

A Pilot Study of Children's Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants (CTEPP)

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Foreword

The mission of the National Exposure Research Laboratory (NERL) is to provide scientific understanding, information and assessment tools that will quantify and reduce the uncertainty in EPA's exposure and risk assessments for environmental stressors. These stressors include chemicals, biologicals, radiation, and changes in climate, land use, and water use. The Laboratory's primary function is to measure, characterize, and predict human and ecological exposure to pollutants. Exposure assessments are integral elements in the risk assessment process used to identify populations and ecological resources at risk. The EPA relies increasingly on the results of quantitative risk assessments to support regulations, particularly of chemicals in the environment. In addition, decisions on research priorities are influenced increasingly by comparative risk assessment analysis. The utility of the risk-based approach, however, depends on accurate exposure information. Thus, the mission of NERL is to enhance the Agency's capability for evaluating exposure of both humans and ecosystems from a holistic perspective.

The National Exposure Research Laboratory focuses on four major research areas: predictive exposure modeling, exposure assessment, monitoring methods, and environmental characterization. Underlying the entire research and technical support program of the NERL is its continuing development of state-of-the-art modeling, monitoring, and quality assurance methods to assure the conduct of defensible exposure assessments with known certainty. The research program supports its traditional clients -- Regional Offices, Regulatory Program Offices, ORD Offices, and Research Committees -- as well as ORD's Core Research Program in the areas of health and ecological exposure analysis and assessment.

Human exposure to multimedia contaminants, including persistent organic pollutants is an area of concern to EPA because of the possible adverse health effects of these compounds. These compounds may originate from industrial processes and combustion and are present in a variety of microenvironments. The efforts described in this report provide an important contribution to our ability to measure and evaluate human exposure to pollutants.

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Abstract

The Pilot Study of Children's Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants (CTEPP) investigated the aggregate exposures of 257 preschool children and their primary adult caregivers to pollutants commonly detected in their everyday environments. The target compounds include organophosphate (OP) pesticides, OP metabolites, organochlorine (OC) pesticides, pyrethroid pesticides and metabolites, acid herbicides, polycyclic aromatic hydrocarbons (PAH), phthalates, phenols, polychlorinated biphenyls (PCB), PAH metabolites, and atrazine. Some of the target compounds are persistent indoors and sometimes outdoors, so that very low levels may exist in the children's surroundings and provide a source of non-acute exposure. The primary purposes of the research were to increase the understanding of children's exposures to persistent and non-persistent organic pollutants, and to gain information on the various activities, environmental media, and pollutant characteristics that may influence children's exposures. The overall objectives were to measure the aggregate exposures of approximately 260 preschool children and their adult caregivers to low levels of a suite of pesticides and other organic pollutants that the children may encounter in their everyday environments and to apportion the routes of exposure and estimate the relative contributions of each route. Within these objectives, four major, specific goals for the CTEPP study were accomplished in this report. These goals were: (1) to measure the concentrations of the target pollutants in multimedia samples collected at the homes and at day care centers of 257 preschool children in six North Carolina (NC) counties and six Ohio (OH) counties, (2) to determine the distributions of child characteristics, activities, and locations that contributed to their exposures, (3) to estimate the aggregate exposures of the preschool children to these pollutants that they may encounter in their everyday environments, and (4) to apportion the routes of exposure. Results will also be used to identify important hypotheses to be tested in future research.

A two-state sampling plan was used to select and recruit study participants. In each state, a total of four urban and two rural counties were randomly selected. The counties were located in three distinct geographical regions of each state. These regions were the mountains, the Piedmont, and the coastal plain of NC, and the northern, central, and southern regions of OH. Dual sampling frames (the day care and the telephone components) were used in each state. To recruit participants in households whose children attended child day care centers, 13 centers in the six NC counties and 16 centers in the six OH counties were selected using probability sampling. Children were then selected randomly from classrooms having children in the eligible age group of two to five years, and their participation was recruited through their parents. To recruit participants in households whose children did not attend child day care centers, list-assisted, random digit dialing telephone sampling in the selected counties was used.

The calculated response rates in NC were 53% for day care centers and 50% for day care parents. In OH these response rates were 57% for OH day care centers and 31% for OH day care parents. The calculated response rate for the telephone sample was 58% in NC and 57% in OH. In NC, children and their caregivers in 130 households participated in the study; in OH, 127 households participated. Approximately half of the children in each state attended child day care centers (63 in NC and 58 in OH). About 84% of the NC participants and 87% of the OH participants lived in urban locations. Low-income households, classified according to federal guidelines for the Women, Infants, and Children (WIC) program (185% of the federal poverty level), comprised 46% of the sampled households in NC and 38% of those in OH.

More than 5,000 discrete personal and environmental samples, including quality control samples, were collected in each state and analyzed. Additionally, house/building characteristics observation surveys, pre- and post-monitoring questionnaires, day care food menus, and detailed child/adult time-activity and food diaries provided ancillary information necessary to estimate aggregate exposures and to aid in interpretation of the CTEPP data.

Field sampling for the day care component took place over a 48-h period at each child's day care center and simultaneously at his/her home. Field sampling for the telephone component took place over a 48-h period at each participant's home. Environmental samples included indoor and outdoor air, outdoor play area soil, indoor floor dust (carpet dust) or if no carpet, hard floor surface wipes, and household/day care drinking water. Personal samples included duplicate diet, hand wipes, and urine. If a pesticide had been applied in the seven days prior to or during sampling, transferable residues, hard floor surface wipes and food preparation surface wipes were also collected. Approximately 10% of the children were videotaped for about 2 h at their homes in OH during sampling to supplement and validate the activity diaries and observations.

All samples, including quality control samples, were extracted, and then analyzed by gas chromatography/mass spectrometry for over 50 target compounds. These compounds included two organophosphorus (OP) pesticides, two OP metabolites, ten organochlorine (OC) pesticides, three pyrethroid pesticides, one pyrethroid metabolite, three acid herbicides, nine polycyclic aromatic hydrocarbons (PAHs), six PAH metabolites, two phthalates, three phenols, 17 polychlorinated biphenyls (PCBs), and atrazine. These compounds, with the exception of atrazine, PAH metabolites and pyrethroid metabolites, were analyzed in the environmental and personal samples. Atrazine was analyzed only in drinking water samples. Only one OP metabolite, 3,5,6-trichloro-2-pyridinol (3,5,6-TCP), was analyzed in the NC environmental and personal samples; both 2-isopropyl-6-methyl-4-pyrimidinol (IMP) and 3,5,6-TCP were measured in the OH samples. In the NC urine samples, two OP metabolites; IMP and 3,5,6-TCP; 2,4-dichlorophenoxyacetic acid (2,4-D), two hydroxy PAHs: 1-hydroxybenz[a]anthracene and 3-hydroxychrysene; and pentachlorophenol were analyzed. In the OH urine samples, these same metabolites and/or parent compounds were analyzed, in addition to five hydroxy PAHs (1-hydroxypyrene, 3-hydroxybenz[a]anthracene, 3-hydroxybenzo[a]pyrene, 6-hydroxychrysene, and 6-hydroxyindeno[1,2,3-*cd*]pyrene) and 3-phenoxybenzoic acid (3-PBA).

Two similarly formatted CTEPP databases were developed, one for the NC study and one for the OH study. Each database contained questionnaire data, analytical data, and metadata, and provided sufficient documentation to allow the data to be understood by a diverse set of users. Descriptive statistics were calculated for sample size, mean, standard deviation, percentage detected, minimum and maximum reported values, and selected percentiles (25th, 50th, 75th, and 95th). The distributions of participant characteristics, activities, and locations that are important for exposure were quantified, based on the questionnaire data. Potential exposures and potential absorbed doses were estimated for selected target compounds, based on the percentage of the samples that had detectable levels of these compounds, the measured concentrations, the participants' activity patterns, and assumed physiological parameters. Statistical analyses to meet the four goals of the study were performed on log-transformed data, using analysis of variance (ANOVA) models. The data summaries presented in this report represent only the children and their primary caregivers in NC and OH who participated in this study.

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In a large study such as CTEPP, many people contribute to its success. The CTEPP study was conceptualized by EPA's National Exposure Research Laboratory (NERL) on the basis of three small studies of preschool children's exposures conducted earlier by NERL. NERL staff, with support from Battelle, developed the study design. Battelle performed the recruitment, field sampling, sample analysis, and statistical and data analysis of the two (NC and OH) field exposure studies.

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Executive Summary

The Children's Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants (CTEPP) study is one of the largest aggregate exposure studies of preschool children (i.e., 2 to 5 years of age) performed in the United States. These young children are suspected of having greater exposures to pesticides and other pollutants in their everyday environments compared to older children and adults. These greater exposures may result from what preschool children drink or eat, where they spend their time, and what they do in these locations. The primary goals of this landmark study were:

1. to measure the concentration of chemical pollutants in multimedia samples collected at the homes and day care centers of preschool children,
2. to determine the distribution of child characteristics, activities, and locations that contributed to their exposures,
3. to estimate the aggregate exposures to the pollutants they may come in contact with in their everyday environments, and
4. to evaluate the contribution of each route of exposure.

This report presents the results of statistical analyses conducted to address these primary study goals. Data analysis will continue over the next year to more fully characterize those factors that are responsible for preschool children's exposure and to evaluate the relationship between environmental concentrations, exposure factors, and biomarkers of exposure. The entire CTEPP study database will be made available to scientists in EPA program and regional offices, to researchers in industry and academia, and to the general public to allow the data to be used in additional analysis, as input to exposure models, and in developing risk assessments for preschool children.

The CTEPP study was conducted in six counties in North Carolina (NC) and six counties in Ohio (OH). These two states were selected to provide exposure information in two different geographical regions of the United States (i.e., the Southeast and Midwest). Overall, 257 preschool children and their adult caregivers took part in the study. Participants were recruited from eligible homes and child day care centers in the twelve counties. Participants were selected from several categories to allow for comparisons between home vs. day care settings, urban vs. rural locations, and low income vs. middle/high income environments. Although, the study focused on preschool children, information was also collected on the adult caregivers for comparison purposes. The results presented in this report apply only to the study participants; they have not been generalized to preschool children living in either state or to children in general.

Monitoring was performed over a 48-h period at the children's homes and/or day care centers. Environmental (air, dust, and soil) and personal (hand wipe, diet, water, and urine)

samples were collected. Surface wipe samples were collected from homes with recent pesticide applications. Questionnaires and diaries were used to collect information on housing characteristics, products used in the home, and activities of the participants. Multimedia samples were analyzed for over 50 pollutants belonging to such classes as the organophosphate (OP) pesticides, OP metabolites, organochlorine (OC) pesticides, pyrethroid pesticides, pyrethroid metabolites, acid herbicides, polycyclic aromatic hydrocarbons (PAHs), PAH metabolites, phthalates, phenols, and the polychlorinated biphenyls (PCBs). These pollutants were selected because they have been commonly detected in indoor and outdoor environments and/or because they are potentially carcinogenic, mutagenic, or endocrine-disrupting chemicals in humans.

Results of the study showed there were low levels of many pollutants in both the homes and day care centers where preschool children spend their time. Children can become exposed to these pollutants when they breathe the air, ingest food and water, ingest soil and dust, and touch contaminated surfaces. An absorbed dose occurs when pollutants are taken into the body through such routes as the lungs, intestines, and skin. Exposure and absorption into the body has been confirmed by measuring the same pollutants or metabolites of these pollutants in urine samples collected from children in the study.

The most frequently detected pollutants in environmental media were those commonly used in the home, those found in products used throughout the home, or those formed as a result of common processes. These pollutants included chlorpyrifos, diazinon, *cis*- and *trans*-permethrin, *alpha*- and *gamma*-chlordane, and pentachlorophenol, which are pesticides used in households. CTEPP was the first study to measure the metabolites of chlorpyrifos (3,5,6-trichloro-2-pyridinol [TCP]) and diazinon (2-isopropyl-6-methyl-4-pyrimidinol [IMP]) in environmental samples. These two compounds were detected at a very high rate in most sample types. Benzybutylphthalate, di-*n*-butylphthalate, and bisphenol-A, are commonly used plasticizers that were frequently detected. The PAHs were also frequently detected in most environmental samples. PAHs are formed during processes which involve burning of specific substances, with indoor sources including smoking and cooking, and outdoor sources including motor vehicles, incinerators, fires, and power plants. Target pollutants were detected most often in dust and indoor air samples. Only the PAHs were detected at a high rate in soil samples. Very few pollutants were detected in liquid food samples.

Median values of measured concentrations for selected pollutants are shown in Table ES-1 by state. The highest concentrations in most samples were found for the two phthalates, benzybutylphthalate and di-*n*-butylphthalate. For the other pollutants, concentration rankings depended upon the media and the properties of the chemicals.

Table ES-1. Median Concentrations of Selected Pollutants Measured in Multiple Media.

Pollutants/Metabolite	Indoor Air, ng/m ³		Dust, ng/g		Outdoor Air, ng/m ³		Dermal Wipe, ng/m ²		Solid Food, ng/g	
	NC	OH	NC	OH	NC	OH	NC	OH	NC	OH
Chlorpyrifos	6.1	1.8	140	62	0.28	0.20	160	60	0.17	0.18
3,5,6-TCP	1.8	0.65	92	42	0.23	0.21	130	78	2.6	1.9
<i>cis</i> -Permethrin	0.41	< ^a	800	500	<	<	530	240	<	<
<i>trans</i> -Permethrin	0.27	<	730	390	<	<	300	190	<	<
Benzo[<i>a</i>]pyrene	0.08	<	200	930	0.09	<	<	40	<	<
Benzylbutylphthalate	<	<	19,000	19,000	<	<	7,900	<	<	11
Di- <i>n</i> -butylphthalate	240	260	6,800	6,400	<	<	9,000	<	<	<
Bisphenol-A	1.6	0.98	<	28	<	<	5,900	4,600	4.1	3.5

^a "<" indicates that the median value falls below the MDL for the pollutant within the specified sample medium.

Comparisons of environmental measurements between home and day care settings, urban and rural locations, and low-income and middle/high-income environments showed few instances where the geometric mean concentration in one setting differed by a factor of three or more (when rounded) from the other setting, and where this difference was statistically significant. Incidences where such differences were observed included the following:

- **Day Care vs. Home Environments.** In both NC and OH, floor dust loadings (ng/m²) averaged higher in day care centers than in homes, and this difference was statistically significant, for a number of current use pesticides, PAHs, and phthalates. This was likely a result of more dust being found in the day care centers, rather than higher concentrations of pollutants in the dust.
- **Urban vs. Rural Environments.** In OH, concentrations of the PAHs in dust samples, diazinon and IMP in outdoor air samples, and TCP in soil samples averaged higher in urban compared to rural settings, and this difference was statistically significant. In NC, the concentration of 2,4-D in floor dust samples tended to be higher in urban compared to rural settings.
- **Low Income vs. Middle/High Income Environments.** In NC, indoor air concentrations of diazinon and the permethrins averaged higher in low-income compared to middle/high-income environments, with the difference being statistically significant. The same was true for selected PAHs in soil. In both OH and NC, 2,4-D concentrations in dust were higher in middle/high-income compared to low-income homes. Finally in both states, floor dust loadings (ng/m²) for pesticides were higher in low-income compared to middle/high-income homes. Again, this is likely a result of more dust found in low-income homes rather than to higher pesticide concentrations in the dust.

For 27 target pollutants, information on environmental and personal sample concentrations was combined with activity data to estimate potential exposure (ng/day) for each study participant by the inhalation, dietary ingestion, and indirect ingestion exposure routes. For each of these three exposure routes, potential absorbed dose (ng/kg/day) was also calculated by assuming a 50% absorption rate and dividing potential exposure by body weight. Results through the dermal route were not reported due to uncertainties in the assumptions required for the calculations. However, absorbed doses of these pollutants through the dermal route of exposure were assumed to be low.

For eight of the target pollutants (chlorpyrifos, diazinon, 3,5,6-TCP, *cis*-permethrin, *trans*-permethrin, 2,4-D, di-*n*-butylphthalate, and bisphenol-A), aggregate potential exposure and absorbed dose estimates were calculated by summing over all three routes. In both states, aggregate exposure and dose estimates were highest for di-*n*-butylphthalate, bisphenol-A, and 3,5,6-TCP. The NC and OH children had the highest median aggregate potential exposure levels to di-*n*-butylphthalate (42,900 and 8,310 ng/day), bisphenol-A (2,560 and 1,880 ng/day), and 3,5,6-TCP (1,230 and 930 ng/day). Median aggregate potential absorbed dose was highest among the NC and OH children for these same three pollutants (1,250 and 262 ng/kg/day for di-*n*-butylphthalate, 71.4 and 60.8 ng/kg/day for bisphenol-A, and 37.7 and 25.4 ng/kg/day for 3,5,6-TCP for NC and OH children, respectively). The median aggregate potential absorbed doses of di-*n*-butylphthalate was over four times greater in NC children compared to OH children. For di-*n*-butylphthalate, bisphenol-A, and 3,5,6-TCP, the relative importance of the exposure routes was dietary ingestion, followed by inhalation and indirect ingestion. In addition in both states, the children had the highest estimated aggregate exposures and absorbed doses to di-*n*-butylphthalate.

In several cases, there were significant differences in the calculated exposure and dose estimates between different groups of children. Those differences for which the geometric mean estimate was at least three times higher (when rounded) in one category than another included the following:

- ***Day Care vs. Stay-at-Home Children.*** In OH, exposure and dose estimates for diazinon, the PAHs, and benzylbutylphthalate via the indirect ingestion route were higher for day care children than stay-at-home children. Likewise, dietary exposure and dose estimates for benzylbutylphthalate and the permethrins were higher for the same group of children.
- ***Urban vs. Rural Children.*** In NC, exposure and dose estimates for 2,4-D by the indirect ingestion route were higher for children in urban compared to rural locations. In OH, PAHs showed higher estimates via the indirect ingestion route for urban children.
- ***Low Income vs. Middle/High Income Children.*** In NC, exposure and dose estimates for 2,4-D via the indirect ingestion route were higher for children in middle/high-income compared to low-income environments.

Because the indirect ingestion route was most frequently associated with sizable (and statistically significant) differences in exposure and dose estimates between groups of children, but yet accounted for a relatively small amount of the total or aggregate exposure for each child, it is not surprising that similar differences were not observed for aggregate exposure.

Some pollutants or metabolites were frequently detected and measurable in the children's urine samples, including 3,5,6-TCP, 2,4-D, and pentachlorophenol. Median urinary concentrations of 3,5,6-TCP, 2,4-D, and pentachlorophenol were 5.3, 0.7, and 0.4 ng/mL, respectively, for NC children. For OH children, median urinary concentrations of 3,5,6-TCP, 2,4-D, and pentachlorophenol were 5.1, 1.0, and 0.8 ng/mL, respectively. On average, levels of 3,5,6-TCP in urine samples for both NC and OH children were at least five times greater than those for 2,4-D or pentachlorophenol. As with estimates of aggregate potential exposure and absorbed dose, there were no incidences where differences in urinary concentrations were highly significant between various groups of children.

Finally, comparisons between children and their adult caregivers showed that children were generally exposed to higher levels of pollutants than adults in the same household, with the difference being statistically significant. Much of these differences was likely attributable to differences in physiological factors (i.e., ventilation rates and body weights) and activity patterns (i.e., daily soil and dust ingestion rates) between children and adults.

Chapter 1

Introduction

1.1 Background

Young children, especially those of preschool age, are hypothesized to have greater exposures than do older children or adults to pesticides and semivolatile organic pollutants, including some compounds that may have endocrine-disrupting effects or developmental toxicity. These greater exposures may result from what children eat and drink, where they spend their time, and what they do there. The impact of the exposures may be greater on young children because of their smaller body masses, immature body systems, and rapid physical development.

Organochlorine (OC) and organophosphate (OP) pesticides, pyrethroid pesticides, acid herbicides, polycyclic aromatic hydrocarbons (PAHs), phthalates, phenols, and polychlorinated biphenyls (PCBs), are pollutants commonly found in multiple environmental media. Many of these compounds are persistent in the indoor and outdoor environments. Some have been shown to have deleterious effects on health, exhibiting not only acute toxicity, but also possible chronic effects at low levels. Many are sufficiently volatile or soluble to evaporate and condense, or to move otherwise through environmental media – air, water, and soil. They can enter indoor microenvironments through intrusion of outdoor air, inadvertent transport by people or pets, and other means (1-4). Additionally, there are many potential sources of these pollutants indoors, such as pesticides, home chemicals, environmental tobacco smoke, consumer products, and building materials.

With the passage of the Food Quality and Protection Act of 1996 (FQPA), new, more stringent standards for pesticide residues in foods were set, to provide increased emphasis on health protection for infants and children. The exposure component of the risk assessment for pesticides is now required to

- Consider the potentially greater susceptibility of children to pesticide exposure, compared to adults, and
- Account for aggregate exposures to the pesticides from all sources, including food, drinking water, and non-occupational applications of the pesticides in homes, schools, day care centers, and other microenvironments.

Essentially, the FQPA states that exposure assessments must be conducted for infants and children and that these exposure assessments must include and be reliable for all sources of pesticide exposure. Because young children learn about their environment by exploring not only the appearance and texture of objects, but also their taste and smell, both dietary and indirect

ingestion can play an important role in their exposures. However, very little information on children's aggregate exposures is available at the present time, and the dominant pathways and media through which such exposures may take place are known uncertainly. The Children's Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants (CTEPP) study provides some of this information.

In our previous work, methods to measure and estimate the exposures of preschool children in low-income families to PAHs were developed and evaluated (5,6). Preschool children's aggregate exposures to PAHs through three exposure routes including inhalation, dietary and indirect ingestion were estimated for 24 children (7). Further studies of an extensive suite of pollutants including OP and OC pesticides, acid herbicides, PAHs, phthalates, phenols, and PCBs concentrations in multiple media at nine child day care centers and of the aggregate exposures of nine preschool children to these pollutants were conducted (8-10). Results from these studies suggested that dietary and indirect ingestion could be important contributors to children's exposures. In addition, the children's potential absorbed doses resulting from their exposures could exceed those of adults living in the same households. This background work, along with the new requirements of the FQPA, led to the conceptualization, development, and realization of the CTEPP study.

1.2 Study Overview

The CTEPP study provides data on aggregate exposures of 257 children to pesticides and other persistent and non-persistent organic pollutants in several microenvironments, and has improved the methods for determining their exposures and the routes of exposure. The study results also allow identification of important hypotheses to be tested in future research. The following four major, specific goals were established for the CTEPP study:

1. To measure the environmental concentrations of pesticides and other persistent and non-persistent organic pollutants in multiple media at the homes and day care centers of 257 preschool children in six North Carolina and six Ohio counties,
2. To determine the distributions of child characteristics, activities, and locations that contributed to these children's exposures to the selected pollutants,
3. To estimate the exposures of the preschool children to these pollutants that they may encounter in their everyday environments, and
4. To apportion the exposures through the ingestion, inhalation, and dermal routes.

In meeting these goals, the following seven hypotheses were tested in the study:

1. Exposures of children to the target pollutants are similar at home and at day care.

2. Exposures of children to the target pollutants are similar for low-income households compared to those in other households.
3. Exposures of children to the target pollutants are similar for urban and rural households.
4. Routes of exposure and their relative importance are different for the different chemical classes of pesticides and other persistent and non-persistent organic pollutants.
5. Ingestion is a major route of exposure of the selected children and adults living in the same household.
6. Diet is a major contributor to children's ingestion exposures.
7. Children's exposures to the target pollutants (and the potential absorbed doses resulting therefrom) are significantly greater than those of adults living in the same household.

CTEPP investigated the exposures of 257 preschool children and their adult care givers to a large number of persistent and non-persistent organic pollutants in their everyday surroundings. These exposures, through the dietary and indirect ingestion, inhalation, and dermal absorption routes, were measured in the participants' homes and child day care environments, in non-occupational settings. The target compounds include OP pesticides and metabolites, OC pesticides, pyrethroid pesticides and a metabolite, acid herbicides, PAHs, phthalates, phenols, PCBs, PAH metabolites, and atrazine. The specific compounds were selected because they may be carcinogenic, mutagenic, acutely or chronically toxic, or possibly disruptive to the human endocrine system, and because they are commonly found in both indoor and outdoor environments.

To minimize selection bias, a population-based, multistaged stratified random sampling plan was devised for the CTEPP study (11). The target population for CTEPP was children between the ages of 18 months and five years. The study consisted of two separate field studies, one conducted in North Carolina (NC) and the other in Ohio (OH). Within each state, four urban and two rural counties were selected randomly according to population, distributed among three distinct geographical regions of each state to ensure a broad range of likely exposures. These regions were the mountains, the Piedmont, and the coastal plain of NC, and northern, central, and southern regions of OH. Two sampling frames, (1) the telephone component (households containing children who do not attend day care) and (2) the day care component (households containing children attending day care centers) were constructed within each state. For the telephone component, a list-assisted, random digit dialing telephone sampling in the selected counties was used. The calculated response rate for the telephone sample was 58% in NC and 57% in OH. For the day care component, 13 centers in the six chosen NC counties and 16 centers in the six chosen OH counties were recruited. Children were then selected randomly from classrooms having children in the eligible age group of two to five years, and their participation was recruited through their parents. The calculated response rates in NC were 53% for day care centers and 50% for day care parents. In OH, the response rates were 57% for OH

day care centers and 31% for OH day care parents. For ease of discussion, the participants from the telephone component are referred to as stay-at-home participants (children) and the participants from the day care component are referred to as day care participants (children) throughout the report

In NC, children and their caregivers in 130 households participated in the study, while in OH, 127 households participated. Approximately half of the children in each state attended day care centers (63 in NC and 58 in OH). About 84% of the NC participants and 87% of the OH participants lived in urban locations. Low-income households, classified according to federal guidelines for the Women, Infants, and Children (WIC) program (185% of the federal poverty level), comprised 46% of the sampled households in NC and 38% of those in OH.

Fifty Standard Operating Procedures (SOPs) were prepared for the CTEPP study, covering subject recruitment, field sampling, storing and shipping of samples, administering questionnaires, data processing, and laboratory procedures. All field activities, laboratory operations, and data handling were performed following these SOPs. The list of the CTEPP SOPs is given in Appendix A.

More than 5,000 discrete personal and environmental samples, including quality control samples, were collected in each state (NC and OH) and analyzed. Additionally, house/building characteristics observation surveys, pre- and post-monitoring questionnaires, day care food menus, and detailed child/adult time-activity and food diaries provided ancillary information necessary to estimate aggregate exposures and to aid in interpretation of the CTEPP data.

Field sampling for the participants from the day care component took place over a 48-h period at each participating child's day care center and simultaneously at his/her home. Field sampling for the participants from the telephone survey component took place over a 48-h period at each participant's home. Environmental and personal samples were collected at the participants homes and/or day care centers:

- to identify the sources of exposures in the participants' environments,
- to determine the important routes of exposure (inhalation, ingestion, and dermal absorption) and,
- to allow estimation of potential exposure and potential absorbed dose through multiple sample media

The environmental samples collected in this study included indoor and outdoor air, outdoor play area soil, and indoor floor (carpet) dust, or if no carpet, hard floor surface wipes. If a pesticide had been applied in the home or day care center in the seven days prior to sampling, transferable residues, hard floor surface wipes, and food preparation surface wipes were also collected. Personal samples collected in this study included drinking water, duplicates of all food and beverages that the participants ate or drank during the 48-h sampling period, hand wipes, and urine. In addition, approximately 10% of the children (26) in OH were videotaped for about 2 h at their homes. Note that the videotaped data are not presented in this report.

The collected field samples and field and laboratory quality control samples were extracted, then analyzed by gas chromatography/mass spectrometry for over 50 target compounds¹. These compounds included the following:

- two OP pesticides: chlorpyrifos and diazinon;
- two OP metabolites: 2-isopropyl-6-methyl-4-pyrimidinol (IMP) and 3,5,6-trichloro-2-pyridinol (3,5,6-TCP);
- ten OC pesticides: aldrin, *alpha*-chlordane, *gamma*-chlordane, *p,p'*-DDE, *p,p'*-DDT, dieldrin, endrin, heptachlor, lindane, and pentachloronitrobenzene;
- three pyrethroid pesticides: cyfluthrin and *cis*- and *trans*-permethrin;
- one pyrethroid metabolite: 3-phenoxybenzoic acid (3-PBA);
- three acid herbicides: dicamba, 2,4-D, and 2,4,5-T;
- nine PAHs: benz[*a*]anthracene (BaA), benzo[*a*]pyrene (BaP), benzo[*b*]fluoranthene, benzo[*e*]pyrene, benzo[*ghi*]perylene, benzo[*k*]fluoranthene, chrysene, dibenz[*a,h*]anthracene, and indeno[1,2,3-*cd*]pyrene;
- six PAH metabolites: 1-hydroxybenz[*a*]anthracene, 1-hydroxypyrene, 3-hydroxybenz[*a*]anthracene, 3-hydroxybenz[*a*]pyrene, 3-hydroxychrysene, 6-hydroxyindeno[1,2,3-*cd*]pyrene, and 6-hydroxychrysene;
- two phthalates esters: benzylbutyl phthalate and di-*n*-butyl phthalate;
- three phenols: bisphenol-A, nonylphenol, and pentachlorophenol (PCP);
- 17 PCBs: PCBs 10, 15, 28, 44, 52, 70, 77, 95, 101, 105, 110, 118, 126, 138, 153, 169, and 180; and
- one triazine: atrazine.

These pollutants/metabolites, with the exception of atrazine, were analyzed in the multimedia samples. Atrazine was analyzed only in drinking water samples. Only one OP metabolite, 3,5,6-TCP, was analyzed in the NC multimedia samples, while both IMP and 3,5,6-TCP were measured in the OH environmental and personal samples. The NC urine samples were analyzed for the two OP metabolites, IMP and 3,5,6-TCP; 2,4-D; two hydroxy PAHs (1-hydroxybenz[*a*]anthracene and 3-hydroxychrysene); and PCP. The OH urine samples were analyzed for these same metabolites and/or parent compounds, in addition to five hydroxy PAHs (1-hydroxypyrene, 3-hydroxybenz[*a*]anthracene, 3-hydroxybenzo[*a*]pyrene, 6-hydroxychrysene, and 6-hydroxyindeno[1,2,3-*cd*]pyrene) and 3-PBA.

Two similarly formatted CTEPP databases were developed, one for the NC study and one for the OH study. Each database contained questionnaire data, analytical data, and metadata, and provide sufficient documentation to allow the data to be understood by a diverse set of users. Descriptive statistics were calculated for sample size, mean, standard deviation, percentage detected, minimum and maximum reported values, and selected percentiles (25th, 50th, 75th, and

¹Two carbamates, propoxur and bendicarb, were originally included on the list of target pollutants but were later removed due to the study's analytical methods being incompatible for these pollutants. Atrazine was only measured in drinking water because of co-eluting interference present in other sample media.

95th). The distributions of participant characteristics, activities, and locations that are important for exposure were quantified, based on the questionnaire data. Potential exposures and potential absorbed doses were estimated for selected target compounds, based on the percentage of samples that had detectable levels of these compounds, the measured concentrations, the participants' activity patterns, and assumed physiological parameters. Statistical analyses were performed on log-transformed data, using analysis of variance (ANOVA) models. The data summaries presented in this report represent only the children and their primary caregivers in NC and OH who participated in this study.

This report summarizes the recruitment, field sampling, chemical analyses, data analyses, and the study findings for both the NC and OH field studies.

Chapter 2

Conclusions

2.1 Overview

The CTEPP study examined the aggregate exposures of 257 preschool children to pollutants commonly found in their everyday environments. This study was conducted in six counties each in North Carolina (NC) and Ohio (OH) which are in two different geographical locations – the Southeast and the Midwest – of the United States. The overall goals of this study were (1) to measure the concentrations of the target pollutants in multimedia samples collected at the homes and at day care centers of 257 preschool children in six NC counties and six OH counties, (2) to determine the distributions of child characteristics, activities, and locations that contributed to their exposures, (3) to estimate the aggregate exposures of the preschool children to these pollutants that they may encounter in their everyday environments, and (4) to apportion the routes of exposure. Participants were recruited randomly from selected homes and child day care centers. Monitoring was performed over a 48-h period at the children's homes and/or day care centers. Environmental (air, dust, and soil) and personal (hand wipes, diet, water, urine) samples were collected. In addition, surface wipe samples including hard floor wipes, food preparation, and transferable residue (PUF) samples were collected from homes that had recent pesticide applications. The samples were analyzed by gas chromatography/mass spectrometry (GC/MS) for over 50 pollutants from such chemical classes as the organophosphate (OP) pesticides, organochlorine (OC) pesticides, pyrethroid pesticides, acid herbicides, polycyclic aromatic hydrocarbons (PAHs), phthalates, phenols, polychlorinated biphenyls (PCBs), and the triazine pesticide atrazine. The pollutants were selected because they had been commonly detected in the past in indoor and outdoor environments and/or were potentially carcinogenic, mutagenic, or endocrine disrupting chemicals in humans.

The study showed that the participating NC and OH preschool children were potentially exposed at their homes and day care centers to low levels of many of these pollutants from several sources. In addition, these children were potentially exposed/dosed at low levels to some of these pollutants through several pathways and routes. The conclusions derived from the study apply only to the children and their primary caregivers in NC and OH who participated in this study and cannot be generalized to all preschool children in either state. Therefore, the comparisons between results from NC and OH discussed below apply only to the results for children in the selected NC and OH counties. In addition, this data report has only discussed the potential exposures and potential absorbed doses of these preschool children and their primary caregivers to pollutants in these environments, *not* possible health effects associated with these exposures.

2.2 Goal 1

The CTEPP study's first goal was to measure the concentrations of the target pollutants in multimedia samples collected at the homes and day care centers of 257 preschool children in six NC and six OH counties.

2.2.1 Multimedia Sources of Potential Exposure

Many of the pollutants were detected in several environmental, personal, and biological media at the homes and day care centers of the participating NC and OH children. Pollutants that were detected in 50% or more of the samples in four or more types of environmental or personal media were regarded as “frequently detected” pollutants. For both NC and OH portions of the study, frequently detected pollutants included the following:

- **OP pesticides and metabolite:** chlorpyrifos, diazinon, and 3,5,6-TCP,
- **OC pesticides:** *alpha*-chlordane and *gamma*-chlordane,
- **Pyrethroid pesticides:** *cis*-permethrin and *trans*-permethrin,
- **PAHs:** benz[*a*]anthracene, benzo[*b*]fluoranthene, benzo[*k*]fluoranthene, benzo[*ghi*]perylene, benzo[*a*]pyrene, benzo[*e*]pyrene, chrysene, indeno[1,2,3-*cd*]pyrene,
- **Phthalates:** benzylbutylphthalate and di-*n*-butylphthalate, and
- **Phenols:** bisphenol-A and pentachlorophenol.

In addition, PCB 52 and IMP (the metabolite of diazinon) were classified as “frequently detected” pollutants within the OH portion of the study. PCB 52 was detected in more than 50% of samples in four types of media in OH but in only two types of media in NC. IMP was analyzed only in OH samples.

For pollutants that were frequently detected in indoor air, indoor floor dust, outdoor air, dermal wipe, and solid food samples, median concentrations within these media are given in Table 2.2.1 for both NC and OH. In both states, these median concentrations were generally higher for the indoor samples compared to the outdoor samples, although similar median values were observed in both indoor and outdoor environments for several PAHs, particularly in NC. Median PAH concentrations in indoor and outdoor air were slightly higher for NC air samples than for OH air samples. Both the NC and OH solid food samples contained only a few pollutants at median levels above the method detection limit (MDL). These pollutants were chlorpyrifos (0.17 and 0.18 ng/g), 3,5,6-TCP (2.3 and 1.9 ng/g), and bisphenol-A (4.1 and 3.5 ng/g), where the numbers in parentheses correspond to median levels in NC and OH solid food samples, respectively. It is of interest to note that median levels of 3,5,6-TCP were about 15 and 10 times higher than the chlorpyrifos levels in solid food samples from NC and OH, respectively. The break-down product of DDT, *p,p'*-DDE, was not classified as a frequently detected pollutant, but it was detected in greater than 50% of solid food samples. The median levels of *p,p'*-DDE were 0.16 and 0.18 ng/g, respectively, in NC and OH solid food samples. In dust samples, median concentrations of several PAHs were at least four times lower in homes and/or day care centers of NC children compared to OH. In dermal wipe samples, median concentrations of all PAHs were higher in OH than in NC. Lastly, median levels of bisphenol-A

were much higher in the dermal wipe samples in NC (5,900 ng/m²) and OH (4,600 ng/m²) compared to the other frequently detected pollutants (≤ 530 ng/m²).

Table 2.2.1. Median Levels of Pollutants Frequently Detected in Air, Dust, Dermal Wipe, and Solid Food Samples Collected at the Homes and Day Care Centers of Preschool Children in NC and OH

Pollutant/Metabolite	Indoor Air, ng/m ³		Dust, ng/g		Outdoor Air, ng/m ³		Dermal Wipe, ng/m ²		Solid Food, ng/g	
	NC	OH	NC	OH	NC	OH	NC	OH	NC	OH
Chlorpyrifos	6.1	1.8	140	62	0.28	0.20	160	60	0.17	0.18
Diazinon	2.0	0.97	21	25	0.09	0.15	33	< ^a	<	<
3,5,6-TCP	1.8	0.65	92	42	0.23	0.21	130	78	2.6	1.9
IMP	– ^b	0.53	–	15	–	0.33	–	<	–	0.43 ^c
<i>alpha</i> -Chlordane	0.84	0.23	24	11	0.09	0.09	34	<	<	<
<i>gamma</i> -Chlordane	1.5	0.34	36	13	0.13	0.10	42	<	<	<
<i>cis</i> -Permethrin	0.41	<	800	500	<	<	530	240	<	<
<i>trans</i> -Permethrin	0.27	<	730	390	<	<	300	190	<	<
Benz[<i>a</i>]anthracene	<	<	130	640	0.064	<	<	31	<	<
Benzo[<i>b</i>]fluoranthene	0.13	<	350	1700	0.19	<	<	79	<	<
Benzo[<i>k</i>]fluoranthene	<	<	110	620	0.064	<	<	40	<	<
Benzo[<i>ghi</i>]perylene	0.12	<	190	930	0.13	<	<	46	<	<
Benzo[<i>a</i>]pyrene	0.08	<	200	930	0.09	<	<	40	<	<
Benzo[<i>e</i>]pyrene	<	<	190	930	0.095	<	<	57	<	<
Chrysene	0.10	<	180	940	0.12	<	<	53	<	<
Indeno[1,2,3- <i>cd</i>]pyrene	0.09	<	180	880	0.095	<	<	41	<	<
Bisphenol-A	1.6	0.98	<	28	<	<	5900	4600	4.1	3.5

^a “<” indicates that the median value falls below the MDL for the pollutant in this matrix.

^b IMP was not measured in the NC samples.

^c Reported value was underestimated because the recoveries of the matrix spike samples were less than 50%.

Although the two phthalates do not appear in Table 2.2.1, their median concentrations were high compared to other pollutants for two or more of the media types included in this table. The phthalate data were corrected for the background levels found in corresponding field blanks. Median concentrations for benzylbutylphthalate were 19,000 ng/g and 7,900 ng/m² in dust and dermal wipe samples, respectively, in homes and/or day care centers in NC. For di-*n*-butylphthalate, median concentrations were 6,800 ng/g and 9,000 ng/m² in the dust and dermal

wipe samples from NC. In OH, median concentrations of benzylbutylphthalate and di-*n*-butylphthalate were 19,000 and 6,400 ng/g in dust samples and were below the MDL within dermal wipe samples. Note that higher background levels were observed in OH dermal wipe samples compared to NC samples. These background median levels of the MDL were 6,400 and 8,000 ng/m² for benzylbutylphthalate, and 1,900 and 8,200 ng/m² for di-*n*-butylphthalate, in NC and OH dermal wipes, respectively.

Liquid food and soil media types were not included in Table 2.2.1, because measured concentrations of the frequently detected pollutants were typically low or below the MDL in these media. Only one pollutant, bisphenol-A, had median concentrations in liquid food samples which were above the MDL (0.46 ng/mL in NC and 0.49 ng/mL in OH). Generally, PAH concentrations in soil samples were lower than the corresponding dust samples. Median levels of the frequently detected PAHs ranged from 0.66 to 3.2 ng/g in NC soil and from 12 to 33 ng/g in OH soil. The median level of di-*n*-butylphthalate was 44 ng/g in OH soil, but below the MDL in NC soil.

Table 2.2.2 presents median concentrations of pollutants that were frequently detected in three types of surface samples that were collected after recent pesticide applications at homes in NC and OH (hard floor surface wipe, food preparation surface wipe, and transferable residues [PUF]). Median levels of chlorpyrifos and benzylbutylphthalate in the hard floor surface wipes, along with benzylbutylphthalate in transferable residues, were more than four times greater in samples collected from NC homes than those from OH homes. In addition, median levels of di-*n*-butylphthalate were slightly lower in all three surface sample types collected in NC homes than those from OH homes. In NC, median levels of the pyrethroid pesticides (*cis*- and *trans*-permethrin) ranged from 210 to 600 ng/m² in these surface wipes and transferable residue samples and were higher than those of the OP pesticides, while median levels of the pyrethroid pesticides ranged from 31 to 65 ng/m² for these sample types in OH homes.

In summary, several pollutants, including chlorpyrifos, 3,5,6-TCP, *cis*-permethrin, *trans*-permethrin, benz[*a*]anthracene, benzo[*b*]fluoranthene, benzo[*k*]fluoranthene, benzo[*ghi*]perylene, benz[*a*]anthracene, benzo[*b*]fluoranthene, benzo[*k*]fluoranthene, benzo[*ghi*]perylene, benzo[*a*]pyrene, benzo[*e*]pyrene, chrysene, indeno[1,2,3-*cd*]pyrene, benzylbutylphthalate, di-*n*-butylphthalate, and bisphenol-A, were frequently detected in several environmental media such as air, dust, and surface wipes, as well as in personal samples such as dermal wipes and foods, collected at the homes and day care centers of participating children in both states. Therefore, children could be potentially exposed to these pollutants in multiple environmental and personal media through different exposure routes.

Table 2.2.2. Median Levels of Pollutants Measured in Surface Samples Which Were Collected After Recent Pesticide Applications at Homes in NC and OH

Pollutant/Metabolite	Hard Floor Surface Wipe, ng/m ²		Food Prep. Surface Wipe, ng/m ²		Trans. Residue (PUF), ng/m ²	
	NC	OH	NC	OH	NC	OH
Chlorpyrifos	68	16	69	12	35	20
Diazinon	12	< ^a	16	<	33	7.3
<i>cis</i> -Permethrin	500	63	600	<	230	37
<i>trans</i> -Permethrin	400	65	260	<	210	31
Chrysene	25	47	6.4	<	18	16
Benzylbutylphthalate	29,000	6,100	2,100	2,000	28,000	5,400
Di- <i>n</i> -butylphthalate	5,000	7,200	3,400	5,500	5,100	7,500
Bisphenol-A	210	660	260	500	410	260

^a “<” indicates that the median value falls below the MDL for the pollutant in this matrix.

2.2.2 Testing Important Hypotheses

One approach to addressing the first three of the seven hypotheses listed in Section 1.0 was to fit an analysis of variance model to the least squares mean of the log-transformed measurements of target pollutants in various environmental and personal sample media to determine whether these measurements differed significantly between 1) day care and home environments, 2) urban and rural environments, and 3) low-income and middle/high income environments. These measurements represented potential exposure levels for the participating children.

Comparisons between day care centers and home environments: When comparing environmental and personal sample measurements between day care centers and home environments in NC, highly significant differences ($p < 0.01$) were frequently observed among the different pollutants and sample media, with higher levels frequently found in day care centers compared to homes. This was especially true for dust when pollutant concentrations were expressed as ng/m² (dust loadings). Loadings of diazinon, *alpha*-chlordane, *gamma*-chlordane, *cis*-permethrin, and *trans*-permethrin in dust were 10.0, 11.1, 11.1, 5.6 and 6.3 times higher, respectively, at day care centers than at homes in NC. Loadings of several PAHs (benz[*a*]anthracene, benzo[*b*]fluoranthene, benzo[*k*]fluoranthene, benzo[*ghi*]perylene, benzo[*a*]pyrene, benzo[*e*]pyrene, chrysene, dibenz[*a,h*]anthracene, and indeno[1,2,3-*cd*]pyrene) in dust ranged between 7.7 to 8.3 times higher at day care centers than at homes in NC. Loadings of benzylbutylphthalate and di-*n*-butylphthalate were both 10 times higher, and loadings of pentachlorophenol were 4.2 times higher, in dust at day care centers compared to homes in NC. In children’s dermal wipe samples, bisphenol-A loadings were three times higher when collected

at day care centers versus homes in NC. However, highly significant differences between day care and home environments occurred less frequently when levels in floor dust were expressed in concentration units (ng/g). These results were partly due to the higher dust loadings measured in carpets at day care centers compared to homes in NC. The mean value of fine dust particle (<150µm) loadings in NC day care centers was more than twice that in NC homes.

Similar to NC, highly significant differences ($p < 0.01$) were frequently observed among the different pollutants and sample media in OH, with higher levels frequently found in day care centers compared to homes, especially for dust when expressed as a loading. Loadings of chlorpyrifos, diazinon, 3,5,6-TCP, cyfluthrin, *cis*-permethrin, and *trans*-permethrin were 7.1, 5.9, 3.4, 4.3, 5.0, and 5.3 times higher, respectively, at day care centers than at homes in OH. Similarly, levels of PAHs (benz[*a*]anthracene, benzo[*b*]fluoranthene, benzo[*ghi*]perylene, benzo[*a*]pyrene, benzo[*e*]pyrene, chrysene, dibenz[*a,h*]anthracene, and indeno[1,2,3-*cd*]pyrene) ranged between 5.6 and 6.7 times higher at day care centers than at homes in OH. Loadings of benzylbutylphthalate and di-*n*-butylphthalate were both 7.1 times higher in dust loadings at day care centers compared to homes in OH. In addition, levels of bisphenol-A and PCB 52 were 3.0 and 4.2 times higher, respectively, at day care centers than at homes in OH. However, like for NC, highly significant differences between OH day care and home environments occurred less frequently when levels in floor dust were expressed in concentration units (ng/g), partly due to the amounts of dust at OH day care centers being generally higher (approximately three times) than in OH homes.

Comparisons between urban and rural environments: Only the acid herbicide 2,4-D had dust concentrations (ng/g) which were highly significantly different ($p < 0.01$) between urban and rural locations for NC, with concentrations being 3.2 times higher in urban settings compared to rural settings. In OH, there were several pollutants having concentrations in dust which were highly significantly different between urban and rural settings. Concentrations of PAHs (benz[*a*]anthracene, benzo[*b*]fluoranthene, benzo[*k*]fluoranthene, benzo[*ghi*]perylene, benzo[*a*]pyrene, benzo[*e*]pyrene, chrysene, dibenz[*a,h*]anthracene, and indeno[1,2,3-*cd*]pyrene) in OH dust samples ranged from 3.3 to 4.0 times higher in urban compared to rural environments. When PAH levels in dust were expressed as loadings (ng/m²), the levels of benz[*a*]anthracene and chrysene were 3.2 and 3.0 times higher in urban than rural environments.

Comparisons between low-income and middle/high-income environments: In NC, several pollutants and sample media had highly statistically significant ($p < 0.01$) differences occurring for children in the low-income compared to middle/high-income groups. Concentrations (ng/m³) of diazinon, *cis*-permethrin, and *trans*-permethrin in indoor air samples were 3.6, 4.2, and 3.9 times higher, respectively, for low-income households than middle/high-income households. Loadings (ng/m²) of diazinon, 3,5,6-TCP, *cis*-permethrin, and benzylbutylphthalate in NC dust samples were 6.3, 3.4, 3.2, and 4.8 times higher, respectively, for low-income households than for middle/high-income households. In contrast, concentrations of 2,4-D in dust samples (ng/g) were 4.5 times higher for middle/high-income households compared to low-income households.

In OH, loadings of chlorpyrifos in dust samples (ng/m²) were 3.4 times higher in low-income households compared to middle/high-income households. In contrast, concentrations of

2,4-D in dust samples (ng/g) were 4.2 times higher in middle/high-income households than in low-income households.

Summary: As determined from analyses performed on environmental and personal sample media measurements, highly significant differences in floor dust loadings (ng/m²) occurred between day care and home environments in both NC and OH for diazinon, the pyrethroid pesticides, the nine PAHs, and the two phthalates, with loadings at homes averaging less than one-third of the loadings observed in day care centers. These results were partly due to the higher levels of dust in the carpets at day care centers compared to homes in both states. NC preschool children were potentially exposed to higher levels of 2,4-D in dust samples (ng/g) within an urban location compared to a rural setting, suggesting that 2,4-D may have been used as a lawn herbicide for weed control more frequently in urban than in rural locations. OH children were potentially exposed to higher levels of several PAHs in dust (ng/g and ng/m²) when in an urban location compared to a rural setting; PAH concentrations (ng/g) tended to be at least two times higher in urban dust samples than in rural dust samples in OH. Through indoor air, NC preschool children were potentially exposed to higher levels of diazinon, *cis*-permethrin, and *trans*-permethrin when in low-income environments compared to middle/high-income households. In addition, the NC preschool children were exposed to higher levels of diazinon, 3,5,6-TCP, *cis*-permethrin, and benzylbutylphthalate in dust (ng/m²) when in low-income compared to middle/high-income households. However, concentrations of 2,4-D tended to be higher in dust samples (ng/g) from middle/high-income than from low-income households. In OH, levels of chlorpyrifos in dust (ng/m²) were higher in low-income than in middle/high-income households, while concentrations of 2,4-D in dust samples were higher in middle/high-income households compared to low-income households.

2.3 Goal 2

The second goal of the CTEPP study was to determine the distributions of child characteristics, activities, and locations that contributed to their exposures. The factors that were considered important for determining the children's and their primary caregiver's potential exposures and potential absorbed doses to pollutants were the following:

- physical characteristics of the participant (body weight and hand surface area),
- children's activity patterns (frequency of placing toys and other objects in the mouth, pacifier use, teething, and frequency of washing hands),
- locations where children spent their time (indoor and outdoors at homes, at day care centers, or other locations)
- volume of liquid and weight of solid food consumed by the participant over a 24-h period.

These factors were used in the algorithms to estimate the children's exposures to pollutants at homes and/or day care centers through the inhalation and ingestion (dietary and indirect) routes of exposure. Exposures via the dermal route were not estimated for the children in this study.

2.4 Goal 3

The third goal of the CTEPP study was to estimate potential exposure level (ng/day) and potential absorbed dose (ng/kg/day) of the pollutants that the study participants may encounter in their everyday environments. **Potential exposure** (ng/day) is defined as the total amount of a pollutant that an individual comes in contact with over a 24-h period. **Potential absorbed dose** (ng/kg/day) is defined as the total dose that could be absorbed in the body by the three routes of exposure over a 24-h period, relative to the participant's body weight (kg). For each exposure route, potential absorbed dose was estimated by assuming a 50% absorption rate for all pollutants and participants. **Aggregate potential exposure** and **aggregate potential absorbed dose** were defined as the sums of the estimated potential exposure and potential absorbed dose, respectively, across all three exposure routes.

These estimates were made for selected pollutants via up to three routes of exposure (inhalation, dietary ingestion, and indirect ingestion). Then, for those pollutants having estimates available for all three exposure routes, aggregated potential exposure level and aggregated potential absorbed dose were calculated as the sum of the exposure/dose estimates across the three routes.

For each state, the following pollutants were considered for estimating potential exposure level and potential absorbed dose for the study participants:

- **OP pesticides/metabolite:** chlorpyrifos, diazinon, and 3,5,6-TCP,
- **OC pesticides:** *alpha*-chlordane, *gamma*-chlordane, *p,p'*-DDE, and heptachlor (NC only),
- **Pyrethroid pesticides:** cyfluthrin, *cis*-permethrin, and *trans*-permethrin,
- **Acid herbicide:** 2,4-D,
- **PAHs:** benz[*a*]anthracene, benzo[*b*]fluoranthene, benzo[*k*]fluoranthene, benzo[*ghi*]perylene, benzo[*a*]pyrene, benzo[*e*]pyrene, chrysene, dibenz[*a,h*]anthracene, and indeno[1,2,3-*cd*]pyrene,
- **Phthalates:** benzylbutylphthalate and di-*n*-butylphthalate,
- **Phenols:** bisphenol-A and pentachlorophenol, and
- **PCBs:** congeners 52, 95, and 101.

For most of these pollutants, potential exposure level and potential absorbed dose were estimated under a given exposure route for the study participants in a given state only when at least 45% of the samples collected in that state had detectable measurements for each media type entering into the calculation of the estimates.

For each state, aggregated potential exposure level and aggregated potential absorbed dose was estimated for the following eight pollutants (based on availability of exposure/dose estimates for each of the three exposure routes):

- **OP pesticides/metabolite:** chlorpyrifos, diazinon, and 3,5,6-TCP,
- **Pyrethroid pesticides:** *cis*-permethrin and *trans*-permethrin,
- **Acid herbicide:** 2,4-D,

- **Phthalate:** di-*n*-butylphthalate, and
- **Phenol:** bisphenol-A

2.4.1. Estimated Potential Exposure Levels for NC and OH Preschool Children

Potential exposure level (ng/day) was defined as the total amount of a pollutant that an individual comes in contact with over a 24-h period. The estimated potential exposure levels of the participating NC and OH preschool children were quantified by one or more routes of exposure for each of the pollutants mentioned above.

For the NC children, the estimated median potential exposure levels were highest for di-*n*-butylphthalate (1,800 ng/day) through the inhalation route of exposure, followed by lower levels of heptachlor (62 ng/day) and chlorpyrifos (47 ng/day). Estimated exposures to other pollutants via the inhalation route were less than 20 ng/day. When considering the dietary ingestion route, median potential exposure levels for NC children were highest for di-*n*-butylphthalate (39,000 ng/day), bisphenol-A (2,700 ng/day), and 3,5,6-TCP (1,200 ng/day), while exposures to other pollutants were less than 200 ng/day. When considering the indirect ingestion route, median potential exposure levels for NC children were highest for benzylbutylphthalate (920 ng/day) and di-*n*-butylphthalate (350 ng/day), *cis*-permethrin (48 ng/day), and *trans*-permethrin (35 ng/day) while estimated exposures to other pollutants were less than 10 ng/day.

For the OH children, the estimated median potential exposure levels were highest for di-*n*-butylphthalate (2,000 ng/day) through the inhalation route of exposure, followed by lower levels of pentachlorophenol (18 ng/day) and chlorpyrifos (15 ng/day). Estimated exposures to other pollutants via the inhalation route were less than 10 ng/day. When considering the dietary ingestion route, median potential exposure levels for OH children were highest for benzylbutylphthalate (9,400 ng/day), bisphenol-A (1,700 ng/day), and 3,5,6-TCP (860 ng/day), while exposures to other pollutants were less than 150 ng/day. When considering the indirect ingestion route, median potential exposure levels for OH children were highest for benzylbutylphthalate (630 ng/day) and di-*n*-butylphthalate (210 ng/day), while exposures to PAHs except for dibenz[*a,h*]anthracene (6.2 to 53 ng/day) and to *cis*- and *trans*-permethrin (18 and 12 ng/day) were each greater than 10 ng/day, and estimated exposures to other pollutants were less than 10 ng/day. These results suggest that participating children had the highest potential exposure levels to phthalates through all three routes of exposure.

2.4.2. Estimated Potential Absorbed Doses for NC and OH Preschool Children

Potential absorbed dose (ng/kg/day) was defined as the total amount that could be absorbed into the body over a 24-h period, relative to the child's body weight (kg). For each exposure route, potential absorbed dose was estimated under the assumption that all pollutants had a 50% absorption rate into the body for all exposure routes (17). The estimated potential absorbed doses of the NC and OH preschool children were quantified by one or more routes of exposure for each of the pollutants mentioned above.

For the NC children, estimated median potential absorbed doses were highest for di-*n*-butylphthalate (56 ng/kg/day) through the inhalation route of exposure, followed by much lower concentrations for heptachlor (1.7 ng/kg/day) and chlorpyrifos (1.4 ng/kg/day). When considering the dietary ingestion route, median potential absorbed doses for NC children were highest for di-*n*-butylphthalate (1,100 ng/kg/day), followed by bisphenol-A (74 ng/kg/day). Benzylbutylphthalate had the highest estimated median potential absorbed doses (26 ng/kg/day) under the indirect ingestion route of exposure, followed by di-*n*-butylphthalate (9.7 ng/kg/day).

For the OH children, estimated median potential absorbed doses were highest for di-*n*-butylphthalate (57 ng/kg/day) through the inhalation route of exposure, while all other pollutants had estimated median potential absorbed doses via the inhalation route of less than 0.6 ng/kg/day. When considering the dietary ingestion route, median potential absorbed doses for OH children were highest for benzylbutylphthalate (270 ng/kg/day), bisphenol-A (52 ng/kg/day) and 3,5,6-TCP (25 ng/kg/day), while median estimated potential absorbed doses through the indirect ingestion route were highest for benzylbutylphthalate (18 ng/kg/day), followed by di-*n*-butylphthalate (5.7 ng/kg/day). Like for potential exposure level, these results suggest that the preschool children had the highest potential absorbed doses to the phthalates through all three routes of exposure.

2.4.3. Estimated Aggregated Potential Exposure Levels for NC and OH Preschool Children

Aggregated potential exposure (ng/day) was defined as the sum of the estimated potential exposure levels across all three exposure routes – inhalation, direct ingestion and indirect ingestion – and was estimated for the eight pollutants mentioned earlier. Figure 2.4.1 presents median values of the aggregated potential exposure levels for the study participants.

NC children had the highest median aggregated potential exposure levels to di-*n*-butylphthalate (42,900 ng/day), followed by bisphenol-A (2,560 ng/day), and 3,5,6-TCP (1,230 ng/day), while the lowest median aggregated potential exposure level was observed for diazinon

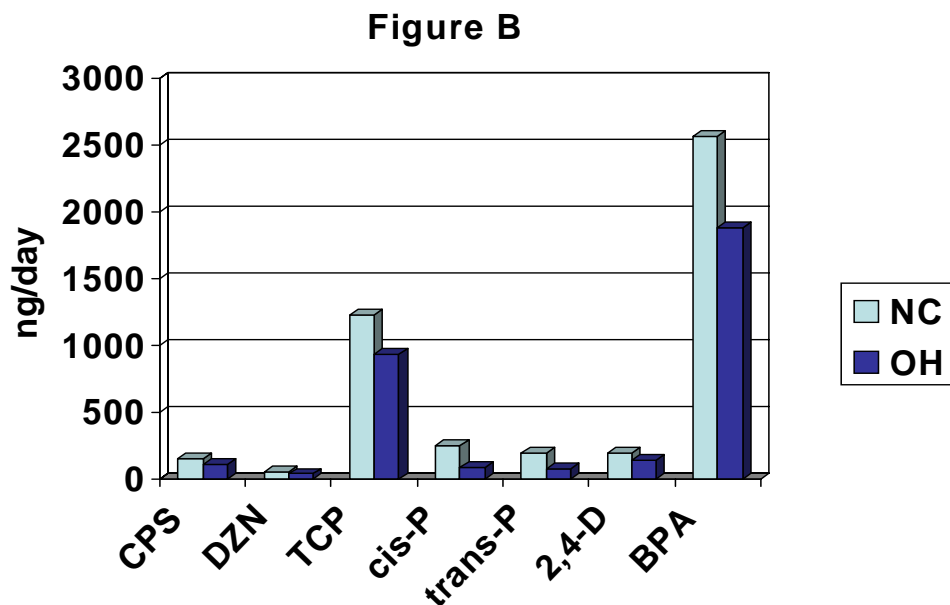
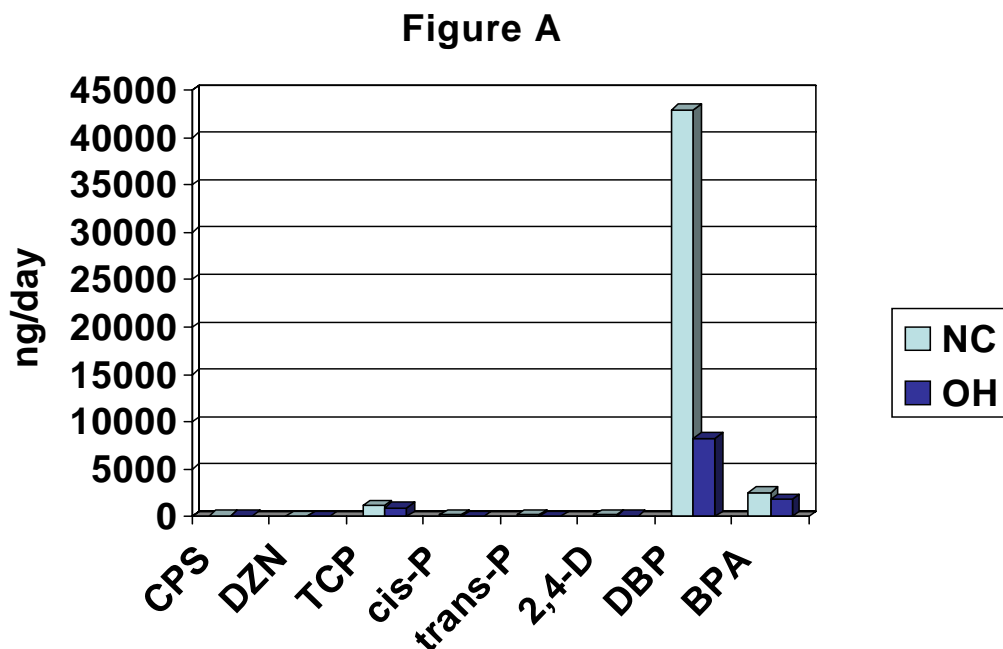


Figure 2.4.1 Estimated Median Aggregate Potential Exposure Levels of NC and OH Preschool Children to Eight Pollutants in Their Everyday Environments.

Legend: CPS = Chlorpyrifos; DZN = Diazinon; TCP = 3,5,6-Trichloro-2-pyridinol Cis-P and Trans-P = Cis- and Trans-Permethrin; 2,4-D = 2,4-Dichlorophenoxyacetic acid; DBP = Di-*n*-butylphthalate; BPA = Bisphenol-A

Note: Figures A and B are equivalent, except Figure B excludes DBP.

(51.6 ng/day). OH children had the highest median aggregate potential exposure levels to di-*n*-butylphthalate (8,310 ng/day), bisphenol-A (1,880 ng/day), and 3,5,6-TCP (930 ng/day), while the lowest median aggregate potential exposure level was observed for diazinon (38.6 ng/day). Thus, children in both states had the highest potential aggregate exposures to di-*n*-butylphthalate, bisphenol-A, and 3,5,6-TCP in their everyday environments. However, NC children had five times greater median aggregate potential exposure levels to di-*n*-butylphthalate than OH children.

2.4.4. Estimated Aggregated Potential Absorbed Doses for NC and OH Preschool Children

Aggregate potential absorbed dose (ng/kg/day) was defined as the sum of the estimated potential absorbed dose across all three exposure routes – inhalation, dietary ingestion, and nondietary ingestion – and was estimated for the eight pollutants mentioned earlier. Figure 2.4.2 presents median values of the aggregated potential absorbed doses for the study participants.

The NC and OH children had the highest median aggregated potential absorbed doses to di-*n*-butylphthalate (1,250 and 262 ng/kg/day) and bisphenol-A (71.4 and 60.8 ng/kg/day), respectively. Both the NC and OH children had the lowest median aggregated potential doses to diazinon (1.44 and 1.13 ng/kg/day), respectively.

The results show that both the NC and OH children had the highest estimated aggregated potential absorbed doses to di-*n*-butylphthalate in their everyday environments. However, the NC children had over four times greater median aggregated potential absorbed doses of di-*n*-butylphthalate than the OH children.

2.4.5 Urinary Biomarker Concentrations as a Indicator of Absorbed Dose

Several acid pollutants and metabolites were measured in urine samples collected over the 48-h sampling period from each study participant. Of these, 3,5,6-TCP, 2,4-D, and pentachlorophenol were used as indicators of aggregated potential absorbed doses. For NC children, median urinary concentrations were 5.3 ng/mL for 3,5,6-TCP (98% detected), 0.7 ng/mL for 2,4-D (94% detected), and 0.4 ng/mL for pentachlorophenol (89% detected). Similar median levels were observed for OH children: 5.1 ng/mL for 3,5,6-TCP (100% detected), 1.0 ng/mL for 2,4-D (98% detected), and 0.8 ng/mL for pentachlorophenol (99% detected).

In urine samples, NC and OH children had at least five times greater levels of 3,5,6-TCP compared to 2,4-D and pentachlorophenol. Overall, NC and OH children were exposed to low levels of these pollutants or their metabolites at their homes and/or day care centers over the 48-h sampling period.

2.4.6. Testing Important Hypothesis

Analyses of estimated potential exposure levels, potential absorbed doses, aggregated potential exposure levels, aggregated potential absorbed doses, and urinary concentrations of the participating children were performed to address the first three of the seven hypotheses listed in

Figure A

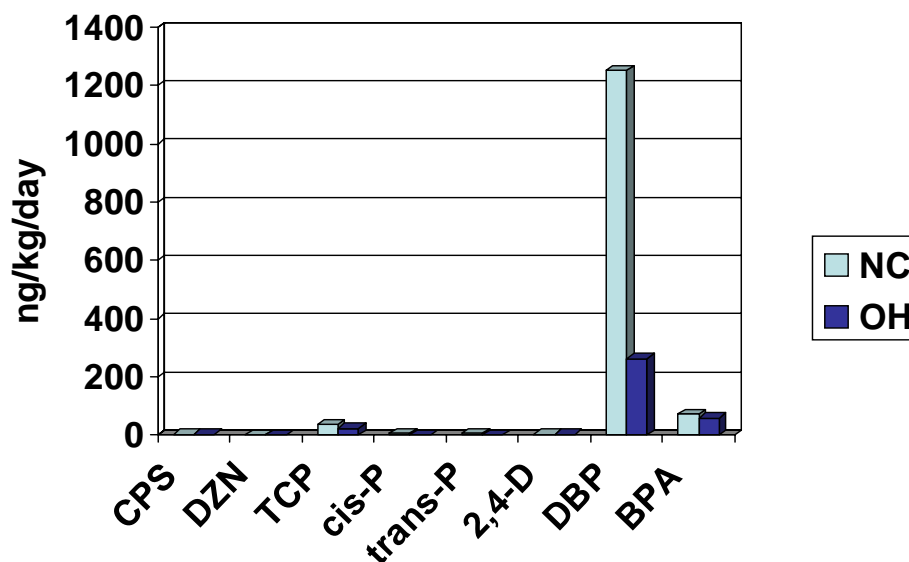


Figure B

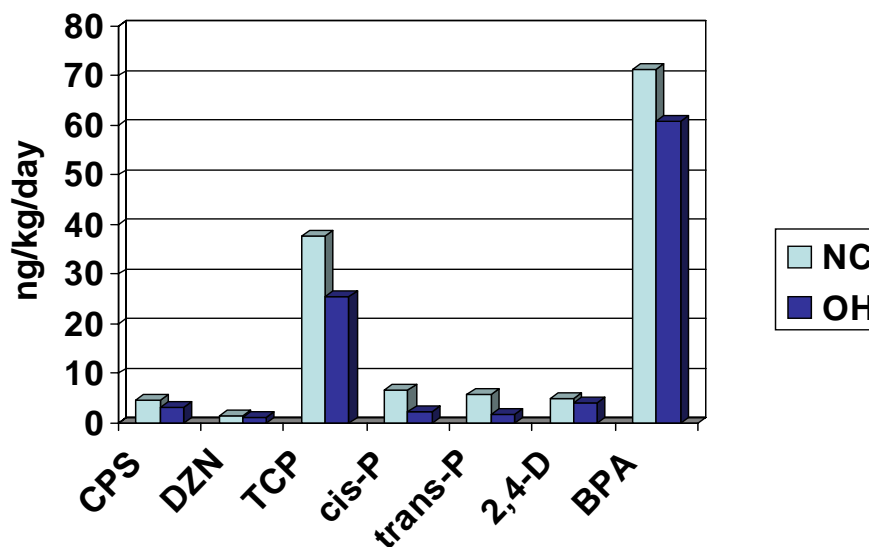


Figure 2.4.2 Estimated Median Aggregate Potential Doses of NC and OH Preschool Children to Eight Pollutants in Their Everyday Environments

Legend: CPS = Chlorpyrifos; DZN = Diazinon; TCP = 3,5,6-Trichloro-2-pyridinol *Cis*-P and *Trans*-P = *Cis*- and *Trans*-Permethrin; 2,4-D = 2,4-Dichlorophenoxyacetic acid; DBP = Di-*n*-butylphthalate; BPA = Bisphenol-A

Note: Figures A and B are equivalent, except Figure B excludes DBP.

Section 1.0. An analysis of variance approach was taken to determine whether these estimates and concentrations differed significantly between 1) day care children and stay-at-home children, 2) children in urban and rural environments, and 3) children in low-income and middle/high-income environments.

The comparisons between the exposures of children and adults in the same households in NC and OH are not discussed in this section. The results in chapter 9 showed that children were generally exposed to significantly higher levels of pollutants than adults in the same household, however, these results were likely due to differences in physiological factors (i.e., ventilation rates and body weights), activity patterns (i.e., hand-to-mouth and object-to-mouth), or consumption of different types of food.

Comparisons between day care children and stay-at-home children: For the nine PAHs and for benzylbutylphthalate via the indirect ingestion route, OH day care children ranged up to 3.3 times higher potential exposures and potential absorbed doses compared to stay-at-home children, and these differences were highly significant. For the dietary ingestion exposure route, highly significant differences existed in potential exposure level and/or potential absorbed dose between OH day care children and stay-at-home children for *cis*- and *trans*-permethrin and for benzylbutylphthalate, with day care children having approximately three times the levels, on average, compared to stay-at-home children. For NC children, potential exposure level or potential absorbed dose for one group (day care children or stay-at-home children) was always less than three times the value of the second group, on average, across the pollutants and exposure routes.

Comparisons between children in urban and rural environments: NC children who lived in urban counties had 3.4 times and 3.7 times higher potential exposures and potential absorbed doses, respectively, to 2,4-D through the indirect ingestion route of exposure compared to rural children, and these differences were highly significant ($p < 0.01$). Similarly, OH children living in urban counties had 3.2 to 3.7 times higher potential exposures and potential absorbed doses of each of the nine PAHs through the indirect ingestion route of exposure compared to rural children, and these differences were highly significant.

Comparisons between children in low-income and middle/low-income environments: Between low-income and middle/high-income children in both NC and OH, potential exposure and potential absorbed dose estimates of 2,4-D were highly significantly different under the indirect ingestion route, with low-income children averaging 30% or less of the estimates of middle/high-income children, on average.

Summary: The largest differences between urban and rural children, between day care and stay-at-home children, and between low-income and middle/high-income children in potential exposure level and potential absorbed dose, as well as the most frequent occurrences of significant differences, occurred within the indirect ingestion exposure route for both states. There were relatively few occurrences of highly significant differences between population strata for either aggregated potential exposure levels or aggregated potential absorbed dose among the eight pollutants for which these measures were calculated for the study participants, and no

difference deemed to be highly significant was at least three times larger, on average, for one stratum versus another. There were no highly significant differences in urinary concentrations of 3,5,6-TCP, 2,4-D or pentachlorophenol between any strata.

2.5 Goal 4

The fourth goal of the CTEPP study was to apportion the aggregated potential exposure levels and aggregated potential absorbed dose estimates for the NC and OH children across the inhalation, dietary ingestion, and indirect ingestion routes of exposure. These aggregated potential exposure levels and aggregated potential absorbed doses could be quantified through the three routes of exposure for eight pollutants: chlorpyrifos, diazinon, 3,5,6-TCP, *cis*-permethrin, *trans*-permethrin, 2,4-D, di-*n*-butylphthalate, and bisphenol-A. Statistical analyses involved calculating the proportions of the aggregate potential exposure levels and aggregate potential doses by each route of exposure for each child, then fitting a logistic regression model to these proportions to estimate mean proportions as a function of environmental type, urbanicity, and income status.

Figures 2.5.1 and 2.5.2 illustrate the overall estimates of the mean proportions by route of exposure for NC and OH children, respectively. The results show that for both states, the dietary ingestion route was the primary route of exposure to all eight pollutants. Greater than 92% of the aggregated potential exposure levels and aggregated potential absorbed doses of the children were to bisphenol-A, 3,5,6-TCP, 2,4-D, and di-*n*-butylphthalate through the dietary ingestion route of exposure. In addition, about 50% of the aggregated potential exposure levels and potential absorbed doses of *trans*-permethrin, *cis*-permethrin, diazinon, and chlorpyrifos were through the dietary ingestion route of exposure. The OP pesticides, chlorpyrifos and diazinon, contributed most to the inhalation route of exposure for NC and OH children, while the pyrethroids, *cis*-permethrin and *trans*-permethrin, contributed most to the indirect ingestion route of exposure. Therefore, children in both states were predominantly exposed to the eight chemicals through ingestion, primarily dietary in nature.

Mean proportions associated with each exposure route were also calculated by stratum (urban children, rural children, low-income children, middle/high-income children, day care children, stay-at-home children), and statistical analysis was performed to determine whether a particular type of stratum (urbanicity, income level, day care attendance) had a significant effect on the mean proportion for a given exposure route. Results of this analysis showed that there were several highly statistically significant ($p < 0.01$) differences in the exposures of NC or OH children between pairs of strata. However, these statistically significant differences between each strata were frequently not realistically meaningful, except in some instances. For example, for diazinon, mean proportions for the inhalation route of exposure differed significantly ($p < 0.01$) between low-income children (46%) and middle/high-income children (34%) for NC children.

For the NC and OH children, Table 2.5.1 presents the relative importance of the children's exposures to the eight target pollutants through the inhalation, dietary ingestion, and indirect ingestion routes of exposure.

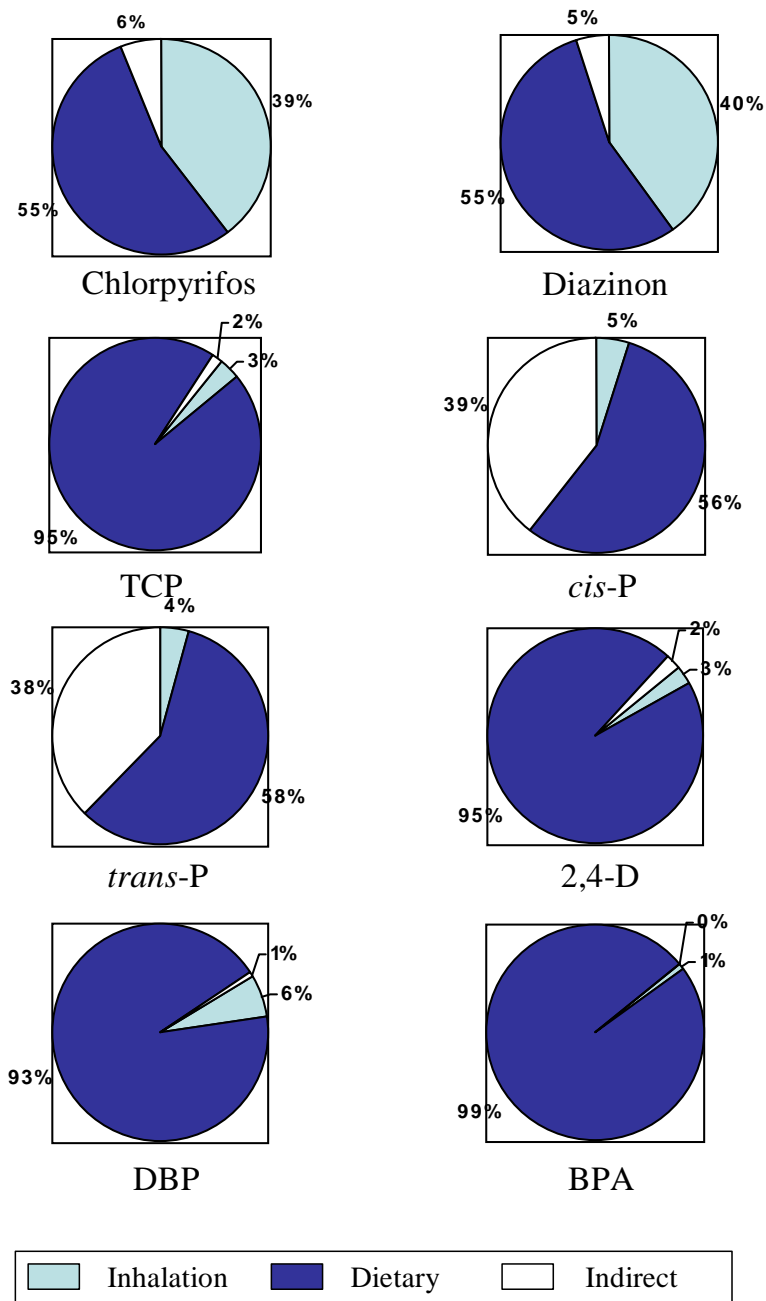


Figure 2.5.1 Estimated Mean Proportion of Aggregated Potential Exposure and Potential Absorbed Dose for NC Children, by Exposure Route

Legend: TCP = 3,5,6-Trichloro-2-pyridinol; *Cis*-P and *Trans*-P = *Cis*- and *Trans*-Permethrin; 2,4-D = 2,4-Dichlorophenoxyacetic acid; DBP = Di-*n*-butylphthalate; BPA = Bisphenol-A.

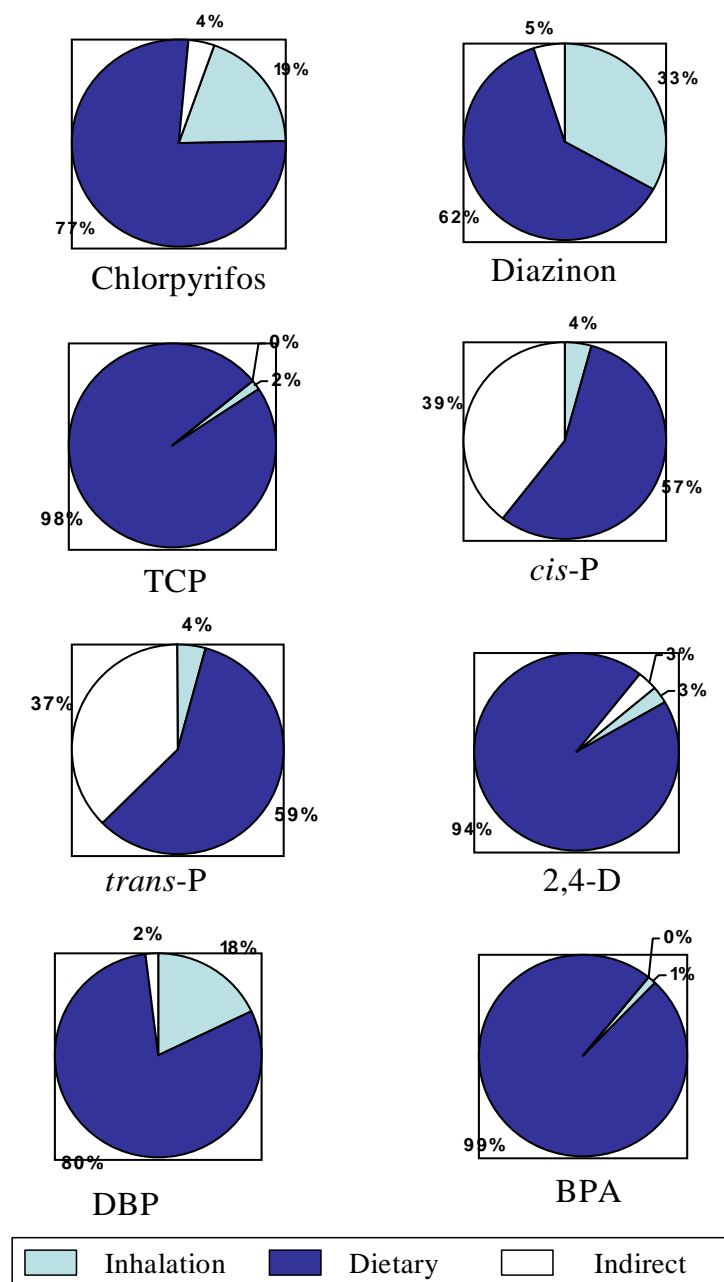


Figure 2.5.2 Estimated Mean Proportion of Aggregated Potential Exposure and Potential Absorbed Dose for OH Children, by Exposure Route

Legend: TCP = 3,5,6-Trichloro-2-pyridinol; *Cis*-P and *Trans*-P = *Cis*- and *Trans*-Permethrin; 2,4-D = 2,4-Dichlorophenoxyacetic acid; DBP = Di-*n*-butylphthalate; BPA = Bisphenol-A. .

Table 2.5.1 The Relative Importance of the NC and OH Children's Exposures to the Eight Pollutants Through the Inhalation, Dietary Ingestion, and Indirect Ingestion Routes of Exposure.

Chemical Class	Pollutant(s)	Apportionment of Aggregated Exposure/Dose
OP Pesticides	Chlorpyrifos Diazinon	<i>NC:</i> dietary ingestion . inhalation > indirect ingestion <i>OH:</i> dietary ingestion > inhalation > indirect ingestion
OP Metabolite	3,5,6-TCP	<i>NC:</i> dietary ingestion > inhalation > indirect ingestion <i>OH:</i> dietary ingestion > inhalation > indirect ingestion
Pyrethroid Pesticides	<i>cis</i> -Permethrin <i>trans</i> -Permethrin	<i>NC:</i> dietary ingestion . indirect ingestion > inhalation <i>OH:</i> dietary ingestion > indirect ingestion > inhalation
Acid Herbicide	2,4-D	<i>NC:</i> dietary ingestion > inhalation > indirect ingestion <i>OH:</i> dietary ingestion > indirect ingestion . inhalation
Phthalate	Di- <i>n</i> -butylphthalate	<i>NC:</i> dietary ingestion > inhalation > indirect ingestion <i>OH:</i> dietary ingestion > inhalation > indirect ingestion
Phenol	Bisphenol-A	<i>NC:</i> dietary ingestion > inhalation > indirect ingestion <i>OH:</i> dietary ingestion > inhalation > indirect ingestion

In summary, the NC and OH children had similar mean proportions of aggregated potential exposure level and of aggregated potential absorbed dose for the eight pollutants across the three routes of exposure considered in this study. The dominant route of exposure for these children was through dietary ingestion for all eight pollutants. The OP pesticides, chlorpyrifos and diazinon, contributed most to the inhalation route of exposure, while the pyrethroids, *cis*- and *trans*-permethrin contributed most to the indirect ingestion route of exposure.

Chapter 3

Recommendations

The CTEPP study has provided a wealth of data on young children's exposures to pollutants in their everyday environments. The study findings indicate that the participating children in NC and OH could have been potentially exposed and could have acquired potential doses to low levels of many of the targeted pollutants from several sources, through several pathways and routes.

EPA will use these data in the future for the following:

- To estimate the dermal exposures of the NC and OH preschool children to the eight most prevalent pollutants, in order to estimate better their aggregate exposures to these pollutants in their everyday environments.
- To refine the algorithms that are currently used to determine children's potential exposures and potential absorbed doses to these pollutants.
- To refine models and human health risk assessments, particularly for children.
- To compare the levels of potential exposure and potential absorbed doses with possible human health effects, particularly in children.

Chapter 4

Sampling Design and Participant Recruitment

4.1 Sampling Design

A population-based, stratified random sampling design (Figure 4.1.1) was developed to collect the data needed to meet the objectives of the study. In each state, four urban and two rural counties, representing three distinct geographical areas in the state, were randomly selected. Within these counties, there were two sampling frames (components), which were designed to allow testing of the study hypotheses, and in particular, to test whether the children's exposures are significantly different at day care versus at home. The first sampling component, the telephone component, was composed of households that were selected randomly through list-assisted telephone sampling. The telephone component enrolled households with preschool children who did not attend day care. The second sampling component, the day care component, was composed of child day care centers that were randomly selected and enrolled households with preschool children who did attend day care. Within these components, the households and child day care centers were stratified by income.

In both North Carolina (NC) and Ohio (OH), six counties were selected using stratified random sampling. Because of stratification, the samples represented different regions, urban and rural areas, and low-income and middle/high-income areas of each state. The sample selection process targeted counties with larger population and in particular, larger population in the low-income groups, by selecting counties using probabilities proportional to size (PPS) within each stratum. The county population in the low-income segment was used as a measure of size. This approach ensured greater representation of low-income families than would have occurred otherwise. The locations of these counties in the two states are shown in Figure 4.1.2. The selected counties were in three distinct geographical areas in each state. In NC, these geographical areas were the coastal plain, the Piedmont, and the mountains. In OH, the areas were the northern, central, and southern regions.

Within each of the two states, the samples were further stratified according to degree of urban character (urbanicity) and family income. The urbanicity stratification was imposed at the first stage of selection by classifying counties as predominantly urban or rural. A county was considered urban if it was within or contained wholly or in part a Metropolitan Statistical Area (MSA) as defined by the Office of Management and Budget (OMB Bulletin No. 99-04). Income stratification was performed at subsequent stages of selection for the day care component and the telephone component. This stratification was used to distinguish between low-income and middle/high-income households and day care centers. Day care centers were classified as low-income if they received Federal assistance to serve low-income clients under the Head Start

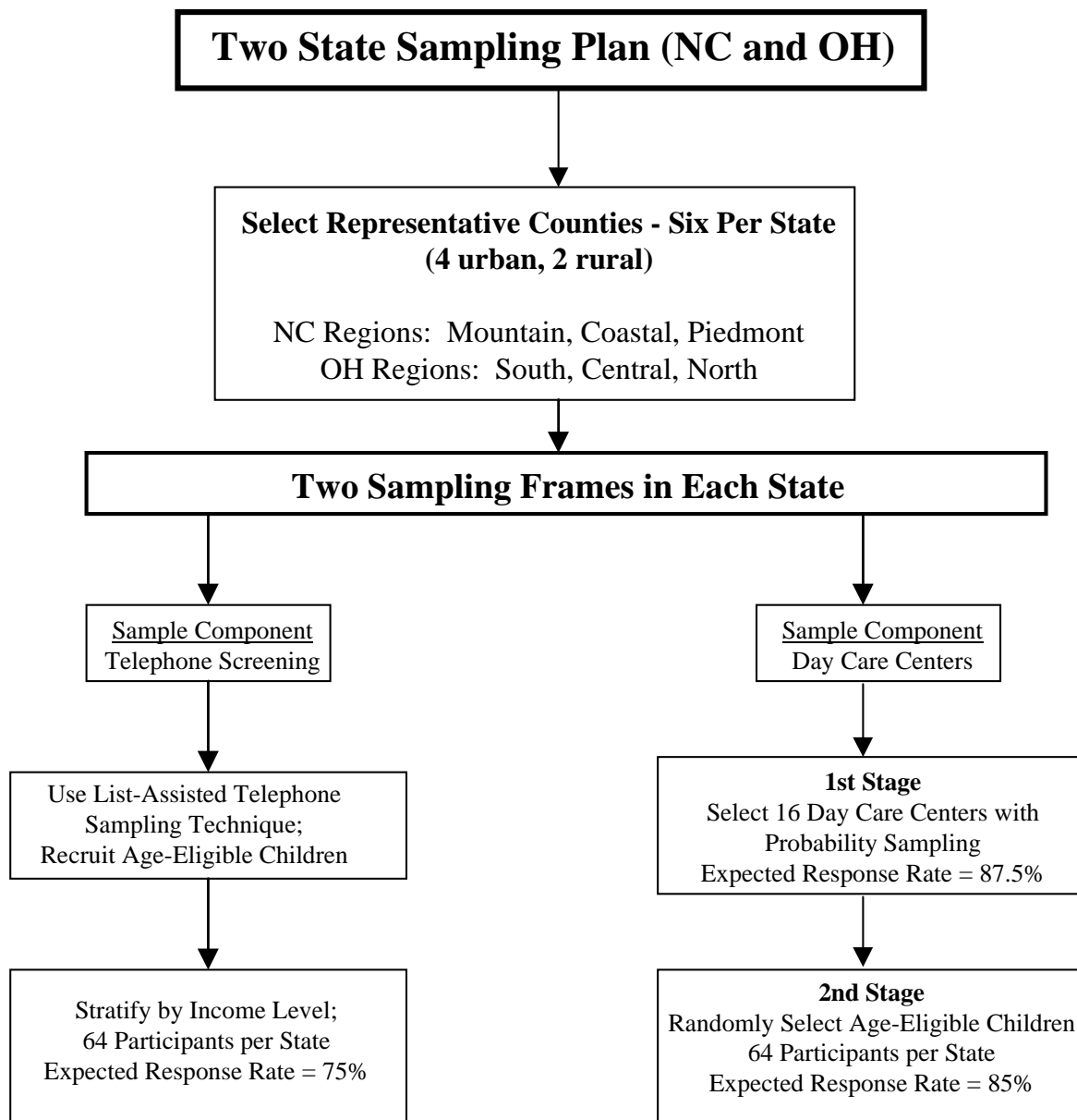
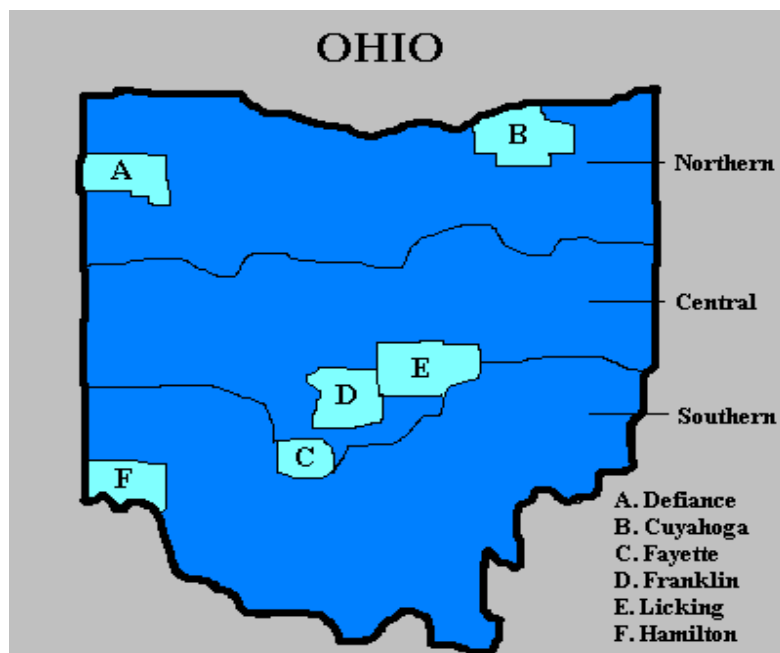


Figure 4.1.1 CTEPP Overall Sampling Design



A



B

Figure 4.1.2 Six Counties in North Carolina (A) and Ohio (B) Selected by Stratified Random Sampling

program. Low-income families were classified according to the federal guidelines for assistance eligibility under the Women, Infants, and Children program (WIC, 2000). A household was classified as low-income if its household income was below 185% of the federal poverty guidelines (Federal Register, 2000). In 2000, the WIC eligibility level for a family of two was \$20,813 and for a family of four was \$31,534.

In the day care component, all eligible child day care centers in the six selected counties were identified. A child day care center was considered eligible if it was a commercial or not-for-profit service provider, which provided child care services to seven or more preschool children at a location other than the service provider's personal residence. During the second-stage sampling frame, these centers were divided into the two income strata. From these strata, a random sample of targeted centers and a random sample of eligible children within each participating center were selected. In the telephone component, a random sample of telephone numbers was selected, using list-assisted telephone sampling techniques in the six counties in each state. The anticipated sample size was 128 children in each state, with half (64) from the day care center sample (children who attended day care) and the other half (64) from the telephone sample (children who did not attend day care). This dual frame approach provided maximum coverage for the target population.

4.2 Recruitment

4.2.1 Recruitment of the Day Care Center Component

Recruitment of the day care center component was conducted in two stages, as diagrammed in Figure 4.2.1. In the first stage, master lists of all day care centers in NC and of all those in OH were compiled. For the six target counties in each state, a complete list of day care centers in each county was prepared and sorted by urbanicity and income. From these lists, approximately 16 centers were targeted for selection; of these at least four were Head Start centers, which served primarily low-income clients. The centers were contacted through telephone calls and mailings. In the second stage of the day care center component, eligible children who attended the day care centers were selected randomly from up to two classrooms in each participating center. Classroom information was requested from each of the centers. Parents or primary caregivers were contacted through the centers, as discussed below, to obtain informed consent for study participation.

Because every eligible child day care center must be licensed to operate in its state, the state licensing agencies were the main sources of comprehensive lists of centers in both NC and OH. Additionally, to ensure the completeness of the master lists of child day care centers, the lists obtained from the state agencies were supplemented with information on centers from other sources. The most updated CD-ROM national telephone database (Pro-CD, 1999-2000, infoUSA Inc.) was searched, and a list of eligible day care centers in the target counties was prepared. In addition to the CD-ROM national telephone database, an Internet search was done. Centers that appeared on the CD-ROM national telephone database and/or the Internet were cross-checked against the lists provided by state licensing agencies. Centers that appeared on the

CD-ROM national telephone database and/or Internet, but did not appear on the list from state licensing agencies, were called to determine the eligibility status of the center. Additional eligible centers were then added to the master list.

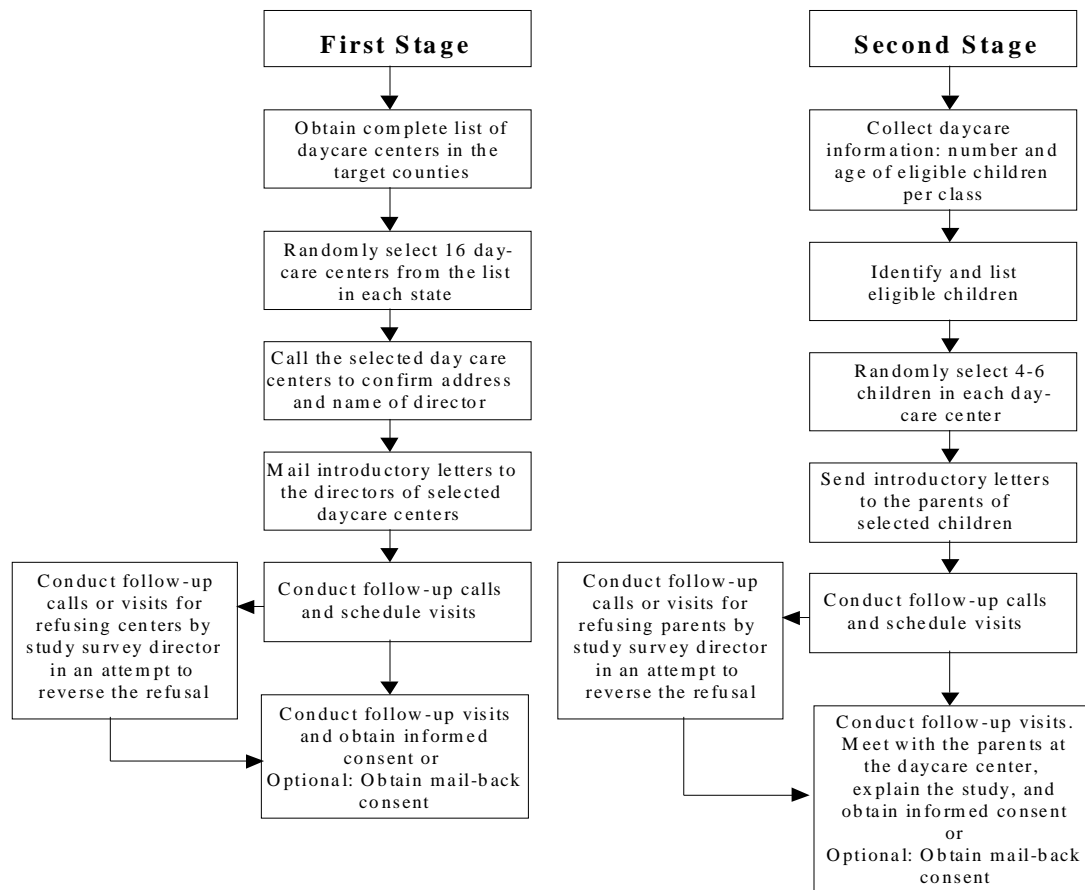


Figure 4.2.1 Procedures for Recruiting Day Care Center Component

This sampling component was then stratified by county and by whether or not the center received Federal assistance to serve low-income clients (Head Start centers). Within each stratum, day care centers were selected, with probability proportional to the number of children enrolled in the center. A total of 16 centers, including at least four Head Start centers, were targeted for recruitment in each state. Further details on the day care center sample recruitment can be found in the recruitment reports from NC and OH (Appendix B).

Screening calls were conducted by the recruitment team, to confirm the addresses of the selected centers and the names of the center directors. After confirmation, the recruitment team sent an introductory letter, a study brochure, and a gift certificate (as incentive for the center to participate) to each day care center director by overnight express mail. Approximately three days after the letters were mailed, the recruitment team made follow-up calls to each director. To encourage participation of each center, the team made follow-up visits to the center director, and the Battelle field team leader contacted the center as needed. The first stage recruitment activities were completed by obtaining informed consent forms from each day care center.

The second sampling stage of the day care component involved selecting a random sample of eligible children from up to two classrooms in the selected centers. Children in the child day care center component were eligible if they were between the ages of 18 months and 5 years, toilet-trained or able to provide at least one urine sample, and not being breast-fed. In addition, they had to attend a state-licensed child day care center, serving seven or more children, on three consecutive days, for at least 25 h per week.

The second stage recruitment activities began with the determination of the number of age-eligible children in each classroom. Classroom Information sheets were sent to and completed by the day care director. These sheets requested the following information for each classroom: name of the classroom, total number of children in the classroom, and the initials and ages of eligible children. Two classrooms and five children in each classroom were selected randomly. Following the selection of the children, the recruitment team asked the day care director to distribute the recruitment package, which contained an introductory letter, a study brochure, and a gift certificate (as incentive for the household to participate), to the parents of the selected children. Parents were encouraged to call the project toll-free number to ask about the study. In consultation with the day care center director, the recruitment team also set up an appropriate time, typically two or three days after the letters were sent, to meet with the parents at the day care center.

During the meeting with the parents, the recruitment team established rapport with the parents and the child, and gave a small gift to the child, such as a book or small toy. The recruitment team emphasized the positive experiences that we and the participants had in our previous pilot studies. An informed consent form was obtained from the parents, and they were asked to complete the Recruitment Survey (Form #1; Table 5.2.2). The recruitment team then scheduled an initial sampling date with each family.

4.2.2. Recruitment of the Telephone Sample Component

The procedures for recruiting households by telephone sampling are diagramed in Figure 4.2.2. A telephone sample list, which included addresses, was ordered from a commercial survey sampling firm (Marketing Systems Group [MSG], Genesys Sampling System, <http://www.genesys-sampling.com>). The sample design used for the telephone component was: (1) to identify efficiently, through telephone contact, households having one or more children in the eligible age range, that met the sampling targets in the household low-income or middle/high-income domains, and (2) to provide coverage of households with unlisted telephone numbers.

The survey sampling firm used Census data, marketing research data, and other sources to classify directory-listed households as having either one or more children in the age range of 18 months to 5 years, or having no children in that age group. The same data were used to assign the directory-listed households to an income range. All directory-listed households in each of the six counties were assigned to one of the following four strata:

1. Directory-listed households with income above \$25,000 and having one or more children in the target age range
2. Directory-listed households with income below or equal to \$25,000 and having one or more children in the target age range
3. Directory-listed households with income above \$25,000 and having no children in the target age range
4. Directory-listed households with income below or equal to \$25,000 and having no children in the target age range

In some counties, as many as 30% of households could have unlisted telephone numbers. To ensure inclusion of those households that did not appear in the directories, a Random Digit Dialing (RDD) approach was used. To implement the RDD approach, the survey sampling firm first identified all telephone exchanges in the selected county. Telephone exchanges having very low percentages of directory-listed households, primarily nonresidential or business areas, in the selected county were deleted. From the remaining exchanges, a systematic random sample of all numbers was drawn. Some of these telephone numbers were residential, and some were business or nonworking numbers. To prevent a directory-listed telephone number from being sampled in both the RDD frame and the directory-listed frame, the survey sampling firm selected the RDD sample of telephone numbers first. The sampled telephone numbers were compared to the database of directory-listed telephone numbers. Those telephone numbers that were directory-listed were removed from the directory-listed frame, prior to the stratification described above. The list-assisted samples, corresponding to the four strata above, and the RDD samples were combined in replicate files. This telephone sample selection did not include households without home telephones; however, they were represented in the day care sample component.

CTEPP Recruitment Protocol

Sample Component: Telephone Sample

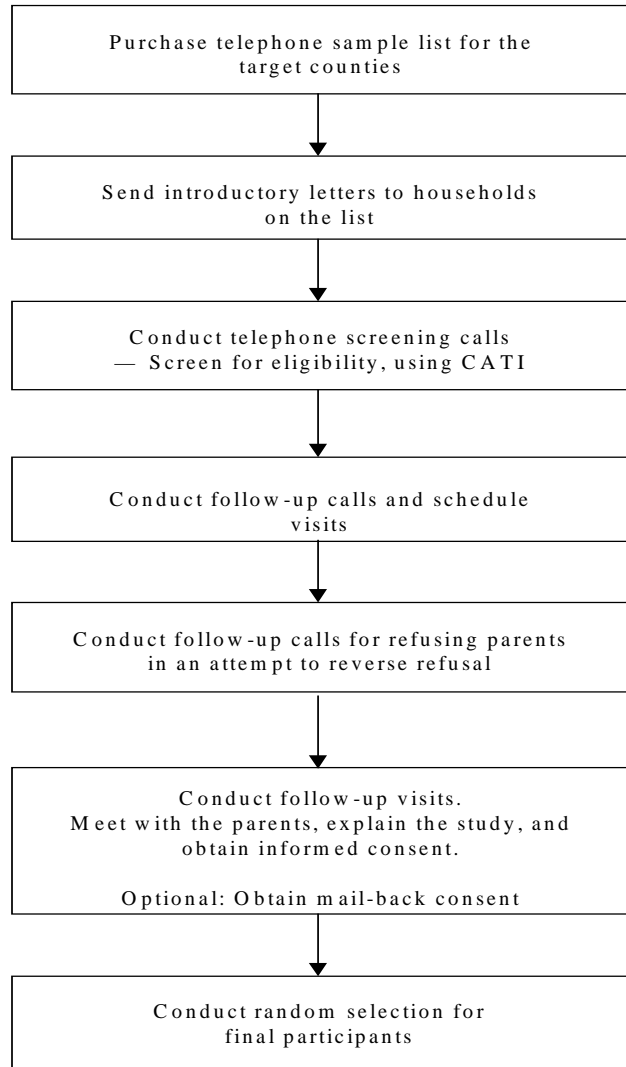


Figure 4.2.2 Procedures for Recruiting Telephone Sample Component

Introductory letters and a study brochure were sent to households in the telephone list that had valid addresses. A Computer Assisted Telephone Interview (CATI) system was developed to facilitate the screening process. All numbers in the files were called and screened for eligible subjects. Children were eligible for this telephone sample component if they were between the ages of 18 months and 5 years, toilet-trained or able to provide at least one urine sample, not being breast-fed, and not attending a day care center. The final participants were randomly selected from the eligible subjects. Staff visited those households that tentatively agreed to participate in the study. At these visits, the staff explained the study further and obtained informed consent.

4.3 Recruitment Results

4.3.1 North Carolina

Recruitment of subjects for the NC field study was conducted in two phases. Recruitment of Phase I participants began in four NC counties (Durham, Buncombe, Lee, and Mecklenburg) in early February 2000, but was suspended on February 29 for four months due to the OMB 2000 Census requirement. The OMB prohibited other federally-sponsored surveys from occurring during the period from March to June 2000 while the 2000 U.S. Census was conducted.). Recruitment of subjects in these counties resumed in July 2000 and continued through December 2000. Phase I field sampling activities were completed with 48 households in December 2000. Recruitment of Phase II subjects was conducted for the two eastern NC counties affected by severe flooding from Hurricane Floyd (Edgecombe and Jones) from February 26 through March 30, 2001. Twelve additional subjects and their adult caregivers from the day care center sample component were enrolled in Phase II. In Jones County, although one day care center agreed to participate in the study, no parents were willing to participate, because they were still dealing with the flooding problems from the hurricane.

A conservative approach was used to calculate the final response rate. During the recruitment period, some people refused to be screened and some could not be reached. As a result, their eligibility status was unknown. A calculated eligibility rate was used to estimate the number of eligible subjects in this group of status-unknown subjects. This eligibility rate, which was determined from the known responses, was calculated as the total number of eligibles divided by the sum of the total number of eligibles and ineligibles. To calculate the final response rate, the number of eligible subjects who agreed to participate was divided by the estimated total number of eligible subjects – the total of those eligibles who responded plus the estimated eligibles. This approach tends to underestimate the final response rate, because it does not include the number of status-unknown subjects who might be eligible and agree to participate in the study but could not be reached.

Table 4.3.1 summarizes the response rates for the NC study. Overall, 98% of the recruitment target for day care participants in NC was achieved through enrollment of a total of 63 of 64 target households. Overall, 105% of the targeted number (67 of 64 targeted) of telephone sample households in NC were enrolled in the CTEPP study. All recruitment activities for NC were completed by March 30, 2001.

Table 4.3.2 provides the overall recruitment results for NC for the children who were recruited at home or at day care. The final recruitment results for the NC field study led to the enrollment of 130 children, ranging in age from 20 to 64 months, and their primary adult caregivers.

Table 4.3.1 Summary of CTEPP North Carolina Response Rates

Sampling Frame	Summary
Child Day Care Component: Child Day Care Centers	
(A) Eligible and Recruited Child Day Care Centers	13
(B) Eligible Child Day Care Centers	17
(C) Ineligible Child Day Care Centers	5
(D) Unknown Eligibility	10
(E) Calculated Response Rate ^a	53%
Child Day Care Component: Day Care Parents	
(A) Eligible and Recruited Day Care Parents	69
(B) Eligible Day Care Parents	85
(C) Ineligible Day Care Parents	26
(D) Unknown Eligibility	71
(E) Calculated Response Rate ^a	50%
Telephone Screening Component	
(A) Eligible and Recruited Stay-at-Home Parents	272
(B) Eligible Stay-at-Home Parents	333
(C) Ineligible Stay-at-Home Parents	6547
(D) Unknown Eligibility	2807
(E) Calculated Response Rate ^a	58%

^a Calculated Response Rate, $E = (A)/(B + (B/(B + C)) \times D)$

Table 4.3.2 Summary of CTEPP North Carolina Participant Characteristics

Final NC Results		Telephone Sample				Day Care Sample			
		Unknown	Low-income	Mid-income	Subtotal	Unknown	Low-income	Mid-income	Subtotal
Urban	Buncombe		6	1	7		6	4	10
	Durham		5	21	26		5	12	17
	Mecklenburg	3	2	15	20	1	11	3	15
	Edgecombe		1	1	2	1	11	0	12
	Total Urban	3	14	38	55	2	33	19	54
Rural	Lee		4	3	7	1	5	3	9
	Jones	1	3	1	5		0	0	0
	Total Rural	1	7	4	12	1	5	3	9
	Total NC	4	21	42	67	3	38	22	63
	% of Total	6%	31%	63%	100%	5%	60%	35%	100%

Thirteen NC day care centers (eight regular day care and five Head Start) participated in the study. Sixty-three day care children, day care teachers, and their caregivers successfully completed the field activities of the study. Sixty-six stay-at-home children and their caregivers, successfully completed the field activities of the study. One stay-at-home participant did not complete the study. The distribution of low-income and middle/high-income of the NC families in the telephone sample component was very close to the original sampling design. However, in the day care sample, low-income families were over-enrolled, with 60% of the day care sample classified as low-income. This over-enrollment of low-income families in the day care sample occurred because many of the children in the regular day care centers, those not catering specifically to low-income families through the Federally funded Head Start program, came from families that were classified as low-income. Further information on the NC field study can be found in the NC Recruitment Report (Appendix B) and in our published paper on the CTEPP sampling design and field methodology (11).

4.3.2 Ohio

Recruitment of subjects for the OH field study began in January 2001 and was completed in November 2001. Fifty-eight households were successfully recruited. Table 4.3.3 summarizes the response rates for the OH study. For the day care sample component, 91% of the recruitment target for day care participants in OH was achieved through enrollment of a total of 58 of 64 target households. For the telephone sample component, a total of 165 potentially eligible households were identified. Overall, 108% of the target stay-at-home participants were recruited through enrollment of a total of 69 of 64 target households. All recruitment for OH was completed in November 2001.

Table 4.3.4 provides the overall recruitment results for OH, for both the stay-at-home and day care children. The final recruitment results for the OH field study led to the enrollment of 127 children, ranging in age from 20 to 65 months, and their primary adult caregivers.

Sixteen OH day care centers (12 regular day care and 4 Head Start) participated in the study. Fifty-eight day care children and their caregivers, participated successfully in the field activities of the study, with simultaneous sampling both at the centers and at the children's homes. Sixty-nine households in which the children did not attend day care participated successfully in the field activities of the study, with sampling for the children and their primary caregivers at the children's homes. The distribution of low-income and middle/high-income families in the OH telephone sample component is very close to the original sampling design, with 26% of the stay-at-home participants classified as low-income. However, as in NC, the low-income families were over-enrolled in the day care sample component, with 50% of the day care participants classified as low-income. Further information on the OH field study can be found in the OH Recruitment Report (Appendix B) and in our published paper on the CTEPP sampling design and field methodology (11).

Table 4.3.3 Summary of CTEPP Ohio Participant Response Rates

Sampling Frame	Summary
Child Day Care Component: Child Day Care Centers	
(A) Eligible and Recruited Child Day Care Centers	16
(B) Eligible Child Day Care Centers	24
(C) Ineligible Child Day Care Centers	4
(D) Unknown Eligibility	5
(E) Calculated Response Rate ^a	57%
Child Day Care Component: Day Care Parents	
(A) Eligible and Recruited Day Care Parents	71
(B) Eligible Day Care Parents	100
(C) Ineligible Day Care Parents	8
(D) Unknown Eligibility	141
(E) Calculated Response Rate ^a	31%
Telephone Screening Component	
(A) Eligible and Recruited Stay-at-Home Parents	165
(B) Eligible Stay-at-Home Parents	191
(C) Ineligible Stay-at-Home Parents	4598
(D) Unknown Eligibility	2449
(E) Calculated Response Rate ^a	57%

^a Calculated Response Rate, $E = (A)/(B + (B/(B + C)) \times D)$

In addition to the field sampling and data collection described above for both NC and OH, 26 children in OH were videotaped for about two hours in their homes, in order to supplement the information collected within activity diaries and other observations. Videotaping started in OH in April 2001 and ended in October 2001. Sixty-nine percent of these 26 OH children were stay-at-home children; 88% percent of them lived in urban counties; and 38% percent of them were from low-income families. Fifty percent of the participants were female, and the children's ages ranged from two to five years.

4.4 Evaluation

Recruitment strategies included minimizing the burden on participants, ensuring confidentiality, providing incentives for participation, and using carefully selected and trained field staff. Throughout the study, the staff were encouraged to be sensitive to participants' concerns and to persevere in recruitment.

The most frequent concern related to participant burden was the lack of center staff or parent time. Day care teachers in particular were concerned about collection and storage of urine samples. Several ways of reducing participant burden were used. These included providing individual training to participants prior to the field sampling, providing assistance for urine collection at the centers, offering flexible sampling schedules, and providing a project toll-free telephone number to call for assistance. Additionally, actual contact time between staff and participants during sampling was kept as short as possible.

A major concern of some participants, especially of the directors and staff of child day care centers, was whether individual data would be released to any regulatory agency or to others. To allay this concern, a Certificate of Confidentiality for the study was obtained from the National Institute of Mental Health. This Certificate provided legal protection of the privacy of the individual data. Under this Certificate, the study researchers cannot and will not release any individual data to anyone, including the courts, without written permission of the individual.

To encourage participation, both monetary and non-monetary incentives were offered to participants. Participating families and child day care centers received \$100 to cover their costs of providing food and other samples. If the children were to be videotaped for about 2 h, an additional incentive payment of \$50 was furnished to the participating household; a \$25 gift certificate for a book or other appropriate item for the classroom was provided to child care centers. At each visit to homes or centers, field staff brought small age-appropriate gifts for the participating children. Field staff encouraged participants to realize that they were performing important research, and that their participation was valuable. Participants were given a project T-shirt and pen. All participants received a framed certificate, acknowledging their contributions, at the conclusion of field sampling.

To enhance response rates in the study, user-friendly materials and brochures were developed. Letters and statements of endorsement were obtained from child care organizations, such as the National Head Start Organization, and from past pilot study participants. Press

releases prepared by the U.S. EPA describing the study were used in the selected areas, and EPA's principal investigator provided radio interviews. Prior to personal contact with centers and parents, introductory letters and brochures were sent to them by overnight courier. Multiple follow-up calls and personal visits were made by study staff to potential participants. Throughout, the study staff tried to develop a sense of a research partnership between centers, teachers, parents, and researchers.

For the initial telephone screening of potential participants, scripts were developed for interviewers, so that the screening information could be entered directly into the computer. Written consent forms for participation and for possible future contact were developed.

4.5 Recommendations

Study recruitment required far more effort and time than initially anticipated. In the future, similar studies should allocate more time and staff resources to the recruitment of participants. Recruitment should begin at least four months prior to field sampling. In addition, the problem with participant recruitment was exacerbated by the requirement that no contact could be made with subjects during the 2000 Census, which meant that some participant recruiting had to occur during the field activity phase of the study.

Overall, the recruitment methods worked well. However, several participants indicated that they should receive greater compensation for performing data collection activities that they found burdensome. In addition, increased monetary incentives should help to increase the response rates and participant cooperation.

Recommendations to improve day care center participation in future studies of this type include the following:

- Increase the compensation to day care centers, both to the center director and to the individual classroom teachers.
- Prepare a special document that would contain information to ease the concerns of the center directors. This information would address privacy issues and guarantees, compensation for time spent on the project activities, a description of day care recruitment procedures and study activities, and the assistance that would be provided by study staff.
- Design and implement a study web site that would explain the study and also provide a means for participants to ask questions.
- Increase the staff and resources for the project recruitment team, so that more intensive recruitment activities, such as follow-up visit to the day care centers, can be conducted.
- Increase the compensation to day care parents.
- Conduct additional in-depth staff training on subject recruitment and data collection activities.

- Have at least two or three staff members attend meetings with parents at the center. This would ensure full attention by the staff to all participants and minimize parents' waiting time.
- Minimize participant burden as much as possible.

Although the telephone recruiting worked very well, the advance mailings were not very effective, as about 65% of the mailed packages were returned as undeliverable. Recommendations to improve participation for stay-at-home participants in future studies of this type include the following:

- Increase the compensation to the parents.
- Mail the study brochure and introductory letter to the potential participant immediately after their initial telephone screening is completed.
- Minimize participant burden as much as possible.

Chapter 5

Field Monitoring

5.1 Overview

The CTEPP study collected environmental and personal samples as well as supplemental information to aid in the interpretation and assessment of the children's exposures to pollutants at homes or day care centers. For children who stayed at home during the day with their primary caregivers, field samples, questionnaires, and time-activity/food diaries were collected at their homes over a 48-h period. For children who attended day care, these above samples were collected at both their day care centers and homes simultaneously over a 48-h period. Household and center observation surveys, day care menus and other ancillary information were collected before or immediately after sampling.

Field staff collected samples of outdoor play area soil, indoor and outdoor air, indoor floor dust, and drinking water at homes and child day care centers. The adult caregiver collected duplicate diets, dermal (hand) wipes, and multiple spot urine samples for themselves and for their child while at home. The teachers collected the above samples for day care children while at day care. If a pesticide application had occurred inside or outside the home or day care center within the seven days preceding sampling or during the 48-h monitoring period, additional types of field samples were collected. These additional samples consisted of transferable residues (PUF roller samples), hard floor surface wipes, and food preparation surface wipes. Supplemental information was collected through pre- and post-monitoring questionnaires, house/building characteristic observation surveys, child/adult activity and food diaries, and day care food menus. In addition, 26 children were videotaped for about two hours in their homes in Ohio (OH) to supplement the questionnaires and activity diaries.

Field sampling started in North Carolina (NC) in July 2000 and was completed by March 2001. It was completed in the mountain and Piedmont regions by December 2000. However, field sampling in the two coastal counties was delayed because of the severe hurricane flooding that had occurred the previous year. In this region, field sampling was completed by April 2001. In OH, there were no significant delays in field sampling activities at participants' homes and/or day care centers. Field sampling started in late April 2001 in urban counties, Franklin and Licking, in central OH, because of their close proximity to Battelle's facility in Columbus, OH. Field sampling was completed in the rest of central, northern and southern regions of the state by November 2001. Overall, field samples were collected at a total of 130 homes and 13 day care centers in NC, and at 127 homes and 16 day care centers in OH.

5.2 Field Data Collection

Table 5.2.1 summarizes the field data collection procedures and sampling activities that took place over a 48-h period at a participant's home and/or day care center. This approach was used for both the NC and OH field studies. There were three field sampling teams (labeled as teams A, B, and C), with two staff members in each team. Two field sampling teams, A and B, collected the field data simultaneously at different homes or day care centers. A third field sampling team, C, served as a backup team and was responsible for field preparation and training participants.

Subjects were scheduled in the same cluster of locations within a county in the same sampling week. The time needed to complete the field sampling work for each state was about 24 to 30 weeks, depending on the availability of the participants and the weather. One week prior to each scheduled sampling date, the participants were trained to collect urine, hand wipe and food samples, and were given instructions for filling out the Child Activity Diary. At that time, they were given the opportunity to ask additional questions and voice any concerns they had about their participation.

For stay-at-home participants, field sampling activities took place at the households of approximately eight children per week. These activities occurred over a 48-h period for three consecutive days. Typical sampling schedules were: (1) Monday to Wednesday, (2) Tuesday to Thursday, or (3) Wednesday to Friday. The initial sampling appointments generally ranged from 7 a.m. to 8 p.m; sampling began shortly thereafter and continued for the following 48 h. In a given week, field sampling activities began at four households on Day 1, and each of two field teams was responsible for the activities at four households per week.

For day care participants, field sampling activities occurred at one day care center per week, representing from four to six participating children. Sampling activities also occurred at the households of these children during that week. Field sampling took place simultaneously during a 48-h period at each child's day care center and at her/his home. In a given week, field sampling activities began at the day care center and at the households of two or three children on Day 1, and each of two field teams was responsible for the activities at two or three households per week.

5.2.1 Environmental and Personal Samples

All field sampling procedures were conducted according to Standard Operating Procedures (CTEPP-SOPs: 2.10 - 2.27). The list of all CTEPP SOPs is presented in Appendix A. The multimedia samples that were collected at the children's homes and day care centers are described below, in Sections 5.2.1.1 through 5.2.1.10.

Table 5.2.1 Summary of Field Data Collection Procedures and Sampling Activities over a 48-h Period at a Participant's Home and/or Day Care Center

Sampling Day	Data Collection and Sampling Activity/Task
Day 1	<ul style="list-style-type: none"> < Obtain signed consent form < Conduct Pre-monitoring Interview < Complete the House/Building Characteristic Observation Survey < Provide instructions on food sample collection, give food containers and cooler, ask if it's OK to store the food samples in the participant's refrigerator < Remind parent and teacher--no vacuuming during the 48-hour period (sweeping with a broom is OK) < Review the instructions for collecting urine and hand wipe samples < Give the sample collection supplies to the parent and teacher (e.g., urine and hand wipe) < Review instructions for recording in the Child Activity Diary < Set up indoor air monitor, mark the location on the sketch, record air log < Set up outdoor air monitor, mark the location on the sketch, record air log < Take pictures of sampling activities. <p><i>Note: Each child's supplies (clean sample containers) are stored in a clean container with name labeled on top).</i></p>
Day 2	<ul style="list-style-type: none"> < Complete activities pending since Day 1, if any < Check outdoor air monitor, record air log < Check with the parent and teacher for questions about or problems with sampling activities < Videotape child's activities, if applicable
Day 3	<ul style="list-style-type: none"> < Complete activities pending since Day 1, if any < Unload indoor air samplers, record air log, remove air monitors < Collect dust sample, vacuum the house (must unload the indoor air samplers first) < Unload outdoor air samplers, record air log, remove air monitors < Collect one soil sample (children's usual outdoor play area), mark the location on the sketch < Collect hard floor surface wipe sample < Collect food preparation surface wipe sample < Collect PUF roller sample for transferable residues < Pick up food samples, examine the samples, remove any non-edible materials < Pick up urine and hand wipe samples < Pick up the Child Activity Diary < Conduct Post-monitoring Interview < Present a <i>Certificate of Appreciation</i> to the parent and teacher < Confirm the check mailing information with the parent and teacher < Take pictures of sampling activities < Videotape child's activities, if randomly selected

5.2.1.1 Outdoor Play Area Soil

Outdoor play area soil was sampled from the location identified by the teacher or the primary caregiver as most often used by the children. A scraping (putty) knife was used to collect the soil from the top 0.5 cm of soil in a 1 ft² (0.1 m²) area and placed into a glass jar. If a play area did not have bare soil or dirt (e.g., grass, sand), the sample was collected near a subject's sidewalk, driveway, or garden, reasonably close to the identified play area.

5.2.1.2 Indoor Floor Dust

The high-volume small surface sampler (HVS3; Cascade Stack Sampling Systems, Bend, Oregon) method was used to collect floor dust from a 0.76 m² area of carpet (12). The samples were collected in the room the child used most often at the residence or day care center. The initial sampled area was 0.76 m². Additional 0.76 m² areas of the carpet were sampled until a sufficient amount of dust was collected for analysis (typically ~1.0 g). The dust sample was transferred from the Teflon catch bottle to a glass jar. A hard floor surface wipe, described below, replaced the floor dust sample when no carpeted areas were available.

5.2.1.3 Indoor and Outdoor Air

Outdoor and indoor air was sampled over a 48-h period using filter and a backup XAD-2 trap to collect pollutants in air (8). Briefly, outdoor samples were collected using a Thomas pump (Model 107CAB18A; Thomas Compressor and Vacuum Pumps, Sheboygan, MI). Indoor samples were collected using an SKC pump (Model 224-PCXR8; SKC, Inc., Eightyfour, PA). Flow rates for both pumps were set at a range of 3.9 to 4.1 L/min using a calibrated flow meter. The inlet port of the sampling cartridge was placed approximately 75 cm above the floor or ground, at the approximate breathing height of children in the participant age group. The URG-2000 sampling cartridge (University Research Glassware Corp., Chapel Hill, NC) contained a pre-cleaned quartz fiber filter and an XAD-2 cartridge, to collect the targeted pollutants both in the vapor phase and condensed on particles < 10 µm. Outdoors, the sampling pump and controls were placed in a Styrofoam cooler, which was housed in a large, plastic doghouse, furnished by the field staff, to protect the equipment from inclement weather conditions. Indoors, the sampling equipment was placed in a Styrofoam cooler and housed in a child's playpen, also furnished by the field staff, which was covered by a stroller net to protect it from curious children or pets. Flow rates were recorded at the beginning and end of the sampling period.

5.2.1.4 Drinking Water

For the day care center component, field staff collected one drinking water sample from each participating child's home and one sample from each participating day care center. For the telephone component, only one drinking water sample was collected from each participating child's home. These samples were collected in either 1-L or 0.5-L plastic jugs and refrigerated until shipped to the laboratory.

5.2.1.5 Duplicate Plate Food and Beverages

Duplicate plate samples of the solid and liquid food served to the children (7,8) were collected for each child during the 48-h sampling period. At home, the adult caregiver provided the same amount of the same food and beverages, excluding drinking water, consumed by their child over the sampling period. The teachers provided duplicate servings of food and beverages consumed by the participating children while at day care. Because all children in a given classroom were served the same food on the same day, only one duplicate sample was provided for each classroom on a given day. If a child brought his/her food from home, the home caregiver was asked to provide a duplicate sample of that food. Composite solid and liquid food samples were collected separately in 2 L glass containers. These containers were placed in provided coolers with blue ice until they were picked up by field staff.

5.2.1.6 Dermal Hand Wipes

Adult caregivers and day care teachers collected dermal (hand) wipe samples from each participating child during the 48-h sampling period (8). Hand wipe samples were taken before the participants washed their hands. The hand wipe consisted of a gauze pad (SOF-WICK, 10 x 10 cm – 3 ply; Johnson & Johnson), which was pre-cleaned with dichloromethane (DCM), dried and wetted with 2 mL of 75% isopropanol in distilled water, and stored in a glass jar. The adult caregiver removed the pre-wetted gauze pad from the jar and wiped both hands of the child, according to a specified procedure (CTEPP-SOP-2.15), then put the wipe back into the jar. A total of four hand wipe samples were collected for each child (two per day, one each before lunch and dinner). All hand wipe samples were refrigerated or placed in provided coolers with blue ice until picked up by field staff. Adult participants collected their own dermal wipe samples according to these same procedures.

5.2.1.7 Transferable Residues

The polyurethane foam roller (PUF) method (13) was used to collect transferable residues from indoor floor surfaces (e.g., carpet, vinyl), at homes or at day care centers that had recent pesticide applications. Transferable residues were sampled at three locations where the child spent most of their time inside the home or day care center; these locations were not the same as those that were sampled for carpet dust with the HVS3. The PUF roller apparatus, having a pre-cleaned, dry PUF sampling cylinder was rolled on the indoor floor surface at a rate of approximately 10 cm/s for a 2 m distance (1 m up and back). This procedure was repeated, using the same PUF cylinder, at the other two selected locations. On completion of sample collection, the PUF cylinder was wrapped in muffled aluminum foil and placed in a Ziplock bag.

5.2.1.8 Food Preparation Surface Wipe

At homes and day care centers having recent pesticide applications, food surface preparation wipes were collected from the kitchen counters where food was prepared. The wipe consisted of a pre-cleaned, gauze pad (SOF-WICK, 10 x 10 cm – 3 ply; Johnson & Johnson), which was cleaned with DCM, dried, and then wetted with 2 mL of 75% isopropanol and stored in a glass jar. Masking tape was used to mark off a 38 x 38 cm (0.14 m²) area of the counter. The sample was collected by wiping this part of the counter in one direction, folding the wipe in half and wiping the surface again in the opposite direction, then returning it to the glass jar.

5.2.1.9 Hard Floor Surface Wipe

At homes and day care centers either having recent pesticide applications or having little or no carpeted floor surfaces for dust sampling, hard floor surface wipe samples were collected on indoor floors (i.e., tile, vinyl, hardwood floors) where the children spent most of their time. The wipe consisted of a gauze pad (SOF-WICK, 10 x 10 cm – 3 ply; Johnson & Johnson), which was cleaned with DCM, dried, and wetted with 2 mL of 75% isopropanol and stored in a glass jar. Masking tape was used to mark off a 38 x 38 cm (0.14 m²) area of the floor. The sample was collected by wiping the designated area of the floor in one direction, then folding the wipe in half, and wiping the surface again in the opposite direction, then returning the wipe to the jar.

5.2.1.10 Urine

Spot urine samples were collected from each child over the 48-h monitoring period (8). The child urinated into a plastic urine collector (bonnet) that was placed under the toilet seat. The urine was then poured into a 120 mL plastic bottle by the adult. Adult caregivers, when at home, collected three urine samples per day (first morning void, after lunch, and after dinner or before bedtime) from their child. Day care teachers collected one urine sample from the child each day after lunch. All urine samples were refrigerated or placed into provided coolers with blue ice until picked up by field staff. Adult participants collected their own urine samples at the same frequency following similar procedures. Note: The spot urine samples for adults and children were composited over the 48-h period, with the exception of those collected at homes with recent pesticide applications, which were stored and analyzed separately.

5.2.2 *Supplemental Information*

Supplemental information was collected to help assess the children's exposures to pollutants in their everyday surroundings. Table 5.2.2 summarizes the types of collected supplemental data. The same types of forms were used in both the NC and OH studies to collect these data. The recruitment survey (Form #1) was used to collect the subject's eligibility information. This form was administered either by an interviewer, using Computer Assisted Telephone Interviewing (CATI), or as a Self-Administered Questionnaire. The house/building characteristics survey described the physical characteristics of the sampled house (Form #2) and

Table 5.2.2 Types of Questionnaires, Diaries, or Menus Collected from Participants

Supplemental information	Types of information
Recruitment survey (Form #1)	Identify potential participants in a household.
House/building characteristics observation survey (Form #2)	Document the physical characteristics of the house and identify/inventory possible sources of pollutants.
Day care center/building characteristics survey (Form #3)	Document the physical characteristics of the day care center and identify and inventory possible sources of pollutants.
Parent pre-monitoring questionnaire (Form #4)	Identify the individuals living in the home and describes the sources and routes of potential exposure to pollutants.
Day care center pre-monitoring interview (Form #5)	Identify the individuals within the day care center/classroom and describe the sources and routes of potential exposure to pollutants.
Parent post-monitoring questionnaire (Form #6)	Provide information on the child's activities and potential exposure to pollutants over the 48-h sampling period.
Day care center post-monitoring questionnaire (Form #7)	Provide information on the child's activities and potential exposure to pollutants over the 48-h sampling period.
Child activity diary and food survey-home group (Forms #8/AM and #8/PM)	Provide information on the child's activity patterns and food consumption patterns at home.
Child activity diary and food survey-day care group (Forms #9 and #10)	Provide information on the child's activity patterns and food consumption patterns at day care center.
Day care center menus	Provide daily dietary menus up to three months prior to field sampling at a day care center.

day care center (Form #3) and collected information for identifying possible sources of pollutants. These forms were filled out by the field staff. Pre- and post-monitoring questionnaires (Forms #4 to #7) collected general information on the households and day care centers, as well as specific information on the possible sources of contamination in the children's surrounding environments, on the usage of pesticides, and on the children's usual activities and their activities during the 48-h sampling period. Child's activity and food diaries (Forms #8, #9, #10) documented the information on the child's activities and food consumption patterns over the 48-h sampling period. Forms #4 through #10 were filled out by teachers and home caregivers. Additionally, day care center food menus were collected; these provided information on the food served at the centers a few weeks before field sampling occurred.

5.2.3 Sample Custody, Field Storage, Shipping, Laboratory Receipt, and Laboratory Storage

The NC and OH field samples collected by participants during the 48-h sampling period (food, hand wipe, and urine) were temporarily stored in the provided cooler with ice packs or in the participant's home refrigerator until collected by the project staff at the end of the sampling period. Samples collected from NC were temporarily stored in freezers at or below -10°C at the NC field office until shipped on dry ice to the Battelle laboratory in Columbus, OH on a weekly basis. OH field samples were stored in freezers at or below -10°C in the analytical laboratories until being prepared for analysis.

Before field sampling, all sample containers were appropriately identified and labeled with their purpose and with bar codes, then checked by the QC staff at the field office. Just prior to leaving the field office for a sampling appointment, the field team conducted a sample and equipment inventory and verified all sample ID labels again. During field sampling, the field team collected samples and noted sample conditions on the field sample/data check list. After the samples were collected and brought back to the field office, they were processed immediately by the receiving team. Sample conditions and collection information were recorded into the CTEPP Tracking System. All labels were checked and samples were transported and stored in accordance with specifications described in the field sample handling SOPs (CTEPP SOPs 3.10 - 3.12 and 4.10 - 4.12).

Strict sample custody procedures were followed throughout the collection and analysis activities. A sample chain of custody form was used to document all collection, shipment, receipt, analysis, processing, and handling steps that each sample underwent as it passed from one individual to the next. This record was initiated in the field by the responsible field staff member and captured the original field collection of the sample, as well as all subsequent operations performed. Each sample custody record contained, at a minimum, the following information: participant identification code, sample ID, the operation performed on the sample (e.g., collection, processing, shipment, receipt, storage, laboratory procedure, disposal), initials of the person performing the operation, date on which the operation was initiated, and any relevant remarks or comments pertaining to the sample. The sample custody form was a hand-written paper record. In addition, a computer-based tracking system was employed, into which the scanned information from the sample bar codes, as well as other pertinent information

for all collected samples, was entered. At the laboratory, the samples were stored in freezers at or below -10°C until sample preparation and chemical analysis.

5.2.4 *Quality Control*

Quality Assurance/Quality Control (QA/QC) procedures (including pre-field assessment and field assessment) were implemented throughout the field data collection periods in NC and OH.

For pre-field assessment, the sampling equipment was calibrated and the sampling media were prepared in the laboratory prior to shipment to the field. Equipment was always tested when it was set up and when it was removed, to ensure that it performed to specifications defined in the relevant SOPs. All SOPs and field forms were field tested prior to project implementation. SOPs and field forms that were found to be inadequate were revised and finalized prior to field implementation.

For field assessment, field duplicates were collected for air samples. The dust, soil, food, urine, and drinking water samples were bulk samples; different aliquots of the same samples were used as field duplicates. Field blanks, which underwent the same handling and shipping procedures as real field samples but did not go through the sample collection step, were generated in the field to document any possible contamination that might have occurred in field sample handling and shipping. Field blanks were prepared and analyzed using the same methods as field samples.

Questionnaire results obtained during field visits were reviewed by technicians in the field. The final checks for completeness were performed by the QC team members at the field office.

Quality assurance orientation for CTEPP NC and OH field data team members included an overview of program and facility QA requirements, QA requirement documents, field data record keeping and quality assurance/quality control monitoring. The Battelle Quality Assurance Officer (QAO) conducted field audits in both the NC and OH field studies. Field inspections performed by the Battelle QAO included facility preparation and sample storage areas in Durham NC, as well as Day-3 sampling activities. The QAO also inspected the Battelle Columbus OH laboratory facilities for adherence to sample receipt, inspection, storage, preparation and analysis procedures and oversaw sampling preparation and set-up, Day-1 sampling, and sample preparation performed in Columbus. In addition, Battelle Field Team Leaders conducted periodic internal field audits as described in CTEPP SOP 2.25. The EPA QAO and EPA Task Order Project Officer (TOPO) also performed field audits in NC and OH. There were no non-compliance findings observed during these audits. All recommendations generated during internal and external audits, technical systems audits (TSAs) and surveillances were formally documented in laboratory internal records or in responses to EPA audit reports.

5.3 Results

Results of the NC and OH field data collection activities are summarized in Sections 5.3.1 and 5.3.2.

5.3.1 *North Carolina*

Tables 5.3.1 and 5.3.2 summarize the completeness associated with the collection of field samples and supplemental information (questionnaires/diaries), respectively, from NC. Field data collection activities in the NC study achieved greater than 99% completeness for field samples, 100% for collected questionnaires/diaries, and greater than 99% for data collected on the questionnaires/ diaries.

The proposed samples were the ones that the field staff or participants planned to collect at home or at day care. The collected samples were the ones that were actually collected in the field. Empty liquid food containers were collected in some households, because the adult caregivers claimed that they or the child participants drank only water. Thus, we did not count the liquid food samples from these households. Completeness of field data collection was expressed as a percentage of all samples collected in the field that had data generated in the laboratory.

Despite the fact that participants were paid (\$25) sufficiently in advance to cover their cost of duplicate food samples, some participants were still reluctant to provide us these samples. Solid food samples with the smallest weights (12.3 g of adult food and 7.76 g of child food) were collected from the same low-income household. The adult caregiver in this household claimed that they did not consume large amounts of food. Two day care centers provided only snacks and the children brought their own lunches. Since these lunches were prepared at the children's homes, the parents were asked to prepare duplicate lunches, which were provided as part of the at-home food samples. In one household, the adult participant withdrew from the study after the Day-1 sampling event because the domestic partner did not want to continue the study. Therefore, only partial field samples were collected and analyzed. However, a complete set of questionnaires/ diaries was collected from this household.

As shown in Table 5.3.2, 100 % of data forms were collected from the participating households and day care centers, and more than 99% of the data were collected from these forms. Data values labeled as "incomplete" were treated as missing data, i.e., data that participants failed to provide and/or which could not be obtained by re-contacting the participants. After all attempts were made to re-contact the participants in order to obtain missing information, the any uncollected data were coded as "Missing". Responses of "Don't Know" (as stated by the participant) or "Refused" were not treated as missing data items because these were valid responses.

Table 5.3.1 Summary of the Completeness of the NC Sample Collection

Sample Description	Proposed	Collected ^b	Reported	Samples Voided	Completeness (%)
Hand Wipe Adult	198	197 ^c	197	0	100
Hand Wipe Child	284	283 ^c	283	0	100
Drinking Water	155	155	155	0	100
Food Preparation Surface Wipe	18	18	18	0	100
Hard Floor Surface Wipe	46	46	46	0	100
Indoor Air Acid	151	151	150 ^d	1	99.3
Indoor Air Neutral	151	151	151	0	100
Floor Dust	154	154	154	0	100
Liquid Food Adult	130 ^a	123 ^c	122 ^f	1	99.2
Liquid Food Child	166 ^a	164 ^e	163 ^g	1	99.4
Outdoor Air Acid	154	154	154	0	100
Outdoor Air Neutral	154	155 ^h	154	1	99.4
Transferable Residues	18	18	18	0	100
Solid Food Adult	130	130	130	0	100
Solid Food Child	166	166	166	0	100
Outdoor Play Area Soil	143	143	143	0	100
Urine Adult	618, 190 ⁱ	615, 190 ^h	615, 190	0	100
Urine Child	744, 283 ⁱ	739, 283 ⁱ	739, 283	0	100

^a Empty jars were collected for the liquid food samples because the participants claimed they drank only water.

^b Samples collected include all field samples and field blanks but not laboratory generated QC samples.

^c The participant withdrew from the study after day-1 sampling because the domestic partner refused to participate.

^d One sample was voided due to pump malfunction (air volume sampled equaled zero).

^e Count does not include the empty jars that were collected from households in which the adult and/or child only drank water.

^f One sample was spilled during preparation.

^g The field staff dropped one liquid food sample while loading the van.

^h One extra outdoor air sample was collected to replace one sample due to pump malfunction.

ⁱ The first number is the number of individual collected urine samples, and the second number is the number of both composite and non-composite samples.

Table 5.3.2 Summary of the Completeness of the NC Questionnaire/Diary Collection

Form Number	Proposed	Collected	Reported	Completeness for Collected Forms (%)	Completeness for Collected Data^a (%)
Form # 1	130	130	130	100	99.6
Form # 2	130	130	130	100	99.8
Form # 3	13	13	13	100	99.8
Form # 4	130	130	130	100	99.9
Form # 5	13	13	13	100	99.8
Form # 6	130	130	130	100	99.3
Form # 7	63	63	63	100	99.9
Form # 8	67	67	67	100	99.0
Form # 9	63	63	63	100	99.7
Form # 10	63	63	63	100	99.6

^a A SAS program was used to calculate the percentage of completeness for the data collected on each form using the equation $\text{Completeness (\%)} = [(A-B)/A]*100$

where A = Count the total number of filled, valid data variables (not empty)

B = Count the number of data variables coded as “missing”

5.3.2 Ohio

Tables 5.3.3 and 5.3.4 summarize the completeness associated with the collection of field samples and supplemental information (questionnaires/diaries), respectively, from OH. Field data collection activities in the OH study achieved greater than 99% completeness for field samples, 100% for collected questionnaires/diaries, and greater than 94% completeness for the data collected on the questionnaires/diaries. In addition, all proposed children (26) were successfully videotaped at their homes in OH; therefore, 100% completeness was achieved for the videotaping activities.

Table 5.3.3 Summary of the Completeness of the OH Sample Collection

Sample Description	Proposed	Collected ^b	Reported	Samples Voided	Completeness (%)
Hand Wipe Adult	196	196	196	0	100
Hand Wipe Child	283	283	283	0	100
Drinking Water	157	157	157	0	100
Food Preparation Surface Wipe	16	16	16	0	100
Hard Floor Surface Wipe	38	38	38	0	100
Indoor Air Acid	150	150	150	0	100
Indoor Air Neutral	150	150	150	0	100
Floor Dust	157	157	157	0	100
Liquid Food Adult	127 ^a	122 ^c	122	0	100
Liquid Food Child	171 ^a	170 ^c	170	0	100
Outdoor Air Acid	156	156	155	1 ^d	99.4
Outdoor Air Neutral	156	156	156	0	100
Transferable Residues	18	18	18	0	100
Solid Food Adult	127	127	127	0	100
Solid Food Child	170	170	170	0	100
Outdoor Play Area Soil	143	143	143	0	100
Urine Adult	634, 194 ^e	634, 194 ^e	634, 194 ^e	0	100
Urine Child	756, 266 ^e	756, 266 ^e	756, 266 ^e	0	100

^a Empty jars were collected for the liquid food samples because the participants claimed they drank only water.

^b Samples collected include all field samples and field blanks but not laboratory generated QC samples.

^c Count does not include the empty jars that were collected from households in which the adult and/or child only drank water.

^d One sample was lost during laboratory extraction.

^e The first number is the number of individual urine samples collected, and the second number is the number of both composite and non-composite samples.

Table 5.3.4 Summary of the Completeness of the OH Questionnaire/Diary Collection

Form Number	Proposed	Collected	Reported	Completeness for Collected Forms (%)	Completeness for Collected Data^a (%)
Form # 1	127	127	127	100	98.8
Form # 2	127	127	127	100	100
Form # 3	16	16	16	100	99.8
Form # 4	127	127	127	100	99.9
Form # 5	16	16	16	100	99.4
Form # 6	127	127	127	100	99.9
Form # 7	58	58	58	100	99.6
Form # 8	69	69	69	100	99.9
Form # 9	58	58	58	100	95.1
Form # 10	58	58	58	100	94.0

^a A SAS program was used to calculate the percentage of completeness for the data collected on each form using the equation $\text{Completeness, (\%)} = (A-B)/A \times 100$

where A = Count the total number of filled, valid data variables (not empty)

B = Count the number of data variables coded as “missing”

5.4 Evaluation

Several problems were encountered during field sample collection. A frequent problem encountered at the day care centers was the teachers' difficulty in recording the time-activity diary for more than one child in a classroom. Although project field staff went over the recording procedures carefully with the teachers before sampling, the detail required was overwhelming for some of them. As a result, coverage of the time periods in the child activity diaries was sometimes incomplete. In future studies, this information should be collected by a more simplified method.

Some day care teachers were reluctant to collect and store children's urine samples for later pickup. Field staff, therefore, assisted in urine sample collection at day care centers when requested. Some parents had difficulty understanding the need and procedures for duplicate plate food sample collection and the time-activity diary recording procedures. Thorough pre-sampling training of the adult participants by the field staff was necessary to communicate these procedures.

Training of day care teachers and parents was conducted at the participating day care centers in each state. The project staff first consulted with the day care director to identify the best time for the training (normally in the afternoon before the pickup time of the children). A flyer about the upcoming CTEPP study meeting was then distributed to all selected parents and classroom teachers a few days before the scheduled training date. The meeting was designed to accomplish the following: (1) training of teachers in the selected classrooms (often best accomplished when children were napping); (2) training of parents; (3) meeting with the day care cook or kitchen staff to explain food collection; and (4) meeting with the day care director to confirm sampling dates at the day care and to discuss the information needed for pre-monitoring interview (e.g., day care floor plan and chemical use information).

Training for teachers and parents included a brief study background discussion (e.g., what the study was about, why it was important, what assistance was needed from them) and a step-by-step demonstration of the procedures for completing the child activity diary and for collecting urine, hand wipe, and duplicate food samples. Best results were achieved when two to three staff members were available to train a small group of participants. The training emphasized hands-on practice. Instruction sheets were handed out to participants after training for use at home. In addition to the training, the staff also reviewed the informed consent process with the parent and asked the parent to complete the recruitment survey if informed consent had been obtained earlier. After the training was completed, a project T-shirt was presented to each participant. Finally the staff confirmed the sampling schedule with the parent and gave them a money order for \$25 to cover their cost for providing duplicate food samples. Similar training was conducted for the telephone component participants at their homes. Once a subject was determined to be eligible through the telephone screening process, an appointment was made to meet with the subject at his/her house to go over the study procedures.

Communication issues in the field were related to problems with directions, equipment malfunctions, and scheduling changes. Participants were therefore encouraged to contact the field staff by phone at any time necessary, and all field staff were provided with cellular phones to facilitate communication with the participants and other staff members.

In one household, the study was unable to collect outdoor air samples due to no available electrical outlet for the air pump. In another household, a valid indoor air sample for acid analysis could not be obtained because the air pump did not operate properly. In one household, the participant refused to continue the study after Day-1, resulting in incomplete sets of dermal hand wipes and the child liquid food sample. The urine samples from three households were combined incorrectly by the laboratory staff, requiring the collection and processing of make-up urine samples from these households. One liquid food sample was dropped while field staff were loading the van.

5.5 Recommendations

Despite efforts to enhance participant cooperation in collecting food samples (i.e., training and pre-paying for food samples provided by the participants), there were still some missing food samples due to participants' reluctance to collect duplicate food samples. This was particularly problematic when the participants ate in a restaurant. In some situations, the project staff was able to purchase the missing food samples from the same restaurant. We recommend an increase in participant compensation or a decrease in the participant burden (i.e., collecting 24-h instead of 48-h food samples) to improve the participants' cooperation in future studies.

Some air sampling problems were caused by severe storms or an unreliable power supply at the sampling site. For future similar studies, we recommend self-powered (i.e., battery-powered) air pumps for air sampling. A battery backup system is also a good alternative; however, such systems can only provide temporary power for approximately 18 h.

Chapter 6

Sample Analysis Procedures

6.1 Overview

In the CTEPP study, more than 50 compounds were measured in 11 different types of sample matrices. Target compounds included two organophosphate (OP) pesticides, two OP metabolites, three pyrethroid pesticides, one pyrethroid metabolite, 10 organochlorine (OC) pesticides, three acid herbicides, nine polycyclic aromatic hydrocarbons (PAHs), two phthalates, three phenols, 17 polychlorinated biphenyls (PCBs), seven PAH metabolites, and one triazine. (Note that two carbamates, propoxur and bendicarb were originally included on the list of target pollutants but were later removed due to the study's analytical methods being incompatible for these pollutants.) The target pollutants and their metabolites were divided into two groups, neutral and acidic, based on their chemical properties. According to sample media, various extraction and cleanup methods were employed for these pollutants/metabolites in each group. The neutral and acidic pollutants and OP metabolites that were measured in the environmental and personal samples, except urine, are listed in Tables 6.1.1 and 6.1.2, respectively¹. The target acidic pollutants/metabolites that were measured in urine are listed in Table 6.1.3. With the exception of creatinine in urine samples, Battelle performed all analyses of CTEPP field samples. No cross-checks by independent laboratories were used to confirm measured levels in some samples.

Both neutral and acidic pollutants as well as OP metabolites were measured in air, indoor floor dust, soil, hand wipe, hard floor surface wipe, food preparation surface wipe, transferable residue (PUF), and child food samples. Adult food samples were analyzed only for acidic pollutants and OP metabolites. Child food samples from North Carolina (NC) were analyzed for all neutral and acidic pollutants as well as one OP metabolite. Child food samples from Ohio (OH) were analyzed for all the target pollutants and two OP metabolites, except for the PCBs. Note that one OP metabolite, 3,5,6-trichloro-2-pyridinol (3,5,6-TCP), was measured in the NC samples and two OP metabolites, 3,5,6-TCP and 2-isopropyl-6-methyl-4-pyrimidinol (IMP), were measured in the OH samples. Drinking water samples were analyzed only for atrazine. Floor surface wipe samples, when collected to replace floor dust samples from homes without carpet, were analyzed for neutrals and acids. Additionally, food preparation surface wipe, hard floor surface wipe, and transferable residue samples were collected in homes where pesticides had been applied recently (within seven days of field sampling or during the 48-h monitoring period). In NC and OH, recent pesticide applications were only reported at homes and none at day care centers. The pesticides applied to the NC homes were all neutral pollutants, therefore,

¹Participants were still able to purchase and apply both chlorpyrifos and diazinon at their residences or day care centers in NC and OH during the study.

Table 6.1.1 Neutral Target Pollutants for the CTEPP Study

Target Pollutants		
OP Pesticides		PCBs ^a
Chlorpyrifos	<i>trans</i> -Permethrin	PCB 44 (2,2',3,5'-tetrachlorobiphenyl)
Diazinon	PAHs	PCB 52 (2,2',5,5'-tetrachlorobiphenyl)
OC Pesticides	Benz[<i>a</i>]anthracene	PCB 70 (2,3',4',5-tetrachlorobiphenyl)
Aldrin	Benzo[<i>a</i>]pyrene	PCB 77 (3,3',4,4'-tetrachlorobiphenyl)
<i>alpha</i> -Chlordane	Benzo[<i>b</i>]fluoranthene	PCB 95 (2,2',3,5',6-pentachlorobiphenyl)
<i>gamma</i> -Chlordane	Benzo[<i>e</i>]pyrene	PCB 101 (2,2',4,5,5'-pentachlorobiphenyl)
<i>p,p'</i> -DDE	Benzo[<i>ghi</i>]perylene	PCB 105 (2,3,3',4,4'-pentachlorobiphenyl)
<i>p,p'</i> -DDT	Benzo[<i>k</i>]fluoranthene	PCB 110 (2,3,3',4',6-pentachlorobiphenyl)
Dieldrin	Chrysene	PCB 118 (2,3',4,4',5-pentachlorobiphenyl)
Endrin	Dibenz[<i>a,h</i>]anthracene	PCB 138 (2,2',3,4,4',5'-pentachlorobuphenyl)
Heptachlor	Indeno[1,2,3- <i>cd</i>]pyrene	PCB 153 (2,2',4,4',5,5'-hexachlorobiphenyl)
Lindane	Phthalates	PCB 180 (2,2',3,4,4',5'-heptachlorobiphenyl)
Pentachloronitrobenzene	Benzylbutylphthalate	Triazine
Pyrethroid Pesticides	Di- <i>n</i> -butylphthalate	Atrazine
Cyfluthrin	Phenols	
<i>cis</i> -Permethrin	Bisphenol-A	
	Nonylphenol	

^a Data were reported for 12 PCBs, but not for PCBs 10, 15, 28, 126, and 169. The data for the five PCBs were excluded because the presence of the volatile PCBs 10, 15, and 28 with the presence of closely eluted interference peaks could not provide useful information for Aroclor patterns and none of the PCBs 126 and 169 were detected in the samples.

Table 6.1.2 Acidic Target Pollutants and Metabolites for the CTEPP Study

Target Pollutants and Metabolites
OP Metabolites 2-Isopropyl-6-methyl-4-pyrimidinol (IMP) ^a 3,5,6-Trichloro-2-pyridinol (3,5,6-TCP) Acid Herbicides Dicamba 2,4-Dichlorophenoxyacetic acid (2,4-D) 2,4,5-Trichlorophenoxyacetic acid (2,4,5-T) Phenols Pentachlorophenol (PCP)

^a IMP was measured only in the OH samples.

Table 6.1.3 Target Pollutants and Metabolites Measured in The CTEPP Urine Samples

Target Pollutants and Metabolites	
OP Metabolites 2-Isopropyl-6-methyl-4-pyrimidinol (IMP) 3,5,6-Trichloro-2-pyridinol (3,5,6-TCP) Pyrethroid Metabolite 3-Phenoxybenzoic acid (3-PBA) ^a Acid Herbicides 2,4-Dichlorophenoxyacetic acid (2,4-D) PAH Metabolites 1-Hydroxybenz[<i>a</i>]anthracene	3-Hydroxybenz[<i>a</i>]anthracene ^a 3-Hydroxybenzo[<i>a</i>]pyrene ^a 3-Hydroxychrysene 6-Hydroxychrysene ^a 6-Hydroxyindeno[1,2,3- <i>cd</i>]pyrene ^a 1-Hydroxypyrene ^a Phenols Pentachlorophenol (PCP)

^a These metabolites were measured only in the OH samples.

the wipe and transferable residue samples were only analyzed for neutral pollutants. The pesticides applied to the OH homes were either neutral or acidic pollutants. Therefore, these OH samples were analyzed for either neutral or acidic pollutants/metabolites depending upon the type of pesticides that had been applied.

Environmental samples were solvent-extracted using Soxhlet extraction, sonication, accelerated solvent extraction (ASE), or refluxing techniques. Most samples required cleanup to remove potential interferences. Acidic compounds were derivatized using silylation or methylation, depending upon the compound. The specific gravity and creatinine concentrations of the urine samples were measured. Urine samples were then hydrolyzed under acidic conditions, extracted, derivatized, and cleaned up prior to analysis. Concentrated extracts of all samples were analyzed by gas chromatography/mass spectrometry (GC/MS) in the selected ion monitoring mode. Thirty different SOPs, as listed in Appendix A, were used due to the large variety of chemicals and matrices that were considered for extraction and analysis. Flow charts of the sample preparation and analysis methods used for all the target pollutants/metabolites in each sample media are given in Appendix C.

Quality control (QC) samples were analyzed to assess the overall quality of the analytical results. These QC samples included: (1) field and laboratory duplicates, (2) duplicate GC/MS analyses of sample extracts, (3) matrix spike samples (MSSs), and (4) field and laboratory blanks. Surrogate recovery standards (SRSs) were used to assess recovery in every sample.

6.2 Procedures for North Carolina and Ohio samples

The same sample analysis procedures were used to determine target pollutants and metabolites in environmental and personal samples collected in both NC and OH. As noted in Tables 6.1.2 and 6.1.3, a few additional acidic pollutants/metabolites were measured in the OH samples, along with the target compounds analyzed in the NC samples.

6.2.1 Extraction

Several types of samples required processing prior to extraction. Dust samples were sieved, and only the fine dust samples (<150 μm) were extracted. Any visible small rocks were removed from the soil samples, and then the sample was mixed with a glass rod before an aliquot was taken for extraction. Liquid food samples were thawed for 2 to 5 days in a refrigerator prior to extraction. Solid food samples were thawed (~2-5 days), homogenized with dry ice using a food processor (Hobart Food Chopper, 33"x19"x9.5"); and stored in glass jars at < -10°C for subsequent extraction. Urine samples were composited for each child and adult over the 48-h period at homes, except from homes with recent pesticide applications. The urine samples from the homes with recent pesticide applications were extracted individually. If the child attended day care, the urine samples collected from the day care center were not combined with the urine samples collected from the child's home. All other samples were processed as received from the field. Table 6.2.1 summarizes the SRSs and internal standards (ISs) used in the different types of samples. The SRSs were added to each sample prior to extraction, and the ISs were added to the concentrated sample extracts prior to GC/MS analysis. Table 6.2.2 summarizes the sample

preparation methods employed for each type of samples. Detailed preparation and extraction methods are described in CTEPP SOPs 5.12-5.23 and 5.27-5.29. Typically, all samples were extracted within 14 days of receipt.

Table 6.2.1 Surrogate Recovery Standards and Internal Standards for Chemical Analysis

Compound Class	Surrogate Recovery Standards	Internal Standards
Neutral Pollutants		
OP Pesticide	p,p'-DDE-d ₄	Diazinon-d ₁₀
OC Pesticide	p,p'-DDE-d ₄	Phenanthrene-d ₁₀ , p,p'-Dibromobiphenyl
Pyrethroid Pesticide	p,p'-DDE-d ₄	p,p'-Dibromobiphenyl
PAH	Dibenz[<i>a,h</i>]anthracene-d ₁₄	p,p'-Dibromobiphenyl, Benzo[<i>e</i>]pyrene-d ₁₂
Phthalate	Benzylbutylphthalate-d ₄	p,p'-Dibromobiphenyl
Phenol	Bisphenol-A-d ₆	p,p'-Dibromobiphenyl
PCB	2,2,4,5,5'-Pentachlorobiphenyl-C ₁₃	Phenanthrene-d ₁₀
Triazine ^a	NA ^b	Atrazine-d ₅
Acidic Pollutants/Metabolites		
OP Metabolite	NA ^b	TCP-C ₁₃ N ₁₅
Acid Herbicide	2,4-D-C ₁₃	Dicamba-d ₃
Phenol	2,4-D-C ₁₃	Dicamba-d ₃ , TCP-C ₁₃ N ₁₅
Acidic Pollutants/Metabolites in Urine		
OP Metabolite	NA ^b	TCP-C ₁₃ N ₁₅
Pyrethroid Metabolite	2,4-D-C ₁₃	Dicamba-d ₃
Acid Herbicide	2,4-D-C ₁₃	Dicamba-d ₃
PAH Metabolite	2,4-D-C ₁₃	Dicamba-d ₃
Phenol	2,4-D-C ₁₃	Dicamba-d ₃

^a Atrazine was measured only in drinking water samples.

^b NA denotes not available.

Table 6.2.2 Summary of Sample Extraction Methods

Medium	Target Chemicals	Summary of Method
Air	Neutral pollutants	Soxhlet extract overnight (~14 h) with 80 mL dichloromethane (DCM); concentrate with Kuderna-Danish concentrator (KD); if cleanup is needed, solvent exchange to hexane; Florisil solid phase extraction (SPE) clean up with 18 mL of 15% ethyl ether (EE) in hexane; concentrate with KD.
	Acidic pollutants/metabolites	Soxhlet extract overnight (~14 h) with 80 mL acetonitrile (ACN); concentrate with KD; split sample extract for silylation and methylation. Silylate with 100 µL MTBSTFA at 70°C for 1 h. Methylate in 50 µL methanol with ethereal diazomethane (diazald, carbitol, 37% aqueous KOH).
Dust/Soil	Neutral pollutants	0.5 g of dust or 1-2 g of soil, sonicate for 15 min with 2 x 10 mL of 10% diethyl ether in hexane; concentrate with KD; if cleanup is needed, Florisil SPE clean-up with 12 mL of 15% EE in hexane and 6 mL DCM; concentrate with KD.
	Acidic pollutants/metabolites	0.5 g of dust or 5 g of soil, accelerated solvent extraction (ASE) with acetone at 120°C and 2000 psi for 3 cycles of 10 min; concentrate with KD; split sample extract for silylation and methylation. Silylate with 100 µL MTBSTFA at 70°C for 1 h. Methylate in 50 µL methanol with ethereal diazomethane; solvent exchange into isooctane; Florisil SPE clean up with 12 mL of 15% EE in hexane and 6 mL DCM; concentrate with KD.
Drinking Water	Atrazine	100 mL of drinking water, C18 SPE with 12 mL of 50% DCM in hexane; dry with sodium sulfate; filter through quartz fiber filter; concentrate with KD.
Solid Food	Neutral pollutants	12 g of solid food, ASE with DCM at 100°C and 2000 psi for 2 cycles of 5 min; dry with sodium sulfate; concentrate with KD; GPC clean-up with DCM; collect fractions F1 and F2 separately. Concentrate F2 with KD; F1: solvent exchange into ACN; ENVI-Carb clean up with 48 mL ACN; concentrate with KD or TurboVap
	Acidic pollutants/metabolites	8 g of solid food, ASE with methanol at 110°C and 2000 psi for 2 cycles of 5 min; concentrate with KD; extract with 15 mL MilliQ water; adjust to pH>12 with 40% KOH; extract with 3x20 mL hexane; discard hexane; acidify to pH<2 with conc. HCl; extract with 3x20 mL DCM; dry with sodium sulfate; concentrate with KD; split extract for silylation and methylation. Silylate with 100 µL MTBSTFA at 70°C for 1 h. Methylate in 50 µL methanol with ethereal diazomethane.

Table 6.2.2 Summary of Sample Extraction Methods (cont.)

Medium	Target Chemicals	Summary of Method
Liquid Food	Neutral pollutants	30 mL of liquid food, reflux in 60 mL DCM for 1.5 h, filter, extract with 2x20 mL DCM, dry with sodium sulfate, filter, concentrate with KD, filter extract on micron acrodisc PTFE filter, GPC clean-up with DCM, collect fractions F1 and F2 separately. Concentrate F2 with KD. F1: solvent exchange into ACN; ENVI-Carb clean up with 48 mL ACN; concentrate with KD or TurboVap
	Acidic pollutants/metabolites	10 mL of liquid food, extraction method 1 or 2: <i>Method 1 for non-clear liquid food:</i> ASE with methanol at 110EC and 2000 psi for 2 cycles of 5 min; concentrate with KD for subsequent liquid-liquid partitioning as method 2. <i>Method 2 for clear liquid food:</i> liquid-liquid partitioning with 10 mL milliQ water and 10 mL sample, filter through quartz filter; add up to 15 mL MilliQ water to resulting extract from either method 1 or 2; adjust to pH>12 with 40% KOH; extract with 3x20 mL hexane; discard hexane; acidify to pH<2 with concentrated HCl; extract with 3x20 mL DCM; dry with sodium sulfate; concentrate with KD; split extract for silylation and methylation. Silylate with 100 µL MTBSTFA at 70EC for 1 h. Methylate in 50 µL methanol with ethereal diazomethane.
Dermal, Floor Surface, Food Preparation Wipes	Neutral pollutants	Soxhlet extract overnight (~14 h) with 300 mL DCM; filter on quartz fiber filter; concentrate with KD, if needed, Florisil SPE clean-up with 18 mL of 15% EE in hexane; concentrate with KD.
	Acidic pollutants/metabolites	ASE with acetonitrile (ACN) at 120EC and 2000 psi for 3 cycles of 5 min; concentrate with KD; split sample extract for silylation and methylation. Silylate with 100 µL MTBSTFA at 70EC for 1 h. Methylate in 50 µL methanol with ethereal diazomethane. If needed, Florisil SPE clean-up with 18 mL of 15% EE in hexane; concentrate with KD.
Urine	Acidic pollutants/metabolites	1 mL urine: hydrolysis with 100 µL conc. HCl at 80EC for 1 h; add 1 mL of 20% NaCl solution, 1 mL chlorobutane (CB), and 10 µL of internal standard; mix and centrifuge; remove 800 µL of the extract and silylate with 100 µL MTBSTFA at 70EC for 1 h; transferred to GC vial. 10 mL urine: hydrolysis with 500 uL conc. HCl and 1 mL of CB at 80EC for 1 h; add 10 mL of 20% NaCl solution and extract with 3x10 mL DCM; concentrate with KD; methylate in 50 µL methanol with ethereal diazomethane.

Prior to GC/MS analysis, two different derivatization methods, methylation and silylation, were used for the acidic compounds. Dicamba, 2,4-D, 2,4,5-T, 3-PBA, and hydroxy-PAHs were methylated using diazomethane. 3,5,6-TCP and IMP were silylated using N-(t-butyldimethylsilyl)-N-methyl-trifluoroacetamide (MTBSTFA). Pentachlorophenol (PCP) could be derivatized by methylation or silylation, and in early analyses the silylated derivative was used. However, interferences were seen in some dust samples. Therefore, PCP was analyzed in most samples as the methyl derivative. After cleanup and derivatization, sample extracts were concentrated to 1 mL and spiked with internal standards, as shown in Table 6.2.2. Extracts were stored in a freezer at < -10°C until analysis. Typically, all samples were analyzed within 14 days of extraction.

6.2.2 Sample Analysis

All concentrated sample extracts and standard solutions were analyzed by 70 eV electron impact (EI) GC/MS. The Hewlett-Packard GC/MS was operated in the selected ion monitoring mode. Data acquisition and processing were performed with a ChemStation data system. The GC column was a DB-5 fused silica capillary (60 m x 0.32 mm, 0.25 µm film thickness). Helium was used as the GC carrier gas. The GC/MS operation conditions used for different types of samples are summarized in Table 6.2.3. Peaks monitored were the molecular ion peaks and their associated characteristic fragment ion peaks. Identification of the target compounds was based on their GC retention times relative to their internal standard and relative abundance of the monitored ions. Quantification of target compounds was based on comparisons of the integrated ion current response of the target ions to those of the respective internal standards using average response factors for the target compounds, generated from standard calibrations. The response factor was calculated using the following equation:

$$R_f = (A_s/A_{is}) \times (C_{is}/C_s)$$

where

- A_s = area of quantification ion for target pollutant in the standard solution
- A_{is} = area of quantification ion for internal standard in the standard solution
- C_{is} = concentration of internal standard in the standard solution
- C_s = concentration of target pollutant in the standard solution
- R_f = response factor of target pollutant

The target pollutant concentration in the sample was calculated using the following equation:

$$C_s = (A_s/A_{is}) \times (C_{is}/R_{f,avg})$$

where

- A_s = area of quantification ion for target pollutant in the sample extract
- A_{is} = area of quantification ion for internal standard in the sample extract
- C_{is} = concentration of internal standard in the sample extract
- C_s = concentration of target pollutant in the sample extract
- $R_{f,avg}$ = average response factor of target pollutant

Table 6.2.3 Summary of GC/MS Operating Conditions

Medium	Target Chemicals	Summary of Method
Air, Dust, Soil, Solid Food, Liquid Food, Dermal Wipes, Floor Surface Wipes, Food Preparation Wipes, Transferable Residue	OP and OC pesticides, pyrethroid pesticides, PAHs, phthalates, and phenols	Injection volume: 1 µL Solvent delay: 7 min Inlet: 290EC Oven: 70EC (2 min hold), 15EC/min to 150EC, 6EC/min to 290EC Transfer line: 290EC
	PCBs	Injection volume: 1 µL Solvent delay: 7 min Inlet: 290EC Oven: 70EC (2 min hold), 20EC/min to 150EC, 4EC/min to 290EC (4 min hold) Transfer line: 290EC
	Acid herbicides and PCP	Injection volume: 1 µL Solvent delay: 7 min Inlet: 290EC Oven: 90EC, 8EC/min to 290EC Transfer line: 290EC
	OP metabolites (3,5,6-TCP and IMP), and PCP	Injection volume: 1 µL Solvent delay: 7 min Inlet: 290EC Oven: 90EC, 8EC/min to 290EC Transfer line: 290EC
Drinking Water	Triazine (atrazine)	Injection volume: 1 µL Solvent delay: 7 min Inlet: 290EC Oven: 70EC, 20EC/min to 190EC, 4EC/min to 215EC, 27EC/min to 290EC Transfer line: 290EC
Urine	Pyrethroid metabolite (3-PBA), 2,4-D, PAH metabolites, and PCP	Injection volume: 1 µL Solvent delay: 7 min Inlet: 290EC Oven: 90EC, 8EC/min to 290EC (5 min) Transfer line: 290EC
	OP metabolites (3,5,6-TCP, IMP)	Injection volume: 1 µL Solvent delay: 7 min Inlet: 290EC Oven: 90EC, 8EC/min to 290EC Transfer line: 290EC

6.2.3 Supplemental Measurements on Urine Samples

Creatinine concentration and specific gravity were measured in the urine samples so that comparisons of urine metabolite concentrations could be made from sample to sample on a common basis, considering that the dilution level of individual urine samples can vary greatly depending on the individuals' muscle activity, kidney efficiency, and the amount of water that they ingest. Creatinine is a byproduct of the breakdown of creatine and phosphocreatine, an energy storage compound in muscle. The more active the person, the greater the amount of creatinine excreted in the urine. The specific gravity is the weight of a known amount of urine compared to the weight of an equal amount of water. Specific gravity measures the kidney's ability to concentrate or dilute urine in relation to plasma. Because urine is a solution of minerals, salts, and compounds dissolved in water, the specific gravity of urine is greater than 1. Urine specific gravity increases as the urine becomes more concentrated.

Aliquots (10 mL each) of composited urine samples were removed for creatinine analysis. The non-composited urine samples were not analyzed for creatinine, because of the small sample size per void and the need to analyze the urine samples for parent compounds or metabolites. The urine sample aliquots were sent to the Ohio State University Clinical Laboratory for creatinine analysis. The method employed was the Jaffee Picric Acid, colorimetric method. Specific gravity measurements were performed on all composited and non-composited urine samples, using reagent strips purchased from Lab Essentials Inc. (Monroe, GA), Urine Reagent Strips (9-parameter). The reagent end of the strip was dipped into the urine sample. After one minute, the color of the test strip was compared to the standard color chart, and the specific gravity value was recorded.

6.2.4 Method Evaluation

6.2.4.1 Instrument Performance

The GC/MS system was calibrated with perfluorotributylamine according to the manufacturer's instructions, to verify that acceptable performance criteria were achieved, before analyzing any standard solutions and/or samples. A multi-point calibration curve (typically five points) was constructed with calibration standards for each sample set. An average response factor (Rf) of each target pollutant was generated from the multi-point calibration curve. The percent relative standard deviation (% RSD) of the calculated Rf values in all the calibration solutions was required to be within $\pm 25\%$. The calculated values of the standard solutions were checked to ensure that the relative percent difference (%RPD) was within $\pm 30\%$ of the expected values. If the % RSD values of some compounds were greater than $\pm 25\%$, the GC/MS system was checked to determine the sources of this variation. Appropriate corrective actions (i.e., cleaning the source) were taken. The calibration standard solutions and the sample set were then re-analyzed, and another multi-point calibration curve was generated for quantification.

6.2.4.2 Method Performance

6.2.4.2.1 North Carolina Method precision was evaluated based on the results from duplicate samples and duplicate GC/MS analyses. One field duplicate air sample for neutral analysis, and one for acid analysis, were collected in the NC study. Duplicate NC samples for dust, soil, food and urine were duplicate aliquots of these samples. Duplicate wipe and transferable residue samples were not obtained because it was not feasible to obtain true duplicate samples for these sample media. For example, once a surface has been wiped or sampled with a PUF roller, there is no other equivalent surface from which a duplicate sample can be obtained. A summary of the mean and standard deviation (SD) values of the %RPD of the duplicate NC samples are given in Tables 6.2.4 through 6.2.6. For neutral pollutants in the multimedia samples, the mean %RPD ranged from 0 to 26%, except for PCB 52 for which the mean %RPD ranged from 0 to 36%. The mean %RPD for acidic pollutants/metabolites ranged from 0 to 16%. Duplicate GC/MS analyses were performed on randomly selected sample extracts for all sample media (the same sample extract was analyzed twice by GC/MS). Results of the mean and SD for the %RPD of the duplicate GC/MS analyses are summarized in Tables 6.2.7 to 6.2.9. The mean %RPD ranged from 0 to 9% for all neutral and acidic pollutants/metabolites.

Overall method accuracy was evaluated by measuring the recoveries of the MSSs and SRSs that had been spiked onto all field samples. Recoveries of the MSSs for dust, soil, liquid food, solid food, and urine samples were obtained from different aliquots of the corresponding spiked and non-spiked samples. Recoveries of the MSSs of air, wipe, and PUF samples were obtained from the spiked blank sample media. The mean and SD values of the recovery data from the NC matrix spike samples are summarized in Tables 6.2.10 to 6.2.12. Typical spiking levels of MSSs and SRSs by matrix are shown in these Tables. With few exceptions, satisfactory recoveries were obtained for most target pollutants/metabolites in all types of samples. Mean recoveries ranged from 54 ± 6.5 to $130 \pm 6.5\%$ for neutral pollutants. Mean recoveries ranged from 64 ± 16 to $99 \pm 23\%$ for acidic pollutants/metabolites. High background levels of the two phthalates were found in the non-spiked blank sample media as well as in the field samples. Consequently, the spiked levels of the two phthalates were not high enough in most of the matrix spike samples to provide satisfactory recovery data. For the same reason, satisfactory recoveries for target OP pesticides and PAHs could not be obtained in a few dust and soil samples. Interference peaks were observed for bisphenol-A, cyfluthrin, and *cis*-permethrin. Recovery data for these samples were not included in calculating the mean and SD as noted in Table 6.2.10. A *trans*-permethrin standard was not available at the early stage of the NC field study, thus some of the matrix spike samples did not contain this compound.

Recovery data of SRSs are summarized in Tables 6.2.13 to 6.2.15. Quantitative recoveries for the SRSs including *p,p'*-DDE- d_4 , dibenz[*a,h*]anthracene- d_{14} , PCB101- C_{13} , and 2,4-D- C_{13} were obtained in most NC field samples. Recoveries for SRSs ranged from 56 ± 9.5 to $120 \pm 18\%$ for neutral pollutants and from 75 ± 11 to $91 \pm 18\%$ for acidic pollutant, 2,4-D- C_{13} . Interference peaks were observed for benzylbutylphthalate- d_4 and bisphenol-A- d_6 , in some air, dust, soil, and wipe samples. Therefore, satisfactory recoveries were not obtained.

Field blanks and laboratory method blanks were used to assess background contamination from field sample handling and laboratory sample processing. Results of the neutral and acidic

pollutants/metabolites in field blanks and laboratory blanks from NC are summarized in Tables 6.2.16 to 6.2.17. Typically, field blanks were taken every other week during the sampling periods in each state. Field blanks for air, wipe, and PUF samples were unspiked sampling cartridges, precleaned wipes, and precleaned PUFs respectively. These cartridges, wipes, and PUFs were taken to the field and treated the same way as field samples, but were not exposed. Field blanks for dust/soil and liquid/solid food were empty containers that were used for collecting the respective samples and went through the same field handling procedures as field samples. Because the same kind of wipes was used for dermal wipes, floor surface wipes, and food preparation wipes, all the wipe samples shared the same field blanks. Dust and soil samples shared the same field blanks, because the same type of containers was used for these samples.

The reported median and SD values in Tables 6.2.16 and 6.2.17 were generated from the combined field blanks and laboratory blanks data. These tables do not include the pollutants/metabolites that were not detected in the blanks from all sample media. If the target pollutant/metabolite was detected in some of the blanks, the non-detected blank results were replaced by the method detection limit (MDL) divided by the square root of two for all media, except liquid food, in the determination of the median and SD values. Non-detected results for liquid food blanks were replaced by the MDL divided by ten. With few exceptions, most target pollutants/metabolites were not detected in the field blanks and laboratory method blanks. The median values of these pollutants/metabolites were below or close to the method detection limits in these blanks. Measurable amounts of bisphenol-A in wipe samples, and of the two phthalates in all sample media, were found in the field blanks and laboratory method blanks in NC. Therefore, background correction was performed for these samples, before the data were used for the statistical analysis discussed in Chapter 8 of this report. Two PUF method blanks (11% of all PUF samples) were analyzed for neutrals; one did not contain any detectable target pollutants except for the two phthalates. The other PUF blank contained few PCBs; visible particles were observed in this blank PUF, which were probably due to contamination in the laboratory. There were 29 (6.1% of total urine samples) method blanks, and 12 (2.5% of total urine samples) field blanks, which were collected and analyzed for target pollutants/metabolites in urine. None of the urine blanks had any detectable target compounds.

Only one target pollutant, atrazine, was measured in the drinking water samples, thus all QC data for the drinking water samples are summarized in Table 6.2.18. There was no SRS for the water samples, because atrazine- d_5 was used as an internal standard. Overall method precision was very good; the mean of the %RPD of duplicate water samples was $2.2 \pm 3.5\%$, and a similar result was obtained from the duplicate GC/MS analyses. Average recovery of the matrix spike samples was $84 \pm 20\%$. Trace amounts of atrazine were found in some of the blank samples.

Table 6.2.4 Results for Duplicate Samples for Neutral Pollutants - North Carolina

Pollutant	Air		Dust/Soil		Liquid Food		Solid Food	
Number of QC samples	2		30		10		6	
Percent of field samples	0.7		10		6.1		3.6	
Relative Percent Difference, %								
OP Pesticides	mean ^a	SD	mean	SD	mean	SD	mean	SD
Chlorpyrifos	24	NA	14	27	-	-	-	-
Diazinon	- ^b	-	5.4	8.9	-	-	-	-
OC Pesticides								
Aldrin	-	-	1.2	3.1	-	-	-	-
<i>alpha</i> -Chlordane	1.3	NA ^c	4.2	5.6	-	-	-	-
<i>gamma</i> -Chlordane	9.3	NA	4.3	5.9	-	-	-	-
<i>p,p'</i> -DDE	-	-	1.7	4.2	-	-	4.4	6.9
<i>p,p'</i> -DDT	-	-	2.8	7.6	-	-	0.25	0.44
Dieldrin	-	-	3.0	9.3	-	-	-	-
Endrin	-	-	0.22	0.85	-	-	-	-
Heptachlor	4.2	NA	1.5	3.3	-	-	-	-
Lindane	7.4	NA	-	-	-	-	2.9	5.0
Pentachloronitrobenzene	-	-	-	-	-	-	-	-
Pyrethroid Pesticides								
Cyfluthrin	-	-	0.63	1.59	-	-	-	-
<i>cis</i> -Permethrin	-	-	3.1	4.9	1.3	2.4	2.5	3.4
<i>trans</i> -Permethrin	-	-	4.6	6.1	5.2	9.7	8.9	15
PAHs								
Benz[<i>a</i>]anthracene	-	-	21	23	0.76	1.7	4.5	4.0
Benzo[<i>a</i>]pyrene	-	-	14	12	-	-	3.6	1.8
Benzo[<i>b</i>]fluoranthene	-	-	14	11	-	-	5.3	0.45
Benzo[<i>e</i>]pyrene	-	-	17	14	-	-	1.9	0.95
Benzo[<i>ghi</i>]perylene	-	-	16	15	-	-	-	-
Benzo[<i>k</i>]fluoranthene	-	-	9.9	8.0	-	-	0.59	0.51
Chrysene	-	-	15	15	0.19	0.42	3.2	1.7
Dibenz[<i>a,h</i>]anthracene	-	-	9.6	12	-	-	-	-
Indeno[1,2,3- <i>cd</i>]pyrene	-	-	13	11	-	-	-	-
Phthalates								
Benzylbutylphthalate	6.0	NA	23	25	23	23	26	26
di- <i>n</i> -Butylphthalate	13	NA	20	26	18	9.4	18	11
Phenols								
Bisphenol-A	-	-	2.3	4.6	2.8	3.2	2.9	2.5
Nonylphenol	-	-	1.1	4.2	1.4	3.1	-	-
PCBs								
PCB 44	-	-	0.04	0.15	-	-	-	-
PCB 52	36	NA	1.5	3.4	-	-	-	-
PCB 70	-	-	0.67	2.2	-	-	-	-
PCB 77	-	-	-	-	-	-	-	-
PCB 95	7.8	NA	1.8	6.9	-	-	-	-
PCB 101	7.6	NA	1.9	6.4	-	-	-	-
PCB 105	-	-	1.2	4.5	-	-	-	-
PCB 110	-	-	0.71	1.8	-	-	-	-
PCB 118	-	-	1.2	2.5	-	-	-	-
PCB 138	-	-	0.04	0.14	-	-	-	-
PCB 153	-	-	0.51	1.5	-	-	-	-
PCB 180	-	-	0.76	2.9	-	-	-	-

^a Only one duplicate air sample was collected for neutral pollutants; the reported mean value of RPD is the RPD value of the duplicate samples.

^b - denotes that the target pollutant was below detection limit in all duplicate samples.

^c NA denotes not applicable.

Table 6.2.5 Results for Duplicate Samples for Acidic Pollutants/Metabolites - North Carolina

Pollutant	Air		Dust/Soil		Liquid Food		Solid Food	
Number of QC samples	2		20		28		44	
Percent of field samples	0.7		6.7		9.8		15	
Relative Percent Difference, %								
OP Metabolites	mean ^a	SD	mean	SD	mean	SD	mean	SD
3,5,6-TCP	16	NA ^c	8.0	8.9	5.8	7.0	7.7	6.5
Acid Herbicides								
Dicamba	- ^b	-	-	-	-	-	-	-
2,4-D	-	-	2.6	5.6	0.33	1.2	4.7	7.7
2,4,5-T	-	-	-	-	-	-	0.47	2.1
Phenols								
PCP	0.69	NA	4.8	4.4	-	-	1.3	3.5

^a Only one air duplicate sample was collected for acidic pollutants; the reported mean value of RPD is the RPD for the duplicate samples.

^b - denotes that the target pollutant was below detection limit in all duplicate samples.

^c NA denotes not applicable.

Table 6.2.6 Results for Duplicate Samples for Urine Analysis - North Carolina

Pollutant	Urine	
Number of QC samples	26	
Percent of field samples	5.5	
Relative Percent Difference, %		
OP Metabolites	mean	SD
IMP	- ^a	-
3,5,6-TCP	7.9	7.3
Acid Herbicides		
2,4-D	2.5	3.2
PAH Metabolites		
1-Hydroxybenz[a]anthracene	4.0	14
3-Hydroxychrysene	-	-
Phenols		
PCP	8.2	8.5

^a - denotes that the target pollutant was below detection limit in all duplicate samples.

Table 6.2.7 Results for Duplicate Analyses of the Same Sample Extract for Neutral Pollutants - North Carolina

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF	
	PCB	Others	PCB	Others	PCB	Others	PCB	Others	PCB	Others	PCB	Others
Number of QC samples	24	28	38	34	36	42	34	34	30	26	-	2
Percent of field samples	7.9	9.2	13	11	12	15	21	21	18	16	0.0	11
Relative Percent Difference, %												
OP Pesticides	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean ^a	SD
Chlorpyrifos	3.3	3.1	2.7	5.0	5.5	4.6	0.38	1.1	3.9	5.5	0.29	NA ^b
Diazinon	2.0	3.1	3.5	5.2	1.5	3.5	0.02	0.08	2.6	5.9	1.1	NA
OC Pesticides												
Aldrin	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean ^a	SD
<i>alpha</i> -Chlordane	0.35	0.91	- ^c	-	0.42	1.9	-	-	0.52	1.9	-	-
<i>gamma</i> -Chlordane	2.4	2.9	4.0	6.2	2.8	5.5	-	-	0.56	1.3	-	-
<i>p,p'</i> -DDE	2.1	3.0	3.1	4.3	1.8	2.6	-	-	0.85	2.1	-	-
<i>p,p'</i> -DDT	-	-	2.9	5.6	0.09	0.39	0.39	0.86	3.3	3.4	-	-
Dieldrin	0.34	1.3	0.62	1.3	0.11	0.36	-	-	0.50	1.8	-	-
Endrin	1.8	5.4	2.6	5.9	2.4	10	-	-	-	-	-	-
Heptachlor	1.5	2.8	0.89	2.2	0.02	0.10	-	-	-	-	-	-
Lindane	2.6	4.1	0.69	1.7	1.6	3.8	-	-	0.54	0.99	-	-
Pentachloronitrobenzene	-	-	0.08	0.33	0.90	3.1	-	-	0.00	0.00	-	-
Pyrethroid Pesticides												
Cyfluthrin	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean ^a	SD
<i>cis</i> -Permethrin	0.21	0.78	1.4	3.9	0.99	2.4	-	-	-	-	0.05	NA
<i>trans</i> -Permethrin	1.9	3.6	7.4	13	5.9	6.9	0.60	1.7	0.43	1.2	3.5	NA
PAHs												
Benz[<i>a</i>]anthracene	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean ^a	SD
Benz[<i>a</i>]pyrene	3.2	4.9	4.8	5.2	3.1	4.4	0.21	0.85	2.6	3.8	7.8	NA
Benz[<i>b</i>]fluoranthene	2.6	4.6	4.6	5.5	2.1	4.9	-	-	0.89	2.1	-	-
Benz[<i>e</i>]pyrene	3.4	7.2	6.0	11	2.0	3.7	-	-	1.7	2.6	-	-
Benz[<i>k</i>]fluoranthene	2.6	3.1	3.0	3.2	2.5	4.4	-	-	0.86	1.3	-	-
Chrysene	4.0	6.1	5.1	6.3	3.6	7.2	-	-	-	-	-	-
Dibenz[<i>a,h</i>]anthracene	2.4	2.9	4.6	4.8	1.9	5.3	-	-	1.2	2.3	-	-
Indeno[1,2,3- <i>cd</i>]pyrene	3.3	5.6	3.3	3.0	2.7	4.5	0.05	0.22	0.74	1.2	-	-
	0.72	1.9	2.9	3.8	0.55	2.0	-	-	-	-	-	-
	5.6	7.2	6.4	6.9	3.6	9.0	-	-	-	-	-	-

Table 6.2.7 Results for Duplicate Analyses of the Same Sample Extract for Neutral Pollutants - North Carolina (cont.)

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF	
	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Phthalates												
Benzylbutylphthalate	7.6	10	8.9	11	7.3	8.0	2.0	1.6	5.8	7.4	3.1	NA
di- <i>n</i> -Butylphthalate	3.9	6.4	4.7	4.1	3.1	3.2	3.3	5.7	3.6	6.8	4.4	NA
Phenols												
Bisphenol-A	6.5	8.9	1.2	2.7	8.6	7.7	3.1	3.3	4.1	2.6	5.4	NA
Nonylphenol	0.71	2.7	2.7	8.5	1.3	4.4	0.14	0.59	0.1	0.34	-	NA
PCBs												
PCB 44	0.47	1.6	0.54	2.3	0.46	2.0	-	-	-	-	-	-
PCB 52	4.6	6.2	1.2	3.1	1.3	4.4	-	-	-	-	-	-
PCB 70	0.86	2.6	-	-	0.24	1.0	-	-	-	-	-	-
PCB 77	-	-	-	-	-	-	-	-	-	-	-	-
PCB 95	2.2	3.8	0.69	2.5	0.59	1.7	-	-	0.03	0.12	-	-
PCB 101	1.4	2.6	0.99	2.5	0.35	1.5	-	-	-	-	-	-
PCB 105	-	-	-	-	-	-	-	-	-	-	-	-
PCB 110	1.7	3.1	1.7	3.4	0.60	1.9	-	-	-	-	-	-
PCB 118	0.79	2.8	2.4	5.3	0.18	0.64	-	-	-	-	-	-
PCB 138	-	-	1.3	3.4	0.13	0.56	-	-	-	-	-	-
PCB 153	0.45	1.6	2.1	6.1	1.4	3.9	-	-	-	-	-	-
PCB 180	0.10	0.35	1.3	3.7	0.25	0.93	-	-	-	-	-	-

^a Only one duplicate GC/MS analysis for OC, OP, PAH, PE, Phenols, and PY performed on the PUF sample; the reported mean value of RPD is the RPD of the duplicate GC/MS analyses.

^b NA denotes not applicable.

^c - denotes that the target pollutant was below detection limit in all duplicate GC/MS analyses.

Table 6.2.8 Results for Duplicate Analyses of the Same Sample Extract for Acidic Pollutants/Metabolites - North Carolina

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food	
	silylate	methyrate	silylate	methyrate	silylate	methyrate	silylate	methyrate	silylate	methyrate
Number of QC samples	22	20	40	32	21	22	16	22	34	38
Percent of field samples	7.3	6.6	13	11	8.2	8.6	5.6	7.7	12	13
Relative Percent Difference, %										
OP Metabolites	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
3,5,6-TCP	5.7	6.0	4.1	4.5	5.5	4.3	1.5	1.7	3.1	3.6
Acid Herbicides										
Dicamba	- ^a	-	2.3	7.0	-	-	-	-	0.99	2.1
2,4-D	2.4	7.0	1.6	2.7	0.89	2.9	-	-	2.8	4.0
2,4,5-T	0.12	0.37	-	-	-	-	-	-	-	-
Phenols										
PCP	7.9	6.2	5.3	4.7	1.5	2.7	-	-	0.15	0.64

^a - denotes that the target pollutant was below detection limit in all duplicate GC/MS analyses.

Table 6.2.9 Results for Duplicate Analyses of the Same Sample Extract for Urine - North Carolina

Pollutant	Urine	
Number of QC samples	54	
Percent of field samples	11	
Relative Percent Difference, %		
OP Metabolites	mean	SD
IMP	1.1	3.9
3,5,6-TCP	3.9	2.8
Acid Herbicides		
2,4-D	4.6	5.4
PAH Metabolites		
1-Hydroxybenz[a]anthracene	1.3	2.7
3-Hydroxychrysene	0.44	1.4
Phenols		
PCP	3.7	3.7

Table 6.2.10 Results for Matrix Spike Samples for Neutral Pollutants - North Carolina

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF	
Typical spike level, ng	50		20		20		50		50		50	
Number of QC samples	15		19		21		10		8		2	
Percent of field samples	4.9		6.4		7.3		6.1		4.8		11	
Percent Recovery, %												
OP Pesticides	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Chlorpyrifos ^a	100	13	89	18	110	18	110	17	95	25	85	20
Diazinon ^b	81	9.5	80	12	96	17	54	6.5	58	18	84	3.5
OC Pesticides												
Aldrin	90	9.2	80	14	95	15	93	16	83	11	87	19
<i>alpha</i> -Chlordane	95	9.8	76	14	99	18	91	18	71	9.1	74	1.1
<i>gamma</i> -Chlordane	92	11	76	17	95	17	88	18	72	8.4	76	3.8
<i>p,p'</i> -DDE	96	13	80	14	96	18	88	18	80	11	84	0.33
<i>p,p'</i> -DDT	110	17	97	20	130	35	120	41	110	14	110	
Dieldrin	87	10	83	21	95	16	88	13	91	16	86	5.7
Endrin ^c	100	13	96	19	110	22	100	20	91	10	85	-
Heptachlor	100	15	96	23	100	21	100	28	96	18	89	12
Lindane	92	10	83	11	100	17	97	20	92	11	95	6.2
Pentachloronitrobenzene	97	13	75	14	110	22	120	31	110	17	78	7.9
Pyrethroid Pesticides												
Cyfluthrin ^d	100	15	100	19	110	16	64	12	88	13	91	23
<i>cis</i> -Permethrin ^e	120	17	100	31	110	20	88	15	97	14	82	6.4
<i>trans</i> -Permethrin ^f	-	-	-	-	-	-	86	25	78	14	-	-
PAHs												
Benz[<i>a</i>]anthracene	110	20	96	23	110	26	110	25	85	15	90	12
Benzo[<i>a</i>]pyrene	110	12	87	15	98	19	120	17	89	15	92	16
Benzo[<i>b</i>]fluoranthene	110	13	95	21	120	23	100	15	82	10	85	10
Benzo[<i>e</i>]pyrene	95	11	83	15	95	16	87	11	73	7.8	78	7.0
Benzo[<i>ghi</i>]perylene	93	11	89	19	91	16	110	15	95	12	77	1.8
Benzo[<i>k</i>]fluoranthene	110	14	87	16	100	20	110	14	81	9.7	85	4.8
Chrysene	100	15	86	19	100	22	93	20	71	9.2	96	17
Dibenz[<i>a,h</i>]anthracene	110	18	91	19	99	20	110	15	87	15	77	5.7
Indeno[1,2,3- <i>cd</i>]pyrene	99	15	93	20	95	20	110	18	89	15	77	7.7

Table 6.2.10 Results for Matrix Spike Samples for Neutral Pollutants - North Carolina (cont.)

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF	
	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Phthalates												
Benzylbutylphthalate ^g	-	-	110	28	-	-	74	24	67	13	-	-
di- <i>n</i> -Butylphthalate ^h	-	-	100	29	-	-	61	25	61	1.7	-	-
Phenols												
Bisphenol-A ⁱ	91	17	69	12	110	27	130	10	100	17	80	30
Nonylphenol ^j	100	16	89	22	120	16	130	9.5	125	14	85	31
PCBs												
PCB 44	92	14	79	13	100	16	90	13	74	12	86	7.8
PCB 52	91	14	81	16	100	16	88	11	75	13	87	5.5
PCB 70	93	11	80	13	110	17	95	12	81	18	91	8.4
PCB 77	100	12	88	15	110	19	100	16	89	8.7	98	24
PCB 95	89	13	74	12	100	17	86	13	78	23	81	12
PCB 101	92	13	78	12	100	17	91	14	79	18	91	8.7
PCB 105	100	13	87	18	120	22	99	18	82	9.7	100	23
PCB 110	97	14	81	17	110	19	100	12	77	12	97	15
PCB 118	99	13	86	17	120	23	100	16	86	20	97	23
PCB 138	100	16	86	17	110	22	96	18	73	9.4	100	25
PCB 153	97	13	85	16	120	21	96	17	74	8.8	97	25
PCB 180	110	16	89	21	120	27	97	19	78	16	110	19

^a Data for two dust/soil samples were excluded because of low spike level.

^b Data for one dust/soil sample was excluded because of low spike level.

^c Data for one PUF sample was excluded because of matrix effect.

^d Data for seven dust/soil, two wipe, six liquid food, and one solid food were excluded because of low spike level, or interference.

^e Data for 12 dust/soil and five wipe samples were excluded because of low spike level or matrix effect.

^f Trans-permethrin standard was included in the matrix spike solution in part of NC field study.

^g Data for all air, wipe, and PUF as well as 15 dust/soil, seven liquid food, and six solid samples were excluded because of low spike level or interference.

^h Data for all air, wipe, and PUF as well as 12 dust/soil, seven liquid food and six solid food samples were excluded because of low spike level or interference.

ⁱ Data for 12 dust/soil, 13 wipe, and two liquid food samples were excluded because of low spike level, or matrix effect.

^j Data for four dust/soil, five wipe, and three liquid food samples were excluded because of matrix effect.

Table 6.2.11 Results for Matrix Spike Samples for Acidic Pollutants/Metabolites - North Carolina

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food	
Typical spike level, ng	50		50		50		50		50	
Number of QC samples	20		19		12		14		21	
Percent of field samples	6.6		6.4		4.7		4.9		7.1	
Percent Recovery, %										
OP Metabolites	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
3,5,6-TCP	80	11	8	18	80	8.2	69	14	80	7.8
Acid Herbicides										
Dicamba	64	16	72	16	75	13	74	14	88	13
2,4-D ^a	67	18	76	23	77	15	80	15	92	15
2,4,5-T	69	15	78	19	74	15	80	14	99	14
Phenols										
PCP	99	23	78	26	69	11	67	14	78	14

^a Data for four dust/soil samples were excluded because of low spike level or matrix effect.

Table 6.2.12 Results for Matrix Spike Samples for Urine Analysis - North Carolina

Pollutant	Urine	
Typical spike level, ng/sample	25	
Number of QC samples	32	
Percent of field samples	6.8	
Percent Recovery, %		
OP Metabolites	mean	SD
IMP ^a	7.2	3.2
3,5,6-TCP	99	11
Acid Herbicides		
2,4-D	98	12
PAH Metabolites		
1-Hydroxybenz[<i>a</i>]anthracene ^b	92	22
3-Hydroxychrysene ^b	95	18
Phenols		
PCP	79	10

^a Low recoveries were obtained for IMP because the analytical method used was developed for 3,5,6-TCP, not IMP.

^b Data for three urine samples were excluded because of matrix effect or interference.

Table 6.2.13 Results for Surrogate Recovery Standards for Neutral Pollutants - North Carolina

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF
Typical spike level, ng	50		50		20		50		50		50
Number of QC samples	351		371		346		202		197		23
Percent of field samples	110		120		120		120		120		130
Percent Recovery, %											
	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	SD
Benzylbutylphthalate-d ₄ ^a	120	18	110	21	120	15	74	25	56	9.5	16
Bisphenol-A-d ₆ ^b	110	21	73	22	110	19	110	21	100	21	19
Dibenz[<i>a,h</i>]anthracene-d ₁₄ ^c	110	18	87	19	99	19	110	22	88	21	11
p,p'-DDE-d ₄	97	14	84	19	100	18	89	22	73	15	14
PCB101-C ₁₃	98	14	86	18	110	17	90	21	69	10	11

^a Data for 231 air, 83 dust/soil, and 126 wipe samples were excluded because of interference or matrix effect.

^b Data for 97 air, 210 dust/soil, 147 wipe, 36 liquid food, and 36 solid food samples were excluded because of interference or matrix effect.

^c Data for 24 dust/soil and 39 solid food samples were excluded because of matrix effect or interference.

Table 6.2.14 Results for Surrogate Recovery Standards for Acidic Pollutants - North Carolina

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food	
Typical spike level, ng	50		50		50		50		50	
Number of QC samples	355		359		290		332		379	
Percent of field samples	120		120		110		110		130	
Percent Recovery, %										
	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
2,4-D-C ₁₃ ^a	79	15	79	14	75	11	75	14	91	16

^a Data for 11 air samples were excluded because of matrix effect.

Table 6.2.15 Results for Surrogate Recovery Standards for Urine Analysis - North Carolina

Pollutant	Urine	
Typical spike level, ng	20	
Number of QC samples	564	
Percent of field samples	120	
Percent Recovery, %		
	mean	SD
2,4-D-C ₁₃	91	18

Table 6.2.16 Results for Blank Samples Having Detectable Neutral Pollutants - North Carolina

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF	
	MR	ER	MR	ER	MR	ER	MR	ER	MR	ER	MR	ER
Number of QC samples	17	12	23	12	15	13	8	12	7	12	2	0
Percent of field samples	5.6	3.9	7.7	4.0	5.2	4.5	4.9	7.4	4.2	7.2	1.1	0
Concentration												
	ng/m ³		ng/g		ng/sample		ng/mL		ng/g		ng/m ²	
OP Pesticides	median	SD	median	SD	median	SD	median	SD	median	SD	median	SD
Chlorpyrifos	0.06	0.01	- ^a	-	-	-	-	-	-	-	-	-
Pyrethroid Pesticides												
<i>cis</i> -Permethrin	0.06	0.03	-	-	-	-	0.003	0.03	-	-	-	-
<i>trans</i> -Permethrin	-	-	-	-	-	-	0.003	0.07	-	-	-	-
Phthalates												
Benzylbutylphthalate	28	78	41	96	360	490	9.8	43	36	86	7000	1500
di- <i>n</i> -Butylphthalate	24	21	38	59	300	500	42	46	94	130	9000	8800
Phenols												
Bisphenol-A	-	-	-	-	7.1	15	-	-	-	-	-	-

a. - denotes not detected in all blanks.

Table 6.2.17 Results for Blank Samples Having Detectable Acidic Pollutants/Metabolites - North Carolina

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food	
	MB	FB	MB	FB	MB	FB	MB	FB	MB	FB
Number of QC samples	19	12	15	12	12	11	7	12	17	12
Percent of field samples	6.3	4.0	5.1	4.0	4.7	4.3	2.5	4.2	5.7	4.0
Concentration										
	ng/m ³		ng/g		ng/sample		ng/mL		ng/g	
	median	SD	median	SD	median	SD	median	SD	median	SD
OP Metabolites										
3,5,6-TCP	0.06	0.01	1.4	0.56	0.71	0.88	-	-	0.09	0.03
Phenols										
PCP	0.06	1.1	- ^a	-	-	-	-	-	-	-

a. - denotes not detected in all blanks.

Table 6.2.18 Results for Water Samples - North Carolina

Pollutant	Drinking Water Samples							
	Duplicate		Analytical Duplicate		MSS		Blank	
							MB	FB
Number of QC	28		28		16		15	13
Percent of field	18		18		10		9.7	8.4
	Relative Percent Difference, %		Relative Percent Difference, %		Percent Recovery, %		Concentration, ng/mL	
	mean	SD	mean	SD	mean	SD	median	SD
Atrazine	2.2	3.5	2.3	5.1	84	20	0.01	0.02

6.2.4.2.2 *Ohio* For the OH study, results of the %RPD of duplicate samples for neutral pollutants, acidic pollutants/metabolites, and pollutants/metabolites in urine are summarized in Tables 6.2.19, 6.2.20, and 6.2.21, respectively. The mean of the %RPD was between 0% and 18% for all duplicate samples, except for the two phthalates. The mean of the %RPD for the two phthalates ranged from 7.1% to 38%. Results of the %RPD of duplicate GC/MS analyses are summarized in Tables 6.2.22 to 6.2.24. As expected, %RPD values from the duplicate GC/MS analyses were smaller than those from the duplicate samples.

Recovery data for the OH matrix spike samples are summarized in Tables 6.2.25 to 6.2.27. Recovery data of SRSs are summarized in Tables 6.2.28 to 6.2.30. With few exceptions, quantitative matrix spike and SRS recoveries were obtained for the target compounds in all sample media. Mean recoveries ranged from $70\pm 16\%$ to $130\pm 23\%$ for neutral pollutants, from $71\pm 8.2\%$ to $100\pm 11\%$ for acidic pollutants/metabolites. Because of the high background levels found in the nonspiked blank sample media as well as the high levels found in field samples, the spiked levels of the two phthalates were not high enough in most of the matrix spike samples. As a result, satisfactory recoveries could not be obtained. For the same reason, satisfactory recoveries for diazinon, PAHs, and *trans*-permethrin could not be obtained in one matrix spike sample. Interference peaks were observed for bisphenol-A, cyfluthrin, and *cis*-permethrin in some samples. Recovery of IMP was not acceptable ($<50\%$) in liquid food, solid food, and urine samples. This was mainly because the analytical method developed for the other OP metabolite, 3,5,6-TCP, was also used to measure IMP, but was found to be inadequate to measure IMP in some matrices. Different analytical methods need to be developed and evaluated for quantitative determination of IMP in these sample media.

Quantitative recoveries for the SRSs including p,p'-DDE-d₄, dibenz[*a,h*]anthracene-d₁₄, PCB101-C₁₃, and 2,4-D-C₁₃ were obtained in most OH field samples. Interference peaks were observed for the benzylbutylphthalate-d₄ and bisphenol-A-d₆, in some air, dust, soil, and wipe samples; satisfactory recoveries for these SRSs were not obtained.

Results of the OH field blanks and laboratory blanks are summarized in Tables 6.2.31 to 6.2.33. Note that the reported median and SD values were from the combined field blanks and laboratory method blanks. The median concentrations of the target pollutants/metabolites were below or close to the method detection limits. Measurable amounts of the two phthalates were found in the field blanks and laboratory method blanks in all media, and *cis*- and *trans*-permethrin were found in air blanks. Therefore, background-corrected data for these samples were used for the statistical analysis discussed in Chapter 8 of this report.

Table 6.2.19 Results for Duplicate Samples for Neutral Pollutants - Ohio

Pollutant	Dust/Soil		Liquid Food		Solid Food	
Number of QC samples	22		8		10	
Percent of field samples	7.2		4.8		5.9	
Relative Percent Difference, %						
OP Pesticides	mean	SD	mean	SD	mean	SD
Chlorpyrifos	4.8	8.9	0.79	1.6	9.6	5
Diazinon	7.8	10	- ^a	-	1.6	2.5
OC Pesticides						
Aldrin	-	-	-	-	-	-
<i>alpha</i> -Chlordane	3.9	5.6	-	-	-	-
<i>gamma</i> -Chlordane	4.2	5.2	-	-	-	-
<i>p,p'</i> -DDE	3.8	7.7	-	-	4.8	4.2
<i>p,p'</i> -DDT	1.9	4.4	-	-	-	-
Dieldrin	3.1	6.9	-	-	-	-
Endrin	0.18	0.60	-	-	-	-
Heptachlor	-	-	-	-	-	-
Lindane	-	-	-	-	-	-
Pentachloronitrobenzene	-	-	-	-	-	-
Pyrethroid Pesticides						
Cyfluthrin	3.7	6.3	-	-	-	-
<i>cis</i> -Permethrin	3.3	4.0	-	-	2.3	2.4
<i>trans</i> -Permethrin	2.8	3.5	-	-	3.9	4.2
PAHs						
Benz[<i>a</i>]anthracene	18	14	-	-	0.37	0.84
Benzo[<i>a</i>]pyrene	13	12	-	-	0.63	1.4
Benzo[<i>b</i>]fluoranthene	8.3	7.7	-	-	3.7	6.6
Benzo[<i>e</i>]pyrene	13	9.4	-	-	-	-
Benzo[<i>ghi</i>]perylene	11	8.5	-	-	-	-
Benzo[<i>k</i>]fluoranthene	5.8	5.3	-	-	0.36	0.50
Chrysene	14	10	-	-	2.5	3.5
Dibenz[<i>a,h</i>]anthracene	10	8.9	-	-	-	-
Indeno[1,2,3- <i>cd</i>]pyrene	11	7.0	-	-	-	-
Phthalates						
Benzylbutylphthalate	22	34	29	28	30	28
di- <i>n</i> -Butylphthalate	15	11	38	17	7.1	2.8
Phenols						
Bisphenol-A	2.3	3.9	4.7	9.3	9.6	12
Nonylphenol	-	-	-	-	-	-
PCBs						
PCB 44	0.79	1.7	NM	-	-	-
PCB 52	1.4	2.4	NM	-	-	-
PCB 70	1.1	2.9	NM	-	-	-
PCB 77	-	-	NM	-	-	-
PCB 95	4.1	6.5	NM	-	-	-
PCB 101	2.1	3.2	NM	-	-	-
PCB 105	0.55	1.8	NM	-	-	-
PCB 110	2.3	4.3	NM	-	-	-
PCB 118	1.1	1.6	NM	-	-	-
PCB 138	1.2	3.4	NM	-	-	-
PCB 153	3.3	5.4	NM	-	-	-
PCB 180	0.73	2.4	NM	-	-	-

^a - denotes not detected in all duplicate samples.

^b NM denoted that PCBs were not measured in liquid food samples.

Table 6.2.20 Results for Duplicate Samples for Acidic Pollutants/Metabolites - Ohio

Pollutant	Dust/Soil		Liquid Food		Solid Food	
Number of QC samples	20		22		16	
Percent of field samples	6.7		7.6		5.4	
Relative Percent Difference, %						
OP Metabolites	mean	SD	mean	SD	mean	SD
IMP	3.5	5.3	1.5	5.0	7.1	5.3
3,5,6-TCP	5.0	3.4	2.1	2.4	6.3	5.6
Acid Herbicides						
dicamba	1.3	2.8	- ^a	-	2.0	5.6
2,4-D	5.2	7.8	-	-	1.9	3.0
2,4,5-T	0.66	2.1	-	-	-	-
Phenols						
PCP	4.2	4.4	-	-	0.33	0.93

a. - denotes not detected in all duplicate samples.

Table 6.2.21 Results for Duplicate Samples for Urine Analysis - Ohio

Pollutant	Urine	
Number of QC samples	26	
Percent of field samples	5.7	
Relative Percent Difference, %		
OP Metabolites	mean	SD
IMP	- ^a	-
3,5,6-TCP	4.8	6.1
Acid Herbicides		
2,4-D	4.1	4.0
PAH Metabolites		
1-Hydroxybenz[a]anthracene	0.18	0.44
3-Hydroxychrysene	-	-
Phenols		
PCP	4.9	3.4

a. - denotes not detected in all duplicate samples.

Table 6.2.22 Results for Duplicate Analyses of the Same Sample Extract for Neutral Pollutants - Ohio

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF	
	PCB	Others	PCB	Others	PCB	Others	PCB	Others	PCB	Others	PCB	Others
Number of QC samples	32	34	44	30	54	38	NM ^a	18	28	24	4	4
Percent of field samples	10	11	15	10	19	14	-	11	16	14	29	29
Relative Percent Difference, %												
OP Pesticides	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Chlorpyrifos	2.0	2.6	2.3	3.4	2.3	2.8	-	-	2.5	3.7	5.7	8.1
Diazinon	3.7	5.3	3.7	4.4	1.4	2.9	-	-	0.23	0.57	1.3	1.9
OC Pesticides												
Aldrin	0.05	0.20	0.11	0.42	- ^b	-	-	-	-	-	-	-
<i>alpha</i> -Chlordane	3.0	3.7	3.4	2.9	1.8	4.2	-	-	0.66	2.3	-	-
<i>gamma</i> -Chlordane	4.1	4.0	3.5	3.6	1.8	3.2	-	-	0.66	2.3	-	-
<i>p,p'</i> -DDE	-	-	2.7	3.2	-	-	-	-	1.5	1.8	-	-
<i>p,p'</i> -DDT	-	-	2.7	4.6	0.10	0.43	-	-	-	-	-	-
Dieldrin	0.18	0.74	0.57	1.6	-	-	-	-	0.35	1.2	9.0	13
Endrin	0.11	0.30	0.04	0.15	-	-	-	-	-	-	-	-
Heptachlor	1.2	2.7	0.54	1.5	-	-	-	-	0.06	0.21	-	-
Lindane	-	-	0.40	1.6	-	-	-	-	-	-	-	-
Pentachloronitrobenzene	0.80	3.0	-	-	-	-	-	-	-	-	-	-
Pyrethroid Pesticides												
Cyfluthrin	-	-	2.3	4.0	0.19	0.57	-	-	-	-	-	-
<i>cis</i> -Permethrin	3.5	4.1	3.6	3.6	2.3	3.4	-	-	-	-	2.4	1.7
<i>trans</i> -Permethrin	1.6	2.4	2.4	1.9	4.3	4.9	-	-	-	-	3.4	0.50
PAHs												
Benz[<i>a</i>]anthracene	2.0	3.7	2.6	1.9	2.0	2.4	-	-	0.30	0.81	3.4	4.4
Benzo[<i>a</i>]pyrene	0.31	0.71	2.3	1.8	1.7	2.1	-	-	0.07	0.23	6.7	2.2
Benzo[<i>b</i>]fluoranthene	1.2	2.6	3.7	2.7	2.5	3.6	-	-	2.2	4.8	3.6	4.2
Benzo[<i>e</i>]pyrene	2.2	3.7	2.8	2.2	2.9	3.3	-	-	0.66	2.0	4.6	4.5
Benzo[<i>ghi</i>]perylene	1.5	3.5	3.6	2.7	2.6	2.3	-	-	-	-	4.2	0.34
Benzo[<i>k</i>]fluoranthene	0.88	1.8	3.3	3.5	3.3	3.3	-	-	0.12	0.42	2.8	0.98
Chrysene	1.8	2.6	2.8	3.2	2.4	2.2	-	-	0.85	2.5	1.7	1.0
Dibenz[<i>a,h</i>]anthracene	-	-	4.9	4.1	3.4	6.3	-	-	-	-	-	-
Indeno[1,2,3- <i>cd</i>]pyrene	0.83	1.6	4.3	4.0	3.7	3.5	-	-	-	-	2.2	0.44

Table 6.2.22 Results for Duplicate Analyses of the Same Sample Extract for Neutral Pollutants - Ohio (cont.)

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF	
	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Phthalates												
Benzylbutylphthalate	11	21	6.1	9.8	2.6	3.1	3.8	4.6	2.4	1.8	1.3	0.79
di- <i>n</i> -Butylphthalate	9.1	26	7.5	13	1.6	2.7	3.3	4.0	1.2	0.95	0.87	0.42
Phenols												
Bisphenol-A	3.5	4.1	2.1	3.6	3.4	3.8	2.6	3.2	3.8	1.9	2.9	0.58
Nonylphenol	-	-	-	-	-	-	-	-	-	-	-	-
PCBs												
PCB 44	0.26	1.0	0.51	1.7	0.41	1.5	NM	-	-	-	-	-
PCB 52	4.7	5.4	1.5	2.4	0.67	1.8	NM	-	0.23	0.87	8.5	4.0
PCB 70	0.71	1.5	0.72	1.5	1.2	3.4	NM	-	-	-	0.62	0.87
PCB 77	-	-	-	-	-	-	NM	-	-	-	-	-
PCB 95	1.7	2.8	1.9	3.6	0.57	2.6	NM	-	-	-	-	-
PCB 101	0.78	2.7	0.83	1.4	0.43	1.6	NM	-	-	-	3.9	5.4
PCB 105	-	-	0.29	1.3	0.11	0.58	NM	-	-	-	-	-
PCB 110	0.27	1.1	1.4	2.5	0.25	0.84	NM	-	-	-	4.3	4.8
PCB 118	-	-	0.89	1.8	0.25	0.98	NM	-	-	-	-	-
PCB 138	-	-	0.67	1.6	-	-	NM	-	-	-	-	-
PCB 153	-	-	1.7	3.6	-	-	NM	-	-	-	-	-
PCB 180	-	-	0.72	1.8	-	-	NM	-	-	-	-	-

^a NM denotes that PCBs were not measured in liquid food samples.

^b - denotes not detected in all duplicate GC/MS analyses.

Table 6.2.23 Results for Duplicate Analyses of the Same Sample Extract for Acidic Pollutants/Metabolites - Ohio

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food	
	silylate	methy/late	silylate	methy/late	silylate	methy/late	silylate	methy/late	silylate	methy/late
Number of QC samples	28	26	28	42	30	20	24	30	16	16
Percent of field samples	9.2	8.5	9.3	14	12	7.9	8.3	10	5.4	5.4
Relative Percent Difference, %										
OP Metabolites	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
	3.1	3.10	1.9	2.8	1.5	2.8	0.68	1.7	4.1	5.1
3,5,6-TCP	5.0	6.5	1.1	1.3	3.6	2.9	0.85	1.5	2.9	2.3
Acid Herbicides										
Dicamba	0.03	0.10	1.1	2.4	0.05	0.14	-	-	0.19	0.53
2,4-D	2.7	5.7	2.6	4.2	1.2	1.7	-	-	0.32	0.52
2,4,5-T	- ^a	-	-	0.01	-	-	-	-	-	-
Phenols										
PCP	2.9	4.2	1.8	1.7	1.6	2.3	0.38	1.5	0.06	0.16

^a - denotes not detected in all duplicate GC/MS analyses.

Table 6.2.24 Results for Duplicate Analyses of the Same Sample Extract for Urine - Ohio

Pollutant	Urine		
Number of QC samples	56		
Percent of field samples	12		
Relative Percent Difference, %			
OP Metabolites	mean	SD	
IMP	0.05	0.21	
3,5,6-TCP	1.8	1.6	
Acid Herbicides			
2,4-D	3.1	2.8	
PAH Metabolites			
1-Hydroxybenz[<i>a</i>]anthracene	- ^a	-	
3-Hydroxychrysene	-	-	
Phenols			
PCP	4.9	3.8	

^a - denotes not detected in all duplicate GC/MS analyses.

Table 6.2.25 Results for Matrix Spike Samples for Neutral Pollutants - Ohio

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food	
Typical spike level, ng	50		20		20		2.5		50	
Number of QC samples	19		11		7		6		7	
Percent of field samples	6.2		3.7		2.5		3.6		4.1	
Percent Recovery, %										
OP Pesticides	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Chlorpyrifos	97	13	81	6.8	110	12	89	11	100	17
Diazinon ^a	77	13	77	7.8	95	120	72	13	78	12
OC Pesticides										
Aldrin	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
<i>alpha</i> -Chlordane	84	9.8	81	12	91	14	90	8.4	93	14
<i>gamma</i> -Chlordane	91	12	72	4.0	95	12	73	9.3	78	8.3
<i>p,p'</i> -DDE	95	12	76	7.3	96	15	72	9.4	76	6.7
<i>p,p'</i> -DDT	96	23	88	5.7	93	15	81	11	77	13
Dieldrin	87	12	92	13	110	15	89	12	110	17
Endrin	94	12	82	15	93	15	90	6.0	93	13
Heptachlor	90	15	95	8.5	110	10	90	10	100	9.8
Lindane	86	9.1	81	13	100	16	83	13	100	7.2
Pentachloronitrobenzene	87	11	82	11	120	7.3	87	12	110	12
Pyrethroid Pesticides										
Cyfluthrin ^b	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
<i>cis</i> -Permethrin ^c	97	19	100	14	100	15	71	18	110	16
<i>trans</i> -Permethrin ^d	100	17	110	30	99	12	87	19	110	27
PAHs ^e	88	11	86	7.1	97	1.8	68	27	85	17
Benz[<i>a</i>]anthracene	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Benz[<i>a</i>]pyrene	89	17	87	21	95	16	91	16	100	24
Benz[<i>b</i>]fluoranthene	76	18	90	15	95	19	91	13	100	13
Benz[<i>e</i>]pyrene	88	16	95	24	97	17	96	12	92	13
Benz[<i>k</i>]perylene	75	12	82	14	92	17	81	7.8	82	11
Benz[<i>ghi</i>]perylene	72	12	90	15	88	17	89	14	100	17
Benz[<i>k</i>]fluoranthene	84	19	86	8.8	93	15	99	7.9	96	17
Chrysene	85	14	90	18	91	15	78	12	83	17
Dibenz[<i>a,h</i>]anthracene	74	15	79	6.1	92	16	100	16	100	20
Indeno[1,2,3- <i>cd</i>]pyrene	70	16	87	13	91	19	100	18	100	16

Table 6.2.25 Results for Matrix Spike Samples for Neutral Pollutants - Ohio (cont.)

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food	
	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD
Phthalates										
Benzylbutylphthalate ^f	-	-	80	12	-	-	-	-	120	15
di- <i>n</i> -Butylphthalate ^g	-	-	91	11	-	-	-	-	76	5.8
Phenols										
Bisphenol-A ^h	78	10	567	4.2	110	13	97	24	130	23
Nonylphenol	86	12	76	20	100	12	100	19	130	12
PCBs ⁱ										
PCB 44	89	13	75	5.1	80	14	-	-	84	12
PCB 52	88	11	78	9.5	87	8.7	-	-	86	11
PCB 70	93	14	76	6.0	87	8.3	-	-	90	11
PCB 77	92	15	83	14	90	17	-	-	100	13
PCB 95	87	14	72	7.2	81	11	-	-	78	12
PCB 101	90	12	73	7.7	87	8.6	-	-	86	12
PCB 105	99	14	79	7.4	88	11	-	-	100	19
PCB 110	93	12	73	7.1	88	9.0	-	-	91	13
PCB 118	97	13	74	6.3	87	13	-	-	98	15
PCB 138	94	12	78	8.4	86	10	-	-	94	14
PCB 153	93	12	76	7.5	86	11	-	-	95	15
PCB 180	99	15	78	8.3	85	12	-	-	98	17

^a Data for diazinon in one dust/soil sample was excluded because of low spike level.

^b Data for two dust/soil samples were excluded because of interference.

^c Data for eight dust/soil samples were excluded because of interference or low spike level.

^d Data for one dust/soil sample was excluded because of low spike level.

^e Data for all target PAHs in one dust/soil sample was excluded because of low spike level.

^f Data for air, wipe, and liquid food can not be obtained because of low spike level; data for seven dust/soil, six liquid food, and five solid food samples were excluded because of low spike level or matrix effect.

^g Data for air, wipe, and liquid food can not be obtained because of low spike level; data for eight dust/soil, six liquid food, and five solid food samples were excluded because of low spike level or matrix effect.

^h Data for two air samples, eight dust/soil samples were excluded because of matrix effect.

ⁱ PCBs were not measured in liquid food samples.

Table 6.2.26 Results for Matrix Spike Samples for Acidic Pollutants/Metabolites - Ohio

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF
Typical spike level, ng		50		50		50		50		50	50
Number of QC samples		14		8		9		11		9	1
Percent of field samples		4.6		2.7		3.5		3.8		3.0	25
Percent Recovery, %											
OP Metabolites	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	mean ^a
											SD
IMP	93	12	63	35	79	13	6.6	4.6	10	5.9	59
3,5,6-TCP	86	12	82	8.7	86	14	79	13	86	17	56
Acid Herbicides											
Dicamba	77	10	72	11	79	15	82	9.9	78	6.0	26
2,4-D	80	9.3	71	8.2	82	9.9	83	11	85	8.2	51
2,4,5-T	85	8.8	81	12	83	11	84	6.4	86	9.1	51
Phenols											
PCP	77	7.0	86	12	79	5.9	84	18	84	10	75
											NA

^a The reported mean value for the PUF sample was the recovery data of the one matrix spike PUF sample analyzed.

^b NA denotes not applicable.

Table 6.2.27 Results for Matrix Spike for Urine Analysis - Ohio

Pollutant	Urine	
Typical spike level, ng	25	
Number of QC samples	14	
Percent of field samples	3.0	
Percent Recovery, %		
OP Metabolites	mean	SD
IMP ^a	5.0	2.3
3,5,6-TCP	96	10
Acid Herbicides		
2,4-D	98	20
PAH Metabolites		
1-Hydroxybenz[a]anthracene	95	16
3-Hydroxychrysene	100	11
Phenols		
PCP	96	18

^a Low recoveries were obtained for IMP because the analytical method used was developed for 3,5,6-TCP, not IMP.

Table 6.2.28 Results for Surrogate Recovery Standards for Neutral Pollutants - Ohio

Pollutant	Air	Dust/Soil	Wipes	Liquid Food	Solid Food	PUF
Typical spike level, ng	50	20	20	25	50	20
Number of QC samples	360	347	317	192	198	17
Percent of field samples	120	120	110	110	120	120
Percent Recovery, %						
	mean	SD	mean	SD	mean	SD
Benzylbutylphthalate-d ₄ ^a	120	38	110	28	61	12
Bisphenol-A-d ₆ ^b	92	25	100	13	97	19
Dibenz[<i>a,h</i>]anthracene-d ₁₄	80	18	92	16	98	19
p,p'-DDE-d ₄	98	18	94	15	80	18
PCB101-C ₁₃	94	16	89	11	NM ^c	-
					93	19
					95	8.5

^a Data for 85 liquid food and 119 solid food were excluded because of matrix effect.

^b Data for 256 dust/soil, 75 wipe, 22 solid food, and 14 PUF were excluded because of interference or matrix effect.

^c NM denotes that PCBs were not measured in liquid food samples.

Table 6.2.29 Results for Surrogate Recovery Standards for Acidic Pollutants - Ohio

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF
Typical spike level, ng	50		50		50		50		50		70
Number of QC samples	357		350		281		336		333		5
Percent of field samples	120		120		110		120		110		120
Percent Recovery, %											
	mean	SD	mean	SD	mean	SD	mean	SD	mean	SD	SD
2,4-D-C ₁₃	80	15	81	11	82	10	90	13	88	12	1.8

Table 6.2.30 Results for Surrogate Recovery Standards for Urine Analysis - Ohio

Pollutant	Urine	
Typical spike level, ng	20	
Number of QC samples	518	
Percent of field samples	110	
Percent Recovery, %		
	mean	SD
2,4-D-C ₁₃	95	20

Table 6.2.31 Results for Blank Samples with Detectable Neutral Pollutants - Ohio

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF	
	MB	FB	MB	FB	MB	FB	MB	FB	MB	FB	MB	FB
Number of QC samples	18	14	11	14	12	14	5	14	4	14	1	1
Percent of field samples	5.9	4.6	3.7	4.7	4.3	5.0	3.0	8.3	2.3	8.2	7.1	7.1
Concentration												
	ng/m ³		ng/g		ng/sample		ng/mL		ng/g		ng/m ²	
	median	SD	median	SD	median	SD	median	SD	median	SD	median	SD
OP Pesticides												
Chlorpyrifos	0.06	0.01	-	-	-	-	-	-	-	-	-	-
OC Pesticides												
p,p'-DDT	- ^a	-	-	-	-	-	0.003	0.03	-	-	-	-
Pyrethroid Pesticides												
Cyfluthrin	0.62	0.08	-	-	-	-	-	-	-	-	-	-
cis-Permethrin	0.06	0.52	-	-	-	-	0.003	0.21	-	-	-	-
trans-Permethrin	0.06	0.44	-	-	-	-	0.003	0.22	-	-	-	-
PAHs												
Benz[a]anthracene	0.06	0.02	-	-	-	-	-	-	-	-	-	-
Chrysene	0.06	0.01	-	-	-	-	-	-	-	-	-	-
Phthalates												
Benzylbutylphthalate	27	50	66	47	360	1400	14	12	10	12	4100	4800
di-n-Butylphthalate	44	43	130	170	760	1800	25	7.2	66	41	18000	23000
Phenols												
Bisphenol-A	0.62	0.55	-	-	7.1	11	0.03	0.67	-	-	388	510
PCBs												
PCB 44	0.03	0.02	-	-	-	-	-	-	-	-	-	-
PCB 52	0.03	0.02	-	-	0.71	0.83	-	-	-	-	-	-
PCB 70	0.03	0.03	-	-	0.71	0.83	-	-	-	-	-	-
PCB 110	0.03	0.01	-	-	0.71	0.83	-	-	-	-	-	-

^a - denotes that the pollutant was not detected in all the blanks.

Table 6.2.32 Results for Blank Samples with Detectable Acidic Pollutants/Metabolites - Ohio

Pollutant	Air		Dust/Soil		Wipes		Liquid Food		Solid Food		PUF	
	MB	FB	MB	FB	MB	FB	MB	FB	MB	FB	MB	FB
Number of QC samples	21	14	11	14	9	14	8	14	9	14	-	1
Percent of field samples	6.9	4.6	3.7	4.7	3.2	5.0	2.8	4.8	3.0	4.7	-	25
Concentration												
	ng/m ³		ng/g		ng/sample		ng/mL		ng/g		ng/m ²	
	median	SD	median	SD	median	SD	median	SD	median	SD	median	SD
OP Metabolites												
IMP	0.06	0.01	-	-	-	-	-	-	-	-	-	-
3,5,6-TCP	0.06	0.03	-	-	0.71	0.89	-	-	0.09	0.05	-	-
Acid Herbicides												
2,4-D	0.12	0.03	- ^a	-	1.4	1.7	-	-	-	-	-	-
Phenols												
PCP	0.12	0.27	-	-	-	-	-	-	-	-	-	-

^a - denotes that the pollutant was not detected in all the blanks.

Table 6.2.33 Results for Blank Samples with Detectable Urine Pollutants - Ohio

Pollutant	Urine	
	MB	FB
Number of QC samples	16	14
Percent of field samples	3.5	3.0
	Concentration, ng/mL	
	median	SD
OP Metabolites		
3,5,6-TCP	0.71	0.18

The QC data for the OH water samples are summarized in Table 6.2.34. The overall method precision was very good. The mean of the RPD of duplicate water samples was $2.1 \pm 3.4\%$; similar results were obtained from the duplicate GC/MS analyses. The average recovery of the matrix spike samples was $79 \pm 4.7\%$. Trace amounts of atrazine were found in some of the blank samples.

Table 6.2.34 Results of Analysis of Water Samples - Ohio

Pollutant	Drinking Water Samples					
	Duplicate		Analytical Duplicate		MSS	
					Blank	
					MB	FB
Number of QC samples	8		26		5	14
Percent of field samples	5.1		17		3.2	8.9
	Relative Percent Difference, %		Relative Percent Difference, %		Percent Recovery, %	
	mean	SD	mean	SD	mean	SD
Atrazine	2.1	3.4	2.3	1.8	79	4.7

6.3 Evaluation

Due to budget constraints, different analytical methods could not be used for each compound class. Instead, the OP and OC pesticides, pyrethroid pesticides, PAHs, phthalates, phenols except for PCP, PCBs, and triazine were grouped as neutral pollutants, and the acid herbicides, PCP and metabolites for OP pesticides, pyrethroid pesticides, and PAHs were grouped as acid pollutants/metabolites.

Two carbamate pollutants, propoxur and bendiocarb, were not included in the day care pilot studies, and were added later to the CTEPP study design at the suggestion of the EPA Office of Pesticide Programs, in hopes that the CTEPP methods might be able to detect these compounds (7-10). However, the analytical methods used in the CTEPP study were not tested for these two compounds. Unfortunately, these two pollutants decompose partially on the GC column and interference compounds co-eluted with both propoxur and bendiocarb. Therefore, useful data were not obtained for these two compounds.

Atrazine could be measured accurately in water samples, but there were interference problems in other sample media. For air, dust, soil, and wipe samples, there was an interference compound that eluted at the same retention time as atrazine on the GC column, and which also had the same ion ratio of the monitored ions as those observed for atrazine. This was initially observed in the air samples, when extremely high concentrations (>1000 ng/mL) were detected for what was believed to be atrazine. The sample extracts were re-analyzed using GC/MS in full mass scan mode in an attempt to confirm the presence of atrazine in these sample extracts. The full mass scan results showed that an interference compound, which was an unsaturated aliphatic hydrocarbon, eluted at the same retention time and had the same monitored ion ratio as did atrazine. Therefore, atrazine was measured only in drinking water samples.

Interference peaks were also observed for cyfluthrin, *cis*-permethrin, bisphenol-A-d₆, and benzylbutylphthalate-d₄ in some samples. These interference peaks affected only the quantification of the SRSs, benzylbutylphthalate-d₄ and bisphenol-A-d₆, and did not affect the quantification of the native chemicals benzylbutylphthalate and bisphenol-A. If the interference components were not completely resolved from the peaks of target pollutants, estimated values were obtained and reported. These data were coded with “INT” in the database to show the presence of the interferences. Note that the interference peak for *cis*-permethrin became insignificant when the concentrations of this compound exceeded 100 to 500 ng/mL, depending upon the sample. In these cases, the INT codes were not reported in the database. In some samples, interferences were observed for one of the surrogate recovery standard (SRS), bisphenol-A-d₆, but not for the native compound bisphenol-A. Similar interferences were observed for benzylbutylphthalate-d₆, but not for benzylbutylphthalate.

It is not surprising that phthalates were found in field blanks and laboratory blanks. Background levels varied greatly among different sample matrices. Phthalates were present in the analytical-grade solvents that were used for extracting samples and cleaning up sample extracts. Plastic-related materials were used in the disposal pipette holders and in the pre-packed solid phase extraction (SPE) columns that were used to clean up sample extracts. Depending upon the sample media, types of solvent used, and cleanup method employed, the background levels of phthalates varied. In general, the phthalate contamination increased with sample handling and number of cleanup steps. Also, in food samples, the elution band of the phthalates on the GPC column included many fatty acids and fatty acid esters that hindered low-level detection of pyrethroids such as cyfluthrin. The GPC fractions had to be cleaned up further, using ENVI-Carb columns for the food samples, in order to measure cyfluthrin.

The determination of a diazinon metabolite, IMP, in the environmental and personal samples was added late in the OH field study. We used the same analytical methods for TCP to measure IMP in these samples. Results of the matrix spike samples showed that IMP were quantitatively measured in air, dust, soil, wipe but not in urine, solid food and liquid food samples. We have identified that IMP was lost during the liquid-liquid partitioning step. The overall recoveries of IMP in these samples were less than 10%, no statistical analyses were performed on these data.

6.4 Recommendations

We recommend evaluation of cleanup methods and/or different detection methods such as liquid chromatography (LC)/MS to determine carbamates in multimedia samples for future studies. In an on-going Battelle study for US EPA, we developed an analytical method for the determination of carbamates in water samples. This method consists of SPE extraction of water samples into acetonitrile (ACN) and LC/MS analysis of the ACN extracts.

We recommend evaluation of cleanup methods such as use of a C18 SPE column or an immunoaffinity (IA) purification column to determine atrazine in multimedia samples. In an on-going Battelle study for US EPA, we developed an IA column for atrazine, established the elution

profile of atrazine for the IA column. Preliminary results suggest that the IA column is an effective cleanup method for analysis of atrazine in dust and soil samples.

Different SRSs should be evaluated for phthalates and bisphenol-A to minimize the interference peaks observed in multimedia samples for future studies.

In a recent Battelle internal research and development study, we developed an analytical method that can provide quantitative recoveries of IMP from urine samples. We therefore recommend that this new analytical method be evaluated and refined as necessary for determining IMP in multimedia samples in future studies.

As noted earlier, phthalates were found in the field blanks and in the laboratory blanks. In this study, the phthalate contamination increased with increased sample handling and with the number of cleanup steps. For future studies, we recommend a different approach to measurement of phthalates in multimedia samples. Since phthalates are typically present at much higher concentrations than the other target pollutants in multimedia samples, we would conduct GC/MS analysis of the phthalates in dilute sample extracts prior to any cleanup steps for the neutral compound analyses, as a separate analysis. This approach would eliminate much of the exacting and time-consuming sample preparation work associated with limiting phthalate contamination from sample handling. The GC/MS analysis of the phthalates would include both the m/z 149 ion for quantification of low concentration pollutants, and the molecular ion for quantification of pollutants at higher levels.

Chapter 7

CTEPP Database

7.1 Overview

The CTEPP database was configured similarly to the database developed in the National Human Exposure Assessment Survey (NHEXAS)-Arizona study (14). The database followed the general format that was used in EPA's exposure database that was current at the start of the CTEPP study. The database, which comprises the two databases for the North Carolina (NC) and the Ohio (OH) field studies, contains the questionnaire data, the analytical data, and metadata. Sufficient detail was provided so that the data can be understood by a diverse set of users.

The CTEPP database is one of the largest current databases containing information on the environmental exposures of preschool children. The study's documentation, which includes the study design, Standard Operating Procedures, and Quality System Implementation Plan, will be placed in EPA's Environmental Information Management System (EIMS; [http://oaspub.epa.gov/edr/eims\\$.startup](http://oaspub.epa.gov/edr/eims$.startup)). In addition, the metadata, which include abstracts, acronyms, keywords, and related entries will be placed in EIMS. The CTEPP data will be stored in the Human Exposure Database System (HEDS; <http://www.epa.gov/heds/>). The CTEPP database will be made available to interested federal agencies, state and local agencies, non-governmental organizations, academia, and the general public.

7.2 Quality Assurance Procedures for the Database

Quality assurance and quality control(QA/QC) procedures were implemented within both the NC and OH databases. The QA/QC summaries are given in Appendix D. The following subsections provide information on the types of QA/QC procedures associated with the questionnaire data, analytical data, and metadata collected in this study.

7.2.1 Questionnaire Data

A comprehensive QA/QC plan was implemented to ensure data quality in all phases of questionnaire data collection. During the pre-data collection phase, each hard copy data form was tested by trained project staff for consistency and accuracy. Mock interviews and field data collection simulations were conducted to evaluate the effectiveness of the data forms. Once revisions were made to the data forms based on the outcome of these activities, final drafts were sent to EPA for review and approval. The data forms were further updated after receiving EPA's comments. The updated forms were reviewed and approved by the Battelle Institutional Review Board, the U.S. EPA Human Subjects Research Protection Official, and the U.S. Office of Management and Budget.

After final approval of the data forms, software components were programmed for use in the recruitment telephone survey and to allow double entry of the data. Standardized programming methods were used which inserted QC checks in all of these programs, including range checks, consistency checks, and skip pattern rules. These programs enforced the rules upon data entry. Before the programs were approved for actual data entry, they went through strict QA/QC checks for programming errors.

Before data collection began, telephone interviewers and field staff were trained in the study procedures, according to the SOPs, to ensure high data quality. Telephone interviewers were required to be certified for the study by passing a series of tests before they could initiate any contact with the study subjects. Training for the field data collection team members included a 40-h training session which incorporated at least one day of actual supervised field sample collection experience. Field staff were allotted additional time to practice their field data collection techniques.

After data collection began, data collection activities were monitored routinely. These efforts included the use of computer software and phone monitoring systems to monitor telephone recruitment data, and periodic internal field audits to ensure high quality of data collected in the field. In addition, external field audits were conducted by an EPA auditor and the EPA Task Order Project Officer (TOPO).

During field data collection, the field staff also reviewed the collected information while at the sampling site, to identify missing data items or questionable information. Any identified issues or problems were resolved at the sampling site before the field data collection team returned to Battelle. A Daily Activity Check List was also used to assist the field staff in conducting data collection activities and field edits.

After a data collection event at a sampling site was completed and the data forms were returned to Battelle, the receiving team conducted QC checks on each participant's data forms and study materials. The team used a Participant Data QC Check List to verify a standard list of important items. All data forms were then entered twice and verified, using the CTEPP Double Data Entry Program. Two data entry teams performed the data entry work and entered the data into two separate databases. These separate databases were compared for consistency, corrected if necessary, and combined into one database. As mentioned above, these data entry programs included range checks, consistency checks, and skip pattern rules.

Finally, after completing all the data collection tasks, the project staff conducted final QA/QC checks by reviewing data frequency reports and verifying randomly selected participant files. Data items in the database were checked against the data documentation manual and the actual participant data in the original data form. Personal identifiers were removed from the database to ensure participant confidentiality.

7.2.2 *Analytical Data*

Analytical data were electronically imported into the database according to CTEPP SOP 4.12. The analytical raw data (QUAN report) were generated from each instrument by a qualified analyst. The QUAN report was then reviewed by the Task Order Leader (TOL) for all the identified pollutants. The QUAN report was then electronically transferred into a custom report and saved as a “crd” file. The “crd” file was then electronically parsed into an Excel spreadsheet template. Data such as sample extraction weight and quality assurance codes were manually entered and saved as an Excel file with an extension of .xls by the first data reviewer. The TOL reviewed all the Excel files before they were imported into the analytical database. If any anomalous results were observed in the data, every effort was made to identify any problems in the sample collection, sample preparation, and/or analysis, which could have contributed to the anomaly. Data dictionaries and code sets for core analytical data, QA/QC data, and ancillary data were developed for the analytical database. The completed Excel spreadsheets were then electronically imported into the analytical database by the database staff.

Database queries were developed to perform QA/QC checks on the NC and OH analytical databases. These included (1) sample ID checks, (2) missing data checks, (3) duplicate data checks, (4) out-of-range checks, and (5) upper- and lower- concentrations checks.

The sample ID checks were performed to verify that all Sample IDs with reported data were valid Sample IDs, that is, that they were logged as being received from the field. If invalid sample IDs were detected, the database staff traced back to the original raw data, including laboratory record books and GC/MS logbooks, to identify the transcription error and to make the corrections accordingly. All corrections were documented in the database importing log book.

Missing data checks were performed to verify that all Sample IDs received from the field had a complete set of analytical data reported. Those samples that were received but did not have a complete set of analytical data and/or ancillary data for a stated reason in the electronic Chain of Custody (CoC) data were identified, and either the analytical data for these samples were found and imported into the database, or the samples were located, processed, analyzed, and reviewed, and the analytical data were imported into the database.

Duplicate data checks were performed to verify that the same analytical data were not imported into the database twice for a given sample. The database staff traced the sample results back to the laboratory record books, the GC/MS sequence logs, and/or the QUAN reports to confirm that duplicate data were the result of a double import, and not a QA/QC re-analysis (e.g. duplicate sample or duplicate injection). Once the duplicate data were identified as a double import, the set of results for the sample having the oldest sample import date were eliminated from the analytical database. If the duplicate data were identified as a QA/QC re-analysis, the proper QC code was added to the QC_Code data field, and the data for the first duplicate (only) remained in the Core_Analytical_Results table, and the data for the first and second duplicates were reported in the QA_QC_Results table.

Out-of-range checks were performed to verify that all data for data fields limited to a code set did not violate that code set. For data fields that were limited to a code set of values, queries were performed to identify data within those fields that did not belong to, or “violated”, the code set. Once identified, the database staff traced the sample results back to the laboratory record books to identify the transcription error. The data in the database were corrected, and these corrections were documented.

Upper- and lower-level concentrations checks were performed on all results that were greater than plus or minus three standard deviations from the mean. Database queries were performed to identify those calculated results (Result1 and Result2) that were greater than or less than three standard deviations from the domain mean. Five percent of these data were reviewed again by the data reviewer. The data reviewer checked the QUAN report, all the parameters used for the results calculation, and the result calculation itself to make sure that identification and quantification were performed correctly. If the data reviewers detected any mis-identification and/or mis-quantification, corrections were made accordingly. The TOL approved the corrected data, and the database manager made the changes in the database. All activities were documented in the laboratory record books and database importing log.

After all checks were completed, the final calculation of results was performed within the database. A random subset (approximately 5%) of calculated results were recalculated using an independent calculation source (Excel) for validation. In addition, hand calculations were performed on one data set for each sample matrix using a calculator.

7.2.3 Metadata

Metadata were prepared in the format described in the "User Guide and Data Administration Guidelines for the USEPA's Environmental Information Management System (EIMS)," Version 1.3, Oct. 2001, including abstracts, related entries, key words, and acronyms, at the study, data table, and document level.

7.3 EPA Review

EPA conducted several independent QA/QC reviews of the early draft versions of the NC and OH databases. The EPA performed visual range checks. The data were normalized before identifying potential outliers. Outliers were identified based on whether they exceeded six standard deviations from the mean. For a randomly selected set of variables (about 5%), more extensive checks were performed including range checks, consistency, and skip pattern checks. When the EPA Database Manager or the EPA TOPO identified problems or errors (i.e., missing samples, duplicate samples, linkage problems) in the database, the EPA TOPO had Battelle verify that the data were correct and make any necessary changes to the data in the database.

After the draft final NC and OH databases were delivered to EPA, EPA conducted a more thorough QA/QC review of the databases. EPA repeated the extensive checks performed on the randomly selected variables. In addition, a new set of randomly selected variables

(additional 5%) were thoroughly checked. Furthermore, comparisons were made between earlier versions and the latest version of the database to assure that no unexplained changes had occurred. Any errors identified by EPA in the database were corrected by Battelle.

After EPA received the final versions of the NC and OH databases, EPA assigned data quality values to each sample in the Core_Analytical_Results table. The QA/QC protocol (SAS program) used to assess the quality of each sample is found in Appendix E. Each sample result was assigned one of the following data quality (QC_Flag code) values:

- 1 = good quality data
- 2 = questionable, but still acceptable data
- 3 = unusable data

Only sample results that had assigned QC_Flag code values of 1 or 2 were used in the statistical analyses discussed in Chapters 8 and 9. In addition, the data associated with one NC adult participant (PID972072) and accompanying child (PID972071) who withdrew from the study after Day 1 were excluded from the statistical analyses.

7.4 Evaluation

Within each record of the CTEPP database, the Participant Identification code (PID) was designed to be the key linking field that allows database users access to all of a given subject's study data, including questionnaire data and measured environmental and biological target compound levels. The PID was designed as a 6-digit composite data field. The first two digits contained the day care code (indicating whether or not the study participant attended day care, the specific day care, participant or non-day care participant and the state of origin). The next three digits were a unique participant identification number. The sixth digit contained the participant type code, which identified the sample as collected from a child or from an adult at home, or from a child at day care. Although the information contained within the PID was important, the first step database users had to do before querying the environmental, personal, or questionnaire data was to query the PID to separate it into its different pieces of information.

7.5 Recommendations

Based upon lessons learned from designing the CTEPP database, recommendations for designing large exposure databases on future studies are as follows:

(1) Avoid Composite Data Fields

Data fields should not be designed as a composite data field that contains several distinct pieces of data. If a piece of information is significant, it should be stored as its own separate data field. For example, the PID should actually have been separated into three separate data fields: 1) Day care ID, 2) Participant ID, and 3) Participant Type. Avoiding composite data fields would eliminate the need to write queries that separate out the bits of information contained within such fields, resulting in a more streamlined data extraction process.

(2) Design and Test Key Linking Fields

The key linking fields that allow a user access to all of the questionnaire, environmental, and personal data for a given subject should be planned and tested for a small pilot study prior to implementing them into a large study database.

(3) Add Link Tables for User Friendliness

Due to the complex nature of the CTEPP study design, it was not possible to have just one key field that linked all of the collected and calculated data for a given subject. As a result, several fields needed to be considered when bringing data together across all samples collected for a given subject. In the case of a study that has several “many-to-many” tables within its database (e.g., a single water sample is collected at a day care center, yet the analytical result for this sample is applicable to all study subjects attending the day care center, while conversely, a single study subject is associated with multiple samples such as urine, hand wipes, and food), an additional link table should be added to make the database more user-friendly. Designing a database containing many-to-many tables further complicates the relationships required to link the environmental and biological data with the questionnaire data. These relationships are not readily understood by those not intimately familiar with the study design. Link tables provide a user-friendly way of making use of the key linking fields without requiring the user to understand the relationships between those fields. An example of a useful link table is a table that lists all of the Sample IDs that are applicable for a given participant and makes the construction of the database queries that link environmental, biological, and questionnaire data much simpler.

Chapter 8

Statistical Analyses

8.1 Overview of Data Analysis

Data for a variety of parameters were available for statistical analysis. These data included the following:

- Concentrations of target pollutants in environmental samples collected at homes and day care centers. Environmental samples included indoor and outdoor air (ng/m³), soil (ng/g), indoor floor dust collected via HVS3 vacuum (ng/m² and ng/g), and drinking water (ng/mL; atrazine only). For homes with recent pesticide applications, concentration data were available for dust collected via wipes from hard floors and food preparation surfaces (ng/m²) and for transferable residues collected from floors via PUF roller (ng/m²). Concentration data in dust collected via wipes from hard floors were also available for some locations that did not have carpeted floors from which dust could be collected via HVS3 vacuum.
- Concentrations of target pollutants in personal samples collected from children and adults. Personal samples included duplicate diet solid food samples (ng/g), duplicate diet liquid food samples (ng/mL), and hand wipes (ng/m²). Adult food samples were analyzed only for selected acid pollutants.
- Information on characteristics, time spent at various locations, and activity patterns associated with the participating children and adults during the sampling period.
- Concentrations of selected acid pollutants and metabolites in urine samples collected from the participating children and adults (ng/mL and μ moles/mole creatinine). For both North Carolina (NC) and Ohio (OH), these pollutants and metabolites included 2,4-D, 1-hydroxybenz[a]anthracene, 3-hydroxychrysene, pentachlorophenol, and 3,5,6-TCP. For OH, seven additional metabolites were measured: 3-hydroxybenz[a]anthracene, 3-hydroxybenzo[a]pyrene, 6-hydroxychrysene, 6-hydroxyindeno[1,2,3-*cd*]pyrene, 1-hydroxypyrene, IMP, and 3-phenoxybenzoic acid.

Pollutant concentrations in multimedia samples (e.g., air, dust, soil, food) were combined with information on activity patterns and physiological parameters to estimate daily potential exposure and absorbed dose for each participant by each of three exposure routes: inhalation, dietary ingestion, and indirect ingestion.¹ **Potential exposure**, expressed in ng/day and pmoles/day, is defined as the total amount of a pollutant that an individual comes in contact with over a 24-h period. Potential exposure is a route-specific parameter that was calculated from the

¹ Potential exposure and absorbed dose were not estimated for the dermal exposure route due to the limited availability of adequate methods and sufficient background data in the literature.

measured concentrations in those exposure media (multimedia samples) that were relevant to the given exposure route, along with the estimated contact rates with those media. **Potential absorbed dose**, expressed in ng/kg/day and pmoles/kg/day, is defined as the total dose that could be absorbed into the body over a 24-h period, relative to the participant's body weight. For each exposure route, potential absorbed dose was estimated by assuming a 50% absorption rate for all pollutants and participants (17). This was a conservative approach and was adopted due to the lack of sufficient information available in the scientific literature for most CTEPP target pollutants on the nature of their absorption into the body. Future research may allow these results to be updated be performed on these data when more detailed and accurate absorption rate information becomes available for certain pollutants. For a given study participant, pollutant, and exposure route, potential exposure and potential absorbed dose were calculated if the criteria specified in Section 8.4 were achieved. Section 8.4 provides the detailed formulas that were used to calculate potential exposure and potential absorbed dose.

Aggregate potential exposure and **aggregate potential absorbed dose** were defined as the sums of the estimated potential exposure and potential absorbed dose, respectively, across all three exposure routes. Aggregate potential exposure and absorbed dose were calculated for the following eight pollutants and metabolites that were frequently detected (at or above 50%) in several types of multimedia: bisphenol-A, chlorpyrifos, diazinon, di-*n*-butylphthalate, 2,4-D, *cis*-permethrin, *trans*-permethrin, and 3,5,6-TCP.

The concentrations of several parent compounds or their metabolites (specified above) were measured in the urine of children and adults over the 48-h sampling period. Urine samples were combined spot samples rather than total void samples. This was done primarily to prevent placing undue burden on the participants if total void samples were to be collected across the 48-h sampling period. While using spot urine samples rather than total void samples has some limitations (e.g., not allowing for total volume over the 48-h period to be known), a steady-state assumption was made which implied that exposures were chronic in nature. This assumption was reasonable given that information on individual half-lives of the pollutants were unknown, pesticide applications were infrequent, and measured exposures tended to be low. The estimated aggregate potential exposures and absorbed doses of the children were compared with the concentrations of these pollutants in their urine.

Monitoring data were available from a probability sample of 129 children and 129 adults in North Carolina (NC) and a probability sample of 127 children and 127 adults in OH. It is important to note that the study design only permits the outcome of the statistical analyses to be used to characterize the subpopulation of children who reside in the selected counties and who participated in the CTEPP study. The results should not be used to make inferences on larger populations of children, such as all children "in NC, OH, or in the United States," "in low-income and middle/high-income families," or "in day care centers." Neither can the study design permit results to be used to test hypotheses such as whether exposures differ significantly between all NC children and all OH children. For this report, the statistical summaries and analysis did not consider sample weights assigned to the study participants that would have allowed the results to represent larger populations of children. Future analyses could be

performed which calculate and take into account sampling weights, from which inferences could be drawn for the populations from which the participants were randomly recruited, namely, preschool children and their caregivers in the randomly-selected counties in NC and OH.

Statistical analyses were conducted to meet each of the four goals detailed in Table 8.1.1. Sub-goals are provided for three of the four goals. Table 8.1.1 also provides an overview of the types of statistical analyses used to address each goal or sub-goal. Details on the statistical analysis approaches are given in Section 8.5.

8.2 Preparation for Statistical Analysis

To prepare for the statistical analyses, several preliminary operations were performed on the collected study data:

- Because high and variable concentrations of selected pollutants were observed in some of the blank samples, it was necessary to apply a background correction to the measured concentrations for these pollutants in some matrices. Background correction to measured concentrations were performed in the following instances:

- for benzylbutylphthalate and di-*n*-butylphthalate in all sample media collected in both states,
- for bisphenol-A in dust wipe samples collected in NC, and
- for *cis*- and *trans*-permethrin in air samples collected in OH.

The following procedure was used to correct for background contamination. For a given pollutant and matrix, a t-test was applied to the blank data to determine if the mean blank value was significantly different from zero. The mean blank value and an upper 95% confidence bound on the mean were calculated. Then, background-corrected results were calculated by subtracting the mean value adjusted for sample volume, amount, or area (whichever is relevant for the given sample media).

- Sample results labeled as “not detected” were replaced by the method detection limit (MDL) divided by the square root of two for all media except liquid food samples. The pollutant concentrations detected in the liquid food samples were generally very low. When pollutants were detected in liquid food samples at levels close to the MDL, the signal-to-noise ratios for the chromatograms were greater than three. Therefore, not-detected results for the liquid food samples were replaced by the MDL divided by ten.
- In the database, the concentrations of pollutants in dermal wipes were given in ng/sample. Prior to statistical analyses, this value was converted to a loading (ng/m² of skin wiped). For each study participant, a tracing of one hand was taken on a sheet of paper, and this tracing was cut out and weighed (in grams). The following equation was then used to calculate the dermal wipe loading (ng/m²):

Table 8.1.1 Study Goals and the Statistical Analysis Approaches Used to Address Each Goal

Study Goal (and Sub-goals)	Overview of Statistical Analysis Approach
<p>Goal 1: To measure the concentrations of pesticides and other persistent and non-persistent organic pollutants in multimedia at the homes and day care centers of a set of preschool children in several North Carolina and Ohio counties:</p> <p>Sub-goal 1.1: To quantify the distribution of target pollutants in multimedia (environmental and personal) samples collected from homes and day care centers.</p> <p>Sub-goal 1.2: To determine on average how multimedia concentrations differ between</p> <ul style="list-style-type: none"> – urban and rural environments – low-income and middle/high-income environments – microenvironments (home for families with stay-at-home children, home for families with day care children, and day care centers). 	<p>Sub-goal 1.1: The following descriptive statistics were calculated on the analytical measurements: sample size, mean (arithmetic and geometric), standard deviation (for untransformed and log-transformed data), percentage detected, minimum reported value, maximum reported value, and selected percentiles (25th, 50th, 75th, 95th). Boxplots of the observed data were also prepared. (<i>See Section 8.5.1</i>)</p> <p>Sub-goal 1.2: Mixed model analysis of variance (ANOVA) was performed on log-transformed analytical measurements, with the model including fixed effects of income status, urbanicity, and environment type and taking into account correlation in measurements for samples taken within the same day care center. F-tests performed on the model's fixed effects were used to make the statistical comparisons of interest. Results were reported as ratios of geometric means along with 95% confidence intervals, and t-tests were performed to determine whether a particular ratio was significantly different from one. (<i>See Section 8.5.2.1</i>)</p>
<p>Goal 2: To quantify the distribution of child characteristics, activities, and locations that are important for exposure.</p>	<p>Summary statistics (mean, standard deviation, median, minimum, maximum) were calculated on selected factors that were used to estimate potential exposure levels and potential absorbed dose. These factors included physical characteristics of the study participants (e.g., age, gender, body weight, height, hand surface area), the percentage of time that study participants spent indoors or outdoors at various locations, and the daily amount of solid and liquid food collected from study participants. In addition, the percentage of participating children within specified categories denoting how often certain activities occurred on a daily basis were reported, based upon information obtained from the study questionnaires.</p>

Table 8.1.1 Study Goals and the Statistical Analysis Approaches Used to Address Each Goal (cont.)

Study Goal (and Sub-goals)	Overview of Statistical Analysis Approach
<p>Goal 3: To estimate the exposures of the preschool children to these pollutants that they may encounter in their everyday environments:</p> <p><u>Sub-goal 3.1:</u> To quantify the distribution of potential exposure and potential absorbed dose by exposure route.</p> <p><u>Sub-goal 3.2:</u> To quantify the distribution of potential exposure and potential dose aggregated over all exposure routes.</p> <p><u>Sub-goal 3.3:</u> To quantify the distribution of urinary biomarkers concentrations as an indicator of absorbed dose.</p> <p><u>Sub-goal 3.4:</u> To determine on average how these exposure and dose metrics for each route and aggregated over routes differ between</p> <ul style="list-style-type: none"> – children in urban and rural settings – children in low and middle/high-income families – day care and stay-at-home children – children and adults in the same household overall – children and adults by stratum. 	<p><u>Sub-goals 3.1 through 3.3:</u> Descriptive statistics were calculated on estimates of potential exposure and potential absorbed dose (by exposure route), aggregate potential exposure, aggregate potential absorbed dose, and urinary biomarker concentrations. Statistics included sample size, mean (arithmetic and geometric), standard deviation (for untransformed and log-transformed data), percentage detected, minimum reported value, maximum reported value, and selected percentiles (25th, 50th, 75th, 95th). Boxplots of the exposure and dose estimates and of the urinary biomarker concentrations were also prepared. (<i>See Section 8.5.1</i>)</p> <p><u>Sub-goal 3.4:</u> Mixed model ANOVA was performed on log-transformed estimates of each of these exposure and dose metrics, as well as on differences in log-transformed estimates between children and adults in the same household. This model included fixed effects of income status, urbanicity, and day care status and took into account correlation in measurements for children attending the same day care center. F-tests performed on the model's fixed effects were used to make the statistical comparisons of interest. Results were reported as ratios of geometric means along with 95% confidence intervals, and t-tests were performed to determine whether a particular ratio was significantly different from one. (<i>See Section 8.5.2.2</i>)</p>

Table 8.1.1 Study Goals and the Statistical Analysis Approaches Used to Address Each Goal (cont.)

Study Goal (and Sub-goals)	Overview of Statistical Analysis Approach
<p>Goal 4: To apportion the exposures through the inhalation, dietary ingestion, and indirect ingestion routes:</p> <p><u>Sub-goal 4.1:</u> To estimate the proportion of aggregated potential exposure and absorbed dose that is associated with a given exposure route for the study children, overall and by stratum.</p> <p><u>Sub-goal 4.2:</u> For each exposure route, determine if this proportion differs for children</p> <ul style="list-style-type: none"> – in urban and rural settings – from low and middle/high-income families – who attend day care or stay at home. <p><u>Sub-goal 4.3:</u> Determine whether significant differences exist between exposure routes.</p> <p><u>Sub-goal 4.4:</u> Characterize how these estimates differ overall between pairs of exposure routes.</p> <p><u>Sub-goal 4.5:</u> Identify which pairs of exposure routes differ significantly in these estimates.</p>	<p><u>Sub-goal 4.1:</u> Proportions of aggregated potential exposure and absorbed dose were calculated for each exposure route and analyzed using a logistic regression model that contained effects for income status, urbanicity, and day care status and that accounted for correlation between children attending the same day care center. (<i>See Section 8.5.2.3, analysis #1.</i>)</p> <p><u>Sub-goal 4.2:</u> Wald chi-square tests were performed within the logistic regression to test for significance of the effects in the regression model for a given exposure route to determine whether the proportions differ significantly between two specified groups of children. Estimates of the average proportion within each group and corresponding 95% confidence intervals were reported. (<i>See Section 8.5.2.3, analysis #1.</i>)</p> <p><u>Sub-goal 4.3:</u> Each study participant was represented by a three-dimensional vector of log-transformed potential exposure estimates for the inhalation, dietary, and indirect routes, and a multivariate mixed-model ANOVA was performed on these vectors. This model included fixed effects of income status, urbanicity, and day care status and took into account correlation in measurements for children attending the same day care center, as well as correlation between a participant's three exposure routes. A statistical test performed within this model fit determined whether significant differences existed in the log-transformed exposure or dose estimates among the three routes. (<i>See Section 8.5.2.3, analysis #2.</i>)</p> <p><u>Sub-goals 4.4 and 4.5:</u> Within the multivariate mixed-model ANOVA, pairwise comparisons among the three exposure routes were performed, and these results were reported. (<i>See Section 8.5.2.3, analysis #2.</i>)</p>

$$Loading = \frac{A(D)}{4(W)} \quad (8-1)$$

where A corresponds to the analytical measurement (ng), D equals the density of the paper on which the hand tracing was made ($\sim 80 \text{ g/m}^2$), and W corresponds to the weight of the hand tracing (g). Since the hand wipe involved wiping the front and back of both hands, the reported weight of the hand tracing (W) was multiplied by four within this equation. Note that if a study participant had multiple wipe samples taken at home and/or day care over the 48-h period, the value of A for that participant at a particular location corresponded to the geometric mean of the multiple measurements taken at that location. If W was not reported for a given participant (one in NC, four in OH), then the average value for W was calculated from other participants within the same state and sex category and that were similar in age to the participant, and this average was used to calculate the participant's wipe loading.

- Occasionally, such as when homes did not have carpeted floors or when homes had recent pesticide applications, multiple hard floor surface wipes were collected in the same home. For each of these homes, the geometric mean of these multiple wipe sample results was calculated (after replacing “not detected” values as mentioned above) and used in the statistical analysis. The geometric mean was labeled as “not detected” only when all results used in its calculation were labeled as “not detected.”
- A study participant may have had multiple urine samples taken due to recent pesticide application, or a child attending day care may have had urine samples taken both at home and at day care. In these situations, the geometric mean of a participant's urine sample results was calculated and used in the analyses. This geometric mean was labeled as “not detected” only when all results used in its calculation were labeled as “not detected.”
- Urine sample concentrations (in both ng/mL and pmoles/mL) were adjusted in two ways: 1) by dividing by the sample's specific gravity, and 2) by dividing by the sample's creatinine level. Creatinine-adjusted urine concentration was expressed in both ng/mg creatinine and $\mu\text{moles/mole creatinine}$. Descriptive statistics and statistical analyses were performed on unadjusted and adjusted urine concentrations, for both types of adjustments.

Data labeled as “unusable” by the study's quality control process were not used in statistical summaries and analyses. Measured concentrations were not adjusted based on the recoveries of QC samples (e.g., surrogate recovery samples) prior to including them in summaries or analyses.

8.3 Strata Considered in the Statistical Analysis

The study goals required the statistical analysis to make comparisons between different strata that were determined according to urbanicity, the income status of the participating families or day care centers, and the type of environment where samples were collected. The different types of statistical analyses required that multimedia sample locations and study participants be stratified. The strata that were considered in the statistical analyses, along with the criteria for placing sampling locations and study participants into strata, were as follows.

- Urban and rural strata: Sampling locations and study participants were placed in the “urban” or “rural” stratum based on the county in which they were located or resided:
 - NC locations and participants were placed in the “urban” stratum if they originated from Buncombe, Durham, Edgecombe, or Mecklenburg counties.
 - OH locations and participants were placed in the “urban” stratum if they originated from Cuyahoga, Franklin, Hamilton, or Licking counties.
 - NC locations and participants were placed in the “rural” stratum if they originated from Jones or Lee counties.
 - OH locations and participants were placed in the “rural” stratum if they originated from Defiance or Fayette counties.

A county was classified as urban if it contained part of, or was contained within, a Metropolitan Statistical Area (MSA) as defined by the Office of Management and Budget (OMB Bulletin No. 99-04). Counties not meeting this criterion were classified as rural.

- Low-income and middle/high-income strata. Sampling locations from day care centers were placed in the “low income” stratum if the day care center was a Head Start center and in the “middle/high-income” stratum otherwise. Sampling locations from households, as well as all study participants whether stay-at-home or at-day care, were placed in the “low income” stratum if the household’s income status (verified during recruitment) achieved the Women, Infants, and Children (WIC) program income guidelines for the period of 7/1/2000 to 6/30/2001, which was equivalent to falling below 185% of the U.S. Poverty Income Guidelines, and were placed in the “middle/high-income” stratum otherwise.
- Children enrolled in day care and children not enrolled in day care. Children were considered enrolled in day care if they attended one of the selected day care centers and were selected to participate based upon meeting all study criteria. Children verified as not attending a day care center or otherwise meeting the day care criteria were labeled as not enrolled in day care.
- Children and adults in the same household. When a child was recruited into the study, a primary caregiver residing in the same household was also identified to participate in the study by providing personal samples (e.g., food, dermal wipes, urine) and activity pattern information needed to calculate potential exposure and potential absorbed dose.

Table 8.3.1 shows the number of participants in each stratum, for both the NC and OH portions of the study. Because one adult caregiver participated with each child in the study, the number of children and adults in the study was the same within each stratum. While the number of day care and stay-at-home children in the study was similar within each state, the number of participants from urban settings was considerably higher than the number from rural settings. In addition, more middle/high-income households participated in the study compared to low-income households in each state, with the difference in number more apparent in OH. However, a few households in each state did not have sufficient information to allow for their income level to be categorized. Data associated with these households were not included in summaries and statistical analyses when the income status associated with each data value needed to be specified.

Table 8.3.1 Number of Study Participants in Each Stratum, by State

Stratum	Number of Participants			
	North Carolina		Ohio	
	Children	Adults	Children	Adults
Stay-at-Home Child	66	66	69	69
Child Attends Day Care	63	63	58	58
Low-income	59	59	41	41
Middle/High-income	66	66	73	73
Unknown income	4	4	13	13
Urban	108	108	110	110
Rural	21	21	17	17

8.4 Procedures for Calculating Potential Exposure and Potential Absorbed Dose

Estimates of potential exposure were calculated for each study participant under the inhalation, dietary ingestion, and indirect ingestion exposure routes using the equations given below. Estimates of potential exposure via the dermal route were not calculated and were assumed to be negligible. For each participant and exposure route, the potential absorbed dose estimate was calculated as 50% of the potential exposure estimate divided by the participant's body weight (Ross et al., 2001)¹. Aggregate potential exposure and aggregate potential absorbed dose were defined as the sums of the potential exposure and potential absorbed dose estimates, respectively, across all three exposure routes.

¹ If a participant's body weight was not reported, then the average body weight for other participants within the same state and sex category that were similar in age to the participant was calculated and used in calculating the participant's potential absorbed dose. This approach was necessary for one NC child participant.

The concentrations of measured pollutants and metabolites in urine over the 48-h sampling period were used as biomarkers of exposure in the study participants. The urinary concentrations of pollutants and metabolites were compared between strata for children and adults.

For each state, Table 8.4.1 lists those pollutants and metabolites that were among those detected in at least 50% of the samples in at least one media type (as seen in Section 9.2) and which were considered for estimating potential exposure and potential absorbed dose in the study participants. Twenty-seven pollutants are listed for NC and 26 for OH. Eight of these pollutants are denoted with an asterisk, as their detection rates were high in multiple media, and some have been commonly found in household consumer products. For these eight pollutants, potential exposure and absorbed dose were estimated in NC and OH children and adults for each exposure route, and aggregate potential exposure and aggregate potential absorbed dose were calculated in these study participants across routes. For the remaining pollutants listed in Table 8.4.1, potential exposure and potential absorbed dose were estimated in children and adults for a given exposure route and state only when the following criteria were satisfied for that pollutant:

- Inhalation route: When at least 45% of the state's indoor air samples, or at least 45% of the state's outdoor air samples, have detected results (i.e., at or above the MDL)
- Dietary ingestion route: When at least 45% of the state's solid food samples, or at least 45% of the state's liquid food samples, have detected results
- Indirect ingestion route: When at least 45% of the state's (vacuum) floor dust samples, or at least 45% of the state's soil samples, have detected results.

Unless otherwise specified, when any of the data entering into the equations below were either not available, could not be assumed to be zero, or were labeled as invalid for a particular study participant, then the potential exposure and potential absorbed dose was not estimated for that participant under the given exposure route, and as a result, aggregate potential exposure and aggregate potential absorbed dose could not be calculated. For purposes of the statistical summaries and analyses, potential exposure level and potential absorbed dose estimates were labeled as “detected” when at least one of the concentrations entering into their calculation was labeled as “detected.”

8.4.1 Potential Exposure via Inhalation

Potential exposure via inhalation (ng/day) is a weighted average of measured air concentrations in the different environments in which the participant was present, with the weights corresponding to the time spent in each environment, after adjusting for the participant's estimated ventilation rate:

Table 8.4.1 Pollutants Considered for Estimating Potential Exposure and Potential Absorbed Dose for Study Participants in a Given State

Pollutant	NC	OH	Pollutant	NC	OH
Benz[<i>a</i>]anthracene	T	T	Dibenz[<i>a,h</i>]anthracene	T	T
Benzo[<i>b</i>]fluoranthene	T	T	Di- <i>n</i> -butylphthalate*	T	T
Benzo[<i>k</i>]fluoranthene	T	T	<i>p,p'</i> -DDE	T	T
Benzo[<i>ghi</i>]perylene	T	T	2,4-Dichlorophenoxyacetic acid*	T	T
Benzo[<i>a</i>]pyrene	T	T	Heptachlor	T	
Benzo[<i>e</i>]pyrene	T	T	Indeno[1,2,3- <i>cd</i>]pyrene	T	T
Benzylbutylphthalate	T	T	Pentachlorophenol	T	T
Bisphenol-A*	T	T	<i>cis</i> -Permethrin*	T	T
<i>alpha</i> -Chlordane	T	T	<i>trans</i> -Permethrin*	T	T
<i>gamma</i> -Chlordane	T	T	PCB 52	T	T
Chlorpyrifos*	T	T	PCB 95	T	T
Chrysene	T	T	PCB 101	T	T
Cyfluthrin	T	T	3,5,6-Trichloro-2-pyridinol*	T	T
Diazinon*	T	T			

* Pollutants for which potential exposure and potential absorbed dose were calculated for each exposure route for the study participants in each state, and for which aggregate potential exposure and aggregate potential absorbed dose were calculated (across exposure routes).

$$Exp_{inh} = \frac{(C_{di}(t_{di}) \% (C_{do}(t_{do}) \% (C_{hi}(t_{hi}) \% (C_{ho}(t_{ho}) \% (C_{away}(t_{away}))}{t_{di} \% t_{do} \% t_{hi} \% t_{ho} \% t_{away}}) (V \quad (8-2)$$

where the notation is as follows:

- C_{di} = Indoor air concentration in the participant's day care center classroom (ng/m³)
- C_{do} = Outdoor air concentration at the participant's day care center (ng/m³)
- C_{hi} = Indoor air concentration in the participant's home (ng/m³)
- C_{ho} = Outdoor air concentration at the participant's home (ng/m³)
- C_{away} = Air concentrations in indoor locations other than the participant's day care center or home where the participant may spend time (ng/m³)
- t_{di} = Time spent indoors at day care when indoor air is being sampled there (hr)
- t_{do} = Time spent outdoors at day care when outdoor air is being sampled there (hr)
- t_{hi} = Time spent indoors at home when indoor air is being sampled there (hr)

- t_{ho} = Time spent outdoors at home when outdoor air is being sampled there (hr)
 t_{away} = Time spent indoors at locations other than day care or home during the sampling period (hr)
 V = Ventilation rate, estimated as follows from information in the EPA Exposure Factors Handbook:
 - 6.8 m³/day for children less than 36 months of age
 - 8.3 m³/day for children aged 36 months or higher
 - 11.3 m³/day for adult females
 - 15.2 m³/day for adult males

For each of the participating children and their adult caregivers, an air sample was collected over a 48-h period in each of the indoor and outdoor environments at their homes. In addition, an air sample was collected over a 48-h period in each of the indoor and outdoor environments of participating day care centers, with most centers having separate indoor air samples taken in each classroom containing a participating child. Thus, the values of C_{di} , C_{do} , C_{hi} , and C_{ho} for a given participant were taken to be the measured concentrations in the four air samples associated with that participant. However, no air samples were taken in indoor environments other than homes and day care centers to allow C_{away} to be estimated. Thus, to arrive at a value for C_{away} , the median of all indoor air concentration measures taken in a given state was calculated for each pollutant listed in Table 8.4.1, and this median, specified in Appendix F, was taken to be the estimate of C_{away} for each study participant in that state. Equation (8-2) does not include a term for air concentration in outdoor environments away from homes or day care centers, as the times spent in these other outdoor environments were assumed to be trivial (i.e., near zero) for the study participants.

For day care children, values of t_{di} and t_{do} in equation (8-2) were obtained from information recorded on the Child Activity Diary and Food Survey (Form 10), completed by day care teachers. For day care children and their adult caregivers, values of t_{hi} and t_{ho} were obtained from information recorded on Child Activity Diary and Food Survey (Form 9), completed by day care parents), and t_{away} was calculated from information recorded on Forms 09 and 10. For stay-at-home children and their adult caregivers, values of t_{hi} , t_{ho} , and t_{away} were determined from information recorded on Form 08 (Child Activity Diary and Food Survey, completed by “home” parents). For stay-at-home children and all adult caregivers in the study who were not exposed to a day care environment, t_{di} and t_{do} were both set equal to 0.

8.4.2 Potential Exposure via Dietary Ingestion

Potential exposure level via dietary ingestion (ng/day) is a weighted sum of measured concentrations in both solid and liquid food within the day care and home environments in which the participant was present, with each concentration multiplied by the amount of the collected sample (representing the total amount of food eaten by the participant):

$$Exp_d = [(C_{dl}(M_{dl}) \% (C_{ds}(M_{ds}) \% (C_{hl}(M_{hl}) \% (C_{hs}(M_{hs})] \left(\frac{1}{N_f} \right) \quad (8-3)$$

where the notation is as follows:

- C_{dl} = Concentration in liquid food sample collected in the participant's day care classroom (ng/mL)
 C_{ds} = Concentration in solid food sample collected in the participant's day care classroom (ng/g)
 M_{dl} = Total volume of liquid food sample collected in the participant's day care classroom (mL)
 M_{ds} = Total weight of solid food sample collected in the participant's day care classroom (g)
 C_{hl} = Concentration in the participant's liquid food sample collected at home (ng/mL)
 C_{hs} = Concentration in the participant's solid food sample collected at home (ng/g)
 M_{hl} = Total volume of the participant's liquid food sample collected at home (mL)
 M_{hs} = Total weight of the participant's solid food sample collected at home (g)
 N_f = Number of days over which all food samples (liquid and solid) associated with the participant were collected.

Because each food sample at a given location for a given study participant corresponded to a composite of total food consumed by the participant over a two-day period, the value of N_f was set equal to two for each participant. Participants that drank only water at day care and/or home were assumed to have liquid food sample concentrations (C_{dl} and C_{hl} , respectively) of 0 ng/mL for that environment. Although C_{dl} and C_{ds} were not measured for stay-at-home children and for all adult caregivers, the values of M_{dl} and M_{ds} for these participants were zero, and therefore, these concentrations were not a factor in calculating the potential exposure level.

8.4.3 Potential Exposure via Indirect Ingestion

Potential exposure via indirect ingestion (i.e., ingestion of dust and soil) (ng/day) is a weighted average of measured floor dust and soil concentrations in the indoor and outdoor environments, respectively, in which the study participant was present, with each concentration scaled by the participant's assumed ingestion rate:

$$Exp_n = \frac{(D_{dd}(M_d(t_{di}) \% (D_{ds}(M_s(t_{do}) \% (D_{hd}(M_d(t_{hi}) \% (D_{hs}(M_s(t_{ho}))}{t_{di} \% t_{do} \% t_{hi} \% t_{ho}} \quad (8-4)$$

where the notation is as follows:

- D_{dd} = Concentration in the day care center/classroom's HVS3 (vacuum) floor dust sample (ng/g)
- D_{ds} = Concentration in day care center's play area soil sample (ng/g)
- D_{hd} = Concentration in home's HVS3 floor dust sample (ng/g)
- D_{hs} = Concentration in home's play area soil sample (ng/g)
- M_d = Participant's estimated daily ingestion rate of dust (g/day)
- M_s = Participant's estimated daily ingestion rate of soil (g/day)

and t_{di} , t_{do} , t_{hi} , and t_{ho} are defined in the same way as in equation (8-2) (i.e., times spent indoors and outdoors in the day care and home environments). For stay-at-home children and all adult caregivers who were not exposed to a day care environment, t_{di} and t_{do} were both set equal to 0. Any indirect ingestion that might have occurred outside of the day care center and home environments was assumed to be trivial, and therefore, was not included in equation (8-4). Daily ingestion rates of dust and soil were estimated according to the published literature (15-16) and from the collected questionnaire data on children's activity patterns. For participating children, daily ingestion rates were estimated by placing each child into one of three groups (Groups A, B, or C) according to information recorded on study survey forms on how often the child conducted activities that could lead to dust and soil ingestion, such as teething, chewing, and putting objects into his/her mouth. For soil ingestion activity, responses from the following two questions on Form 04 (parent pre-monitoring questionnaire) were evaluated:

- (1) Question C5: How often did [the child] play with sand or dirt?
- (2) Question C6: Which of the following have you seen your child eat: dirt, sand, snow?

For dust ingestion activity, responses from the following questions on Form 04 were evaluated:

- (1) Question C12: Did your child use a pacifier in the past month?
- (2) Question C13a: In the past month, did [your child] suck or chew his/her thumb/fingers?
- (3) Question C13b: In the past month, did [your child] suck or chew his/her toe/foot?
- (4) Question C16: Did [your child] ever put his/her mouth on the floor and lick the floor?
- (5) Question C21: Is your child currently teething?
- (6) Question C22: How often did [your child] put toys in his/her mouth?
- (7) Question C23: Did [your child] put any things other than toys or food in his/her mouth?

Algorithms were established to assign a daily soil ingestion rate and a daily dust ingestion rates to a child based upon the responses to the above questions for that child, with the specific rates that entered into the algorithms being selected in conjunction with the published literature (15-16). Appendix G provides details on these algorithms. Separately for dust and soil ingestion, the algorithms placed children into Groups A, B, or C based upon whether their

activity levels were considered high, medium, or low, respectively. For both dust and soil, daily ingestion rates were assigned as follows:

- Children in Group A: Daily ingestion rate = 0.100 g/day
- Children in Group B: Daily ingestion rate = 0.050 g/day
- Children in Group C: Daily ingestion rate = 0.025 g/day

For all participating adult caregivers, assigned ingestion rates were $M_d=25$ mg/day for dust and $M_s=50$ mg/day for soil. Note that while the activity diaries and questionnaires provide useful information for exposure assessment, they were not fully validated prior to their use in this study.

8.5 Statistical Analysis

This section details the methods associated with the statistical summaries and analyses that were applied to the study data in order to address each of the study's goals and sub-goals. The data were prepared for analysis as discussed in Section 8.2, then were statistically summarized and analyzed using Version 8 (Release 8.2) of the SAS® System. These statistical methods were applied independently to data from NC and OH.

8.5.1 Descriptive Statistics

As mentioned in Table 8.1.1, descriptive statistics were generated on the study data in order to address the following five goals or sub-goals:

- Sub-goal 1.1: to quantify the distribution of target pollutants in multimedia samples at homes and day care centers
- Goal 2: to quantify the distribution of child characteristics, activities, and locations that are important for exposure
- Sub-goal 3.1: to quantify the distribution of potential exposure and potential absorbed dose by exposure route
- Sub-goal 3.2: to quantify the distribution of aggregate potential exposure and potential absorbed dose
- Sub-goal 3.3: to quantify the distribution of urinary biomarker concentrations as an indicator of absorbed dose.

The SAS® System's UNIVARIATE procedure was applied to the relevant study data to calculate the descriptive statistics. For Goal 2, the list of summarized parameters and the descriptive statistics calculated on these parameters were given in Table 8.1.1. For the four sub-goals, the descriptive statistics included the sample size, mean (arithmetic and geometric), standard deviation (for untransformed and log-transformed data), percent of results labeled as detected, minimum reported value, maximum reported value, and selected percentiles of the observed data distribution (25th, 50th, 75th, 95th). Means and standard deviations were reported only when at least 50% of the data entering into their calculation were detected. A given percentile was

reported only when the observed data values at the percentile exceeded the MDL. The maximum reported value was reported only when at least one detected measurement was reported, and the minimum reported value was reported only when 100% of the reported measurements were detected. These descriptive statistics are included as appendices to this report.

Also, for the four sub-goals specified above, boxplots were prepared which portrayed the distribution of observed data values as a box-type diagram, within which the 25th, 50th, and 75th percentiles, the geometric mean, and the range of the data were expressed graphically. Details on how to interpret the boxplots are given in Section 9.3.1.

8.5.2 Analysis of Variance (ANOVA) Modeling

Model-based analysis of variance (ANOVA) methods were applied to the study data in order to address Sub-goal 1.2, Sub-goal 3.4, and Goal 4, as detailed in the three subsections below. In each case, the ANOVAs were repeatedly applied to different subsets of study data using the SAS[®] System's MIXED and GENMOD procedures, with each subset of data associated with a specific target pollutant and media type/dose metric. While the ANOVA approach applies when the data used in the analysis satisfies certain statistical assumptions, the same approach was applied to each subset of data (i.e., each combination of pollutant and sample type) when addressing a particular study goal. This was done in order to maintain consistency in approach across the repeated analyses, so that the outcomes of the analyses could be more comparable across the pollutants and sample types. Note that the outcome of statistical analyses of urine, potential exposure, and potential absorbed dose data was not affected by whether the data were expressed in mass concentration or molar concentration units.

8.5.2.1 Sub-goal 1.2: To determine on average how multimedia concentrations differ between urban and rural environments, low-income and middle high-income environments, and microenvironments

Multimedia (environmental and food) samples were collected at the homes and day care centers of the participating children. Within a day care center, indoor environmental samples were linked to children by classroom. These two locations, along with an indicator of whether or not a child attended day care, defined three possible *microenvironments*: 1) the day care microenvironment; 2) the home microenvironment for stay-at-home children, and 3) the home microenvironment for children attending day care. Additionally, multimedia samples were classified by income status (low or middle/high) and urbanicity (urban or rural) according to the microenvironment from which they were collected. The primary aim of the data analysis was to make statistical comparisons among the three microenvironments, although comparisons were also made according to income status and urbanicity.

For a given multimedia sample type and pollutant (with the exception of dermal wipes), let Y_{ijk} denote the log-transformed analytical measurement associated with a sample collected in the i^{th} environment type, where the sample is identified as follows:

- For samples collected in a day care center environment ($i=1$), the sample taken in the j^{th} classroom within the k^{th} day care center in the study.
- For samples collected in the home environment of a stay-at-home child ($i=2$), the sample collected in the k^{th} home of this type in the study. (Here, j is assumed to be equal to one as only one sample was taken per home).
- For samples collected in the home environment of a day care child ($i=3$), the sample taken in the k^{th} home of this type in the study. (Here, j is assumed to be equal to one as only one sample was taken per home.)

Then, for a particular combination of pollutant and environmental/food sample type, the following analysis of variance (ANOVA) model was applied to the log-transformed analytical measurements Y_{ijk} :

$$Y_{ijk} = \mu + \eta_i + \gamma_1 M_{ik} + \gamma_2 U_{ik} + \delta_k + \epsilon_{ijk} \quad (8-5)$$

where

μ = an overall constant,

η_i = effect of originating from the i^{th} environment type,

γ_1 = effect of originating from a middle/high-income environment versus a low income environment

M_{ik} = indicator of income status associated with the k^{th} day care center or home within the i^{th} environment type (i.e., $M_{ik}=1$ if middle/high-income and $=0$ if low income),

γ_2 = effect of originating from an urban environment versus a rural environment

U_{ik} = indicator of urbanicity associated with the k^{th} day care center or home within the i^{th} environment type (i.e., $U_{ij}=1$ if an urban area and $=0$ if a rural area),

δ_{jk} = a random term corresponding to the k^{th} home or day care center, and

ϵ_{ijk} = a random error term representing random variation not explained by the model.

Because no interactions are included in the model, any interaction effects are included in the random error term. The variance-covariance matrix of δ_k was defined to account for correlation in measurements for samples taken in different classrooms (j) within the same day care center (k), while the variance-covariance matrix of ϵ_{ijk} was defined under the assumption that the values of ϵ_{ijk} for different samples are independent.

The statistical significance of environment type (η_i), income status (γ_1), and urbanicity (γ_2) on the value of Y_{ijk} was determined by applying F-tests within the ANOVA, and significance levels of these F-tests were reported. When the F-test for the effect of environment type (η_i) was found to be significant at the 0.05 level and all three environment types were represented by the data, multiple comparisons (using Tukey's studentized range test) were performed to identify which of the three pairs of environment types differed significantly, and the significance levels (adjusted for the multiple comparisons) associated with each of the three pairs were reported. Additionally, a t-test was performed within the ANOVA to determine if the day care

environment differed significantly with the mean of the two home environment types, and the significance level of this test was also reported.

To characterize how the analytical measurements differ between two strata (e.g., urban vs. rural, low income vs. middle/high-income), the ANOVA model was used to estimate the average log-transformed analytical measurement (“least squares mean”) for each stratum. Then, the difference in the least squares means of the two strata was calculated, a t-test was performed within the ANOVA to determine whether this difference was statistically significant at the 0.05 or 0.01 levels, and a 95% two-sided confidence interval on this difference was also calculated within the ANOVA. The estimated difference in least squares means and its 95% confidence interval were then exponentiated, resulting in a ratio of estimated geometric means between the two strata and a corresponding 95% two-sided confidence interval on this ratio. The estimated ratio, its 95% confidence interval, and the outcome of the statistical test for significant difference between the two strata were reported.

Because a statistical comparison between home and day care environments was also of interest, a linear contrast was constructed within the ANOVA to estimate the difference in average log-transformed measurements between these two environments. Because the home environment consisted of two of the three microenvironments (i.e., the home environment for day care children and the home environment for stay-at-home children), the linear contrast was specified as the average log-transformed analytical measurement for the day care microenvironment, minus the average of the average log-transformed analytical measurements associated with the two home microenvironments. As with the other comparisons of strata, a t-test was performed within the ANOVA to determine whether this difference between home and day care environments was significant at the 0.05 or 0.01 levels, and a 95% two-sided confidence interval on this difference was calculated within the ANOVA. A ratio of estimated geometric means between the home and daycare environments was also calculated, along with a 95% two-sided confidence interval on this ratio.

While all pollutants were considered in the analysis of environmental sample data, model (8-5) was applied to only those combinations of pollutant and multimedia samples that met the following two criteria:

- At least 50% of the values of Y_{ijk} were labeled as detected.
- Values of Y_{ijk} were available for at least two of the three environment types.

Within an application of the analysis, if data were available from only one of a given microenvironment (e.g., data were available for only one day care center), then data for that microenvironment were excluded from that application of the analysis. The check for whether at least 50% of the values were detected occurred after any necessary data exclusions were made.

For the adult food sample type, microenvironments were relevant based upon whether or not their child attended day care: home microenvironment for stay-at-home children ($i=2$), and home

microenvironment for day care children (i=3). This is because all adult-specific data were collected within the home microenvironment.

A slightly different ANOVA model was used for analysis of dermal wipe data. Dermal wipes were collected for each study participant (child and adult) at their home and, for day care children, at their day care center. Thus, day care children could have up to two dermal wipe measurements, corresponding to their home and day care microenvironments. The statistical analysis of dermal wipe data, therefore, needed to take into account correlation in the day care and home dermal wipe samples for day care children. In the analysis of dermal wipe data, let Y_{ijk} denote the log-transformed analytical measurement associated with a dermal wipe sample collected in the i^{th} environment type, where the sample is identified as follows:

- For day care children, the sample taken in the i^{th} environment (day care [$i=1$] or home [$i=3$]) from the j^{th} child enrolled in the k^{th} day care center of the study.
- For stay-at-home children and for all adult participants, the sample collected in the k^{th} home of the environment type determined by whether or not the child attends day care ($i=2$ or 3). (Here, j is assumed to be equal to one as only one child and one adult participated from each home.)

The ANOVA model applied to the dermal wipe sample data took the following form:

$$Y_{ijk} = \mu + \eta_i + \gamma_1 M_{ij} + \gamma_2 U_{ij} + \delta_k + \epsilon_{ijk} \quad (8-6)$$

where the terms are as defined for equation (8-5) except for the following:

M_{ij} = indicator of income status associated with the j^{th} study participant within the i^{th} environment type (i.e., $M_{ij}=1$ if middle/high-income and $=0$ if low income),
 U_{ij} = indicator of urbanicity associated with the j^{th} study participant within the i^{th} environment type (i.e., $U_{ij}=1$ if an urban area and $=0$ if a rural area),

Because no interactions are included in the model, any interaction effects are included in the random error term (ϵ_{ijk}). The variance-covariance matrix of δ_k was defined to account for correlation in measurements for samples taken from different children (j) within the same day care center (k), while the variance-covariance matrix of ϵ_{ijk} was defined to account for correlation in measurements for samples taken from the same child (j) at different environment types (i) (i.e., day care and home).

The results for the tests of significance for environment, urbanicity, and income status on the log-transformed analytical measurement, and their estimated geometric ratios and associated 95% confidence intervals, were reported in the same manner as for the environmental/food samples. Model (8-6) was fitted separately for each pollutant, as well as separately for adults and children.

- 8.5.2.2. Sub-goal 3.4: To determine on average how potential exposure and absorbed dose metrics for each route and aggregated over routes differs between children in urban and rural settings, children in low and middle/high-income settings, day care children and stay-at-home children, and children and adults by stratum

The analysis approach presented in this subsection was performed on the potential exposure and absorbed dose estimates for the target pollutants listed in Table 8.4.1, when the data for these pollutants achieved the criteria specified in Section 8.4 for a given exposure route. The analyses were executed separately for each exposure route. In addition, this approach was performed on urine concentration data (both adjusted and unadjusted for specific gravity and creatinine concentration), separately for each pollutant measured in urine, and on aggregated potential exposure level and aggregated potential absorbed dose estimates, separately for each of the eight pollutants labeled with asterisks in Table 8.4.1.

Let j denote a specific household enrolled in the study. The analyses addressing Sub-goal 3.4 were performed on the measures Y_j , with separate analyses being conducted by pollutant and for each of the following definitions of Y_j :

- Log-transformed potential exposure level for the child in the j^{th} household (separate analyses by exposure route)
- Log-transformed potential absorbed dose for the child in the j^{th} household (separate analyses by exposure route)
- Log-transformed aggregated potential exposure level for the child in the j^{th} household
- Log-transformed aggregated potential absorbed dose for the child in the j^{th} household
- Log-transformed unadjusted urine concentration for the child in the j^{th} household
- Log-transformed urine concentration, adjusted for specific gravity, for the child in the j^{th} household
- Log-transformed urine concentration, adjusted for creatinine, for the child in the j^{th} household
- Difference in log-transformed potential exposure level between the child and adult in the j^{th} household (separate analyses by exposure route)
- Difference in log-transformed potential absorbed dose between the child and adult in the j^{th} household (separate analyses by exposure route)
- Difference in log-transformed aggregated potential exposure level between the child and adult in the j^{th} household
- Difference in log-transformed aggregated potential absorbed dose between the child and adult in the j^{th} household
- Difference in log-transformed unadjusted urine concentration between the child and adult in the j^{th} household
- Difference in log-transformed urine concentration, adjusted for specific gravity, between the child and adult in the j^{th} household

- Difference in log-transformed urine concentration, adjusted for creatinine, between the child and adult in the j^{th} household.

The ANOVA model applied to data for a given combination of pollutant and Y_j definition was the following:

$$Y_j = \mu + \gamma_1 M_j + \gamma_2 U_j + \gamma_3 D_j + \varepsilon_j \quad (8-7)$$

where

- μ = an overall constant,
- γ_1 = effect of a middle/high-income household versus a low income household,
- M_j = indicator of the j^{th} household's income status ($M_j=1$ if middle/high-income, $=0$ if low income),
- γ_2 = effect of an urban household versus a rural household,
- U_j = indicator of the j^{th} household's urbanicity ($U_j=1$ if urban, $=0$ if rural),
- γ_3 = effect of a child enrolled in day care versus staying at home,
- D_j = indicator of child's day care status in the j^{th} household ($D_j=1$ if day care, $=0$ if non-day care), and
- ε_j = a random error term representing random variation not explained by the model.

The variance-covariance matrix of ε_j was defined to account for correlation in measurements among households whose children attend the same day care center.

In a given fitting of model (8-7), the statistical significance of urbanicity, income status, and day care status on the value of Y_j was determined by testing for the significance of their corresponding coefficients in the model using F-tests and reporting the significance levels of these tests. As in the previous models, because no interactions of these factors are included in the model, only the main effects of these factors were tested. Thus, any interaction effects are included in the model's random error term.

When the definition of Y_j corresponded to some child-specific measure (i.e., not a child vs. adult difference), the ratio of estimated geometric means between two strata (e.g., urban vs. rural, low income vs. middle/high-income, day care vs. non-day care) were reported for this measure as in the previous models, along with 95% two-sided confidence intervals. T-tests were also performed to determine whether a particular ratio was significantly different from one, implying no significant difference between the two strata represented by the ratio. When the definition of Y_j corresponded to a difference in measures between children and adults within the same household, the ratio of estimated geometric means for children versus adults in the same household were reported overall and for each stratum, along with 95% two-sided confidence intervals. In addition, a one-sided t-test was performed within the model fitting that tested whether, overall, children tended to have significantly higher measures than their adult caregivers. For the individual strata, two-sided t-tests were performed to test whether children's measures differed significantly from their adult caregivers.

8.5.2.3 Goal 4: To apportion the exposures through the inhalation, dietary ingestion, and indirect ingestion routes

For the eight pollutants highlighted in Table 8.4.1 for which aggregated potential exposure level and aggregated potential absorbed dose were estimated, this goal focuses on characterizing how these aggregated estimates were apportioned across the three exposure routes considered in this study (inhalation, dietary ingestion, and indirect ingestion) and noting which routes were more important contributors to aggregate potential exposure or aggregate potential absorbed dose than others. As indicated in Table 8.1.1, this goal was divided into the following five sub-goals:

- 4.1 To estimate the proportion of aggregated exposure and dose that is associated with a given exposure route for the study children overall and by stratum.
- 4.2 For each exposure route, determine if this proportion differs for children
 - a. in urban and rural settings
 - b. from low and middle/high-income families
 - c. who attend day care or stay at home
- 4.3 Determine whether significant differences exist between exposure routes
- 4.4 Characterize how these estimates differ overall between pairs of exposure routes
- 4.5 Identify which pairs of exposure routes differ significantly in these estimates

To address each of these sub-goals, two types of analyses were developed and executed:

- Analysis #1 (Sub-goals 4.1 and 4.2): Characterizes the proportion of the aggregated value that is associated with a specific exposure route, both overall and by stratum, and determines whether these proportions differ significantly between strata. This analysis was performed separately by pollutant and exposure route.
- Analysis #2 (Sub-goals 4.3, 4.4, and 4.5): Compares average log-transformed measures between exposure routes. This analysis was performed separately by pollutant and for potential exposure and potential absorbed dose.

Each of these analysis approaches is now discussed.

Analysis #1. When applied to a given exposure route, this analysis involved calculating p_j , or the proportion of the estimated aggregated exposure that is associated with the given exposure route, for the j^{th} participant. To make statistical comparisons of the value of p_j between strata, the following logistic regression model was used:

$$\log(p_j/(1-p_j)) = \mu + \gamma_1 M_j + \gamma_2 U_j + \gamma_3 D_j + \epsilon_j \quad (8-8)$$

where the terms in this model are as defined for equation (8-7). Generalized estimating equations were used to allow values of the proportion p_j associated with children enrolled in the same day care center to be correlated.

The presence of significant differences among strata was determined by testing the statistical significance of the corresponding model coefficients via a Wald chi-square test. For example, the differences of the proportion between children living in urban areas and children living in rural areas was investigated by testing for the significance of the γ_2 coefficient in model (8-8). Significance levels of tests for significant differences between urban and rural strata, between middle/high and low income strata, and between day care and non-day care strata were reported, along with estimates and corresponding 95% confidence intervals for the average proportion for each stratum. The estimated average proportion for each stratum was determined by solving model (8-8) for the value of p_j for the given stratum (i.e., calculating the inverse logit).

Because the proportion p_j is calculated for each participant for a given exposure route, the outcome of this calculation is the same whether potential exposure level or potential absorbed dose is used. This is because the absorption rate (50%) and the participant's body weight cancel out from the numerator and denominator of the proportion equation. Thus, for a given exposure route, only one analysis was necessary between these two endpoints.

Analysis #2. To investigate whether potential exposure level or potential absorbed dose differed significantly among the three exposure routes and among strata, this analysis involved a multivariate ANOVA fitted to the log-transformed estimates for a given pollutant. This approach is similar to that discussed in Section 8.5.2.2, except the model is multivariate in nature in that it is applied to the vector of three log-transformed estimates associated with each exposure route. For the i^{th} entry (or exposure route) in this vector ($i=1, 2, 3$), the multivariate ANOVA model is as follows:

$$Y_{ij} = \mu + \gamma_1 M_j + \gamma_2 U_j + \gamma_3 D_j + \delta_j + \varepsilon_{ij} \quad (8-9)$$

where

Y_{ij} = log-transformed exposure or dose estimate for the j^{th} study participant via the i^{th} exposure route,

μ = an overall constant,

γ_1 = effect of a middle/high-income household versus a low income household,

M_j = indicator of the household income status for the j^{th} study participant ($M_j=1$ if middle/high-income, =0 if low income),

γ_2 = effect of an urban household versus a rural household,

U_j = indicator of the urbanicity of the household containing the j^{th} study participant ($U_j=1$ if urban, =0 if rural),

γ_3 = effect of a child enrolled in day care versus staying at home,

- D_j = indicator of child's day care status in the household containing the j^{th} study participant ($D_j=1$ if day care, $=0$ if non-day care),
- δ_j = random day care center effect, which accounts for correlation between children attending the same day care center, and
- ε_j = a random error term representing random variation not explained by the model that accounts for correlation between exposure routes for each participant.

When fitting model (8-9), a statistical test was performed to determine whether significant differences existed in the log-transformed exposure or dose estimates among the three exposure routes. Then, pairwise comparisons among the three exposure routes were performed, and the results were reported. In addition, the estimated ratio of geometric means between two exposure routes were calculated and reported for each pair of routes, along with a 95% confidence interval on the ratio.

Chapter 9

Results and Discussion

9.1 Overview

This chapter presents the results of the statistical analyses of the CTEPP study data. The presentation includes descriptive statistics and the outcome of statistical modeling efforts which were performed to address the following four statistical goals:

- **Goal 1:** To measure the environmental concentrations of pesticides and other persistent and non-persistent organic pollutants in multimedia at the homes and day care centers of a set of preschool children in several North Carolina (NC) and Ohio (OH) counties.
- **Goal 2:** To quantify the distribution of child characteristics, activities, and locations that are important for exposure.
- **Goal 3:** To estimate the exposures of the preschool children to these pollutants that they may encounter in their everyday environments.
- **Goal 4:** To apportion the exposures through the ingestion, inhalation, and dermal routes.

The results presented in this chapter characterize only those children who participated in the CTEPP study. The results should not be used to make inferences to larger populations of children, such as all children “in NC, OH, or in the United States,” “in low-income and middle/high-income families,” “in day care centers,” etc. Neither can the study design permit results to be used to test hypotheses such as whether exposures differ significantly between all NC children and all OH children. The statistical analysis did not calculate sample weights assigned to the study participants that would represent larger populations of children.

Compound prevalence is reported for each pollutant by matrix for each state (section 9.2). Statistical analysis was conducted on the most frequently detected pollutants. The results of these analyses of the data that address the four specific goals of the study are presented in sections 9.3 through 9.6.

9.2 Method Quantifiable Limits and Compound Prevalence

The method quantifiable limits (MQLs) were based on instrumental performance alone and were estimated based on the lowest calibration standard that could be measured within 30% of the true value and had a signal-to-noise ratio that exceeded three to five. The method detection limit (MDL) was defined as the minimum concentration at which a pollutant can be detected in a sample and was estimated to be one-half of the MQL.

High and variable concentrations were observed in blank samples for several pollutants and matrices. These include:

- benzylbutylphthalate and di-*n*-butylphthalate in all sample media for both NC and OH,
- bisphenol-A in NC wipe blanks, and
- *cis*-permethrin and *trans*-permethrin in OH air blanks

For these pollutants and matrices, the MDL and MQL were calculated using the following equations:

$$\text{MDL} = [z_{0.95} * \text{se}(\text{FMB})]/S$$

where z_{α} is the $\alpha * 100^{\text{th}}$ percentile of the standard normal distribution ($z_{0.95} = 1.645$), $\text{se}(\text{FMB})$ is the standard error of the measurements associated with field blanks, and S corresponds to the sample volume, area, or weight, whichever is relevant for the given media type.

For each pollutant and metabolite, the MDL was initially reported in mass units (ng) for each collected multimedia sample and then converted to concentration units by dividing by the sample volume, weight, or area. Tables 9.2.1 and 9.2.2 give the median MDL values for neutral and acid pollutants, respectively, in the multimedia samples, while Table 9.2.3 provides the median MDL values for pollutants and metabolites measured in urine samples.

With some exceptions, median MDL values were the same or very similar across neutral pollutants for a given media type (Table 9.2.1). Median MDLs were somewhat higher for the two phthalates compared to other neutral pollutants, mainly due to the background corrections as described above. For bisphenol-A, nonylphenol, and cyfluthrin, the estimated instrumental detection limits were about ten times the detection levels of the other neutral pollutants due to their chromatographic properties and the relative abundances of the quantitation ions. For PCB congeners, the median MDL in transferable residue (PUF) samples was twice as large for OH than for NC due to differences in sample matrices. Among acid pollutants and metabolites measured in urine (Table 9.2.3), MDL values differed between the methylated pollutants/metabolites (2,4-D, hydroxy-PAHs, and PCP) and the silylated metabolites (3,5,6-TCP) due to the amounts of urine used for analysis (10 mL for the methylated pollutants/metabolites versus 1 mL for the silylated metabolites) and their different detection capabilities.

For each pollutant, percentages of collected samples with concentrations at or above the MDL are presented by media type in Tables 9.2.4 and 9.2.5 for NC and OH, respectively. Detection percentages associated with special samples collected from homes having recent pesticide applications (i.e., hard floor and food preparation surface wipes, PUF samples) are presented in Table 9.2.6 for NC and OH. Within these four tables, pollutants with detection percentages of at least 50% in a particular medium are shaded in gray. Similar tables

Table 9.2.1 Median MDL Values for Neutral Pollutants Measured in Multimedia Samples from North Carolina and Ohio

Pollutant ^a	Location	Median MDL Values								
		Indoor Air (ng/m ³)	Outdoor Air (ng/m ³)	Soil (ng/g)	Dust (ng/g)	Dermal Wipe (ng/m ²)	Solid Food (ng/g)	Liquid Food (ng/mL)	Surface Wipe (ng/m ²)	PUF ^d (ng/m ²)
Benzylbutylphthalate	NC	57	57	12	50	6,400	52	27	1,400	4.4
	OH	35	35	5.6	22	8,000	5.7	18	1,700	4.4
Di- <i>n</i> -butylphthalate	NC	13	13	7.7	32	1,900	62	22	400	4.4
	OH	25	25	23	94	8,200	18	7.4	1,800	4.4
Bisphenol-A	NC	0.87	0.87	4.9	20	320	0.83	0.33	68	44
	OH	0.87	0.86	5.0	25	280	0.83	0.33	69	44
Nonylphenol	NC	0.87	0.87	4.9	20	320	0.83	0.33	69	44
	OH	0.87	0.87	5.0	20	280	0.83	0.33	69	44
Cyfluthrin	NC	0.87	0.87	4.9	20	320	0.83	0.33	69	44
	OH	0.87	0.87	5.0	20	250	0.83	0.33	69	44
<i>cis</i> -Permethrin	NC	0.09	0.09	0.49	2.0	32	0.08	0.03	6.9	4.4
	OH	0.39	0.38	0.50	2.0	32	0.08	0.03	6.9	4.4
<i>trans</i> -Permethrin	NC	0.09	0.09	0.49	2.0	32	0.08	0.03	6.9	4.4
	OH	0.33	0.33	0.50	2.3	32	0.08	0.03	6.9	4.4
PCB congeners	NC	0.04	0.04	0.49	2.0	32	0.08	0.03	6.9	4.4
	OH	0.04	0.04	0.50	2.0	32 ^b	0.08	— ^c	6.9	8.8
All other neutral pollutants ^a	NC	0.09	0.09	0.49	2.0	32	0.08	0.03	6.9	4.4
	OH	0.09	0.09	0.50	2.0	32 ^b	0.08	0.03	6.9	4.4

^a Atrazine is not showed in this table as it was measured only in drinking water samples. It had a median MDL value of 0.01 ng/mL for both NC and OH.

^b Across PCB congeners and all other neutral pollutants, median MDL values in Ohio ranged from 31 to 32 ng/m².

^c Ohio liquid food samples were not analyzed for PCB congeners.

^d There were no field blanks for PUF samples in NC and only one field blank for PUF samples in OH; the MDLs for the two phthalates in PUF were not corrected for the background levels.

Table 9.2.2 Median MDL Values for Acid Pollutants and Metabolites Measured in Multimedia Samples from North Carolina and Ohio

Pollutant/ Metabolite	Location	Median MDL Values								
		Indoor Air (ng/m ³)	Outdoor Air (ng/m ³)	Soil (ng/g)	Dust (ng/g)	Dermal Wipe (ng/m ²)	Solid Food (ng/g)	Liquid Food (ng/mL)	Surface Wipe (ng/m ²)	PUF ^b (ng/m ²)
Dicamba	NC	0.17	0.17	0.40	4.0	63	0.25	0.20	14	-- ^a
	OH	0.17	0.17	0.40	4.0	61	0.25	0.20	14	4.4
2,4-D	NC	0.17	0.17	0.40	4.0	63	0.25	0.20	14	--
	OH	0.17	0.17	0.40	4.0	61	0.25	0.20	14	4.4
IMP	OH	0.09	0.09	0.20	2.0	30	0.12	0.10	6.9	4.4
Pentachlorophenol	NC	0.09	0.09	0.40	4.0	63	0.25	0.20	14	--
	OH	0.17	0.17	0.40	4.0	61	0.25	0.20	14	4.4
2,4,5-T	NC	0.17	0.17	0.40	4.0	63	0.25	0.20	14	--
	OH	0.17	0.17	0.40	4.0	61	0.25	0.20	14	4.4
3,5,6-TCP	NC	0.09	0.09	0.20	2.0	33	0.12	0.10	6.9	--
	OH	0.09	0.09	0.20	2.0	31	0.13	0.10	6.9	4.4

^a A dash indicates that the pollutant was not measured in PUF samples.

^b There were no field blanks for PUF samples in NC and only one field blank for PUF samples in OH.

Table 9.2.3 Median MDL Values for Pollutants and Metabolites Measured in Urine Samples from North Carolina and Ohio

Pollutant/Metabolite	Median MDL Values in Urine (ng/mL)	
	NC	OH
2,4-D	0.20	0.20
1-hydroxybenz[<i>a</i>]anthracene	0.20	0.20
3-hydroxybenz[<i>a</i>]anthracene	-- ^a	0.20
3-hydroxybenz[<i>a</i>]pyrene	--	0.20
3-hydroxychrysene	0.20	0.20
6-hydroxychrysene	--	0.20
6-hydroxy indeno[1,2,3- <i>cd</i>]pyrene	--	0.20
1-hydroxypyrene	--	0.20
Pentachlorophenol	0.20	0.20
3-PBA	--	0.20
3,5,6-TCP	1.0	1.0

^a A dash indicates that the pollutant was not measured in urine samples.

Table 9.2.4 Percentages of NC Samples With Detectable Pollutant and Metabolite Levels (At or Above the MDL) in Multimedia and Urine Samples ^a

Pollutant/Metabolite ^b	Percentage of Results At or Above the MDL in Multimedia and Urine Samples							
	INDOORS		OUTDOORS		PERSONAL			
	Indoor Air	Dust	Outdoor Air	Soil	Dermal Wipe	Solid Food	Liquid Food	Urine
OP Pesticides and Metabolite								
Chlorpyrifos	100	100	83	18	80	63	11	-- ^c
Diazinon	100	96	51	16	51	22	0.68	--
3,5,6-TCP	99	100	88	69	98	99	40	97
OC Pesticides								
Aldrin	41	16	8.6	0.0	3.1	2.6	0.0	--
<i>alpha</i> -Chlordane	99	96	54	31	59	16	5.4	--
<i>gamma</i> -Chlordane	100	97	64	31	61	18	0.0	--
<i>p,p'</i> -DDE	31	41	0.71	15	3.6	58	21	--
<i>p,p'</i> -DDT	34	38	12	20	6.7	3.9	2.0	--
Dieldrin	40	45	14	13	4.9	2.0	0.0	--
Endrin	34	18	41	4.2	2.2	0.65	0.0	--
Heptachlor	93	43	61	4.9	20	14	0.0	--
Lindane	14	15	11	6.3	3.1	7.2	2.0	--
Pentachloronitrobenzene	14	2.8	2.9	0.0	0.45	0.65	1.4	--
Pyrethroid Pesticides								
Cyfluthrin	4.7	47	0.0	11	23	5.9	0.0	--
<i>cis</i> -Permethrin	65	100	18	21	82	42	17	--
<i>trans</i> -Permethrin	64	100	18	21	82	43	16	--
Acid Herbicides								
Dicamba	0.68	21	7.9	5.0	0.44	14	0.0	--
2,4-D	48	67	22	17	7.4	52	2.6	78
2,4,5-T	6.8	0.71	8.6	0.72	0.0	1.1	0.0	--
PAHs								
Benz[<i>a</i>]anthracene	48	100	53	73	38	31	1.3	--
Benzo[<i>b</i>]fluoranthene	61	100	68	77	31	32	2.0	--
Benzo[<i>k</i>]fluoranthene	43	100	51	71	28	16	0.0	--
Benzo[<i>ghi</i>]perylene	63	100	64	74	43	1.3	0.0	--
Benzo[<i>a</i>]pyrene	50	100	54	74	25	16	0.0	--
Benzo[<i>e</i>]pyrene	49	100	56	75	30	24	3.3	--
Chrysene	61	100	69	75	43	33	3.3	--
Dibenz[<i>a,h</i>]anthracene	4.7	96	3.6	55	9.4	0.0	0.0	--
Indeno[1,2,3- <i>cd</i>]pyrene	51	100	58	71	27	0.66	0.0	--

Table 9.2.4. Percentages of NC Samples With Detectable Pollutant and Metabolite Levels (At or Above the MDL) in Multimedia and Urine Samples^a (cont.)

Pollutant/Metabolite ^b	Percentage of Results At or Above the MDL in Multimedia and Urine Samples							
	INDOORS		OUTDOORS		PERSONAL			
	Indoor Air	Dust	Outdoor Air	Soil	Dermal Wipe	Solid Food	Liquid Food	Urine
Phthalates								
Benzylbutylphthalate	34	100	6.4	34	57	3.2	4.3	--
Di- <i>n</i> -butylphthalate	100	100	39	36	84	32	30	--
Phenols								
Bisphenol-A	65	29	31	2.9	94	88	79	--
Nonylphenol	9.5	4.5	2.1	1.9	1.3	2.6	4.6	--
Pentachlorophenol	97	93	95	32	31	7.8	1.5	75
PCBs								
PCB 44	48	20	24	1.4	1.8	1.3	0.0	--
PCB 52	91	36	65	4.2	6.7	7.2	0.0	--
PCB 70	47	22	18	1.4	1.8	0.0	0.0	--
PCB 77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
PCB 95	75	38	44	2.8	8.5	2.6	0.0	--
PCB 101	53	38	26	3.5	11	0.0	0.0	--
PCB 105	6.8	5.7	0.71	2.1	0.89	0.0	0.0	--
PCB 110	42	42	19	7.1	12	0.0	0.0	--
PCB 118	24	26	8.6	5.6	8.0	0.0	0.0	--
PCB 138	13	20	2.9	9.9	2.2	0.0	0.0	--
PCB 153	21	30	2.9	9.2	3.6	0.0	0.0	--
PCB 180	4.7	12	0.71	7.7	0.89	0.0	0.0	--
PAH Metabolites Measured in Urine Only								
1-hydroxybenz[<i>a</i>]anthracene	--	--	--	--	--	--	--	11
3-hydroxychrysene	--	--	--	--	--	--	--	2.8

^a The percentages were calculated using results from individual samples. Multiple samples for the same person or room were considered as individual samples. Cells corresponding to pollutants having at least 50% of samples detected in the specified matrix are shaded in gray.

^b In addition to the pollutants represented in this table, atrazine was measured in drinking water samples. Thirty-eight percent of NC drinking water samples had atrazine levels at or above the MDL.

^c A dash indicates that the pollutant was not measured in the specified matrix.

Table 9.2.5 Percentages of OH Samples With Detectable Pollutant and Metabolite Levels (At or Above the MDL) in Multimedia and Urine Samples ^a

Pollutant/Metabolite ^b	Percentage of Results At or Above the MDL in Multimedia and Urine Samples							
	INDOORS		OUTDOORS		PERSONAL			
	Indoor Air	Dust	Outdoor Air	Soil	Dermal Wipe	Solid Food	Liquid Food	Urine
OP Pesticides and Metabolites								
Chlorpyrifos	99	100	75	39	61	66	7.1	-- ^c
Diazinon	98	97	74	32	39	17	1.9	--
IMP	95	87	86	40	25	86	33	-- ^d
3,5,6-TCP	100	99	88	80	94	99	36	97
OC Pesticides								
Aldrin	2.7	3.5	1.4	2.1	0.45	0.65	0.65	--
<i>alpha</i> -Chlordane	93	86	56	55	29	7.1	0.0	--
<i>gamma</i> -Chlordane	97	85	59	51	29	5.8	0.0	--
<i>p,p'</i> -DDE	35	48	2.8	42	4.5	73	6.5	--
<i>p,p'</i> -DDT	22	39	2.1	29	3.6	5.2	1.9	--
Dieldrin	12	21	7.0	17	0.45	8.4	0.0	--
Endrin	12	7.0	19	2.8	2.7	1.3	0.0	--
Heptachlor	34	5.6	18	2.1	2.2	7.8	1.3	--
Lindane	4.1	11	3.5	0.70	1.8	3.2	1.3	--
Pentachloronitrobenzene	11	0.70	3.5	0.0	1.3	1.9	0.0	--
Pyrethroid Pesticides and Metabolite								
Cyfluthrin	2.7	74	0.71	18	6.7	2.6	0.65	--
<i>cis</i> -Permethrin	22	100	22	5.6	82	30	0.0	--
<i>trans</i> -Permethrin	19	100	18	5.8	82	30	0.0	--
3-PBA	--	--	--	--	--	--	--	60
Acid Herbicides								
Dicamba	0.69	48	2.9	4.2	2.7	13	0.36	--
2,4-D	44	96	32	39	43	42	5.4	92
2,4,5-T	0.0	2.8	0.74	3.5	0.45	0.0	0.36	--
PAHs								
Benz[<i>a</i>]anthracene	38	100	26	92	58	28	0.65	--
Benzo[<i>b</i>]fluoranthene	27	100	36	92	78	39	1.9	--
Benzo[<i>k</i>]fluoranthene	21	100	25	92	68	16	1.3	--
Benzo[<i>ghi</i>]perylene	27	100	23	91	71	3.8	0.0	--
Benzo[<i>a</i>]pyrene	18	100	15	91	64	17	0.0	--
Benzo[<i>e</i>]pyrene	22	100	26	91	76	19	0.65	--
Chrysene	42	100	50	93	75	36	0.65	--
Dibenz[<i>a,h</i>]anthracene	0.68	99	0.0	75	18	1.3	0.0	--
Indeno[1,2,3- <i>cd</i>]pyrene	20	100	17	91	67	3.2	0.65	--

Table 9.2.5 Percentages of OH Samples With Detectable Pollutant and Metabolite Levels (At or Above the MDL) in Multimedia and Urine Samples ^a (cont.)

Pollutant/Metabolite ^b	Percentage of Results At or Above the MDL in Multimedia and Urine Samples							
	INDOORS		OUTDOORS		PERSONAL			
	Indoor Air	Dust	Outdoor Air	Soil	Dermal Wipe	Solid Food	Liquid Food	Urine
Phthalates								
Benzylbutylphthalate	33	100	11	37	46	58	6.6	--
Di- <i>n</i> -butylphthalate	97	100	49	58	45	25	3.3	--
Phenols								
Bisphenol-A	65	51	35	2.1	98	100	71	--
Nonylphenol	0.68	3.6	0.0	2.4	1.3	1.3	0.0	--
Pentachlorophenol	88	94	60	50	47	22	4.3	92
PCBs								
PCB 44	31	24	15	15	7.6	0.0	--	--
PCB 52	88	50	66	20	19	5.8	--	--
PCB 70	36	25	14	19	14	0.0	--	--
PCB 77	0.0	0.0	0.0	0.70	0.0	0.0	--	--
PCB 95	63	42	36	23	7.6	0.65	--	--
PCB 101	55	45	25	25	11	0.65	--	--
PCB 105	5.4	14	2.8	20	2.7	0.0	--	--
PCB 110	44	48	21	31	12	0.65	--	--
PCB 118	23	41	8.5	30	8.5	1.3	--	--
PCB 138	9.5	28	2.8	31	1.3	0.65	--	--
PCB 153	17	41	1.4	34	2.7	1.3	--	--
PCB 180	2.7	16	0.0	22	0.45	0.0	--	--
PAH Metabolites Measured in Urine Only								
1-hydroxybenz[<i>a</i>]anthracene	--	--	--	--	--	--	--	12
3-hydroxybenz[<i>a</i>]anthracene	--	--	--	--	--	--	--	1.1
3-hydroxybenz[<i>a</i>]pyrene	--	--	--	--	--	--	--	0.0
3-hydroxychrysene	--	--	--	--	--	--	--	0.67
6-hydroxychrysene	--	--	--	--	--	--	--	0.90
6-hydroxyindeno[1,2,3- <i>cd</i>]pyrene	--	--	--	--	--	--	--	0.0
1-hydroxypyrene	--	--	--	--	--	--	--	62

^a The percentages were calculated using results from individual samples. Multiple samples for the same person or room were considered as individual samples. Cells corresponding to pollutants having at least 50% of samples detected in the specified matrix are shaded in gray.

^b In addition to the pollutants represented in this table, atrazine was measured in drinking water samples. Fifty-nine percent of OH drinking water samples had atrazine levels at or above the MDL.

^c A dash indicates that the pollutant was not measured in the specified matrix.

^d Low recovery (<10%) of IMP was observed in matrix spikes, and therefore, IMP was not quantifiable in urine samples.

Table 9.2.6 Percentages of NC and OH Samples With Detectable Pollutant and Metabolite Levels (At or Above the MDL) in Surface Samples ^a

Pollutant/Metabolite	Percentage of Results At or Above the MDL in Samples Collected From Homes After Recent Pesticide Applications					
	North Carolina			Ohio		
	Hard Floor Surface Wipe	Food Prep. Surface Wipe	Trans. Residue (PUF)	Hard Floor Surface Wipe	Food Prep. Surface Wipe	Trans. Residue (PUF)
OP Pesticides and Metabolites						
Chlorpyrifos	91	89	94	73	62	85
Diazinon	69	61	67	31	31	54
IMP	-- ^b	--	--	33	0.0	0.0
3,5,6-TCP	100	--	--	92	67	33
OC Pesticides						
Aldrin	13	5.6	11	3.8	0.0	0.0
<i>alpha</i> -Chlordane	59	56	44	23	15	23
<i>gamma</i> -Chlordane	66	56	44	23	15	23
<i>p,p'</i> -DDE	16	11	28	12	0.0	0.0
<i>p,p'</i> -DDT	19	17	28	19	7.7	0.0
Dieldrin	25	17	22	3.8	0.0	23
Endrin	13	28	11	0.0	0.0	7.7
Heptachlor	38	33	28	3.8	0.0	0.0
Lindane	9.4	0.0	28	0.0	0.0	0.0
Pentachloronitrobenzene	0.0	0.0	0.0	0.0	0.0	0.0
Pyrethroid Pesticides						
Cyfluthrin	6.3	0.0	78	7.7	0.0	0.0
<i>cis</i> -Permethrin	94	83	83	69	38	69
<i>trans</i> -Permethrin	94	83	83	69	38	69
Acid Herbicides						
Dicamba	0.0	--	--	0.0	0.0	0.0
2,4-D	7.1	--	--	42	0.0	33
2,4,5-T	0.0	--	--	0.0	0.0	0.0
PAHs						
Benz[<i>a</i>]anthracene	78	33	94	96	31	62
Benzo[<i>b</i>]fluoranthene	78	33	67	96	46	92
Benzo[<i>k</i>]fluoranthene	75	28	67	92	38	85
Benzo[<i>ghi</i>]perylene	88	17	67	92	31	85
Benzo[<i>a</i>]pyrene	81	17	61	88	31	85
Benzo[<i>e</i>]pyrene	88	17	67	96	38	92
Chrysene	88	50	83	96	46	85
Dibenz[<i>a,h</i>]anthracene	34	5.6	22	62	7.7	15
Indeno[1,2,3- <i>cd</i>]pyrene	84	22	67	96	31	69

Table 9.2.6 Percentages of NC and OH Samples With Detectable Pollutant and Metabolite Levels (At or Above the MDL) in Surface Samples ^a (cont.)

Pollutant/Metabolite	Percentage of Results At or Above the MDL in Samples Collected From Homes After Recent Pesticide Applications					
	North Carolina			Ohio		
	Hard Floor Surface Wipe	Food Prep. Surface Wipe	Trans. Residue (PUF)	Hard Floor Surface Wipe	Food Prep. Surface Wipe	Trans. Residue (PUF)
Phthalates						
Benzylbutylphthalate	97	56	100	77	54	100
Di- <i>n</i> -butylphthalate	100	72	100	65	85	100
Phenols						
Bisphenol-A	81	89	100	96	85	71
Nonylphenol	0.0	0.0	6.3	0.0	0.0	8.3
Pentachlorophenol	43	--	--	33	0.0	33
PCBs						
PCB 44	9.4	22	11	12	7.7	15
PCB 52	22	22	6.3	38	7.7	50
PCB 70	13	17	17	50	15	23
PCB 77	0.0	0.0	0.0	0.0	0.0	0.0
PCB 95	13	22	13	3.8	0.0	31
PCB 101	6.3	17	20	7.7	0.0	46
PCB 105	0.0	0.0	22	12	0.0	7.7
PCB 110	19	28	10	38	0.0	46
PCB 118	9.4	17	33	15	0.0	23
PCB 138	3.1	0.0	0.0	0.0	0.0	7.7
PCB 153	3.1	11	17	3.8	0.0	23
PCB 180	3.1	0.0	5.6	0.0	0.0	0.0

^a The percentages were calculated using results from individual samples. Multiple samples for the same person or room were considered as individual samples. Cells corresponding to pollutants having at least 50% of samples detected in the specified matrix are shaded in gray.

^b A dash indicates that the pollutant was not measured in the specified matrix.

documenting the percentages of samples with concentrations at or above the MQL are presented by media type in Appendix H for NC and OH. These percentages take into account all samples collected in the study within the given state for which a valid measurement for the pollutant was available.

For NC, pollutants and metabolites that were most commonly detected in the sampled environmental and personal media were the following:

- The OP pesticides, chlorpyrifos and diazinon, were frequently detected in indoor air (100%), floor dust (96%), transferable residue (67%), surface wipe (61%), outdoor air (51%), and dermal wipe (51%) samples. The metabolite of chlorpyrifos, 3,5,6-

TCP, had high detection rates in floor dust and hard floor surface wipes (100%), indoor air and solid food (99%), dermal wipe (98%), urine (97%), outdoor air (88%), and soil (69%) samples.

- Two OC pesticides, *alpha*- and *gamma*-chlordane, were both frequently detected in indoor air (\$99%), floor dust (\$96%), dermal wipe (\$59%), surface wipe (\$56%), and outdoor air (\$54%) samples.
- Two pyrethroid pesticides, *cis*- and *trans*-permethrin, were both frequently detected in floor dust (100%), surface wipe (\$83%), transferable residue (83%), dermal wipe (82%), and indoor air (\$64%) samples.
- The acid herbicide, 2,4-D, had the highest detection percentages in urine (78%), floor dust (67%), and solid food (52%) samples.
- All nine PAHs were frequently detected above 50% in dust, soil, and floor surface wipe samples, except for dibenz[*a,h*]anthracene in floor surface wipes (34%). These PAHs were frequently detected above 50% in outdoor air and transferable residue samples, except for dibenz[*a,h*]anthracene. Five of these PAHs (benzo[*b*]fluoranthene, benzo[*ghi*]perylene, benzo[*a*]pyrene, chrysene, and indeno[1,2,3-*cd*]pyrene) were detected in at least 50% of indoor air samples, while two other PAHs (benzo[*a*]anthracene and benzo[*e*]pyrene) were detected in slightly below 50% of the indoor air samples.
- The two phthalates, benzylbutylphthalate and di-*n*-butylphthalate, were frequently detected in floor dust (100%), transferable residue (100%), floor surface wipe (\$97%), dermal wipe (\$57%), and food preparation surface wipe (\$56%) samples. In addition, di-*n*-butylphthalate was detected in 100% of indoor air samples.
- Among the phenols, bisphenol-A was detected most frequently in transferable residue (100%), dermal wipe (94%), solid food (88%), surface wipe (\$81%), and liquid food (79%) samples. Pentachlorophenol was detected most frequently in indoor air (97%), outdoor air (95%), floor dust (93%), and urine (75%) samples.

For OH, pollutants and metabolites that were most commonly detected in the environmental and personal media were the following:

- The OP pesticides, chlorpyrifos and diazinon, were both frequently detected in indoor air (\$98%), floor dust (\$97%), and outdoor air (\$74%) samples. The two OP metabolites, IMP and 3,5,6-TCP, were also frequently detected in indoor air (\$95%), floor dust (\$87%), and outdoor air (\$86%) samples. In addition, 3,5,6-TCP was detected frequently in solid food (99%), urine (97%), dermal wipe (94%), floor surface wipe (92%), and soil (80%) samples.

- Two OC pesticides, *alpha*- and *gamma*-chlordane, were both frequently detected in indoor air (\$93%) and floor dust (\$85%) samples, while detection percentages for outdoor air (\$56%) and soil (\$51%) samples were somewhat lower but still above 50%.
- Two pyrethroid pesticides, *cis*- and *trans*-permethrin, were both frequently detected in floor dust (100%), dermal wipe (82%), hard floor surface wipe (69%), and transferable residue (69%) samples. Cyfluthrin was detected in 74% of the floor dust samples. A urinary metabolite of *cis*- and *trans*-permethrin, 3-PBA, was found in 60% of urine samples.
- The acid herbicide, 2,4-D, was frequently detected in floor dust (96%) and urine (92%) samples.
- The PAHs were frequently detected in floor dust (\$99%), soil (\$75%), floor surface wipe (\$62%), transferable residue (\$62% for all but dibenz[*a,h*]anthracene), and dermal wipe (\$58% for all but dibenz[*a,h*]anthracene) samples.
- The two phthalates, benzylbutylphthalate and di-*n*-butylphthalate, were both detected most frequently in floor dust (100%), transferable residues (100%), and floor surface wipes (\$65%). In addition, di-*n*-butylphthalate was detected in 97% of indoor air samples and 85% of food preparation surface wipe samples.
- Among the phenols, bisphenol-A was detected most frequently in solid food (100%), dermal wipe (98%), surface wipe (\$85%), liquid food (71%), and transferable residue (71%) samples. Pentachlorophenol was detected most frequently in floor dust (94%), urine (92%), and indoor air (88%) samples.

For each state, the detection percentages in Tables 9.2.4 through 9.2.6 were used to classify the pollutants and metabolites measured in multimedia samples into the following three groups:

- Frequently Detected - pollutants detected in 50% or more of samples in 4 or more different media types.
- Sometimes Detected - pollutants detected in 50% or more of samples in 1, 2, or 3 media types.
- Rarely Detected: pollutants detected in less than 50% of the samples in all media types.

Results of this classification for each state are presented in Table 9.2.7.

Table 9.2.7 Pollutants Were Classified Into Three Groups, By State, Based On Their Level of Detection in the Multimedia Samples

North Carolina	Ohio
Frequently Detected	
<u>OP pesticides/metabolites</u> Chlorpyrifos, Diazinon, 3,5,6-TCP	<u>OP pesticides/metabolites</u> Chlorpyrifos, Diazinon, IMP, 3,5,6-TCP
<u>OC pesticides</u> <i>alpha</i> -Chlordane, <i>gamma</i> -Chlordane	<u>OC pesticides</u> <i>alpha</i> -Chlordane, <i>gamma</i> -Chlordane
<u>Pyrethroid pesticides</u> <i>cis</i> -Permethrin, <i>trans</i> -Permethrin	<u>Pyrethroid pesticides</u> <i>cis</i> -Permethrin, <i>trans</i> -Permethrin
<u>PAHs</u> Benz[<i>a</i>]anthracene, Benzo[<i>b</i>]fluoranthene, Benzo[<i>k</i>]fluoranthene, Benzo[<i>ghi</i>]perylene, Benzo[<i>a</i>]pyrene, Benzo[<i>e</i>]pyrene, Chrysene, Indeno[1,2,3- <i>cd</i>]pyrene,	<u>PAHs</u> Benz[<i>a</i>]anthracene, Benzo[<i>b</i>]fluoranthene, Benzo[<i>k</i>]fluoranthene, Benzo[<i>ghi</i>]perylene, Benzo[<i>a</i>]pyrene, Benzo[<i>e</i>]pyrene, Chrysene, Indeno[1,2,3- <i>cd</i>]pyrene
<u>Phthalates</u> Benzylbutylphthalate, Di- <i>n</i> -butylphthalate	<u>Phthalates</u> Benzylbutylphthalate, Di- <i>n</i> -butylphthalate
<u>Phenols</u> Bisphenol-A, Pentachlorophenol	<u>Phenols</u> Bisphenol-A, Pentachlorophenol
<u>PCBs</u> None	<u>PCBs</u> Congener 52
Sometimes Detected	
<u>OC pesticides</u> <i>p,p'</i> -DDE, Heptachlor	<u>OC pesticides</u> <i>p,p'</i> -DDE
<u>Pyrethroid pesticides</u> Cyfluthrin	<u>Pyrethroid pesticides</u> Cyfluthrin
<u>Acid Herbicides</u> 2,4-D	<u>Acid Herbicides</u> 2,4-D
<u>PAHs</u> Dibenzo[<i>a,h</i>]anthracene	<u>PAHs</u> Dibenz[<i>a,h</i>]anthracene
<u>PCBs</u> Congeners 52, 95, 101	<u>PCBs</u> Congeners 70, 95, 101

Table 9.2.7 Pollutants Were Classified Into Three Groups, By State, Based On Their Level of Detection in the Multimedia Samples (cont.)

North Carolina	Ohio
Rarely Detected	
<u>OC Pesticides</u> Aldrin, <i>p,p'</i> -DDT, Dieldrin, Endrin, Lindane, Pentachloronitrobenzene	<u>OC Pesticides</u> Aldrin, <i>p,p'</i> -DDT, Dieldrin, Endrin, Heptachlor, Lindane, Pentachloronitrobenzene
<u>Acid Herbicides</u> Dicamba, 2,4,5-T	<u>Acid Herbicides</u> Dicamba, 2,4,5-T
<u>Phenols</u> Nonylphenol	<u>Phenols</u> Nonylphenol
<u>PCBs</u> Congeners 44, 70, 77, 105, 110, 118, 138, 153, 180	<u>PCBs</u> Congeners 44, 77, 105, 110, 118, 138, 153, 180

The pollutants and metabolites that are classified as “frequently” or “sometimes” detected in Table 9.2.7 were among those considered for calculating potential exposure level and potential absorbed dose of these pollutants in the study participants. Although IMP was classified as “frequently” detected in OH multimedia samples, it was not measured in NC multimedia samples.

For the study participants, aggregate exposure level and aggregate potential absorbed dose were calculated for bisphenol-A (BPA), chlorpyrifos (CPS), diazinon (DZN), di-*n*-butylphthalate (DBP), 2,4-D, *cis*- and *trans*- permethrin (*cis*- and *trans*-P), and the metabolite 3,5,6-TCP (TCP). These eight pollutants/metabolites were detected in a majority of samples across multiple media, including urine, and some were commonly found in consumer products used by the participating households and day care centers.

9.3 Goal 1: To Measure the Environmental Concentrations of Pesticides and Other Persistent and Non-Persistent Organic Pollutants in Multimedia (Environmental and Personal Samples) at Participating Homes and Day Care Centers.

Goal 1 focused on quantifying the concentration of each pollutant by medium and determining whether these concentrations differed significantly between microenvironments (i.e., urbanicity, income level, home versus day care environments).

9.3.1 Sub-goal 1.1: To Quantify the Distribution of Target Pollutants in Multimedia at Participating Home and Day Care Centers

Descriptive statistics for pollutant and metabolite concentrations in multimedia samples are given in Appendix I for NC and Appendix J for OH. These appendices display the descriptive statistics (number of samples, percentage of samples with detected results, arithmetic mean, standard deviation, geometric mean, log standard deviation, selected percentiles [25th, 50th, 75th, and 95th], and range) within two tables for each measured pollutant. For a given sample type, descriptive statistics are presented separately for samples collected at the homes of study participants and for samples collected at participating day care centers. In addition, for the home environment, descriptive statistics are presented separately for the homes of day care children and the homes of stay-at-home children. In these tables, the arithmetic and geometric means, as well as the standard deviations for both untransformed and log-transformed measurements, are specified only when more than 50% of the data entering into their calculation exceeded the MDL. In addition, percentiles of the observed data distribution are reported when the data values at the percentile exceeded the MDL, otherwise “<MDL” is displayed.

Overall median levels of the 27 target pollutants in NC multimedia samples are presented by sample type in Table 9.3.1 and Table 9.3.2 for home and day care center environments, respectively. Similarly, Table 9.3.3 and Table 9.3.4 contain median levels of the 26 target pollutants in OH multimedia samples for home and day care center environments, respectively. The pollutants are grouped by pollutant class, and medians are presented only when a pollutant achieved greater than a 50% detection rate in the given medium.

For the eight pollutants for which estimated aggregate potential exposures and potential absorbed doses were calculated, the distributions of valid measurements are presented as boxplots in Figures 9.3.1 through 9.3.5. The sample types and measurements represented within each figure are as follows:

- Figure 9.3.1: concentrations in indoor and outdoor air samples (both NC and OH), expressed in units of ng/m³.
- Figure 9.3.2: concentrations in floor dust and soil samples (both NC and OH), expressed in units of ng/g.
- Figure 9.3.3 (NC) and Figure 9.3.4 (OH): loadings in floor dust samples, hard floor surface wipes, food preparation surface wipes, transferable residues, and dermal wipes (children and adults), expressed in units of ng/m².
- Figure 9.3.5: concentrations in solid food samples (children and adults, for both NC and OH), expressed in units of ng/g. Adult solid food sample data were available only for 2,4-D and 3,5,6-TCP.

Table 9.3.1 Median Levels of 27 Target Pollutants in NC Multimedia Samples Collected from Home Environments^a

Pollutant/Metabolite	Median Values											
	INDOORS						OUTDOORS		PERSONAL			
	Indoor Air (ng/m ³)	Dust (ng/g)	Dust (ng/m ²)	Hard Floor Wipe (ng/m ²)	Food Prep. Wipe (ng/m ²)	Trans. Residue (PUF) (ng/m ²)	Outdoor Air (ng/m ³)	Soil (ng/g)	Dermal Wipe (ng/m ²)	Solid Food (ng/g)	Liquid Food (ng/mL)	Urine (ng/mL)
OP Pesticides and Metabolite												
Chlorpyrifos	6.2	140	94	68	69	35	0.27	< ^b	200	0.19	<	— ^c
Diazinon	2.0	18	16	11	16	33	0.090	<	<	<	<	--
3,5,6-TCP	1.9	96	83	50	--	--	0.23	0.57	190	2.3	<	4.5
OC Pesticides												
<i>alpha</i> -Chlordane	0.88	22	26	9.4	11	<	0.080	<	39	<	<	--
<i>gamma</i> -Chlordane	1.5	31	35	11	14	<	0.12	<	57	<	<	--
<i>p,p'</i> -DDE	<	<	<	<	<	<	<	<	<	0.16	<	--
Heptachlor	6.8	<	<	<	<	<	0.29	<	<	<	<	--
Pyrethroid Pesticides												
Cyfluthrin	<	<	<	<	<	1,000	<	<	<	<	<	--
<i>cis</i> -Permethrin	0.58	800	1,000	460	600	230	<	<	620	<	<	--
<i>trans</i> -Permethrin	0.36	630	850	360	260	210	<	<	490	<	<	--
Acid Herbicides												
2,4-D	<	32	36	<	--	--	<	<	<	0.35	<	0.43
PAHs												
Benz[<i>a</i>]anthracene	<	120	140	15	<	110	0.090	1.4	<	<	<	--
Benzo[<i>b</i>]fluoranthene	0.13	300	400	47	<	23	0.19	3.0	<	<	<	--
Benzo[<i>k</i>]fluoranthene	<	110	120	13	<	11	0.090	1	<	<	<	--
Benzo[<i>ghi</i>]perylene	0.13	180	210	19	<	16	0.14	1.3	<	<	<	--
Benzo[<i>a</i>]pyrene	0.080	180	210	20	<	9.5	0.090	1.9	<	<	<	--
Benzo[<i>e</i>]pyrene	<	180	190	18	<	15	0.11	1.5	<	<	<	--
Chrysene	0.10	170	190	23	<	18	0.12	1.7	<	<	<	--
Dibenz[<i>a,h</i>]anthracene	<	40	46	<	<	<	<	0.61	<	<	<	--
Indeno[1,2,3- <i>cd</i>]pyrene	0.090	160	200	17	<	8.8	0.10	1.2	<	<	<	--
Phthalates												
Benzylbutylphthalate	<	17,000	19,000	27,000	2,100	28,000	<	<	12,000	<	<	--
Di- <i>n</i> -butylphthalate	230	5,600	5,400	5,000	3,400	5,100	<	<	10,000	<	<	--
Phenols												
Bisphenol-A	1.8	<	<	250	260	410	<	<	6,900	4.3	0.45	--
Pentachlorophenol	1.5	60	73	<	--	--	0.91	<	<	<	<	0.36
PCBs												
PCB 52	0.53	<	<	<	<	<	0.090	<	<	<	<	--
PCB 95	0.090	<	<	<	<	<	<	<	<	<	<	--
PCB 101	0.060	<	<	<	<	<	<	<	<	<	<	--

^a For urine, the median was based on data for NC children who were classified as “stay-at-home” children.

^b “<” indicates that the median value falls below the MDL for the pollutant within the specified sample medium.

^c Dashes indicate that no data were available for the pollutant within the specified sample medium.

Table 9.3.2 Median Levels of 27 Target Pollutants in NC Multimedia Samples Collected from Day Care Center Environments^a

Pollutant/Metabolite	Median Values											
	INDOORS						OUTDOORS		PERSONAL			
	Indoor Air (ng/m ³)	Dust (ng/g)	Dust (ng/m ²)	Hard Floor Wipe (ng/m ²)	Food Prep. Wipe (ng/m ²)	Trans. Residue (PUF) (ng/m ²)	Outdoor Air (ng/m ³)	Soil (ng/g)	Dermal Wipe (ng/m ²)	Solid Food (ng/g)	Liquid Food (ng/mL)	Urine (ng/mL)
OP Pesticides and Metabolite												
Chlorpyrifos	3.0	140	570	130	-- ^c	--	0.34	< ^b	170	0.10	<	--
Diazinon	2.3	65	180	33	--	--	0.12	<	65	<	<	--
3,5,6-TCP	0.93	66	200	53	--	--	0.13	<	100	2.9	0.10	5.1
OC Pesticides												
<i>alpha</i> -Chlordane	0.51	43	190	<	--	--	0.15	<	48	<	<	--
<i>gamma</i> -Chlordane	0.78	67	270	9.9	--	--	0.28	<	64	<	<	--
<i>p,p'</i> -DDE	<	<	<	<	--	--	<	<	<	0.16	<	--
Heptachlor	5.4	19	89	<	--	--	0.54	<	<	<	<	--
Pyrethroid Pesticides												
Cyfluthrin	<	<	<	<	--	--	<	<	<	<	<	--
<i>cis</i> -Permethrin	0.11	810	6,900	940	--	--	<	<	730	<	<	--
<i>trans</i> -Permethrin	<	860	4,100	730	--	--	<	<	360	<	<	--
Acid Herbicides												
2,4-D	0.33	23	56	<	--	--	<	<	<	<	<	0.66
PAHs												
Benz[<i>a</i>]anthracene	<	200	980	7.2	--	--	0.060	3.6	<	<	<	--
Benzo[<i>b</i>]fluoranthene	0.11	500	2,300	35	--	--	0.11	9.4	<	<	<	--
Benzo[<i>k</i>]fluoranthene	<	180	770	8.1	--	--	<	3.7	<	<	<	--
Benzo[<i>ghi</i>]perylene	0.10	280	1,200	12	--	--	0.10	4.8	60	<	<	--
Benzo[<i>a</i>]pyrene	<	270	1,300	7.9	--	--	0.070	5.9	<	<	<	--
Benzo[<i>e</i>]pyrene	<	280	1,200	15	--	--	0.070	5.0	<	<	<	--
Chrysene	0.090	220	1,100	53	--	--	0.090	5.3	<	<	<	--
Dibenz[<i>a,h</i>]anthracene	<	64	290	<	--	--	<	1.5	<	<	<	--
Indeno[1,2,3- <i>cd</i>]pyrene	<	230	1,100	12	--	--	0.064	4.4	<	<	<	--
Phthalates												
Benzylbutylphthalate	<	58,000	140,000	160,000	--	--	<	<	<	<	<	--
Di- <i>n</i> -butylphthalate	380	14,000	66,000	18,000	--	--	15	13	12,000	<	<	--
Phenols												
Bisphenol-A	<	31	120	<	--	--	<	<	28,000	3.6	0.79	--
Pentachlorophenol	1.2	81	430	<	--	--	0.77	<	<	<	<	0.43
PCBs												
PCB 52	0.50	8.2	47	<	--	--	0.080	<	<	<	<	--
PCB 95	0.11	<	<	<	--	--	0.050	<	<	<	<	--
PCB 101	0.080	4.3	16	<	--	--	0.050	<	<	<	<	--

^a For urine, the median was based on data for NC children who were classified as “day care” children.

^b “<” indicates that the median value falls below the MDL for the pollutant within the specified sample medium.

^c Dashes indicate that no data were available for the pollutant within the specified sample medium.

Table 9.3.3 Median Levels of 26 Target Pollutants in OH Multimedia Samples Collected from Home Environments^a

Pollutant/Metabolite	Median Values											
	INDOORS						OUTDOORS		PERSONAL			
	Indoor Air (ng/m ³)	Dust (ng/g)	Dust (ng/m ²)	Hard Floor Wipe (ng/m ²)	Food Prep. Wipe (ng/m ²)	Trans. Residue (PUF) (ng/m ²)	Outdoor Air (ng/m ³)	Soil (ng/g)	Dermal Wipe (ng/m ²)	Solid Food (ng/g)	Liquid Food (ng/mL)	Urine (ng/mL)
OP Pesticides and Metabolite												
Chlorpyrifos	1.7	52	64	24	12	20	0.20	< ^b	110	0.19	<	— ^c
Diazinon	0.97	20	22	<	<	7.3	0.17	<	<	<	<	--
3,5,6-TCP	0.63	41	38	9.0	7.6	<	0.23	0.70	120	1.9	<	5.3
OC Pesticides												
<i>alpha</i> -Chlordane	0.26	11	11	<	<	<	0.10	0.76	<	<	<	--
<i>gamma</i> -Chlordane	0.36	12	12	<	<	<	0.11	0.62	<	<	<	--
<i>p,p'</i> -DDE	<	<	<	<	<	<	<	<	<	0.19	<	--
Pyrethroid Pesticides												
Cyfluthrin	<	200	180	<	<	<	<	<	<	<	<	--
<i>cis</i> -Permethrin	<	470	450	89	<	37	<	<	330	<	<	--
<i>trans</i> -Permethrin	<	340	300	94	<	31	<	<	270	<	<	--
Acid Herbicides												
2,4-D	<	120	120	18	<	<	<	<	<	<	<	1.2
PAHs												
Benz[<i>a</i>]anthracene	<	570	620	23	<	8.4	<	15	43	<	<	--
Benzo[<i>b</i>]fluoranthene	<	1,500	1,800	54	<	25	<	33	120	<	<	--
Benzo[<i>k</i>]fluoranthene	<	520	590	22	<	9.3	<	12	64	<	<	--
Benzo[<i>ghi</i>]perylene	<	770	920	28	<	19	<	16	93	<	<	--
Benzo[<i>a</i>]pyrene	<	720	900	32	<	15	<	18	72	<	<	--
Benzo[<i>e</i>]pyrene	<	830	920	35	<	17	<	16	100	<	<	--
Chrysene	<	780	910	43	<	16	<	19	89	<	<	--
Dibenz[<i>a,h</i>]anthracene	<	170	190	8.1	<	<	<	4.2	<	<	<	--
Indeno[1,2,3- <i>cd</i>]pyrene	<	780	950	31	<	13	<	15	80	<	<	--
Phthalates												
Benzylbutylphthalate	<	17,000	16,000	4,800	2,000	5,400	<	<	<	11	<	--
Di- <i>n</i> -butylphthalate	250	5,200	5,700	6,800	5,500	7,500	<	46	<	<	<	--
Phenols												
Bisphenol-A	0.98	<	<	680	500	260	<	<	5,600	3.6	0.47	--
Pentachlorophenol	2.1	60	75	<	<	<	0.43	0.73	<	<	<	1.0
PCBs												
PCB 52	0.42	<	<	<	<	<	0.11	<	<	<	--	--
PCB 95	0.11	<	<	<	<	<	<	<	<	<	--	--
PCB 101	0.090	<	<	<	<	<	<	<	<	<	--	--

^a For urine, the median was based on data for OH children who were classified as “stay-at-home” children.

^b “<” indicates that the median value falls below the MDL for the pollutant within the specified sample medium.

^c Dashes indicate that no data were available for the pollutant within the specified sample medium.

Table 9.3.4 Median Levels of 26 Target Pollutants in OH Multimedia Samples Collected from Day Care Center Environments^a

Pollutant/Metabolite	Median Values											
	INDOORS						OUTDOORS		PERSONAL			
	Indoor Air (ng/m ³)	Dust (ng/g)	Dust (ng/m ²)	Hard Floor Wipe (ng/m ²)	Food Prep. Wipe (ng/m ²)	Trans. Residue (PUF) (ng/m ²)	Outdoor Air (ng/m ³)	Soil (ng/g)	Dermal Wipe (ng/m ²)	Solid Food (ng/g)	Liquid Food (ng/mL)	Urine (ng/mL)
OP Pesticides and Metabolite												
Chlorpyrifos	2.0	170	450	< ^b	-- ^c	--	0.11	<	98	0.14	<	--
Diazinon	0.96	40	220	<	--	--	0.080	<	<	<	<	--
3,5,6-TCP	0.71	58	170	8.8	--	--	0.17	0.63	110	1.5	0.11	4.3
OC Pesticides												
<i>alpha</i> -Chlordane	0.18	11	41	<	--	--	0.064	<	<	<	<	--
<i>gamma</i> -Chlordane	0.26	13	53	<	--	--	0.070	<	<	<	<	--
<i>p,p'</i> -DDE	<	<	<	<	--	--	<	<	<	0.11	<	--
Pyrethroid Pesticides												
Cyfluthrin	<	340	1,400	<	--	--	<	<	<	<	<	--
<i>cis</i> -Permethrin	<	1,000	2,700	59	--	--	<	<	350	<	<	--
<i>trans</i> -Permethrin	<	550	2,600	45	--	--	<	<	280	<	<	--
Acid Herbicides												
2,4-D	<	140	640	<	--	--	<	<	<	<	<	0.87
PAHs												
Benz[<i>a</i>]anthracene	<	1,800	6,200	7.9	--	--	<	20	41	<	<	--
Benzo[<i>b</i>]fluoranthene	<	4,200	13,000	83	--	--	<	35	100	<	<	--
Benzo[<i>k</i>]fluoranthene	<	1,500	4,500	17	--	--	<	15	49	<	<	--
Benzo[<i>ghi</i>]perylene	<	2,300	7,100	15	--	--	<	19	78	<	<	--
Benzo[<i>a</i>]pyrene	<	2,100	7,800	15	--	--	<	20	65	<	<	--
Benzo[<i>e</i>]pyrene	<	2,200	7,000	34	--	--	<	19	67	<	<	--
Chrysene	0.072	2,400	7,800	120	--	--	0.090	20	91	<	<	--
Dibenz[<i>a,h</i>]anthracene	<	470	1,500	<	--	--	<	4.8	<	<	<	--
Indeno[1,2,3- <i>cd</i>]pyrene	<	2,200	7,300	15	--	--	<	20	70	<	<	--
Phthalates												
Benzylbutylphthalate	<	29,000	94,000	210,000	--	--	<	<	<	9.0	<	--
Di- <i>n</i> -butylphthalate	320	15,000	53,000	99,000	--	--	21	<	14,000	<	<	--
Phenols												
Bisphenol-A	0.92	28	160	410	--	--	<	<	3,000	3.5	0.51	--
Pentachlorophenol	1.3	36	00	<	--	--	0.22	<	<	<	<	0.81
PCBs												
PCB 52	0.49	7.2	26	<	--	--	0.10	<	<	<	--	--
PCB 95	0.10	6.0	16	<	--	--	<	<	<	<	--	--
PCB 101	0.10	6.1	16	<	--	--	<	<	<	<	--	--

^a For urine, the median was based on data for OH children who were classified as “day care” children.

^b “<” indicates that the median value falls below the MDL for the pollutant within the specified sample medium.

^c Dashes indicate that no data were available for the pollutant within the specified sample medium.

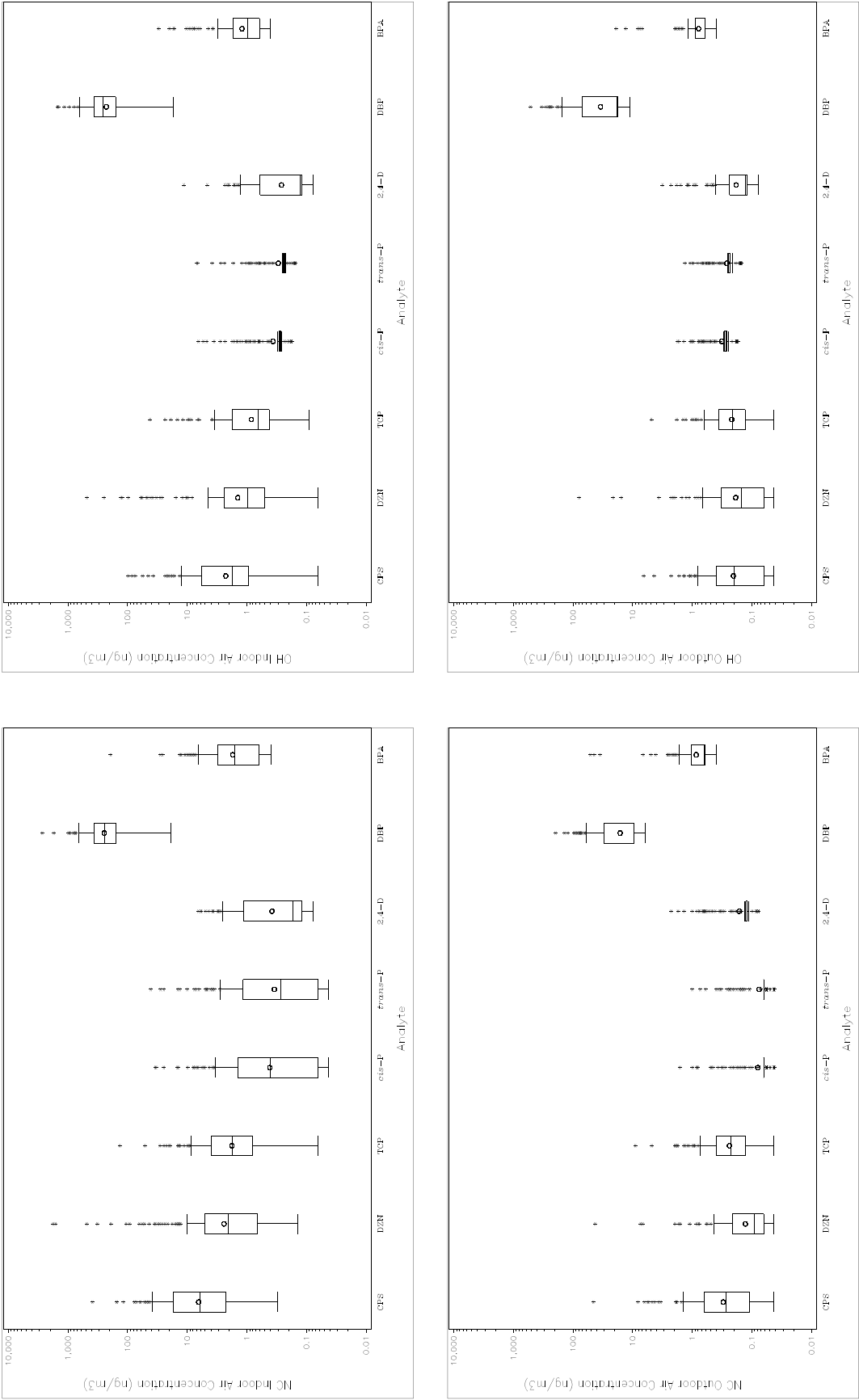


Figure 9.3.1 Boxplots of Pollutant Concentrations in Indoor Air and Outdoor Air Samples Collected at the Homes and Day Care Centers of Participating NC and OH Children, for Eight Pollutants

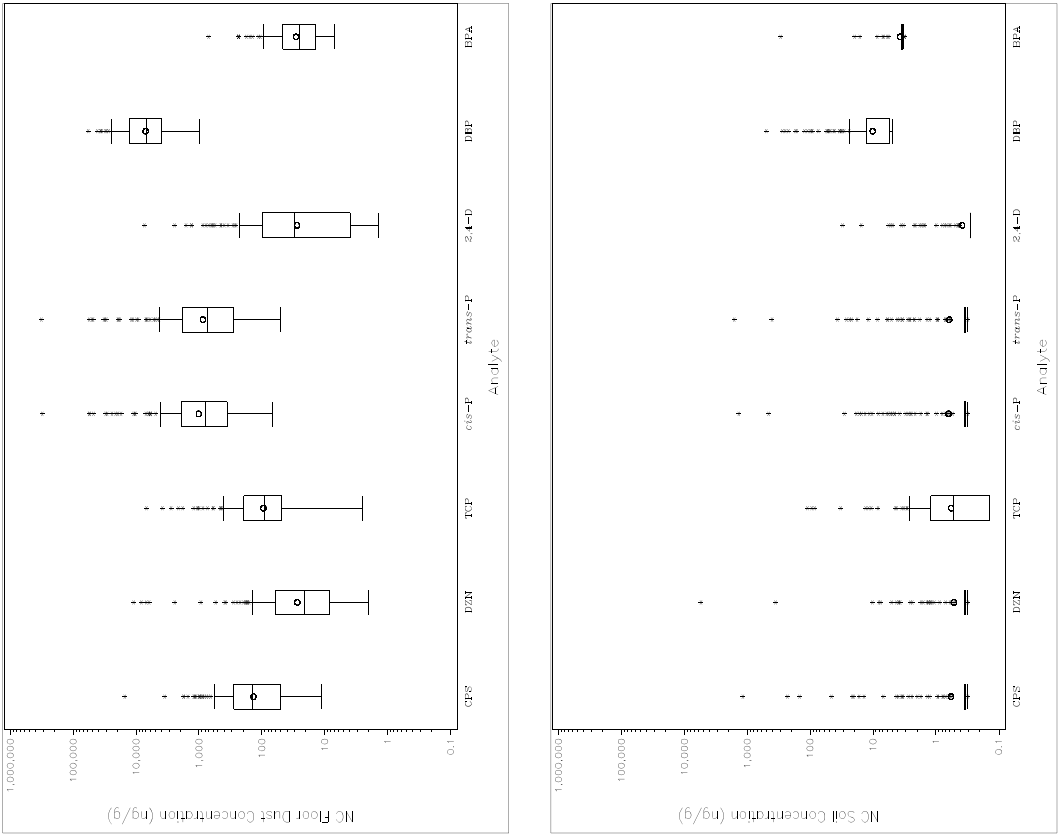


Figure 9.3.2 Boxplots of Pollutant Concentrations in Dust and Soil Samples Collected at the Homes and Day Care Centers of Participating NC and OH Children, for Eight Pollutants

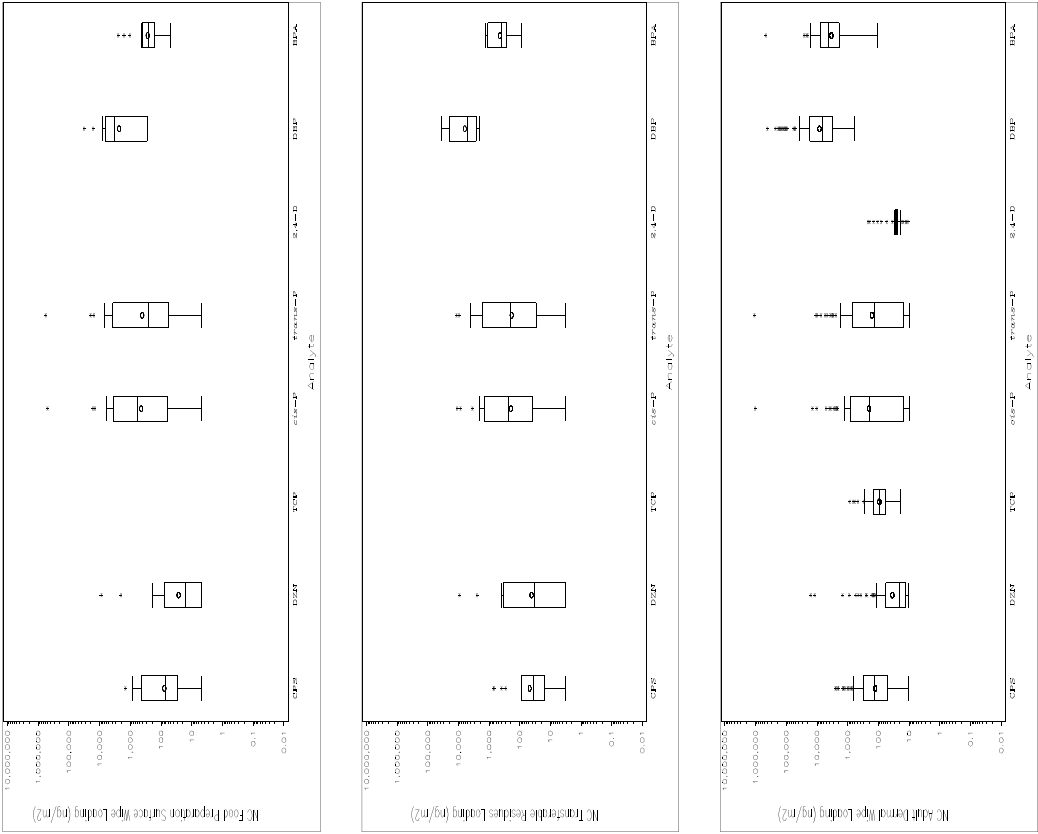
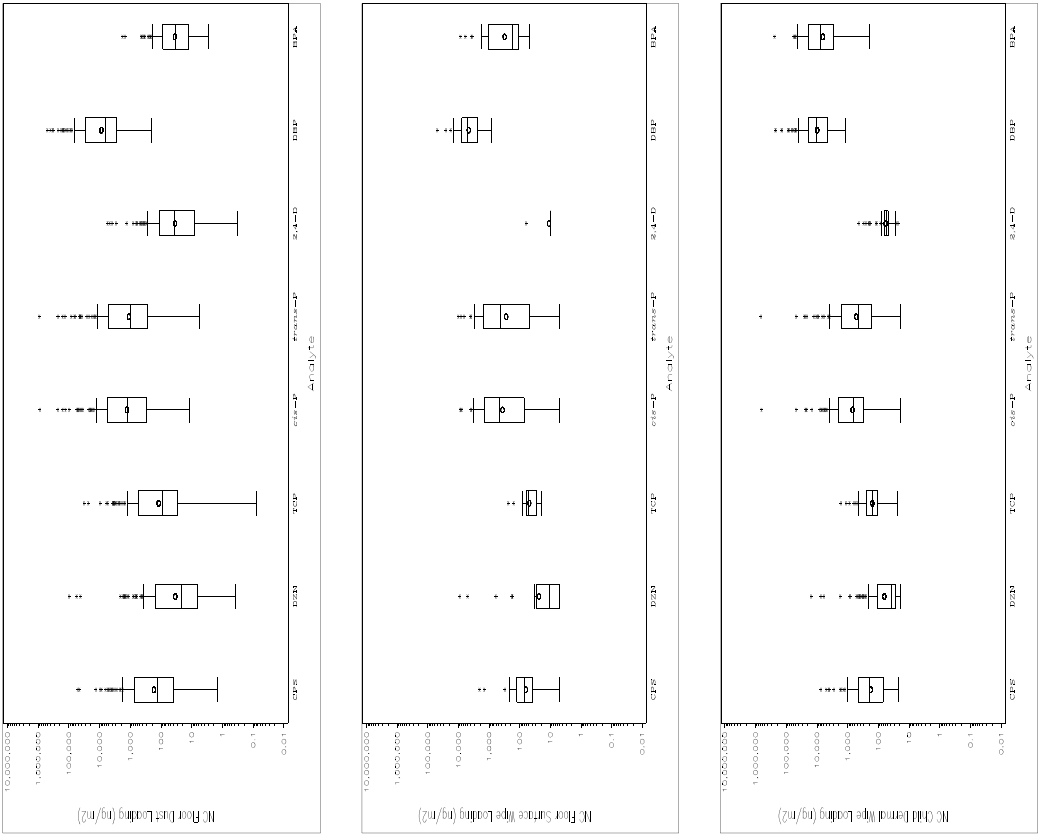


Figure 9.3.3 Boxplots of Pollutant Loadings in Dust, Hard Floor Surface Wipe, Food Preparation Surface Wipe, Transferable Residues, and Children and Adult Dermal Wipe Samples Collected at the Homes and Day Care Centers of Participating NC Children, for Eight Pollutants

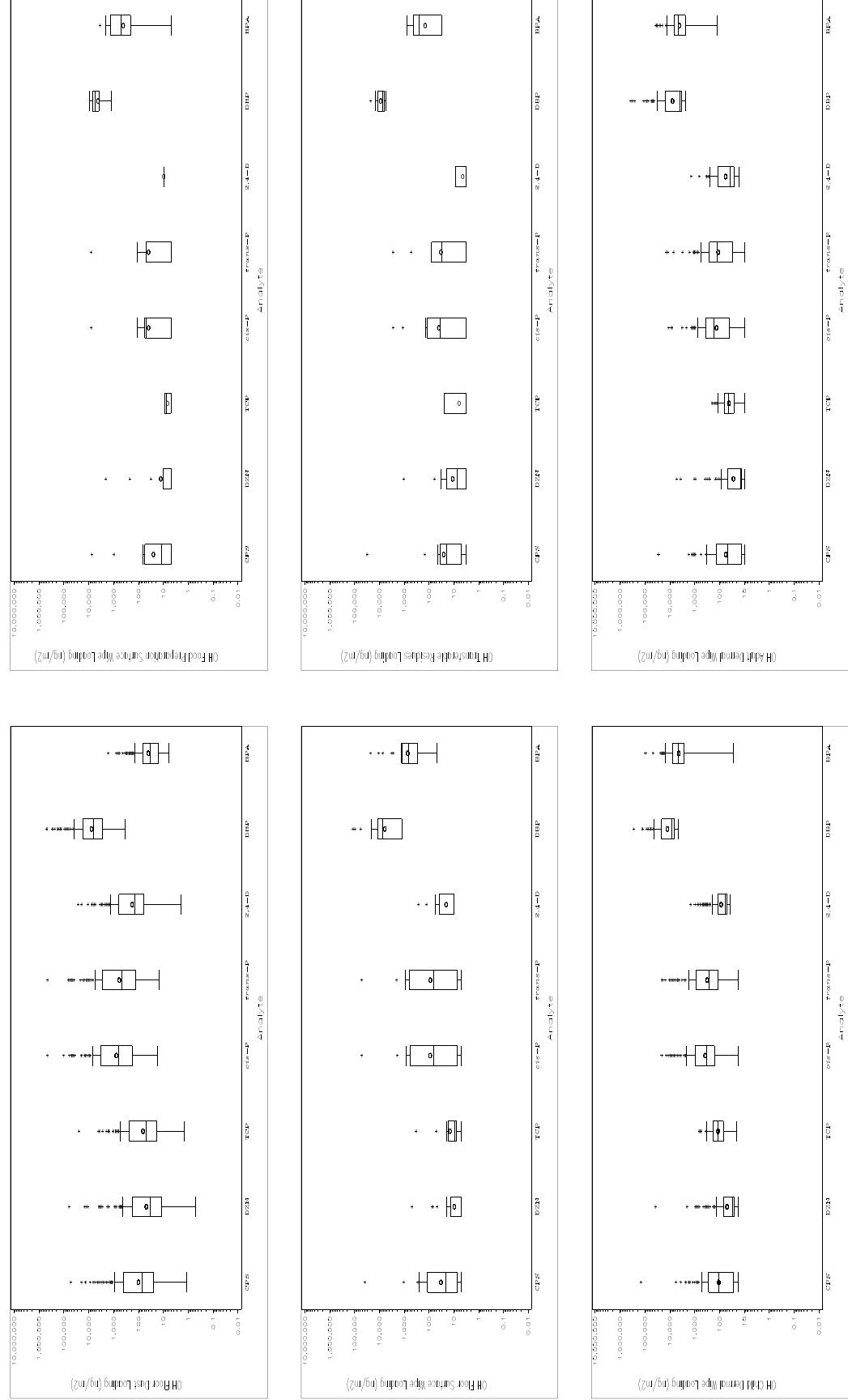


Figure 9.3.4 Boxplots of Pollutant Loadings in Dust, Hard Floor Surface Wipe, Food Preparation Surface Wipe, Transferable Residues, and Children and Adult Dermal Wipe Samples Collected at the Homes and Day Care Centers of Participating OH Children, for Eight Pollutants

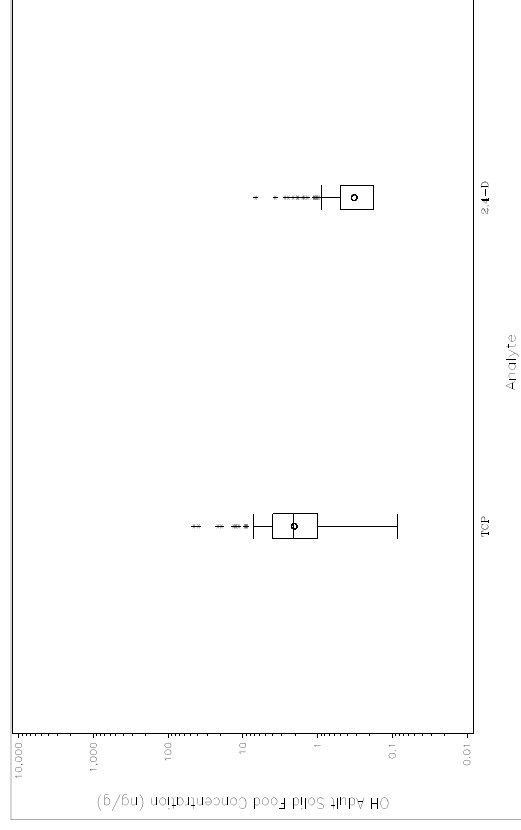
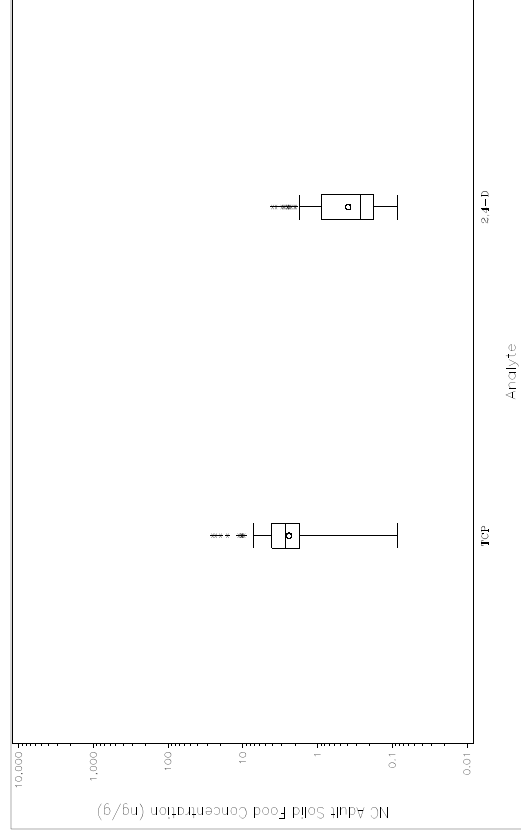
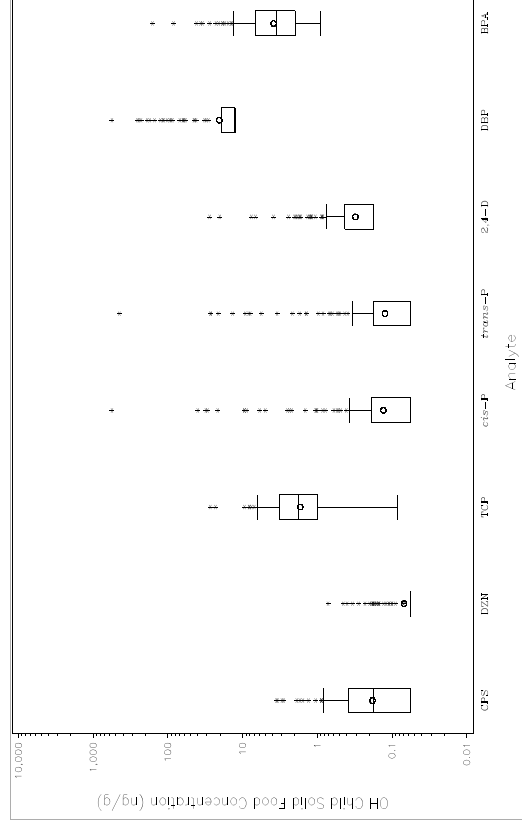
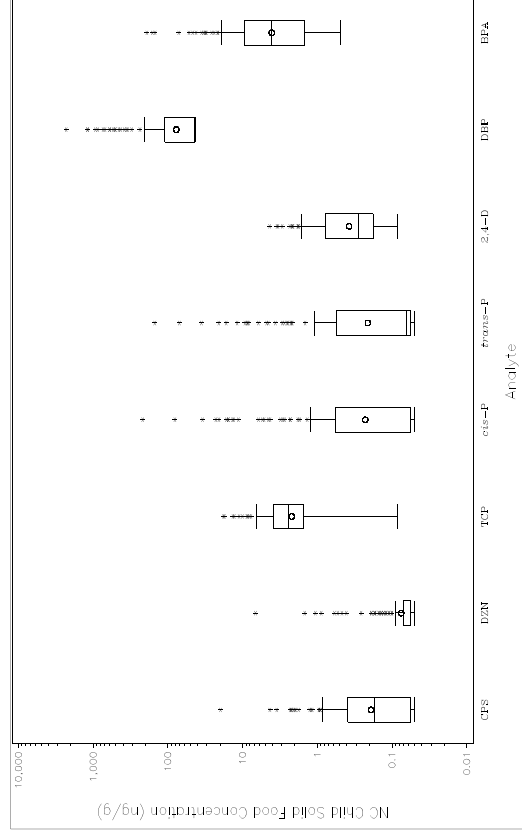


Figure 9.3.5 Boxplots of Pollutant Concentrations in Solid Food Samples Collected from Participating NC and OH Children and Adults, for Eight Pollutants

Each boxplot shows the distribution as a box-type diagram, where the lower and high limits of the box represent the 25th and 75th percentiles, respectively, of the observed data distribution. The length of the box (from top to bottom) represents the data's interquartile range (IQR), or the difference between the 75th and 25th percentiles, and is an indicator of data variability. A horizontal line within the box represents the 50th percentile, or median. The geometric mean is plotted with an open circle. Vertical lines extend from the top and/or bottom of the box to the value of the most extreme data point which falls within 1.5 IQRs from the box. Each data point extending beyond 1.5 IQRs from the box is plotted by an asterisk. Abbreviations for the pollutants that are specified along the horizontal axis of each figure were defined in the last paragraph of Section 9.2.

The boxplots show that, even when plotted using a logarithmic vertical axis, most data distributions for the eight pollutants and metabolites show skewness toward lower levels within all sample media, and most contain several measurements within the upper quartile that are at a considerable distance from the distribution's 75th percentile (i.e., top of box). This supports the approach of performing data analyses on log-transformed data, although some skewness remains in the distribution of the log-transformed data. Boxplots portrayed as very short boxes (e.g., measurements of the two permethrins within outdoor air samples from NC and OH) represent measurements that are nearly constant, which occurs most often when a large percentage of measurements are not detected. Other observations include the following:

- Indoor air and floor dust measurements tend to cover wider ranges than outdoor air and soil measurements, especially in NC.
- Soil concentrations tend to have highly skewed distributions across all pollutants, although on average, these concentrations are lower than for indoor dust.
- The distributions of loadings from surface wipe samples tend to be consistent between different surface types.
- Di-*n*-butylphthalate is frequently associated with higher measurements across the pollutants and metabolites, especially with regard to concentrations in air, dust, soil, and food samples.

9.3.2 *Sub-goal 1.2: To Determine on Average How Multimedia Concentrations Differ Between Urban and Rural Environments, Low-Income and Middle/High-Income Environments, and Microenvironments (i.e., home for families with stay-at-home children, home for families with day care children, and day care centers)*

To address this sub-goal, statistical analysis was performed on log-transformed measurements whenever at least 50% of these measurements were detected for a given pollutant and multimedia sample type. An analysis of variance using models (8-5) and (8-6) from Section 8.5.2.1 was performed to calculate a least squares mean of the log-transformed measurements for each environment type and microenvironment of interest. For a given pair of environment types

or microenvironments, the difference in the least-squares mean concentrations was calculated within the analysis of variance along with a 95% confidence interval on this difference, and a t-test was applied to test whether the difference was statistically significant. This difference and its confidence interval were exponentiated back to regular units, resulting in a ratio of the least-squares geometric mean concentrations for one environment type versus another and an approximate 95% confidence interval on this ratio.

For ease of discussion here and throughout Chapter 9, children recruited from the child day care sampling frame are referred to as “day care children,” while those from the telephone screening sampling frame are referred to as “stay-at-home children.” Analyses were performed and results are reported separately for NC and OH phases of the study, and pollutants are addressed according to their chemical class. Because no day care centers in this study had recent pesticide applications prior to multimedia sampling, no data were available from day care centers for food preparation surface wipes and transferable residue samples. In addition, no adult food or dermal wipe data were available for the day care environment.

For indoor and outdoor environmental samples and personal (food) samples, ratios and their 95% confidence intervals are presented by pollutant and sample type in Appendix K (Table K-1 for NC and Table K-2 for OH). These ratios are of the least-squares geometric mean concentration for the first environment type specified in the column heading versus the second specified type, and 95% confidence intervals are shown in parentheses. The t-test applied to the log-transformed data also is a test of whether this ratio differs significantly from one; p-values associated with these tests are also given in Appendix K (Table K-3 for NC and Table K-4 for OH). Within these tables, p-values for tests that compare a specific pair of microenvironments, as well as home versus day care environments, are presented only when the test for general differences among the three microenvironments was significant at the 0.05 level.

Table 9.3.5 has condensed the information provided within Tables K-1 and K-2 of Appendix K for a given sample type by presenting only those pollutants whose ratios were significantly different from one at the 0.05 level for pairs of strata determined by urbanicity, income status, or environmental type. Within Table 9.3.5, a dashed cell indicate that the statistical analysis was not performed because either the study design did not permit such analysis or the data were less than 50% detected. A blank cell means that the ratio was not significantly different from one at the 0.05 level. If a pollutant or sample type does not appear in this table, then none of the estimated ratios were significantly different from one at the 0.05 level.

To illustrate how to interpret the numbers in Tables K-1 and K-2 of Appendix K and Table 9.3.5, consider the results presented for *alpha*-chlordane in NC indoor floor dust (ng/m²). Results of the model fitting indicated that the least squares mean log-transformed measure was 4.69 for the low-income stratum and 3.93 for the middle/high-income stratum (data not shown). The difference in these two least squares means is 0.76, which when exponentiated, becomes 2.13. It is interpreted as the estimated ratio of least-squares geometric mean concentrations between low-income and middle/high-income environments, and it implies that the geometric mean of *alpha*-chlordane in floor dust (ng/m²) was estimated to be 113% higher in low-income

Table 9.3.5. Environmental and Food Samples: Estimated Ratios of Geometric Mean Pollutant Levels Between Urban and Rural, Low-Income and Middle/High-Income, and Home and Day Care Environments, When These Ratios Were Significantly Different from One at the 0.05 Level^a

Pollutant/Metabolite	Sample Medium ^b	Estimated Ratio of Geometric Means (When Significantly Different from 1 at the 0.05 Level)					
		North Carolina			Ohio		
		Urban vs. Rural	Low- vs. Mid/High-Income	Home vs. Day Care	Urban vs. Rural	Low- vs. Mid/High-Income	Home vs. Day Care
OP Pesticides and Metabolites							
Chlorpyrifos	Outdoor air		0.64*				1.74*
	Dust (ng/g)					2.09*	0.37*
	Dust (ng/m ²)		2.88**	0.27*		3.39**	0.14**
	C-solid food					2.06**	
Diazinon	Indoor air		3.59**				
	Outdoor air				2.70**	0.60*	
	Dust (ng/g)		2.06*	0.36*			
	Dust (ng/m ²)		6.32**	0.10**		2.24*	0.17**
IMP	Indoor air	--	--	--		1.66*	
	Outdoor air	--	--	--	3.87**	0.48**	
	Dust (ng/m ²)	--	--	--			0.39*
3,5,6-TCP	Indoor air					1.72*	
	Outdoor air		0.65*	1.84*			
	Soil			2.29*	2.80**		
	Dust (ng/m ²)		3.40**			2.35*	0.29**
	C-solid food		0.48**				
OC Pesticides							
<i>alpha</i> -Chlordane	Outdoor air			0.44**			1.63*
	Soil	--	--	--		2.12*	2.80*
	Dust (ng/g)			0.42*			
	Dust (ng/m ²)		2.13*	0.09**			
<i>gamma</i> -Chlordane	Outdoor air		1.60*	0.41*			1.62*
	Dust (ng/g)			0.40*			
	Dust (ng/m ²)			0.09**			
Pyrethroid Pesticides							
Cyfluthrin	Dust (ng/g)	--	--	--	2.33*		
	Dust (ng/m ²)	--	--	--		2.12*	0.23**
<i>cis</i> -Permethrin	Indoor air		4.17**		--	--	--
	Dust (ng/m ²)		3.19**	0.18**		2.21*	0.20**
<i>trans</i> -Permethrin	Indoor air		3.85**		--	--	--
	Dust (ng/m ²)		2.89*	0.16**			0.19**

Table 9.3.5. Environmental and Food Samples: Estimated Ratios of Geometric Mean Pollutant Levels Between Urban and Rural, Low-Income and Middle/High-Income, and Home and Day Care Environments, When These Ratios Were Significantly Different from One at the 0.05 Level^a (cont.)

Pollutant/Metabolite	Sample Medium ^b	Estimated Ratio of Geometric Means (When Significantly Different from 1 at the 0.05 Level)					
		North Carolina			Ohio		
		Urban vs. Rural	Low- vs. Mid/High-Income	Home vs. Day Care	Urban vs. Rural	Low- vs. Mid/High-Income	Home vs. Day Care
Acid Herbicides							
2,4-D	Dust (ng/g)	3.20**	0.22**		2.38*	0.24**	
	Dust (ng/m ²)	2.64*				0.39*	0.38*
	C-solid food ^c	1.60*			--	--	--
PAHs							
Benz[a]anthracene	Outdoor Air	1.58*					
	Soil		2.55**				
	Dust (ng/g)		0.54**		3.97**	0.58*	0.45*
	Dust (ng/m ²)			0.12**	3.19**		0.17**
Benzo[b]fluoranthene	Indoor air		1.95**		--	--	--
	Soil		2.54*				
	Dust (ng/g)		0.57**		3.63**	0.57*	0.44**
	Dust (ng/m ²)			0.12**	2.92**		0.16**
Benzo[k]fluoranthene	Soil		2.21*				
	Dust (ng/g)		0.56**		3.35**	0.58*	0.43**
	Dust (ng/m ²)			0.13**	2.70*		0.16**
Benzo[ghi]perylene	Indoor air		1.76**		--	--	--
	Soil		2.49**				
	Dust (ng/g)		0.57**		3.28**	0.56*	0.43**
	Dust (ng/m ²)			0.12**	2.64*		0.16**
Benzo[a]pyrene	Indoor air		1.94**		--	--	--
	Outdoor air	1.47*			--	--	--
	Soil		2.30*				
	Dust (ng/g)		0.55**		3.57**	0.55*	0.49*
	Dust (ng/m ²)			0.13**	2.87*		0.18**
Benzo[e]pyrene	Soil		2.49**				
	Dust (ng/g)		0.60*		3.40**	0.57*	0.45*
	Dust (ng/m ²)			0.12**	2.73*		0.16**
Chrysene	Indoor air		1.76**		--	--	--
	Soil		2.53**				
	Dust (ng/g)		0.59*		3.71**	0.56*	0.43**
	Dust (ng/m ²)			0.12**	2.99**		0.16**

Table 9.3.5. Environmental and Food Samples: Estimated Ratios of Geometric Mean Pollutant Levels Between Urban and Rural, Low-Income and Middle/High-Income, and Home and Day Care Environments, When These Ratios Were Significantly Different from One at the 0.05 Level^a (cont.)

Pollutant/Metabolite	Sample Medium ^b	Estimated Ratio of Geometric Means (When Significantly Different from 1 at the 0.05 Level)					
		North Carolina			Ohio		
		Urban vs. Rural	Low- vs. Mid/High-Income	Home vs. Day Care	Urban vs. Rural	Low- vs. Mid/High-Income	Home vs. Day Care
Dibenz[<i>a,h</i>]anthracene	Dust (ng/g)		0.57**	0.52*	3.66**	0.58*	0.42**
	Dust (ng/m ²)			0.12**	2.94*		0.15**
Indeno[1,2,3- <i>cd</i>]pyrene	Indoor air		1.90**		--	--	--
	Soil		2.61**				
	Dust (ng/g)		0.59**		3.43**	0.56*	0.41**
	Dust (ng/m ²)			0.12**	2.75*		0.15**
Phthalates							
Benzylbutylphthalate	Dust (ng/g)		1.76**	0.48**			0.41**
	Dust (ng/m ²)		4.75**	0.10**		2.52**	0.14**
Di- <i>n</i> -butylphthalate	Indoor air			0.56**			0.56**
	Dust (ng/g)			0.50**			0.38**
	Dust (ng/m ²)		2.56**	0.10**		1.76*	0.14**
Phenols							
Bisphenol-A	Dust (ng/m ²)	--	--	--			0.33**
Pentachlorophenol	Indoor air		1.77*				2.16*
	Outdoor air		0.69*				
	Dust (ng/m ²)		2.56*	0.24*			
PCBs							
PCB 52	Dust (ng/m ²)	--	--	--			0.24**

^a Dashed cells indicate that no analysis was performed due to the data being less than 50% detected. Blank cells indicate that a ratio was estimated but was not significantly different from one at the 0.05 level. Note that pollutants, or sample media for a given pollutant, have been excluded from this table if all cells within the rows corresponding to these pollutants or media would have been blank or dashed within this table. All estimated ratios for each sample medium and each pollutant, along with corresponding 95% confidence intervals on these ratios, are presented in Table K-1 (NC) and Table K-2 (OH) of Appendix K.

^b "Dust" = Indoor floor dust collected via HVS3 vacuum. "C-solid food" = Children's solid food.

* Significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Significantly different from 1 at the 0.01 level.

environments than in middle/high-income environments. The 95% confidence interval of (1.03, 4.41) indicates that we can conclude with 95% confidence that the actual ratio falls within this interval. The single asterisk indicates that the estimated ratio (2.13) was significantly different from one (and, equivalently, that the difference of 0.76 between the least squares means of the log-transformed measurements was significantly different from zero) at the 0.05 level, but not at the 0.01 level ($p=0.041$). For *alpha*-chlordane in NC outdoor air samples, the estimated ratio of home versus day care environments was 0.44, implying that the geometric mean concentration at home environments was 44% of the corresponding geometric mean for day care centers. This ratio was significantly different from one at the 0.01 level ($p=0.009$).

For dermal wipe loadings, ratios and confidence intervals are presented by pollutant for children and adults in Appendix K (Table K-5 for NC and Table K-6 for OH). Appendix K also contains tables of p-values associated with t-tests applied to the log-transformed dermal wipe loadings (Table K-7 for NC and Table K-8 for OH). Those ratios found to be significantly different from one at the 0.05 level are listed in Table 9.3.6 for both states. All of these tables are constructed, and their contents are interpreted, in the same manner as in Tables K-1 through K-4 of Appendix K and Table 9.3.5.

9.3.2.1 Comparing Pollutant Concentrations in NC Multimedia Samples Among Strata

Significant differences between urban and rural sampling locations were observed rather infrequently in the NC data. Significant differences occurred at the 0.01 level only in two instances: for concentrations of 2,4-D in indoor floor dust (ng/g), and for loadings of bisphenol-A in adult dermal wipes. On average, concentrations of 2,4-D in floor dust (ng/g) were about 3.2 times higher in urban locations than in rural locations. Bisphenol-A levels in adult dermal wipe samples were about 2.6 times higher when taken in urban locations.

Within Table 9.3.5 and 9.3.6, across all pollutants and sample media for NC, significant differences in pollutant levels were most frequently observed between low-income and middle/high-income locations. In fact, whenever a pollutant had at least 50% detected data for NC in at least one sample medium, therefore allowing that data to be analyzed statistically, significant differences were observed at the 0.05 level between low-income and middle/high-income strata for that pollutant in at least one sample medium. Incidences of significant differences at the 0.01 level between low-income and middle/high-income strata were as follows, according to pollutant class:

- For the two OP pesticides, chlorpyrifos and diazinon, along with the metabolite 3,5,6-TCP, significant differences were observed at the 0.01 level in floor dust loadings (ng/m²), with loadings in low-income households ranging from 2.9 times (chlorpyrifos) to 6.3 times (diazinon) higher on average than middle/high-income households. Levels of 3,5,6-TCP in children's solid food samples collected in low-income households were about 48% of the levels in samples collected in middle/high-income areas; this difference was significant at the 0.01 level. Diazinon levels in indoor

Table 9.3.6. Dermal Wipe Samples: Estimated Ratios of Geometric Mean Pollutant Levels Between Urban and Rural, Low-Income and Middle/High-Income, and Home and Day Care Environments, When These Ratios Were Significantly Different from One at the 0.05 Level^a

Pollutant/Metabolite	Type of Dermal Wipe Sample	Estimated Ratio of Geometric Means (When Significantly Different from 1 at the 0.05 Level)					
		North Carolina			Ohio		
		Urban vs. Rural	Low- vs. Mid/High-Income	Home vs. Day Care	Urban vs. Rural	Low- vs. Mid/High-Income	Home vs. Day Care
OP Pesticides and Metabolites							
Chlorpyrifos	Child			1.75*		2.53**	
	Adult		1.91*	--		4.08**	--
3,5,6-TCP	Child			1.88**			
	Adult		1.47*	--			--
PAHs							
Chrysene	Adult	--	--	--	1.81*		--
Phthalates							
Benzylbutylphthalate	Child		1.64*		--	--	--
Phenols							
Bisphenol-A	Child			0.33**			2.90**
	Adult	2.61**		--			--

^a Dashed cells indicate that the study data or design did not permit the given ratio to be estimated for the specified type of dermal wipe sample, or that no analysis was performed due to the data being less than 50% detected. Blank cells indicate that a ratio was estimated but was not significantly different from one at the 0.05 level. Note that pollutants, or sample types for a given pollutant, have been excluded from this table if all cells within the rows corresponding to these pollutants or sample types would have been blank or dashed within this table. All estimated ratios for each sample type and each pollutant, along with corresponding 95% confidence intervals on these ratios, are presented in Table K-5 (NC) and Table K-6 (OH) of Appendix K.

* Significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Significantly different from 1 at the 0.01 level.

air were about 3.6 times higher in low-income areas compared to middle/high-income areas; this difference was significant at the 0.01 level.

- Concentrations of *cis*- and *trans*-permethrin in indoor air were about 4 times higher in low-income locations compared to middle/high-income locations, with the difference being significant at the 0.01 level. For both pollutants, low-income locations had higher loadings in floor dust compared to middle/high-income locations, with loadings being about 220% higher for *cis*-permethrin (which was significant at the 0.01 level).
- Concentrations of 2,4-D in floor dust (ng/g) were about 4.5 times higher in middle/high-income locations compared to low-income locations; this difference was significant at the 0.01 level.

- Among the PAHs, concentrations in indoor floor dust were higher for middle/high-income locations, while concentrations in yard soil and indoor air were higher for low-income locations. For all nine target PAHs, indoor floor dust from middle/high-income locations had concentrations (ng/g) that were from 67% to 85% higher than low-income locations, with the difference being significant at the 0.01 level for all but benzo[*e*]pyrene and chrysene. For all PAHs except dibenz[*a,h*]anthracene, yard soil from low-income locations had concentrations that were from 121% to 161% higher than middle/high-income locations, with the difference being significant at the 0.01 level for benz[*a*]anthracene, benzo[*ghi*]perylene, benzo[*e*]pyrene, chrysene, and indeno[1,2,3-*cd*]pyrene. For five PAHs (benzo[*b*]fluoranthene, benzo[*ghi*]perylene, benzo[*a*]pyrene, chrysene, and indeno[1,2,3-*cd*]pyrene), indoor air concentrations ranged from 76% to 94% higher in low-income areas than in middle/high-income areas, with the difference being significant at the 0.01 level.
- For di-*n*-butylphthalate and benzylbutylphthalate, loadings in indoor floor dust (ng/m²) were 2.6 and 4.8 times as high, respectively, in low-income locations than in middle/high-income locations, with the difference being significant at the 0.01 level. In addition, benzylbutylphthalate concentration in indoor floor dust (ng/g) averaged nearly 80% higher in low-income locations, with the difference also being significant at the 0.01 level.

Across pollutants and sample media, frequent incidences of significant differences in the NC data also occurred between home and day care environments. Home environments often had lower pollutant levels on average compared to day care environments, with 3,5,6-TCP being the primary exception. Incidences of significant differences at the 0.01 level were as follows:

- Among the OC pesticides and metabolite, only two instances of significant difference between home and day care environments at the 0.01 level were observed: for diazinon in floor dust (ng/m²), where home environments averaged only 10% of the loading found in day care environments, and for 3,5,6-TCP in children's dermal wipes, where samples taken in home environments averaged 88% higher than in day care environments.
- For both *alpha*- and *gamma*-chlordane, differences in loadings found in indoor floor dust (ng/m²) were significant between home and day care environments at the 0.01 level, with home environments averaging only 9% of the loadings in day care environments. For indoor floor dust concentration (ng/g) and outdoor air concentration, home environments averaged about 44% of the levels of *alpha*- and *gamma*-chlordane compared to day care environments, with the difference being significant at the 0.01 level for *alpha*-chlordane in outdoor air samples.
- For both *cis*- and *trans*-permethrin, significant differences were observed at the 0.01 level between home and day care environments for loadings in indoor floor dust (ng/m²), with home environments having slightly less than 20% of the loadings observed in day care environments, on average.

- For each of the nine PAHs, loadings (ng/m²) in indoor floor dust differed significantly at the 0.01 level between home and day care environments, with home environments having approximately 12% of the loadings observed in day care environments, on average.
- For benzylbutylphthalate and di-*n*-butylphthalate, levels in indoor floor dust samples taken from home environments averaged approximately 10% of the levels for day care environments when expressed as a loading (ng/m²) and approximately 50% of the levels for day care environments when expressed as a concentration (ng/g). In each case, the difference was significant at the 0.01 level. In addition, concentrations of di-*n*-butylphthalate in indoor air were significantly different at the 0.01 level, with home environments averaging about 56% of the levels observed in day care environments.
- Among the two phenols, significant differences occurred between home and day care environments at the 0.01 level only for bisphenol-A in children's dermal wipe samples, where samples taken from day care environments had loadings that were approximately three times higher than for samples taken from home environments.

9.3.2.2 Comparing Pollutant Concentrations in OH Multimedia Samples Among Strata

Incidences of significant differences in sample media concentrations between urban and rural locations occurred more frequently for OH data compared to NC data, with the following differences being significant at the 0.01 level:

- Among the OP pesticides and metabolites, significant differences in outdoor air concentrations between urban and rural locations were observed at the 0.01 level for diazinon and IMP, with urban locations averaging 2.7 and 3.9 times the concentrations, respectively, of rural locations. In addition, for 3,5,6-TCP, significant differences in soil concentrations were observed at the 0.01 level, with urban locations averaging 2.8 times the concentrations of rural locations.
- Among all nine PAHs, significant differences were observed between urban and rural locations for indoor floor dust levels. When expressed as a concentration (ng/g), significance was at the 0.01 level, and urban locations averaged from 3.3 to 4.0 times higher loadings compared to rural locations. When expressed as a loading (ng/m²), significance was at the 0.01 level for three PAHs (benz[*a*]anthracene, benzo[*b*]fluoranthene, and chrysene), where urban locations averaged from 2.9 to 3.2 times higher concentrations compared to rural locations.

While frequent occurrences of significant differences were observed in the OH data between low-income and middle/high-income strata, their occurrence was somewhat less frequent for OH than for NC. Incidences of significant differences at the 0.01 level were as follows, according to pollutant class:

- The most frequent occurrences of significant differences among income strata occurred with the OP pesticides and metabolites. Significant differences at the 0.01 level occurred for chlorpyrifos in dermal wipe samples for both children and adults, with low-income locations having 2.5 and 4.1 times the levels of middle/high-income locations, respectively. Significant differences at the 0.01 level also occurred for chlorpyrifos in children's solid food samples, where low-income locations had roughly twice the levels of middle/high-income locations, and for IMP in outdoor air samples, where middle/high-income locations had roughly twice the levels of low-income locations. For chlorpyrifos, diazinon, and 3,5,6-TCP, loadings in indoor floor dust (ng/m²) averaged from 2.2 to 3.4 times higher in low-income locations than in middle/high-income locations, with the difference significant at the 0.01 level for chlorpyrifos.
- Concentrations of 2,4-D in indoor floor dust (ng/g) differed significantly at the 0.01 level between low-income and middle/high-income locations, with middle/high-income locations having about four times higher concentrations on average compared to low-income locations.
- Loadings of benzylbutylphthalate in indoor floor dust (ng/m²) differed significantly at the 0.01 level, with loadings in low-income locations being 2.5 times higher than for middle/high-income locations.

The following occurrences of significant differences in OH data between home and day care environments were observed at the 0.01 level:

- For all OP pesticides and metabolites except IMP, significant differences in loadings were observed at the 0.01 level between home and day care environments for indoor floor dust (ng/m²), with home environments having from 14% to 29% of the loadings observed in day care environments, on average.
- For all three pyrethroid pesticides, significant differences in loadings were observed at the 0.01 level between home and day care environments for indoor floor dust (ng/m²), with day care environments having about five times higher loadings compared to home environments.
- Among the PAHs, significant differences were observed between home and day care environments for indoor floor dust levels. When expressed as a loading (ng/m²), significance was at the 0.01 level for all nine PAHs, where home environments averaged from 15% to 18% of the loadings associated with day care environments. When expressed as a concentration (ng/g), significance was at the 0.01 level all but three PAHs (benz[a]anthracene, benzo[a]pyrene, and benzo[e]pyrene), where home environments averaged from 41% to 45% of the concentrations associated with day care environments.
- Similar to the PAHs, significant differences were present at the 0.01 level for both phthalates in indoor floor dust samples, regardless of whether the levels were expressed

as a concentration or a loading. When expressed as a loading (ng/m²), home environments averaged 14% of the loadings associated with day care environments, while when expressed as a concentration (ng/g), home environments averaged about 40% of the concentrations associated with day care environments. In addition, indoor air concentrations of di-*n*-butylphthalate differed significantly at the 0.01 level between home and day care environments, with day care environments having roughly twice the concentration on average compared to home environments.

- For bisphenol-A, significant differences were observed at the 0.01 level between home and day care environments for loadings in floor dust samples (ng/m²), with day care environments averaging roughly three times higher loadings compared to home environments, and for children's dermal wipe samples, where samples taken in home environments had about 2.9 times higher levels compared to day care environments.
- Significant differences were observed at the 0.01 level in floor dust loading (ng/m²) of PCB 52, with day care environments having roughly four times the loadings, on average, compared to home environments.

9.4 Goal 2: To Quantify the Distributions of Child Characteristics, Activities, and Location that are Important for Exposure.

Important factors for helping to determine the estimated potential exposures and potential absorbed doses of the children and their primary caregivers to pollutants in these environments included their physical characteristics, activity patterns, locations where they spend their time, and the amount of food they consume. Table 9.4.1 contains summary statistics of the physical characteristics of the children and their primary caregivers including age, gender, body weight, height, and hand surface area in both states. Table 9.4.2 provides the common activities of the preschool children that were recorded by the parents in the questionnaires. These included such activities as frequency of placing toys and other objects in the mouth, pacifier use, teething, and frequency of washing hands. Table 9.4.3 and Table 9.4.4 contain the daily percentage of time that the participating children and adults, respectively, spent indoors or outdoors at their homes, day care centers, or other places. The children spent a daily average of 94% and 90% of their time indoors in NC and OH, respectively, while adults spent a daily average of 73% and 69% of their time indoors at their home in NC and OH, respectively. Table 9.4.5 contains summary statistics for the amount of solid food (g) and liquid food (mL) samples that were collected over the 48-h sampling period from children and their primary caregivers by group (stay at home or attended day care). Many of these factors were used to determine the children's estimated potential exposures and potential absorbed doses to pollutants at homes and day care centers.

Table 9.4.1 Summary of Selected Physical and Demographic Characteristics of the Participating Children and Their Primary Caregivers, for NC and OH

Physical Characteristics	Children		Adults	
	NC	OH	NC	OH
# Participants	129 ^a	127	129 ^a	127
# Participants, by Gender				
Male	58	63	8	12
Female	71	64	121	115
Age of participants (yr) ^b				
Mean	3.9/46.8	3.9/47.1	31.3	32.2
SE ^c	0.9/0.9	0.8/0.9	6.8	6.5
Median	3.9/47.2	4.0/47.9	31.0	32.0
Minimum	1.7/20.0	1.7/20.3	19.0	19.0
Maximum	5.5/65.5	5.6/66.6	46.0	49.0
Height of participants (cm)				
Mean	103.0	102.1	165.9	166.4
SE	8.8	9.0	7.9	8.3
Median	104.1	101.6	165.1	165.1
Minimum	78.7	78.7	144.8	152.4
Maximum	124.5	121.9	190.5	203.2
Weight of participants (kg)				
Mean	17.2	17.7	76.1	75.2
SE	4.3	4.0	19.4	19.4
Median	16.7	17.1	72.5	72.0
Minimum	10.4	10.8	45.0	45.0
Maximum	44.1	33.3	151.7	140.0
Hand surface area ^d of participants (cm ²)				
Mean	261.5	269.2	571.2	561.5
SE	42.1	44.6	70.0	73.7
Median	255.0	260.0	560.0	550.0
Minimum	175.0	190.0	460.0	410.0
Maximum	380.0	405.0	825.0	840.0
Highest education level				
11 th grade or less			12.3%	6.3%
High school (HS) graduate/GED			20.8%	22.1%
Post-HS training			5.4%	5.5%
Some college			23.1%	20.5%
College graduate			23.1%	34.6%
Post-graduate			14.6%	11.0%
Unknown (missing)			0.8%	0.0%

Table 9.4.1 Summary of Selected Physical and Demographic Characteristics of the Participating Children and Their Primary Caregivers, for NC and OH (cont.)

Physical Characteristics	Children		Adults	
	NC	OH	NC	OH
Racial background				
White	55.4%	70.1%	57.7%	73.2%
Black	36.9%	25.2%	36.9%	22.8%
Hispanic	3.9%	2.4%	2.3%	2.4%
Asian/Pacific Islander	0.0%	2.4%	0.0%	1.6%
Other	3.1%	0.0%	2.3%	0.0%
Unknown (missing)	0.8%	0.0%	0.8%	0.0%
Total household income				
Less than \$15,000			20.0%	9.5%
\$15,001 to \$25,000			17.7%	16.5%
\$25,001 to \$35,000			6.9%	7.9%
\$35,001 to \$50,000			16.1%	24.4%
More than \$50,000			35.4%	30.7%
Refused			3.1%	5.5%
Don't know			0.8%	2.4%
Unknown (missing)			0.0%	3.2%

^a One adult and their child dropped out of the study before field sampling was completed.

^b For children, age is given in total years, followed by total months.

^c Standard error of the mean

^d Hand surface are of both hands.

Table 9.4.2 Prevalence of Selected Daily Activities Among the Participating Children, as Recorded on Study Questionnaires

Daily Activities During the Previous Month	NC Children (n=129)	OH Children (n=127)
How often did your child play with sand or dirt? Most of the time Sometimes Almost never	34% 40% 26%	29% 36% 35%
Have you ever seen your child eat.....? Dirt Sand Snow	12% 9% 29%	8% 5% 5%
Did your child use a pacifier? Yes No	5% 95%	4% 96%
Did your child ever put their mouth on the floor or lick the floor? Yes No Don't know	10% 89% 1%	8% 92% —
Is your child currently teething? Yes No Don't know	5% 94% 1%	2% 98% —
How often did your child put toys in their mouth? Frequently Sometimes Almost never	25% 33% 42%	18% 31% 51%
Did your child put anything ^a other than toys or food in their mouth? Yes No Missing data	33% 67% —	25% 74% 1%
Did your child suck or chew their thumb or fingers? Yes No	42% 58%	15% 85%
Did your child suck or chew their toe or foot? Yes No	5% 95%	1% 99%
When your child was outside the house, how often did he/she walk barefoot? Most of the time Sometimes Almost never	8% 21% 71%	22% 24% 54%

Table 9.4.2 Prevalence of Selected Daily Activities Among the Participating Children, as Recorded on Study Questionnaires (cont.)

Daily Activities During the Previous Month	NC Children (n=129)	OH Children (n=127)
How often did your child take something to eat or drink when he/she were playing outside the house? Most of the time Sometimes Almost never	15% 35% 50%	17% 39% 44%
When your child was inside the house, how often did he/she walk barefoot Most of the time Sometimes Almost never	75% 16% 8%	74% 18% 8%
When your child was inside the house, how often did he/she sit or play on the floor? Most of the time Sometimes Almost never	78% 21% 1%	74% 23% 3%
How often did your child sleep or take a nap on the floor? Most of the time Sometimes Almost never	5% 12% 83%	3% 13% 84%
How often were your child's hand's washed before eating meals? Most of the time Sometimes Almost never	77% 20% 3%	83% 16% 1%
How often were your child's hands washed before eating snacks? Most of the time Sometimes Almost never Don't know	35% 43% 22% –	39% 35% 25% 1%
How often were your child's hands washed after playing outside the house? Most of the time Sometimes Almost never	67% 24% 9%	60% 32% 8%
How often were their hands washed before going to bed? Most of the time Sometimes Almost never	83% 8% 9%	74% 17% 9%

^a “Anything” refers to objects other than toys or food that could be placed into the mouth.

Table 9.4.3 Daily Percentage of Time that Participating Children Spent Indoors or Outdoors at Homes, Day Care Centers, Or Other Places

Location	# Children	Percentage of Time Spent at the Given Location				
		Mean	SD	Median	Minimum	Maximum
North Carolina						
Indoors	129	94	4	95	81	100
at Home	129	72	15	71	48	100
at Day Care	63	27	6	26	14	41
Other location	129	9	7	8	0	36
Outdoors	129	6	4	5	0	19
at Home	129	4	4	3.1	0	19
at Day Care	63	3	2	3.0	0	10
Ohio						
Indoors	127	90	8	92	58	100
at Home	127	68	16	68	8	99
at Day Care	58	30	12	30	8	89
Other location	127	8	7	6	0	47
Outdoors	127	10	8	8	0	42
at Home	127	8	8	5	0	42
at Day Care	58	5	5	4	0	17

Table 9.4.4 Daily Percentage of Time that Participating Adults Spent Indoors or Outdoors at Homes or Other Places

Location	Percentage of Time Spent at the Given Location				
	Mean	SD	Median	Minimum	Maximum
North Carolina (N=129 adults)					
Indoors at Home	73	15	72	48	100
Outdoors at Home	3	4	2	0	21
Away from Home	24	15	25	0	48
Ohio (N=127 adults)					
Indoors at Home	69	17	69	8	100
Outdoors at Home	6	8	3	0	54
Away from Home	24	19	19	0	91

Table 9.4.5 Summary Statistics on the Daily Amount of Solid and Liquid Food Collected from Participating Children and Their Primary Caregivers in the Stay-at-Home and Day Care Groups^a

Food Sample Type	State	N	Mean	SD	Median	Min	Max
Weight of Solid Food (g)							
Stay-at-home group Adults	NC	66	498.6	206.6	509.0	20.6	925.9
	OH	69	577.7	208.7	571.6	221.6	1102.8
Stay-at-home group Children	NC	66	355.4	151.0	328.7	74.7	891.3
	OH	69	364.9	104.1	353.0	141.5	623.9
Day care group Adults	NC	63	342.7	193.7	323.4	6.2	1378.5
	OH	58	310.4	149.1	274.4	102.5	792.0
Day care group Children	NC	63	504.9	143.6	511.9	207.7	773.3
	OH	58	432.0	138.8	417.1	188.1	806.0
Volume of Liquid Food (mL)							
Stay-at-home group Adults	NC	64	723.9	430.9	692.5	69.0	2326.0
	OH	67	748.6	392.6	700.0	124.0	1802.5
Stay-at-home group Children	NC	65	597.3	246.6	600.0	83.0	1550.0
	OH	69	559.4	230.6	545.0	144.0	1655.0
Day care group Adults	NC	57	565.4	320.2	548.0	80.0	1380.0
	OH	55	456.1	329.3	370.0	110.0	1387.5
Day care group Children	NC	62	777.5	277.9	780.0	237.0	1351.0
	OH	57	600.8	226.8	600.0	200.0	1140.0

^a Solid and liquid food samples were composited separately over a 48-h period.

9.5 **Goal 3: To Estimate the Exposures of Participating Preschool Children to CTEPP Pollutants that They May Encounter in Their Everyday Environments**

The formulas used to estimate potential exposure level and potential absorbed dose for a given study participant via the inhalation, dietary ingestion, and indirect ingestion routes were given in Sections 8.4.1, 8.4.2, and 8.4.3, respectively. For the eight target pollutants specified at the end of Section 9.2, potential exposure level and potential absorbed dose were estimated for each exposure route in all study participants. For the remaining target pollutants specified in Table 8.3 of Section 8.4 (19 pollutants in NC and 18 pollutants in OH), potential exposure level and potential absorbed dose via a given exposure route were estimated for study participants within a given state only when the following criteria were satisfied:

- **Inhalation route:** When at least 45% of the state's samples have detected results (i.e., at or above the MDL) for indoor air and/or outdoor air

- Dietary ingestion route: When at least 45% of the state's samples have detected results (i.e., at or above the MDL) for solid food.
- Indirect ingestion route: When at least 45% of the state's samples have detected results (i.e., at or above the MDL) for floor dust.

For target pollutants achieving these criteria within a given exposure route, potential exposure level and potential absorbed dose results are presented in this section.

9.5.1 Sub-goal 3.1: To Quantify the Distribution of Potential Exposure and Potential Absorbed Dose by Exposure Route

Descriptive statistics of potential exposure level and potential absorbed dose estimates are presented by exposure route in Appendix L for NC children, Appendix M for OH children, Appendix N for NC adults, and Appendix O for OH adults. The descriptive statistics are calculated across all study participants, as well as for study participants within each stratum: urban, rural, low-income, middle/high-income, stay-at-home children (or adults with stay-at-home children), and day care children (or adults with day care children). The descriptive statistics in these tables are presented and interpreted in the same way as was discussed in Section 9.3.1, except the sample size (N) now corresponds to numbers of study participants.

For the target pollutants, overall median values of estimated potential exposure level and potential absorbed dose are summarized by exposure route in Table 9.5.1 for NC children, Table 9.5.2 for OH children, Table 9.5.3 for NC adults, and Table 9.5.4 for OH adults. For the eight pollutants for which potential exposure level and potential absorbed dose were calculated for each exposure route, boxplots of the distribution of estimated potential exposure level and potential absorbed dose are given in Figures 9.5.1 through 9.5.6, with each figure focused on either children or adults and a specific exposure route:

- Figure 9.5.1: inhalation route for children
- Figure 9.5.2: dietary ingestion route for children
- Figure 9.5.3: indirect ingestion route for children
- Figure 9.5.4: inhalation route for adults
- Figure 9.5.5: dietary ingestion route for adults (3,5,6-TCP and 2,4-D only)
- Figure 9.5.6: indirect ingestion route for adults.

Each figure contains separate boxplots for potential exposure level and potential absorbed dose, for each pollutant for which data were available to make these estimates, and for each state. See Section 9.3.1 for how to interpret these boxplots.

Table 9.5.1 Median Values of Estimated Potential Exposure and Potential Absorbed Dose for Target Pollutants in Participating NC Preschool Children, by Exposure Route

Pollutant/Metabolite	Potential Exposure Level (ng/day)			Potential Absorbed Dose (ng/kg/day)		
	Inhalation	Dietary Ingestion	Indirect Ingestion	Inhalation	Dietary Ingestion	Indirect Ingestion
OP Pesticide and Metabolite						
Chlorpyrifos	47	81	5.2	1.4	2.5	0.16
Diazinon	17	< ^a	0.98	0.51	<	0.030
3,5,6-TCP	14	1,200	4.5	0.43	38	0.12
OC Pesticides						
<i>alpha</i> -Chlordane	8.3	<	1.6	0.24	<	0.048
<i>gamma</i> -Chlordane	13	<	2.7	0.42	<	0.083
<i>p,p'</i> -DDE	<	88	0.21	<	2.6	0.0074
Heptachlor	62	<	0.92	1.7	<	0.028
Pyrethroid Pesticides						
Cyfluthrin	<	<	3.6	<	<	0.13
<i>cis</i> -Permethrin	4.6	85	48	0.14	2.6	1.4
<i>trans</i> -Permethrin	2.7	74	35	0.088	2.2	1.0
Acid Herbicides						
2,4-D	4.0	190	1.4	0.099	4.8	0.042
PAHs						
Benz[<i>a</i>]anthracene	0.75	<	5.5	0.023	<	0.17
Benzo[<i>b</i>]fluoranthene	1.2	<	14	0.035	<	0.46
Benzo[<i>k</i>]fluoranthene	0.61	<	4.8	0.019	<	0.15
Benzo[<i>ghi</i>]perylene	1.0	<	8.6	0.029	<	0.25
Benzo[<i>a</i>]pyrene	0.80	<	7.7	0.025	<	0.25
Benzo[<i>e</i>]pyrene	0.73	<	7.7	0.022	<	0.24
Chrysene	0.85	<	7.5	0.027	<	0.23
Dibenz[<i>a,h</i>]anthracene	<	<	1.9	<	<	0.058
Indeno[1,2,3- <i>cd</i>]pyrene	0.83	<	7.4	0.025	<	0.24
Phthalates						
Benzylbutylphthalate	<	<	920	<	<	26
Di- <i>n</i> -butylphthalate	1,800	39,000	350	56	1,100	9.7
Phenols						
Bisphenol-A	14	2,700	<	0.41	74	<
Pentachlorophenol	12	<	3.4	0.34	<	0.11
PCBs						
PCB 52	4.2	<	<	0.13	<	<
PCB 95	0.69	<	<	0.021	<	<
PCB 101	0.55	<	<	0.017	<	<

^a "<" indicates that the estimates were labeled as "not detected" for more than 50% of participating NC children, meaning that all pollutant concentrations entering into the calculation of the estimate were not detected.

Table 9.5.2 Median Values^a of Estimated Potential Exposure and Potential Absorbed Dose for Target Pollutants in Participating OH Preschool Children, by Exposure Route

Pollutant/Metabolite	Potential Exposure Level (ng/day)			Potential Absorbed Dose (ng/kg/day)		
	Inhalation	Dietary Ingestion	Indirect Ingestion	Inhalation	Dietary Ingestion	Indirect Ingestion
OP Pesticide and Metabolite						
Chlorpyrifos	15	78	2.7	0.38	2.1	0.083
Diazinon	8.0	< ^a	1.0	0.24	<	0.031
3,5,6-TCP	5.1	860	1.6	0.14	25	0.049
OC Pesticides						
<i>alpha</i> -Chlordane	2.1	<	0.40	0.063	<	0.011
<i>gamma</i> -Chlordane	2.7	<	0.45	0.088	<	0.012
<i>p,p'</i> -DDE	<	78	0.27	<	2.1	0.0075
Pyrethroid Pesticides						
Cyfluthrin	<	<	7.1	<	<	0.20
<i>cis</i> -Permethrin	<	<	18	<	<	0.49
<i>trans</i> -Permethrin	<	<	12	<	<	0.34
Acid Herbicides						
2,4-D	1.9	120	4.8	0.049	3.6	0.15
PAHs						
Benz[<i>a</i>]anthracene	<	<	22	<	<	0.62
Benzo[<i>b</i>]fluoranthene	<	31	53	<	0.93	1.5
Benzo[<i>k</i>]fluoranthene	<	<	22	<	<	0.60
Benzo[<i>ghi</i>]perylene	<	<	28	<	<	0.82
Benzo[<i>a</i>]pyrene	<	<	29	<	<	0.81
Benzo[<i>e</i>]pyrene	<	<	30	<	<	0.79
Chrysene	0.56	<	29	0.018	<	0.82
Dibenz[<i>a,h</i>]anthracene	<	<	6.2	<	<	0.18
Indeno[1,2,3- <i>cd</i>]pyrene	<	<	28	<	<	0.80
Phthalates						
Benzylbutylphthalate	<	9,400	630	<	270	18
Di- <i>n</i> -butylphthalate	2,000	<	210	57	<	5.7
Phenols						
Bisphenol-A	7.8	1,700	1.0	0.24	52	0.028
Pentachlorophenol	18	<	1.8	0.58	<	0.051
PCBs						
PCB 52	3.6	— ^b	0.23	0.10	--	0.0058
PCB 95	0.81	--	0.15	0.025	--	0.0041
PCB 101	0.72	--	0.18	0.021	--	0.0057

^a "<" indicates that the estimates were labeled as "not detected" for more than 50% of participating OH children, meaning that all pollutant concentrations entering into the calculation of the estimate were not detected.

^b Dashes indicate that no valid concentrations for the given pollutant were available for those sample media that enter into the calculation of the potential exposure and potential absorbed dose estimates for the given exposure route.

Table 9.5.3 Median Values^a of Estimated Potential Exposure and Potential Absorbed Dose for Target Pollutants in Participating NC Adults, by Exposure Route

Pollutant/Metabolite	Potential Exposure Level (ng/day)			Potential Absorbed Dose (ng/kg/day)		
	Inhalation	Dietary Ingestion	Indirect Ingestion	Inhalation	Dietary Ingestion	Indirect Ingestion
OP Pesticides and Metabolites						
Chlorpyrifos	69	— ^b	3.2	0.45	--	0.021
Diazinon	23	--	0.43	0.14	--	0.0030
3,5,6-TCP	21	1,200	2.3	0.14	7.9	0.016
OC Pesticides						
<i>alpha</i> -Chlordane	9.5	--	0.55	0.064	--	0.0037
<i>gamma</i> -Chlordane	17	--	0.74	0.11	--	0.0052
<i>p,p'</i> -DDE	< ^a	--	<	<	--	<
Heptachlor	80	--	<	0.54	--	<
Pyrethroid Pesticides						
Cyfluthrin	<	--	1.2	<	--	0.0077
<i>cis</i> -Permethrin	5.6	--	20	0.036	--	0.14
<i>trans</i> -Permethrin	3.9	--	16	0.020	--	0.11
Acid Herbicides						
2,4-D	2.1	140	0.80	0.016	0.97	0.0058
PAHs						
Benz[<i>a</i>]anthracene	0.97	--	2.8	0.0067	--	0.018
Benzo[<i>b</i>]fluoranthene	1.6	--	7.0	0.011	--	0.051
Benzo[<i>k</i>]fluoranthene	0.77	--	2.5	0.0061	--	0.017
Benzo[<i>ghi</i>]perylene	1.5	--	4.2	0.010	--	0.029
Benzo[<i>a</i>]pyrene	1.0	--	4.2	0.0078	--	0.028
Benzo[<i>e</i>]pyrene	0.97	--	4.3	0.0069	--	0.026
Chrysene	1.2	--	4.1	0.0083	--	0.027
Dibenz[<i>a,h</i>]anthracene	<	--	0.96	<	--	0.0064
Indeno[1,2,3- <i>cd</i>]pyrene	1.1	--	3.9	0.0080	--	0.026
Phthalates						
Benzylbutylphthalate	<	--	420	<	--	3.1
Di- <i>n</i> -butylphthalate	2,600	--	130	18	--	0.96
Phenols						
Bisphenol-A	20	--	<	0.13	--	<
Pentachlorophenol	17	<	1.5	0.11	<	0.011
PCBs						
PCB 52	6.0	--	<	0.040	--	<
PCB 95	1.0	--	<	0.0065	--	<
PCB 101	0.68	--	<	0.0047	--	<

^a "<" indicates that the estimates were labeled as "not detected" for more than 50% of participating NC adults, meaning that all pollutant concentrations entering into the calculation of the estimate were not detected.

^b Dashes indicate that no valid concentrations for the given pollutant were available for those sample media that enter into the calculation of the potential exposure and potential absorbed dose estimates for the given exposure route.

Table 9.5.4 Median Values^a of Estimated Potential Exposure and Potential Absorbed Dose for Target Pollutants in Participating OH Adults, by Exposure Route

Pollutant/Metabolite	Potential Exposure Level (ng/day)			Potential Absorbed Dose (ng/kg/day)		
	Inhalation	Dietary Ingestion	Indirect Ingestion	Inhalation	Dietary Ingestion	Indirect Ingestion
OP Pesticides and Metabolites						
Chlorpyrifos	20	— ^b	1.2	0.13	--	0.0079
Diazinon	11	--	0.48	0.076	--	0.0031
3,5,6-TCP	7.0	980	0.99	0.046	6.1	0.0068
OC Pesticides						
<i>alpha</i> -Chlordane	3.0	--	0.26	0.021	--	0.0018
<i>gamma</i> -Chlordane	4.1	--	0.31	0.030	--	0.0019
<i>p,p'</i> -DDE	< ^a	--	0.17	<	--	0.0012
Pyrethroid Pesticides						
Cyfluthrin	<	--	4.4	<	--	0.028
<i>cis</i> -Permethrin	<	--	10	<	--	0.074
<i>trans</i> -Permethrin	<	--	8.0	<	--	0.060
Acid Herbicides						
2,4-D	1.9	<	2.9	0.015	<	0.021
PAHs						
Benz[<i>a</i>]anthracene	<	--	13	<	--	0.092
Benzo[<i>b</i>]fluoranthene	<	--	34	<	--	0.23
Benzo[<i>k</i>]fluoranthene	<	--	13	<	--	0.075
Benzo[<i>ghi</i>]perylene	<	--	18	<	--	0.11
Benzo[<i>a</i>]pyrene	<	--	17	<	--	0.12
Benzo[<i>e</i>]pyrene	<	--	19	<	--	0.12
Chrysene	0.77	--	18	0.0061	--	0.12
Dibenz[<i>a,h</i>]anthracene	<	--	3.9	<	--	0.027
Indeno[1,2,3- <i>cd</i>]pyrene	<	--	18	<	--	0.11
Phthalates						
Benzylbutylphthalate	<	--	410	<	--	2.7
Di- <i>n</i> -butylphthalate	2,700	--	130	19	--	0.86
Phenols						
Bisphenol-A	11	--	<	0.076	--	<
Pentachlorophenol	23	<	1.3	0.16	<	0.0091
PCBs						
PCB 52	4.8	--	0.11	0.033	--	0.00072
PCB 95	1.2	--	0.084	0.0077	--	0.00065
PCB 101	1.0	--	0.11	0.0064	--	0.00076

^a "<" indicates that the estimates were labeled as "not detected" for more than 50% of participating OH adults, meaning that all pollutant concentrations entering into the calculation of the estimate were not detected.

^b Dashes indicate that no valid concentrations for the given pollutant were available for those sample media that enter into the calculation of the potential exposure and potential absorbed dose estimates for the given exposure route.

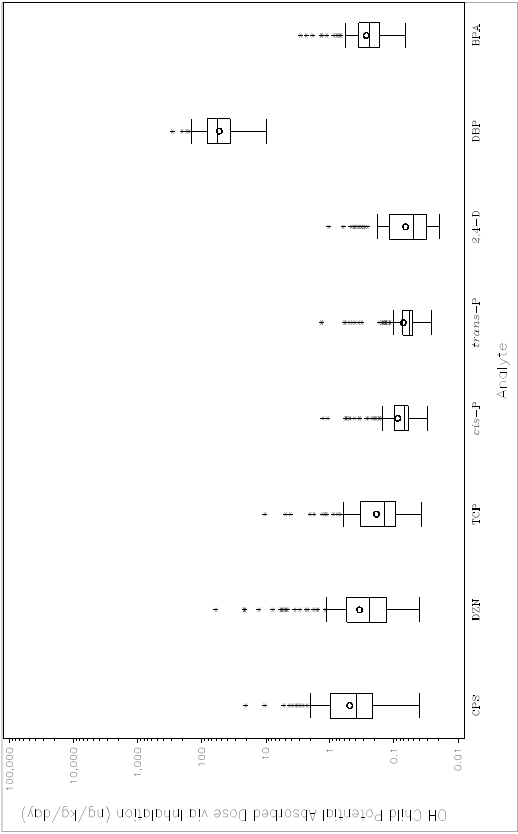
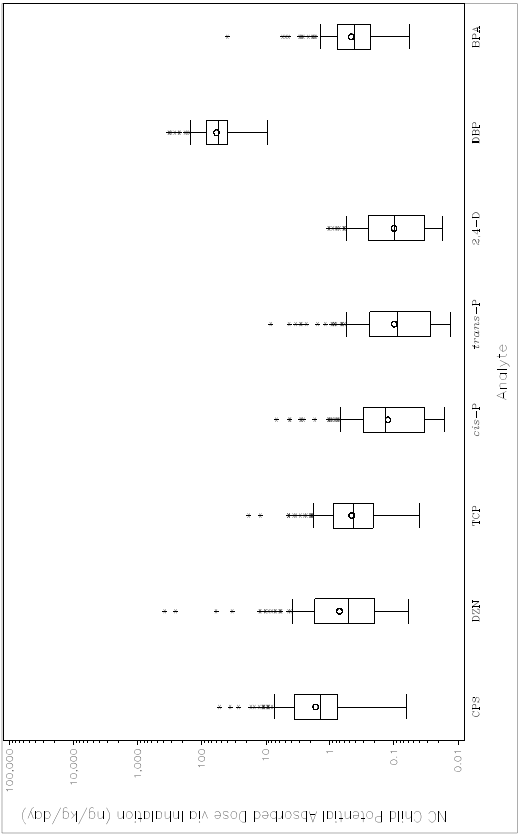
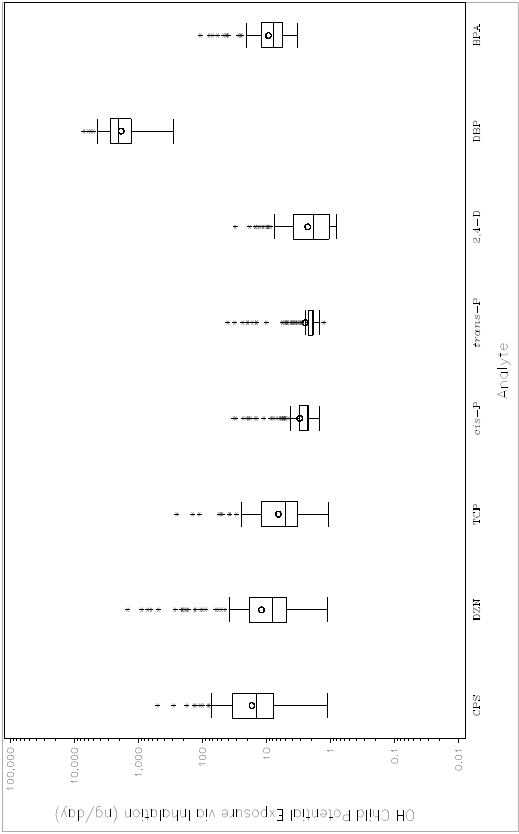
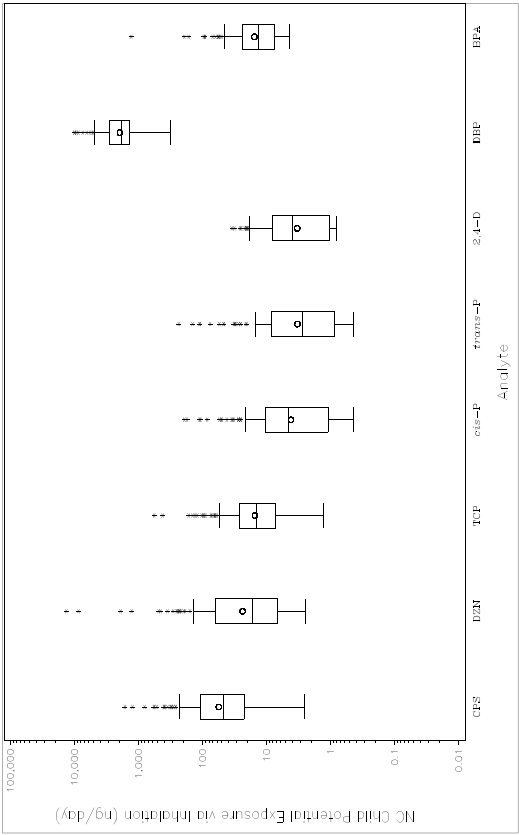


Figure 9.5.1 Boxplots of Estimated Potential Exposure and Potential Absorbed Dose via Inhalation for Participating NC and OH Children, for Eight Pollutants

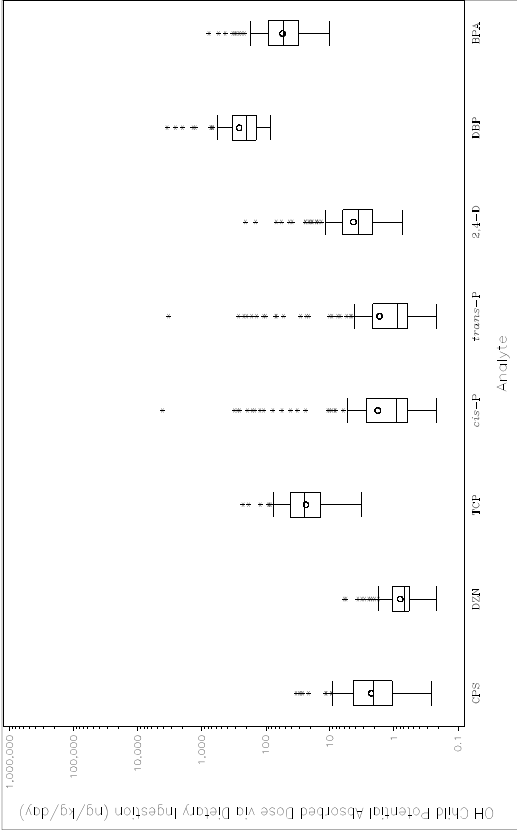
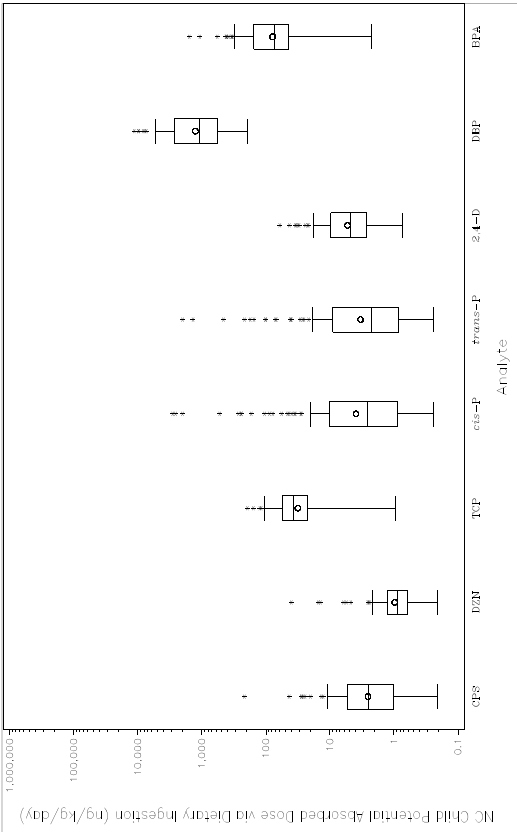
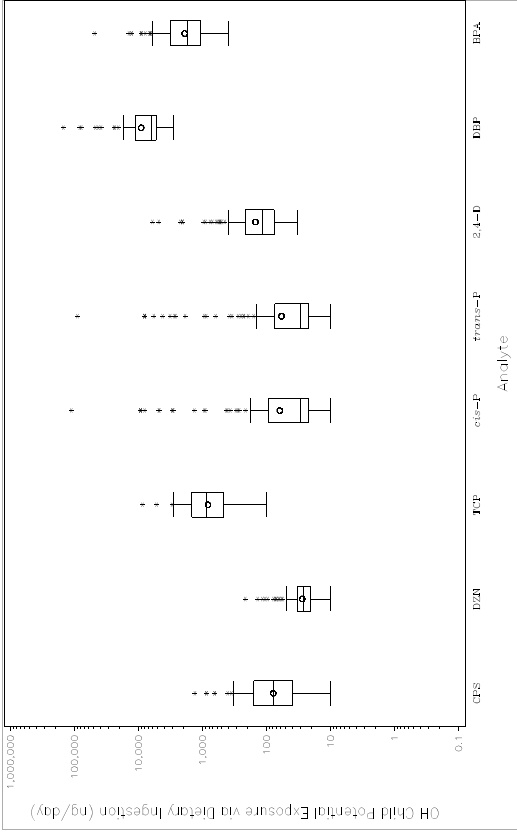
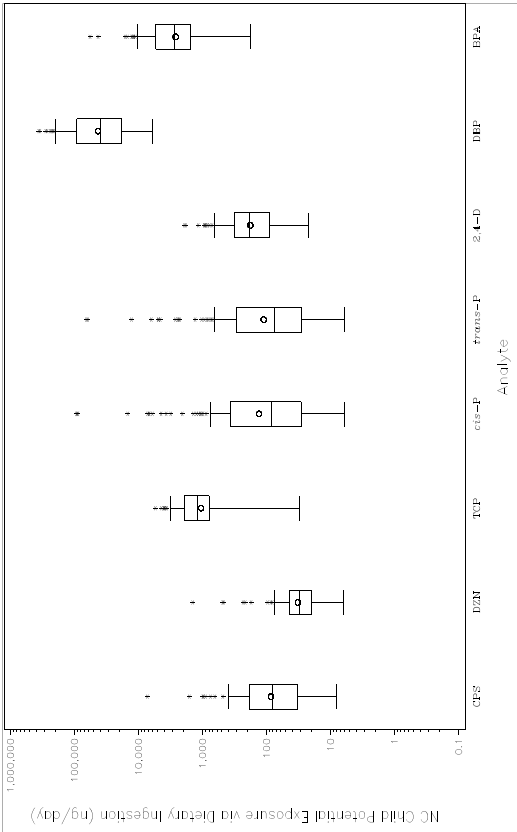


Figure 9.5.2 Boxplots of Estimated Potential Exposure and Potential Absorbed Dose via Dietary Ingestion for Participating NC and OH Children, for Eight Pollutants

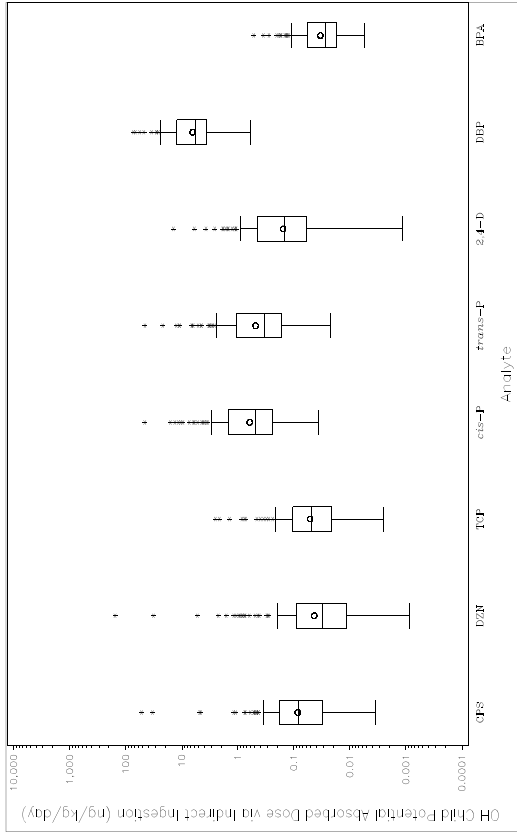
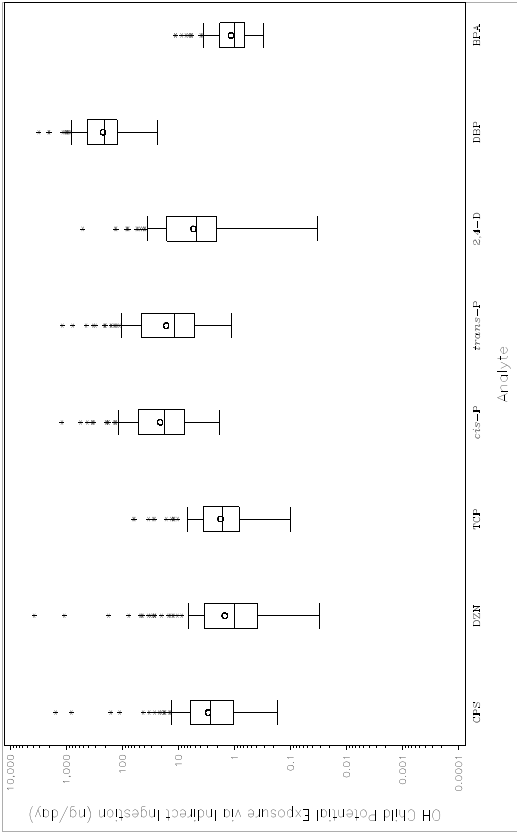
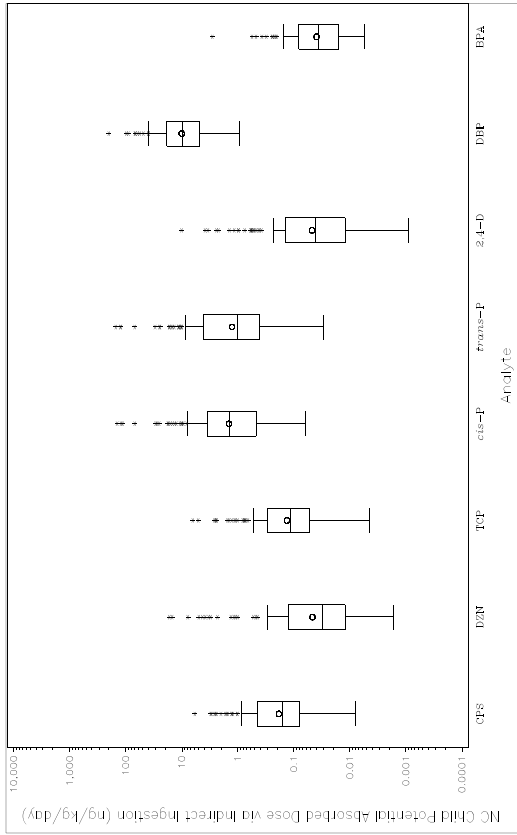
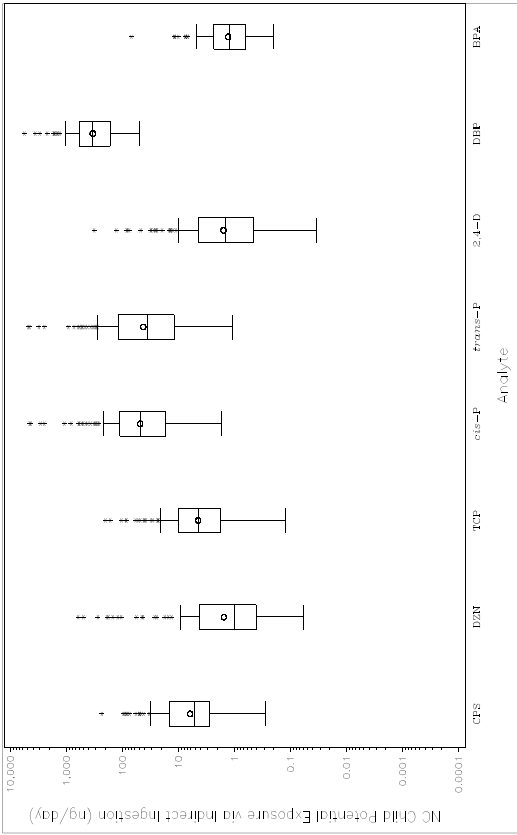


Figure 9.5.3 Boxplots of Estimated Potential Exposure and Potential Absorbed Dose via Indirect Ingestion for Participating NC and OH Children, for Eight Pollutants

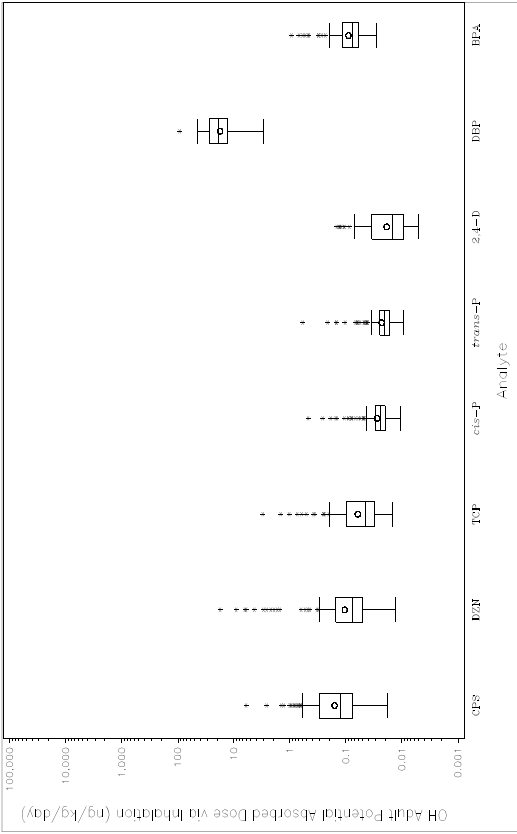
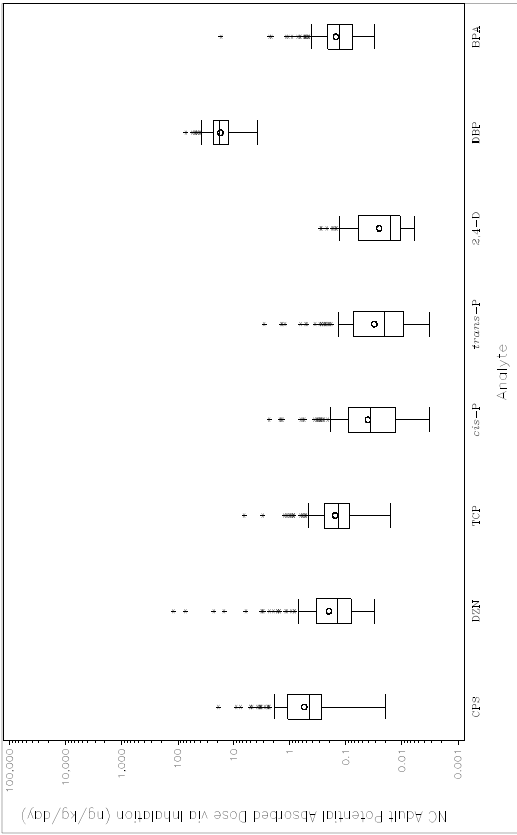
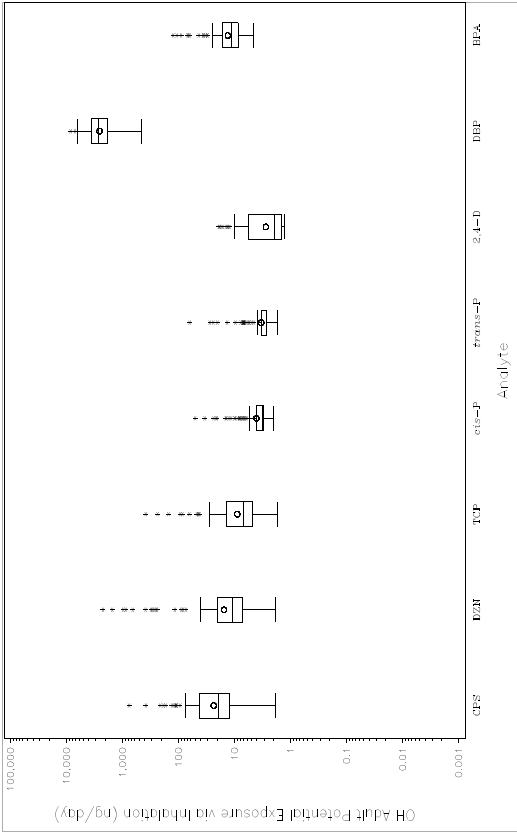
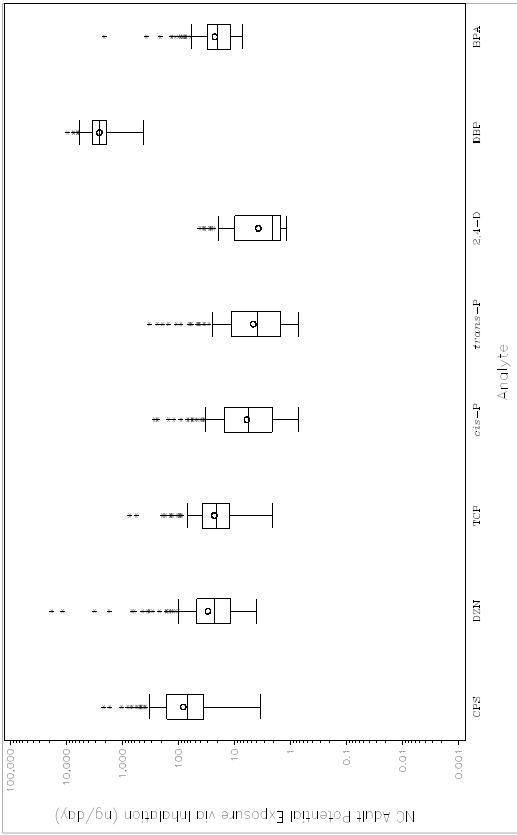


Figure 9.5.4 Boxplots of Estimated Potential Exposure and Potential Absorbed Dose via Inhalation for Participating NC and OH Adults, for Eight Pollutants

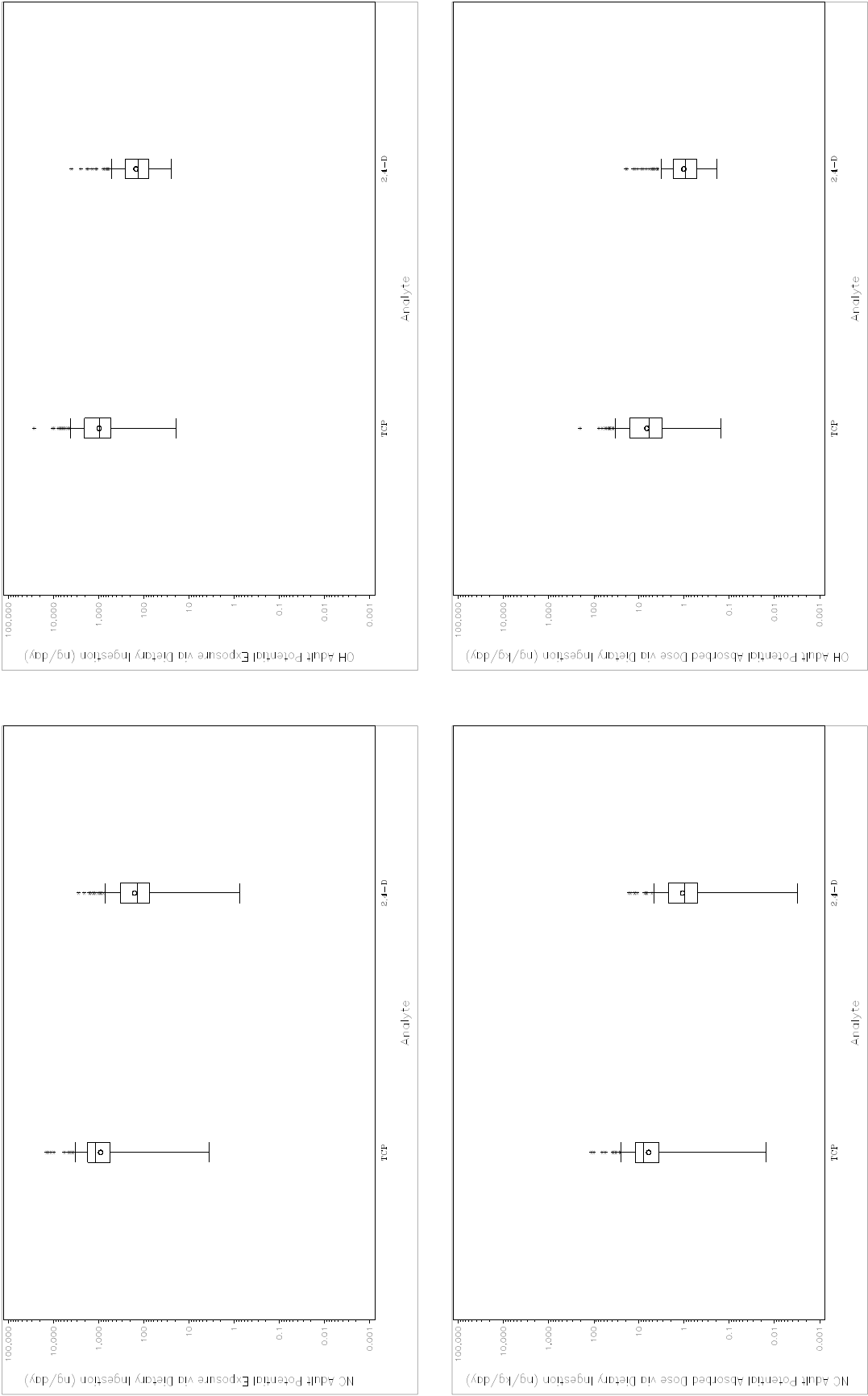


Figure 9.5.5 Boxplots of Estimated Potential Exposure and Potential Absorbed Dose via Dietary Ingestion for Participating NC and OH Adults, for Eight Pollutants Measured in Adult Food

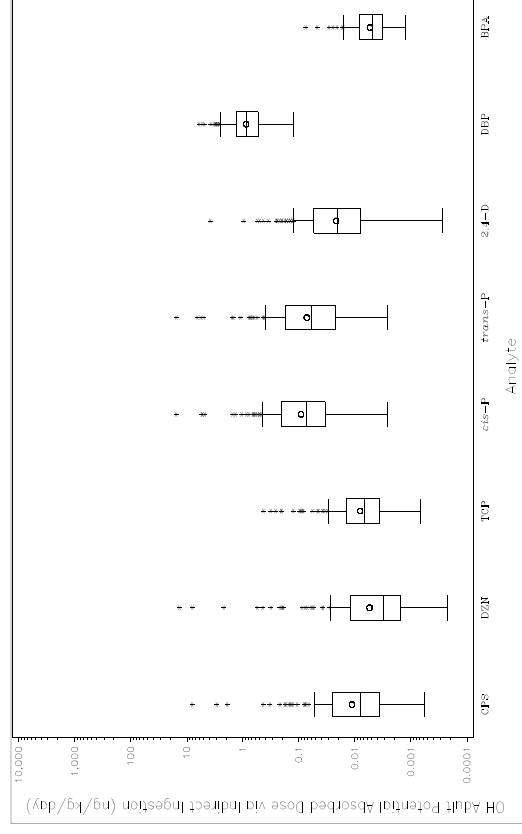
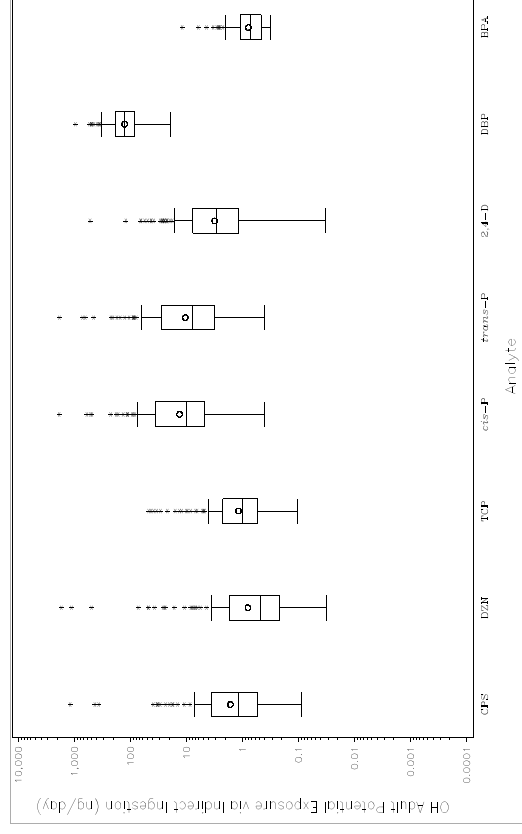
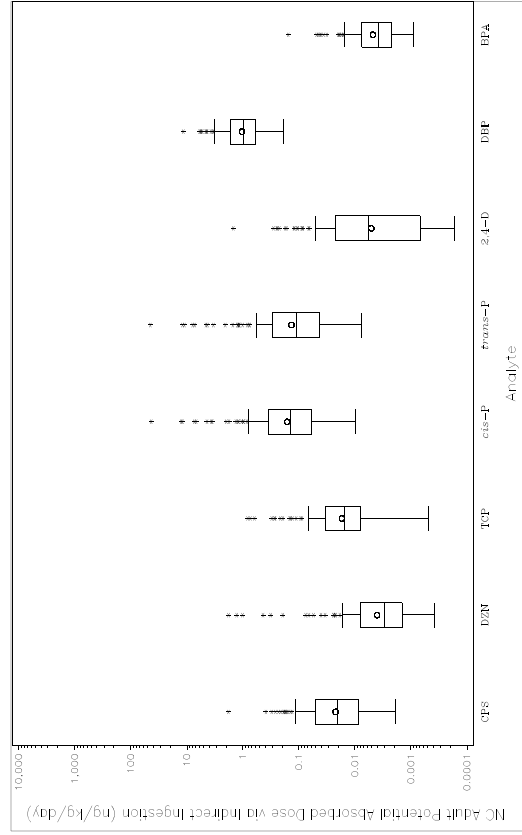
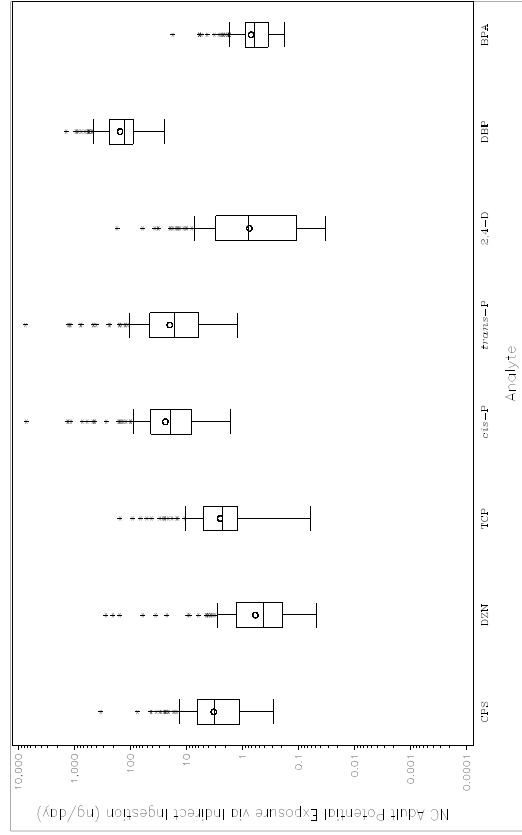


Figure 9.5.6 Boxplots of Estimated Potential Exposure and Potential Absorbed Dose via Indirect Ingestion for Participating NC and OH Adults, for Eight Pollutants

The shapes of the distributions of potential exposure and potential absorbed dose estimates that are portrayed in Figures 9.5.1 through 9.5.6 closely resemble those for the environmental and personal media that are given in Section 9.3.1. Di-*n*-butylphthalate estimates tend to be higher than estimates for the other pollutants, especially for inhalation. In addition, estimates tend to be higher across the board for NC than for OH under each exposure route.

9.5.2 *Sub-goal 3.2: To Quantify the Distribution of Potential Exposure and Potential Dose Aggregated over All Exposure Routes*

As discussed in Section 8.4, aggregate potential exposure and aggregate potential absorbed dose associated with a study participant were defined as the sums of the potential exposure and potential absorbed dose estimates, respectively, across all three exposure routes considered in this study (inhalation, dietary ingestion, and indirect ingestion). These aggregate estimates were calculated only for the eight target pollutants mentioned at the end of Section 9.2, for which potential exposure and potential absorbed dose estimates were calculated for each of the three exposure routes for each study participant.

Descriptive statistics of the potential aggregate exposure level and potential aggregate absorbed dose estimates are presented in Appendix L for NC children, Appendix M for OH children, Appendix N for NC adults, and Appendix O for OH adults. They are presented only in those tables that are associated with the eight target pollutants. (Note that these tables also contain route-specific data summaries.) Within these tables and in Table 9.5.5 and Table 9.5.6 for NC and OH, respectively, these descriptive statistics are presented across all study participants, separately for children and adults. In addition, within the appendix tables, descriptive statistics are presented for each stratum: urban, rural, low-income, middle/high-income, stay-at-home children (or adults with stay-at-home children), and day care children (or adults with day care children).

Boxplots of potential aggregate exposure level and potential aggregate absorbed dose estimates are given in Figure 9.5.7 for participating children and in Figure 9.5.8 for their adult caregivers. Each figure contains separate boxplots for potential aggregate exposure level and potential aggregate absorbed dose, for each pollutant for which data were available to make these estimates, and for each state. The boxplots show that aggregate potential exposure and dose estimates in the participating children were highest for di-*n*-butylphthalate and bisphenol-A, and to a lesser extent, 3,5,6-TCP. See Section 9.3.1 for how to interpret these boxplots.

9.5.3 *Sub-goal 3.3: To Quantify the Distribution of Urinary Biomarkers Concentrations as an Indicator of Absorbed Dose*

Concentrations of selected acid pollutants and metabolites in urine collected over the 48-h sampling period were used as biomarkers of exposure in study participants. These concentrations were summarized and analyzed 1) after adjusting for the urine sample's specific gravity, 2) after adjusting for the urine sample's creatinine level, and 3) without any adjustment.

Table 9.5.5 Summary of Aggregate Potential Exposure and Aggregate Potential Absorbed Dose Estimates for Eight Pollutants in NC Study Participants^a

Pollutant/ Metabolite	Type of Measure	N	% Detected	Arith. Mean	S.D.	Geom. Mean	Percentiles				Max.
							25 th	50 th	75 th	95 th	
OP Pesticides and Metabolite											
Chlorpyrifos	Children -- Aggregate Exposure ^a	109	100	359	801	174	78.9	152	295	1,180	7,630
	Children -- Aggregate Dose ^b	109	100	10.6	23.8	5.18	2.49	4.59	8.84	31.7	227
	Adults -- Aggregate Exposure	-- ^c	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--
Diazinon	Children -- Aggregate Exposure	109	100	354	1,720	68.1	30.4	51.6	110	544	15,100
	Children -- Aggregate Dose	109	100	10.2	49.4	2.02	0.965	1.44	2.60	15.8	428
	Adults -- Aggregate Exposure	--	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--
3,5,6-TCP	Children -- Aggregate Exposure	113	100	1,480	1,010	1,110	804	1,230	1,960	3,780	5,600
	Children -- Aggregate Dose	113	100	43.8	30.9	33.3	22.6	37.7	57.8	100	199
	Adults -- Aggregate Exposure	117	100	1,660	2,130	1,010	596	1,310	1,770	4,390	14,400
	Adults -- Aggregate Dose	117	100	11.6	15.5	6.81	3.95	8.37	12.6	33.1	113
Pyrethroid Pesticides											
<i>cis</i> - Permethrin	Children -- Aggregate Exposure	109	100	3,290	15,000	306	88.9	246	656	6,840	93,300
	Children -- Aggregate Dose	109	100	92.5	412	9.08	2.71	6.72	21.5	243	2,850
	Adults -- Aggregate Exposure	--	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--
<i>trans</i> - Permethrin	Children -- Aggregate Exposure	106	100	1,870	8,720	252	77.9	193	555	4,870	65,300
	Children -- Aggregate Dose	106	100	52.4	235	7.52	2.37	5.82	19.5	154	2,000
	Adults -- Aggregate Exposure	--	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--
Acid Herbicides											
2,4-D	Children -- Aggregate Exposure	105	96	279	302	188	96.4	193	343	836	2,250
	Children -- Aggregate Dose	105	96	8.33	9.35	5.56	2.95	4.93	9.75	22.5	70.8
	Adults -- Aggregate Exposure	110	96	318	441	183	92.9	164	338	1,310	2,840
	Adults -- Aggregate Dose	110	96	2.11	2.90	1.24	0.557	1.12	2.28	6.86	16.8
Phthalates											
Di- <i>n</i> - butylphthalate	Children -- Aggregate Exposure	78	100	72,900	76,600	47,100	21,600	42,900	94,800	270,000	365,000
	Children -- Aggregate Dose	78	100	2,100	2,190	1,360	652	1,250	2,910	7,800	11,400
	Adults -- Aggregate Exposure	--	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--
Phenols											
Bisphenol-A	Children -- Aggregate Exposure	102	100	4,190	6,190	2,500	1,500	2,560	5,240	11,300	57,200
	Children -- Aggregate Dose	102	100	125	175	75.6	42.4	71.4	153	342	1,570
	Adults -- Aggregate Exposure	--	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--

^a Aggregate potential exposure level (ng/day)

^b Aggregate potential absorbed dose (ng/kg/day)

^c Dashes indicate that insufficient data prevented aggregate potential exposure or aggregate potential absorbed dose from being estimated. An estimate is labeled "detected" if at least one of the sample media levels entering into its calculation is labeled "detected."

Table 9.5.6 Summary of Aggregate Potential Exposure and Aggregate Potential Absorbed Dose Estimates for Eight Pollutants in OH Study Participants^a

Pollutant/ Metabolite	Type of Measure	N	% Detected	Arith. Mean	S.D.	Geom. Mean	Percentiles				Max.
							25 th	50 th	75 th	95 th	
OP Pesticides and Metabolite											
Chlorpyrifos	Children -- Aggregate Exposure ^a	96	100	178	234	117	77.7	109	172	491	1,520
	Children -- Aggregate Dose ^c	96	100	5.39	8.25	3.37	2.04	3.10	5.11	17.1	61.8
	Adults -- Aggregate Exposure	-- ^c	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--
Diazinon	Children -- Aggregate Exposure	112	100	142	534	54.1	29.9	38.6	67.0	378	5,430
	Children -- Aggregate Dose	112	100	4.62	21.3	1.56	0.872	1.13	1.89	11.0	221
	Adults -- Aggregate Exposure	--	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--
3,5,6-TCP	Children -- Aggregate Exposure	103	100	1,180	1,110	852	488	930	1,500	2,610	8,700
	Children -- Aggregate Dose	103	100	34.1	32.9	24.4	15.2	25.4	42.3	80.3	228
	Adults -- Aggregate Exposure	108	100	2,010	3,210	1,050	554	1,000	2,170	7,080	27,300
	Adults -- Aggregate Dose	108	100	14.5	23.4	7.22	3.27	6.39	16.5	47.1	200
Pyrethroid Pesticides											
<i>cis</i> - Permethrin	Children -- Aggregate Exposure	111	100	665	1,960	118	38.8	90.1	167	4,790	9,430
	Children -- Aggregate Dose	111	100	18.3	54.1	3.40	1.29	2.22	4.71	151	315
	Adults -- Aggregate Exposure	--	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--
<i>trans</i> - Permethrin	Children -- Aggregate Exposure	97	100	280	784	87.5	36.6	72.0	146	1,960	5,790
	Children -- Aggregate Dose	97	100	8.39	25.1	2.52	1.07	1.78	4.00	53.1	199
	Adults -- Aggregate Exposure	--	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--
Acid Herbicides											
2,4-D	Children -- Aggregate Exposure	95	99	350	736	175	81.0	141	245	2,070	6,090
	Children -- Aggregate Dose	95	99	10.1	23.5	5.05	2.35	4.13	7.48	39.1	210
	Adults -- Aggregate Exposure	106	99	278	393	166	92.5	147	269	1,140	2,540
	Adults -- Aggregate Dose	106	99	1.97	2.96	1.12	0.589	0.978	1.83	8.37	19.3
Phthalates											
Di- <i>n</i> - butylphthalate	Children -- Aggregate Exposure	43	100	19,500	27,600	12,200	7,330	8,310	16,900	81,000	152,000
	Children -- Aggregate Dose	43	100	539	703	353	205	262	467	2,080	3,570
	Adults -- Aggregate Exposure	--	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--
Phenols											
Bisphenol-A	Children -- Aggregate Exposure	67	100	3,620	6,310	2,150	1,270	1,880	3,540	12,800	48,600
	Children -- Aggregate Dose	67	100	101	130	63.8	34.1	60.8	93.9	328	775
	Adults -- Aggregate Exposure	--	--	--	--	--	--	--	--	--	--
	Adults -- Aggregate Dose	--	--	--	--	--	--	--	--	--	--

^a Aggregate potential exposure level (ng/day)

^b Aggregate potential absorbed dose (ng/kg/day)

^c Dashes indicate that insufficient data prevented aggregate potential exposure or aggregate potential absorbed dose from being estimated. An estimate is labeled "detected" if at least one of the sample media levels entering into its calculation is labeled "detected."

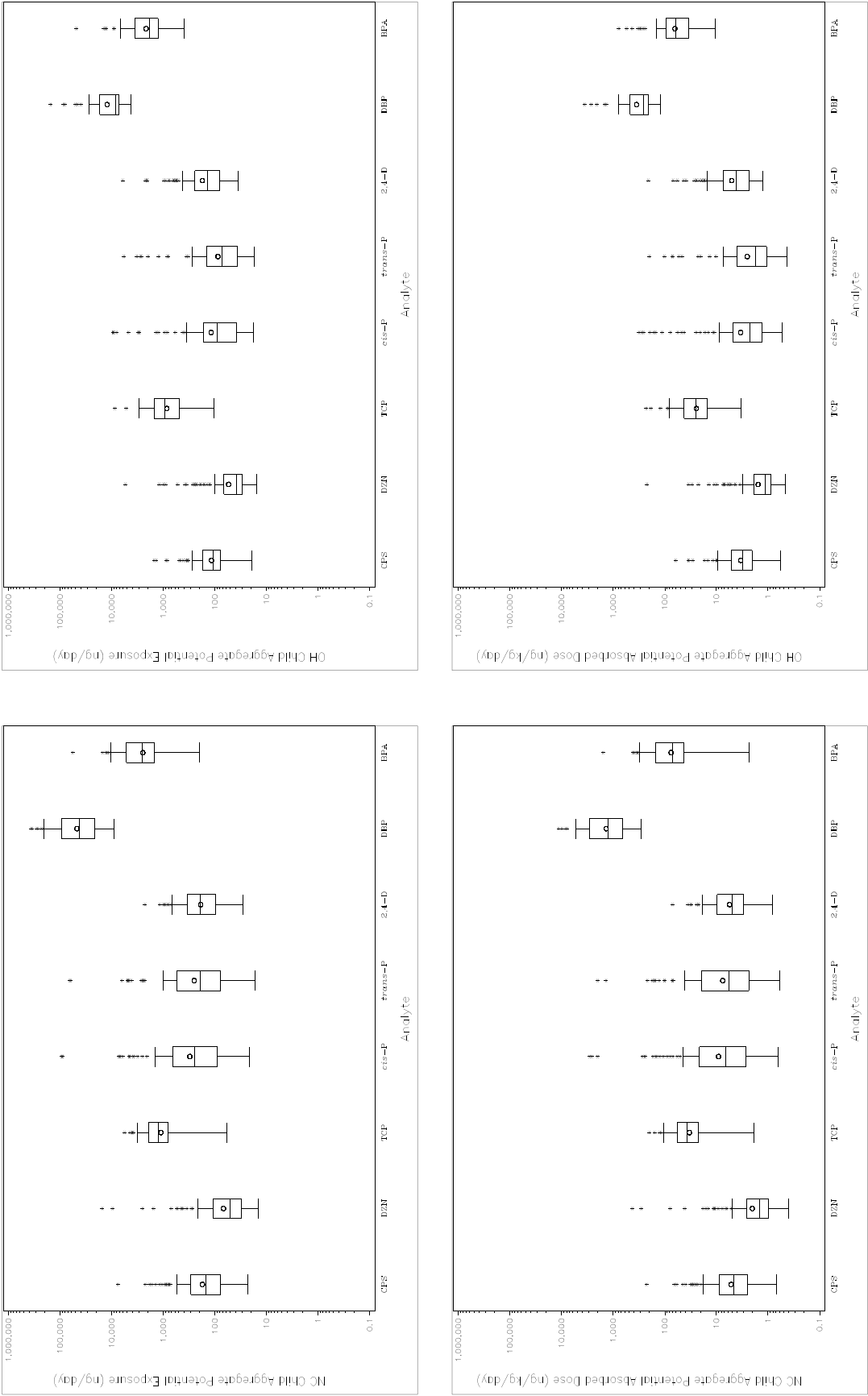


Figure 9.5.7 Boxplots of Estimated Aggregate Potential Exposure and Aggregate Potential Absorbed Dose for Participating NC and OH Children, for Eight Pollutants

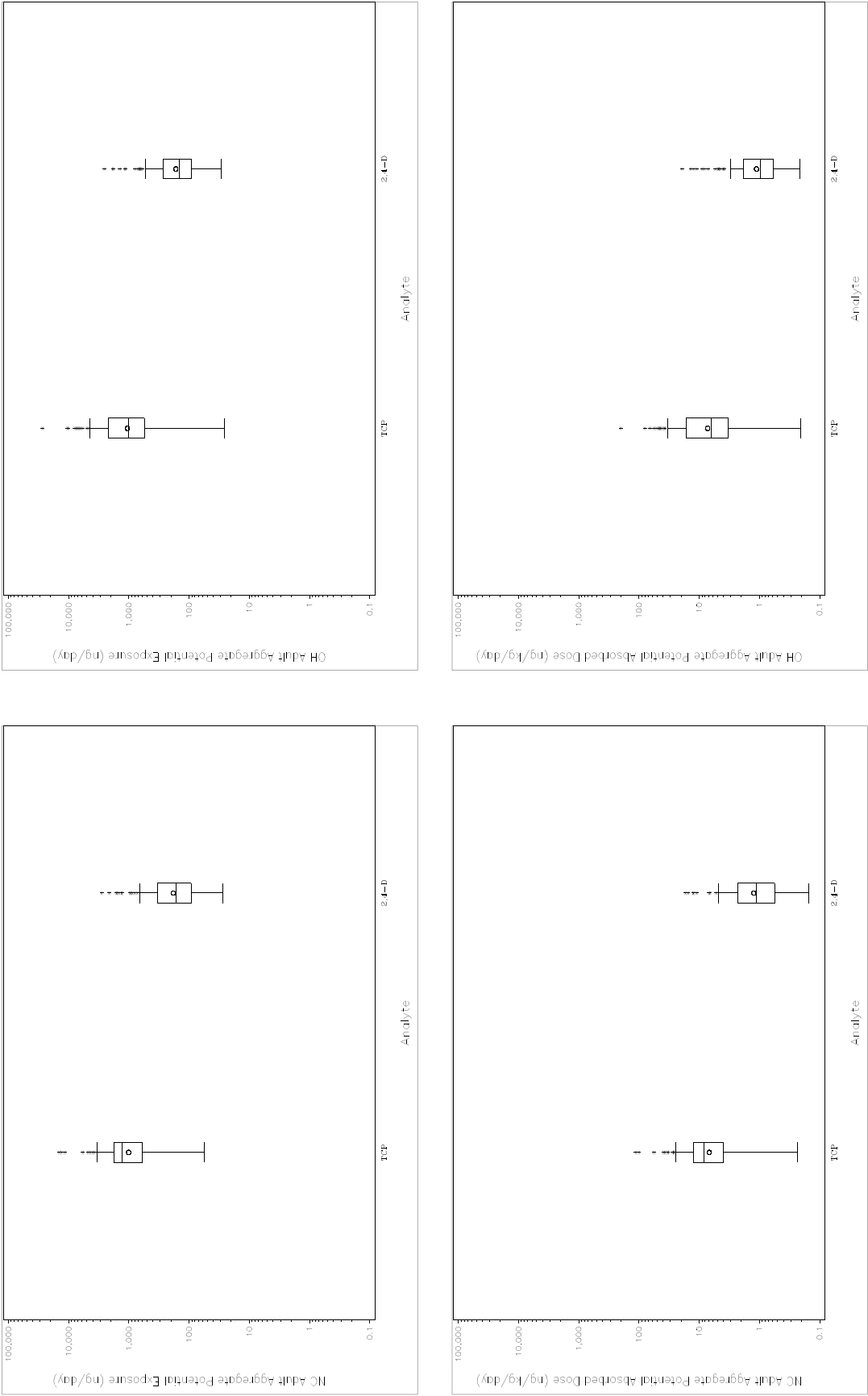


Figure 9.5.8 Boxplots of Estimated Aggregate Potential Exposure and Aggregate Potential Absorbed Dose for Participating NC and OH Adults, for Eight Pollutants

When multiple urine samples were taken for a given study participant during the study, the geometric mean concentration was used in the summaries and analyses.

Descriptive statistics of the urine biomarker concentrations are presented in Appendix P for NC and Appendix Q for OH. Each appendix contains separate sets of tables for children and adults, and within each set, each pollutant and metabolite is represented by two tables for ease in display. The descriptive statistics are presented across all study participants, as well as separately for each stratum: urban, rural, low-income, middle/high-income, stay-at-home children (or adults with stay-at-home children), and day care children (or adults with day care children).

For both states, 3,5,6-TCP and 2,4-D were measured in urine samples of study participants and were considered in estimating aggregate potential exposure level and aggregate potential absorbed dose estimates for study participants. For these two target pollutants, along with pentachlorophenol, the descriptive statistics associated with unadjusted urine concentrations are also presented in Table 9.5.7 and Table 9.5.8 for NC children and OH children, respectively.

Boxplots of the unadjusted urine concentrations for 3,5,6-TCP and 2,4-D are presented in Figure 9.5.9, with separate boxplots for children and adults, as well as by state. These boxplots show that, in general, levels of 3,5,6-TCP covered a higher range than for 2,4-D, and for both, similar distributions were observed between children and adults and between NC and OH. While the boxplots in Figure 9.5.9 resemble those for aggregate potential exposure and absorbed dose that are given in Figure 9.5.8, the urine concentrations have less of a difference between the two states in the range covered by the distributions. See Section 9.3.1 for how to interpret the boxplots.

9.5.4 *Sub-goal 3.4: To Determine on Average How These Exposure and Dose Metrics for Each Route and Aggregated over Routes Differ Between Children in Urban and Rural Settings, Children in Low- and Middle/High-Income Families, Day Care and Stay-at-Home Children, Children and Adults in the Same Household Overall, and Children and Adults by Stratum*

To address this sub-goal, a statistical analysis was performed on the (log-transformed) potential exposure level and potential absorbed dose estimates (by exposure route and aggregated across routes¹) and on urine biomarker concentrations to determine whether these measures differ significantly 1) between children in urban and rural settings, 2) between children in low- and middle/high-income families, and 3) between day care and stay-at-home children. In each case, an analysis of variance using model (8-7) in Section 8.5.2.2 was performed to calculate a least squares mean of the log-transformed measures for each stratum (i.e., urban, rural, low-income, middle/high-income, stay-at-home child, day care child). Then, in the manner described in

¹ Analysis of aggregated exposures and absorbed dose estimates was performed only for the eight pollutants mentioned at the end of Section 9.2.

Table 9.5.7 Summary of Unadjusted Urinary Biomarker Concentrations (ng/mL) for Three Pollutants and Metabolites Measured in the Urine of Participating NC Children^a

Strata	N	% Detected	Arith. Mean	Standard Deviation	Geom. Mean	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
3,5,6-TCP										
Overall	128	98	7.28	10.3	5.22	3.70	5.26	8.18	15.5	104
Urban	107	98	7.28	10.9	5.18	3.68	5.22	8.28	13.3	104
Rural	21	100	7.28	6.93	5.46	3.95	5.29	6.51	19.9	30.9
Low-Income	59	98	6.55	7.36	4.90	3.40	5.08	5.86	19.9	49.1
Mid/High-Income	65	99	8.02	12.7	5.48	3.81	5.22	10.1	14.7	104
Home Children	65	97	8.12	13.7	5.15	3.68	5.16	8.27	15.5	104
Day Care Children	63	100	6.42	4.76	5.31	3.74	5.29	7.82	12.0	30.9
2,4-D										
Overall	128	94	0.775	0.561	0.594	0.343	0.652	1.09	1.97	2.64
Urban	107	94	0.812	0.575	0.624	0.349	0.690	1.10	2.11	2.64
Rural	21	95	0.583	0.453	0.465	0.280	0.430	0.656	1.40	1.97
Low-Income	59	97	0.836	0.558	0.665	0.405	0.736	1.10	1.97	2.64
Mid/High-Income	65	91	0.707	0.573	0.522	0.276	0.510	0.945	2.11	2.61
Home Children	65	88	0.715	0.556	0.519	0.245	0.510	1.07	1.93	2.41
Day Care Children	63	100	0.836	0.565	0.684	0.412	0.707	1.10	2.17	2.64
Pentachlorophenol										
Overall	128	89	0.605	0.629	0.433	0.262	0.394	0.654	1.92	3.45
Urban	107	89	0.639	0.672	0.447	0.258	0.400	0.694	2.43	3.45
Rural	21	91	0.433	0.280	0.369	0.290	0.328	0.500	0.901	1.33
Low-Income	59	95	0.659	0.625	0.498	0.296	0.460	0.773	1.92	3.45
Mid/High-Income	65	85	0.571	0.649	0.388	0.220	0.335	0.564	2.43	3.08
Home Children	65	80	0.641	0.734	0.419	0.246	0.370	0.658	2.70	3.45
Day Care Children	63	98	0.567	0.500	0.448	0.281	0.402	0.646	1.38	2.84

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the MDL divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of participants having data entering into the summaries.

Table 9.5.8 Summary of Unadjusted Urinary Biomarker Concentrations (ng/mL) for Three Pollutants and Metabolites Measured in the Urine of Participating OH Children^a

Strata	N	% Detected	Arith. Mean	Standard Deviation	Geom. Mean	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
3,5,6-TCP										
Overall	122	100	5.61	3.38	4.64	2.87	5.07	7.33	12.3	15.3
Urban	107	100	5.68	3.43	4.71	2.90	4.79	7.50	12.8	15.3
Rural	15	100	5.08	3.07	4.21	2.08	5.28	6.12	12.3	12.3
Low-Income	40	100	5.68	3.11	4.89	3.38	5.15	7.42	12.0	14.1
Mid/High-Income	70	100	5.69	3.59	4.60	2.73	5.12	7.78	13.3	15.3
Home Children	67	100	6.05	3.73	4.90	3.01	5.28	9.08	12.9	15.3
Day Care Children	55	100	5.06	2.84	4.34	2.68	4.43	6.88	11.2	12.8
2,4-D										
Overall	126	98	1.32	1.59	0.927	0.566	1.02	1.35	3.59	12.5
Urban	109	98	1.32	1.68	0.902	0.560	0.994	1.34	3.59	12.5
Rural	17	100	1.30	0.904	1.11	0.857	1.15	1.36	4.35	4.35
Low-Income	40	100	1.36	1.14	1.03	0.589	1.12	1.60	3.97	5.63
Mid/High-Income	73	97	1.37	1.90	0.908	0.550	1.02	1.33	7.04	12.5
Home Children	69	97	1.50	1.84	1.03	0.710	1.16	1.44	4.35	12.5
Day Care Children	57	100	1.10	1.21	0.816	0.525	0.809	1.17	3.21	7.55
Pentachlorophenol										
Overall	126	99	1.27	2.20	0.876	0.536	0.835	1.39	2.71	23.8
Urban	109	99	1.23	2.32	0.830	0.520	0.755	1.38	2.47	23.8
Rural	17	100	1.52	1.19	1.25	0.871	1.24	1.52	5.23	5.23
Low-Income	40	100	1.05	0.884	0.797	0.486	0.769	1.59	2.33	5.02
Mid/High-Income	73	99	1.47	2.80	0.959	0.640	0.876	1.39	3.56	23.8
Home Children	69	99	1.54	2.89	0.993	0.640	0.920	1.39	3.96	23.8
Day Care Children	57	100	0.946	0.638	0.753	0.483	0.738	1.36	2.37	2.71

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the MDL divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of participants having data entering into the summaries.

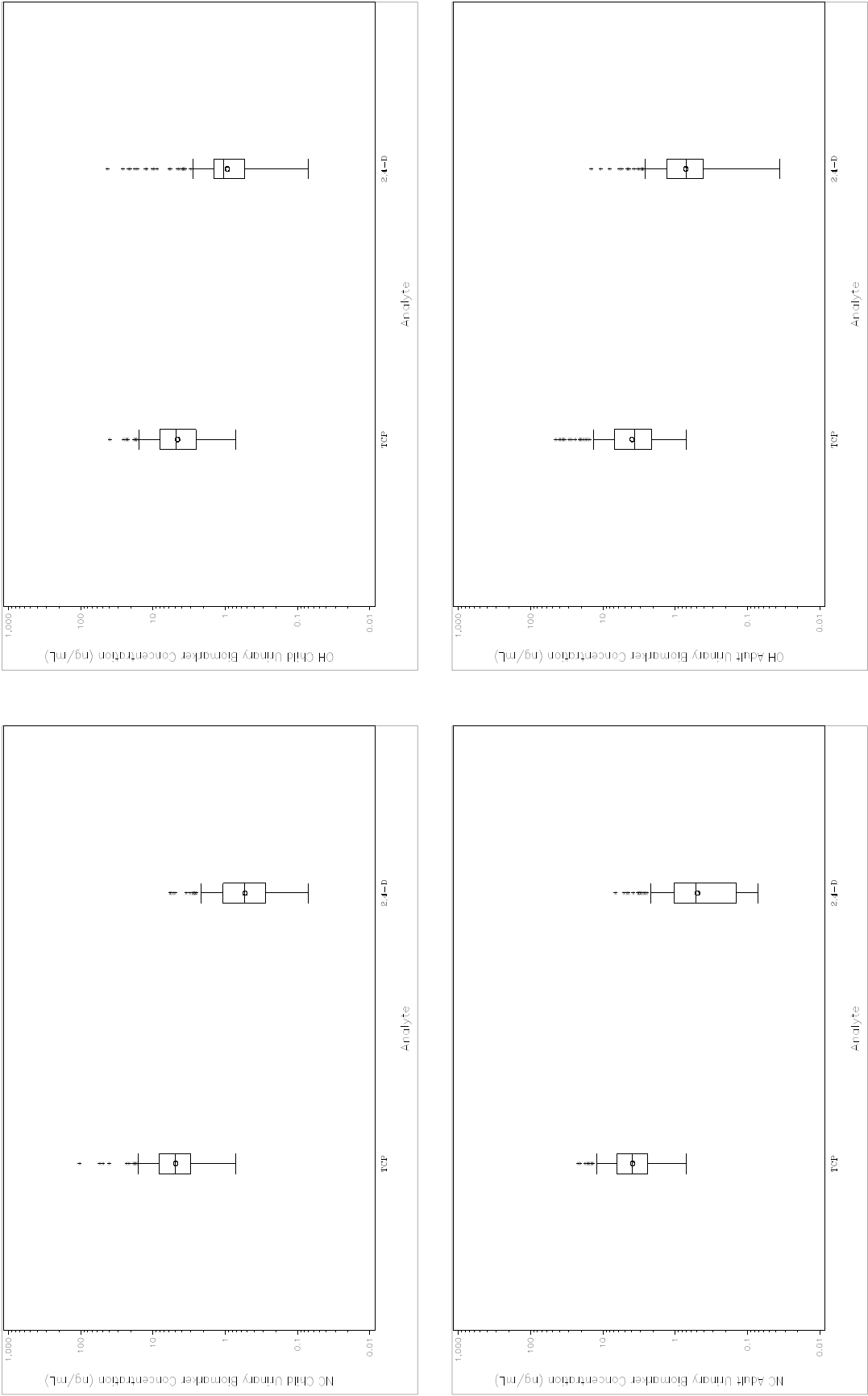


Figure 9.5.9 Boxplots of Urinary Biomarker Concentrations for Participating NC and OH Children and Adults, for Eight Pollutants

Section 9.3.2, a ratio of least-squares geometric mean concentrations was calculated between the above pairs of strata, along with an approximate 95% confidence interval on this ratio.

For children's potential exposure level and potential absorbed dose estimates, ratios and confidence intervals are presented by pollutant and exposure route in Appendix R (Table R-1 for NC and Table R-2 for OH). These ratios are of the least-squares geometric mean for the first stratum specified in the column heading versus the second specified stratum, and 95% confidence intervals are shown in parentheses. The t-test applied to the log-transformed data also is a test of whether this ratio differs significantly from one; p-values associated with these tests are also given in Appendix R, within the second, third, and fourth columns in Table R-3 (for NC) and Table R-4 (for OH).

Table 9.5.9 has condensed the information presented in Tables R-1 and R-2 of Appendix R by presenting only those ratios which were significantly different from one at the 0.05 level. Thus, Table 9.5.9 contains one row for each combination of pollutant, parameter, and exposure route having at least one of the three ratios significantly different from one at the 0.05 level in either state. When a ratio is not specified in this table and a dash does not appear in its place (meaning that the criteria placed on the percentage of detected concentrations entering into calculation of the exposure/dose estimate were met for performing statistical analysis), then the ratio was not significantly different from one at the 0.05 level.

To illustrate how to interpret the numbers in Table 9.5.9 and Tables R-1 and R-2, analysis of 3,5,6-TCP data from OH suggest that potential exposure level via inhalation is about 70% higher in low-income children than in middle/high-income children (ratio=1.70), and potential exposure level via indirect ingestion is about 81% higher in day care children than in stay-at-home children (ratio=1.81). Both are significantly different from one at the 0.05 level but not at the 0.01 level.

For the urinary biomarker concentrations, ratios between the specified strata and 95% confidence intervals on these ratios are presented by pollutant in Appendix R (Table R-5 for NC and Table R-6 for OH). For a given state, these concentrations were statistically analyzed, and ratios were reported, only for those pollutants in which at least 50% of urine samples had detected concentrations. P-values associated with t-tests applied to the log-transformed urinary biomarker concentrations to test whether these ratios differ significantly from one are also given in Appendix R, within the second, third, and fourth columns in Table R-7 (for NC) and Table R-8 (for OH). Among all ratios reported in Table R-5 and R-6 of Appendix R, significant differences from one were reported only for 2,4-D in OH, where the geometric mean for OH stay-at-home children was about 65% of the geometric mean for OH day care children under each form of the urinary concentration (i.e., unadjusted, creatinine-adjusted, specific gravity-adjusted).

Table 9.5.9 Estimated Ratios Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating NC and OH Children, When These Ratios Were Significantly Different from One at the 0.05 Level^a

Pollutant/ Metabolite	Exposure/Dose Parameter and Pathway	Estimated Ratio of Geometric Means (When Significantly Different from 1 at the 0.05 Level)					
		North Carolina			Ohio		
		Urban vs. Rural	Low- vs. Mid/High- Income	Day Care vs. Home	Urban vs. Rural	Low- vs. Mid/High- Income	Day Care vs. Home
OP Pesticides and Metabolites							
Chlorpyrifos	Exposure/Dietary Ingestion ^b					2.00**	
	Exposure/Indirect Ingestion ^c						2.52**
	Dose/Dietary Ingestion ^d					2.06**	
	Dose/Indirect Ingestion ^c						2.33*
	Aggregated Exposure ^f					1.64*	
	Aggregated Dose ^g					1.66*	
Diazinon	Exposure/Inhalation ^h		2.24*				2.02*
	Exposure/Dietary Ingestion						1.37**
	Exposure/Indirect Ingestion						3.45**
	Dose/Inhalation ⁱ		2.14*				1.88*
	Dose/Dietary Ingestion						1.28*
	Dose/Indirect Ingestion						3.22*
	Aggregated Exposure						1.66*
	Aggregated Dose						1.52*
3,5,6-TCP	Exposure/Inhalation					1.70*	
	Exposure/Dietary Ingestion		0.65*	1.82*			
	Exposure/Indirect Ingestion						1.81*
	Dose/Inhalation					1.73*	
	Dose/Dietary Ingestion		0.60**				
	Aggregated Exposure		0.61*	1.76*			
	Aggregated Dose		0.56**				
Pyrethroid Pesticides							
Cyfluthrin	Exposure/Indirect Ingestion				2.47*		
	Dose/Indirect Ingestion				2.44*		
<i>cis</i> -Permethrin	Exposure/Inhalation		2.38**				
	Exposure/Dietary Ingestion						3.14**
	Exposure/Indirect Ingestion						1.95*
	Dose/Inhalation		2.26**				
	Dose/Dietary Ingestion						2.92**
	Aggregated Exposure						2.34*
	Aggregated Dose						2.16*

Table 9.5.9 Estimated Ratios Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating NC and OH Children, When These Ratios Were Significantly Different from One at the 0.05 Level^a (cont.)

Pollutant/ Metabolite	Exposure/Dose Parameter and Pathway	Estimated Ratio of Geometric Means (When Significantly Different from 1 at the 0.05 Level)					
		North Carolina			Ohio		
		Urban vs. Rural	Low- vs. Mid/High- Income	Day Care vs. Home	Urban vs. Rural	Low- vs. Mid/High- Income	Day Care vs. Home
<i>trans</i> -Permethrin	Exposure/Inhalation		2.45**				
	Exposure/Dietary Ingestion						2.92**
	Dose/Inhalation		2.31**				
	Dose/Dietary Ingestion						2.72*
Acid Herbicides							
2,4-D	Exposure/Inhalation			2.23**			
	Exposure/Dietary Ingestion			1.59*			
	Exposure/Indirect Ingestion	3.39**	0.27**	0.54*	2.80*	0.29**	
	Dose/Inhalation			1.94*			
	Dose/Indirect Ingestion	3.68**	0.25**	0.47*	2.84*	0.29**	
PAHs							
Benz[<i>a</i>]anthracene	Exposure/Indirect Ingestion				3.69**	0.43**	3.29**
	Dose/Indirect Ingestion				3.65**	0.43**	3.08**
Benzo[<i>b</i>]fluoranthene	Exposure/Inhalation		1.58*				
	Exposure/Indirect Ingestion			1.81*	3.55**	0.43**	3.15**
	Dose/Inhalation		1.52*				
	Dose/Indirect Ingestion				3.52**	0.43**	2.94**
Benzo[<i>k</i>]fluoranthene	Exposure/Inhalation		1.25*				
	Exposure/Indirect Ingestion				3.18**	0.43**	3.16**
	Dose/Indirect Ingestion				3.16**	0.43**	2.95**
Benzo[<i>ghi</i>]perylene	Exposure/Indirect Ingestion				3.18**	0.43**	3.12**
	Dose/Indirect Ingestion				3.16**	0.43**	2.92**
Benzo[<i>a</i>]pyrene	Exposure/Inhalation		1.57**				
	Exposure/Indirect Ingestion				3.35**	0.41**	3.09**
	Dose/Inhalation		1.51*				
	Dose/Indirect Ingestion				3.32**	0.41**	2.89**
Benzo[<i>e</i>]pyrene	Exposure/Inhalation		1.36*				
	Exposure/Indirect Ingestion				3.23**	0.43**	3.04**
	Dose/Inhalation		1.31*				
	Dose/Indirect Ingestion				3.21**	0.44**	2.84**

Table 9.5.9 Estimated Ratios Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating NC and OH Children, When These Ratios Were Significantly Different from One at the 0.05 Level^a (cont.)

Pollutant/ Metabolite	Exposure/Dose Parameter and Pathway	Estimated Ratio of Geometric Means (When Significantly Different from 1 at the 0.05 Level)					
		North Carolina			Ohio		
		Urban vs. Rural	Low- vs. Mid/High- Income	Day Care vs. Home	Urban vs. Rural	Low- vs. Mid/High- Income	Day Care vs. Home
Chrysene	Exposure/Inhalation		1.57**				
	Exposure/Indirect Ingestion				3.51**	0.42**	3.24**
	Dose/Inhalation		1.52*				
	Dose/Indirect Ingestion				3.47**	0.42**	3.03**
Dibenz[<i>a,h</i>] anthracene	Exposure/Indirect Ingestion				3.50**	0.44**	3.19**
	Dose/Indirect Ingestion				3.47**	0.44**	2.98**
Indeno[1,2,3- <i>cd</i>] pyrene	Exposure/Inhalation		1.48*				
	Exposure/Indirect Ingestion				3.34**	0.43**	3.20**
	Dose/Inhalation		1.43*				
	Dose/Indirect Ingestion				3.31**	0.43**	3.00**
Phthalates							
Benzylbutylphthalate	Exposure/Dietary Ingestion	--	--	--			2.83**
	Exposure/Indirect Ingestion						2.73**
	Dose/Dietary Ingestion	--	--	--			2.44*
	Dose/Indirect Ingestion						2.54**
Di- <i>n</i> -butylphthalate	Exposure/Inhalation			1.77**	0.65*		1.44*
	Exposure/Dietary Ingestion						2.17**
	Exposure/Indirect Ingestion						2.02**
	Dose/Inhalation			1.54**	0.63*		1.34*
	Dose/Dietary Ingestion		0.58*				1.87*
	Dose/Indirect Ingestion						1.88**
	Aggregated Exposure						2.07**
	Aggregated Dose						1.76*
Phenols							
Bisphenol-A	Exposure/Inhalation					1.38*	
	Exposure/Dietary Ingestion			2.47**			
	Dose/Dietary Ingestion			2.19**			
	Aggregated Exposure			2.12**			
	Aggregated Dose			1.85**			

Table 9.5.9 Estimated Ratios Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating NC and OH Children, When These Ratios Were Significantly Different from One at the 0.05 Level^a (cont.)

Pollutant/ Metabolite	Exposure/Dose Parameter and Pathway	Estimated Ratio of Geometric Means (When Significantly Different from 1 at the 0.05 Level)					
		North Carolina			Ohio		
		Urban vs. Rural	Low- vs. Mid/High- Income	Day Care vs. Home	Urban vs. Rural	Low- vs. Mid/High- Income	Day Care vs. Home
PCBs							
PCB101	Exposure/Inhalation						1.73*

^a Dashed cells indicate that no analysis was performed on the exposure/dose estimates for the given exposure route due to the sample media entering into their calculation not achieving requirements on the percentage of detected measures. Blank cells indicate that a ratio was estimated but was not significantly different from one at the 0.05 level. Note that pollutants, or exposure routes for a given pollutant, have been excluded from this table if all cells within the rows corresponding to these pollutants or exposure routes would have been blank or dashed within this table. All estimated ratios for each exposure route and each pollutant, along with corresponding 95% confidence intervals on these ratios, are presented in Table R-1 (NC) and Table R-2 (OH) of Appendix R.

^b Potential exposure level via dietary ingestion

^c Potential exposure level via indirect ingestion

^d Potential absorbed dose via dietary ingestion

^e Potential absorbed dose via indirect ingestion

^f Aggregated potential exposure level

^g Aggregated potential absorbed dose

^h Potential exposure level via inhalation

ⁱ Potential absorbed dose via inhalation

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

9.5.4.1 Results of Analyses on NC Exposure/Dose Estimates and Urinary Biomarker Concentrations

Between urban and rural NC children, potential exposure level and potential absorbed dose differed significantly at the 0.01 level in only one instance: for 2,4-D via indirect ingestion. On average, urban NC children had estimated potential exposure/dose estimates for 2,4-D via indirect ingestion that exceeded three times that of rural NC children.

Significant differences between low-income and middle/high-income strata in estimated potential exposure and/or absorbed dose via inhalation for NC children were observed at the 0.01 level for *cis*- and *trans*-permethrin and chrysene, and at the 0.05 level for five other PAHs (benzo[*b*]fluoranthene, benzo[*k*]fluoranthene, benzo[*a*]pyrene, benzo[*e*]pyrene, and indeno[1,2,3-*cd*]pyrene) and diazinon. Via the inhalation route, low-income NC children tended to have 36% to 58% higher exposure levels and absorbed doses of the PAHs compared to middle/high-income children, and from 100% to 150% higher exposure levels and absorbed doses for diazinon, *cis*- and *trans*-permethrin. Via the indirect ingestion route, significant differences existed in potential exposures and absorbed dose at the 0.01 level for 2,4-D, where low-income NC children experienced only 25% of the potential exposure levels and absorbed

doses compared to middle/high-income children. For 3,5,6-TCP, significant differences were observed at the 0.01 level for potential absorbed dose via the dietary ingestion route and for aggregate potential absorbed dose (and at the 0.05 level for potential exposure level via indirect ingestion and for aggregate potential exposure), where low-income NC children averaged about 60% of the potential exposures and absorbed doses compared to middle/high-income children.

Compared to stay-at-home children, NC children who attend day care centers were associated with 59% to 123% higher estimated potential exposure levels and absorbed doses to 2,4-D via the inhalation and dietary ingestion routes, but approximately 50% lower exposures/doses via the indirect ingestion route. These differences were statistically significant at the 0.05 level, with one (exposure via inhalation) significant at the 0.01 level. These two groups of children also differed significantly at the 0.01 level in estimated potential exposure levels and absorbed doses via dietary ingestion for bisphenol-A and via inhalation for di-*n*-butylphthalate. In each case, day care children tended to have from 54% to 147% higher estimated exposure or absorbed dose estimates compared to stay-at-home children. For bisphenol-A, the estimated aggregated potential exposure and absorbed dose for day care children was significantly different from (and approximately twice as high as) stay-at-home children at the 0.01 level.

Table R-5 of Appendix R shows that statistical analysis of urinary biomarker concentration was limited to 2,4-D, 3,5,6-TCP, and pentachlorophenol, as these were the only pollutants that were analyzed in urine (out of six) and detected in at least 50% of the samples for NC children. IMP measurements in NC urine samples were not statistically analyzed because the analytical method did not provide adequate quantitative recoveries. Urine concentrations for participating NC children did not differ significantly at the 0.05 level between the three pairs of strata (urban vs. rural, low-income vs. middle/high-income, day care vs. stay-at-home children) for these three pollutants, regardless of whether the concentrations were adjusted for specific gravity or creatinine levels.

9.5.4.2 Results of Analyses on OH Exposure/Dose Estimates and Urinary Biomarker Concentrations

Between urban and rural OH children, estimated potential exposure level and potential absorbed dose via the indirect ingestion route differed significantly at the 0.01 level for all nine target PAHs, where urban OH children had estimated potential exposure/dose estimates that were from three to four times as high, on average, than rural OH children, and at the 0.05 level for cyfluthrin and 2,4-D, where estimates for urban OH children were from two to three times as high as rural children. For di-*n*-butylphthalate via the inhalation route, estimated potential exposure/dose estimates for urban OH children differed significantly at the 0.05 level and were only about 65% of the estimates for rural OH children, on average. For those pollutants having aggregate exposure/dose calculated, no significant differences were observed at the 0.05 level between urban and rural OH children.

Significant differences between low-income and middle/high-income OH children in potential exposure and/or absorbed dose were observed at the 0.01 level for 2,4-D and all target PAHs via indirect ingestion and for chlorpyrifos via dietary ingestion. When significant differences occurred via indirect ingestion, low-income OH children tended to have exposures/doses that were 30% to 45% lower than middle/high-income OH children. In contrast, low-income OH children had chlorpyrifos exposures via dietary ingestion that were twice as high on average as for middle/high-income OH children. Exposures via inhalation to bisphenol-A and 3,5,6-TCP were 38% and 70% higher, respectively, for low-income children compared to middle/high-income children, but these were significant only at the 0.05 level. For those pollutants having aggregate exposure/dose calculated, significant differences in these aggregated estimates between low-income and middle/high-income OH children were observed only for chlorpyrifos and at the 0.05 level, with low-income children averaging about 65% higher estimates for both potential exposure and absorbed dose.

Significant differences in potential exposure and/or potential absorbed dose estimates between OH day care children and OH stay-at-home children were observed at the 0.01 level for chlorpyrifos, the nine target PAHs, benzylbutylphthalate, and *cis*-permethrin via indirect ingestion; for *cis*- and *trans*-permethrin via dietary ingestion; and for diazinon, benzylbutylphthalate, and di-*n*-butylphthalate via both exposure routes. In all of these instances, day care children averaged higher exposures and/or doses compared to stay-at-home children. The largest differences occurred with the PAHs and diazinon via indirect ingestion, where exposure/dose estimates averaged over three times higher for day care children than for stay-at-home children. Aggregate potential exposure level and/or aggregate potential absorbed dose differed significantly between day care and stay-at-home children at the 0.01 level for di-*n*-butylphthalate, and at the 0.05 level for diazinon and *cis*- and *trans*-permethrin, with the largest differences between the two groups occurring for the two permethrins (where day care children averaged more than double the exposure levels and/or doses compared to stay-at-home children when they differed significantly).

Table R-6 of Appendix R shows that statistical analysis of urinary biomarker concentration was performed for five pollutants (2,4-D, 3,5,6-TCP, 1-hydroxypyrene, pentachlorophenol, 3-PBA) that were analyzed in urine for OH and were detected in at least 50% of the samples for OH children. Urine concentrations differed significantly at the 0.05 level between day care and stay-at-home OH children only for 2,4-D, with this result holding for unadjusted and adjusted urine concentrations. Here, day care children tended to have 2,4-D concentrations in urine samples that were only about 65% of the concentrations for stay-at-home children. No other significant differences between strata were observed for any other pollutant, regardless of whether the concentrations were adjusted for specific gravity or creatinine levels.

9.5.4.3 Comparing Potential Exposure, Potential Absorbed Dose, and Urine Concentrations Between Children and Adults in the Same Household

For potential exposure level and potential absorbed dose, Table R-9 of Appendix R presents estimated ratios of geometric means for NC children versus adults in the same

household for a given exposure route, along with 95% confidence intervals on this ratio. Table R-10 presents the same results for the urinary biomarker concentrations for NC. The corresponding tables for the OH portion of the study are Table R-11 (potential exposure level and potential absorbed dose) and Table R-12 (urinary biomarker) of Appendix R. In Tables R-9 through R-12, a ratio of greater than one implies that the given exposure or dose measurement tended to be higher for the monitored child than for the child's adult caregiver in the same household. The columns of these tables specify the strata for which the ratio represents, with the first of these columns representing the entire set of study households within the given state. P-values for the statistical tests which were below 0.05 (indicating significant differences at the 0.05 level) are found in the last four columns of Table R-3 (for NC potential exposure and absorbed dose), Table R-4 (for OH potential exposure and absorbed dose), Table R-7 (for NC urinary biomarker concentrations) and Table R-8 (for OH urinary biomarker concentrations) in Appendix R.

For both states and for nearly all exposure routes, statistically significant differences were observed at the 0.01 level in potential exposure/dose estimates for each target pollutant between participating children and their adult caregivers living in the same households. The nature of the differences between children and adults was heavily influenced by the physiological and behavioral differences between them. For example, via the inhalation route, children tended to have lower potential exposures to these pollutants than their adult caregivers, but this was primarily due to their lower ventilation rates. In contrast, potential absorbed doses were higher for children than for adults because of their smaller body weights. Via the indirect ingestion route, children tended to have higher potential exposure/dose levels than adults, partly because children tend to have higher soil and dust ingestion rates than adults due to their different activity patterns. For the dietary ingestion route, statistical analyses to compare children and adult exposures could be performed only on 2,4-D, PCP, and 3,5,6-TCP data, due to neutral pollutants not being measured in adult food samples. When significant differences were present between children and adults for potential exposure/dose via dietary ingestion, children tended to have higher estimates than adults. For both states, estimated aggregate potential absorbed dose levels for 2,4-D and 3,5,6-TCP differed significantly at the 0.01 level between children and their adult caregivers within the same household, with children having roughly 4 to 5 times the potential absorbed dose compared to adults.

The estimates in Table R-10 of Appendix R indicate that there is no statistically significant difference in urinary 2,4-D concentrations (ng/mL) at the 0.05 level between participating NC children and adults in the same household when the concentrations are either unadjusted or adjusted for specific gravity. However, if adjusted for creatinine ($\mu\text{mole/mole}$), 2,4-D concentrations averaged about 80% higher in children samples versus adult samples. This difference was statistically significant at the 0.01 level, as were differences associated with children in NC urban areas, from low-income families, or who attended day care centers. When either unadjusted or adjusted for specific gravity, urinary concentrations in children were from 30% to 40% higher than their adult caregivers for PCP and 3,5,6-TCP, with the differences being statistically significant at the 0.05 level. However, when urinary concentrations were adjusted for creatinine levels, these differences became considerably larger and significant at the 0.01

level. This trend (i.e., children having higher concentrations of 2,4-D, PCP, and 3,5,6-TCP compared to their adult caregivers) agreed with that seen for estimated aggregate potential absorbed dose in Table R-9.

The descriptive statistics of NC urinary biomarker concentrations, found in Appendix P, show that two hydroxy-PAHs were detected in fewer children's urine samples than adults' urine samples. These two pollutants were detected in less than 3% of all children's urine samples (n=128). In contrast, detectable levels of 1-hydroxybenz[a]anthracene and 3-hydroxychrysene were found in approximately 31% and 8%, respectively, of adults' urine samples (n=128). In the previous pilot study (7), these two hydroxy-PAHs were detected in more than 70% of the urine samples (24 children and 24 adults). This greater detection in the earlier study is primarily due to the analytical method used in the previous study, which was targeted at PAH metabolites and had a lower estimated detection limits (~0.01 ng/mL). The method used for the CTEPP study was modified in order to include metabolites from other pollutant classes such as 2,4-D, PCP, and 3,5,6-TCP, which increased the estimated detection limit for hydroxy-PAHs to ~0.2 ng/mL.

For all five pollutants included in the analysis of OH urine data and in Table R-12, urine concentrations adjusted for creatinine levels differed significantly at the 0.01 level between OH children and adults in the same household, both overall and separately within each stratum. These creatinine-adjusted concentrations were higher in children samples by factors of 2 or 3 compared to adult samples. If no adjustment is made or when adjusting for specific gravity, urine concentrations differed significantly between children and adults at the 0.01 level for only three of the five pollutants (i.e., all but 1-hydroxypyrene and 3-phenoxybenzoic acid), and the extent to which children's concentrations were higher than adults was less than when a creatinine adjustment was made. Selected strata (rural, middle/high-income, day care children) did not see a significant difference at the 0.05 level between children and adults for 2,4-D urine concentrations that were either unadjusted or adjusted for specific gravity.

The descriptive statistics of OH urinary biomarker concentrations, found in Appendix Q, show that seven hydroxy-PAHs, 2,4-D, 3,5,6-TCP, 3-phenoxybenzoic acid, and PCP were measured in OH children and adults' urine samples. While IMP was also measured, the analytical method employed in this study could not provide quantitative recoveries for IMP, which contributed to less than 10% of urine samples having measurable levels of IMP. Detectable concentrations for 2,4-D, 3,5,6-TCP, 3-phenoxybenzoic acid, and PCP were found in most urine samples. While most OH children and adult urine samples had detectable concentrations for 1-hydroxypyrene, fewer urine samples had detectable levels of 1- and 3-hydroxybenz[a]anthracene and 3- and 6-hydroxy chrysene.

9.6 Goal 4: To Apportion Exposures among the Inhalation, Dietary Ingestion, and Indirect Ingestion Routes

For the eight pollutants and metabolites listed at the end of Section 9.2, aggregate potential exposure level and aggregate potential absorbed dose were estimated by summing the route-specific exposure/dose estimates across the three exposure routes characterized in this

study (inhalation, dietary ingestion, and indirect ingestion). The statistical analyses performed in support of Goal 4 characterized how these aggregate exposure/dose estimates were apportioned across the three exposure routes, so that the routes could be evaluated based on their contribution to total exposure/dose.

9.6.1 *Sub-goal 4.1: To Estimate the Proportion of Aggregated Exposure and Dose that is Associated with a Given Exposure Route for Participating Children, Overall and by Stratum*

Analysis #1 under Goal 4 involved calculating the proportion of aggregate potential exposure level and absorbed dose under each exposure route for each child participant, then fitting the logistic regression model (8-8) in Section 8.5.2.3 to these proportions to estimate mean proportions as a function of urbanicity, income category, and day care status. Table 9.6.1 contains estimates of the mean proportions that are attributable to each exposure route, calculated separately by pollutant and state across all participating children. Tables 9.6.2 and 9.6.3 contain mean proportions by stratum for NC and OH children, respectively, when the test for significance of the given strata (i.e., urban and rural strata, low-income and middle/high-income strata, or stay-at-home and day care strata) on the overall proportion was significant at the 0.05 level. Tables S-1 and S-2 of Appendix S contain estimates of mean proportions for each stratum and exposure route and 95% confidence intervals on these mean proportions, for participating children in NC and OH, respectively. Results presented in these tables represent mean proportions of both aggregate potential exposure level and aggregate potential absorbed dose.

Note that in some cases, the outcome of the statistical analysis presented in Tables 9.6.2 and 9.6.3, as well as Tables S-1 through S-4 in Appendix S, suggested that a significant stratum effect was present when, in fact, the estimated mean proportions within the different strata were either each very large or very small. Such an outcome does not necessarily suggest that the difference in the estimated proportion between the strata was significant from a practical standpoint. Thus, caution should be taken in making inferences from the results in these tables when the overall mean percentages for certain exposure routes were either very small (e.g., less than 5%) or very large (e.g., greater than 95%).

Among the adults in this study, exposure and dose estimates for all three exposure routes, and therefore aggregate exposure/dose estimates, could be characterized for only two of the eight pollutants (2,4-D and 3,5,6-TCP). This is because adult food samples were not analyzed for the other six pollutants, and therefore, dietary exposure/dose estimates could not be calculated for them. For these two pollutants, Table 9.6.4 contains estimates of the mean proportions attributable to each exposure route as calculated over all participating adult caregivers, by pollutant and state. Tables S-3 and S-4 of Appendix S contain estimates of mean proportions for each stratum and exposure route, as well as 95% confidence intervals on these mean proportions, for participating adults in NC and OH, respectively. Note from these two tables that for NC and OH adults, the stratum effect on the overall proportion was not significant at the 0.05 level for either of the two pollutants or for any of the exposure routes.

Table 9.6.1. Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating NC and OH Children That is Attributable to Each Exposure Route, Calculated Across All Children^a

Pollutant/Metabolite	Estimate of the Overall Mean Proportion of Aggregate Exposure/Dose in Participating Children					
	North Carolina			Ohio		
	Inhalation	Dietary Ingestion	Indirect Ingestion	Inhalation	Dietary Ingestion	Indirect Ingestion
OP Pesticides and Metabolite						
Chlorpyrifos	0.39	0.54	0.06	0.19	0.76	0.04
Diazinon	0.40	0.55	0.05	0.33	0.62	0.05
3,5,6-TCP	0.03	0.95	0.02	0.02	0.98	<0.01
Pyrethroid Pesticides						
<i>cis</i> -Permethrin	0.05	0.55	0.39	0.04	0.56	0.39
<i>trans</i> -Permethrin	0.04	0.57	0.37	0.04	0.58	0.37
Acid Herbicides						
2,4-D	0.03	0.95	0.02	0.03	0.92	0.03
Phthalates						
Di- <i>n</i> -butylphthalate	0.06	0.93	0.01	0.18	0.80	0.02
Phenols						
Bisphenol-A	0.01	0.99	<0.01	0.01	0.99	<0.01

^a Estimates of mean proportions are based on a logistic regression analysis fitted to the mean proportions calculated for each participating child. Estimated 95% confidence intervals on these mean proportions are given in the second column of Table S-1 (NC) and Table S-2 (OH) of Appendix S.

Table 9.6.2 Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating NC Children That is Attributable to Each Exposure Route, Calculated by Stratum, When Differences Between Pairs of Strata Were Significant at the 0.05 Level^a

Pollutant/ Metabolite	Exposure Route	Stratum	Estimate of Stratum Mean Proportion	P-value of Test for Significant Stratum Effect
OP Pesticides and Metabolite				
Diazinon	Inhalation	Low-Income Children	0.46	0.008**
		Middle/High-Income Children	0.34	
	Indirect Ingestion	Low-Income Children	0.04	0.049*
		Middle/High-Income Children	0.06	
3,5,6-TCP	Inhalation	Low-Income Children	0.04	0.018*
		Middle/High-Income Children	0.02	
		Non-Day Care Children	0.03	0.019*
		Day Care Children	0.01	
Pyrethroid Pesticides				
cis-Permethrin	Inhalation	Low-Income Children	0.07	0.020*
		Middle/High-Income Children	0.03	
trans-Permethrin	Inhalation	Low-Income Children	0.07	0.004**
		Middle/High-Income Children	0.03	
		Non-Day Care Children	0.06	0.048*
		Day Care Children	0.03	
Acid Herbicides				
2,4-D	Dietary Ingestion	Urban Children	0.92	0.038*
		Rural Children	0.96	
	Inhalation	Urban Children	0.04	0.021*
		Rural Children	0.02	
	Indirect Ingestion	Low-Income Children	0.01	0.009**
		Middle/High-Income Children	0.03	
Phthalates				
Di-n-butylphthalate	Dietary Ingestion	Urban Children	0.91	0.014*
		Rural Children	0.94	
	Inhalation	Urban Children	0.08	0.010*
		Rural Children	0.05	
Phenols				
Bisphenol-A	Dietary Ingestion	Non-Daycare Children	0.98	<0.001**
		Daycare Children	0.99	
	Inhalation	Non-Daycare Children	0.02	<0.001**
		Davcare Children	0.01	

^a Estimates of mean proportions for specific strata are based on a logistic regression analysis fitted to the mean proportions calculated for each participating child. Estimated 95% confidence intervals on these mean proportions are given in the fourth column of Table S-1 of Appendix S.

* Statistically significant at the 0.05 level, but not at the 0.01 level.

** Statistically significant at the 0.01 level.

Table 9.6.3 Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating OH Children That is Attributable to Each Exposure Route, Calculated by Stratum, When Differences Between Pairs of Strata Were Significant at the 0.05 Level^a

Pollutant/ Metabolite	Exposure Route	Stratum	Estimate of Stratum Mean Proportion	P-value of Test for Significant Stratum Effect
OP Pesticides and Metabolite				
Chlorpyrifos	Indirect Ingestion	Low-Income Children	0.03	<0.001**
		Middle/High-Income Children	0.05	
		Non-Day Care Children	0.03	0.038*
		Day Care Children	0.06	
Diazinon	Indirect Ingestion	Low-Income Children	0.03	0.009**
		Middle/High-Income Children	0.07	
3,5,6-TCP	Dietary Ingestion	Low-Income Children	0.97	0.023*
		Middle/High-Income Children	0.99	
	Inhalation	Low-Income Children	0.03	0.010**
		Middle/High-Income Children	0.01	
Pyrethroid Pesticides				
cis-Permethrin	Inhalation	Urban Children	0.06	0.010*
		Rural Children	0.03	
trans-Permethrin	Inhalation	Low-Income Children	0.02	<0.001**
		Middle/High-Income Children	0.06	
		Urban Children	0.05	0.015*
		Rural Children	0.03	
Acid Herbicides				
2,4-D	Dietary Ingestion	Low-Income Children	0.95	0.040*
		Middle/High-Income Children	0.89	
	Indirect Ingestion	Urban Children	0.07	<0.001**
		Rural Children	0.02	
Phthalates				
Di-n-butylphthalate	Dietary Ingestion	Non-Day Care Children	0.76	0.017*
		Day Care Children	0.84	
	Inhalation	Non-Day Care Children	0.22	0.047*
		Day Care Children	0.15	
	Indirect Ingestion	Non-Day Care Children	0.02	0.008**
		Day Care Children	0.01	
Phenols				
Bisphenol-A	Dietary Ingestion	Non-Daycare Children	0.99	0.015*
		Daycare Children	0.99	
	Inhalation	Urban Children	0.01	0.039*
		Rural Children	0.00	

^a Estimates of mean proportions for specific strata are based on a logistic regression analysis fitted to the mean proportions calculated for each participating child. Estimated 95% confidence intervals on these mean proportions are given in the fourth column of Table S-2 of Appendix S.

* Statistically significant at the 0.05 level, but not at the 0.01 level.

** Statistically significant at the 0.01 level.

Table 9.6.4 Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating NC and OH Adults That is Attributable to Each Exposure Route, Calculated Across All Adults^a

Pollutant/Metabolite	Estimate of the Overall Mean Proportion in Participating Adults					
	North Carolina			Ohio		
	Inhalation	Dietary Ingestion	Indirect Ingestion	Inhalation	Dietary Ingestion	Indirect Ingestion
3,5,6-TCP	0.05	0.94	0.01	0.02	0.98	<0.01
2,4-D	0.05	0.93	0.01	0.04	0.93	0.03

^a Estimates of mean proportions are based on a logistic regression analysis fitted to the mean proportions calculated for each participating adult. Estimated 95% confidence intervals on these mean proportions are given in the second column of Table S-3 (NC) and Table S-4 (OH) of Appendix S.

For NC children, the dietary ingestion exposure route was the dominant of the three routes for each of the eight pollutants, with the mean proportion exceeding 85% for 3,5,6-TCP, 2,4-D, di-*n*-butylphthalate, and bisphenol-A (Table 9.6.1). Similar results were observed for 3,5,6-TCP and 2,4-D in NC adults (Table 9.6.4). For the two OP pesticides (chlorpyrifos and diazinon), the mean proportion for the inhalation route in NC children was approximately 40%; this proportion was the highest seen for the inhalation route among the eight pollutants. (The estimated mean proportion for inhalation was less than 10% for each of the other six pollutants.) The mean percentage for the indirect ingestion route in NC children was below 10% for each pollutant except *cis*- and *trans*-permethrin, where the estimated percentages were 39% and 37%, respectively.

For OH children, the dietary ingestion exposure route was also the dominant of the three routes for each of the eight pollutants (Table 9.6.1). The mean proportion for the dietary ingestion route exceeded 90% for 3,5,6-TCP and 2,4-D (as it also did for OH adults), equaled 99% for bisphenol-A, equaled 80% for di-*n*-butylphthalate, exceeded 60% for the two OP pesticides (chlorpyrifos and diazinon), and exceeded 50% for *cis*- and *trans*-permethrin. The mean proportion for the inhalation route was largest for diazinon at 33%. The mean percentage for the indirect ingestion route was below 10% for most pollutants except for *cis*- and *trans*-permethrin, where the estimated percentages were 39% and 37%, respectively.

Because the two OP pesticides are more volatile than the two pyrethroid pesticides, this could partly contribute to differences in the level of importance of the exposure routes (inhalation vs. indirect ingestion) to total exposure/dose that was seen for both states.

9.6.2 *Sub-goal 4.2: For Each Exposure Route, Determine if This Proportion Differs for Children in Urban and Rural Settings, from Low-and Middle/High-Income Families, and Who Attend Day Care or Stay at Home*

The last column in Tables S-1 through S-4 of Appendix S contains p-values of tests performed in the logistic regression model fitting, with the tests determining whether the estimated mean proportion of total exposure/dose differs significantly between two strata for a given exposure route and pollutant. These tests were performed for three pairs of strata: low-income and middle/high-income level, urban and rural strata, and day care and stay-at-home children. For proportions of total exposure/dose associated with participating NC and OH children, those p-values falling below 0.05 were documented in the last columns of Tables 9.6.2 and 9.6.3, respectively. (For adults in both NC and OH, none of these p-values in Tables S-3 and S-4 of Appendix S are below 0.05 for either 3,5,6-TCP or 2,4-D.)

For NC children (Table 9.6.2), significant differences in the mean proportion were observed at the 0.05 level between low-income and middle/high-income strata for diazinon via the inhalation and indirect ingestion routes, for 3,5,6-TCP and for *cis*- and *trans*-permethrin via the inhalation route, and for 2,4-D via the indirect ingestion route. Significant differences between urban and rural children were observed at the 0.05 level for 2,4-D and di-*n*-butylphthalate via the dietary ingestion and inhalation routes. Significant differences between day care and non-day care children were observed at the 0.05 level for 3,5,6-TCP via the indirect ingestion route, for *trans*-permethrin via the inhalation route, and for bisphenol-A via each route. However, the estimated proportion of total exposure/dose of bisphenol-A attributed to indirect ingestion was virtually zero, implying that any difference among strata was not significant from a practical standpoint.

For OH children (Table 9.6.3), significant differences in the mean proportion were observed at the 0.05 level between low-income and middle/high-income strata for the two OP pesticides (chlorpyrifos and diazinon) via the indirect ingestion route, for 3,5,6-TCP via the dietary and inhalation routes, for *trans*-permethrin via the inhalation route, and for 2,4-D via the dietary ingestion route. Significant differences between OH urban and rural children were observed at the 0.05 level for bisphenol-A and *cis*- and *trans*-permethrin via the inhalation route and for 2,4-D via the indirect ingestion route. Significant differences between OH stay-at-home and day care children were observed at the 0.05 level for chlorpyrifos via the indirect ingestion route, for di-*n*-butylphthalate in each route, and for bisphenol-A via the dietary ingestion and inhalation routes.

9.6.3 *Sub-goal 4.3: Determine Whether Significant Differences Exist Between Exposure Routes*

Analysis #2 in Section 8.5.2.3 was used to compare average log-transformed potential exposure level and potential absorbed dose measures between exposure routes. This analysis involved fitting model (8-9) of Section 8.5.2.3 to log-transformed measures (represented as a vector of measures for the three exposure routes) within a multivariate analysis of variance

(ANOVA). This analysis was performed separately for each pollutant addressed under Goal 4, as well as separately for potential exposure level and potential absorbed dose, for children and adults, and for each state.

Results of the multivariate ANOVAs indicated that for each pollutant, highly significant differences existed between exposure routes for both potential exposure level and potential absorbed dose ($p < 0.0001$). This result held for both children and adults in NC and OH. This result was apparent by reviewing the tables in Section 9.6.1, where one exposure route typically dominated the other two for each pollutant in each state. Note that the model was unable to converge when being fitted to potential exposure level estimates of *cis*-permethrin in OH children, and therefore, comparisons between exposure routes could not be performed in this instance.

9.6.4 Sub-goal 4.4: Characterize How These Estimates Differ Overall Between Pairs of Exposure Routes

For each pair of exposure routes, each multivariate ANOVA performed in Section 9.6.3 produced estimates of the ratio of geometric mean potential exposure level or potential absorbed dose between the two routes, along with a 95% confidence interval on the ratio. Tables S-5 and S-6 of Appendix S present these ratios and confidence intervals for participating children in NC and OH, respectively. Similarly, Tables S-7 and S-8 present ratios and confidence intervals for participating adult caregivers in NC and OH, respectively. Each row of these tables corresponds to a particular fit of the multivariate ANOVA. Those ratios that are significantly different from one at the 0.05 level are summarized in Table 9.6.5 for NC children, Table 9.6.6 for OH children, Table 9.6.7 for NC adults, and Table 9.6.8 for OH adults; further discussion of significant differences from one is found in Section 9.6.5.

For NC children, Table S-5 of Appendix S shows that for all eight pollutants and for both potential exposure level and potential absorbed dose, ratios of the dietary ingestion route versus either the inhalation route or the indirect ingestion route exceeded one. This implies that the estimated geometric mean exposure/dose estimate via dietary ingestion was larger than the geometric mean for either inhalation or indirect ingestion. Ratios of the inhalation route to the indirect ingestion route were greater than one for all pollutants but *cis*- and *trans*-permethrin, where the indirect ingestion route was more dominant than the inhalation route. For the two pollutants that were also included in the data analysis for NC adults (3,5,6-TCP and 2,4-D), the same conclusions held for both adults and children (Tables 9.6.5 and 9.6.6).

Table 9.6.5. Estimated Ratios Between Two Exposure Routes of Geometric Mean Potential Exposure Level and Potential Absorbed Dose Estimates in Participating NC Children, When These Ratios Were Significantly Different From One at the 0.05 Level^a

Pollutant/ Metabolite	Parameter	Ratio of Geometric Means		
		Dietary Ingestion Route vs. Inhalation Route	Dietary Ingestion Route vs. Indirect Ingestion Route	Inhalation Route vs. Indirect Ingestion Route
OP Pesticides and Metabolite				
Chlorpyrifos	Potential Exposure Level		12.60**	8.92**
	Potential Absorbed Dose		12.61**	8.93**
Diazinon	Potential Exposure Level		20.70**	14.58**
	Potential Absorbed Dose		20.68**	14.62**
3,5,6-TCP	Potential Exposure Level	72.58**	229.05**	3.16**
	Potential Absorbed Dose	72.84**	230.39**	3.16**
Pyrethroid Pesticides				
cis-Permethrin	Potential Exposure Level	22.18**		0.09**
	Potential Absorbed Dose	22.17**		0.09**
trans-Permethrin	Potential Exposure Level	22.02**		0.08**
	Potential Absorbed Dose	21.81**		0.08**
Acid Herbicides				
2,4-D	Potential Exposure Level	48.67**	194.41**	3.99**
	Potential Absorbed Dose	48.63**	193.78**	3.98**
Phthalates				
Di-n-butylphthalate	Potential Exposure Level	22.92**	126.17**	5.50**
	Potential Absorbed Dose	22.61**	124.38**	5.50**
Phenols				
Bisphenol-A	Potential Exposure Level	207.17**	2235.24**	10.79**
	Potential Absorbed Dose	207.37**	2212.20**	10.67**

^a Blank cells correspond to ratios that were not significantly different from one at the 0.05 level. All ratios are presented, regardless of their significance, along with 95% confidence intervals on these ratios, within Table S-5 of Appendix S.

** Significantly different from 1 at the 0.01 level.

Table 9.6.6. Estimated Ratios Between Two Exposure Routes of Geometric Mean Potential Exposure Level and Potential Absorbed Dose Estimates in Participating OH Children, When These Ratios Were Significantly Different From One at the 0.05 Level^a

Pollutant/ Metabolite	Parameter	Ratio of Geometric Means		
		Dietary Ingestion Route vs. Inhalation Route	Dietary Ingestion Route vs. Indirect Ingestion Route	Inhalation Route vs. Indirect Ingestion Route
OP Pesticides and Metabolite				
Chlorpyrifos	Potential Exposure Level	6.03**	30.88**	5.12**
	Potential Absorbed Dose	6.06**	31.03**	5.12**
Diazinon	Potential Exposure Level	2.04**	20.68**	10.15**
	Potential Absorbed Dose	2.04**	20.78**	10.19**
3,5,6-TCP	Potential Exposure Level	132.32**	546.95**	4.13**
	Potential Absorbed Dose	129.55**	541.95**	4.18**
Pyrethroid Pesticides				
<i>cis</i> -Permethrin	Potential Exposure Level	— ^b	--	--
	Potential Absorbed Dose	22.00**	2.60*	0.12**
<i>trans</i> -Permethrin	Potential Exposure Level	24.32**	3.52**	0.14**
	Potential Absorbed Dose	24.29**	3.38**	0.14**
Acid Herbicides				
2,4-D	Potential Exposure Level	52.25**	47.52**	
	Potential Absorbed Dose	51.75**	47.22**	
Phthalates				
Di- <i>n</i> -butylphthalate	Potential Exposure Level	4.68**	53.07**	11.34**
	Potential Absorbed Dose	4.63**	51.94**	11.21**
Phenols				
Bisphenol-A	Potential Exposure Level	181.33**	1853.99**	10.22**
	Potential Absorbed Dose	183.70**	1851.10**	10.08**

^a Blank cells correspond to ratios that were not significantly different from one at the 0.05 level. All ratios are presented, regardless of their significance, along with 95% confidence intervals on these ratios, within Table S-6 of Appendix S.

^b No ratios were estimated due to the model being unable to converge when fitted to the data.

* Significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Significantly different from 1 at the 0.01 level.

Table 9.6.7. Estimated Ratios Between Two Exposure Routes of Geometric Mean Potential Exposure Level and Potential Absorbed Dose Estimates in Participating NC Adults, When These Ratios Were Significantly Different From One at the 0.05 Level^a

Parameter	Ratio of Geometric Means		
	Dietary Ingestion Route vs. Inhalation Route	Dietary Ingestion Route vs. Indirect Ingestion Route	Inhalation Route vs. Indirect Ingestion Route
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)			
Potential Exposure Level	41.76**	358.70**	8.59**
Potential Absorbed Dose	41.74**	358.31**	8.58**
2,4-D (2,4-dichlorophenoxyacetic acid)			
Potential Exposure Level	40.74**	379.85**	9.32**
Potential Absorbed Dose	40.88**	379.64**	9.29**

^a Ratios are presented, along with 95% confidence intervals on these ratios, within Table S-7 of Appendix S.

** Significantly different from 1 at the 0.01 level.

Table 9.6.8. Estimated Ratios Between Two Exposure Routes of Geometric Mean Potential Exposure Level and Potential Absorbed Dose Estimates in Participating OH Adults, When These Ratios Were Significantly Different From One at the 0.05 Level^a

Parameter	Ratio of Geometric Means (95%CI)		
	Dietary Ingestion Route vs. Inhalation Route	Dietary Ingestion Route vs. Indirect Ingestion Route	Inhalation Route vs. Indirect Ingestion Route
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)			
Potential Exposure Level	102.37**	907.46**	8.86**
Potential Absorbed Dose	102.51**	907.69**	8.85**
2,4-D (2,4-dichlorophenoxyacetic acid)			
Potential Exposure Level	49.33**	78.75**	
Potential Absorbed Dose	49.32**	78.63**	

^a Ratios are presented, along with 95% confidence intervals on these ratios, within Table S-8 of Appendix S.

** Significantly different from 1 at the 0.01 level.

For OH children, Table S-6 of Appendix S shows that for all eight pollutants and for both potential exposure level and potential absorbed dose, ratios of the dietary ingestion route versus either the inhalation route or the indirect ingestion route exceeded one in all instances, indicating that dietary ingestion was the dominant exposure route. The ratios of the inhalation route to the indirect ingestion route were greater than one for all pollutants but 2,4-D and *cis*- and *trans*-permethrin. For the two permethrins, Table 9.6.1 showed that the indirect ingestion route was more dominant than the inhalation route with regard to exposure/dose, while the two routes were equally inferior to dietary ingestion for 2,4-D. Although the ratio of 2,4-D exposure/dose estimates between the inhalation route and the indirect ingestion route exceeded one for OH adults (Table S-8 of Appendix S), implying larger exposure/dose estimates for the inhalation route in adults, the ratio was not significantly different from one at the 0.05 level for either children or adults in OH. Note that although the multivariate ANOVA model could not converge to solutions for potential exposure level in OH children for *cis*-permethrin, it is expected (upon viewing the results for the other pollutants) that the outcome would have been very similar to that given for potential absorbed dose for this pollutant.

The magnitudes of the ratios presented in the tables in this section, as well as the conclusions made by these ratios, are consistent with the findings found in the tables within Section 9.6.1. Note that in Tables S-5 through S-8, the second column presents the p-values of the tests of significant differences among exposure routes. As mentioned in Section 9.6.3, these p-values were all less than 0.0001 across all model fits for both NC and OH.

9.6.5 Sub-goal 4.5: Identify Which Pairs of Exposure Routes Differ Significantly in These Estimates

Within the multivariate ANOVA model fits discussed in Section 9.6.3 and Section 9.6.4, statistical tests were performed to determine whether the estimated ratios reported in Tables S-5 through S-8 of Appendix S were significantly different from one, thereby indicating that the pair of exposure routes had significantly different geometric mean exposure/dose measures. Those ratios that were significantly different from one at the 0.05 are presented in Tables 9.6.5 through 9.6.8, with each ratio followed by either one or two asterisks. One asterisk implies that the ratio is significantly different from one at the 0.05 level, while two asterisks indicate significance at the 0.01 level.

For NC children, Table 9.6.5 shows that the ratios of exposure/dose estimates between dietary ingestion and inhalation were significantly different from (and greater than) one at the 0.01 level for all pollutants but the two OP pesticides (chlorpyrifos and diazinon). Similarly, the ratios between dietary ingestion and indirect ingestion were significantly different from (and greater than) one at the 0.01 level for all pollutants but *cis*- and *trans*-permethrin. For all eight pollutants, the ratio of inhalation to indirect ingestion was significantly different from one at the 0.01 level, but these ratios were smaller than one for *cis*- and *trans*-permethrin and larger than one for the other six pollutants. Thus, these findings indicate that the ordering of the exposure routes for NC children based upon their relative importance to potential exposure/dose is as follows:

- *cis*- and *trans*-permethrin: dietary ingestion . indirect ingestion > inhalation.
- chlorpyrifos and diazinon: dietary ingestion . inhalation > indirect ingestion
- 2,4-D, 3,5,6-TCP, di-*n*-butylphthalate, bisphenol-A:
dietary ingestion > inhalation > indirect ingestion

where “.” indicates statistical equivalence. For 2,4-D and 3,5,6-TCP, the same ordering of the exposure routes occurred for NC adults as for children (Table 9.6.7).

For OH children, Table 9.6.6 shows that the ratios of exposure/dose estimates between dietary ingestion and either inhalation or indirect ingestion were significantly different from (and greater than) one for all eight pollutants, where significance was at the 0.05 level for potential absorbed dose of *cis*-permethrin (for dietary versus indirect ingestion routes) and at the 0.01 level in all other instances. For seven of the eight pollutants (i.e., all pollutants except 2,4-D), the ratio of inhalation to indirect ingestion was significantly different from one at the 0.01 level, but these ratios were smaller than one for *cis*- and *trans*-permethrin and larger than one for the other five pollutants. This ratio was not significantly different from one for 2,4-D. Thus, these findings, along with the magnitude of the reported ratios, indicate that the ordering of the exposure routes for OH children based upon their relative importance to potential exposure/dose is as follows:

- *cis*- and *trans*-permethrin: dietary ingestion > indirect ingestion > inhalation.
- 2,4-D: dietary ingestion > indirect ingestion . inhalation
- chlorpyrifos, diazinon, 3,5,6-TCP, di-*n*-butylphthalate, bisphenol-A:
dietary ingestion > inhalation > indirect ingestion.

For OH adults, the ordering of exposure routes was similar (Table 9.6.8):

- 2,4-D: dietary ingestion > inhalation . indirect ingestion
- 3,5,6-TCP: dietary ingestion > inhalation > indirect ingestion.

The findings in this section indicate that dietary ingestion and inhalation are the two most important exposure routes for children's exposure to the two OP pesticides (chlorpyrifos and diazinon). This finding is in agreement with the previous pilot study (10). For the less volatile pyrethroids (*cis*- and *trans*-permethrin), dietary and indirect ingestion were the two most important exposure routes.

References

1. Chuang, J. C., Callahan, P. J., Menton, R. G., Gordon, S. M., Lewis, R. G., Wilson, N. K. Monitoring methods for polycyclic aromatic hydrocarbons and their distribution in house dust and track-in soil. *Environ. Sci. Technol.* 29(2): 494-500 (1995).
2. Nishioka, M. G., Burkholder, H. M., Brinkman, M. C., Gordon, S. M., Lewis, R. G. Measuring transport of lawn-applied herbicide acids from turf to home: correlation of dislodgeable 2,4-D turf residues with carpet dust and carpet surface residues. *Environ. Sci. Technol.* 30: 3313-3320 (1996).
3. Wania, F. and MacKay, D. Tracking the distribution of persistent organic pollutants. *Environ. Sci. Technol.* 30(9): 390A-396A (1996).
4. Morgan, M. K., Stout II, D. M., and Wilson, N. K. A feasibility study of the potential for human exposure to pet-borne diazinon residues following lawn applications. *Bull. Environ. Contam. Toxicol.* 66: 295-300 (2000).
5. Chuang, J. C., Callahan, P. J., Lyu, C. W., Pennybacker, M. R. Characterization of polycyclic aromatic hydrocarbon exposure among children of low income families from inner city and rural areas. Final Report on Cooperative Agreement CR 822073, EPA 600/R-98/163a, 163b, and 163c (1998).
6. Chuang, J. C., Callahan, P. J., and Lyu, C. W. Field method evaluation of total exposure of children from low-income families that include smokers to polycyclic aromatic hydrocarbons. Final Report to U.S. EPA, Contract Number 68-D4-0023, Work Assignment No. 9, July 1996.
7. Chuang, J. C., Callahan, P. J., Lyu, C. W., and Wilson, N. K. Polycyclic aromatic hydrocarbon exposures of children in low-income families. *J. Expo. Anal. Environ. Epidemiol.* 2: 85-98 (1999).
8. Wilson, N. K., Chuang, J. C., and Lyu, C. Levels of persistent organic pollutants in several child day care centers. *J. Expo. Anal. Environ. Epidemiol.* 11: 419-458 (2001).
9. Chuang, J. C., Lyu, C., Chou, Y.-L., Callahan, P. J., Nishioka, M., Andrews, K., Pollard, M. A., Brackney, L., Hines, C., Davis, D. B., and Menton, R. Evaluation and application of methods for estimating children's exposure to persistent organic pollutants in multiple media. EPA 600/R-98/164a, 164b, and 164c, (1998).

10. Wilson, N. K., Chuang, J. C., Lyu, C. and Morgan, M. K. Aggregate exposures of nine preschool children to persistent organic pollutants at day care and at home. *J. Expo. Anal. Environ. Epidemiol.* 13: 187-202 (2003).
11. Wilson, N. K., Chuang, J. C., Iachen, R., Lyu, C., Gordon, S. M., Morgan, M. K., Özkaynak, H., and Sheldon, L. S. Design and sampling methodology for a large study of preschool children's aggregate exposures to persistent organic pollutants in their everyday environments. *J. Expo. Anal. Environ. Epidemiol.* 14, 260-274 (2004).
12. Roberts, J. W., Budd, W. T., Ruby, M. G., Bond, A. E., Lewis, R. G., Weiner, R. W., and Camann, D. E. Development and Field Testing of a High Volume Sampler for Pesticides and Toxics in Dust. *J. Exposure Anal. Environ. Epidemiol.* 1, 143-155 (1991).
13. Lewis, R.G., Fortmann, R.C., and Camann, D.E., Evaluation of methods for monitoring the potential exposure of small children to pesticides in the residential environment. *Archives of Environmental Contamination and Toxicology*, 26:37-46, (1994).
14. Gordon, S.M., Callahan, P.J., Nishioka, M.G., Brinkman, M.C., O'Rourke, M.K., Lebowitz, M.D., and Moschandreas, D.J. Residential environmental measurements in the National Human Exposure Assessment Survey (NHEXAS) Pilot Study in Arizona: Multimedia results for pesticides and VOCs. *J. Expo. Anal. Environ. Epidemiol.* 9: 456-470, (1999).
15. Stanek III, E.J., and Calabrese, E.J., Daily estimates of soil ingestion in children. *Environ. Health Perspect.* 103:276-285, (1995).
16. Stanek III, E.J., and Calabrese, E.J., Soil ingestion estimates for use in site evaluations based on the best tracer method. *Hum. Ecol. Risk Assess.* 1(2):133-156, (1995).
17. Ross, J.H., Driver, J.H., Cochran, R.C., Thongsinthusak, T., and Krieger, R.I. Could pesticide toxicology studies be more relevant to occupational risk assessment? *Ann. Occup. Hyg.* 2001: 45 (1001): S5-S17.

A Pilot Study of Children's Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants (CTEPP)

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Appendix A

Summary of CTEPP Standard Operating Procedures (SOPs)

Summary of CTEPP Standard Operating Procedures (SOPs)

CTEPP SOP Number	CTEPP SOPs
	1. Subject Recruitment
CTEPP-SOP-1.10	Sample Selection Procedures
CTEPP-SOP-1.11	Day care Centers Recruitment Procedures
CTEPP-SOP-1.12	Telephone Sample Households Recruitment Procedures
CTEPP-SOP-1.13	Informed Consent Procedures
CTEPP-SOP-1.14	Assigning ID Numbers Procedures
	2. Field Sampling
CTEPP-SOP-2.10	Household Sampling Schedule Procedures
CTEPP-SOP-2.11	Field Operations Procedures
CTEPP-SOP-2.12	Collection of Fixed Site Indoor and Outdoor Air Samples for Persistent Organic Pollutants Procedures
CTEPP-SOP-2.13	Collection of Food and Drinking Water Samples Procedures
CTEPP-SOP-2.14	Collection of Urine Samples Procedures
CTEPP-SOP-2.15	Collection of Dermal Hand Wipe Samples for Persistent Organic Pollutants Procedures
CTEPP-SOP-2.16	Collection of Hard Floor Wipe Samples for Persistent Organic Pollutants Procedures
CTEPP-SOP-2.17	Collection of Food Preparation Surface Wipe Samples for Persistent Organic Pollutants Procedures
CTEPP-SOP-2.18	Collection of Dislodgeable Residues - PUF Roller Samples for Persistent Organic Pollutants Procedures
CTEPP-SOP-2.19	Collection of Floor Dust Samples for Persistent Organic Pollutants Procedures
CTEPP-SOP-2.20	Collection of Soil Samples for Persistent Organic Pollutants Procedures
CTEPP-SOP-2.21	Collection of Personal Interview Data Procedures
CTEPP-SOP-2.22	Recording Data Collection Forms Procedures
CTEPP-SOP-2.23	Video Taping Child Activities Procedures
CTEPP-SOP-2.24	Handling Missing Samples/Data Procedures
CTEPP-SOP-2.25	Conducting Internal Field Audit/Quality Control Procedures
CTEPP-SOP-2.26	Handling Sample/Data Custody Procedures
CTEPP-SOP-2.27	Conducting Staff and Participant Training Procedures
	3. Storing and Shipping Samples & Data Collection Forms
CTEPP-SOP-3.10	Storing Study Samples Procedures
CTEPP-SOP-3.11	Packing and Shipping Study Samples Procedures

CTEPP SOP Number	CTEPP SOPs
CTEPP-SOP-3.12	Shipping and Storing Data Collection Forms Procedures
	4. Data Processing
CTEPP-SOP-4.10	Processing Completed Data Forms Procedures
CTEPP-SOP-4.11	Maintaining/Recording Electronic Chain of Custody Procedures
CTEPP-SOP-4.12	Entering or Importing Electronic Data Into CTEPP Data Bases Procedures
CTEPP-SOP-4.13	Translating Videotapes of Child Activities Procedures
	5. Laboratory Procedures
CTEPP-SOP-5.10	Pre-cleaning Filter and XAD-2 Procedures
CTEPP-SOP-5.11	Pre-cleaning Filter and PUF Procedures
CTEPP-SOP-5.12	Extracting and Preparing Air Samples for Analysis of Neutral Persistent Organic Pollutants Pre-cleaning Procedures
CTEPP-SOP-5.13	Extracting and Preparing Air Samples for Analysis of Polar Persistent Organic Pollutants Procedures
CTEPP-SOP-5.14	Extracting and Preparing Dust and Soil Samples for Analysis of Neutral Persistent Organic Pollutants Procedures
CTEPP-SOP-5.15	Extracting and Preparing Dust and Soil Samples for Analysis of Polar Persistent Organic Pollutants Procedures
CTEPP-SOP-5.16	Extracting and Preparing Dermal Wipe Samples for Analysis of Neutral Persistent Organic Pollutants Procedures
CTEPP-SOP-5.17	Extracting and Preparing Surface Wipe Samples for Analysis of Neutral Persistent Organic Pollutants Procedures
CTEPP-SOP-5.18	Extracting and Preparing PUF Roller Samples for Analysis of Neutral Persistent Organic Pollutants Procedures
CTEPP-SOP-5.19	Extracting and Preparing Liquid Food Samples for Analysis of Persistent Organic Pollutants Procedures
CTEPP-SOP-5.20	Extracting and Preparing Solid Food Samples for Analysis of Persistent Organic Pollutants Procedures
CTEPP-SOP-5.21	Extracting and Preparing Urine Samples for Analysis of Hydroxy-PAH, Pentachlorophenol, and 2,4-D Procedures
CTEPP-SOP-5.22	Extracting and Preparing Urine Samples for Analysis of 3,5,6-Trichloro-2-pyridinol Procedures
CTEPP-SOP-5.23	Extracting and Preparing Drinking Water Samples for Analysis of Persistent Organic Pollutants Procedures
CTEPP-SOP-5.24	Detection and Quantification of Target Analytes by Gas Chromatography/Mass Spectrometry (GC/MS) Procedures
CTEPP-SOP-5.25	Preparation of Surrogate Recovery Standard and Internal Standard Solutions for Neutral Target Analytes
CTEPP-SOP-5.26	Preparation of Surrogate Recovery Standard and Internal Standard Solutions for Polar Target Analytes

CTEPP SOP Number	CTEPP SOPs
CTEPP-SOP-5.27	Extracting and Preparing Dermal Wipe and Surface Wipe Samples for Analysis of Polar Organic Pollutants
CTEPP-SOP-5.28	Extracting and Preparing Solid Food Samples for Analysis of Polar Organic Pollutants
CTEPP-SOP-5.29	Extracting and Preparing Liquid Food Samples for Analysis of Polar Organic Pollutants

Appendix B

CTEPP North Caroline and Ohio Field Study Recruitment Reports

I. Introduction

The research study, "Children's Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants," (CTEPP) is a pilot-scale project involving about 260 children, which investigates the possible exposures that young children may have to common contaminants in their everyday surroundings. These contaminants include several pesticides, phenols, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, some of which are suspected of being endocrine disruptors. The targeted compounds are persistent in the indoor and sometimes the outdoor environments, so that very low levels may exist in the children's surrounding microenvironments and provide a source of chronic, non-acute exposure. The primary purposes of the research are to increase our understanding of children's exposures to persistent pollutants, to gain information on the various activities, environmental media, and pollutant characteristics that may influence children's exposures, and to generate further questions and hypotheses for future research.

II Daycare Center Sample Subjects Recruitment

Detailed subjects recruitment procedures and sample selection methods are documented in CTEPP SOP 1.10 and SOP1.11. NC subjects recruitment was conducted in two phases. Phase I daycare center subjects recruitment in four NC counties (Durham, Buncombe, Lee, and Mecklenburg) began in February 2000 and stopped on February 29, 2000 due to the OMB Y2K Census requirement. Subjects recruitment resumed in July 2000 and continued through December 2000. Phase I recruitment achieved 80% of the target subjects recruitment (enrolled 51 of 64 target subjects).

Phase II recruitment was conducted for the two eastern NC counties affected by the flooding that resulted from Hurricane Floyd (Edgecombe and Jones). Phase II recruitment began on February 26, 2001 and was completed on March 30, 2001. Twelve additional subjects were enrolled in phase II. The project has achieved 98% of the NC daycare center subject recruitment target (enrolled 63 of 64 target subjects).

III. Telephone Sample Subjects Recruitment

The sample design utilized for the CTEPP telephone component is intended to fulfill the objectives of:

- Efficiently identifying telephone households having one or more children in the eligible age range and meeting the sampling targets in the high and low income domains
- Providing coverage of households with unlisted telephone numbers

With respect to the first objective, the Marketing Systems Group (MSG) uses Census data, marketing research data, and other sources to classify directory-listed households as having one or more children in the age range of one to five years or no children in that age group. The same data is used to assign the directory-listed households to an income range. While not all households classified as

having children in the target age range will indeed have eligible children, the eligibility rate will still be much higher than a simple random sample of households.

The counts of directory-listed households having children in the target age group for the counties provided by MSG are considerably less than the Census demographic estimates. A portion of the eligible households in a study county will be in the group of households that MSG has classified as having no children in the target age range, but the eligibility rate will still be very small. We must allocate some percentage of our sample to this group of directory-listed households. To allocate a greater proportion of our total sample to the first group of households we stratified the directory-listed households.

All directory-listed households in each of the six study counties were assigned to one of the 4 strata:

1. Directory-listed households with income above \$25,000 and having one or more children in the target age range
2. Directory-listed households with income below or equal to \$25,000 and having one or more children in the target age range
3. Directory-listed households with income above \$25,000 and having no children in the target age range
4. Directory-listed households with income below or equal to \$25,000 and having no children in the target age range

With respect to the second objective, some counties may have as many as 30% of households with unlisted telephone numbers, therefore some of the eligible households in a study county will have unlisted telephone numbers. Trying to estimate the eligibility rate for households having unlisted telephone numbers is difficult. We use a random digit dialing (RDD) approach to give these unlisted telephone households some chance of selection.

To implement the RDD approach, MSG first identifies all telephone exchanges in the study county. Telephone exchanges having very low percentages of directory-listed households in the study county are deleted. From the remaining exchanges, MSG draws a systematic sample of telephone numbers. Some of these telephone numbers are residential and some are business and nonworking. To prevent a directory-listed telephone number from being sampled in both the RDD frame and the directory-listed frame, MSG selects the RDD sample of telephone numbers first. The sampled telephone numbers are matched to the database of directory-listed telephone numbers. Those telephone numbers identified as directory-listed are removed from the directory-listed frame prior to the stratification described above.

Trying to determine the percentage of the total sample that should be allocated to the RDD frame based is difficult. First, the proportion of working residential telephones can vary considerably from county to county so trying to estimate the total number of telephone households in this frame is imprecise. Second, the estimation of the eligibility rate in this frame is imprecise. Since the contact

rate in this frame is substantially lower than any of the four directory-listed strata, the primary determinant of our allocation is dialing efficiency.

Telephone subjects recruitment for four NC counties (Durham, Buncombe, Lee, and Mecklenburg) began in July 2000 and completed in November 2000. The project achieved 54% response rate (using the response rate calculation method suggested by EPA) in Phase I recruitment and screened a total of 244 potentially eligible households for the project. As of the end of December 2000, the project completed field sampling activities with 75% of the target participants (enrolled 48 of 64 target subjects). Phase II telephone subjects recruitment for the two eastern NC counties (Edgecombe and Jones) began in January 2001. A total of 28 potentially eligible subjects were identified. The telephone subjects recruitment was completed on March 30, 2001; a total of 67 subjects participated in the study, which is 105% of the recruitment target.

IV Summary

Table 1 provides detailed outcomes for telephone subjects recruitment. A total of 12,262 phone numbers were called. The project achieved 58% response rate. The method for calculating response rates is also described in Table 1. Recruitment results for daycare centers and daycare parents are provided in Tables 2 and 3. We used the same method suggested by EPA to calculate the response rates. The project achieved 53% response rate for daycare centers and 50% response rate for daycare parents. The field sampling activities were conducted in 23 weeks (Table 4). The number of participants in each county is summarized in Table 5. The participant's income status is summarized in Table 6. The distribution of low and mid-to-high income among telephone (RDD) subjects is very close to the original sampling plan. However, for daycare center subjects, low income subjects were over enrolled, which was due to many of the subjects from the regular daycare centers being low income subjects.

The distribution of participants by NC counties is illustrated in Figure 1. Figure 2 shows the distribution of daycare center participants by urban and rural locations. Figure 3 shows the distribution of telephone (RDD) subjects by urban and rural locations. Figure 4 shows the distribution of daycare center participants by counties. Figure 5 shows the distribution of RDD telephone participants by counties.

V References

CTEPP-SOP-1.10	Sample Selection Procedures
CTEPP-SOP-1.11	Daycare Center Sample Subjects Recruitment Procedures
CTEPP-SOP-1.12	Telephone Sample Subjects Recruitment Procedures
CTEPP-SOP-1.13	Informed Consent Procedures

Table 1. CTEPP Call Ourcomes Report

CTEPP Call Outcomes Report 3/30/2001	Buncombe	Mecklenburg	Durham	Lee	Edgecombe	Jones	Overall Total
A. Agree to Participate/Eligible:	15	118	85	26	18	10	272
B. Ineligible subjects:	643	1882	1480	642	970	930	6547
(1) not a private residence	95	352	153	62	67	39	768
(2) no children in the household	386	669	585	312	516	576	3044
(3) cannot communicate	15	83	95	22	25	25	265
(4) no child in the age range	105	341	257	143	233	241	1320
(5) not stay with child 3 consec days	1	11	11	5	5	5	
(6) child attends a day care	30	348	325	77	106	35	921
(7) child is not potty-trained	11	68	52	21	18	9	179
(8) child is still being breast-fed		10	2				12
C. Refused Screening:	143	526	369	174	83	84	1379
C1. Eligible subjects/Refused:	3	29	18	8	1	2	61
C2. Eligibility Unknown:	140	497	351	166	82	82	1318
D. Non-Working Numbers:	245	693	721	218	297	401	2575
E. Cannot be reached	62	613	489	128	122	75	1489
Total Cases With Final Outcome:	1108	3832	3144	1188	1490	1500	12262
Total Cases Loaded in CATI	1108	3832	3144	1188	1490	1500	12262
Cases Still Active in CATI	0	0	0	0	0	0	0
Calculate Response Rates							
A. Eligible and Completed	15	118	85	26	18	10	272
B. Total Eligible	18	147	103	34	19	12	333
C. Total Ineligible	643	1882	1480	642	970	930	6547
D. Eligibility Unknown	202	1110	840	294	204	157	2807
E. Final Response Rate	64%	52%	54%	53%	79%	71%	58%

$$RR = \frac{A}{B + \left[\frac{B}{B+C} \right] \times D}$$

Table 2. CTEPP Day Care Center Recruitment Results

CTEPP ID	County	Day Care Centers Head Start	AGREE	REFUSED	*NO CONTACT	INELIGIBLE	Total
1	Durham	Day Care Center	13	4	10	5	32
2	Durham	Day Care Center	1				
3	Durham	Day Care Center	1				
4	Durham	HEAD START	1			1	
23	Durham	Day Care Center			1		
24	Durham	Day Care Center	1				
5	Buncombe	Day Care Center	1				
6	Buncombe	HEAD START				1	
7	Buncombe	Day Care Center		1			
8	Buncombe	HEAD START			1		
21	Buncombe	Day Care Center	1				
22	Buncombe	Day Care Center			1		
9	Lee	Day Care Center	1				
10	Lee	HEAD START	1				
11	Mecklenburg	Day Care Center			1		
12	Mecklenburg	Day Care Center		1			
13	Mecklenburg	Day Care Center			1		
14	Mecklenburg	Day Care Center		1			
15	Mecklenburg	Day Care Center	1				
16	Mecklenburg	HEAD START	1				
17	Mecklenburg	HEAD START				1	
25	Mecklenburg	Day Care Center			1		
26	Mecklenburg	Day Care Center		1			
27	Mecklenburg	Day Care Center			1		
28	Mecklenburg	Day Care Center	1				
29	Mecklenburg	Day Care Center			1		
19	Edgecombe	Day Care Center			1		
31	Edgecombe	Day Care Center *				1	
18	Edgecombe	HEAD START	1				
30	Edgecombe	HEAD START	1				
20	Jones	Day Care Center				1	
32	Jones	Day Care Center			1		

* NO CONTACT = Cannot reach the day care director or the director cannot make a decision within the data collection period.

Calculate Response Rates	Summary
A. Eligible and Completed	13
B. Total Eligible	17
C. Total Ineligible	5
D. Eligibility Unknown	10
E. Final Response Rate	53%

$$RR = \frac{A}{B + \left[\frac{B}{B+C} \right]} \times D$$

* Still dealing with flooding problems

* Still dealing with flooding problems, Director agreed, but no parents.

Table 3. CTEPP Day Care Parent Response Rate

Wk#	CTEPP ID#	County	Sampling Date Day-1	Number of Parents Attempted	Responded Agreed	Responded Refused	Responded Ineligible	No Contact*	Total
1	1	Durham	7/17/2000	10	4	0	0	6	10
2	2	Durham	7/24/2000	17	5	0	3	9	17
3	5	Buncombe	7/31/2000	16	6	0	5	5	16
4	15	Mecklenburg	8/7/2000	19	3	3	10	3	19
6	9	Lee	8/28/2000	15	4	8	1	2	15
9	4	Durham	10/2/2000	16	5	0	4	7	16
11	10	Lee	10/16/2000	14	6	1	1	6	14
12	16	Mecklenburg	10/23/2000	14	6	0	1	7	14
14	21	Buncombe	11/6/2000	9	4	2	1	2	9
15	24	Durham	11/13/2000	10	5	0	0	5	10
18	28	Mecklenburg	12/11/2000	14	9	0	0	5	14
22	18	Edgecombe	3/19/2001	14	6	0	0	8	14
23	30	Edgecombe	3/26/2001	14	6	2	0	6	14
		TOTAL		182	69	16	26	71	182

* NO CONTACT = Cannot reach the selected parents or the parents cannot make a decision within the contact window.

Calculate Response Rates	Summary
A. Eligible and Completed	69
B. Total Eligible	85
C. Total Ineligible	26
D. Eligibility Unknown	71
E. Final Response Rate	50%

$$RR = \frac{A}{B + \left[\frac{B}{B+C} \right] \times D}$$

Table 4. Field Data Collection Summary by Sampling Week

Field Data Collection Summary by Sampling Week			Data Collection Completed		Total	Remarks
			Day Care Participant	RDD Participants		
Target			64	64	128	
Week#	As of 3/30/2001		63	67	130	
			% of Target	% of Target		
	County	Date/Day-1	98%	105%	102%	
1	Durham	7/17/2000	3		3	*was 4, 1 last minute dropout
2	Durham	7/24/2000	5		5	
3	Buncombe	7/31/2000	6		6	
4	Mecklenburg	8/7/2000	3		3	*was 4, 1 last minute dropout
5	Buncombe	8/21/2000		6	6	
5	Lee	8/21/2000		1	1	
6	Lee	8/28/2000	4		4	
6	Durham	8/30/2000		1	1	
7	Durham	9/11/2000		1	1	
8	Mecklenburg	9/18/2000		5	5	
8	Durham	9/19/2000		1	1	
9	Durham	10/2/2000	5		5	
10	Mecklenburg	10/9/2000		7	7	
11	Lee	10/16/2000	5		5	
12	Mecklenburg	10/23/2000	6		6	
13	Durham	10/30/2000		8	8	
14	Buncombe	11/6/2000	4	1	5	
15	Durham	11/13/2000	4	3	7	
	Holidays	11/20/2000				
16	Lee	11/27/2000		6	6	
17	Mecklenburg	12/4/2000		7	7	
18	Mecklenburg	12/11/2000	6	1	7	
19	Jones	2/26/2001		5	5	
20	Edgecombe	3/5/2001		2	2	
20	Durham	3/5/2001		4	4	
21	Durham	3/12/2001		8	8	
22	Edgecombe	3/19/2001	6		6	
23	Edgecombe	3/26/2001	6		6	

Table 5. Field Data collection Summary by County

Field Data Collection Summary by County			Data Collection Completed		Total	Remarks
			Day Care Participant	RDD Participants		
Target			64	64	128	
As of 3/30/2001			63	67	130	
Week#	County	Date/Day-1	% of Target	98%	102%	
3	Buncombe	7/31/2000		6	6	
5	Buncombe	8/21/2000		6	6	
14	Buncombe	11/6/2000		4	1	5
	Subtotal	Buncombe		10	7	17
1	Durham	7/17/2000		3		3
2	Durham	7/24/2000		5		5
6	Durham	8/30/2000			1	1
7	Durham	9/11/2000			1	1
8	Durham	9/19/2000			1	1
9	Durham	10/2/2000		5		5
13	Durham	10/30/2000			8	8
15	Durham	11/13/2000		4	3	7
20	Durham	3/5/2001			4	4
21	Durham	3/12/2001			8	8
	Subtotal	Durham		17	26	43
5	Lee	8/21/2000			1	1
6	Lee	8/28/2000		4		4
11	Lee	10/16/2000		5		5
16	Lee	11/27/2000			6	6
	Subtotal	Lee		9	7	16
4	Mecklenburg	8/7/2000		3		3
8	Mecklenburg	9/18/2000			5	5
10	Mecklenburg	10/9/2000			7	7
12	Mecklenburg	10/23/2000		6		6
17	Mecklenburg	12/4/2000			7	7
18	Mecklenburg	12/11/2000		6	1	7
	Subtotal	Mecklenburg		15	20	35
19	Jones	2/26/2001			5	5
	Jones				0	0
	Subtotal	Jones		0	5	5
20	Edgecombe	3/5/2001			2	2
22	Edgecombe	3/19/2001		6		6
23	Edgecombe	3/26/2001		6		6
	Subtotal	Edgecombe		12	2	14

Figure 1. NC Final Data Collection

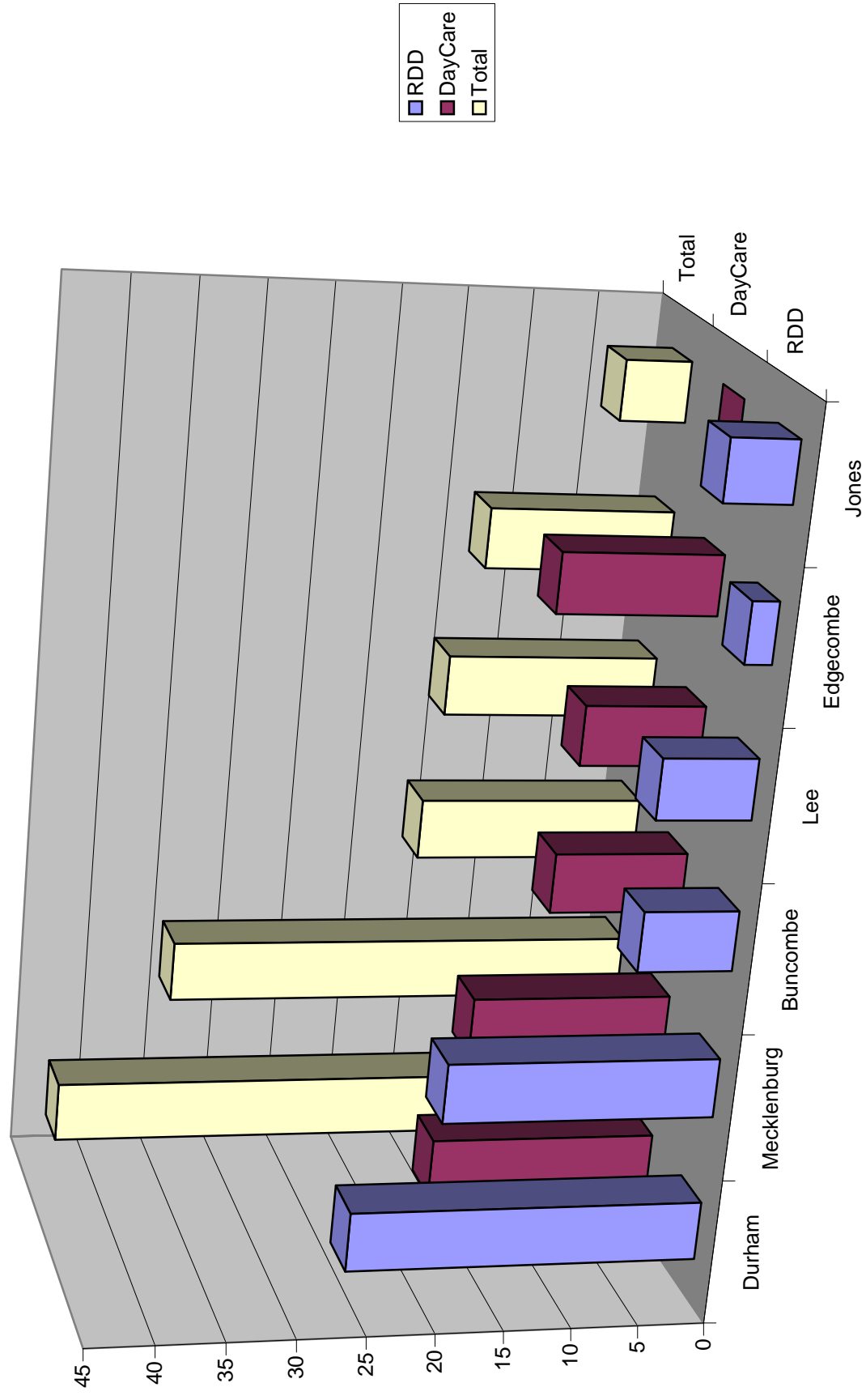


Figure 2. CTEPP NC DayCare

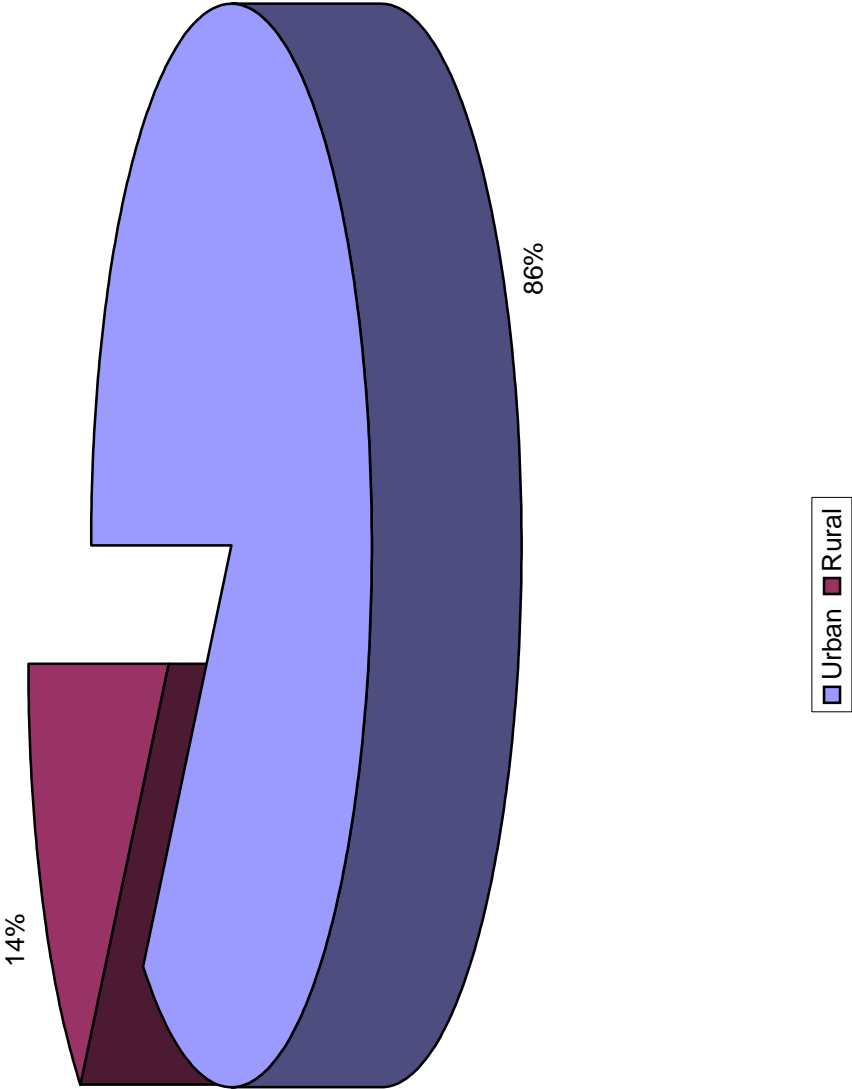


Figure 3. CTEPP NC RDD

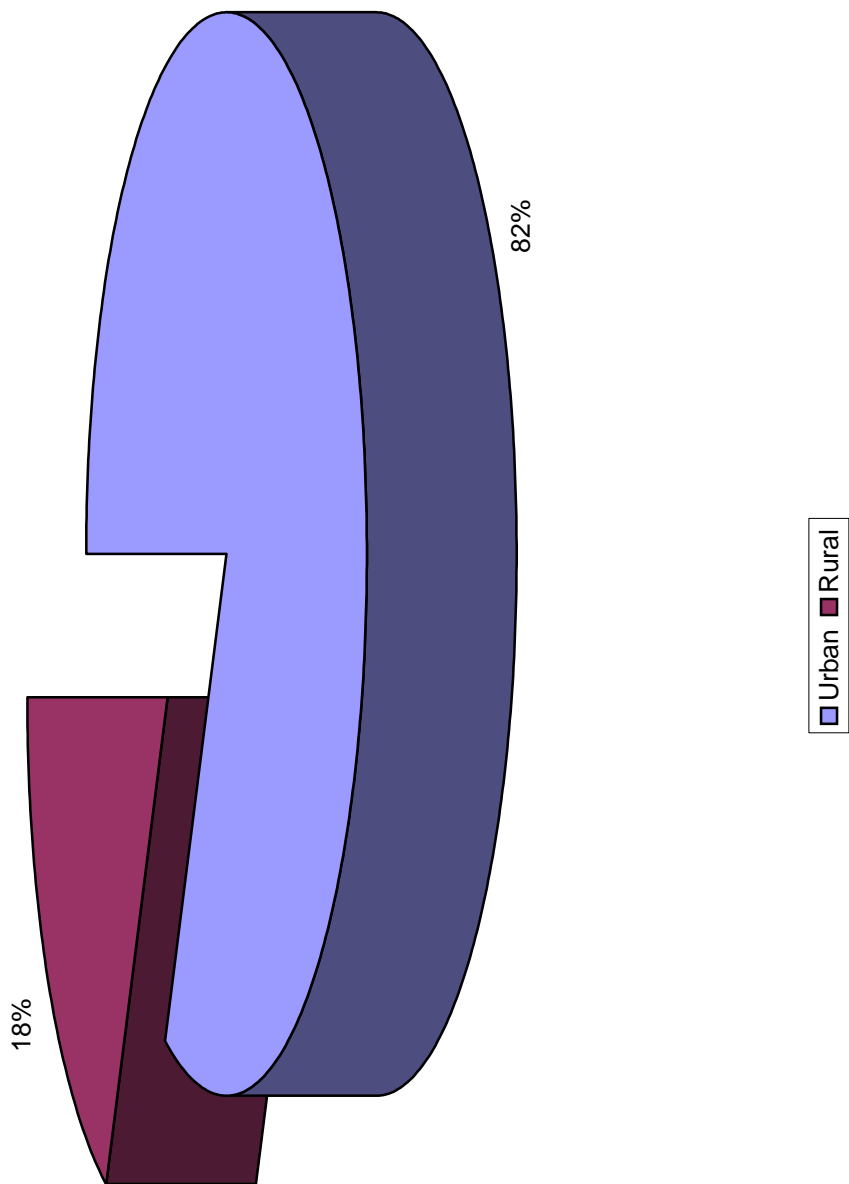


Figure 4. CTEPP NC Day Care Centers

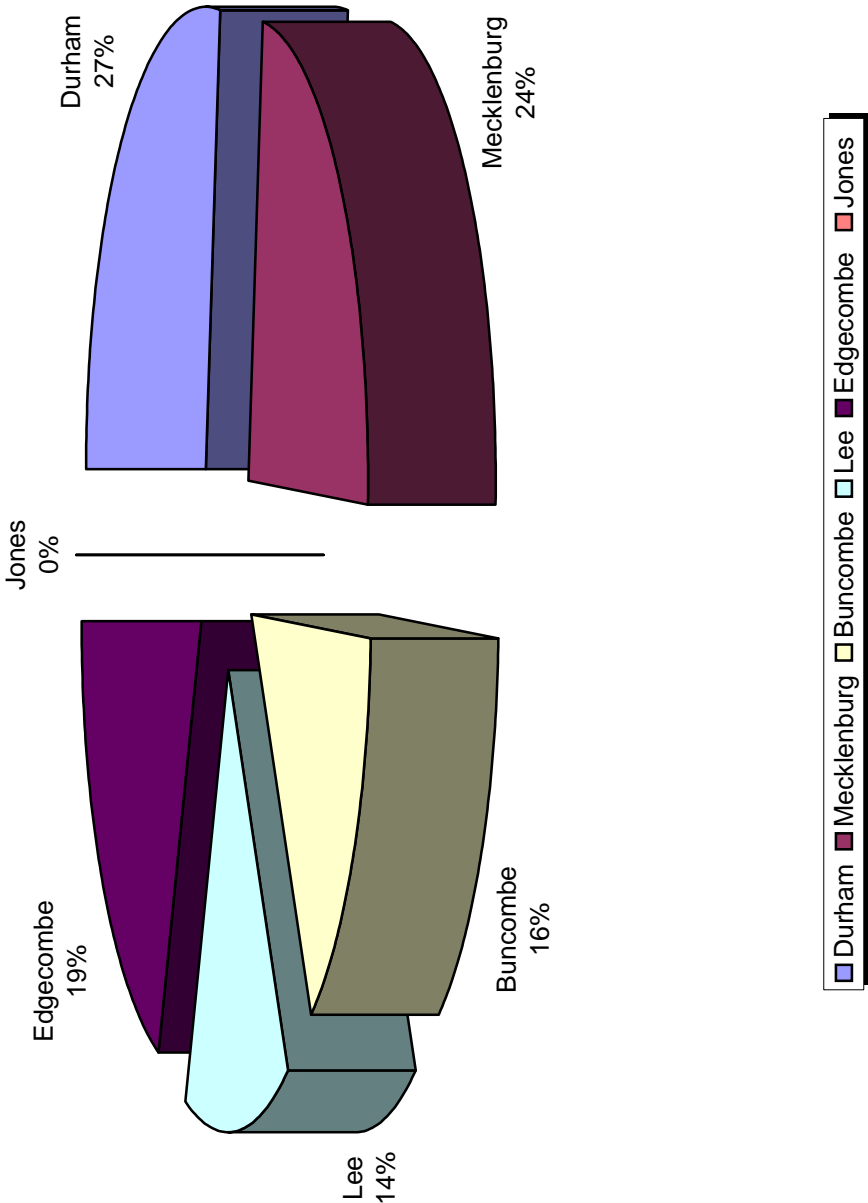
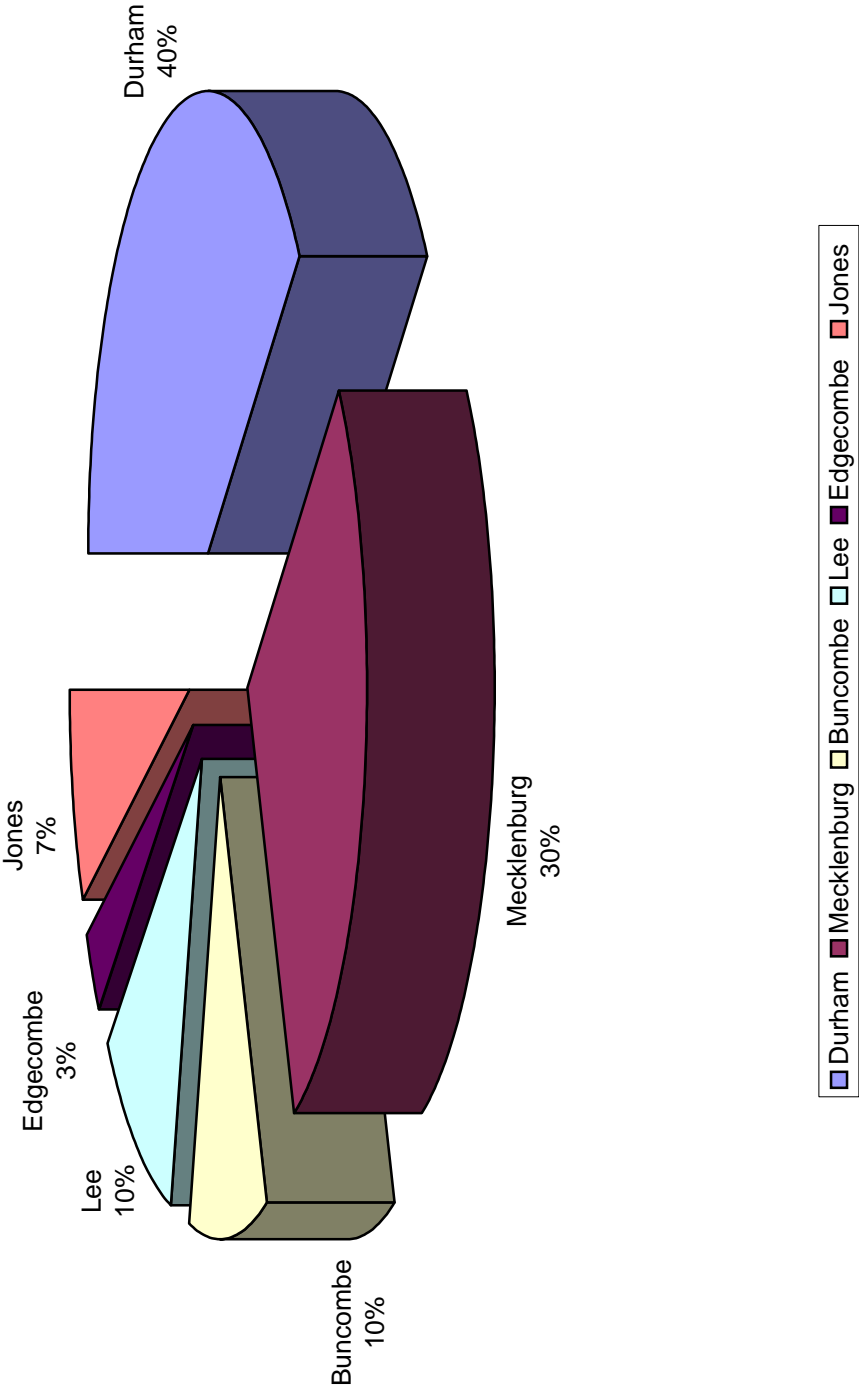


Figure 5. CTEPP NC RDD



I. Introduction

The research study, "Children's Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants," (CTEPP) is a pilot-scale project involving about 260 children, which investigates the possible exposures that young children may have to common contaminants in their everyday surroundings. These contaminants include several pesticides, phenols, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, some of which are suspected of being endocrine disruptors. The targeted compounds are persistent in the indoor and sometimes the outdoor environments, so that very low levels may exist in the children's surrounding microenvironments and provide a source of chronic, non-acute exposure. The primary purposes of the research are to increase our understanding of children's exposures to persistent pollutants, to gain information on the various activities, environmental media, and pollutant characteristics that may influence children's exposures, and to generate further questions and hypotheses for future research.

II. Daycare Center Sample Subjects Recruitment

Detailed subjects recruitment procedures and sample selection methods are documented in CTEPP SOP 1.10 and SOP1.11. Ohio daycare subjects recruitment began in January 2001 and completed in November 2001. The project enrolled 16 child care centers (12 regular daycare and 4 Head Start), completed sampling activities with 58 households, and achieved 91% of the planned target (64). The daycare center response rate is 58% and the daycare parents response rate is 31% (using the response rate calculation method suggested by EPA).

III. Telephone Sample Subjects Recruitment

The sample design utilized for the CTEPP telephone component is intended to fulfill the objectives of:

- Efficiently identifying telephone households having one or more children in the eligible age range and meeting the sampling targets in the high and low income domains
- Providing coverage of households with unlisted telephone numbers

With respect to the first objective, the Marketing Systems Group (MSG) uses Census data, marketing research data, and other sources to classify directory-listed households as having one or more children in the age range of one to five years or no children in that age group. The same data is used to assign the directory-listed households to an income range. While not all households classified as having children in the target age range will indeed have eligible children, the eligibility rate will still be much higher than a simple random sample of households.

The counts of directory-listed households having children in the target age group for the counties provided by MSG are considerably less than the Census demographic estimates. A portion of the eligible households in a study county will be in the group of households that MSG has classified as having no children in the target age range, but the eligibility rate will still be very small. We must allocate some percentage of our sample to this group of directory-listed households. To allocate a greater proportion of our total sample to the first group of households we stratified the directory-listed households.

All directory-listed households in each of the six OH study counties were assigned to one of the 4 strata:

1. Directory-listed households with income above \$25,000 and having one or more children in the target age range
2. Directory-listed households with income below or equal to \$25,000 and having one or more children in the target age range
3. Directory-listed households with income above \$25,000 and having no children in the target age range
4. Directory-listed households with income below or equal to \$25,000 and having no children in the target age range

With respect to the second objective, some counties may have as many as 30% of households with unlisted telephone numbers, therefore some of the eligible households in a study county will have unlisted telephone numbers. Trying to estimate the eligibility rate for households having unlisted telephone numbers is difficult. We use a random digit dialing (RDD) approach to give these unlisted telephone households some chance of selection.

To implement the RDD approach, MSG first identifies all telephone exchanges in the study county. Telephone exchanges having very low percentages of directory-listed households in the study county are deleted. From the remaining exchanges, MSG draws a systematic sample of telephone numbers. Some of these telephone numbers are residential and some are business and nonworking. To prevent a directory-listed telephone number from being sampled in both the RDD frame and the directory-listed frame, MSG selects the RDD sample of telephone numbers first. The sampled telephone numbers are matched to the database of directory-listed telephone numbers. Those telephone numbers identified as directory-listed are removed from the directory-listed frame prior to the stratification described above.

Trying to determine the percentage of the total sample that should be allocated to the RDD frame based is difficult. First, the proportion of working residential telephones can vary considerably from county to county so trying to estimate the total number of telephone households in this frame is imprecise. Second, the estimation of the eligibility rate in this frame is imprecise. Since the contact rate in this frame is substantially lower than any of the four directory-listed strata, the primary determinant of our allocation is dialing efficiency.

Telephone subjects recruitment for OH counties began in March 2001 and completed in November 2001. The project achieved an overall 57% response rate (using the response rate calculation method suggested by EPA) and screened a total of 165 potentially eligible households for the project. A total of 69 subjects participated in the study, which is 108% of the recruitment target (64).

IV Summary

Table 1 provides detailed outcomes for telephone subjects recruitment. A total of 10,179 phone numbers were called. The project achieved an overall 57% response rate. The method for calculating response rates is also described in Table 1. Recruitment results for daycare centers and daycare parents are provided in Tables 2 and 3. We used the same method suggested by EPA to calculate the response rates. The project achieved 57% response rate for daycare centers and 31% response rate for daycare parents. The field sampling activities were conducted in 27 weeks (Table 4). The number of participants in each county is summarized in Table 5. The participant's income status is summarized in Table 6.

The distribution of participants by OH counties is illustrated in Figure 1. Figure 2 shows the distribution of daycare center participants by urban and rural locations. Figure 3 shows the distribution of telephone (RDD) subjects by urban and rural locations. Figure 4 shows the distribution of daycare center participants by counties. Figure 5 shows the distribution of RDD telephone participants by counties.

V References

CTEPP-SOP-1.10	Sample Selection Procedures
CTEPP-SOP-1.11	Daycare Center Sample Subjects Recruitment Procedures
CTEPP-SOP-1.12	Telephone Sample Subjects Recruitment Procedures
CTEPP-SOP-1.13	Informed Consent Procedures

Table 1. CTEPP Call Outcomes Report

CTEPP Ohio Call Outcomes Report 11/30/2001	Cuyahoga	Defiance	Fayette	Franklin	Hamilton	Licking	Overall Total
A. Agree to Participate/Eligible:	40	15	12	34	44	20	165
B. Ineligible subjects:	1022	476	677	740	1033	650	4598
(1) not a private residence	78	22	23	56	58	33	270
(2) no children in the household	583	315	450	412	669	388	2817
(3) cannot communicate	15	1	19	9		4	48
(4) no child in the age range	266	122	140	194	240	187	1149
(5) not stay with child 3 consec days	1	2	4	1	4		12
(6) child attends a day care	57	10	29	47	38	27	208
(7) child is not potty-trained	21	4	12	18	22	10	87
(8) child is still being breast-fed	1			3	2	1	7
C. Refused Screening:	90	41	43	70	55	58	357
C1. Eligible subjects/Refused:	6	3	4	7	4	2	26
C2. Eligibility Unknown:	84	38	39	63	51	56	331
D. Non-Working Numbers:	551	388	437	497	538	530	2941
E. Cannot be reached	517	231	175	459	405	331	2118
Total Cases With Final Outcome:	2220	1151	1344	1800	2075	1589	10179
Total Cases Loaded in CATI	2220	1151	1344	1800	2075	1589	10179
Cases Still Active in CATI	0	0	0	0	0	0	0
Calculate Response Rates							
A. Eligible and Completed	40	15	12	34	44	20	165
B. Total Eligible	46	18	16	41	48	22	191
C. Total Ineligible	1022	476	677	740	1033	650	4598
D. Eligibility Unknown	601	269	214	522	456	387	2449
E. Final Response Rate	56%	54%	57%	50%	64%	58%	57%

$$RR = \frac{A}{B + \left[\frac{B}{B+C} \right] \times D}$$

Table 2. CTEPP Day Care Center Recruitment results

CTEPP ID	Ohio County	Day care Centers Head Start	AGREE	REFUSED	*NO CONTACT	INELIGIBLE	Total
	As of 11/30/2001		16	8	5	4	33
			67%	33%			
49	Franklin	Day Care Center		1			
50	Franklin	Day Care Center			1		
51	Franklin	Day Care Center	1				
52	Franklin	Day Care Center	1				
53	Franklin	Head Start				1	
54	Franklin	Head Start		1			
63	Franklin	Day Care Center	1				
62	Franklin	Day Care Center	1				
60	Licking	Day Care Center			1		
61	Licking	Head Start	1				
40	Cuyahoga	Day Care Center			1		
41	Cuyahoga	Day Care Center	1				
42	Cuyahoga	Day Care Center		1			
43	Cuyahoga	Day Care Center		1			
44	Cuyahoga	Day Care Center	1				
45	Cuyahoga	Head Start	1				
46	Cuyahoga	Head Start	1				
64	Cuyahoga	Day Care Center	1				
65	Cuyahoga	Day Care Center			1		
66	Cuyahoga	Day Care Center	1				
67	Cuyahoga	Day Care Center		1			
68	Cuyahoga	Day Care Center			1		
47	Defiance	Day Care Center		1			
69	Defiance	Day Care Center	1				
55	Hamilton	Day Care Center	1				
56	Hamilton	Day Care Center	1				
57	Hamilton	Day Care Center		1			
58	Hamilton	Head Start				1	
59	Hamilton	Head Start				1	
72	Hamilton	Head Start	1				
48	Fayette	Head Start				1	
70	Fayette	Day Care Center	1				
71	Fayette	Day Care Center		1			

* NO CONTACT = Cannot reach the daycare director or the director cannot make a decision within the data collection period.

Calculate Response Rates	Summary
A. Eligible and Completed	16
B. Total Eligible	24
C. Total Ineligible	4
D. Eligibility Unknown	5
E. Final Response Rate	57%

RR =

A

B +

B

B+C

X D

Table 3. CTEPP Day Care Parent Response Rate

Wk#	CTEPP ID#	County	Sampling Date Day-1	Number of Parents Attempted	Responded Agreed	Responded Refused	Responded Ineligible	No Contact*	Total
1	51	Franklin	4/23/2001	16	5	1	0	10	16
3	52	Franklin	5/7/2001	15	6	0	0	9	15
4	61	Licking	5/14/2001	14	5	0	0	9	14
7	62	Franklin	6/4/2001	19	7	0	0	12	19
8	63	Franklin	6/11/2001	14	6	0	3	5	14
10	44	Cuyahoga	6/25/2001	14	6	0	0	8	14
11	41	Cuyahoga	7/9/2001	14	2	5	0	7	14
12	66	Cuyahoga	7/16/2001	16	4	2	0	10	16
15	69	Defiance	8/6/2001	11	4	1	0	6	11
17	55	Hamilton	8/20/2001	12	3	3	2	4	12
18	56	Hamilton	8/27/2001	14	3	1	0	10	14
21	72	Hamilton	9/24/2001	15	4	4	0	7	15
22	70	Fayette	10/1/2001	14	4	0	1	9	14
24	46	Cuyahoga	10/15/2001	14	4	2	0	8	14
25	45	Cuyahoga	10/22/2001	14	4	5	0	5	14
27	64	Cuyahoga	11/5/2001	33	4	5	2	22	33
		Total		249	71	29	8	141	249

* NO CONTACT = Cannot reach the selected parents or the parents cannot make a decision within the contact window.

Calculate Response Rates	Summary
A. Eligible and Completed	71
B. Total Eligible	100
C. Total Ineligible	8
D. Eligibility Unknown	141
E. Final Response Rate	31%

$$RR = \frac{A}{B + \left[\frac{B}{B+C} \right] \times D}$$

Table 4. Field Data Collection Summary by Sampling Week

Field Data Collection Summary by Sampling Week			Data Collection Completed		Total	Remarks
			Daycare Participant	RDD Participants		
Target			64	64	128	
Week#	As of 11/30/2001		58	69	127	
			% of Target	% of Target		
	County	Date/Day-1	91%	108%	99%	
1	Franklin	4/23/2001	4		4	
2	Franklin	4/30/2001		7	7	
3	Franklin	5/7/2001	4	1	5	
4	Licking	5/14/2001	4		4	
5	Franklin	5/21/2001		7	7	
6	Franklin	5/28/2001		1	1	
7	Franklin	6/4/2001	4		4	
8	Franklin	6/11/2001	4		4	
9	Licking	6/18/2001		7	7	
10	Cuyahoga	1/0/1900	4		4	
11	Cuyahoga	7/9/2001	2		2	
12	Cuyahoga	7/16/2001	4		4	
13	Cuyahoga	7/23/2001		8	8	
14	Cuyahoga	7/30/2001		8	8	
15	Defiance	8/6/2001	4		4	
16	Defiance	8/13/2001		6	6	
17	Hamilton	8/20/2001	3		3	
18	Hamilton	8/27/2001	3	1	4	
19	Hamilton	9/10/2001		8	8	
20	Hamilton	9/17/2001		8	8	
21	Hamilton	9/24/2001	4		4	
22	Fayette	10/1/2001	4		4	
23	Fayette	10/8/2001		3	3	
24	Cuyahoga	10/15/2001	4		4	
25	Cuyahoga	10/22/2001	3		3	
26	Franklin	10/29/2001		4	4	
27	Cuyahoga	11/5/2001	3		3	

Table 5. Field Data Collection by County

Field Data Collection Summary by County			Data Collection Completed		Total	Remarks
			Daycare Participant	RDD Participants		
		Target	64	64	128	
As of 11/30/2001		Actual Total	58	69	127	
Week#	County	Date/Day-1				
1	Franklin	4/23/2001	4		4	
2	Franklin	4/30/2001		7	7	
3	Franklin	5/7/2001	4	1	5	
5	Franklin	5/21/2001		7	7	
6	Franklin	5/28/2001		1	1	
7	Franklin	6/4/2001	4		4	
8	Franklin	6/11/2001	4		4	
26	Franklin	10/29/2001		4	4	
	Subtotal	Franklin	16	20	36	
4	Licking	5/14/2001	4		4	
9	Licking	6/18/2001		7	7	
	Subtotal	Licking	4	7	11	
10	Cuyahoga	6/25/2001	4		4	
11	Cuyahoga	7/9/2001	2		2	
12	Cuyahoga	7/16/2001	4		4	
13	Cuyahoga	7/23/2001		8	8	
14	Cuyahoga	7/30/2001		8	8	
24	Cuyahoga	10/15/2001	4			
25	Cuyahoga	10/22/2001	3			
27	Cuyahoga	11/5/2001	3			
	Subtotal	Cuyahoga	20	16	36	
15	Defiance	8/6/2001	4		4	
16	Defiance	8/13/2001		6	6	
	Subtotal	Defiance	4	6	10	
17	Hamilton	8/20/2001	3		3	
18	Hamilton	8/27/2001	3	1	4	
19	Hamilton	9/10/2001		8	8	
20	Hamilton	9/17/2001		8	8	
21	Hamilton	9/24/2001	4		4	
	Subtotal	Hamilton	10	17	27	
22	Fayette	10/1/2001	4		4	
23	Fayette	10/8/2001		3	3	
	Subtotal	Fayette	4	3	7	

Table 6. Summary of CTEPP OH Participants

Final OH Results		Telephone Sample				Daycare Sample				Total
		Unknown	Low-income	Mid-income	Subtotal	Unknown	Low-income	Mid-income	Subtotal	
Urban	Cuyahoga	1	4	11	16		10	10	20	36
	Licking			7	7		4		4	11
	Franklin		7	13	20	2	6	8	16	36
	Hamilton		2	15	17	1	9	0	10	27
	Total Urban	1	13	46	60	3	29	18	50	110
Rural	Defiance		2	4	6	2		2	4	10
	Fayette		3		3			4	4	7
	Total Rural	0	5	4	9	2	0	6	8	17
Total OH		1	18	50	69	5	29	24	58	127
% of Total		1%	26%	72%	100%	9%	50%	41%	100%	

Figure 1. OH Final Data Collection

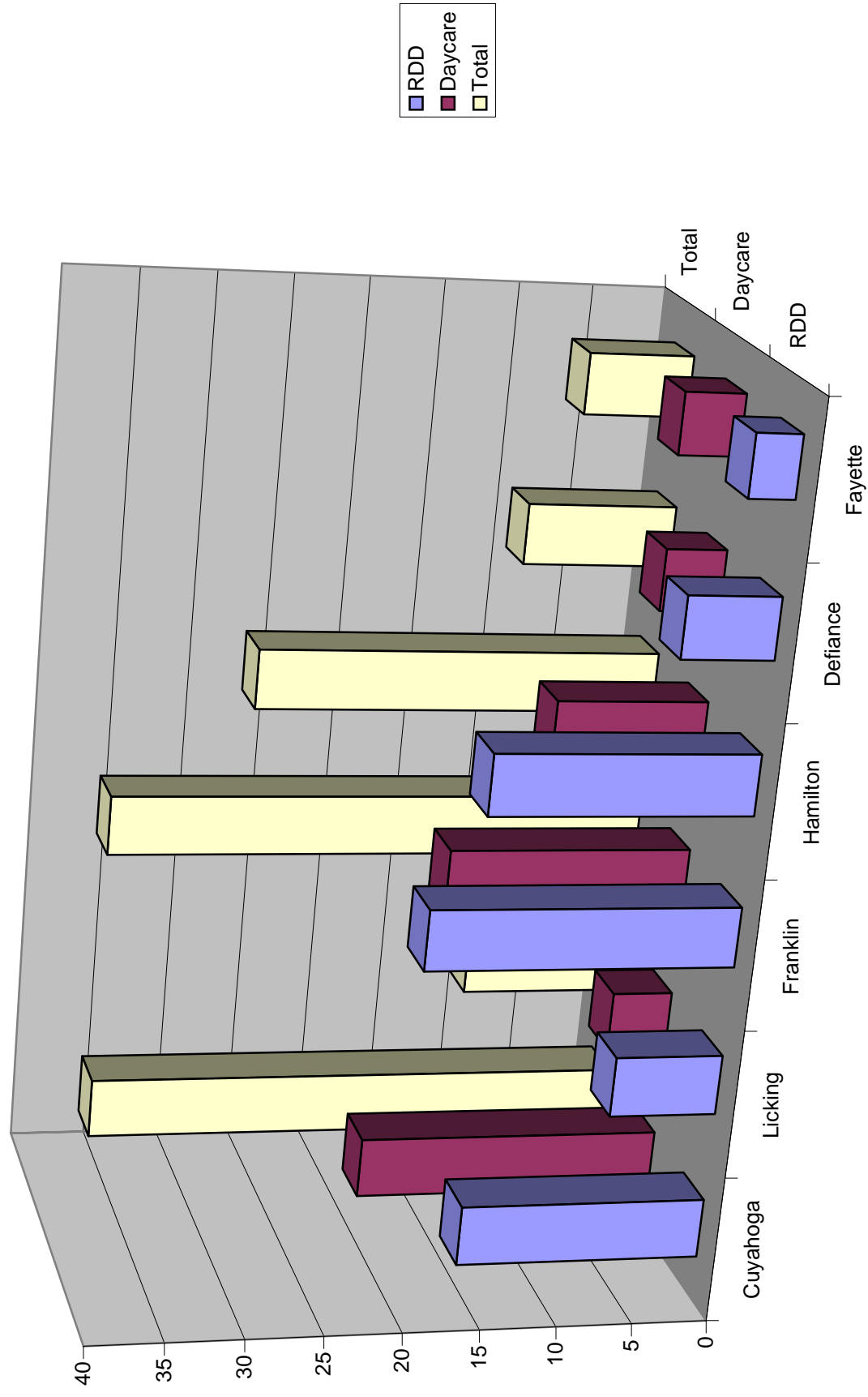


Figure 2. CTEPP OH Daycare

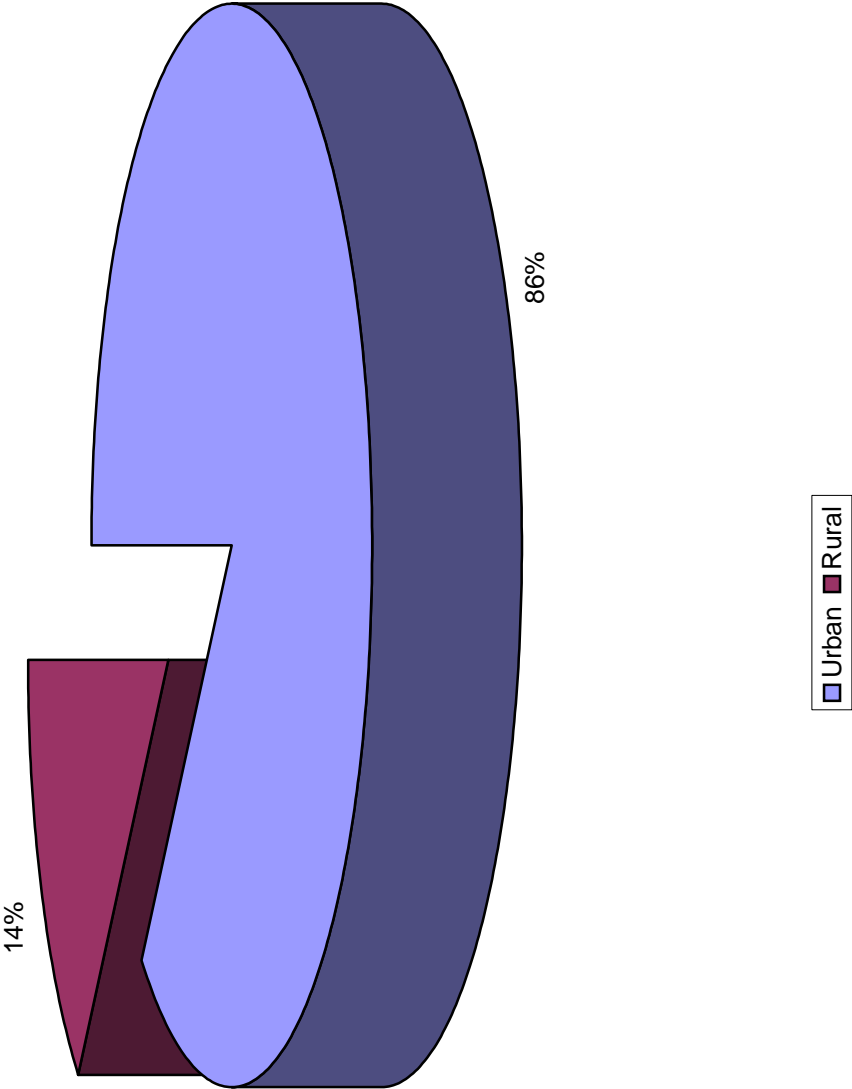


Figure 3. CTEPP OH RDD

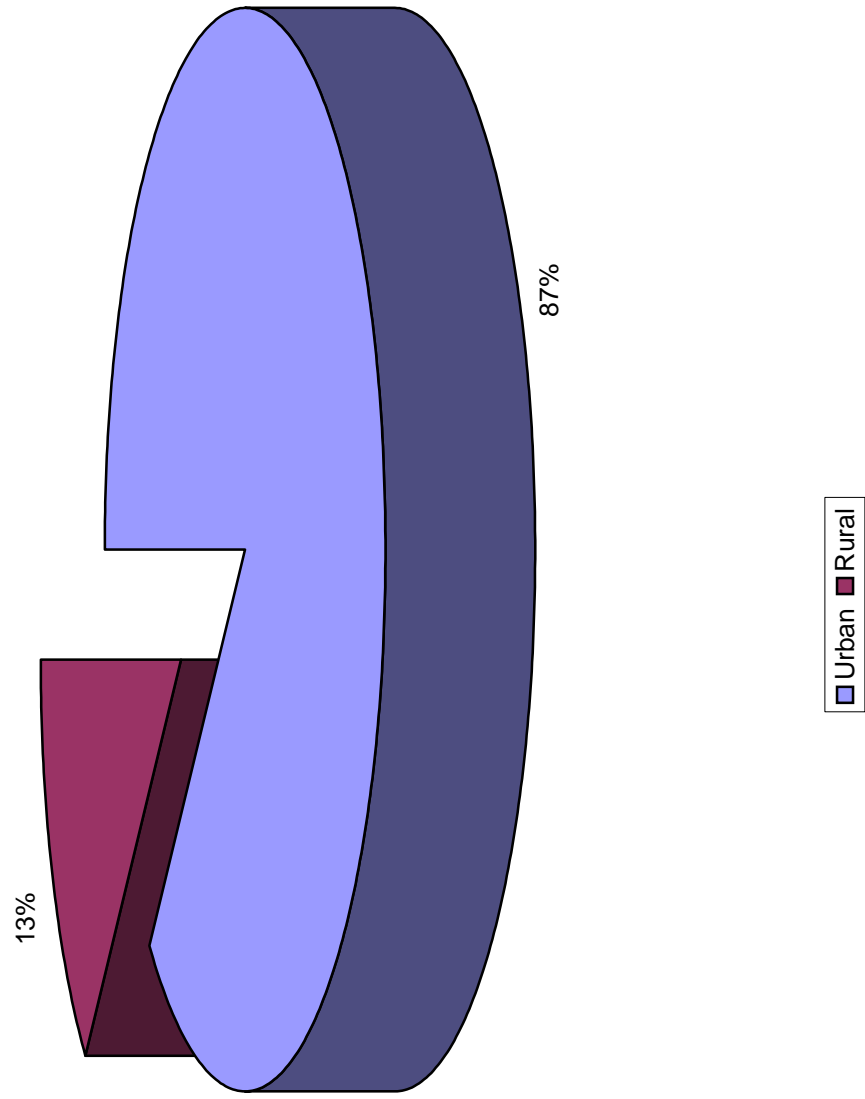


Figure 4. CTEPP OH Daycare Centers

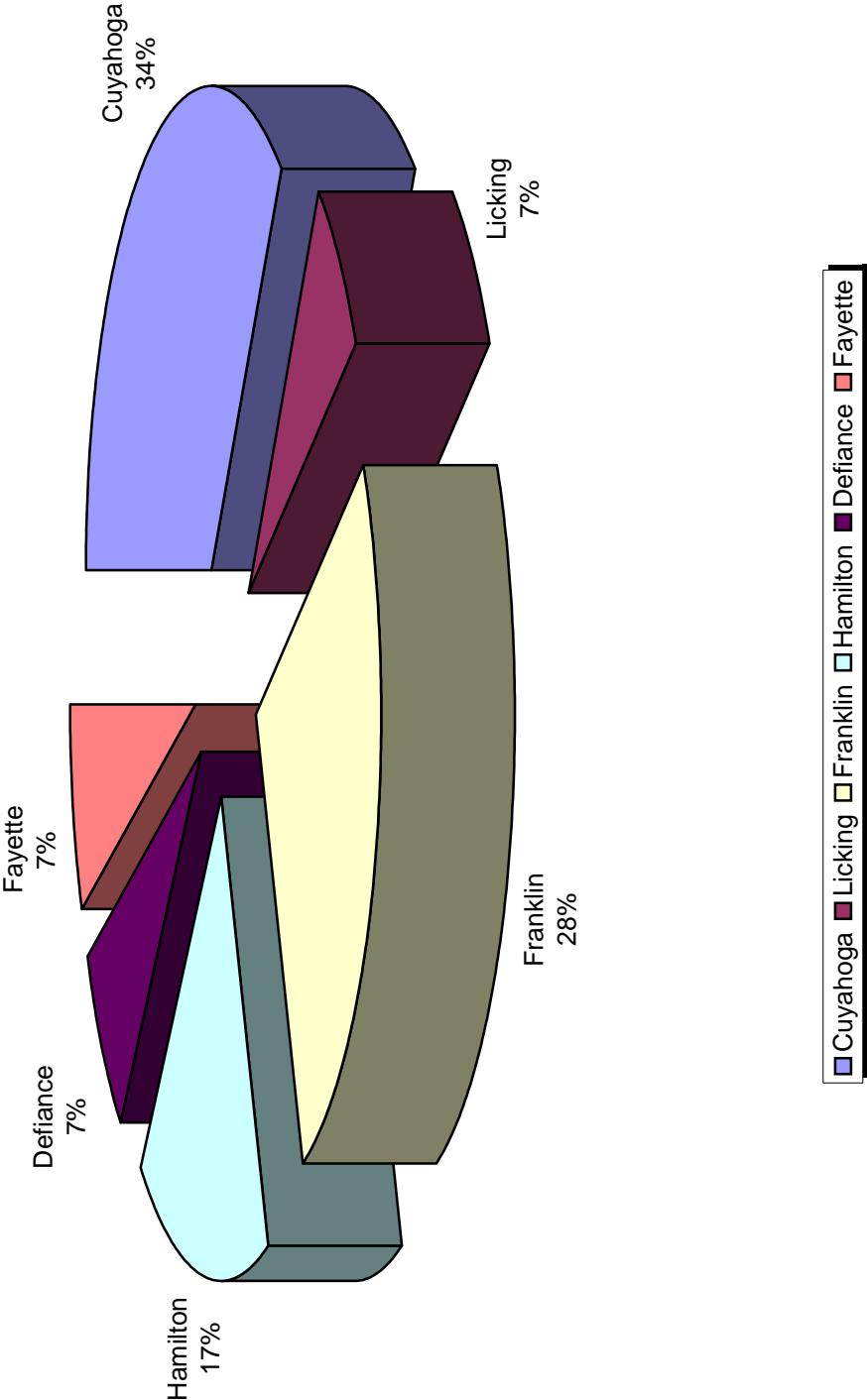
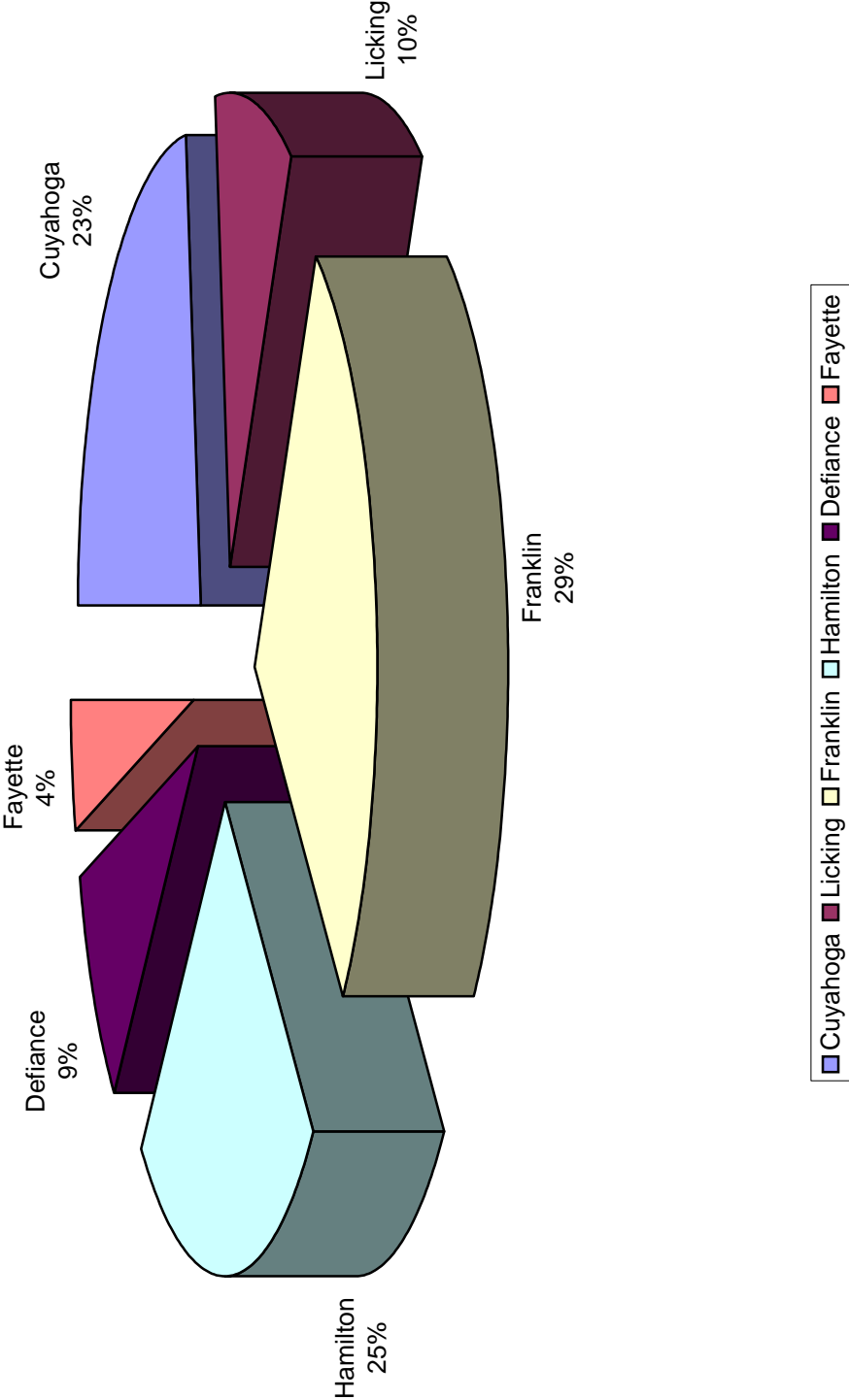


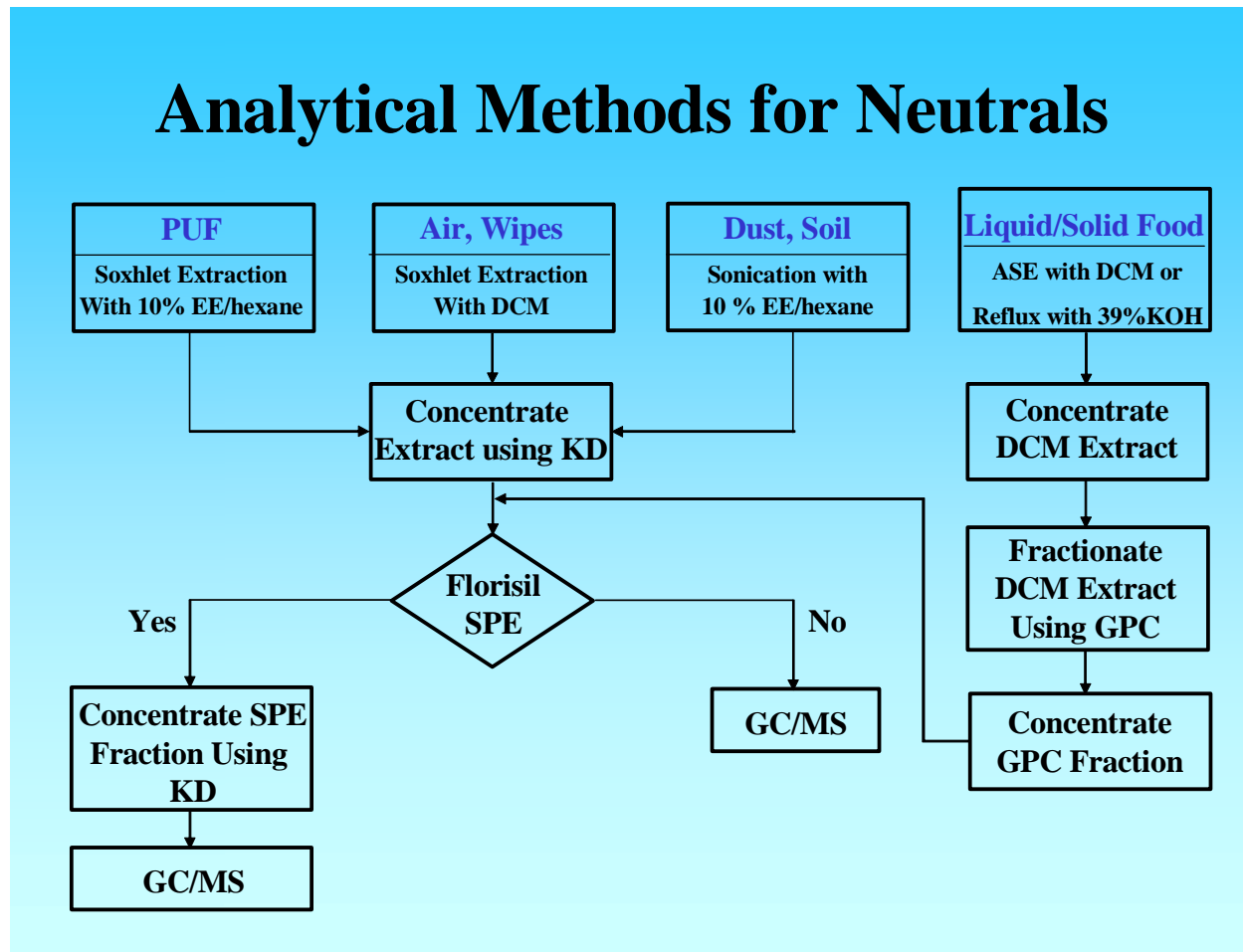
Figure 5. CTEPP OH RDD



Appendix C

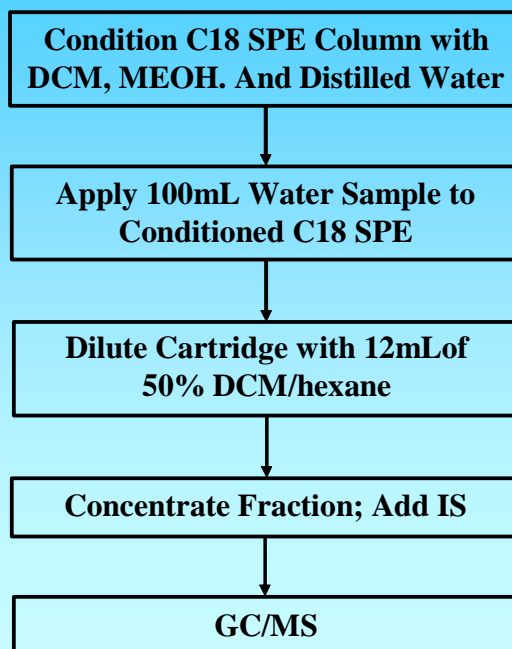
Summary of Analytical Methods for Determining Target Pollutants in Multimedia Samples

**Flow Chart of Analytical Methods for Neutral Analytes in PUF, Air, Wipes,
Dust, Soil, Liquid Food, and Liquid Food**



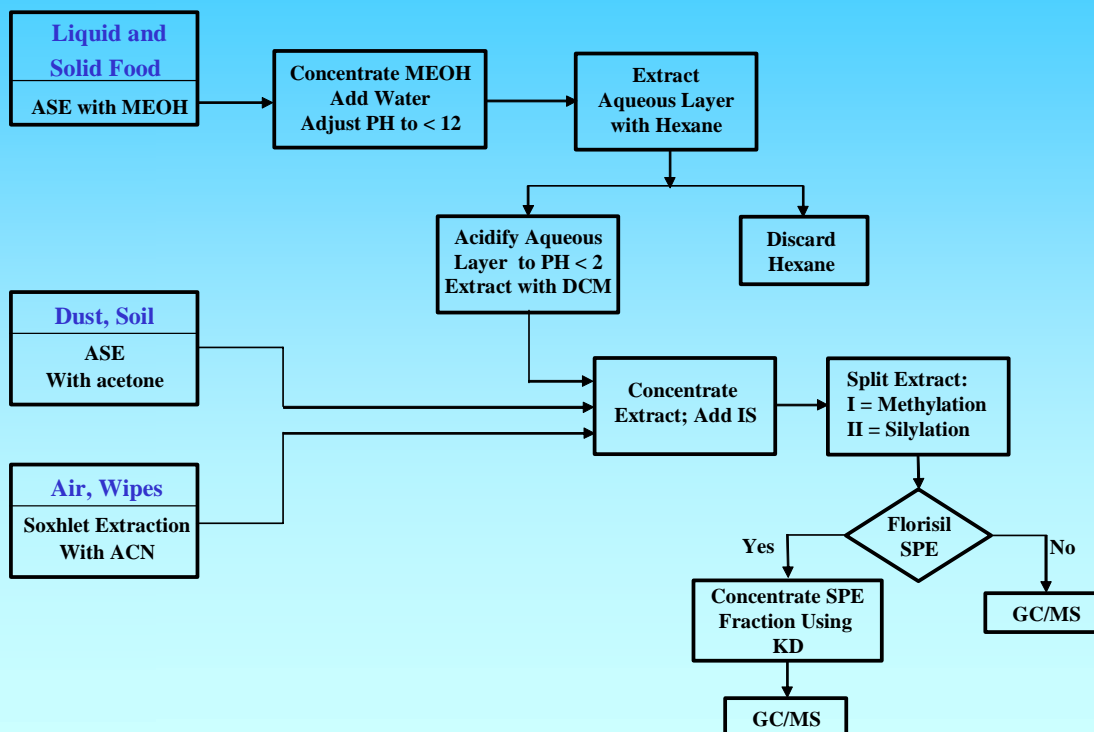
Flow Chart of Analytical Methods for Atrazine in Drinking Water

Analytical Method for Atrazine in Drinking Water



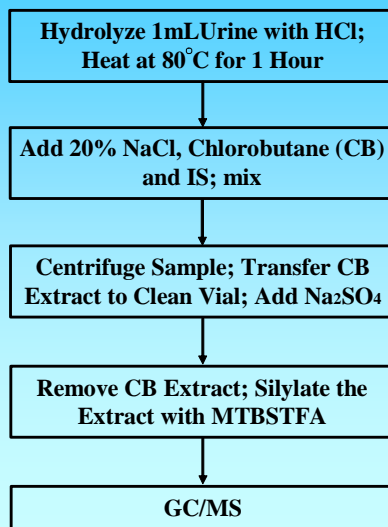
Flow Chart of Analytical Methods for Acidic Analytes in Air, Dust, Soil,
Wipe, Liquid Food, and Solid Food

Analytical Methods for Acids

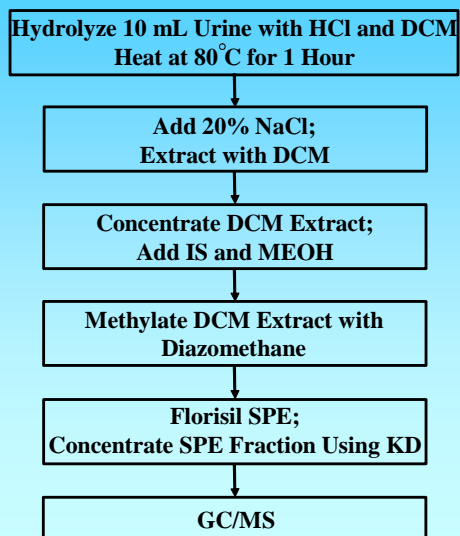


Flow Chart of Analytical Methods for 3,5,6-TCP, 2,4-D, PCP, and OH-PAH in Urine

Analytical Method for 3,5,6-TCP in Urine



Analytical Method for 2,4-D, PCP, OH-PAH in Urine



Appendix D

Quality Assurance/Quality Control Summary for CTEPP North Carolina and Ohio Data Collection

QA/QC Summary Report for CTEPP North Carolina Data Collection**I. Introduction**

The research study, "Children's Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants," (CTEPP) is a pilot-scale project involving about 260 children, which investigates the possible exposures that young children may have to common contaminants in their everyday surroundings. These contaminants include several pesticides, phenols, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, some of which are suspected of being endocrine disrupters. The targeted compounds are persistent in the indoor and sometimes the outdoor environments, so that very low levels may exist in the children's surrounding microenvironments and provide a source of chronic, non-acute exposure. The primary purposes of the research are to increase our understanding of children's exposures to persistent pollutants, to gain information on the various activities, environmental media, and pollutant characteristics that may influence children's exposures, and to generate further questions and hypotheses for future research. This document provides a summary of the quality assurance (QA) and quality control (QC) procedures conducted for the CTEPP project. In the following sections, we describe the study activities and the QA/QC procedures. The relevant standard operating procedures (SOPs) are listed in the Reference Section at the end of this document.

II. CTEPP Study Activities

As illustrated in Exhibit 1 (CTEPP Study Activities Flow Chart), CTEPP study activities are conducted in three phases: Pre-Data Collection, Field Data Collection, and Post-Data Collection. To ensure data quality, standard operating procedures (SOPs) were developed and project team members were trained according to the SOPs. All project activities were conducted by trained project staff members, who were divided into the following project teams: 1) recruitment team (including RDD and field teams), 2) field support team, and 3) field data collection team.

The recruitment team was responsible for recruiting daycare and RDD home participants. It was supported by a team of telephone interviewers and some field staff members. During the pre-data collection phase, the following key activities were conducted by the recruitment team and field support team.

- ❑ Recruit/Train Participants, Present T-shirts, Pay \$25, Remind Food Samples Collection
- ❑ Label Sample Containers
- ❑ Compile Field Notebooks
- ❑ Pack Van, Check items on the check lists

The field support team conducted QA/QC checks before and after the preparation of all field supplies, sample containers, and data forms. They ensured that all the materials needed for the field data collection activities were complete and accurate.

After the field support team completed the preparation work, the field data collection team did a final check on all needed field supplies, sample containers, and data forms for the scheduled sampling appointments. After loading the van and completing the final checks, the field data collection team drove to the sampling site for the scheduled sampling appointment with the study subject. The following key activities were conducted by the field data collection team during the field data collection phase.

- ❑ Field Data Collection Activities
- ❑ Record Sample/Data Condition on Sample/Data Check Lists
- ❑ Put Samples in ZipLoc Bags
- ❑ Put Samples in Freezers
- ❑ Record problems/issues on Daily Check List
- ❑ Leave Field Notebooks in the CTEPP Workroom

Once the field data collection team returned to the Battelle office, the field support team received the field samples and data from the field data collection team. The following key activities were conducted by the field support team during the post-data collection phase.

- ❑ Update Sample/Data Check Lists in the CTEPP Tracking System (TS)
- ❑ Verify Sample Conditions
- ❑ Check Field Notebooks (data forms)
- ❑ File Field Notebooks in the participant folders
- ❑ Ship Samples
- ❑ Conduct Data Entry
- ❑ Update Progress Reports
- ❑ Update QC Reports

In the following Sections, we describe specific QA/QC procedures relevant to the CTEPP data forms and database preparation.

III. CTEPP QA/QC Procedures for Preparing the Data Forms and Database

Battelle is always committed to the production of highest quality data. A key to accomplish this objective is to implement standardized QA/QC procedures. QA/QC is a continuous process. As illustrated in Exhibit 2 (CTEPP QA/QC Procedures for Preparing Data Forms and Database), Battelle implemented a comprehensive QA/QC plan to ensure data quality in all phases of the CTEPP project, from pre-data collection to post-data collection phase.

A. Pre-Data Collection Phase:

Developed and Tested Data Forms, CATI Programs

During the pre-data collection phase, the following data forms were developed.

- Recruitment Survey (Form #1)

-
- House/Building Characteristics Observation Survey - Home (Form #2)
 - House/Building Characteristics Observation Survey - Child Day Care Center (Form #3)
 - Pre-Monitoring Questionnaire - Parent (Form #4)
 - Pre-Monitoring Questionnaire - Child Day Care Center (Form #5)
 - Post-Monitoring Questionnaire - Parent (Form #6)
 - Post-Monitoring Questionnaire - Child Day Care Center (Form #7)
 - Child Activity Diary/Parent - Children Don't Attend Day Care (Form #8)
 - Child Activity Diary/Parent - Children Attend Day Care (Form #9)
 - Child Activity Diary - Day Care Teacher (Form #10)

All the data forms were tested by trained project staff for consistency and accuracy. In addition, mock interviews and field data collection simulations were conducted to evaluate the effectiveness of the data forms. The data forms were finally reviewed and approved by IRB and OMB. Form #1 (Recruitment Survey) was modified into computer-assisted telephone interviewing programs (CATI) for recruiting the RDD participants (children who did not attend daycares). The CATI programs automatically performed QC checks during data entry, which included range checks, consistency checks, and skip pattern checks. Before the CATI programs were approved for actual RDD recruitment and data collection, it also went through rigid QA/QC checks for programming errors. Exhibit 3 provides an example of the QA/QC test document.

Conducted Staff Training on Data Collection SOPs

To ensure the consistency and high quality of data collection, a comprehensive training plan was implemented. The recruitment team members received training in the implementation of the recruitment SOPs before subject recruitment activities began. Standardized scripts and materials (e.g., CATI system and Interviewer's Manual) were developed. The Interviewer's Manual provided information on the background and aims of this study, the standard interviewing procedures, confidentiality requirements, and question-by-question specifications for the recruitment survey. Interviewers must be certified for the study before they can initiate any contact with the study subjects. In order to be certified as a CATI interviewer for the study, an interviewer must pass the following two tests:

1. CATI Operation Test: The interviewer must demonstrate that he/she is familiar with the CATI instrument and the computer-working environment.
2. CATI Interview Test: The interviewer must conduct at least two mock CATI interviews and receive a satisfactory evaluation from the CATI supervisor.

Training for the field data collection team members included a five-day (40-hour) training session and additional self-practice time was provided to the field staff. The following is a brief summary of the training topics.

-
- | | |
|-----------|--|
| Day 1: | Training covered study background, recruitment SOPs, confidentiality issues, informed consent procedures, and the interviewing protocol. |
| Day 2: | The field staff members were trained to administer all the data collection forms. |
| Day 3: | The training included field sampling procedures, i.e., the use of field notebooks and the collection of air, food, urine, dermal hand wipes, hard floor wipes, food preparation surface wipes, the polyurethane foam (PUF) roller for dislodgeable residues, indoor floor dust, and soil samples. Internal field audits and QC procedures were also discussed. |
| Days 4/5: | A mock field sampling exercise (with 2 volunteers) was conducted during the last two days of training. The field team visited the volunteer's home and conduct actual field sampling activities. The field staff members were also certified during these two days (i.e., they were required to pass the tests set for the field sampling procedures). |
| Day 5: | Training in packing and shipping procedures were given on the final day. The training ended with a final review of all SOPs. |

Before field data collection began, the field support team members also went through training for data form tracking and processing procedures, coding procedures, and quality control procedures.

Conducted Participant Orientation/Training

Due to the unique features of the CTEPP study, some key information and samples were collected by the study participants themselves. Keeping the participants involved and well informed was critical to the success of the study. All participants (i.e., parents and daycare staff) were trained (i.e., received project orientation) prior to the scheduled sampling appointment (normally one week before the actual sampling). During the orientation/training, our project staff went through the SOPs for collecting samples of food, urine, and dermal hand wipes and recording the Child Activity Diary with the participants.

B. Data Collection Phase:

Conducted CATI Monitoring

As a standard procedure to ensure data quality, Battelle routinely verifies data collection activities. For monitoring CATI interviews (Form #1 RDD), Battelle employed a sophisticated computer software (i.e., **PROXY**) and a telephone monitoring system to validate CATI interview data. With the monitoring system, the CATI supervisor could actually “watch” and “listen” an interview in progress. A standardized monitoring

procedure was developed and used for CATI monitoring. The supervisor randomly selected an interview for monitoring. The monitoring system transferred the interviewer's computer screen and telephone conversation in real time to the supervisor's workstation. The interviewer being monitored or the study respondent could not notice any difference while the monitoring was in progress. To ensure the participant's right, a statement about the interview that might be monitored by a project supervisor for quality assurance was read to the respondent before the interview began. The monitoring results were recorded in a CATI Interview Monitoring Form (See Exhibit 4).

Conducted Staff Field Edit

All field data collection team members were trained to conduct field edit for all completed data forms. During data collection, the field staff conducted field edits to identify missing data items or questionable information at the sampling site. Any identified issues or problems were resolved at the sampling site before the field data collection team returned to Battelle whenever the field conditions allowed. A Daily Activity Check List was developed to assist the field staff in conducting data collection activities and field edit. The field edits ensured that any data collection issues or problems were resolved early at the sampling site with the study participant.

Conducted Internal Field Audits

According to CTEPP SOP 2.25, Battelle conducted periodical internal field audits to ensure high quality of data collection. The internal field audits were conducted by the Field Team Leader and/or field auditors. The field data collection team was not notified of the field audit visit. The field audit schedule was randomly selected by the field auditor/Field Team Leader. During a field audit visit, the field auditor observed all field sampling activities according to the SOPs. The field auditor recorded any findings or observations about the field staff's work that was not consistent with the SOPs. Before the end of each field audit visit, the field auditor discussed the findings or observations with the field staff. A field audit report was prepared by the field auditor after each field audit to document the field audit visit.

Conducted External Field Audits

In addition to Battelle internal field audits, some external field audits were conducted by EPA auditor and project officer. On September 12 and 13, 2000, EPA audited the North Carolina data collection teams. On June 5, 2001, EPA project officer conducted field observation visit with the Ohio data collection teams. There was no finding in all the external field audits and observation visits.

C. Post-Data Collection Phase:

Applied Chain of Custody Procedures

In order to protect the study samples and data forms, a standardized chain-of-custody procedure was developed and implemented for the CTEPP study (See SOP 2.26). In addition, Battelle developed a sophisticated CTEPP Tracking System to monitor the status of data collection. As soon as the field team returned to the office, the field support (receiving) team checked the samples/data condition and updated the data collection

status in the CTEPP Tracking System (See Exhibit 5). The following information was recorded for each study participant.

- Sample/Data Description
- Sample Type
- Sample ID#
- Staff's Name Who Collected the Sample/Data
- Date of Collection
- Sample Condition
- Number of Floor Dust Sampling Areas
- Sample Explanation (if Sample Condition = Explain)
- Staff's Name Who Received the Sample/Data from the Field Team
- Date Received Sample/Data
- Time Received Sample/Data

If the samples/data need to be shipped to another location, the CTEPP Tracking System automatically generates a Chain-of-Custody record for the staff to sign.

Receiving Team Conducted QC Checks

After checking and storing the environmental and biological samples, the receiving team conducted QC checks on all the participant's data forms and study materials. A CTEPP Participant Data QC Check List was developed to track the QC status of each data item (See Exhibit 6). The staff carefully reviewed each data form for missing or questionable data items. After the staff completed the QC review, she/he put her/his initial and date of review on the back of the data form. Any pending issues (e.g., missing materials or information) identified through the QC review were recorded in the Check Notes of the CTEPP Participant Data QC Check List. The field support staff resolved each pending issue by checking with the field data collection staff or contacting the participant.

Developed and Tested Data Entry Programs

After the data forms went through the QC checks and received a "complete" status, the form was ready for data entry. Battelle programming team developed a double data entry program to allow two separate data entry teams to conduct data entry. The data entry program was designed to perform additional QC checks during data entry, which included range checks, consistency checks, and skip pattern checks. Before the data entry program was used for actual data entry, it was fully tested by trained project staff. An example of the testing document is illustrated in Exhibit 7 (CTEPP Data Entry Program Test). Examples of data entry program screens are illustrated in Exhibits 8, 9, and 10.

Conducted Double-Data Entry

All data forms were entered twice and verified, using the CTEPP Double Data Entry Program. Two data entry teams (Teams A and B) performed the data entry work and entered the data into two separate databases. All the data entry team members were trained before they were allowed to conduct data entry work. Each staff was assigned to only one data entry team and was not allowed to switch team. This ensured that a data form was entered twice by 2 different people. As a standard procedure for entering the

open text fields, the data entry teams were instructed to enter participant's responses verbatim.

Conducted Computer Program Checks for Data Entry Errors

A computer verification program was developed for checking the accuracy of the entered data and every record in the two databases was crosschecked. An example of the crosscheck computer reports is illustrated in Exhibit 11 (CTEPP Double Data Entry Crosschecks). The crosscheck computer reports identified any discrepancies between the two databases. The reports displayed the Participant ID (PID), variable (data field) name, data value in each database (Base vs. Compare), the difference between the 2 databases (numeric fields only), and % difference (if applicable).

Correct Data Entry Errors

For each data item detected by the computer program, the data entry staff verified the information with the original participant data form and made corrections as needed. The crosscheck computer reports made it easy for the staff to identify data entry problems and to verify the information. This program also kept a log of all changes made, including original data value, date/time of data change, and name of the staff who made the changes.

Prepare Final Master Database

A final master database for each data form was prepared after all QC checks were completed and data entry discrepancies were corrected. Backup data files were also created to protect the CTEPP data. All CTEPP data files and documents are protected by password. Only authorized project staff members have access to the restricted project folders.

Prepare and Verify Data Dictionary and Document

After the completion of master database preparation, the programming team prepared the updated data dictionary for each data form database. The project staff verified the data dictionaries by comparing the hard copy manuals, the electronic files, and the database structures.

Final Data Verification Checks

After completing all the tasks described in the earlier sections, the project staff conducted a final QA/QC check by verifying randomly selected participant files. Data items in the database were checked against the data documentation manual (i.e., data variables in the data dictionary) and the actual participant data in the original data form. The results of the random checks showed 100% accuracy. The data in the original participant data form were correctly recorded in the CTEPP database, and the data variables were accurately documented in the data dictionary. Before Battelle delivered the database to EPA, the data variables containing personal identifiers (i.e., names, street address, GPS, etc.) were removed from the database to ensure participant confidentiality. The results of the final data verification checks are shown in the following Table.

Final Data Verification Checks for NC Database

PID	Data Forms Checked	QA/QC Checks Status	Results
15-001-1	1, 2, 4, 6, 9	Complete Checks: Checked all variables of each data form	No problem
21-000-3	3, 5, 7, 10	Complete Checks: Checked all variables of each data form	No problem
97-109-1	8, Air Data Log	Complete Checks: Checked all variables of each data form	No problem
09-003-1	1, 2, 4, 6, 9, Air Data Log	Partial Checks: Checked some randomly selected variables of each data form	No problem
97-079-1	2, 4, 6, 8, Air Data Log	Partial Checks: Checked some randomly selected variables of each data form	No problem
18-000-3	3, 5, 7, 10, Air Data Log	Partial Checks: Checked some randomly selected variables of each data form	No problem

IV. CTEPP QA/QC Procedures for the Analytical Database

Analytical data were electronically imported into the database according to CTEPP SOP 4.12. The analytical raw data (QUAN report) were generated from each instrument by a qualified analyst (the first data reviewer). The QUAN report was then reviewed by the TOL (the second data reviewer) for all the identified analytes. The QUAN report was then electronically transferred into a custom report and saved as a "crd" file. The "crd" file was then electronically parsed into an Excel spreadsheet template, pertinent data such as sample extraction weight and quality assurance codes were added and saved as an Excel file with an extension of ".xls" by the first data reviewer. The TOL reviewed all the Excel files before importing into the analytical database. If any anomalous results were observed in the data, every effort was made to identify any problems in the sample collection, sample preparation, and/or analysis, which could have contributed to the anomaly. Data dictionaries and code sets for core analytical data, QA/QC data, and ancillary data were developed for the analytical database. The completed Excel spreadsheets were then electronically imported into the analytical database by the database staff.

Database queries were developed to perform QA/QC checks. The QA/QC checks performed for the Ohio analytical database include (1) sample ID checks, (2) missing data checks, (3) duplication data checks, (4) out-of-range checks, (5) upper- and lower-concentrations checks, and (6) calculation checks.

Sample ID checks

The sample ID checks were performed to verify that all Sample IDs with reported data were valid Sample IDs, i.e., they were logged in as received from the field. If invalid sample IDs were detected, the database staff traced back to the original raw data, including laboratory record books and GC/MS logbooks, to identify the transcription error and to make the corrections accordingly. All corrections were documented in the database importing logbook.

Missing data checks

The missing data checks were performed to verify that all Sample IDs received from the field had a full set of analytical data reported. Samples that were received but that did not have a complete set of analytical data and/or ancillary data, other than for a stated reason in the electronic CoC data, were identified, and one of the following correction actions was taken (as appropriate): analytical data was found and imported into the database, or samples were located, processed, analyzed, reviewed, and the analytical data was imported into the database. Samples that were lost or damaged during laboratory processing were identified and imported into the QA Action table with an explanation regarding their disqualification.

Duplicate data checks

Duplicate data checks were performed to verify that the same analytical data was not imported into the database twice for a given sample. The database staff traced the sample results back to the laboratory record books, the GC/MS sequence logs, and/or the QUAN reports to confirm that duplicate data was the result of a double import, and not a QA/QC re-analysis (e.g. duplicate sample or duplicate injection). Once the duplicate data was identified as a double import, the set of results for the sample having the oldest sample import date were eliminated from the analytical database. If the duplicate data was identified as a QA/QC re-analysis, the proper QCC code was added to the QC_Code data field, and the data for the first duplicate (only) remained in the Core_Analytical_Results table, and the data for the first and second duplicates were reported in the QA_QC_Results table.

Out of range checks

Out-of-range checks were performed to verify that all data for data fields limited to a codeset did not violate that codeset. For data fields that were limited to a codeset of values, queries were performed to identify data within those fields that did not belong to, or “violated”, the codeset. Once identified, the database staff traced the sample results back to the laboratory record books to identify the transcription error. The data in the database was corrected, and that correction was documented.

Upper- and lower- concentration checks

Upper- and lower-level concentrations checks were performed on approximately 5% of the results that were plus or minus three standard deviations from the mean. Database queries were performed to identify those calculated results (Result1 and Result2) greater than or less than three standard deviations from the domain mean. Five percent of these

data were reviewed again by the data reviewer. The data reviewer checked the QUAN report, all the parameters used for the results calculation, and the result calculation itself to make sure that identification and quantification were performed correctly. If the data reviewers detected any mis-identification and/or mis-quantification, corrections were made accordingly. The TOL approved the corrected data and the database manager made the changes in the database. All activities were documented in the laboratory record books and database importing logbook.

Several additional checks were performed to:

- (1) review the SRS and MSS recoveries data greater than 150% and less than 50%;
- (2) review the %D data that are greater than 50%;
- (3) add more flag codes to explain these QC data from items 1 and 2;
- (4) review all nonzero method blanks and field method blanks; and

Calculation Checks

Calculation checks were performed in Excel spreadsheets for selected samples to verify that the calculations performed on Excel spreadsheet agreed with the calculations performed on the analytical database. Hand calculations, using a calculator, were performed on select data to verify the calculated data agreed with the database calculated data.

For those data requiring calculation of results, a random subset (approximately 5%) of the raw data was calculated using an independent calculation source (Excel) for validation. In addition, hand calculations were performed on random data for each sample matrix using a calculator.

References:

CTEPP-SOP-2.22	Procedures for Recording Data Collection Forms
CTEPP-SOP-2.24	Procedures for Handling Missing Samples/Data
CTEPP-SOP-2.25	Internal Field Audit/Quality Control Procedures
CTEPP-SOP-2.26	Sample/Data Custody Procedures
CTEPP-SOP-2.27	Staff and Participant Training
CTEPP-SOP-4.10	Procedures for Processing Completed Data Forms
CTEPP-SOP-4.12	Entering or Importing Electronic Data Into CTEPP Data Bases Procedures

Attachments:

Exhibit 1	CTEPP Study Activities Flow Chart
Exhibit 2	CTEPP QA/QC Procedures for Preparing Data Forms and Database
Exhibit 3	RDD CATI Tests Document
Exhibit 4	CATI Interview Monitoring Form
Exhibit 5	CTEPP Tracking System
Exhibit 6	CTEPP Participant Data QC Check List
Exhibit 7	CTEPP Data Entry Program Test
Exhibit 8	CTEPP Double Data Entry Program - Initial Screen
Exhibit 9	CTEPP Double Data Entry Program - Data Entry Screen
Exhibit 10	CTEPP Double Data Entry Program - Status Screen
Exhibit 11	CTEPP Double Data Entry Crosschecks

Exhibit 1. CTEPP Study Activities Flow Chart

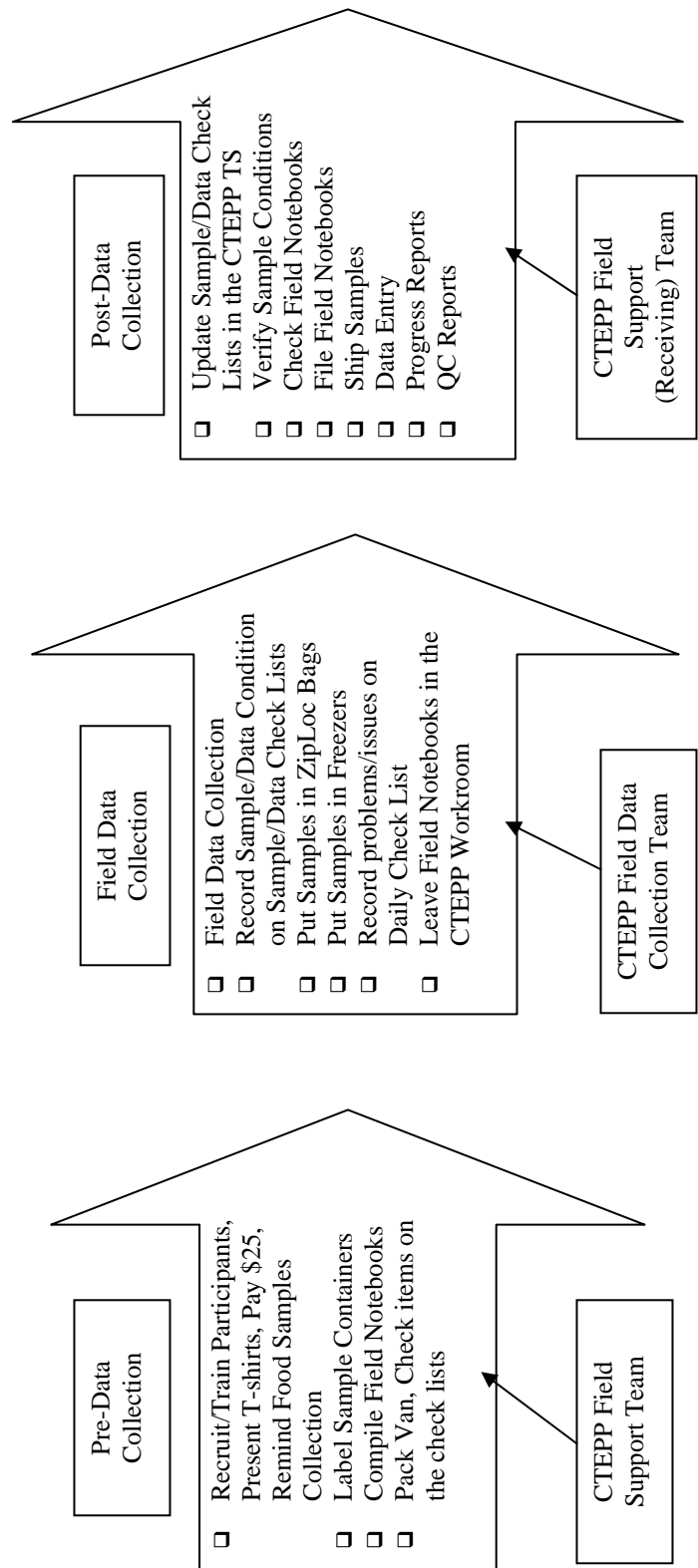


Exhibit 2. CTEPP QA/QC Procedures for Preparing Data Forms and Database

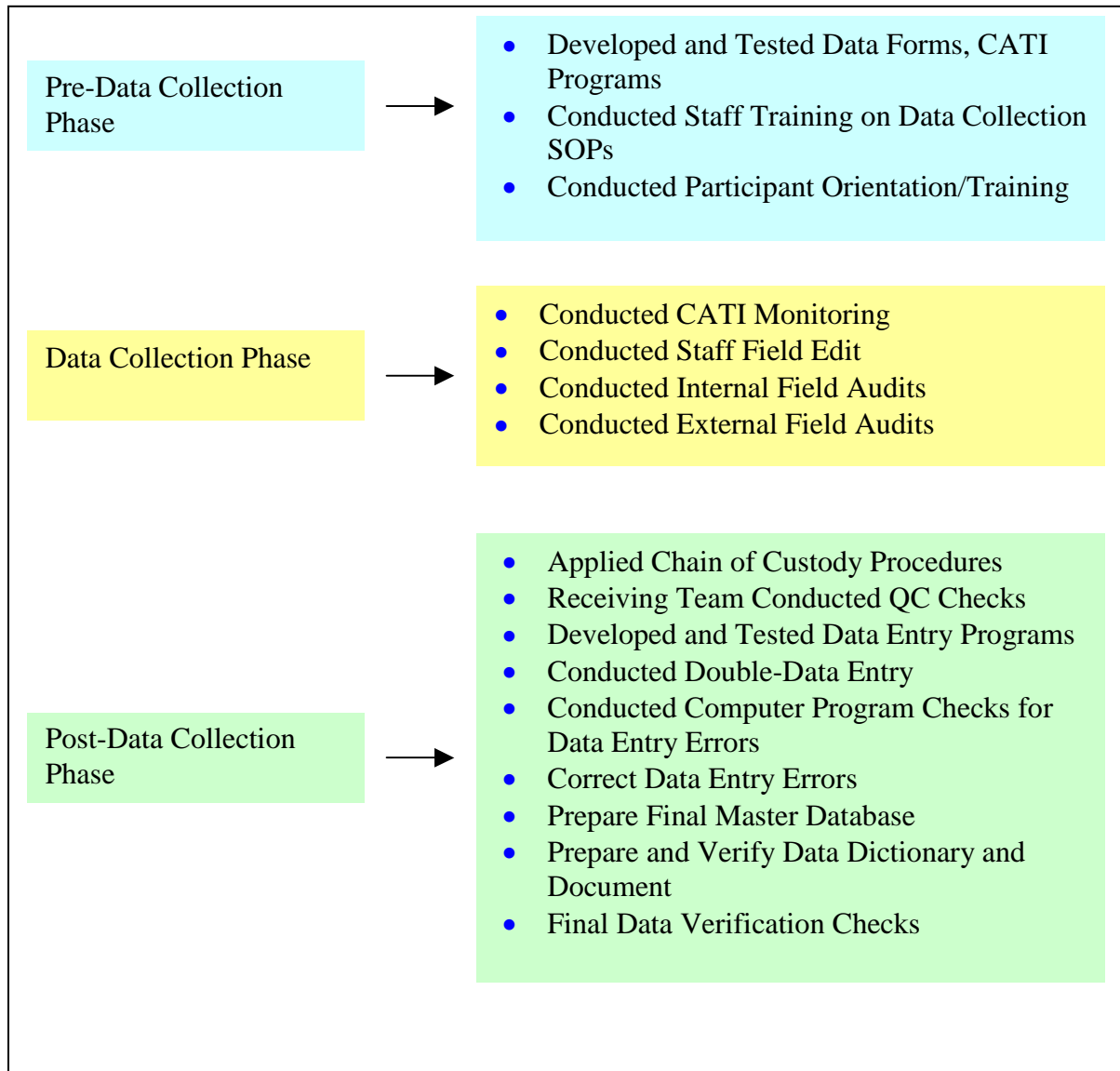


Exhibit 3. RDD CATI Tests Document

RDD CATI Tests
Carey Aselage
December 8, 1999

1. Add the following interviewer instructions to this question: May I speak to the parent or guardian of the children in this household (OR NAME OF RESPONDENT IF OBTAINED THE NAME FROM PREVIOUS CALL)?-fixed EB 12/99
2. Skip pattern for answer #1 goes to Q3. However, this question is numbered as Q2 in CATI. I combined question 2 and 3 into 1 question and called it Q2_3. Since it is really the same question with a little different wording depending on whether the parent answered the phone or had to be called to the phone. CWL – is that ok or do you want 2 separate questions? [CWL: Please program as 2 separate questions] Fixed EB 12/99

I did the same thing with questions 4a & c and 4 b & d. [CWL: Please follow the hard copy]. – Fixed EB 12/99

** Add Contact Information in the first screen (Subject's Name, Address, ID#, Phone #.) or create a Sub Form for this information and revise the instruction in Exit 4 accordingly. – cwl Sub form created EB 12/99
3. According to the HC, answer #4 (Refused, No Information) should go to Exit #1. CATI does skip to Exit #1, however, the skip also includes Exit #4. This makes sense, I just want to confirm since the HC doesn't mention Exit 4 in the skip pattern for response #4. Since Exit 1 didn't have any instructions in the hard copy, I added what I thought were reasonable instructions. CWL – Let me know if this is ok as is, or if I need to make changes.
4. Exit #1 script contains the following information that doesn't appear on HC: IF CORRECT NUMBER: Thank you very much. Goodbye. PRESS CTL/S AND CHOOSE NONRESPONSE. See above comments.
5. Currently, the only month an appointment can be set is December 1999. I set that up for testing purposes. CWL will need to look at the survey definition and let me know what changes need to be made. EB 12/99

Exhibit 4. CATI Interview Monitoring Form

Interview Monitoring Form		Date:	
Study:			
Interviewer:		Time Begin/End:	
Monitor:		Study Manager:	

Total Number of Calls Monitored: _____ Number of Contact-Calls: _____
 [RECORD THE RESULTS OF MONITORING FOR EACH CONTACT-CALL]

Subject ID#:	1=YES 2=NO 3=NA	Comments:
1. Identify self and read introduction clearly		
2. Record the dial result correctly		
3. Record appropriate interviewer comments		
4. Make appointment correctly		
5. Read questions clearly and follow instructions		
6. Use appropriate probing when necessary		
7. Record responses correctly		
8. Record appropriate remarks when necessary		
9. Maintain neutrality and control of interview		
10. Maintain a courteous, professional manner		
11. Answer respondent=s questions appropriately		
12. Refrain from giving personal remarks/opinions		
Did the Supervisor discuss any problems with the interviewer? Yes ----- No Questions # and Problems Identified:		

Exhibit 5. CTEPP Tracking System

Collection Checklist

3. Day Care Center - Center Only Sample/Data Checklist

01-000-3

Item #	Sample / Data	Sample Type	Sample ID	Collected By	Collected Date	Sample Condition	HVS3 Sample	Sample Explanation	Received By	Received Date
1	Indoor Air - XAD 1 - Room #1	IAN	IAN10546	J McDonell	07/19/2000	Good			C Lyu	07/20/2000
2	Indoor Air - XAD 2 - Room #1	IAA	IAA10676	J McDonell	07/19/2000	Good			C Lyu	07/20/2000
3	Outdoor Air - XAD 3	OAN	OAN1079	J McDonell	07/20/2000	Good			C Lyu	07/21/2000
4	Outdoor Air - XAD 4	OAA	OAA1091	J McDonell	07/20/2000	Good			C Lyu	07/21/2000
5	Indoor Air - XAD 5 - Room #2	IAN	IAN10547	L Lantz	07/20/2000	Good			C Lyu	07/21/2000
6	Indoor Air - XAD 6 - Room #2	IAA	IAA10678	L Lantz	07/20/2000	Good			C Lyu	07/21/2000
7	1 Solid Food container - Room	SFC	SFC12050	T Branch	07/19/2000	Good			C Lyu	07/20/2000
8	1 Liquid Food container - Room	LFC	LFC12171	T Branch	07/19/2000	Good			C Lyu	07/20/2000
9	1 Water container per Center	DRW	DRW1263	T Branch	07/19/2000	Good			C Lyu	07/20/2000
10	1 Solid Food container Room	SFC	SFC12051	C Dagnino	07/20/2000	Good			C Lyu	07/21/2000
11	1 Liquid Food container Room	LFC	LFC12172	C Dagnino	07/20/2000	Good			C Lyu	07/21/2000
12	Hard-Floor Wipe - 1 per center	FSW	FSW1372			Explain		sample		

Sample Condition

Good

Explain

Missing

Collected By	Received By	Clear Record	Clear Condition	
Collect All	Receive All	Clear All	Clear All Conditions	Add Condition to All

Print Checklist

Exhibit 6. CTEPP Participant Data QC Check List

CTEPP ID: 09-004-1	
Data Item	Check Notes
1. Daily Checklists	Complete
2. Form #1	Complete
3. Consent Forms (2)	Participation consent: Complete Future consent: Complete
4. Receipts (2)	\$25 and \$75
5. Air Log	Complete
6. Premonitoring	Complete
7. Postmonitoring	Complete
8. Chemical Table	Complete
9. Observation Survey	Complete
10. Sketches	Complete (to be entered electronically)
11. Diary	<i>Non-marked clothing items on page 8, (F1.4) on page 9, (F9) on page 16.</i>
12.	

Exhibit 7. CTEPP Data Entry Program Test

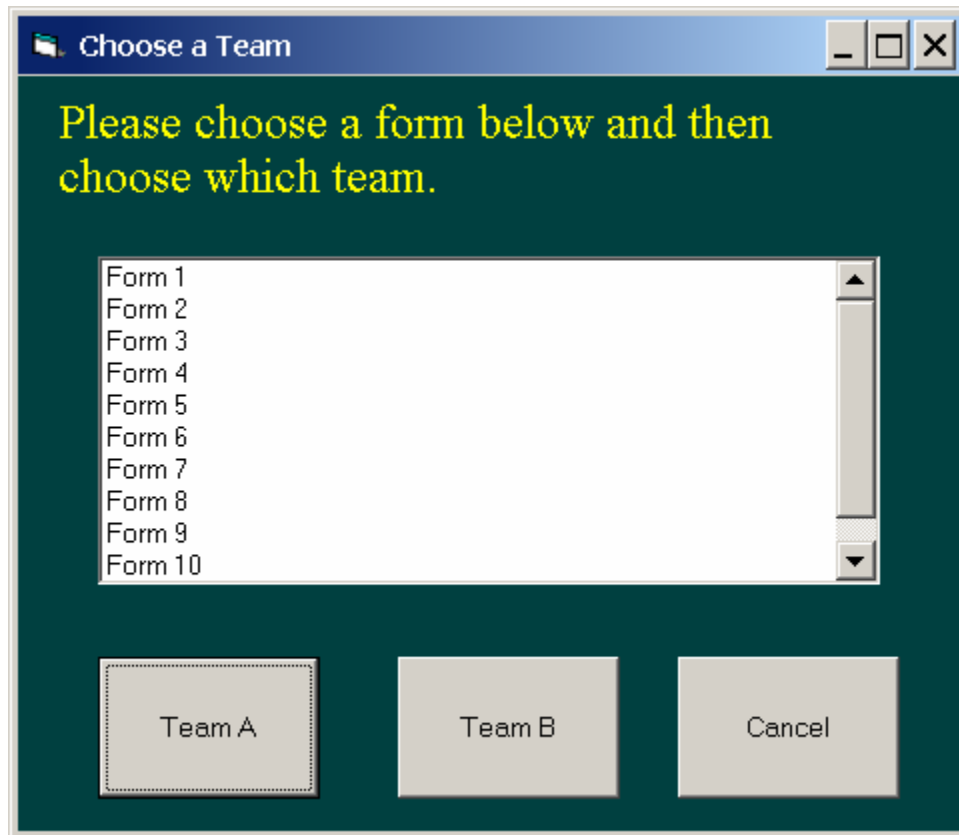
DATA ENTRY TEST
SUZANNE BENNY
8/21/00

Form 4:

1. No place for cooperation/quality of interviewer – need this info?
[Fixed 08/28/00 ER](#)
2. A3 – asks for to identify room – include # only, or verbal description too?
[Verbal description too. 08/31/00 ER](#)
3. A3 & A7 – include instructions on how to advance from these (i.e., leave blank)?
[Fixed 08/28/00 ER](#)
4. A12 j & k – include instructions to leave blank if n/a, and not to put “2” for “No”
[Fixed 08/28/00 ER](#)
5. B17 – no place for “n/a” – this is the farm income question
[Fixed 08/28/00 ER](#)
6. C1 & C10 – assume minutes = 0 if blank? [Yes \(added instructions on screen\) 08/31/00 ER](#)
7. C6 – no place for “none”
[Fixed 08/28/00 ER](#)
8. C26- no option for “never”
[Fixed 08/28/00 ER](#)

Exhibit 8. CTEPP Double Data Entry Program

Initial Screen



The image shows a Windows-style dialog box titled "Choose a Team". The dialog has a dark green background. At the top, there is a blue title bar with the text "Choose a Team" and standard window control buttons (minimize, maximize, close). Below the title bar, the main area contains the instruction "Please choose a form below and then choose which team." in yellow text. In the center, there is a list box containing ten items: "Form 1", "Form 2", "Form 3", "Form 4", "Form 5", "Form 6", "Form 7", "Form 8", "Form 9", and "Form 10". To the right of the list box is a vertical scrollbar. At the bottom of the dialog, there are three buttons: "Team A", "Team B", and "Cancel". The "Team A" button is highlighted with a dotted border.

Choose a Team

Please choose a form below and then choose which team.

- Form 1
- Form 2
- Form 3
- Form 4
- Form 5
- Form 6
- Form 7
- Form 8
- Form 9
- Form 10

Team A Team B Cancel

Exhibit 9. CTEPP Double Data Entry Program

Data Entry Screen

Blaise Data Entry - K:\Projects\CATI\Ctepp\DataForm\Real\TeamA\Form04\form0-1

Forms Answer Navigate Options Help

FORM04

CARPET INFORMATION

(A2) Is there any carpet (including area rugs) in your home?

☒ 1. Yes ☐ 8. Don't Know
☐ 2. No ☐ 9. Missing
☐ 7. Refused

A2	1	yes	A4m	6
A3	BEDROOM		A5	2/YR
A4y	6		A6	7DA/WK
A4m	6		A3	BEDROOM
A5	2/YR		A4y	6
A6	7DA/WK		A4m	6
A3	BEDROOM		A5	2/YR

Old 3/26 Modified by rules Clean Navigate FORM04

Exhibit 10. CTEPP Double Data Entry Program

Status Screen

Data Entry Forms

Form 1 for Team A

Forms				
	CTEPP ID	Completed	Entered By	Entered Date
▶	010011	Yes	D Boyd	11/2/2000
	010031	Yes	D Boyd	11/2/2000
	010041	Yes	D Boyd	11/7/2000
	020011	Yes	J Bower	11/2/2000
	020021	Yes	S Hubbard	11/2/2000
	020031	Yes	J Bower	11/2/2000
	020041	Yes	J Bower	11/3/2000
	020051	Yes	J Bower	11/6/2000
	040011	Yes	L Lantz	1/19/2001
	040021	Yes	M Chapman	1/19/2001
	040031	Yes	C Dagnino	2/1/2001
	040041	Yes	L Lantz	1/19/2001

Total Partial: 0 Total Completes: 63 Total Records: 63

Start Data Entry

Key

Complete
Partial

Exhibit 11. CTEPP Double Data Entry Crosschecks

COMPARE Procedure
Comparison of TEAMA.FORM04A with TEAMB.FORM04A
(Method=EXACT)

Comparison Results for Observations

PID=010011:

Variable	Base Value	Compare	Diff.	% Diff
A12ad	0	98.000000	98.000000	.
May_Note	2 WKS IN SPR			
Oct_Note	2 WKS IN FAL			
A16	8:00-8:30AM	8:00-8:30AM		

PID=010031:

Variable	Base Value	Compare
A6_1	1/WEEK	1/ WEEK
A6_4	1/WEEK	1/ WEEK
A7_1	KITCHEN/DINI	KITCHEN/ DIN
A16	6:30AM/5PM	6:30 AM/ 5PM

PID=010041:

Variable	Base Value	Compare
A3_1	LIVING RM	LIVING ROOM

QA/QC Summary Report for CTEPP Ohio Data Collection

I. Introduction

The research study, “Children’s Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants” (CTEPP), is a pilot-scale project involving about 260 children, which investigates the possible exposures that young children may have to common contaminants in their everyday surroundings. These contaminants include several pesticides, phenols, polychlorinated biphenyls, and polycyclic aromatic hydrocarbons, some of which are suspected of being endocrine disrupters. The targeted compounds are persistent in the indoor and sometimes the outdoor environments, so that very low levels may exist in the children’s surrounding microenvironments and provide a source of chronic, non-acute exposure. The primary purposes of the research are to increase our understanding of children’s exposures to persistent pollutants, to gain information on the various activities, environmental media, and pollutant characteristics that may influence children’s exposures, and to generate further questions and hypotheses for future research. This document provides a summary of the quality assurance (QA) and quality control (QC) procedures conducted for the CTEPP project. In the following sections, we describe the study activities and the QA/QC procedures. The relevant standard operating procedures (SOPs) are listed in the Reference Section at the end of this document.

II. CTEPP Data Collection Activities

As illustrated in Exhibit 1 (CTEPP Study Activities Flow Chart), CTEPP data collection activities are conducted in three phases: Pre-Data Collection, Field Data Collection, and Post-Data Collection. To ensure data quality, standard operating procedures (SOPs) were developed and project team members were trained according to the SOPs. All project activities were conducted by trained project staff members, who were divided into the following project teams: 1) recruitment team (including RDD and field teams), 2) field support team, and 3) field data collection team.

The recruitment team was responsible for recruiting daycare and RDD home participants. It was supported by a team of telephone interviewers and some field staff members. During the pre-data collection phase, the following key activities were conducted by the recruitment team and field support team.

- Recruit/Train Participants, Present T-shirts, Pay \$25, Remind Food Samples Collection
- Label Sample Containers
- Compile Field Notebooks
- Pack Van, Check items on the check lists

The field support team conducted QA/QC checks before and after the preparation of all field supplies, sample containers, and data forms. They ensured that all the materials needed for the field data collection activities were complete and accurate.

After the field support team completed the preparation work, the field data collection team did a final check on all needed field supplies, sample containers, and data forms for the scheduled sampling appointments. After loading the van and completing the final checks, the field data collection team drove to the sampling site for the scheduled sampling appointment with the study subject. The following key activities were conducted by the field data collection team during the field data collection phase.

- Field Data Collection Activities
- Record Sample/Data Condition on Sample/Data Check Lists
- Put Samples in ZipLoc Bags
- Put Samples in Freezers
- Record problems/issues on Daily Check List
- Leave Field Notebooks in the CTEPP Workroom

Once the field data collection team returned to the Battelle office, the field support team received the field samples and data from the field data collection team. The following key activities were conducted by the field support team during the post-data collection phase.

- Update Sample/Data Check Lists in the CTEPP Tracking System (TS)
- Verify Sample Conditions
- Check Field Notebooks (data forms)
- File Field Notebooks in the participant folders
- Ship Samples
- Conduct Data Entry
- Update Progress Reports
- Update QC Check List

In the following Sections, we describe specific QA/QC procedures relevant to the CTEPP data forms and database preparation.

III. CTEPP QA/QC Procedures for Preparing the Questionnaire Data Forms and Questionnaire Database

Battelle is always committed to the production of highest quality data. A key to accomplish this objective is to implement standardized QA/QC procedures. QA/QC is a continuous process. As illustrated in Exhibit 2 (CTEPP QA/QC Procedures for Preparing Data Forms and Database), Battelle implemented a comprehensive QA/QC plan to ensure data quality in all phases of the CTEPP project, from pre-data collection to post-data collection phase.

A. Pre-Data Collection Phase:

Developed and Tested Data Forms, CATI Programs

During the pre-data collection phase, the following data forms were developed.

-
- Recruitment Survey (Form #1)
 - House/Building Characteristics Observation Survey - Home (Form #2)
 - House/Building Characteristics Observation Survey - Child Daycare Center (Form #3)
 - Pre-Monitoring Questionnaire - Parent (Form #4)
 - Pre-Monitoring Questionnaire - Child Daycare Center (Form #5)
 - Post-Monitoring Questionnaire - Parent (Form #6)
 - Post-Monitoring Questionnaire - Child Daycare Center (Form #7)
 - Child Activity Diary/Parent - Children Don't Attend Daycare (Form #8)
 - Child Activity Diary/Parent - Children Attend Daycare (Form #9)
 - Child Activity Diary - Daycare Teacher (Form #10)

All the data forms were tested by trained project staff for consistency and accuracy. In addition, mock interviews and field data collection simulations were conducted to evaluate the effectiveness of the data forms. The data forms were finally reviewed and approved by IRB and OMB. Form #1 (Recruitment Survey) was modified into computer-assisted telephone interviewing programs (CATI) for recruiting the RDD participants (children who did not attend daycares). The CATI programs automatically performed QC checks during data entry, which included range checks, consistency checks, and skip pattern checks. Before the CATI programs were approved for actual RDD recruitment and data collection, it also went through rigid QA/QC checks for programming errors. Exhibit 3 provides an example of the QA/QC test document.

Conducted Staff Training on Data Collection SOPs

To ensure the consistency and high quality of data collection, a comprehensive training plan was implemented. The recruitment team members received training in the implementation of the recruitment SOPs before subject recruitment activities began. Standardized scripts and materials (e.g., CATI system and Interviewer's Manual) were developed. The Interviewer's Manual provided information on the background and aims of this study, the standard interviewing procedures, confidentiality requirements, and question-by-question specifications for the recruitment survey. Interviewers must be certified for the study before they can initiate any contact with the study subjects. In order to be certified as a CATI interviewer for the study, an interviewer must pass the following two tests:

1. CATI Operation Test: The interviewer must demonstrate that he/she is familiar with the CATI instrument and the computer-working environment.
2. CATI Interview Test: The interviewer must conduct at least two mock CATI interviews and receive a satisfactory evaluation from the CATI supervisor.

Training for the field data collection team members included a five-day (40-hour) training session and additional self-practice time was provided to the field staff. The following is a brief summary of the training topics.

-
- | | |
|-----------|--|
| Day 1: | Training covered study background, recruitment SOPs, confidentiality issues, informed consent procedures, and the interviewing protocol. |
| Day 2: | The field staff members were trained to administer all the data collection forms. |
| Day 3: | The training included field sampling procedures, i.e., the use of field notebooks and the collection of air, food, urine, dermal hand wipes, hard floor wipes, food preparation surface wipes, the polyurethane foam (PUF) roller for dislodgeable residues, indoor floor dust, and soil samples. Internal field audits and QC procedures were also discussed. |
| Days 4/5: | A mock field sampling exercise (with 2 volunteers) was conducted during the last two days of training. The field team visited the volunteer's home and conduct actual field sampling activities. The field staff members were also certified during these two days (i.e., they were required to pass the tests set for the field sampling procedures). |
| Day 5: | Training in packing and shipping procedures was given on the final day. The training ended with a final review of all SOPs. |

Before field data collection began, the field support team members also went through training for data form tracking and processing procedures, coding procedures, and quality control procedures.

Conducted Participant Orientation/Training

Due to the unique features of the CTEPP study, some key information and samples were collected by the study participants themselves. Keeping the participants involved and well informed was critical to the success of the study. All participants (i.e., parents and daycare staff) were trained (i.e., received project orientation) prior to the scheduled sampling appointment (normally one week before the actual sampling). During the orientation/training, our project staff went through the SOPs for collecting samples of food, urine, and dermal hand wipes and recording the Child Activity Diary with the participants.

B. Data Collection Phase:

Conducted CATI Monitoring

As a standard procedure to ensure data quality, Battelle routinely verifies data collection activities. For monitoring CATI interviews (Form #1 RDD), Battelle employed sophisticated computer software (i.e., **PROXY**) and a telephone monitoring system to validate CATI interview data. With the monitoring system, the CATI supervisor could actually "watch" and "listen" to an interview in progress. A standardized monitoring procedure was developed and used for CATI monitoring. The supervisor randomly selected an interview for monitoring. The monitoring system transferred the interviewer's computer screen and telephone conversation in real time to the supervisor's workstation. The interviewer being monitored or the study respondent could not notice any difference while the monitoring was in progress. To ensure the participant's right, a

statement that the interview might be monitored by a project supervisor for quality assurance was read to the respondent before the interview began. The monitoring results were recorded in a CATI Interview Monitoring Form (See Exhibit 4).

Conducted Staff Field Edit

All field data collection team members were trained to conduct field edit for all completed data forms. During data collection, the field staff conducted field edits to identify missing data items or questionable information at the sampling site. Any identified issues or problems were resolved at the sampling site before the field data collection team returned to Battelle whenever the field conditions allowed. A Daily Activity Check List was developed to assist the field staff in conducting data collection activities and field edit. The field edits ensured that any data collection issues or problems were resolved early at the sampling site with the study participant.

Conducted Internal Field Audits

According to CTEPP SOP 2.25, Battelle conducted periodic internal field audits to ensure high quality of data collection. The internal field audits were conducted by the Field Team Leader and/or designated field auditors. The field data collection team was not notified of the field audit visit. The field audit schedule was randomly selected by the field auditor/Field Team Leader. During a field audit visit, the field auditor observed all field sampling activities according to the SOPs. The field auditor recorded any findings or observations about the field staff's work that was not consistent with the SOPs. Before the end of each field audit visit, the field auditor discussed the findings or observations with the field staff. A field audit report was prepared by the field auditor after each field audit to document the field audit visit.

Conducted External Field Audits

In addition to Battelle internal field audits, some external field audits were conducted by an EPA auditor and project officer. On September 12 and 13, 2000, EPA audited the North Carolina data collection teams. On June 5, 2001, an EPA project officer conducted a field observation visit with the Ohio data collection teams. There were no findings in all the external field audits and observation visits.

C. Post-Data Collection Phase:

Applied Chain of Custody Procedures

In order to protect the study samples and data forms, a standardized chain-of-custody procedure was developed and implemented for the CTEPP study (See SOP 2.26). In addition, Battelle developed a sophisticated CTEPP Tracking System to monitor the status of data collection. As soon as the field team returned to the office, the field support (receiving) team checked the samples/data condition and updated the data collection status in the CTEPP Tracking System (See Exhibit 5). The following information was recorded for each study participant.

- Sample/Data Description
- Sample Type
- Sample ID#
- Staff's Name Who Collected the Sample/Data
- Date of Collection

-
- Sample Condition
 - Number of Floor Dust Sampling Areas
 - Sample Explanation (if Sample Condition = Explain)
 - Staff's Name Who Received the Sample/Data from the Field Team
 - Date Received Sample/Data
 - Time Received Sample/Data

If the samples/data need to be shipped to another location, the CTEPP Tracking System automatically generates a Chain-of-Custody record for the staff to sign.

Receiving Team Conducted QC Checks

After checking and storing the environmental and biological samples, the receiving team conducted QC checks on all the participant's data forms and study materials. A CTEPP Participant Data QC Check List was developed to track the QC status of each data item (See Exhibit 6). The staff carefully reviewed each data form for missing or questionable data items. After the staff completed the QC review, she/he put her/his initial and date of review on the back of the data form. Any pending issues (e.g., missing materials or information) identified through the QC review were recorded in the Check Notes of the CTEPP Participant Data QC Check List. The field support staff resolved each pending issue by checking with the field data collection staff or contacting the participant.

Developed and Tested Data Entry Programs

After the data forms went through the QC checks and received a "complete" status, the forms were ready for data entry. The Battelle programming team developed a double data entry program to allow two separate data entry teams to conduct data entry. The data entry program was designed to perform additional QC checks during data entry, which included range checks, consistency checks, and skip pattern checks. Before the data entry program was used for actual data entry, it was fully tested by trained project staff. An example of the testing document is illustrated in Exhibit 7 (CTEPP Data Entry Program Test). Examples of data entry program screens are illustrated in Exhibits 8, 9, and 10.

Conducted Double-Data Entry

All data forms were entered twice and verified, using the CTEPP Double Data Entry Program. Two data entry teams (Teams A and B) performed the data entry work and entered the data into two separate databases. All the data entry team members were trained before they were allowed to conduct data entry work. Each data form was entered twice by 2 different people. As a standard procedure for entering the open text fields, the data entry teams were instructed to enter participant's responses verbatim. [**Note:** Some of the participant reported information contained typos or spelling errors. Per EPA's instructions (2/7/02 conference call), we have corrected those spelling errors.]

Conducted Computer Program Checks for Data Entry Errors

A computer verification program was developed for checking the accuracy of the entered data and every record in the two databases was crosschecked. An example of the crosschecks computer program is illustrated in Exhibit 11 (CTEPP Double Keying Crosschecks &

Corrections). The crosscheck computer program identified any discrepancies between the two databases and the results were displayed on screen.

Corrected Data Entry Errors

For each data item detected by the computer program, the data entry staff verified the information with the original participant data form and made corrections as needed. The crosscheck computer program made it easy for the staff to identify data entry problems and to verify the information. This program also kept a log of all changes made, including original and new data, date/time of data changed, and name of the staff that made the changes.

Prepared Final Master Database

A final master database for each data form was prepared after all QC checks were completed and data entry discrepancies were corrected. Backup data files were also created to protect the CTEPP data. All CTEPP data files and document are protected by password. Only authorized project staff members have access to the restricted project folders.

Prepared and Verified Data Dictionary and Document

After the completion of master database preparation, the programming team prepared the updated data dictionary for each data form database. The project staff verified the data dictionaries by comparing the hard copy manuals, the electronic files, and the database structures.

Final Data Verification Checks

After completing all the tasks described in the earlier sections, the project staff conducted final QA/QC checks by reviewing data frequency reports and verifying (about 10%) randomly selected participant files. Data items in the database were checked against the data documentation manual (i.e., data variables in the data dictionary) and the actual participant data in the original data form. The results of the random checks showed 100% accuracy. The data in the original participant data form were correctly recorded in the CTEPP database, and the data variables were accurately documented in the data dictionary. Before Battelle delivered the database to EPA, the data variables containing personal identifiers (i.e., names, street address, GPS, etc.) were removed from the database or the information was modified to ensure participant confidentiality. The results of the final data verification checks are shown in Table 1. A list of data variables removed or modified for ensuring participant confidentiality is included in Table 2.

Exhibit 1. CTEPP Study Activities Flow Chart

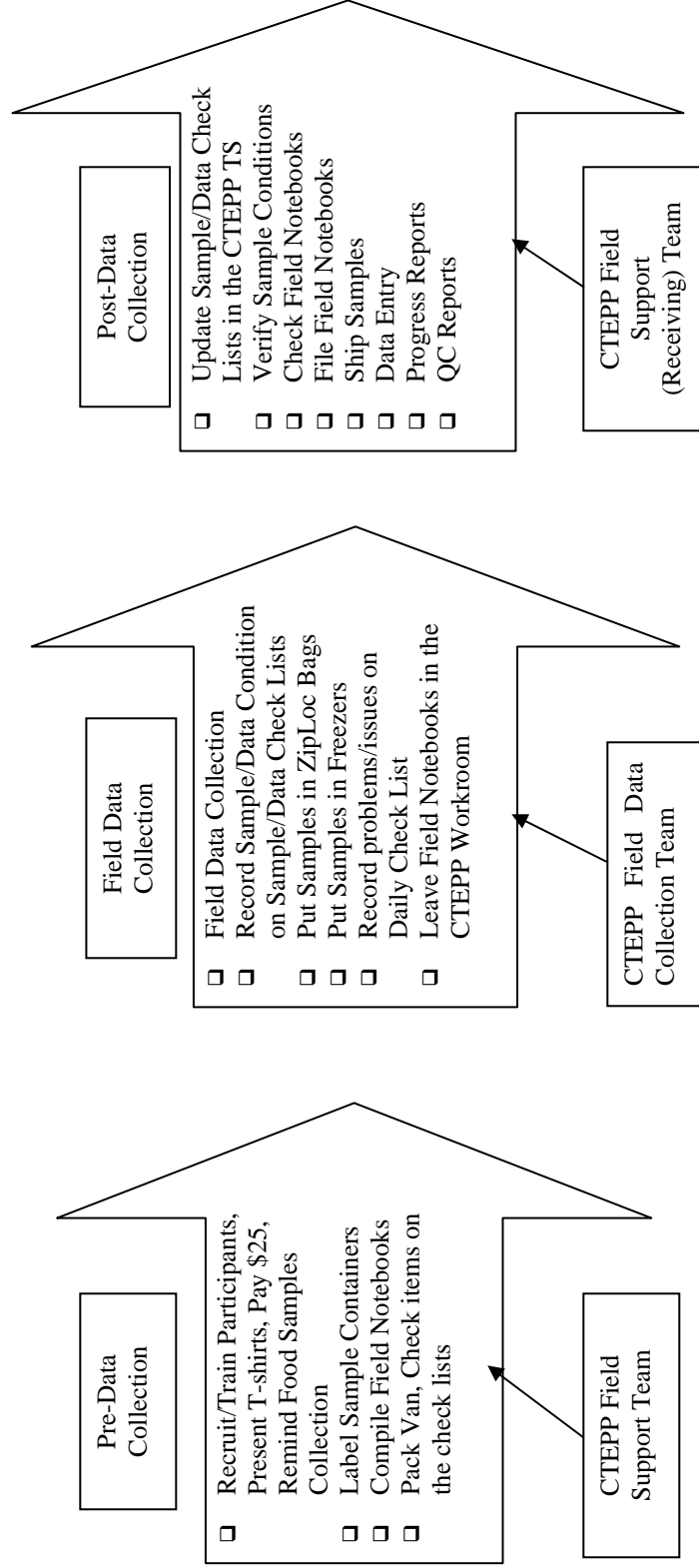


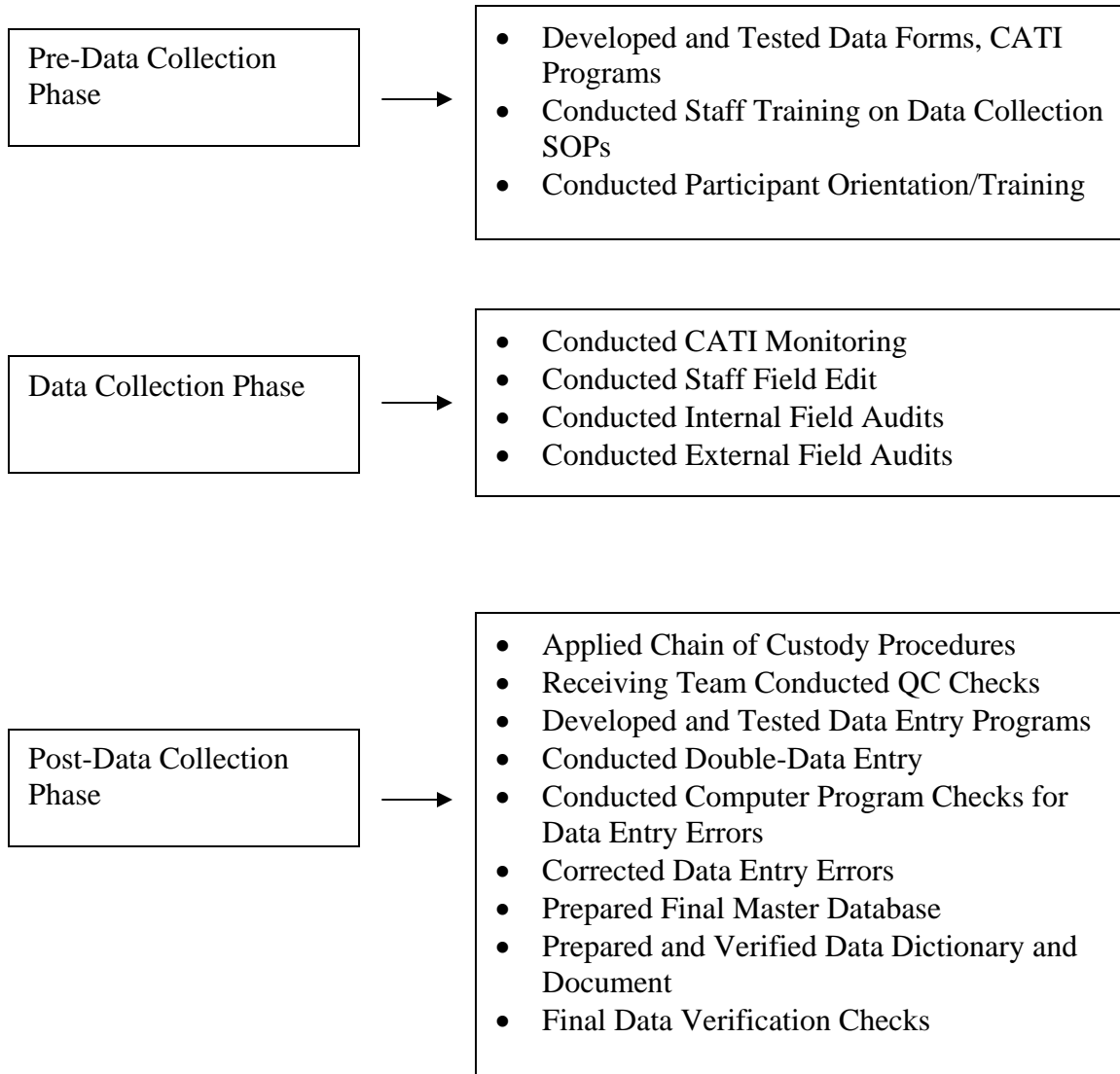
Exhibit 2. CTEPP QA/QC Procedures for Preparing Data Forms and Database

Exhibit 3. RDD CATI Tests Document

RDD CATI Tests

Carey Aselage

December 8, 1999

1. Add the following interviewer instructions to this question: May I speak to the parent or guardian of the children in this household **(OR NAME OF RESPONDENT IF OBTAINED THE NAME FROM PREVIOUS CALL)?** -fixed EB 12/99
2. Skip pattern for answer #1 goes to Q3. However, this question is numbered as Q2 in CATI. **I combined question 2 and 3 into 1 question and called it Q2_3. Since it is really the same question with a little different wording depending on whether the parent answered the phone or had to be called to the phone. CWL – is that ok or do you want 2 separate questions? [CWL: Please program as 2 separate questions] Fixed EB 12/99**
I did the same thing with questions 4a & c and 4 b & d. [CWL: Please follow the hard copy]. –Fixed EB 12/99
**** Add Contact Information in the first screen (Subject's Name, Address, ID#, Phone #.) or create a Sub Form for this information and revise the instruction in Exit 4 accordingly. – cwl Sub form created EB 12/99**
3. According to the HC, answer #4 (Refused, No Information) should go to Exit #1. CATI does skip to Exit #1, however, the skip also includes Exit #4. This makes sense, I just want to confirm since the HC doesn't mention Exit 4 in the skip pattern for response #4. **Since Exit 1 didn't have any instructions in the hard copy, I added what I thought were reasonable instructions. CWL – Let me know if this is ok as is, or if I need to make changes.**
4. Exit #1 script contains the following information that doesn't appear on HC: **IF CORRECT NUMBER: Thank you very much. Goodbye. PRESS CTL/S AND CHOOSE NONRESPONSE.** See above comments.
5. Currently, the only month an appointment can be set is December 1999. **I set that up for testing purposes. CWL will need to look at the survey definition and let me know what changes need to be made. EB 12/99**

Exhibit 4. CATI Interview Monitoring Form

Interview Monitoring Form		Date:	
Study:			
Interviewer:		Time Begin/End:	
Monitor:		Study Manager:	

Total Number of Calls Monitored: _____ Number of Contact-Calls: _____
 [RECORD THE RESULTS OF MONITORING FOR EACH CONTACT-CALL]

Subject ID#:	1=YES 2=NO 3=NA	Comments:
1. Identify self and read introduction clearly		
2. Record the dial result correctly		
3. Record appropriate interviewer comments		
4. Make appointment correctly		
5. Read questions clearly and follow instructions		
6. Use appropriate probing when necessary		
7. Record responses correctly		
8. Record appropriate remarks when necessary		
9. Maintain neutrality and control of interview		
10. Maintain a courteous, professional manner		
11. Answer respondent's questions appropriately		
12. Refrain from giving personal remarks/opinions		
Did the Supervisor discuss any problems with the interviewer? Yes ----- No Questions # and Problems Identified:		

Exhibit 5. CTEPP Tracking System

Collection Checklist

3. Day Care Center - Center Only Sample/Data Checklist

01-000-3

Item #	Sample / Data	Sample Type	Sample ID	Collected By	Collected Date	Sample Condition	HVS3 Sample	Sample Explanation	Received By	Received Date
1	Indoor Air - XAD 1 - Room #1	IAN	IAN10546	J McDonell	07/19/2000	Good			C Lyu	07/20/2000
2	Indoor Air - XAD 2 - Room #1	IAA	IAA10676	J McDonell	07/19/2000	Good			C Lyu	07/20/2000
3	Outdoor Air - XAD 3	OAN	OAN1079	J McDonell	07/20/2000	Good			C Lyu	07/21/2000
4	Outdoor Air - XAD 4	OAA	OAA1091	J McDonell	07/20/2000	Good			C Lyu	07/21/2000
5	Indoor Air - XAD 5 - Room #2	IAN	IAN10547	L Lantz	07/20/2000	Good			C Lyu	07/21/2000
6	Indoor Air - XAD 6 - Room #2	IAA	IAA10678	L Lantz	07/20/2000	Good			C Lyu	07/21/2000
7	1 Solid Food container - Room	SFC	SFC12050	T Branch	07/19/2000	Good			C Lyu	07/20/2000
8	1 Liquid Food container - Room	LFC	LFC12171	T Branch	07/19/2000	Good			C Lyu	07/20/2000
9	1 Water container per Center	DRW	DRW1263	T Branch	07/19/2000	Good			C Lyu	07/20/2000
10	1 Solid Food container Room	SFC	SFC12051	C Dagnino	07/20/2000	Good			C Lyu	07/21/2000
11	1 Liquid Food container Room	LFC	LFC12172	C Dagnino	07/20/2000	Good			C Lyu	07/21/2000
12	Hard-Floor Wipe - 1 per center	FSW	FSW1372			Explain		sample		

Sample Condition

Good
Explain
Missing

Collected By	Received By	Clear Record	Clear Condition	
Collect All	Receive All	Clear All	Clear All Conditions	Add Condition to All

Print Checklist

Exhibit 6. CTEPP Participant Data QC Check List

CTEPP ID: 09-004-1	
Data Item	Check Notes
1. Daily Checklists	Complete
2. Form #1	Complete
3. Consent Forms (2)	Participation consent: Complete Future consent: Complete
4. Receipts (2)	\$25 and \$75
5. Air Log	Complete
6. Premonitoring	Complete
7. Postmonitoring	Complete
8. Chemical Table	Complete
9. Observation Survey	Complete
10. Sketches	Complete (to be entered electronically)
11. Diary	<i>Non-marked clothing items on page 8, (F1.4) on page 9, (F9) on page 16.</i>
12.	

Exhibit 7. CTEPP Data Entry Program Test

DATA ENTRY TEST
SUZANNE BENNY
8/21/00

Form 4:

1. No place for cooperation/quality of interviewer – need this info?
[Fixed 08/28/00 ER](#)
2. A3 – asks for to identify room – include # only, or verbal description too?
[Verbal description too. 08/31/00 ER](#)
3. A3 & A7 – include instructions on how to advance from these (i.e., leave blank)?
[Fixed 08/28/00 ER](#)
4. A12 j & k – include instructions to leave blank if n/a, and not to put “2” for “No”
[Fixed 08/28/00 ER](#)
5. B17 – no place for “n/a” – this is the farm income question
[Fixed 08/28/00 ER](#)
6. C1 & C10 – assume minutes = 0 if blank? [Yes \(added instructions on screen\) 08/31/00 ER](#)
7. C6 – no place for “none”
[Fixed 08/28/00 ER](#)
8. C26- no option for “never”
[Fixed 08/28/00 ER](#)

Exhibit 8. CTEPP Double Data Entry Program**Initial Screen**

The screenshot shows a Windows-style dialog box titled "Choose a Team". The dialog has a dark green background. At the top, in yellow text, it says "Please choose a form below and then choose which team." Below this text is a list box containing ten items: "Form 1", "Form 2", "Form 3", "Form 4", "Form 5", "Form 6", "Form 7", "Form 8", "Form 9", and "Form 10". At the bottom of the dialog, there are three buttons: "Team A", "Team B", and "Cancel". The "Team A" button is highlighted with a dotted border.

Choose a Team

Please choose a form below and then choose which team.

Form 1
Form 2
Form 3
Form 4
Form 5
Form 6
Form 7
Form 8
Form 9
Form 10

Team A Team B Cancel

Exhibit 9. CTEPP Double Data Entry Program**Data Entry Screen**

Blaise Data Entry - K:\Projects\CATI\Ctepp\DataForm\Real\TeamA\Form04\form04

Forms Answer Navigate Options Help

FORM04

CARPET INFORMATION

(A2) Is there any carpet (including area rugs) in your home?

☒ 1. Yes ☐ 8. Don't Know

☐ 2. No ☐ 9. Missing

☐ 7. Refused

A2	1 yes	A4m	6
A3	BEDROOM	A5	2/YR
A4y	6	A6	7DA/WK
A4m	6	A3	BEDROOM
A5	2/YR	A4y	6
A6	7DA/WK	A4m	6
A3	BEDROOM	A5	2/YR

Old 3/26 Modified by rules Clean Navigate FORM04

Exhibit 10. CTEPP Double Data Entry Program**Status Screen**

Data Entry Forms

Form 1 for Team A

	CTEPP ID	Completed	Entered By	Entered Date
▶	010011	Yes	D Boyd	11/2/2000
	010031	Yes	D Boyd	11/2/2000
	010041	Yes	D Boyd	11/7/2000
	020011	Yes	J Bower	11/2/2000
	020021	Yes	S Hubbard	11/2/2000
	020031	Yes	J Bower	11/2/2000
	020041	Yes	J Bower	11/3/2000
	020051	Yes	J Bower	11/6/2000
	040011	Yes	L Lantz	1/19/2001
	040021	Yes	M Chapman	1/19/2001
	040031	Yes	C Dagnino	2/1/2001
	040041	Yes	L Lantz	1/19/2001

Total Partial: 0 Total Complete: 63 Total Records: 63

Start Data Entry

Key

- Complete
- Partial

Exhibit 11. CTEPP Double Keying Crosschecks & Corrections

DOUBLE KEY SOFTWARE

File Edit

Double Keying Error Correction Form

Tables: Form 03 Friday, September 06, 2002 12:13 PM Total Records: 32

Functions

Identify Errors

Lock Free

Edit

Use Value In A

Use Value In B

Capitalize

Save

History

Exit

Rows	Fields	Status
ROWID	Field Name	Status
440003	C3a1	X
440003	B2SPEC	X
450003	timesta1	X
450003	C3btime2	X
460003	C3a1	X
510003	C3a1	X
510003	resspec1	X
510003	date2	X
520003	C7	X
520003	B3SPEC	X
520003	C3a1	X
550003	C6SPEC	X
560003	timeend1	X
610003	C3a	X

A. NOT ABLE TO OBTAIN ALL INFO

B. NOT ABLE TO OBTAIN ALL INFO

Start

K:\Projects\...

Script.txt - ...

Blaise

DOUBLE KEY...

12:13 PM

Table 1. Final Data Verification Checks for OH Database

PID	Data Forms Checked	QA/QC Checks Status	Results
41-001-1	2, 4, 6, 9, Air Data Log	Complete Checks: Checked all variables of each data form	No problem
46-002-1	1, 2, 4, 6, 9, Air Data Log	Complete Checks: Checked all variables of each data form	No problem
52-004-1	2, 4, 6, 9, Air Data Log	Complete Checks: Checked all variables of each data form	No problem
61-004-1	2, 4, 6, 9, Air Data Log	Partial Checks: Checked some randomly selected variables of each data form	No problem
64-003-1	2, 4, 6, 9, Air Data Log	Partial Checks: Checked some randomly selected variables of each data form	No problem
70-001-1	2, 4, 6, 9, Air Data Log	Partial Checks: Checked some randomly selected variables of each data form	No problem
98-008-1	2, 4, 6, 8, Air Data Log	Complete Checks: Checked all variables of each data form	No problem
98-026-1	2, 4, 6, 8, Air Data Log	Complete Checks: Checked all variables of each data form	No problem
98-053-1	2, 4, 6, 8, Air Data Log	Partial Checks: Checked some randomly selected variables of each data form	No problem
98-069-1	2, 4, 6, 8, Air Data Log	Partial Checks: Checked some randomly selected variables of each data form	No problem
98-115-1	2, 4, 6, 8, Air Data Log	Partial Checks: Checked some randomly selected variables of each data form	No problem
51-000-3	3, 5, 7, 10, Air Data Log	Partial Checks: Checked some randomly selected variables of each data form	No problem
66-000-3	3, 5, 7, 10, Air Data Log	Partial Checks: Checked some randomly selected variables of each data form	No problem

Table 2. Potential Participant Identifying Information

Form #	Field Name	Remarks	Action
2	C3a1	May contain street names	Revised as needed
2	C3b1	May contain street names	Revised as needed
2	C3c1	May contain street names	Revised as needed
2	C8latdeg	GPS reading	Removed
2	C8latms	GPS reading	Removed
2	C8dir1	GPS reading	Removed
2	C8londeg	GPS reading	Removed
2	C8lonms	GPS reading	Removed
2	C8dir2	GPS reading	Removed
3	C3a1	May contain street names	Revised as needed
3	C3b1	May contain street names	Revised as needed
3	C3c1	May contain street names	Revised as needed
3	C8latdeg	GPS reading	Removed
3	C8latms	GPS reading	Removed
3	C8dir1	GPS reading	Removed
3	C8londeg	GPS reading	Removed
3	C8lonms	GPS reading	Removed
3	C8dir2	GPS reading	Removed
4	Name	Contact name for who knows the age of the house	Removed
4	Phone	Phone number for who knows the age of the house	Removed
4	Jan_Note - Dec_Note	May contain names	Revised as needed
4	A14spec	May contain street names	Revised as needed
4	B1_1(-10)	People's names	Revised as needed
4	B6	Employer's name, check all	Revised as needed
4	B7	May be too specialized, check all	Revised as needed
4	B8	May be too specialized, check all	Revised as needed
4	B9spec	Person's name	Revised as needed
4	B10	Employer's name, check all	Revised as needed
4	B11	May be too specialized, check all	Revised as needed
4	B12	May be too specialized, check all	Revised as needed
4	B13spec	Person's name	Revised as needed
4	B14	Employer's name	Revised as needed
4	B15	May be too specialized, check all	Revised as needed
4	B16	May be too specialized, check all	Revised as needed
4	B29	Person's name	Revised as needed
4	B31	Person's name	Revised as needed
4	B33	Person's name	Revised as needed
4	C32m and C32d	Child's DOB - Day and Month (kept Year)	Removed
4	C33m and C33d	Adult's DOB - Day and Month (kept Year)	Removed
5	Name	contact name for age of the house	Removed
5	Phone	Phone number for age of the house	Removed
5	A4_1 to A4_5	Change all Classrooms names to either C1 (classroom 1) or C2 (classroom 2).	Revised as needed
5	A14spec	May contain street names	Revised as needed
5	A16	May contain street names	Revised as needed
5	B15_1 to B15_4	Change all Classrooms names to either C1 (classroom 1) or C2 (classroom 2).	Revised as needed

Table 2. Potential Participant Identifying Information

Form #	Field Name	Remarks	Action
5	B21Nm_a to B21Nm_j	Name of commercial contractor (a to j)	Removed
5	B21TL_a to B21TL_j	Phone number of commercial contractor (a to j)	Removed
6	Q1Awh to Q1Zwh	May contain names	Revised as needed
6	Q1Aho to Q1Zho	May contain names	Revised as needed
6	Q21Nm_a to Q21Nm_k	Commercial Contractor name	Removed
6	Q21TL_a to Q21TL_k	Commercial Contractor Phone number	Removed
6	Q22_a to Q22_k	Could contain names	Revised as needed
6	Q24Lc_a to Q24Lc_k	Could contain names	Revised as needed
7	Q1AB to Q1ZB	Could contain names	Revised as needed
7	Q1AC to Q1ZC	Could contain names	Revised as needed
7	comment	Could contain names	Revised as needed
8	Q4Wher_1 to Q4Wher_5	Could contain recognizable locations or names of people	Revised as needed
8	Q5_1 to Q5_5	Could contain recognizable locations or names of people	Revised as needed
8	Q6_1 to Q6_5	Could contain recognizable locations or names of people	Revised as needed
8	ACTdSp_1 to ACTdSp_5	May contain names or locations	Revised as needed
8	ACTiSp_1 to ACTiSp_5	May contain names or locations	Revised as needed
9	Q4Wher_1 to Q4Wher_4	Could contain recognizable locations or names of people	Revised as needed
9	Q5_1 to Q5_4	Could contain recognizable locations or names of people	Revised as needed
9	Q6_1 to Q6_4	Could contain recognizable locations or names of people	Revised as needed
9	ACTdSp_1 to ACTdSp_4	May contain names or locations	Revised as needed
9	ACTiSp_1 to ACTiSp_4	May contain names or locations	Revised as needed
10	Q4Wher_1 to Q4Wher_3	Could contain recognizable locations or names of people	Revised as needed
10	Q6Spc_1 to Q6Spc_3	Could contain recognizable locations or names of people	Revised as needed
10	Q7Spc_1 to Q7Spc_3	Could contain recognizable locations or names of people	Revised as needed
10	ACTdSp_1 to ACTdSp_3	May contain names or locations	Revised as needed
10	ACTiSp_1 to ACTiSp_3	May contain names or locations	Revised as needed

IV. CTEPP QA/QC Procedures for the Analytical Database

Analytical data were electronically imported into the database according to CTEPP SOP 4.12. The analytical raw data (QUAN report) were generated from each instrument by a qualified analyst (the first data reviewer). The QUAN report was then reviewed by the TOL (the second data reviewer) for all the identified analytes. The QUAN report was then electronically transferred into a custom report and saved as a “crd” file. The “crd” file was then electronically parsed into an Excel spreadsheet template, pertinent data such as sample extraction weight and quality assurance codes were added and saved as an Excel file with an extension of “.xls” by the first data reviewer. The TOL reviewed all the Excel files before importing into the analytical database. If any anomalous results were observed in the data, every effort was made to identify any problems in the sample collection, sample preparation, and/or analysis, which could have contributed to the anomaly. Data dictionaries and code sets for core analytical data, QA/QC data, and ancillary data were developed for the analytical database. The completed Excel spreadsheets were then electronically imported into the analytical database by the database staff.

Database queries were developed to perform QA/QC checks. The QA/QC checks performed for the Ohio analytical database include (1) sample ID checks, (2) missing data checks, (3) duplication data checks, (4) out-of-range checks, (5) upper- and lower-concentrations checks, and (6) calculation checks.

Sample ID checks

The sample ID checks were performed to verify that all Sample IDs with reported data were valid Sample IDs, i.e., they were logged in as received from the field. If invalid sample IDs were detected, the database staff traced back to the original raw data, including laboratory record books and GC/MS logbooks, to identify the transcription error and to make the corrections accordingly. All corrections were documented in the database importing logbook.

Missing data checks

The missing data checks were performed to verify that all Sample IDs received from the field had a full set of analytical data reported. Samples that were received but that did not have a complete set of analytical data and/or ancillary data, other than for a stated reason in the electronic CoC data, were identified, and one of the following correction actions was taken (as appropriate): analytical data was found and imported into the database, or samples were located, processed, analyzed, reviewed, and the analytical data was imported into the database. Samples that were lost or damaged during laboratory processing were identified and imported into the QA Action table with an explanation regarding their disqualification.

Table 3 presents a summary of the number of samples collected and the number of samples with data reported.

Table 3. Summary of Ohio Sample Collection and Analysis

Sample Code ^a	Sample Description	Field Samples Collected ^b # Real (#QA)	Field Samples Reported ^b
DAA	Dermal Wipe at Home Adult #3 and #4	69	69
DAH	Dermal Wipe Day care Adult at Home	58	58
DAN	Dermal Wipe at Home Adult #1 and #2	69	69
DCA	Dermal Wipe at Home Child #3 and #4	69 (14)	83
DCD	Dermal Wipe Day care Child at Day care	58	58
DCH	Dermal Wipe Day care Child at Home	59	59
DCN	Dermal Wipe at Home Child #1 and #2	69 (14)	83
DRW	Drinking Water	143 (14)	157
FPW	Food Preparation Surface Wipe	16	16
FSW	Floor Surface Wipe	38	38
IAA	Indoor Air Acid	149 (1)	150
IAN	Indoor Air Neutral	149 (1)	150
IFD	Indoor Floor Dust	143 (14)	157
LFA	Liquid Food Adult	122 ^c	122
LFC	Liquid Food Child	170 ^c	170
OAA	Outdoor Air Acid	143 (13)	155 ^d
OAN	Outdoor Air Neutral	143 (13)	156
PUF	PUF Roller Surface Dislodgeables	16 (2)	18
SFA	Solid Food Adult	127	127
SFC	Solid Food Child	156 (14)	170
SOL	Soil	143	143
URA	Urine Adult	1,096	194 ^e
URC	Urine Child	1,272	266 ^e

^a Sample code shown is the prefix, or first three letters of the Sample Identification Code.

^b Samples collected include all the number of real field samples followed by the number of field blanks in parenthesis. Samples collected and samples reported do not include samples generated and analyzed as laboratory QC samples.

^c Five households returned empty liquid food containers and indicated that they drank water only. These samples were disqualified and were not included in the sample count.

^d Sample OAA19745 was lost during the laboratory extraction.

^e The number of urine samples reported is the number of both composited and non-composited samples.

Duplicate data checks

Duplicate data checks were performed to verify that the same analytical data was not imported into the database twice for a given sample. The database staff traced the sample results back to the laboratory record books, the GC/MS sequence logs, and/or the QUAN reports to confirm that duplicate data was the result of a double import, and not a QA/QC re-analysis (e.g. duplicate sample or duplicate injection). Once the duplicate data was identified as a double import, the set of results for the sample having the oldest sample import date were eliminated from the analytical database. If the duplicate data was identified as a QA/QC re-analysis, the proper QCC code was added to the QC_Code data field, and the data for the first duplicate (only) remained in the Core_Analytical_Results table, and the data for the first and second duplicates were reported in the QA_QC_Results table.

Out of range checks

Out-of-range checks were performed to verify that all data for data fields limited to a codeset did not violate that codeset. For data fields that were limited to a codeset of values, queries were performed to identify data within those fields that did not belong to, or “violated”, the codeset. Once identified, the database staff traced the sample results back to the laboratory record books to identify the transcription error. The data in the database was corrected, and that correction was documented.

Upper- and lower- concentration checks

Upper- and lower-level concentrations checks were performed on approximately 5% of the results that were plus or minus three standard deviations from the mean. Database queries were performed to identify those calculated results (Result1 and Result2) greater than or less than three standard deviations from the domain mean. Five percent of these data were reviewed again by the data reviewer. The data reviewer checked the QUAN report, all the parameters used for the results calculation, and the result calculation itself to make sure that identification and quantification were performed correctly. If the data reviewers detected any mis-identification and/or mis-quantification, corrections were made accordingly. The TOL approved the corrected data and the database manager made the changes in the database. All activities were documented in the laboratory record books and database importing logbook.

Several additional checks were performed to:

- (1) review the SRS and MSS recoveries data greater than 150% and less than 50%;
- (2) review the %D data that are greater than 50%;
- (3) add more flag codes to explain these QC data from items 1 and 2;
- (4) review all nonzero method blanks and field method blanks; and

Calculation Checks

Calculation checks were performed in Excel spreadsheets for selected samples to verify that the calculations performed on Excel spreadsheet agreed with the calculations performed on the analytical database. Hand calculations, using a calculator, were performed on select data to verify the calculated data agreed with the database calculated data.

For those data requiring calculation of results, a random subset (approximately 5%) of the raw data was calculated using an independent calculation source (Excel) for validation. In addition, hand calculations were performed on random data for each sample matrix using a calculator.

Appendix E

EPA SAS Program for QA/QC

EPA SAS Program for QA/QC

```
*** AD ***;

proc sort data=new.qa_qc_results(where=(QC_Code ='AD1' & QC_Result> .30 )) out=ad1;
by matrix report_c;
run;
*****;

data ad1;
  set ad1;

  if (qc_result > .5) then qc_flag_ad1=3; else
  if (qc_result > .3) then qc_flag_ad1=2;
run;

-----

*** DS ***;

proc sort data=new.qa_qc_results(where=(QC_Code ='DS1' & QC_Result> .30 )) out=ds1;
by matrix report_c;
run;
*****;

data ds1;
  set ds1;

  if (qc_result > .5) then qc_flag_ds1=3; else
  if (qc_result > .3) then qc_flag_ds1=2;

  if flag1='HET' then qc_flag_ds1=2;

run;

-----

title "SRS";

proc sort data=new.qa_qc_results(where=(QC_Code='SRS' & index(flag1,'NSA')=0))
out=qa_qc_results ;
by matrix report_c;
run;
*****;

data srs;
  set qa_qc_results;
```



```

        if (.60 <= QC_Result) & (QC_Result <= 1.3) then qc_flag_srs=1; else
        if (.40 <= QC_Result)          then qc_flag_srs=2;          else
        if (.4 > QC_Result)    then qc_flag_srs=3;          else
        if (1.3 < QC_Result) & (QC_Result <= 1.5) & Symbol1 = '<' then qc_flag_srs=1; else
        if (1.3 < QC_Result) & (QC_Result <= 1.5) & Symbol1 = '=' then qc_flag_srs=2; else
        if (1.5 < QC_Result) & (QC_Result <= 3.0) & Symbol1 = '<' then qc_flag_srs=2; else
        if (1.5 < QC_Result) & (QC_Result <= 3.0) & Result1 < 1000 then qc_flag_srs=3; else
        if (1.5 < QC_Result) & (QC_Result <= 3.0) & Result1 >= 1000 then qc_flag_srs=2; else
        if (QC_Result > 3.0) then qc_flag_srs=3;

run;

        title "FMB";

proc sort data=new.qa_qc_results(where=(QC_Code ='FMB' & symbol1="")) out=FMB;
by Raw_ID matrix report_c;
run;
*****;

proc sql;
    create table fmb2 as
    select core.Raw_ID, fmb.sid as fmb_sid, core.sid, core.pid, core.matrix, core.report_c,
    fmb.qc_result, fmb.sad, fmb.raw_data, fmb.result1, fmb.mdl1,
    core.result1 as core_result, core.mdl1 as core_mdl, core.Diln_Fac as core_df, core.Flag1
as core_flag
    from fmb, core
    where substr(fmb.Raw_ID,1,4) = substr(core.Raw_ID,1,4) & fmb.report_c=core.report_c
& fmb.matrix=core.matrix
    order by core.sid, core.matrix, core.report_c, fmb.result1;
run;

proc means data=fmb2 noprint;
    by sid matrix report_c;
    var result1;
    output out=counts n=n;
run;

data ones twos many;
    set counts;
    if n=1 then output ones;
    else if n=2 then output twos;
    else output many;
run;
*****;

```

```

data one2;
    merge ones(in=keepit)
           fmb2;
    by sid matrix report_c;

    if keepit;
run;
*****;

data twos;
    merge twos(in=keepit)
          fmb2;
    by sid matrix report_c;

    if keepit;

run;

proc means data=twos noprint;
    by sid matrix report_c;
    var result1 mdl1;
    output out=two2 min=result1 mdl1;
run;
*****;

data many;
    merge many(in=keepit)
           fmb2;
    by sid matrix report_c;

    if keepit;

run;

proc means data=many noprint;
    by sid matrix report_c;
    var result1 mdl1;
    output out=many2 mean=result1 mdl1;
run;
*****;

data all;
    set    one2(keep=sid matrix report_c result1 mdl1)
          two2

```

```

        many2;
    by sid matrix report_c;

    if last.report_c;

    drop _FREQ_ _TYPE_;

run;
*****;

data fmb;
    merge all(in=keepit)
        core(keep=sid matrix report_c result1 rename=(result1=core_result));
    by sid matrix report_c;

    if keepit = 0 then qc_flag_fmb =1; else
    if core_result <= mdl1 then qc_flag_fmb =1; else
    if (core_result > (8*result1)) then qc_flag_fmb =1; else
    if ((2*result1) <= core_result) & (core_result <= (8*result1)) then qc_flag_fmb =2; else
    if (core_result < (2*result1)) then qc_flag_fmb =3;

run;
    title "LMB";

proc sort data=new.qa_qc_results(where=(QC_Code='LMB')) out=qa_qc_results ;
    by sid matrix report_c;
run;
*****;

proc sql;
    create table lmb as
    select core.Raw_ID, lmb.sid as lmb_sid, core.sid, core.pid, core.matrix, core.report_c,
    lmb.qc_result, lmb.sad, lmb.raw_data, lmb.result1, lmb.mdl1,
    core.result1 as core_result, core.mdl1 as core_mdl
    from qa_qc_results as lmb, core
    where substr(lmb.Raw_ID,1,4) = substr(core.Raw_ID,1,4) & lmb.report_c=core.report_c
    & lmb.matrix=core.matrix
    order by core.Raw_ID, core.matrix, core.report_c;
run;
*****;

data lmb;
    set lmb;
    if result1 <= mdl1 then qc_flag_LMB =1; else
    if core_result <= mdl1 then qc_flag_LMB =1; else

```

```

        if (core_result > (8*result1)) then qc_flag_LMB =1; else
        if ((2*result1) <= core_result) & (core_result <= (8*result1)) then qc_flag_LMB =2; else
        if (core_result < (2*result1)) then qc_flag_LMB =3;
run;
        title "MSS";

proc sort data=new.qa_qc_results(where=(QC_Code='MSS' & index(sid,'LRB')=0))
out=qa_qc_results ;
by matrix report_c;
run;
*****;

proc format;
        value $ media
'DAA', 'DAH', 'DAN', 'DCA', 'DCD', 'DCH', 'DCN', 'FSW' = 'Wipe'

'DRW' = 'Water'

'IAA', 'IAN', 'OAA', 'OAN' = 'Air'

'IFD' = 'Dust'

'PUF' = 'PUF'

'LFA', 'LFC', 'SFA', 'SFC' = 'Solid'

'SOL'='Soil'

'URA', 'URC' = 'Urine';
run;
*****;

data MSS;
        set qa_qc_results;
        media=put(matrix,$media.);
        report_c=trim(left(report_c));

run;
*****;

proc sql;
        create table mss2 as
        select mss.no, sp.spike_level
        from mss, qc.spike_level_mss as sp

```

```

        where mss.media = sp.media & trim(left(mss.report_c)) = trim(left(sp.report_c));
run;

data temp;
    merge mss
          mss2(in=hasspike);
    by no;

    if media = 'Urine' & report_c = "IMP (2-isopropyl-6-methyl-4-pyrimidinol)" then
qc_flag_MSS=3; else
    if flag1='SSL' then qc_flag_MSS=3; else
    if (.70 <= QC_Result) & (QC_Result <= 1.3) then qc_flag_MSS=1;          else
    if (.50 <= QC_Result)          then qc_flag_MSS=2;          else
    if (1.3 < QC_Result) & (QC_Result <= 1.5) then qc_flag_MSS=2; else
    if (QC_Result<.50) | (qc_result >1.5) then do;
        if raw_data > 100 then qc_flag_MSS=3; else
        if raw_data < mdl1 then qc_flag_MSS=3; else
        if raw_data < 20 then qc_flag_MSS=3; else
        if (raw_data >=20) & (raw_data<=100) & raw_data > (2*spike_level) then
qc_flag_MSS=3; else
        if (raw_data >=20) & (raw_data<=100) & raw_data<= (2*spike_level) then
qc_flag_MSS=2;
    end;

run;

    *** Over all QC Flag ***;

data qc_flag;
    length sid $ 50 report_c $ 60;
    merge ad1 com ds1 fmb lmb mss srs ;
    by SID  Matrix  Report_C;

    array flags qc_flag_ad1 qc_flag_com qc_flag_ds1 qc_flag_fmb qc_flag_lmb
qc_flag_mss qc_flag_srs ;
    do over flags;
        if flags = 11 then flags=1;
        if flags<1 then flags=1;
    end;

    if max(qc_flag_com, qc_flag_fmb, qc_flag_lmb, qc_flag_srs, qc_flag_mss, qc_flag_ad1,
qc_flag_ds1) = 3 then qc_flag=3;
    else if max(qc_flag_com, qc_flag_fmb, qc_flag_lmb, qc_flag_srs, qc_flag_mss, qc_flag_ad1,
qc_flag_ds1) = 1 then qc_flag=1;
    else if sum(qc_flag_com, qc_flag_fmb, qc_flag_lmb, qc_flag_srs, qc_flag_mss, qc_flag_ad1,

```

```
qc_flag_ds1) >= 7 then qc_flag=2;  
else qc_flag=0;  
  
run;
```

Appendix F

Median Indoor Air Sample Concentrations (ng/m³) in the NC and OH Portions of the CTEPP Study

Median Indoor Air Sample Concentrations (ng/m³) in the NC and OH Portions of the CTEPP Study

Analyte	Median Indoor Air Concentration (ng/m ³)	
	NC	OH
2,4-D (2,4-dichlorophenoxyacetic acid)	0.166	0.127
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)	1.77	0.650
alpha-chlordane	0.840	0.230
benz[a]anthracene	0.064	0.064
benzo[a]pyrene	0.080	0.064
benzo[b]fluoranthene	0.130	0.064
benzo[e]pyrene	0.067	0.064
benzo[g,h,i]perylene	0.120	0.064
benzo[k]fluoranthene	0.064	0.064
benzylbutylphthalate	40.57	24.78
bisphenol-A	1.595	0.980
chlorpyrifos	6.070	1.750
chrysene	0.100	0.064
cis-permethrin	0.405	0.275
cyfluthrin	0.615	0.615
di-n-butylphthalate	239.69	255.40
diazinon	2.025	0.970
dibenzo[a,h]anthracene	0.064	0.064
gamma-chlordane	1.470	0.340
heptachlor	6.590	0.064
indeno[1,2,3-c,d]pyrene	0.090	0.064
p,p'-DDE	0.064	0.064
PCB 44	0.043	0.028
PCB 52	0.530	0.440
PCB 95	0.090	0.110
PCB 101	0.060	0.090
pentachlorophenol	1.450	2.000
trans-permethrin	0.270	0.236

Note: The median indoor air concentrations in this table were used as estimates for the indoor air concentrations for all study participants when not in either a day care center or home environment.

Appendix G

Algorithms for Estimating Daily Ingestion Rate of Dust and Soil in Children Participants

Algorithms for Estimating Daily Ingestion Rate of Dust and Soil in Children Participants

Daily ingestion rates of dust and soil were obtained from information found in the EPA Exposure Factors Handbook. For all participating adult caregivers, the ingestion rates used in the calculation were $M_d=25$ mg/day and $M_s=50$ mg/day. For participating children, ingestion rates were assigned by placing the children into one of three groups (Groups A, B, or C) based upon their potential for soil ingestion, and then again into one of these three groups based upon their potential for dust ingestion.

For dust ingestion, the following algorithm was used to assign children to Groups A, B, or C:

1. Responses were obtained from the following questions on Form 04 (parent pre-monitoring questionnaire):
 - Question C5: How often did [the child] play with sand or dirt?
 - Question C6: Which of the following have you seen your child eat: dirt, sand, snow
2. Based on the responses to these two questions, each participating child was placed into Group A, B, or C with regard to dust ingestion if any of the following was satisfied:
 - Group A: – Response to C5 was “most of the time”
 - Response to C5 was “sometimes,” and response to C6 was “dirt,” “soil,” and/or “snow”
 - Group B: – Response to C5 was “sometimes,” and response to C6 did not include “dirt,” “soil,” or “snow”
 - Response to C5 was “rarely or almost never,” and response to C6 was “dirt,” “soil,” and/or “snow”
 - Group C: – Response to C5 was neither “most of the time” or “sometimes,” and response to C6 did not include “dirt,” “soil,” or “snow”

For soil ingestion, the following algorithm was used to assign children to Groups A, B, or C:

1. Responses were obtained from the following questions on Form 04 (parent pre-monitoring questionnaire):
 - Question C12: Did your child use a pacifier in the past month?
 - Question C13a: In the past month, did [your child] suck or chew his/her thumb/fingers?
 - Question C13b: In the past month, did [your child] suck or chew his/her toe/foot?
 - Question C16: Did [your child] ever put his/her mouth on the floor and lick the floor?
 - Question C21: Is your child currently teething?
 - Question C22: How often did [your child] put toys in his/her mouth?
 - Question C23: Did [your child] put any things other than toys or food in his/her mouth?

2. Based on the responses to these questions, each participating child was placed into Group A, B, or C with regard to soil ingestion if any of the following was satisfied:

- Group A:
- Response to either C12 or C21 was “yes”
 - Responses to C12 and C21 were both “no,” response to C22 was “frequently,” and at least one “yes” response was given among questions C13a, C13b, C16, and C23
 - Responses to C12 and C21 were both “no,” response to C22 was “sometimes,” and at least three “yes” responses were given among questions C13a, C13b, C16, and C23
- Group B:
- Responses to C12 and C21 were both “no,” response to C22 was “sometimes,” and either one or two “yes” responses were given among questions C13a, C13b, C16, and C23
 - Responses to C12 and C21 were both “no,” response to C22 was “frequently,” and no “yes” responses were given among questions C13a, C13b, C16, and C23
 - Responses to C12 and C21 were both “no,” response to C22 was not “frequently” or “sometimes,” and at least three “yes” responses were given among questions C13a, C13b, C16, and C23
- Group C:
- Responses to C12 and C21 were both “no,” response to C22 was not “frequently” or “sometimes,” and no more than two “yes” responses were given among questions C13a, C13b, C16, and C23
 - Responses to C12 and C21 were both “no,” response to C22 was “sometimes,” and no “yes” responses were given among questions C13a, C13b, C16, and C23

Once a participating child was placed into either Groups A, B, and C for soil ingestion and for dust ingestion, then for both dust and soil, the daily ingestion rates were assigned as follows:

- Children in Group A: Daily ingestion rate = 100 mg/day
- Children in Group B: Daily ingestion rate = 50 mg/day
- Children in Group C: Daily ingestion rate = 25 mg/day

Appendix H

Percentages of NC and OH Multimedia Samples with Pollutant Levels At or Above the MQL

Table H-1 Percentages of NC Samples With Pollutant and Metabolite Levels At or Above the MQL in Multimedia and Urine Samples^a

Pollutant/Metabolite ^b	Percentage of Results At or Above the MQL in Multimedia and Urine Samples							
	INDOORS		OUTDOORS		PERSONAL			
	Indoor Air	Dust	Outdoor Air	Soil	Dermal Wipe	Solid Food	Liquid Food	Urine
OP Pesticides and Metabolite								
Chlorpyrifos	100	99	62	14	77	53	8.1	— ^c
Diazinon	98	81	31	14	35	8.6	0.68	--
3,5,6-TCP	95	97	59	53	87	96	13	84
OC Pesticides								
Aldrin	41	15	6.4	0.0	3.1	2.0	0.0	--
<i>alpha</i> -Chlordane	91	82	27	21	33	3.9	0.0	--
<i>gamma</i> -Chlordane	95	91	39	23	46	7.2	0.0	--
<i>p,p'</i> -DDE	18	34	0.0	9.2	3.1	52	6.1	--
<i>p,p'</i> -DDT	28	38	11	18	6.7	3.3	2.0	--
Dieldrin	40	45	12	13	4.9	2.0	0.0	--
Endrin	34	18	41	4.2	2.2	0.65	0.0	--
Heptachlor	93	42	60	3.5	19	12	0.0	--
Lindane	14	13	11	3.5	2.2	7.2	1.4	--
Pentachloronitrobenzene	12	2.8	2.9	0.0	0.45	0.65	0.68	--
Pyrethroid Pesticides								
Cyfluthrin	2.0	44	0.0	11	21	0.66	0.0	--
<i>cis</i> -Permethrin	61	100	12	19	82	39	14	--
<i>trans</i> -Permethrin	57	100	12	17	81	38	9.8	--
Acid Herbicides								
Dicamba	0.68	18	6.5	2.9	0.0	7.8	0.0	--
2,4-D	45	64	17	10	4.8	38	0.75	62
2,4,5-T	6.8	0.71	7.2	0.72	0.0	1.1	0.0	--
PAHs								
Benz[<i>a</i>]anthracene	28	100	26	60	25	7.9	0.0	--
Benzo[<i>b</i>]fluoranthene	45	100	54	67	24	12	0.0	--
Benzo[<i>k</i>]fluoranthene	14	99	22	52	13	2.6	0.0	--
Benzo[<i>ghi</i>]perylene	37	100	43	61	24	0.66	0.0	--
Benzo[<i>a</i>]pyrene	32	100	26	63	17	7.9	0.0	--
Benzo[<i>e</i>]pyrene	20	100	33	62	21	6.6	1.3	--
Chrysene	33	100	38	66	28	7.9	0.0	--
Dibenzo[<i>a,h</i>]anthracene	1.4	96	1.4	37	6.7	0.0	0.0	--
Indeno[1,2,3- <i>cd</i>]pyrene	30	100	34	57	18	0.0	0.0	--

Table H-1 Percentages of NC Samples With Pollutant and Metabolite Levels At or Above the MQL in Multimedia and Urine Samples (cont.)

Pollutant/Metabolite ^b	Percentage of Results At or Above the MQL in Multimedia and Urine Samples							
	INDOORS		OUTDOORS		PERSONAL			
	Indoor Air	Dust	Outdoor Air	Soil	Dermal Wipe	Solid Food	Liquid Food	Urine
Phthalates								
Benzylbutylphthalate	24	100	5.7	27	43	2.4	3.6	--
Di-n-butylphthalate	99	100	28	21	78	23	23	--
Phenols								
Bisphenol-A	48	12	13	2.2	91	71	30	--
Nonylphenol	6.1	0.0	1.4	0.96	0.45	0.0	1.3	--
Pentachlorophenol	96	88	91	22	22	3.2	0.37	46
PCBs								
PCB 44	46	15	16	1.4	0.45	0.0	0.0	--
PCB 52	91	30	49	2.1	3.1	3.3	0.0	--
PCB 70	35	13	5.7	1.4	0.89	0.0	0.0	--
PCB 77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
PCB 95	52	18	14	1.4	2.2	0.66	0.0	--
PCB 101	36	24	11	2.1	3.6	0.0	0.0	--
PCB 105	4.7	4.3	0.0	2.1	0.45	0.0	0.0	--
PCB 110	35	30	7.9	2.8	5.8	0.0	0.0	--
PCB 118	18	21	4.3	2.1	2.2	0.0	0.0	--
PCB 138	9.5	12	1.4	7.0	0.45	0.0	0.0	--
PCB 153	17	21	1.4	7.0	1.3	0.0	0.0	--
PCB 180	2.0	9.2	0.0	4.9	0.89	0.0	0.0	--
PAH Metabolites Measured in Urine Only								
1-hydroxybenz[a]anthracene	--	--	--	--	--	--	--	5.2
3-hydroxychrysene	--	--	--	--	--	--	--	1.1

^a The percentages were calculated using results from individual samples. Multiple samples for the same person or room were considered as individual samples. The MQL is assumed to equal two times the MDL except as specified in Section 9.2. Cells corresponding to pollutants having at least 50% of samples above the MQL in the specified matrix are shaded in gray.

^b In addition to the pollutants represented in this table, atrazine was measured in drinking water samples. Twenty-two percent of NC drinking water samples had atrazine levels at or above the MQL.

^c A dash indicates that the pollutant was not measured in the specified matrix.

Table H-2 Percentages of OH Samples With Pollutant and Metabolite Levels At or Above the MQL in Multimedia and Urine Samples^a

Pollutant/Metabolite ^b	Percentage of Results At or Above the MQL in Multimedia and Urine Samples							
	INDOORS		OUTDOORS		PERSONAL			
	Indoor Air	Dust	Outdoor Air	Soil	Dermal Wipe	Solid Food	Liquid Food	Urine
OP Pesticides and Metabolites								
Chlorpyrifos	99	97	59	34	56	57	5.8	— ^c
Diazinon	97	90	47	24	26	9.1	0.0	--
IMP	94	77	72	27	9.8	72	13	— ^d
3,5,6-TCP	96	99	62	64	71	97	18	80
OC Pesticides								
Aldrin	2.7	3.5	1.4	2.1	0.45	0.65	0.65	--
<i>alpha</i> -Chlordane	71	66	27	38	17	0.65	0.0	--
<i>gamma</i> -Chlordane	83	69	31	31	17	0.0	0.0	--
<i>p,p'</i> -DDE	22	43	0.0	30	0.45	55	3.9	--
<i>p,p'</i> -DDT	18	38	0.0	27	3.1	4.5	1.9	--
Dieldrin	11	21	5.6	17	0.45	8.4	0.0	--
Endrin	11	7.0	19	2.8	2.7	1.3	0.0	--
Heptachlor	34	5.6	17	2.1	1.8	6.5	1.3	--
Lindane	4.1	11	3.5	0.0	1.3	3.2	1.3	--
Pentachloronitrobenzene	11	0.70	2.8	0.0	0.45	1.9	0.0	--
Pyrethroid Pesticides and Metabolite								
Cyfluthrin	2.0	70	0.71	13	4.0	0.65	0.65	--
<i>cis</i> -Permethrin	15	100	7.7	5.6	80	28	0.0	--
<i>trans</i> -Permethrin	11	100	4.9	5.8	78	26	0.0	--
3-phenoxybenzoic acid	--	--	--	--	--	--	--	42
Acid Herbicides								
Dicamba	0.0	39	1.5	2.1	0.45	6.4	0.36	--
2,4-D	34	95	21	31	28	23	1.8	80
2,4,5-T	0.0	2.1	0.74	2.8	0.45	0.0	0.36	--
PAHs								
Benz[<i>a</i>]anthracene	14	100	10	87	29	4.5	0.0	--
Benzo[<i>b</i>]fluoranthene	16	100	22	90	64	13	0.0	--
Benzo[<i>k</i>]fluoranthene	5.4	100	4.9	85	39	4.5	0.0	--
Benzo[<i>ghi</i>]perylene	15	100	9.8	88	44	3.2	0.0	--
Benzo[<i>a</i>]pyrene	9.5	100	3.5	86	39	4.5	0.0	--
Benzo[<i>e</i>]pyrene	9.5	100	8.4	89	55	3.8	0.0	--
Chrysene	16	100	23	91	51	5.8	0.0	--
Dibenzo[<i>a,h</i>]anthracene	0.68	99	0.0	68	11	1.3	0.0	--
Indeno[1,2,3- <i>cd</i>]pyrene	10	100	4.9	87	40	3.2	0.0	--

Table H-2 Percentages of OH Samples With Pollutant and Metabolite Levels At or Above the MQL in Multimedia and Urine Samples (cont.)

Pollutant/Metabolite ^b	Percentage of Results At or Above the MQL in Multimedia and Urine Samples							
	INDOORS		OUTDOORS		PERSONAL			
	Indoor Air	Dust	Outdoor Air	Soil	Dermal Wipe	Solid Food	Liquid Food	Urine
Phthalates								
Benzylbutylphthalate	16	100	4.2	36	28	48	4.1	--
Di-n-butylphthalate	96	100	33	47	30	21	3.3	--
Phenols								
Bisphenol-A	24	9.4	6.7	0.71	98	81	31	--
Nonylphenol	0.0	3.6	0.0	1.2	0.44	0.0	0.0	--
Pentachlorophenol	87	89	55	47	27	5.3	0.72	79
PCBs								
PCB 44	31	18	15	14	0.45	0.0	--	--
PCB 52	88	38	66	15	2.7	3.2	--	--
PCB 70	35	17	14	14	1.8	0.0	--	--
PCB 77	0.0	0.0	0.0	0.70	0.0	0.0	--	--
PCB 95	63	26	35	18	1.8	0.0	--	--
PCB 101	55	32	25	20	3.6	0.65	--	--
PCB 105	5.4	13	2.1	15	0.89	0.0	--	--
PCB 110	44	40	20	25	4.5	0.65	--	--
PCB 118	22	30	8.5	20	2.2	0.0	--	--
PCB 138	9.5	20	2.8	25	0.45	0.0	--	--
PCB 153	17	30	1.4	25	0.45	0.0	--	--
PCB 180	2.7	9.1	0.0	13	0.45	0.0	--	--
PAH Metabolites Measured in Urine Only								
1-hydroxybenz[a]anthracene	--	--	--	--	--	--	--	4.3
3-hydroxybenz[a]anthracene	--	--	--	--	--	--	--	0.68
3-hydroxybenzo[a]pyrene	--	--	--	--	--	--	--	0.0
3-hydroxychrysene	--	--	--	--	--	--	--	0.45
6-hydroxychrysene	--	--	--	--	--	--	--	0.0
6-hydroxy indeno[1,2,3- <i>cd</i>]pyrene	--	--	--	--	--	--	--	0.0
1-hydroxypyrene	--	--	--	--	--	--	--	40

^a The percentages were calculated using results from individual samples. Multiple samples for the same person or room were considered as individual samples. The MQL is assumed to equal two times the MDL except as specified in Section 9.2. Cells corresponding to pollutants having at least 50% of samples above the MQL in the specified matrix are shaded in gray.

^b In addition to the pollutants represented in this table, atrazine was measured in drinking water samples. Fifty-seven percent of OH drinking water samples had atrazine levels at or above the MQL.

^c A dash indicates that the pollutant was not measured in the specified matrix.

^d Low recovery (<10%) of IMP was observed in matrix spikes, and therefore, IMP was not quantifiable in urine samples.

Table H-3 Percentages of NC and OH Samples With With Pollutant and Metabolite Levels At or Above the MQL in Surface Samples ^a

Pollutant/Metabolite	Percentage of Results At or Above the MQL in Samples Collected From Homes After Recent Pesticide Applications					
	North Carolina			Ohio		
	Hard Floor Surface Wipe	Food Prep. Surface Wipe	Trans. Residue (PUF)	Hard Floor Surface Wipe	Food Prep. Surface Wipe	Trans. Residue (PUF)
OP Pesticides and Metabolites						
Chlorpyrifos	88	83	94	54	38	62
Diazinon	44	56	61	19	23	46
IMP	-- ^b	--	--	25	0.0	0.0
3,5,6-TCP	100	--	--	33	0.0	33
OC Pesticides						
Aldrin	9.4	5.6	11	3.8	0.0	0.0
<i>alpha</i> -Chlordane	44	44	28	15	15	0.0
<i>gamma</i> -Chlordane	44	50	44	15	15	0.0
<i>p,p'</i> -DDE	9.4	5.6	17	7.7	0.0	0.0
<i>p,p'</i> -DDT	19	17	28	19	7.7	0.0
Dieldrin	25	17	22	3.8	0.0	23
Endrin	13	28	11	0.0	0.0	7.7
Heptachlor	34	33	28	3.8	0.0	0.0
Lindane	6.3	0.0	28	0.0	0.0	0.0
Pentachloronitrobenzene	0.0	0.0	0.0	0.0	0.0	0.0
Pyrethroid Pesticides						
Cyfluthrin	6.3	0.0	78	7.7	0.0	0.0
<i>cis</i> -Permethrin	94	83	83	65	31	69
<i>trans</i> -Permethrin	94	83	83	65	31	69
Acid Herbicides						
Dicamba	0.0	--	--	0.0	0.0	0.0
2,4-D	7.1	--	--	25	0.0	33
2,4,5-T	0.0	--	--	0.0	0.0	0.0
PAHs						
Benz[<i>a</i>]anthracene	53	22	89	77	7.7	46
Benzo[<i>b</i>]fluoranthene	78	33	67	92	31	77
Benzo[<i>k</i>]fluoranthene	47	17	56	77	7.7	54
Benzo[<i>ghi</i>]perylene	53	17	61	85	15	69
Benzo[<i>a</i>]pyrene	56	17	56	77	7.7	62
Benzo[<i>e</i>]pyrene	59	17	61	88	23	69
Chrysene	78	17	72	92	23	62
Dibenzo[<i>a,h</i>]anthracene	25	0.0	11	35	0.0	7.7
Indeno[1,2,3- <i>cd</i>]pyrene	59	17	50	88	23	54

Table H-3 Percentages of NC and OH Samples With With Pollutant and Metabolite Levels At or Above the MQL in Surface Samples ^a (cont.)

Pollutant/Metabolite	Percentage of Results At or Above the MQL in Samples Collected From Homes After Recent Pesticide Applications					
	North Carolina			Ohio		
	Hard Floor Surface Wipe	Food Prep. Surface Wipe	Trans. Residue (PUF)	Hard Floor Surface Wipe	Food Prep. Surface Wipe	Trans. Residue (PUF)
Phthalates						
Benzylbutylphthalate	97	44	100	58	31	100
Di-n-butylphthalate	100	72	100	62	77	100
Phenols						
Bisphenol-A	66	83	94	96	85	71
Nonylphenol	0.0	0.0	6.3	0.0	0.0	8.3
Pentachlorophenol	36	--	--	8.3	0.0	33
PCBs						
PCB 44	3.1	11	11	0.0	0.0	15
PCB 52	13	17	6.3	0.0	0.0	42
PCB 70	6.3	11	11	3.8	0.0	23
PCB 77	0.0	0.0	0.0	0.0	0.0	0.0
PCB 95	9.4	11	13	0.0	0.0	31
PCB 101	6.3	11	20	3.8	0.0	31
PCB 105	0.0	0.0	22	0.0	0.0	7.7
PCB 110	9.4	11	10	3.8	0.0	23
PCB 118	9.4	5.6	33	3.8	0.0	23
PCB 138	3.1	0.0	0.0	0.0	0.0	0.0
PCB 153	3.1	5.6	11	3.8	0.0	23
PCB 180	0.0	0.0	5.6	0.0	0.0	0.0

^a The percentages were calculated using results from individual samples. Multiple samples for the same person or room were considered as individual samples. The MQL is assumed to equal two times the MDL except as specified in Section 9.2. Cells corresponding to pollutants having at least 50% of samples above the MQL in the specified matrix are shaded in gray.

^b A dash indicates that the pollutant was not measured in the specified matrix.

Appendix I

Descriptive Statistics of CTEPP Pollutant/Metabolite Measurements in NC Multimedia Samples

This appendix contains tables of descriptive statistics of NC multimedia data for the following pollutants and metabolites:

Pollutant/Metabolite	Table Numbers	Pollutant/Metabolite	Table Numbers
Aldrin	Tables I-1a, I-1b	Endrin	Tables I-24a, I-24b
Atrazine	Tables I-2a, I-2b	Heptachlor	Tables I-25a, I-25b
Benz[<i>a</i>]anthracene	Tables I-3a, I-3b	Indeno[1,2,3- <i>cd</i>]pyrene	Tables I-26a, I-26b
Benzo[<i>b</i>]fluoranthene	Tables I-4a, I-4b	Lindane	Tables I-27a, I-27b
Benzo[<i>k</i>]fluoranthene	Tables I-5a, I-5b	Nonylphenol	Tables I-28a, I-28b
Benzo[<i>ghi</i>]perylene	Tables I-6a, I-6b	Pentachloronitrobenzene	Tables I-29a, I-29b
Benzo[<i>a</i>]pyrene	Tables I-7a, I-7b	Pentachlorophenol	Tables I-30a, I-30b
Benzo[<i>e</i>]pyrene	Tables I-8a, I-8b	<i>cis</i> -Permethrin	Tables I-31a, I-31b
Benzylbutylphthalate	Tables I-9a, I-9b	<i>trans</i> -Permethrin	Tables I-32a, I-32b
Bisphenol-A	Tables I-10a, I-10b	PCB 44	Tables I-33a, I-33b
<i>alpha</i> -Chlordane	Tables I-11a, I-11b	PCB 52	Tables I-34a, I-34b
<i>gamma</i> -Chlordane	Tables I-12a, I-12b	PCB 70	Tables I-35a, I-35b
Chlorpyrifos	Tables I-13a, I-13b	PCB 77	Tables I-36a, I-36b
Chrysene	Tables I-14a, I-14b	PCB 95	Tables I-37a, I-37b
Cyfluthrin	Tables I-15a, I-15b	PCB 101	Tables I-38a, I-38b
Diazinon	Tables I-16a, I-16b	PCB 105	Tables I-39a, I-39b
Dibenzo[<i>a,h</i>]anthracene	Tables I-17a, I-17b	PCB 110	Tables I-40a, I-40b
Di- <i>n</i> -butylphthalate	Tables I-18a, I-18b	PCB 118	Tables I-41a, I-41b
Dicamba	Tables I-19a, I-19b	PCB 138	Tables I-42a, I-42b
<i>p,p'</i> -DDE	Tables I-20a, I-20b	PCB 153	Tables I-43a, I-43b
<i>p,p'</i> -DDT	Tables I-21a, I-21b	PCB 180	Tables I-44a, I-44b
2,4-D	Tables I-22a, I-22b	2,4,5-T	Tables I-45a, I-45b
Dieldrin	Tables I-23a, I-23b	3,5,6-TCP	Tables I-46a, I-46b

For each media type, descriptive statistics are presented separately for the following four groups of samples:

- Samples collected at the homes of study participants
 - Samples collected at the homes of stay-at-home children only
 - Samples collected at the homes of day-care children only
- Samples collected at participating day care centers

Table I-1a. Aldrin (309-00-2): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	38.3	--	--	--	--
	Home children - <i>at home</i>	66	36.4	--	--	--	--
	Day care children - <i>at home</i>	62	40.3	--	--	--	--
	Day care children - <i>at day care</i>	20	55.0	5.37	9.87	0.638	2.42
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	9.4	--	--	--	--
	Home children - <i>at home</i>	65	7.7	--	--	--	--
	Day care children - <i>at home</i>	62	11.3	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	15.7	--	--	--	--
	Home children - <i>at home</i>	66	13.6	--	--	--	--
	Day care children - <i>at home</i>	55	18.2	--	--	--	--
	Day care children - <i>at day care</i>	20	15.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	15.7	--	--	--	--
	Home children - <i>at home</i>	66	13.6	--	--	--	--
	Day care children - <i>at home</i>	55	18.2	--	--	--	--
	Day care children - <i>at day care</i>	20	15.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	10.7	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	18	16.7	--	--	--	--
	Day care children - <i>at day care</i>	1	100.0	22.1	.	22.1	.
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	5.6	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	12.5	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	11.1	--	--	--	--
	Home children - <i>at home</i>	10	20.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	1.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	30	3.3	--	--	--	--
	Day care children - <i>at day care</i>	31	3.2	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	5.2	--	--	--	--
	Home children - <i>at home</i>	66	4.5	--	--	--	--
	Day care children - <i>at home</i>	31	6.5	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	2.3	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	4.8	--	--	--	--
	Day care children - <i>at day care</i>	24	4.2	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-1b. Aldrin (309-00-2): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	<MDL	1.15	9.90	413
	Home Children - at home	66	<MDL	<MDL	<MDL	0.770	2.21	9.90
	Day care Children - at home	62	<MDL	<MDL	<MDL	2.09	31.2	413
	Day care Children - at day care	20	<MDL	<MDL	0.815	4.86	29.5	35.0
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	0.270	2.90
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	0.160	2.90
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	0.270	1.10
	Day care Children - at day care	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - at home	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - at home	121	<MDL	<MDL	<MDL	<MDL	35.4	276
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	34.0	229
	Day care Children - at home	55	<MDL	<MDL	<MDL	<MDL	59.3	276
	Day care Children - at day care	20	<MDL	<MDL	<MDL	<MDL	1,410	2,440
Indoor Floor Dust (ng/m ²)	All Children - at home	121	<MDL	<MDL	<MDL	<MDL	119	950
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	32.1	344
	Day care Children - at home	55	<MDL	<MDL	<MDL	<MDL	462	950
	Day care Children - at day care	20	<MDL	<MDL	<MDL	<MDL	12,000	15,000
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	<MDL	<MDL	<MDL	36.8	117
	Home Children - at home	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	18	<MDL	<MDL	<MDL	<MDL	117	117
	Day care Children - at day care	1	22.1	22.1	22.1	22.1	22.1	22.1
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	<MDL	64.5	64.5
	Home Children - at home	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	64.5	64.5
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	<MDL	166	166
	Home Children - at home	10	<MDL	<MDL	<MDL	<MDL	166	166
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	<MDL	<MDL	151
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	30	<MDL	<MDL	<MDL	<MDL	<MDL	151
	Day care Children - at day care	31	<MDL	<MDL	<MDL	<MDL	<MDL	1,680
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	62.3	985
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	<MDL	985
	Day care Children - at home	31	<MDL	<MDL	<MDL	<MDL	388	419
Solid Food (Children) (ng/g)	All Children - at home	129	<MDL	<MDL	<MDL	<MDL	<MDL	0.467
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.467
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	0.170
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-2a. Atrazine (1912-24-9): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Drinking Water (ng/mL)	All children - <i>at home</i>	124	37.1	--	--	--	--
	Home children - <i>at home</i>	64	23.4	--	--	--	--
	Day care children - <i>at home</i>	60	51.7	0.018	0.018	0.013	0.719
	Day care children - <i>at day care</i>	12	41.7	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-2b. Atrazine (1912-24-9): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Drinking Water (ng/mL)	All Children - <i>at home</i>	124	<MDL	<MDL	<MDL	0.016	0.034	0.092
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	0.030	0.034
	Day care Children - <i>at home</i>	60	<MDL	<MDL	0.010	0.024	0.060	0.092
	Day care Children - <i>at day care</i>	12	<MDL	<MDL	<MDL	0.022	0.043	0.043

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table I-3a. Benz[a]anthracene (56-55-3): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	49.2	--	--	--	--
	Home children - at home	66	51.5	0.255	0.452	0.135	0.970
	Day care children - at home	62	46.8	--	--	--	--
	Day care children - at day care	20	40.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	51.2	0.233	0.600	0.117	0.917
	Home children - at home	65	58.5	0.238	0.467	0.132	0.917
	Day care children - at home	62	43.5	--	--	--	--
	Day care children - at day care	13	69.2	0.127	0.174	0.079	0.859
Soil (ng/g)	All children - at home	128	72.7	42.0	186	2.26	2.00
	Home children - at home	65	76.9	17.8	82.9	1.92	1.72
	Day care children - at home	63	68.3	67.0	250	2.66	2.26
	Day care children - at day care	13	76.9	20.4	46.5	4.43	1.87
Indoor Floor Dust (ng/g)	All children - at home	118	100.0	343	886	135	1.14
	Home children - at home	63	100.0	248	455	132	0.991
	Day care children - at home	55	100.0	453	1,200	137	1.30
	Day care children - at day care	20	100.0	1,180	4,160	237	1.27
Indoor Floor Dust (ng/m ²)	All children - at home	118	100.0	652	2,580	145	1.53
	Home children - at home	63	100.0	334	537	133	1.51
	Day care children - at home	55	100.0	1,020	3,720	160	1.55
	Day care children - at day care	20	100.0	2,450	4,840	1,050	1.21
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	75.0	429	1,770	25.0	1.84
	Home children - at home	10	60.0	11.4	9.11	9.04	0.684
	Day care children - at home	18	83.3	661	2,200	43.9	2.04
	Day care children - at day care	1	100.0	7.24	.	7.24	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	33.3	--	--	--	--
	Home children - at home	10	30.0	--	--	--	--
	Day care children - at home	8	37.5	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	94.4	213	313	87.8	1.55
	Home children - at home	10	100.0	197	194	117	1.19
	Day care children - at home	8	87.5	234	435	61.6	1.93
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	38.5	--	--	--	--
	Home children - at home	66	40.9	--	--	--	--
	Day care children - at home	30	33.3	--	--	--	--
	Day care children - at day care	31	32.3	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	40.2	--	--	--	--
	Home children - at home	66	43.9	--	--	--	--
	Day care children - at home	31	32.3	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	128	32.0	--	--	--	--
	Home children - at home	66	36.4	--	--	--	--
	Day care children - at home	62	27.4	--	--	--	--
	Day care children - at day care	24	25.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	127	1.6	--	--	--	--
	Home children - at home	65	1.5	--	--	--	--
	Day care children - at home	62	1.6	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-3b. Benz[a]anthracene (56-55-3): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	<MDL	0.215	0.750	3.14
	Home Children - at home	66	<MDL	<MDL	0.095	0.230	1.02	3.14
	Day care Children - at home	62	<MDL	<MDL	<MDL	0.180	0.550	0.800
	Day care Children - at day care	20	<MDL	<MDL	<MDL	0.110	0.905	1.65
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	0.090	0.210	0.710	5.66
	Home Children - at home	65	<MDL	<MDL	0.090	0.230	0.840	3.59
	Day care Children - at home	62	<MDL	<MDL	<MDL	0.130	0.660	5.66
	Day care Children - at day care	13	<MDL	<MDL	0.060	0.060	0.630	0.630
Soil (ng/g)	All Children - at home	128	<MDL	<MDL	1.38	5.07	138	1,650
	Home Children - at home	65	<MDL	0.500	1.32	4.11	63.0	661
	Day care Children - at home	63	<MDL	<MDL	1.41	11.7	413	1,650
	Day care Children - at day care	13	<MDL	2.48	3.64	13.1	172	172
Indoor Floor Dust (ng/g)	All Children - at home	118	19.5	60.1	120	225	1,750	7,850
	Home Children - at home	63	22.1	70.4	127	214	681	2,610
	Day care Children - at home	55	19.5	59.3	94.3	256	2,380	7,850
	Day care Children - at day care	20	43.6	117	201	339	9,770	18,800
Indoor Floor Dust (ng/m ²)	All Children - at home	118	3.09	57.3	141	348	1,900	22,300
	Home Children - at home	63	3.09	61.5	148	352	1,620	2,900
	Day care Children - at home	55	20.3	48.3	129	342	4,040	22,300
	Day care Children - at day care	20	169	386	983	2,100	14,100	22,100
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	<MDL	15.4	59.6	1,710	9,320
	Home Children - at home	10	<MDL	<MDL	7.97	14.6	32.0	32.0
	Day care Children - at home	18	<MDL	10.7	29.0	68.3	9,320	9,320
	Day care Children - at day care	1	7.24	7.24	7.24	7.24	7.24	7.24
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	12.8	55.8	55.8
	Home Children - at home	10	<MDL	<MDL	<MDL	14.6	55.8	55.8
	Day care Children - at home	8	<MDL	<MDL	<MDL	12.6	21.6	21.6
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	48.1	107	228	1,290	1,290
	Home Children - at home	10	12.3	48.1	134	355	576	576
	Day care Children - at home	8	<MDL	29.6	70.7	186	1,290	1,290
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	62.0	480	1,770
	Home Children - at home	66	<MDL	<MDL	<MDL	87.1	480	1,770
	Day care Children - at home	30	<MDL	<MDL	<MDL	42.1	279	1,250
	Day care Children - at day care	31	<MDL	<MDL	<MDL	61.5	2,100	2,270
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	41.0	237	441
	Home Children - at home	66	<MDL	<MDL	<MDL	42.6	275	441
	Day care Children - at home	31	<MDL	<MDL	<MDL	29.3	127	139
Solid Food (Children) (ng/g)	All Children - at home	128	<MDL	<MDL	<MDL	0.090	0.467	1.64
	Home Children - at home	66	<MDL	<MDL	<MDL	0.090	0.450	0.640
	Day care Children - at home	62	<MDL	<MDL	<MDL	0.080	0.467	1.64
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	0.130	0.130
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.030
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-4a. Benzo[b]fluoranthene (205-99-2): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	60.2	0.276	0.326	0.161	1.00
	Home children - at home	66	57.6	0.264	0.338	0.156	0.973
	Day care children - at home	62	62.9	0.288	0.316	0.168	1.04
	Day care children - at day care	20	65.0	0.188	0.189	0.132	0.817
Outdoor Air (ng/m ³)	All children - at home	127	67.7	0.366	0.463	0.200	1.09
	Home children - at home	65	69.2	0.416	0.508	0.226	1.12
	Day care children - at home	62	66.1	0.313	0.409	0.176	1.05
	Day care children - at day care	13	69.2	0.259	0.357	0.138	1.08
Soil (ng/g)	All children - at home	128	77.3	61.2	237	3.73	2.13
	Home children - at home	65	76.9	28.4	106	3.27	1.91
	Day care children - at home	63	77.8	95.2	318	4.28	2.34
	Day care children - at day care	13	76.9	38.9	90.1	7.03	2.10
Indoor Floor Dust (ng/g)	All children - at home	118	100.0	947	2,670	353	1.15
	Home children - at home	63	100.0	549	922	325	0.947
	Day care children - at home	55	100.0	1,400	3,750	387	1.35
	Day care children - at day care	20	100.0	2,330	7,670	575	1.22
Indoor Floor Dust (ng/m ²)	All children - at home	118	100.0	1,840	7,360	380	1.56
	Home children - at home	63	100.0	854	1,260	328	1.56
	Day care children - at home	55	100.0	2,960	10,600	451	1.55
	Day care children - at day care	20	100.0	6,590	14,400	2,550	1.25
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	75.0	611	2,470	48.7	1.92
	Home children - at home	10	50.0	21.8	23.2	12.8	1.10
	Day care children - at home	18	88.9	938	3,060	102	1.90
	Day care children - at day care	1	100.0	34.8	.	34.8	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	33.3	--	--	--	--
	Home children - at home	10	40.0	--	--	--	--
	Day care children - at home	8	25.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	66.7	88.9	131	24.8	1.81
	Home children - at home	10	60.0	97.4	162	20.8	1.96
	Day care children - at home	8	75.0	78.4	87.1	30.8	1.72
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	28.1	--	--	--	--
	Home children - at home	66	27.3	--	--	--	--
	Day care children - at home	30	30.0	--	--	--	--
	Day care children - at day care	31	48.4	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	28.9	--	--	--	--
	Home children - at home	66	25.8	--	--	--	--
	Day care children - at home	31	35.5	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	128	32.8	--	--	--	--
	Home children - at home	66	36.4	--	--	--	--
	Day care children - at home	62	29.0	--	--	--	--
	Day care children - at day care	24	25.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	127	2.4	--	--	--	--
	Home children - at home	65	0.0	--	--	--	--
	Day care children - at home	62	4.8	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-4b. Benzo[b]fluoranthene (205-99-2): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	0.130	0.355	0.910	1.75
	Home Children - at home	66	<MDL	<MDL	0.120	0.310	0.840	1.75
	Day care Children - at home	62	<MDL	<MDL	0.135	0.420	0.910	1.56
	Day care Children - at day care	20	<MDL	<MDL	0.109	0.235	0.640	0.820
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	0.190	0.520	1.08	2.43
	Home Children - at home	65	<MDL	<MDL	0.200	0.530	1.52	2.43
	Day care Children - at home	62	<MDL	<MDL	0.150	0.450	0.800	2.14
	Day care Children - at day care	13	<MDL	<MDL	0.110	0.200	1.13	1.13
Soil (ng/g)	All Children - at home	128	<MDL	0.645	2.97	11.5	213	1,860
	Home Children - at home	65	<MDL	0.870	2.64	8.51	123	818
	Day care Children - at home	63	<MDL	0.630	3.15	16.6	683	1,860
	Day care Children - at day care	13	<MDL	3.26	9.42	16.5	332	332
Indoor Floor Dust (ng/g)	All Children - at home	118	31.4	150	304	633	3,370	20,500
	Home Children - at home	63	31.4	183	294	577	1,170	6,710
	Day care Children - at home	55	58.8	145	314	691	8,220	20,500
	Day care Children - at day care	20	142	248	501	841	18,500	34,800
Indoor Floor Dust (ng/m ²)	All Children - at home	118	7.38	143	396	886	4,990	65,100
	Home Children - at home	63	7.38	139	363	901	4,650	5,150
	Day care Children - at home	55	42.1	143	418	810	19,100	65,100
	Day care Children - at day care	20	408	927	2,260	5,250	41,700	65,700
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	<MDL	45.2	148	1,720	13,100
	Home Children - at home	10	<MDL	<MDL	<MDL	38.6	73.8	73.8
	Day care Children - at home	18	<MDL	43.4	69.3	175	13,100	13,100
	Day care Children - at day care	1	34.8	34.8	34.8	34.8	34.8	34.8
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	19.3	73.2	73.2
	Home Children - at home	10	<MDL	<MDL	<MDL	20.5	73.2	73.2
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	55.8	55.8
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	<MDL	22.8	134	419	419
	Home Children - at home	10	<MDL	<MDL	16.4	72.8	419	419
	Day care Children - at home	8	<MDL	<MDL	36.3	159	217	217
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	73.2	809	6,810
	Home Children - at home	66	<MDL	<MDL	<MDL	68.4	348	3,490
	Day care Children - at home	30	<MDL	<MDL	<MDL	207	866	6,810
	Day care Children - at day care	31	<MDL	<MDL	<MDL	142	7,700	10,800
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	21.1	275	731
	Home Children - at home	66	<MDL	<MDL	<MDL	15.4	326	731
	Day care Children - at home	31	<MDL	<MDL	<MDL	42.4	110	275
Solid Food (Children) (ng/g)	All Children - at home	128	<MDL	<MDL	<MDL	0.090	0.270	0.610
	Home Children - at home	66	<MDL	<MDL	<MDL	0.100	0.240	0.420
	Day care Children - at home	62	<MDL	<MDL	<MDL	0.090	0.370	0.610
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	0.140	0.230
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-5a. Benzo[k]fluoranthene (207-08-9): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	43.8	--	--	--	--
	Home children - at home	66	39.4	--	--	--	--
	Day care children - at home	62	48.4	--	--	--	--
	Day care children - at day care	20	40.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	51.2	0.142	0.162	0.104	0.705
	Home children - at home	65	55.4	0.170	0.202	0.118	0.766
	Day care children - at home	62	46.8	--	--	--	--
	Day care children - at day care	13	46.2	--	--	--	--
Soil (ng/g)	All children - at home	128	70.3	25.8	107	1.77	1.87
	Home children - at home	65	73.8	13.8	64.0	1.58	1.66
	Day care children - at home	63	66.7	38.2	138	1.99	2.06
	Day care children - at day care	13	76.9	14.3	31.7	3.48	1.75
Indoor Floor Dust (ng/g)	All children - at home	118	100.0	327	914	123	1.14
	Home children - at home	63	100.0	208	363	118	0.962
	Day care children - at home	55	100.0	464	1,270	129	1.32
	Day care children - at day care	20	100.0	817	2,730	192	1.25
Indoor Floor Dust (ng/m ²)	All children - at home	118	100.0	673	2,880	132	1.56
	Home children - at home	63	100.0	293	431	119	1.51
	Day care children - at home	55	100.0	1,110	4,160	150	1.61
	Day care children - at day care	20	100.0	2,170	4,520	852	1.24
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	71.4	229	931	20.2	1.66
	Home children - at home	10	40.0	--	--	--	--
	Day care children - at home	18	88.9	349	1,150	32.5	1.84
	Day care children - at day care	1	100.0	8.07	.	8.07	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	27.8	--	--	--	--
	Home children - at home	10	30.0	--	--	--	--
	Day care children - at home	8	25.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	66.7	30.5	39.4	13.1	1.38
	Home children - at home	10	60.0	30.1	47.5	11.1	1.44
	Day care children - at home	8	75.0	30.9	29.7	16.1	1.37
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	27.1	--	--	--	--
	Home children - at home	66	25.8	--	--	--	--
	Day care children - at home	30	30.0	--	--	--	--
	Day care children - at day care	31	48.4	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	22.7	--	--	--	--
	Home children - at home	66	19.7	--	--	--	--
	Day care children - at home	31	29.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	128	17.2	--	--	--	--
	Home children - at home	66	19.7	--	--	--	--
	Day care children - at home	62	14.5	--	--	--	--
	Day care children - at day care	24	12.5	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	127	0.0	--	--	--	--
	Home children - at home	65	0.0	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-5b. Benzo[k]fluoranthene (207-08-9): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	<MDL	0.110	0.320	0.550
	Home Children - at home	66	<MDL	<MDL	<MDL	0.100	0.330	0.550
	Day care Children - at home	62	<MDL	<MDL	<MDL	0.120	0.280	0.500
	Day care Children - at day care	20	<MDL	<MDL	<MDL	0.090	0.180	0.180
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	0.090	0.150	0.450	1.33
	Home Children - at home	65	<MDL	<MDL	0.100	0.180	0.490	1.33
	Day care Children - at home	62	<MDL	<MDL	<MDL	0.120	0.280	0.640
	Day care Children - at day care	13	<MDL	<MDL	<MDL	0.070	0.400	0.400
Soil (ng/g)	All Children - at home	128	<MDL	<MDL	1	3.89	72.7	795
	Home Children - at home	65	<MDL	<MDL	1.05	2.88	48.3	510
	Day care Children - at home	63	<MDL	<MDL	0.870	6.13	215	795
	Day care Children - at day care	13	<MDL	1.45	3.73	8.42	117	117
Indoor Floor Dust (ng/g)	All Children - at home	118	7.44	54.3	106	223	1,520	7,810
	Home Children - at home	63	7.44	57.9	120	194	480	2,350
	Day care Children - at home	55	20.0	49.1	91.5	245	2,830	7,810
	Day care Children - at day care	20	40.1	87.4	177	291	6,520	12,400
Indoor Floor Dust (ng/m ²)	All Children - at home	118	2.08	48.4	123	307	1,760	26,200
	Home Children - at home	63	2.08	51.6	122	328	1,560	2,050
	Day care Children - at home	55	18.4	45.6	124	307	5,220	26,200
	Day care Children - at day care	20	165	301	768	1,750	13,600	20,300
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	<MDL	11.7	36.0	715	4,920
	Home Children - at home	10	<MDL	<MDL	<MDL	13.1	34.5	34.5
	Day care Children - at home	18	<MDL	8.90	21.4	51.1	4,920	4,920
	Day care Children - at day care	1	8.07	8.07	8.07	8.07	8.07	8.07
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	7.38	27.0	27.0
	Home Children - at home	10	<MDL	<MDL	<MDL	11.1	27.0	27.0
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	19.6	19.6
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	<MDL	10.9	59.2	144	144
	Home Children - at home	10	<MDL	<MDL	7.31	24.0	144	144
	Day care Children - at home	8	<MDL	<MDL	20.3	63.7	68.3	68.3
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	40.8	213	2,240
	Home Children - at home	66	<MDL	<MDL	<MDL	40.4	112	1,540
	Day care Children - at home	30	<MDL	<MDL	<MDL	70.9	293	2,240
	Day care Children - at day care	31	<MDL	<MDL	<MDL	61.3	2,550	3,440
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	78.1	346
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	91.8	346
	Day care Children - at home	31	<MDL	<MDL	<MDL	21.6	67.8	78.1
Solid Food (Children) (ng/g)	All Children - at home	128	<MDL	<MDL	<MDL	<MDL	0.120	0.467
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	0.120	0.240
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	0.110	0.467
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	0.110	0.160
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-6a. Benzo[ghi]perylene (191-24-2): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	62.5	0.243	0.298	0.150	0.927
	Home children - at home	66	59.1	0.259	0.354	0.149	0.969
	Day care children - at home	62	66.1	0.225	0.225	0.151	0.887
	Day care children - at day care	20	65.0	0.124	0.080	0.103	0.622
Outdoor Air (ng/m ³)	All children - at home	127	63.8	0.274	0.355	0.160	0.987
	Home children - at home	65	69.2	0.339	0.442	0.187	1.05
	Day care children - at home	62	58.1	0.206	0.215	0.136	0.894
	Day care children - at day care	13	69.2	0.182	0.253	0.109	0.934
Soil (ng/g)	All children - at home	128	73.4	30.9	118	2.32	1.93
	Home children - at home	65	73.8	16.1	73.0	2.02	1.70
	Day care children - at home	63	73.0	46.1	150	2.69	2.15
	Day care children - at day care	13	76.9	18.9	45.3	4.06	1.81
Indoor Floor Dust (ng/g)	All children - at home	118	100.0	481	1,320	197	1.07
	Home children - at home	63	100.0	309	462	197	0.879
	Day care children - at home	55	100.0	679	1,850	199	1.27
	Day care children - at day care	20	100.0	1,020	3,020	325	1.15
Indoor Floor Dust (ng/m ²)	All children - at home	118	100.0	994	4,080	213	1.54
	Home children - at home	63	100.0	453	608	198	1.48
	Day care children - at home	55	100.0	1,610	5,910	231	1.60
	Day care children - at day care	20	100.0	3,520	7,270	1,440	1.21
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	85.7	297	1,270	25.3	1.62
	Home children - at home	10	70.0	13.4	12.7	10.1	0.731
	Day care children - at home	18	94.4	455	1,570	42.2	1.76
	Day care children - at day care	1	100.0	12.1	.	12.1	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	16.7	--	--	--	--
	Home children - at home	10	20.0	--	--	--	--
	Day care children - at home	8	12.5	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	66.7	25.2	36.2	12.2	1.22
	Home children - at home	10	70.0	27.1	38.2	14.1	1.21
	Day care children - at home	8	62.5	22.8	36.1	10.1	1.29
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	44.8	--	--	--	--
	Home children - at home	66	39.4	--	--	--	--
	Day care children - at home	30	56.7	175	526	61.0	1.11
	Day care children - at day care	31	61.3	275	830	66.5	1.23
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	36.1	--	--	--	--
	Home children - at home	66	28.8	--	--	--	--
	Day care children - at home	31	51.6	28.0	22.9	21.9	0.668
Solid Food (Children) (ng/g)	All children - at home	128	1.6	--	--	--	--
	Home children - at home	66	1.5	--	--	--	--
	Day care children - at home	62	1.6	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	127	0.0	--	--	--	--
	Home children - at home	65	0.0	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-6b. Benzo[ghi]perylene (191-24-2): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	0.130	0.285	0.910	2.15
	Home Children - at home	66	<MDL	<MDL	0.115	0.270	0.930	2.15
	Day care Children - at home	62	<MDL	<MDL	0.145	0.300	0.680	1.06
	Day care Children - at day care	20	<MDL	<MDL	0.100	0.180	0.305	0.320
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	0.140	0.360	0.870	2.10
	Home Children - at home	65	<MDL	<MDL	0.170	0.370	1.52	2.10
	Day care Children - at home	62	<MDL	<MDL	0.130	0.270	0.570	1.19
	Day care Children - at day care	13	<MDL	<MDL	0.100	0.160	0.950	0.950
Soil (ng/g)	All Children - at home	128	<MDL	<MDL	1.34	6.07	100	851
	Home Children - at home	65	<MDL	<MDL	1.29	5.16	55.9	583
	Day care Children - at home	63	<MDL	<MDL	1.47	9.83	340	851
	Day care Children - at day care	13	<MDL	1.93	4.85	7.35	167	167
Indoor Floor Dust (ng/g)	All Children - at home	118	26.5	91.7	176	334	1,770	9,690
	Home Children - at home	63	26.5	104	212	334	696	3,270
	Day care Children - at home	55	35.8	78.7	153	343	4,080	9,690
	Day care Children - at day care	20	66.4	152	276	536	7,450	13,800
Indoor Floor Dust (ng/m ²)	All Children - at home	118	3.43	80.4	214	528	2,810	38,700
	Home Children - at home	63	3.43	87.7	223	529	1,660	2,970
	Day care Children - at home	55	25.2	68.2	186	411	10,300	38,700
	Day care Children - at day care	20	246	594	1,220	2,950	21,700	32,800
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	10.0	16.9	40.0	717	6,720
	Home Children - at home	10	<MDL	<MDL	9.14	14.8	46.5	46.5
	Day care Children - at home	18	<MDL	12.8	32.3	56.5	6,720	6,720
	Day care Children - at day care	1	12.1	12.1	12.1	12.1	12.1	12.1
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	<MDL	63.3	63.3
	Home Children - at home	10	<MDL	<MDL	<MDL	<MDL	63.3	63.3
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	20.7	20.7
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	<MDL	15.9	24.0	132	132
	Home Children - at home	10	<MDL	<MDL	21.2	24.0	132	132
	Day care Children - at home	8	<MDL	<MDL	8.29	23.8	109	109
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	74.1	286	2,930
	Home Children - at home	66	<MDL	<MDL	<MDL	73.3	247	1,650
	Day care Children - at home	30	<MDL	<MDL	39.3	129	300	2,930
	Day care Children - at day care	31	<MDL	<MDL	59.6	98.0	2,880	3,810
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	26.9	88.0	570
	Home Children - at home	66	<MDL	<MDL	<MDL	22.6	76.3	570
	Day care Children - at home	31	<MDL	<MDL	17.0	30.2	88.0	97.8
Solid Food (Children) (ng/g)	All Children - at home	128	<MDL	<MDL	<MDL	<MDL	<MDL	0.467
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.460
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.467
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-7a. Benzo[a]pyrene (50-32-8): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	50.8	0.216	0.263	0.132	0.922
	Home children - at home	66	47.0	--	--	--	--
	Day care children - at home	62	54.8	0.224	0.264	0.138	0.946
	Day care children - at day care	20	45.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	53.5	0.179	0.259	0.115	0.818
	Home children - at home	65	56.9	0.218	0.321	0.132	0.892
	Day care children - at home	62	50.0	0.139	0.165	0.100	0.711
	Day care children - at day care	13	53.8	0.124	0.161	0.081	0.823
Soil (ng/g)	All children - at home	128	74.2	42.8	177	2.59	1.99
	Home children - at home	65	73.8	22.0	111	2.23	1.76
	Day care children - at home	63	74.6	64.2	225	3.02	2.22
	Day care children - at day care	13	76.9	22.6	53.9	4.80	1.87
Indoor Floor Dust (ng/g)	All children - at home	118	100.0	509	1,430	197	1.12
	Home children - at home	63	100.0	318	485	193	0.933
	Day care children - at home	55	100.0	727	2,020	201	1.31
	Day care children - at day care	20	100.0	1,270	4,200	318	1.22
Indoor Floor Dust (ng/m ²)	All children - at home	118	100.0	979	4,080	212	1.50
	Home children - at home	63	100.0	434	596	195	1.46
	Day care children - at home	55	100.0	1,600	5,910	234	1.55
	Day care children - at day care	20	100.0	3,330	6,860	1,410	1.18
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	78.6	407	1,720	24.8	1.76
	Home children - at home	10	60.0	13.4	13.1	9.82	0.780
	Day care children - at home	18	88.9	626	2,140	41.5	1.95
	Day care children - at day care	1	100.0	7.86	.	7.86	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	16.7	--	--	--	--
	Home children - at home	10	20.0	--	--	--	--
	Day care children - at home	8	12.5	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	61.1	60.3	113	14.0	1.71
	Home children - at home	10	50.0	59.0	136	11.1	1.72
	Day care children - at home	8	75.0	62.0	83.8	18.7	1.77
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	25.0	--	--	--	--
	Home children - at home	66	21.2	--	--	--	--
	Day care children - at home	30	33.3	--	--	--	--
	Day care children - at day care	31	41.9	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	19.6	--	--	--	--
	Home children - at home	66	15.2	--	--	--	--
	Day care children - at home	31	29.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	128	18.0	--	--	--	--
	Home children - at home	66	24.2	--	--	--	--
	Day care children - at home	62	11.3	--	--	--	--
	Day care children - at day care	24	8.3	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	127	0.0	--	--	--	--
	Home children - at home	65	0.0	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-7b. Benzo[a]pyrene (50-32-8): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	0.080	0.265	0.800	1.37
	Home Children - at home	66	<MDL	<MDL	<MDL	0.240	0.770	1.31
	Day care Children - at home	62	<MDL	<MDL	0.110	0.310	0.800	1.37
	Day care Children - at day care	20	<MDL	<MDL	<MDL	0.100	0.265	0.350
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	0.090	0.190	0.520	2.20
	Home Children - at home	65	<MDL	<MDL	0.100	0.230	0.670	2.20
	Day care Children - at home	62	<MDL	<MDL	<MDL	0.130	0.390	0.990
	Day care Children - at day care	13	<MDL	<MDL	0.070	0.090	0.600	0.600
Soil (ng/g)	All Children - at home	128	<MDL	<MDL	1.86	7.59	98.1	1,370
	Home Children - at home	65	<MDL	<MDL	1.67	5.46	55.1	895
	Day care Children - at home	63	<MDL	<MDL	1.97	9.51	508	1,370
	Day care Children - at day care	13	<MDL	3.51	5.87	7.90	199	199
Indoor Floor Dust (ng/g)	All Children - at home	118	17.1	87.7	175	328	2,350	11,500
	Home Children - at home	63	17.1	100	197	310	702	3,080
	Day care Children - at home	55	33.1	72.6	139	418	4,000	11,500
	Day care Children - at day care	20	60.3	166	268	459	10,000	19,100
Indoor Floor Dust (ng/m ²)	All Children - at home	118	2.86	81.6	206	475	2,500	36,200
	Home Children - at home	63	2.86	88.1	220	500	1,620	2,990
	Day care Children - at home	55	24.8	71.5	188	475	9,970	36,200
	Day care Children - at day care	20	231	597	1,340	2,510	20,200	31,100
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	9.07	18.3	41.0	1,330	9,100
	Home Children - at home	10	<MDL	<MDL	9.07	15.5	45.9	45.9
	Day care Children - at home	18	<MDL	13.2	22.2	63.3	9,100	9,100
	Day care Children - at day care	1	7.86	7.86	7.86	7.86	7.86	7.86
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	<MDL	66.4	66.4
	Home Children - at home	10	<MDL	<MDL	<MDL	<MDL	66.4	66.4
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	25.8	25.8
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	<MDL	9.49	92.8	439	439
	Home Children - at home	10	<MDL	<MDL	<MDL	20.1	439	439
	Day care Children - at home	8	<MDL	<MDL	9.98	123	219	219
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	<MDL	201	2,760
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	179	1,960
	Day care Children - at home	30	<MDL	<MDL	<MDL	74.7	323	2,760
	Day care Children - at day care	31	<MDL	<MDL	<MDL	76.6	3,370	4,160
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	129	621
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	160	621
	Day care Children - at home	31	<MDL	<MDL	<MDL	24.4	93.6	129
Solid Food (Children) (ng/g)	All Children - at home	128	<MDL	<MDL	<MDL	<MDL	0.210	1.21
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	0.210	0.650
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	0.180	1.21
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	0.090	0.230
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-8a. Benzo[e]pyrene (192-97-2): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	50.0	0.141	0.128	0.107	0.691
	Home children - at home	66	47.0	--	--	--	--
	Day care children - at home	62	53.2	0.150	0.141	0.112	0.735
	Day care children - at day care	20	45.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	55.9	0.182	0.203	0.124	0.813
	Home children - at home	65	60.0	0.214	0.235	0.143	0.855
	Day care children - at home	62	51.6	0.148	0.158	0.107	0.745
	Day care children - at day care	13	61.5	0.121	0.139	0.084	0.788
Soil (ng/g)	All children - at home	128	75.0	32.8	131	2.44	1.93
	Home children - at home	65	75.4	16.7	77.7	2.06	1.68
	Day care children - at home	63	74.6	49.4	168	2.91	2.15
	Day care children - at day care	13	76.9	19.0	44.4	4.16	1.82
Indoor Floor Dust (ng/g)	All children - at home	118	100.0	503	1,430	196	1.10
	Home children - at home	63	100.0	310	494	190	0.901
	Day care children - at home	55	100.0	723	2,010	203	1.29
	Day care children - at day care	20	100.0	1,190	3,830	317	1.20
Indoor Floor Dust (ng/m ²)	All children - at home	118	100.0	1,030	4,150	211	1.55
	Home children - at home	63	100.0	461	658	191	1.50
	Day care children - at home	55	100.0	1,670	6,000	237	1.61
	Day care children - at day care	20	100.0	3,480	7,210	1,410	1.21
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	85.7	383	1,700	26.9	1.68
	Home children - at home	10	70.0	15.5	16.0	11.3	0.781
	Day care children - at home	18	94.4	588	2,110	43.7	1.86
	Day care children - at day care	1	100.0	14.9	.	14.9	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	16.7	--	--	--	--
	Home children - at home	10	20.0	--	--	--	--
	Day care children - at home	8	12.5	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	66.7	40.7	57.8	15.5	1.47
	Home children - at home	10	60.0	35.5	64.3	12.5	1.46
	Day care children - at home	8	75.0	47.1	52.2	20.5	1.52
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	30.2	--	--	--	--
	Home children - at home	66	28.8	--	--	--	--
	Day care children - at home	30	33.3	--	--	--	--
	Day care children - at day care	31	41.9	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	26.8	--	--	--	--
	Home children - at home	66	19.7	--	--	--	--
	Day care children - at home	31	41.9	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	128	25.0	--	--	--	--
	Home children - at home	66	33.3	--	--	--	--
	Day care children - at home	62	16.1	--	--	--	--
	Day care children - at day care	24	16.7	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	127	3.1	--	--	--	--
	Home children - at home	65	1.5	--	--	--	--
	Day care children - at home	62	4.8	--	--	--	--
	Day care children - at day care	24	4.2	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-8b. Benzo[e]pyrene (192-97-2): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	<MDL	0.160	0.390	0.780
	Home Children - at home	66	<MDL	<MDL	<MDL	0.160	0.390	0.590
	Day care Children - at home	62	<MDL	<MDL	0.090	0.180	0.380	0.780
	Day care Children - at day care	20	<MDL	<MDL	<MDL	0.099	0.220	0.300
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	0.110	0.210	0.530	1.38
	Home Children - at home	65	<MDL	<MDL	0.130	0.270	0.600	1.38
	Day care Children - at home	62	<MDL	<MDL	0.077	0.170	0.430	0.830
	Day care Children - at day care	13	<MDL	<MDL	0.070	0.090	0.500	0.500
Soil (ng/g)	All Children - at home	128	<MDL	<MDL	1.52	7.41	91.0	967
	Home Children - at home	65	<MDL	0.500	1.48	4.77	56.8	620
	Day care Children - at home	63	<MDL	<MDL	1.54	10.8	312	967
	Day care Children - at day care	13	<MDL	2.24	5.00	7.56	164	164
Indoor Floor Dust (ng/g)	All Children - at home	118	19.3	90.6	179	352	2,060	10,600
	Home Children - at home	63	19.3	92.5	199	326	753	3,370
	Day care Children - at home	55	33.5	86.0	147	386	4,010	10,600
	Day care Children - at day care	20	61.2	144	278	455	9,230	17,400
Indoor Floor Dust (ng/m ²)	All Children - at home	118	3.53	81.4	192	488	2,630	37,900
	Home Children - at home	63	3.53	88.1	200	488	1,930	3,210
	Day care Children - at home	55	29.1	76.3	191	493	10,900	37,900
	Day care Children - at day care	20	256	502	1,250	2,860	21,900	32,300
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	10.2	15.8	46.1	668	9,030
	Home Children - at home	10	<MDL	<MDL	11.6	17.7	58.6	58.6
	Day care Children - at home	18	<MDL	11.0	33.4	80.2	9,030	9,030
	Day care Children - at day care	1	14.9	14.9	14.9	14.9	14.9	14.9
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	<MDL	42.5	42.5
	Home Children - at home	10	<MDL	<MDL	<MDL	<MDL	42.5	42.5
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	27.3	27.3
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	<MDL	15.1	57.0	212	212
	Home Children - at home	10	<MDL	<MDL	11.8	27.8	212	212
	Day care Children - at home	8	<MDL	<MDL	16.3	105	120	120
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	66.9	308	3,400
	Home Children - at home	66	<MDL	<MDL	<MDL	61.5	197	1,680
	Day care Children - at home	30	<MDL	<MDL	<MDL	121	419	3,400
	Day care Children - at day care	31	<MDL	<MDL	<MDL	95.2	3,650	4,970
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	19.0	110	510
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	103	510
	Day care Children - at home	31	<MDL	<MDL	<MDL	29.1	110	269
Solid Food (Children) (ng/g)	All Children - at home	128	<MDL	<MDL	<MDL	<MDL	0.170	0.630
	Home Children - at home	66	<MDL	<MDL	<MDL	0.090	0.160	0.240
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	0.200	0.630
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	0.090	0.160
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.080
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.070
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.080
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	0.050
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-9a. Benzylbutylphthalate (85-68-7): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	34.4	--	--	--	--
	Home children - at home	66	31.8	--	--	--	--
	Day care children - at home	62	37.1	--	--	--	--
	Day care children - at day care	20	35.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	6.3	--	--	--	--
	Home children - at home	65	7.7	--	--	--	--
	Day care children - at home	62	4.8	--	--	--	--
	Day care children - at day care	13	7.7	--	--	--	--
Soil (ng/g)	All children - at home	127	32.3	--	--	--	--
	Home children - at home	65	21.5	--	--	--	--
	Day care children - at home	62	43.5	--	--	--	--
	Day care children - at day care	12	50.0	101	190	30.2	1.55
Indoor Floor Dust (ng/g)	All children - at home	119	100.0	38,200	50,600	20,600	1.09
	Home children - at home	64	100.0	35,900	46,000	19,500	1.09
	Day care children - at home	55	100.0	40,800	55,900	22,000	1.09
	Day care children - at day care	20	100.0	66,100	67,000	43,700	0.980
Indoor Floor Dust (ng/m ²)	All children - at home	119	100.0	105,000	270,000	20,700	1.81
	Home children - at home	64	100.0	89,100	243,000	17,200	1.77
	Day care children - at home	55	100.0	123,000	299,000	25,700	1.85
	Day care children - at day care	20	100.0	575,000	902,000	194,000	1.69
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	96.4	88,100	106,000	37,100	1.51
	Home children - at home	10	100.0	68,600	107,000	27,600	1.40
	Day care children - at home	18	94.4	99,000	107,000	43,700	1.58
	Day care children - at day care	1	100.0	160,000	.	160,000	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	55.6	6,560	7,370	3,170	1.27
	Home children - at home	10	50.0	5,430	6,510	2,730	1.24
	Day care children - at home	8	62.5	7,970	8,560	3,830	1.38
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	8	100.0	49,300	51,800	22,400	1.55
	Home children - at home	5	100.0	42,400	44,900	20,800	1.49
	Day care children - at home	3	100.0	60,800	71,000	25,200	1.98
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	60.4	30,900	42,000	16,100	1.10
	Home children - at home	66	50.0	29,000	40,700	14,700	1.12
	Day care children - at home	30	83.3	34,900	45,100	19,700	1.04
	Day care children - at day care	31	48.4	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	55.7	13,300	28,200	6,490	1.06
	Home children - at home	66	59.1	12,500	15,100	7,180	1.04
	Day care children - at home	31	48.4	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	107	2.8	--	--	--	--
	Home children - at home	53	3.8	--	--	--	--
	Day care children - at home	54	1.9	--	--	--	--
	Day care children - at day care	18	5.6	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	116	2.6	--	--	--	--
	Home children - at home	60	3.3	--	--	--	--
	Day care children - at home	56	1.8	--	--	--	--
	Day care children - at day care	22	13.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-9b. Benzylbutylphthalate (85-68-7): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	<MDL	115	338	5,840
	Home Children - at home	66	<MDL	<MDL	<MDL	112	338	5,840
	Day care Children - at home	62	<MDL	<MDL	<MDL	117	255	928
	Day care Children - at day care	20	<MDL	<MDL	<MDL	104	252	289
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	112	815
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	123	635
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	815
	Day care Children - at day care	13	<MDL	<MDL	<MDL	<MDL	118	118
Soil (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	25.2	133	1,050
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	74.1	114
	Day care Children - at home	62	<MDL	<MDL	<MDL	37.6	197	1,050
	Day care Children - at day care	12	<MDL	<MDL	<MDL	124	671	671
Indoor Floor Dust (ng/g)	All Children - at home	119	1,320	8,550	17,300	45,500	144,000	280,000
	Home Children - at home	64	1,320	8,460	16,600	35,700	144,000	224,000
	Day care Children - at home	55	2,250	10,100	18,100	47,500	135,000	280,000
	Day care Children - at day care	20	6,260	20,700	57,600	82,600	212,000	310,000
Indoor Floor Dust (ng/m ²)	All Children - at home	119	218	6,850	18,600	72,600	727,000	1,950,000
	Home Children - at home	64	690	5,020	18,300	49,900	281,000	1,390,000
	Day care Children - at home	55	218	9,130	20,000	123,000	727,000	1,950,000
	Day care Children - at day care	20	2,300	70,300	137,000	727,000	3,020,000	3,370,000
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	17,700	26,400	134,000	334,000	351,000
	Home Children - at home	10	3,800	9,090	25,800	48,800	334,000	334,000
	Day care Children - at home	18	<MDL	20,500	45,500	157,000	351,000	351,000
	Day care Children - at day care	1	160,000	160,000	160,000	160,000	160,000	160,000
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	2,100	13,300	19,000	19,000
	Home Children - at home	10	<MDL	<MDL	<MDL	10,300	19,000	19,000
	Day care Children - at home	8	<MDL	<MDL	3,100	18,000	18,800	18,800
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	8	2,830	6,550	27,900	91,300	140,000	140,000
	Home Children - at home	5	2,830	10,200	16,300	90,600	91,900	91,900
	Day care Children - at home	3	2,890	2,890	39,600	140,000	140,000	140,000
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	12,100	38,500	114,000	223,000
	Home Children - at home	66	<MDL	<MDL	<MDL	42,300	105,000	223,000
	Day care Children - at home	30	<MDL	8,890	19,700	35,300	162,000	183,000
	Day care Children - at day care	31	<MDL	<MDL	<MDL	31,800	122,000	180,000
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	5,140	12,800	44,700	255,000
	Home Children - at home	66	<MDL	<MDL	6,980	16,000	44,700	83,400
	Day care Children - at home	31	<MDL	<MDL	<MDL	8,140	41,900	255,000
Solid Food (Children) (ng/g)	All Children - at home	107	<MDL	<MDL	<MDL	<MDL	<MDL	292
	Home Children - at home	53	<MDL	<MDL	<MDL	<MDL	<MDL	239
	Day care Children - at home	54	<MDL	<MDL	<MDL	<MDL	<MDL	292
	Day care Children - at day care	18	<MDL	<MDL	<MDL	<MDL	117	117
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	116	<MDL	<MDL	<MDL	<MDL	<MDL	217
	Home Children - at home	60	<MDL	<MDL	<MDL	<MDL	<MDL	217
	Day care Children - at home	56	<MDL	<MDL	<MDL	<MDL	<MDL	129
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	158	163
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-10a. Bisphenol-A (80-05-7): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	68.0	4.54	17.3	1.87	1.05
	Home children - at home	66	74.2	6.13	23.7	2.07	1.13
	Day care children - at home	62	61.3	2.85	4.17	1.68	0.963
	Day care children - at day care	20	45.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	30.7	--	--	--	--
	Home children - at home	65	33.8	--	--	--	--
	Day care children - at home	62	27.4	--	--	--	--
	Day care children - at day care	13	38.5	--	--	--	--
Soil (ng/g)	All children - at home	126	3.2	--	--	--	--
	Home children - at home	64	3.1	--	--	--	--
	Day care children - at home	62	3.2	--	--	--	--
	Day care children - at day care	12	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	119	25.2	--	--	--	--
	Home children - at home	65	18.5	--	--	--	--
	Day care children - at home	54	33.3	--	--	--	--
	Day care children - at day care	19	52.6	42.9	36.5	30.8	0.852
Indoor Floor Dust (ng/m ²)	All children - at home	119	25.2	--	--	--	--
	Home children - at home	65	18.5	--	--	--	--
	Day care children - at home	54	33.3	--	--	--	--
	Day care children - at day care	19	52.6	302	490	133	1.31
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	82.1	1,140	2,040	337	1.57
	Home children - at home	10	70.0	193	189	130	0.916
	Day care children - at home	18	88.9	1,660	2,400	572	1.63
	Day care children - at day care	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	88.9	481	632	275	1.04
	Home children - at home	10	90.0	546	739	303	1.10
	Day care children - at home	8	87.5	399	505	244	1.03
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	100.0	603	437	446	0.856
	Home children - at home	10	100.0	633	458	481	0.815
	Day care children - at home	8	100.0	565	437	406	0.952
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	93.8	11,000	25,100	5,010	1.34
	Home children - at home	66	92.4	12,800	29,700	5,580	1.38
	Day care children - at home	30	96.7	7,230	8,470	3,940	1.24
	Day care children - at day care	31	100.0	24,200	17,700	14,100	1.32
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	92.8	10,300	47,000	3,400	1.36
	Home children - at home	66	97.0	5,680	4,540	3,890	1.04
	Day care children - at home	31	83.9	20,000	82,900	2,560	1.87
Solid Food (Children) (ng/g)	All children - at home	129	89.1	11.1	26.0	4.22	1.29
	Home children - at home	66	89.4	6.72	7.72	3.74	1.14
	Day care children - at home	63	88.9	15.8	36.0	4.80	1.44
	Day care children - at day care	24	83.3	8.53	16.0	3.36	1.31
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	127	79.5	1.08	2.38	0.389	1.47
	Home children - at home	65	87.7	1.01	2.10	0.467	1.25
	Day care children - at home	62	71.0	1.15	2.66	0.321	1.66
	Day care children - at day care	24	79.2	2.41	3.18	0.757	1.93
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-10b. Bisphenol-A (80-05-7): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	1.82	3.20	11.1	193
	Home Children - at home	66	<MDL	<MDL	1.61	4.02	12.6	193
	Day care Children - at home	62	<MDL	<MDL	1.98	2.94	9.62	28.4
	Day care Children - at day care	20	<MDL	<MDL	<MDL	1.61	7.34	8.99
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	1.03	2.59	44.6
	Home Children - at home	65	<MDL	<MDL	<MDL	1.31	4.96	44.6
	Day care Children - at home	62	<MDL	<MDL	<MDL	0.870	2.32	4.12
	Day care Children - at day care	13	<MDL	<MDL	<MDL	1.48	51.5	51.5
Soil (ng/g)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	293
	Home Children - at home	64	<MDL	<MDL	<MDL	<MDL	<MDL	293
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	19.5
	Day care Children - at day care	12	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - at home	119	<MDL	<MDL	<MDL	35.9	236	707
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	236	707
	Day care Children - at home	54	<MDL	<MDL	<MDL	40.7	177	236
	Day care Children - at day care	19	<MDL	<MDL	30.8	61.2	156	156
Indoor Floor Dust (ng/m ²)	All Children - at home	119	<MDL	<MDL	<MDL	64.3	225	433
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	175	265
	Day care Children - at home	54	<MDL	<MDL	<MDL	64.3	357	433
	Day care Children - at day care	19	<MDL	<MDL	120	253	1,820	1,820
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	112	214	1,130	6,010	8,710
	Home Children - at home	10	<MDL	<MDL	117	281	592	592
	Day care Children - at home	18	<MDL	150	728	1,790	8,710	8,710
	Day care Children - at day care	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	158	255	401	2,490	2,490
	Home Children - at home	10	<MDL	165	277	434	2,490	2,490
	Day care Children - at home	8	<MDL	135	255	376	1,610	1,610
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	85.7	270	408	1,100	1,280	1,280
	Home Children - at home	10	121	270	387	1,100	1,280	1,280
	Day care Children - at home	8	85.7	258	437	901	1,240	1,240
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	2,770	6,940	11,200	28,000	241,000
	Home Children - at home	66	<MDL	3,070	7,770	11,700	28,000	241,000
	Day care Children - at home	30	<MDL	1,950	5,270	8,530	19,300	42,600
	Day care Children - at day care	31	755	4,150	27,600	37,900	53,600	57,400
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	1,910	4,200	7,840	16,400	466,000
	Home Children - at home	66	<MDL	2,110	4,530	8,300	12,700	26,100
	Day care Children - at home	31	<MDL	757	3,170	7,750	22,100	466,000
Solid Food (Children) (ng/g)	All Children - at home	129	<MDL	1.49	4.32	9.94	33.2	192
	Home Children - at home	66	<MDL	1.42	4.20	9.00	24.1	35.4
	Day care Children - at home	63	<MDL	1.50	4.64	11.1	52.2	192
	Day care Children - at day care	24	<MDL	1.16	3.63	7.17	42.0	71.4
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	127	<MDL	0.370	0.450	0.730	3.98	17.0
	Home Children - at home	65	<MDL	0.380	0.470	0.640	3.51	15.3
	Day care Children - at home	62	<MDL	<MDL	0.415	0.810	4.67	17.0
	Day care Children - at day care	24	<MDL	0.360	0.790	3.96	5.84	14.1
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-11a. *alpha*-Chlordane (5103-71-9): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	98.4	4.21	9.15	1.17	1.55
	Home children - <i>at home</i>	66	97.0	4.13	8.90	1.08	1.65
	Day care children - <i>at home</i>	62	100.0	4.29	9.48	1.27	1.44
	Day care children - <i>at day care</i>	20	100.0	2.71	4.79	0.837	1.50
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	50.4	0.223	0.456	0.117	0.899
	Home children - <i>at home</i>	65	40.0	--	--	--	--
	Day care children - <i>at home</i>	62	61.3	0.274	0.582	0.132	0.966
	Day care children - <i>at day care</i>	13	84.6	8.54	29.9	0.262	2.01
Soil (ng/g)	All children - <i>at home</i>	129	29.5	--	--	--	--
	Home children - <i>at home</i>	66	19.7	--	--	--	--
	Day care children - <i>at home</i>	63	39.7	--	--	--	--
	Day care children - <i>at day care</i>	13	46.2	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	95.0	97.0	260	27.2	1.45
	Home children - <i>at home</i>	66	92.4	88.2	142	32.4	1.44
	Day care children - <i>at home</i>	55	98.2	108	355	22.1	1.46
	Day care children - <i>at day care</i>	20	100.0	197	312	60.9	1.62
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	95.0	201	513	28.3	2.04
	Home children - <i>at home</i>	66	92.4	271	645	30.7	2.23
	Day care children - <i>at home</i>	55	98.2	117	264	25.7	1.78
	Day care children - <i>at day care</i>	20	100.0	1,670	2,580	270	2.19
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	64.3	91.0	352	16.6	1.41
	Home children - <i>at home</i>	10	60.0	24.4	22.0	15.0	1.10
	Day care children - <i>at home</i>	18	66.7	128	439	17.5	1.58
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	55.6	50.5	103	16.2	1.41
	Home children - <i>at home</i>	10	60.0	64.9	130	20.1	1.50
	Day care children - <i>at home</i>	8	50.0	32.5	58.0	12.3	1.32
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	44.4	--	--	--	--
	Home children - <i>at home</i>	10	40.0	--	--	--	--
	Day care children - <i>at home</i>	8	50.0	7.10	5.37	5.65	0.705
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	51.0	127	241	61.6	1.02
	Home children - <i>at home</i>	66	45.5	--	--	--	--
	Day care children - <i>at home</i>	30	63.3	146	251	72.5	1.06
	Day care children - <i>at day care</i>	31	64.5	89.8	134	55.8	0.836
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	64.9	90.7	210	35.8	1.15
	Home children - <i>at home</i>	66	60.6	97.7	239	34.6	1.19
	Day care children - <i>at home</i>	31	74.2	75.7	130	38.4	1.07
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	17.1	--	--	--	--
	Home children - <i>at home</i>	66	13.6	--	--	--	--
	Day care children - <i>at home</i>	63	20.6	--	--	--	--
	Day care children - <i>at day care</i>	24	12.5	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	4.8	--	--	--	--
	Home children - <i>at home</i>	64	4.7	--	--	--	--
	Day care children - <i>at home</i>	62	4.8	--	--	--	--
	Day care children - <i>at day care</i>	22	9.1	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-11b. *alpha*-Chlordane (5103-71-9): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	0.410	0.885	3.12	24.6	54.7
	Home Children - <i>at home</i>	66	<MDL	0.350	0.720	4.13	13.6	54.7
	Day care Children - <i>at home</i>	62	0.090	0.590	0.915	2.73	24.6	49.0
	Day care Children - <i>at day care</i>	20	0.140	0.255	0.510	2.63	15.7	17.7
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	0.080	0.170	1.19	3.74
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	0.140	1.10	1.36
	Day care Children - <i>at home</i>	62	<MDL	<MDL	0.100	0.180	1.47	3.74
	Day care Children - <i>at day care</i>	13	<MDL	0.100	0.150	0.360	108	108
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	0.710	16.2	2,670
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	3.33	2,670
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	1.58	22.7	46.2
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	0.740	11.9	11.9
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	8.78	22.0	69.0	401	2,010
	Home Children - <i>at home</i>	66	<MDL	11.3	24.9	91.8	401	749
	Day care Children - <i>at home</i>	55	<MDL	8.00	16.6	40.5	452	2,010
	Day care Children - <i>at day care</i>	20	4.61	26.1	43.0	253	987	1,080
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	5.34	25.9	115	1,040	3,090
	Home Children - <i>at home</i>	66	<MDL	4.52	34.4	177	2,030	3,090
	Day care Children - <i>at home</i>	55	<MDL	5.91	23.9	99.2	538	1,540
	Day care Children - <i>at day care</i>	20	10.9	36.8	187	3,090	6,530	6,630
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	10.8	46.1	111	1,880
	Home Children - <i>at home</i>	10	<MDL	<MDL	16.1	41.7	62.5	62.5
	Day care Children - <i>at home</i>	18	<MDL	<MDL	9.83	55.5	1,880	1,880
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	10.8	38.5	427	427
	Home Children - <i>at home</i>	10	<MDL	<MDL	19.5	38.5	427	427
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	29.8	172	172
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	9.82	173	173
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	9.82	173	173
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	10.2	17.3	17.3
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	38.5	111	592	1,560
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	87.7	414	1,560
	Day care Children - <i>at home</i>	30	<MDL	<MDL	70.2	114	610	1,260
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	47.7	79.3	335	700
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	28.0	61.0	404	1,580
	Home Children - <i>at home</i>	66	<MDL	<MDL	23.2	61.0	404	1,580
	Day care Children - <i>at home</i>	31	<MDL	<MDL	30.6	114	182	707
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	0.150	0.467
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.140	0.220
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	0.240	0.467
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	0.110	0.330
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.040	0.040
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-12a. gamma-Chlordane (5103-74-2): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	100.0	7.52	15.2	2.02	1.62
	Home children - <i>at home</i>	66	100.0	7.56	15.3	1.89	1.73
	Day care children - <i>at home</i>	62	100.0	7.48	15.2	2.17	1.50
	Day care children - <i>at day care</i>	20	100.0	6.34	13.0	1.49	1.62
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	61.4	0.404	1.17	0.153	1.08
	Home children - <i>at home</i>	65	52.3	0.284	0.583	0.130	1.00
	Day care children - <i>at home</i>	62	71.0	0.530	1.56	0.182	1.14
	Day care children - <i>at day care</i>	13	84.6	9.21	31.8	0.374	2.01
Soil (ng/g)	All children - <i>at home</i>	129	29.5	--	--	--	--
	Home children - <i>at home</i>	66	19.7	--	--	--	--
	Day care children - <i>at home</i>	63	39.7	--	--	--	--
	Day care children - <i>at day care</i>	13	46.2	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	96.7	133	285	39.4	1.49
	Home children - <i>at home</i>	65	95.4	132	197	47.1	1.48
	Day care children - <i>at home</i>	55	98.2	134	365	31.8	1.49
	Day care children - <i>at day care</i>	20	100.0	304	445	93.0	1.67
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	96.7	283	684	40.4	2.07
	Home children - <i>at home</i>	65	95.4	373	821	43.4	2.29
	Day care children - <i>at home</i>	55	98.2	176	460	37.1	1.81
	Day care children - <i>at day care</i>	20	100.0	2,750	4,710	412	2.21
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	67.9	104	340	21.7	1.54
	Home children - <i>at home</i>	10	60.0	44.8	49.2	20.6	1.42
	Day care children - <i>at home</i>	18	72.2	137	423	22.4	1.65
	Day care children - <i>at day care</i>	1	100.0	9.86	.	9.86	.
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	55.6	102	269	19.7	1.66
	Home children - <i>at home</i>	10	60.0	150	356	26.5	1.85
	Day care children - <i>at home</i>	8	50.0	40.7	77.0	13.6	1.41
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	44.4	--	--	--	--
	Home children - <i>at home</i>	10	40.0	--	--	--	--
	Day care children - <i>at home</i>	8	50.0	10.7	9.40	7.28	0.961
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	54.2	174	312	75.8	1.16
	Home children - <i>at home</i>	66	47.0	--	--	--	--
	Day care children - <i>at home</i>	30	70.0	198	334	92.3	1.15
	Day care children - <i>at day care</i>	31	64.5	130	180	73.2	0.990
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	67.0	122	235	45.0	1.29
	Home children - <i>at home</i>	66	63.6	131	266	43.5	1.34
	Day care children - <i>at home</i>	31	74.2	101	152	48.3	1.19
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	18.6	--	--	--	--
	Home children - <i>at home</i>	66	15.2	--	--	--	--
	Day care children - <i>at home</i>	63	22.2	--	--	--	--
	Day care children - <i>at day care</i>	24	12.5	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-12b. gamma-Chlordane (5103-74-2): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	0.090	0.680	1.51	6.97	40.5	92.1
	Home Children - <i>at home</i>	66	0.090	0.520	1.43	10.6	27.5	92.1
	Day care Children - <i>at home</i>	62	0.120	0.930	1.67	4.90	40.5	78.7
	Day care Children - <i>at day care</i>	20	0.210	0.475	0.785	3.99	42.6	47.7
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	0.120	0.250	1.78	10.9
	Home Children - <i>at home</i>	65	<MDL	<MDL	0.090	0.210	1.78	2.98
	Day care Children - <i>at home</i>	62	<MDL	<MDL	0.155	0.290	1.48	10.9
	Day care Children - <i>at day care</i>	13	<MDL	0.150	0.280	0.490	115	115
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	0.700	11.9	4,440
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	4.08	4,440
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	1.41	42.0	74.3
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	0.710	13.1	13.1
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	12.3	30.6	94.9	649	1,980
	Home Children - <i>at home</i>	65	<MDL	15.7	37.6	165	584	834
	Day care Children - <i>at home</i>	55	<MDL	11.1	21.2	69.5	921	1,980
	Day care Children - <i>at day care</i>	20	5.57	36.9	66.6	398	1,210	1,210
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	7.92	35.1	200	2,060	3,460
	Home Children - <i>at home</i>	65	<MDL	6.19	45.6	241	2,860	3,460
	Day care Children - <i>at home</i>	55	<MDL	9.95	31.5	131	1,020	3,140
	Day care Children - <i>at day care</i>	20	26.0	57.3	272	4,050	14,700	15,100
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	11.2	72.0	212	1,820
	Home Children - <i>at home</i>	10	<MDL	<MDL	21.4	97.7	124	124
	Day care Children - <i>at home</i>	18	<MDL	<MDL	10.2	70.3	1,820	1,820
	Day care Children - <i>at day care</i>	1	9.86	9.86	9.86	9.86	9.86	9.86
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	14.1	55.5	1,150	1,150
	Home Children - <i>at home</i>	10	<MDL	<MDL	20.5	69.7	1,150	1,150
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	34.2	227	227
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	17.8	341	341
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	17.8	341	341
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	19.7	25.2	25.2
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	57.5	151	899	1,720
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	158	441	1,720
	Day care Children - <i>at home</i>	30	<MDL	<MDL	76.6	145	899	1,640
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	63.9	127	511	823
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	36.1	119	754	1,370
	Home Children - <i>at home</i>	66	<MDL	<MDL	32.3	119	850	1,370
	Day care Children - <i>at home</i>	31	<MDL	<MDL	43.9	140	352	754
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	0.220	0.467
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.140	0.410
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	0.260	0.467
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	0.150	0.340
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-13a. Chlorpyrifos (2921-88-2): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	100.0	19.0	41.9	6.99	1.37
	Home children - at home	66	100.0	14.9	24.9	5.91	1.36
	Day care children - at home	62	100.0	23.3	54.4	8.35	1.36
	Day care children - at day care	20	100.0	8.17	8.87	3.86	1.34
Outdoor Air (ng/m ³)	All children - at home	127	83.5	1.06	4.21	0.311	1.29
	Home children - at home	65	78.5	0.576	1.06	0.237	1.21
	Day care children - at home	62	88.7	1.57	5.92	0.414	1.32
	Day care children - at day care	13	76.9	0.402	0.419	0.228	1.21
Soil (ng/g)	All children - at home	128	18.8	--	--	--	--
	Home children - at home	65	16.9	--	--	--	--
	Day care children - at home	63	20.6	--	--	--	--
	Day care children - at day care	13	7.7	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	121	100.0	413	1,430	137	1.31
	Home children - at home	66	100.0	307	527	131	1.27
	Day care children - at home	55	100.0	541	2,040	145	1.37
	Day care children - at day care	19	100.0	237	256	132	1.24
Indoor Floor Dust (ng/m ²)	All children - at home	121	100.0	1,430	6,310	143	1.99
	Home children - at home	66	100.0	1,310	5,740	124	2.08
	Day care children - at home	55	100.0	1,580	6,990	169	1.89
	Day care children - at day care	19	100.0	2,100	3,650	530	1.86
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	89.3	198	455	61.9	1.45
	Home children - at home	10	80.0	301	631	75.5	1.84
	Day care children - at home	18	94.4	140	329	55.4	1.23
	Day care children - at day care	1	100.0	134	.	134	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	88.9	265	395	78.5	1.76
	Home children - at home	10	80.0	257	320	75.6	1.99
	Day care children - at home	8	100.0	275	497	82.2	1.54
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	94.4	142	230	47.6	1.50
	Home children - at home	10	90.0	189	285	52.2	1.79
	Day care children - at home	8	100.0	83.7	128	42.4	1.14
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	80.2	528	1,090	195	1.36
	Home children - at home	66	80.3	467	944	174	1.32
	Day care children - at home	30	80.0	663	1,360	250	1.46
	Day care children - at day care	31	67.7	234	225	130	1.23
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	84.5	323	509	128	1.43
	Home children - at home	66	86.4	290	497	117	1.36
	Day care children - at home	31	80.6	394	533	155	1.58
Solid Food (Children) (ng/g)	All children - at home	129	65.1	0.567	1.82	0.204	1.23
	Home children - at home	66	71.2	0.678	2.46	0.211	1.21
	Day care children - at home	63	58.7	0.451	0.719	0.196	1.25
	Day care children - at day care	24	54.2	0.231	0.255	0.139	1.00
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	10.3	--	--	--	--
	Home children - at home	64	9.4	--	--	--	--
	Day care children - at home	62	11.3	--	--	--	--
	Day care children - at day care	22	13.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-13b. Chlorpyrifos (2921-88-2): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	0.310	2.50	6.21	17.9	70.7	391
	Home Children - at home	66	0.310	2.24	5.12	15.1	62.2	153
	Day care Children - at home	62	0.400	3.30	7.28	21.0	70.7	391
	Day care Children - at day care	20	0.580	1.10	2.99	16.0	25.3	29.4
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	0.110	0.270	0.640	4.29	45.9
	Home Children - at home	65	<MDL	0.090	0.180	0.510	3.38	5.43
	Day care Children - at home	62	<MDL	0.160	0.400	0.710	5.58	45.9
	Day care Children - at day care	13	<MDL	0.090	0.340	0.480	1.53	1.53
Soil (ng/g)	All Children - at home	128	<MDL	<MDL	<MDL	<MDL	16.7	1,170
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	16.7	1,170
	Day care Children - at home	63	<MDL	<MDL	<MDL	<MDL	4.24	230
	Day care Children - at day care	13	<MDL	<MDL	<MDL	<MDL	0.760	0.760
Indoor Floor Dust (ng/g)	All Children - at home	121	11.5	47.5	135	281	1,180	15,100
	Home Children - at home	66	13.9	46.8	105	279	1,120	3,500
	Day care Children - at home	55	11.5	55.7	139	304	1,500	15,100
	Day care Children - at day care	19	12.4	94.2	142	254	921	921
Indoor Floor Dust (ng/m ²)	All Children - at home	121	1.41	34.1	93.7	557	4,210	51,600
	Home Children - at home	66	1.41	30.0	88.9	629	3,870	45,800
	Day care Children - at home	55	3.02	37.1	127	557	4,910	51,600
	Day care Children - at day care	19	9.09	135	570	1,750	13,200	13,200
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	30.7	66.2	119	1,450	2,080
	Home Children - at home	10	<MDL	39.0	96.2	225	2,080	2,080
	Day care Children - at home	18	<MDL	23.2	60.9	101	1,450	1,450
	Day care Children - at day care	1	134	134	134	134	134	134
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	28.5	69.2	451	1,440	1,440
	Home Children - at home	10	<MDL	10.8	106	451	849	849
	Day care Children - at home	8	17.7	29.9	44.5	295	1,440	1,440
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	15.4	34.9	90.4	719	719
	Home Children - at home	10	<MDL	15.4	34.1	287	719	719
	Day care Children - at home	8	12.5	16.3	37.6	77.5	394	394
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	81.1	204	459	2,820	7,440
	Home Children - at home	66	<MDL	71.8	155	399	2,820	4,930
	Day care Children - at home	30	<MDL	99.999998	307	543	1,730	7,440
	Day care Children - at day care	31	<MDL	<MDL	174	361	725	773
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	49.5	137	302	1,440	2,500
	Home Children - at home	66	<MDL	49.5	112	250	1,390	2,500
	Day care Children - at home	31	<MDL	45.9	188	530	1,990	2,100
Solid Food (Children) (ng/g)	All Children - at home	129	<MDL	<MDL	0.190	0.390	2.09	19.7
	Home Children - at home	66	<MDL	<MDL	0.210	0.360	2.25	19.7
	Day care Children - at home	63	<MDL	<MDL	0.170	0.580	1.96	4.32
	Day care Children - at day care	24	<MDL	<MDL	0.100	0.350	0.850	0.950
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	0.060	1.71
	Home Children - at home	64	<MDL	<MDL	<MDL	<MDL	0.060	1.71
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	0.060	0.480
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	0.060	0.150
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-14a. Chrysene (218-01-9): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	60.9	0.220	0.292	0.137	0.882
	Home children - at home	66	56.1	0.247	0.351	0.144	0.945
	Day care children - at home	62	66.1	0.192	0.211	0.130	0.814
	Day care children - at day care	20	60.0	0.153	0.311	0.094	0.693
Outdoor Air (ng/m ³)	All children - at home	127	67.7	0.245	0.478	0.142	0.876
	Home children - at home	65	70.8	0.254	0.427	0.155	0.873
	Day care children - at home	62	64.5	0.235	0.530	0.130	0.878
	Day care children - at day care	13	84.6	0.163	0.168	0.116	0.794
Soil (ng/g)	All children - at home	128	75.0	43.3	181	2.64	2.00
	Home children - at home	65	76.9	20.3	98.9	2.24	1.72
	Day care children - at home	63	73.0	67.0	236	3.13	2.25
	Day care children - at day care	13	76.9	22.7	50.6	5.08	1.90
Indoor Floor Dust (ng/g)	All children - at home	118	100.0	545	1,630	190	1.18
	Home children - at home	63	100.0	330	586	178	1.03
	Day care children - at home	55	100.0	790	2,290	205	1.33
	Day care children - at day care	20	100.0	1,630	5,870	301	1.31
Indoor Floor Dust (ng/m ²)	All children - at home	118	100.0	1,040	4,100	205	1.59
	Home children - at home	63	100.0	482	774	179	1.57
	Day care children - at home	55	100.0	1,690	5,910	239	1.61
	Day care children - at day care	20	100.0	3,440	7,490	1,330	1.24
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	85.7	358	1,450	34.1	1.66
	Home children - at home	10	80.0	23.0	16.7	17.9	0.800
	Day care children - at home	18	88.9	544	1,800	48.9	1.91
	Day care children - at day care	1	100.0	52.7	.	52.7	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	50.0	10.7	11.2	8.10	0.678
	Home children - at home	10	50.0	12.4	14.3	8.68	0.792
	Day care children - at home	8	50.0	8.64	6.04	7.42	0.544
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	83.3	88.5	164	25.9	1.61
	Home children - at home	10	80.0	113	215	26.1	1.78
	Day care children - at home	8	87.5	58.0	65.1	25.8	1.48
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	43.8	--	--	--	--
	Home children - at home	66	42.4	--	--	--	--
	Day care children - at home	30	46.7	--	--	--	--
	Day care children - at day care	31	48.4	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	40.2	--	--	--	--
	Home children - at home	66	42.4	--	--	--	--
	Day care children - at home	31	35.5	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	128	35.2	--	--	--	--
	Home children - at home	66	42.4	--	--	--	--
	Day care children - at home	62	27.4	--	--	--	--
	Day care children - at day care	24	20.8	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	127	3.9	--	--	--	--
	Home children - at home	65	3.1	--	--	--	--
	Day care children - at home	62	4.8	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-14b. Chrysene (218-01-9): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	0.100	0.275	0.750	2.00
	Home Children - at home	66	<MDL	<MDL	0.105	0.290	0.960	2.00
	Day care Children - at home	62	<MDL	<MDL	0.100	0.230	0.730	1.09
	Day care Children - at day care	20	<MDL	<MDL	0.090	0.100	0.805	1.47
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	0.120	0.230	0.710	4.11
	Home Children - at home	65	<MDL	<MDL	0.140	0.240	0.710	3.25
	Day care Children - at home	62	<MDL	<MDL	0.105	0.220	0.530	4.11
	Day care Children - at day care	13	<MDL	0.080	0.090	0.120	0.610	0.610
Soil (ng/g)	All Children - at home	128	<MDL	<MDL	1.67	6.53	123	1,350
	Home Children - at home	65	<MDL	0.690	1.57	5.36	72.2	793
	Day care Children - at home	63	<MDL	<MDL	1.84	11.7	330	1,350
	Day care Children - at day care	13	<MDL	2.87	5.28	11.9	187	187
Indoor Floor Dust (ng/g)	All Children - at home	118	20.6	92.1	170	340	2,210	13,200
	Home Children - at home	63	20.6	94.1	180	295	836	3,810
	Day care Children - at home	55	32.0	83.6	161	379	4,500	13,200
	Day care Children - at day care	20	56.2	138	225	411	13,800	26,500
Indoor Floor Dust (ng/m ²)	All Children - at home	118	4.05	77.2	190	445	3,560	33,200
	Home Children - at home	63	4.05	77.2	186	462	2,420	3,660
	Day care Children - at home	55	28.2	76.4	192	445	11,200	33,200
	Day care Children - at day care	20	182	556	1,110	2,760	21,800	34,000
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	15.0	22.7	58.5	1,070	7,660
	Home Children - at home	10	<MDL	13.0	20.9	26.0	62.6	62.6
	Day care Children - at home	18	<MDL	17.1	36.7	99.0	7,660	7,660
	Day care Children - at day care	1	52.7	52.7	52.7	52.7	52.7	52.7
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	9.66	50.5	50.5
	Home Children - at home	10	<MDL	<MDL	<MDL	13.4	50.5	50.5
	Day care Children - at home	8	<MDL	<MDL	<MDL	9.24	22.7	22.7
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	8.73	18.5	124	673	673
	Home Children - at home	10	<MDL	10.0	17.4	74.7	673	673
	Day care Children - at home	8	<MDL	8.49	19.0	125	157	157
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	89.1	391	3,940
	Home Children - at home	66	<MDL	<MDL	<MDL	81.9	190	1,850
	Day care Children - at home	30	<MDL	<MDL	<MDL	125	457	3,940
	Day care Children - at day care	31	<MDL	<MDL	<MDL	92.9	5,070	7,180
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	34.6	142	347
	Home Children - at home	66	<MDL	<MDL	<MDL	34.3	247	347
	Day care Children - at home	31	<MDL	<MDL	<MDL	37.7	119	142
Solid Food (Children) (ng/g)	All Children - at home	128	<MDL	<MDL	<MDL	0.090	0.270	1.36
	Home Children - at home	66	<MDL	<MDL	<MDL	0.090	0.210	0.360
	Day care Children - at home	62	<MDL	<MDL	<MDL	0.090	0.467	1.36
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	0.130	0.130
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.050
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.050
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-15a. Cyfluthrin (68359-37-5): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	3.9	--	--	--	--
	Home children - at home	66	0.0	--	--	--	--
	Day care children - at home	62	8.1	--	--	--	--
	Day care children - at day care	20	10.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	0.0	--	--	--	--
	Home children - at home	65	0.0	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	13	0.0	--	--	--	--
Soil (ng/g)	All children - at home	129	11.6	--	--	--	--
	Home children - at home	66	7.6	--	--	--	--
	Day care children - at home	63	15.9	--	--	--	--
	Day care children - at day care	13	7.7	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	121	47.9	--	--	--	--
	Home children - at home	66	54.5	281	466	92.2	1.55
	Day care children - at home	55	40.0	--	--	--	--
	Day care children - at day care	19	42.1	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - at home	121	47.9	--	--	--	--
	Home children - at home	66	54.5	341	709	87.3	1.77
	Day care children - at home	55	40.0	--	--	--	--
	Day care children - at day care	19	42.1	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	7.1	--	--	--	--
	Home children - at home	10	0.0	--	--	--	--
	Day care children - at home	18	11.1	--	--	--	--
	Day care children - at day care	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	0.0	--	--	--	--
	Home children - at home	10	0.0	--	--	--	--
	Day care children - at home	8	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	77.8	1,100	1,030	492	1.69
	Home children - at home	10	80.0	1,340	1,200	616	1.75
	Day care children - at home	8	75.0	795	725	372	1.67
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	32.3	--	--	--	--
	Home children - at home	66	30.3	--	--	--	--
	Day care children - at home	30	36.7	--	--	--	--
	Day care children - at day care	31	19.4	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	14.4	--	--	--	--
	Home children - at home	66	18.2	--	--	--	--
	Day care children - at home	31	6.5	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	128	6.3	--	--	--	--
	Home children - at home	66	4.5	--	--	--	--
	Day care children - at home	62	8.1	--	--	--	--
	Day care children - at day care	24	4.2	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	122	0.0	--	--	--	--
	Home children - at home	63	0.0	--	--	--	--
	Day care children - at home	59	0.0	--	--	--	--
	Day care children - at day care	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-15b. Cyfluthrin (68359-37-5): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	<MDL	<MDL	<MDL	183
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	0.960	183
	Day care Children - at day care	20	<MDL	<MDL	<MDL	<MDL	1.60	1.74
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - at home	129	<MDL	<MDL	<MDL	<MDL	32.1	187
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	18.2	187
	Day care Children - at home	63	<MDL	<MDL	<MDL	<MDL	48.5	121
	Day care Children - at day care	13	<MDL	<MDL	<MDL	<MDL	42.2	42.2
Indoor Floor Dust (ng/g)	All Children - at home	121	<MDL	<MDL	<MDL	248	1,660	4,100
	Home Children - at home	66	<MDL	<MDL	70.7	412	1,080	2,370
	Day care Children - at home	55	<MDL	<MDL	<MDL	178	1,670	4,100
	Day care Children - at day care	19	<MDL	<MDL	<MDL	329	1,750	1,750
Indoor Floor Dust (ng/m ²)	All Children - at home	121	<MDL	<MDL	<MDL	399	1,610	21,400
	Home Children - at home	66	<MDL	<MDL	92.8	394	1,160	5,150
	Day care Children - at home	55	<MDL	<MDL	<MDL	439	2,900	21,400
	Day care Children - at day care	19	<MDL	<MDL	<MDL	3,100	7,800	7,800
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	<MDL	<MDL	<MDL	504	1,280
	Home Children - at home	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	18	<MDL	<MDL	<MDL	<MDL	1,280	1,280
	Day care Children - at day care	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	193	1,040	1,550	4,090	4,090
	Home Children - at home	10	<MDL	193	1,390	1,630	4,090	4,090
	Day care Children - at home	8	<MDL	<MDL	842	1,120	2,170	2,170
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	1,350	4,400	9,530
	Home Children - at home	66	<MDL	<MDL	<MDL	1,370	4,590	9,530
	Day care Children - at home	30	<MDL	<MDL	<MDL	1,110	2,590	2,940
	Day care Children - at day care	31	<MDL	<MDL	<MDL	<MDL	3,300	6,300
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	1,260	6,570
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	1,470	6,570
	Day care Children - at home	31	<MDL	<MDL	<MDL	<MDL	628	744
Solid Food (Children) (ng/g)	All Children - at home	128	<MDL	<MDL	<MDL	<MDL	0.900	4.65
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.940
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	1.34	4.65
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	5.31
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	122	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	59	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-16a. Diazinon (333-41-5): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	100.0	40.3	217	2.41	1.81
	Home children - at home	66	100.0	45.2	211	2.24	1.97
	Day care children - at home	62	100.0	35.1	225	2.59	1.63
	Day care children - at day care	20	100.0	11.1	24.4	2.47	1.78
Outdoor Air (ng/m ³)	All children - at home	127	50.4	0.642	3.88	0.133	1.12
	Home children - at home	65	46.2	--	--	--	--
	Day care children - at home	62	54.8	0.310	0.947	0.133	0.986
	Day care children - at day care	13	61.5	0.122	0.087	0.095	0.743
Soil (ng/g)	All children - at home	129	17.8	--	--	--	--
	Home children - at home	66	24.2	--	--	--	--
	Day care children - at home	63	11.1	--	--	--	--
	Day care children - at day care	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	121	95.9	282	1,380	24.4	1.62
	Home children - at home	66	95.5	359	1,570	28.0	1.75
	Day care children - at home	55	96.4	190	1,110	20.6	1.45
	Day care children - at day care	19	100.0	439	1,560	58.6	1.73
Indoor Floor Dust (ng/m ²)	All children - at home	121	95.9	964	6,380	25.4	2.17
	Home children - at home	66	95.5	1,630	8,610	26.6	2.29
	Day care children - at home	55	96.4	164	341	24.1	2.04
	Day care children - at day care	19	100.0	5,710	22,500	235	2.38
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	67.9	557	1,940	23.2	2.07
	Home children - at home	10	70.0	609	1,580	44.1	2.41
	Day care children - at home	18	66.7	528	2,150	16.3	1.83
	Day care children - at day care	1	100.0	32.9	.	32.9	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	61.1	625	2,080	27.0	2.18
	Home children - at home	10	60.0	240	629	27.9	2.00
	Day care children - at home	8	62.5	1,110	3,080	25.9	2.53
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	66.7	750	2,220	41.2	2.56
	Home children - at home	10	60.0	998	2,930	34.1	2.62
	Day care children - at home	8	75.0	441	852	52.3	2.62
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	45.8	--	--	--	--
	Home children - at home	66	43.9	--	--	--	--
	Day care children - at home	30	50.0	353	1,350	69.9	1.35
	Day care children - at day care	31	58.1	152	316	69.5	1.08
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	54.6	363	2,000	35.3	1.40
	Home children - at home	66	48.5	--	--	--	--
	Day care children - at home	31	67.7	440	2,130	44.1	1.41
Solid Food (Children) (ng/g)	All children - at home	128	21.9	--	--	--	--
	Home children - at home	65	21.5	--	--	--	--
	Day care children - at home	63	22.2	--	--	--	--
	Day care children - at day care	24	25.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.8	--	--	--	--
	Home children - at home	64	1.6	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-16b. Diazinon (333-41-5): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	0.140	0.645	2.02	4.66	63.7	1,780
	Home Children - at home	66	0.160	0.530	1.44	4.60	192	1,620
	Day care Children - at home	62	0.140	0.800	2.17	5.56	43.4	1,780
	Day care Children - at day care	20	0.170	0.825	2.27	6.62	70.2	106
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	0.090	0.230	1.10	42.8
	Home Children - at home	65	<MDL	<MDL	<MDL	0.170	1.68	42.8
	Day care Children - at home	62	<MDL	<MDL	0.090	0.270	0.770	7.37
	Day care Children - at day care	13	<MDL	<MDL	0.120	0.170	0.290	0.290
Soil (ng/g)	All Children - at home	129	<MDL	<MDL	<MDL	<MDL	4.24	5,470
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	7.60	5,470
	Day care Children - at home	63	<MDL	<MDL	<MDL	<MDL	2.54	8.05
	Day care Children - at day care	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - at home	121	<MDL	7.90	17.5	54.4	388	11,000
	Home Children - at home	66	<MDL	7.90	19.0	46.3	934	11,000
	Day care Children - at home	55	<MDL	7.69	14.0	55.3	184	8,280
	Day care Children - at day care	19	3.06	26.0	65.2	138	6,880	6,880
Indoor Floor Dust (ng/m ²)	All Children - at home	121	<MDL	5.94	16.3	106	1,230	56,300
	Home Children - at home	66	<MDL	6.08	15.1	98.6	1,450	56,300
	Day care Children - at home	55	<MDL	5.90	16.4	125	1,150	1,630
	Day care Children - at day care	19	1.58	32.4	177	1,540	98,600	98,600
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	<MDL	10.2	27.8	5,070	9,140
	Home Children - at home	10	<MDL	<MDL	18.4	174	5,070	5,070
	Day care Children - at home	18	<MDL	<MDL	9.31	21.2	9,140	9,140
	Day care Children - at day care	1	32.9	32.9	32.9	32.9	32.9	32.9
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	15.5	79.0	8,720	8,720
	Home Children - at home	10	<MDL	<MDL	19.2	87.2	2,020	2,020
	Day care Children - at home	8	<MDL	<MDL	12.7	48.0	8,720	8,720
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	<MDL	33.4	338	9,340	9,340
	Home Children - at home	10	<MDL	<MDL	33.4	98.7	9,340	9,340
	Day care Children - at home	8	<MDL	<MDL	134	369	2,510	2,510
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	106	843	15,500
	Home Children - at home	66	<MDL	<MDL	<MDL	64.5	843	15,500
	Day care Children - at home	30	<MDL	<MDL	<MDL	195	484	7,490
	Day care Children - at day care	31	<MDL	<MDL	64.5	142	508	1,740
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	20.9	56.7	548	15,900
	Home Children - at home	66	<MDL	<MDL	<MDL	46.9	548	15,900
	Day care Children - at home	31	<MDL	<MDL	37.2	80.2	249	11,900
Solid Food (Children) (ng/g)	All Children - at home	128	<MDL	<MDL	<MDL	<MDL	0.410	6.73
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	0.530	6.73
	Day care Children - at home	63	<MDL	<MDL	<MDL	<MDL	0.190	1.48
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	0.170	0.890
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.210
	Home Children - at home	64	<MDL	<MDL	<MDL	<MDL	<MDL	0.210
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-17a. Dibenzo[a,h]anthracene (53-70-3): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	5.5	--	--	--	--
	Home children - at home	66	4.5	--	--	--	--
	Day care children - at home	62	6.5	--	--	--	--
	Day care children - at day care	20	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	3.9	--	--	--	--
	Home children - at home	65	6.2	--	--	--	--
	Day care children - at home	62	1.6	--	--	--	--
	Day care children - at day care	13	0.0	--	--	--	--
Soil (ng/g)	All children - at home	129	52.7	9.50	35.7	1.09	1.61
	Home children - at home	66	48.5	--	--	--	--
	Day care children - at home	63	57.1	13.9	45.0	1.31	1.78
	Day care children - at day care	13	76.9	5.35	11.2	1.85	1.38
Indoor Floor Dust (ng/g)	All children - at home	118	94.9	100	213	44.6	1.15
	Home children - at home	63	93.7	74.5	117	44.0	1.00
	Day care children - at home	55	96.4	130	284	45.2	1.31
	Day care children - at day care	20	100.0	268	826	78.7	1.17
Indoor Floor Dust (ng/m ²)	All children - at home	118	94.9	206	806	48.1	1.61
	Home children - at home	63	93.7	115	162	44.3	1.60
	Day care children - at home	55	96.4	310	1,160	52.7	1.63
	Day care children - at day care	20	100.0	858	1,840	348	1.20
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	35.7	--	--	--	--
	Home children - at home	10	10.0	--	--	--	--
	Day care children - at home	18	50.0	132	450	14.1	1.66
	Day care children - at day care	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	5.6	--	--	--	--
	Home children - at home	10	10.0	--	--	--	--
	Day care children - at home	8	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	22.2	--	--	--	--
	Home children - at home	10	20.0	--	--	--	--
	Day care children - at home	8	25.0	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	7.3	--	--	--	--
	Home children - at home	66	7.6	--	--	--	--
	Day care children - at home	30	6.7	--	--	--	--
	Day care children - at day care	31	12.9	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	10.3	--	--	--	--
	Home children - at home	66	9.1	--	--	--	--
	Day care children - at home	31	12.9	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	128	0.0	--	--	--	--
	Home children - at home	66	0.0	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	127	0.0	--	--	--	--
	Home children - at home	65	0.0	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-17b. Dibenzo[a,h]anthracene (53-70-3): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	<MDL	<MDL	0.090	0.300
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.300
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	0.090	0.120
	Day care Children - at day care	20	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.180
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	0.120	0.180
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.100
	Day care Children - at day care	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - at home	129	<MDL	<MDL	0.610	1.78	26.1	244
	Home Children - at home	66	<MDL	<MDL	<MDL	1.38	20.3	187
	Day care Children - at home	63	<MDL	<MDL	0.700	2.94	116	244
	Day care Children - at day care	13	<MDL	0.900	1.53	3.13	41.8	41.8
Indoor Floor Dust (ng/g)	All Children - at home	118	<MDL	23.5	39.8	81.2	502	1,500
	Home Children - at home	63	<MDL	24.8	45.6	79.2	197	791
	Day care Children - at home	55	<MDL	20.3	34.0	91.7	962	1,500
	Day care Children - at day care	20	17.0	38.5	64.3	129	2,020	3,770
Indoor Floor Dust (ng/m ²)	All Children - at home	118	<MDL	17.3	46.2	130	598	8,260
	Home Children - at home	63	<MDL	21.5	46.2	130	476	840
	Day care Children - at home	55	<MDL	16.1	46.0	141	1,590	8,260
	Day care Children - at day care	20	55.5	149	288	719	5,310	8,360
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	<MDL	<MDL	13.0	235	1,920
	Home Children - at home	10	<MDL	<MDL	<MDL	<MDL	7.17	7.17
	Day care Children - at home	18	<MDL	<MDL	<MDL	19.2	1,920	1,920
	Day care Children - at day care	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	<MDL	7.24	7.24
	Home Children - at home	10	<MDL	<MDL	<MDL	<MDL	7.24	7.24
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	<MDL	30.1	30.1
	Home Children - at home	10	<MDL	<MDL	<MDL	<MDL	8.55	8.55
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	30.1	30.1
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	<MDL	90.0	582
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	90.0	536
	Day care Children - at home	30	<MDL	<MDL	<MDL	<MDL	67.9	582
	Day care Children - at day care	31	<MDL	<MDL	<MDL	<MDL	624	768
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	44.3	115
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	44.3	115
	Day care Children - at home	31	<MDL	<MDL	<MDL	<MDL	30.2	76.2
Solid Food (Children) (ng/g)	All Children - at home	128	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-18a. Di-*n*-butylphthalate (84-74-2): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	100.0	276	180	229	0.635
	Home children - <i>at home</i>	66	100.0	234	146	195	0.639
	Day care children - <i>at home</i>	62	100.0	321	201	271	0.590
	Day care children - <i>at day care</i>	20	100.0	576	623	397	0.840
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	36.2	--	--	--	--
	Home children - <i>at home</i>	65	26.2	--	--	--	--
	Day care children - <i>at home</i>	62	46.8	--	--	--	--
	Day care children - <i>at day care</i>	13	69.2	41.7	60.3	19.5	1.20
Soil (ng/g)	All children - <i>at home</i>	128	33.6	--	--	--	--
	Home children - <i>at home</i>	65	26.2	--	--	--	--
	Day care children - <i>at home</i>	63	41.3	--	--	--	--
	Day care children - <i>at day care</i>	13	61.5	78.6	140	22.5	1.62
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	119	100.0	8,960	8,960	6,400	0.789
	Home children - <i>at home</i>	64	100.0	9,390	9,700	6,900	0.726
	Day care children - <i>at home</i>	55	100.0	8,460	8,090	5,860	0.854
	Day care children - <i>at day care</i>	20	100.0	15,200	8,330	12,800	0.664
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	119	100.0	21,500	51,000	6,430	1.48
	Home children - <i>at home</i>	64	100.0	19,500	46,200	6,090	1.52
	Day care children - <i>at home</i>	55	100.0	23,800	56,400	6,830	1.45
	Day care children - <i>at day care</i>	20	100.0	112,000	130,000	56,600	1.41
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	100.0	7,130	9,680	4,420	0.940
	Home children - <i>at home</i>	10	100.0	3,950	2,820	3,080	0.775
	Day care children - <i>at home</i>	18	100.0	8,900	11,600	5,410	0.982
	Day care children - <i>at day care</i>	1	100.0	18,100	.	18,100	.
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	72.2	5,590	7,860	2,330	1.53
	Home children - <i>at home</i>	10	70.0	4,360	4,890	2,040	1.51
	Day care children - <i>at home</i>	8	75.0	7,130	10,700	2,760	1.64
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	7	100.0	10,700	12,900	6,200	1.09
	Home children - <i>at home</i>	4	100.0	15,500	16,200	8,540	1.35
	Day care children - <i>at home</i>	3	100.0	4,470	2,110	4,050	0.574
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	81.3	17,400	24,000	9,260	1.14
	Home children - <i>at home</i>	66	72.7	14,900	21,600	7,520	1.18
	Day care children - <i>at home</i>	30	100.0	23,100	28,100	14,700	0.920
	Day care children - <i>at day care</i>	31	90.3	30,300	55,500	12,200	1.28
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	84.5	31,100	61,600	8,290	1.63
	Home children - <i>at home</i>	66	84.8	25,400	64,000	6,520	1.49
	Day care children - <i>at home</i>	31	83.9	43,400	55,200	13,800	1.80
Solid Food (Children) (ng/g)	All children - <i>at home</i>	110	31.8	--	--	--	--
	Home children - <i>at home</i>	55	27.3	--	--	--	--
	Day care children - <i>at home</i>	55	36.4	--	--	--	--
	Day care children - <i>at day care</i>	18	33.3	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	117	28.2	--	--	--	--
	Home children - <i>at home</i>	61	31.1	--	--	--	--
	Day care children - <i>at home</i>	56	25.0	--	--	--	--
	Day care children - <i>at day care</i>	22	40.9	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-18b. Di-*n*-butylphthalate (84-74-2): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	18.7	155	234	355	627	988
	Home Children - <i>at home</i>	66	18.7	137	207	291	448	928
	Day care Children - <i>at home</i>	62	75.9	199	264	384	740	988
	Day care Children - <i>at day care</i>	20	127	199	380	648	2,220	2,720
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	30.8	79.7	122
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	13.6	52.7	96.6
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	44.6	86.5	122
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	14.8	30.4	197	197
Soil (ng/g)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	11.1	93.7	277
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	7.92	32.0	249
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	28.8	111	277
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	12.8	74.6	499	499
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	119	989	3,820	5,620	9,980	27,400	57,800
	Home Children - <i>at home</i>	64	2,130	4,110	6,040	10,000	30,900	57,800
	Day care Children - <i>at home</i>	55	989	3,160	5,220	9,390	24,700	41,300
	Day care Children - <i>at day care</i>	20	1,840	9,040	13,700	18,900	32,400	35,400
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	119	203	2,640	5,430	15,700	90,700	336,000
	Home Children - <i>at home</i>	64	203	2,070	6,050	20,600	63,200	329,000
	Day care Children - <i>at home</i>	55	404	2,800	5,240	14,100	119,000	336,000
	Day care Children - <i>at day care</i>	20	1,210	26,400	65,700	151,000	451,000	507,000
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	857	2,390	4,950	7,460	25,700	49,400
	Home Children - <i>at home</i>	10	910	1,820	3,390	5,240	9,620	9,620
	Day care Children - <i>at home</i>	18	857	3,220	5,170	8,340	49,400	49,400
	Day care Children - <i>at day care</i>	1	18,100	18,100	18,100	18,100	18,100	18,100
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	3,380	6,480	32,600	32,600
	Home Children - <i>at home</i>	10	<MDL	<MDL	3,360	6,420	16,400	16,400
	Day care Children - <i>at home</i>	8	<MDL	<MDL	3,410	7,530	32,600	32,600
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	7	2,110	2,630	5,130	19,900	36,500	36,500
	Home Children - <i>at home</i>	4	2,630	2,700	11,400	28,200	36,500	36,500
	Day care Children - <i>at home</i>	3	2,110	2,110	5,130	6,170	6,170	6,170
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	3,990	10,400	18,500	63,800	142,000
	Home Children - <i>at home</i>	66	<MDL	<MDL	9,220	16,600	51,000	142,000
	Day care Children - <i>at home</i>	30	3,250	7,180	15,100	23,200	81,500	138,000
	Day care Children - <i>at day care</i>	31	<MDL	5,810	11,600	20,600	221,000	227,000
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	3,160	6,750	17,200	162,000	410,000
	Home Children - <i>at home</i>	66	<MDL	2,910	5,870	11,500	162,000	410,000
	Day care Children - <i>at home</i>	31	<MDL	4,300	14,800	100,000	155,000	170,000
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	110	<MDL	<MDL	<MDL	112	741	2,300
	Home Children - <i>at home</i>	55	<MDL	<MDL	<MDL	95.7	741	1,190
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	156	871	2,300
	Day care Children - <i>at day care</i>	18	<MDL	<MDL	<MDL	69.9	508	508
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	117	<MDL	<MDL	<MDL	37.3	128	187
	Home Children - <i>at home</i>	61	<MDL	<MDL	<MDL	37.3	128	187
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	125	168
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	41.2	81.7	114
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-19a. Dicamba (1918-00-9): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	0.8	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	20	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	126	7.9	--	--	--	--
	Home children - <i>at home</i>	65	10.8	--	--	--	--
	Day care children - <i>at home</i>	61	4.9	--	--	--	--
	Day care children - <i>at day care</i>	13	7.7	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	127	5.5	--	--	--	--
	Home children - <i>at home</i>	65	6.2	--	--	--	--
	Day care children - <i>at home</i>	62	4.8	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	23.1	--	--	--	--
	Home children - <i>at home</i>	66	27.3	--	--	--	--
	Day care children - <i>at home</i>	55	18.2	--	--	--	--
	Day care children - <i>at day care</i>	20	5.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	23.1	--	--	--	--
	Home children - <i>at home</i>	66	27.3	--	--	--	--
	Day care children - <i>at home</i>	55	18.2	--	--	--	--
	Day care children - <i>at day care</i>	20	5.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>	13	0.0	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	98	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	32	0.0	--	--	--	--
	Day care children - <i>at day care</i>	32	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	98	1.0	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	32	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	16.3	--	--	--	--
	Home children - <i>at home</i>	66	18.2	--	--	--	--
	Day care children - <i>at home</i>	63	14.3	--	--	--	--
	Day care children - <i>at day care</i>	24	4.2	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>	128	13.3	--	--	--	--
	Home children - <i>at home</i>	66	13.6	--	--	--	--
	Day care children - <i>at home</i>	62	12.9	--	--	--	--
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	125	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	61	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>	120	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	56	0.0	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-19b. Dicamba (1918-00-9): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	<MDL	0.480
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.480
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	0.430	0.760
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.430	0.720
	Day care Children - <i>at home</i>	61	<MDL	<MDL	<MDL	<MDL	<MDL	0.760
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.210	0.210
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.400	26.1
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.400	26.1
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	1.79
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	70.7	159
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	19.9	70.7	159
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	70.7	141
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	23.6
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	84.2	400
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	14.5	84.8	255
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	84.2	400
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	43.1
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	98	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	32	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	32	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	98	<MDL	<MDL	<MDL	<MDL	<MDL	47.7
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	47.7
	Day care Children - <i>at home</i>	32	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	0.880	1.67
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	1.09	1.43
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	0.520	1.67
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	<MDL	0.330
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	0.700	2.03
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.610	2.03
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.770	1.22
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	61	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-20a. *p,p'*-DDE (72-55-9): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	33.6	--	--	--	--
	Home children - <i>at home</i>	66	30.3	--	--	--	--
	Day care children - <i>at home</i>	62	37.1	--	--	--	--
	Day care children - <i>at day care</i>	20	15.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	0.0	--	--	--	--
	Home children - <i>at home</i>	65	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	13	7.7	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	14.7	--	--	--	--
	Home children - <i>at home</i>	66	9.1	--	--	--	--
	Day care children - <i>at home</i>	63	20.6	--	--	--	--
	Day care children - <i>at day care</i>	13	15.4	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	39.7	--	--	--	--
	Home children - <i>at home</i>	66	39.4	--	--	--	--
	Day care children - <i>at home</i>	55	40.0	--	--	--	--
	Day care children - <i>at day care</i>	20	50.0	11.2	17.6	4.51	1.38
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	39.7	--	--	--	--
	Home children - <i>at home</i>	66	39.4	--	--	--	--
	Day care children - <i>at home</i>	55	40.0	--	--	--	--
	Day care children - <i>at day care</i>	20	50.0	71.3	120	20.0	1.72
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	17.9	--	--	--	--
	Home children - <i>at home</i>	10	20.0	--	--	--	--
	Day care children - <i>at home</i>	18	16.7	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	11.1	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	27.8	--	--	--	--
	Home children - <i>at home</i>	10	30.0	--	--	--	--
	Day care children - <i>at home</i>	8	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	4.2	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	30	10.0	--	--	--	--
	Day care children - <i>at day care</i>	31	3.2	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	3.1	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	31	6.5	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	58.9	0.315	0.410	0.175	1.07
	Home children - <i>at home</i>	66	65.2	0.324	0.351	0.190	1.06
	Day care children - <i>at home</i>	63	52.4	0.305	0.467	0.160	1.08
	Day care children - <i>at day care</i>	24	54.2	0.385	0.571	0.176	1.24
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	21.4	--	--	--	--
	Home children - <i>at home</i>	64	17.2	--	--	--	--
	Day care children - <i>at home</i>	62	25.8	--	--	--	--
	Day care children - <i>at day care</i>	22	18.2	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-20b. *p,p'*-DDE (72-55-9): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	0.120	0.490	2.88
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.100	0.280	0.970
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.200	0.540	2.88
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	0.160	0.210
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.070	0.070
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	2.82	208
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.640	3.10
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	8.89	208
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	4.32	4.32
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	9.14	53.0	203
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	9.14	53.0	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	10.2	68.7	203
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	16.4	52.7	75.7
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	12.8	195	350
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	11.9	195	350
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	18.2	216	336
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	90.2	379	465
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	43.3	48.8
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	43.3	43.3
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	48.8	48.8
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	59.5	59.5
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	59.5	59.5
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	7.02	133	133
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	7.59	133	133
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	22.9	22.9
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	280
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	40.4
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	100	280
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	112
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	71.9
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	67.0
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	67.2	71.9
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	0.160	0.410	0.950	2.83
	Home Children - <i>at home</i>	66	<MDL	<MDL	0.185	0.480	0.950	1.86
	Day care Children - <i>at home</i>	63	<MDL	<MDL	0.160	0.410	0.870	2.83
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	0.155	0.505	1.67	2.42
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	0.060	0.250
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	0.050	0.080
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.030	0.060	0.250
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.050	0.100
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-21a. *p,p'*-DDT (50-29-3): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	36.7	--	--	--	--
	Home children - <i>at home</i>	66	36.4	--	--	--	--
	Day care children - <i>at home</i>	62	37.1	--	--	--	--
	Day care children - <i>at day care</i>	20	20.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	11.8	--	--	--	--
	Home children - <i>at home</i>	65	15.4	--	--	--	--
	Day care children - <i>at home</i>	62	8.1	--	--	--	--
	Day care children - <i>at day care</i>	13	15.4	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	20.2	--	--	--	--
	Home children - <i>at home</i>	66	12.1	--	--	--	--
	Day care children - <i>at home</i>	63	28.6	--	--	--	--
	Day care children - <i>at day care</i>	13	15.4	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	38.8	--	--	--	--
	Home children - <i>at home</i>	66	36.4	--	--	--	--
	Day care children - <i>at home</i>	55	41.8	--	--	--	--
	Day care children - <i>at day care</i>	20	30.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	38.8	--	--	--	--
	Home children - <i>at home</i>	66	36.4	--	--	--	--
	Day care children - <i>at home</i>	55	41.8	--	--	--	--
	Day care children - <i>at day care</i>	20	30.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	17.9	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	18	22.2	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	16.7	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	8	25.0	--	--	--	--
	Day care children - <i>at day care</i>			--	--	--	--
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	27.8	--	--	--	--
	Home children - <i>at home</i>	10	40.0	--	--	--	--
	Day care children - <i>at home</i>	8	12.5	--	--	--	--
	Day care children - <i>at day care</i>			--	--	--	--
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	8.3	--	--	--	--
	Home children - <i>at home</i>	66	7.6	--	--	--	--
	Day care children - <i>at home</i>	30	10.0	--	--	--	--
	Day care children - <i>at day care</i>	31	3.2	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	6.2	--	--	--	--
	Home children - <i>at home</i>	66	4.5	--	--	--	--
	Day care children - <i>at home</i>	31	9.7	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	3.9	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	63	6.3	--	--	--	--
	Day care children - <i>at day care</i>	24	4.2	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	2.4	--	--	--	--
	Home children - <i>at home</i>	64	3.1	--	--	--	--
	Day care children - <i>at home</i>	62	1.6	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-21b. *p,p'*-DDT (50-29-3): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	0.270	3.28	90.2
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.260	3.28	90.2
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.270	2.70	22.7
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	3.04	5.85
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.320	2.16
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.420	2.16
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.230	1.30
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.340	0.340
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	13.3	544
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	3.15	8.51
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	1.21	56.2	544
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	7.78	7.78
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	34.1	208	4,080
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	29.5	276	707
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	37.5	158	4,080
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	34.5	426	657
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	47.1	1,000	10,500
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	26.2	1,000	3,580
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	70.8	1,030	10,500
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	210	4,320	6,950
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	636	1,860
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	636	636
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	1,860	1,860
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	249	249
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	89.8	89.8
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	249	249
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	111	5,650	5,650
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	141	5,650	5,650
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	815	815
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	723	7,380
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	239	809
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	5,660	7,380
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	4,610
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	1,510	3,560
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	1,600
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	1,830	3,560
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	2.52
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	0.330	2.52
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	<MDL	1.31
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.100
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	0.070
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.100
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-22a. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	46.1	--	--	--	--
	Home children - at home	66	37.9	--	--	--	--
	Day care children - at home	62	54.8	1.06	1.29	0.481	1.33
	Day care children - at day care	20	60.0	1.58	1.99	0.574	1.58
Outdoor Air (ng/m ³)	All children - at home	126	19.0	--	--	--	--
	Home children - at home	65	18.5	--	--	--	--
	Day care children - at home	61	19.7	--	--	--	--
	Day care children - at day care	13	46.2	--	--	--	--
Soil (ng/g)	All children - at home	126	19.0	--	--	--	--
	Home children - at home	65	16.9	--	--	--	--
	Day care children - at home	61	21.3	--	--	--	--
	Day care children - at day care	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	120	65.8	214	744	30.4	2.01
	Home children - at home	66	83.3	280	933	57.3	1.74
	Day care children - at home	54	44.4	--	--	--	--
	Day care children - at day care	20	75.0	28.3	24.6	15.5	1.37
Indoor Floor Dust (ng/m ²)	All children - at home	120	65.8	227	789	31.7	1.93
	Home children - at home	66	83.3	317	992	54.3	1.81
	Day care children - at home	54	44.4	--	--	--	--
	Day care children - at day care	20	75.0	205	329	68.5	1.61
Hard Floor Surface Wipes (ng/m ²)	All children - at home	13	7.7	--	--	--	--
	Home children - at home						
	Day care children - at home	13	7.7	--	--	--	--
	Day care children - at day care	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home						
	Home children - at home						
	Day care children - at home						
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home						
	Home children - at home						
	Day care children - at home						
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	98	9.2	--	--	--	--
	Home children - at home	66	7.6	--	--	--	--
	Day care children - at home	32	12.5	--	--	--	--
	Day care children - at day care	32	3.1	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	98	7.1	--	--	--	--
	Home children - at home	66	4.5	--	--	--	--
	Day care children - at home	32	12.5	--	--	--	--
	Day care children - at day care						
Solid Food (Children) (ng/g)	All children - at home	129	55.8	0.629	0.727	0.393	0.932
	Home children - at home	66	47.0	--	--	--	--
	Day care children - at home	63	65.1	0.632	0.678	0.415	0.900
	Day care children - at day care	24	37.5	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home	128	50.8	0.678	0.808	0.387	1.02
	Home children - at home	66	50.0	0.643	0.805	0.379	0.974
	Day care children - at home	62	51.6	0.716	0.815	0.396	1.07
	Day care children - at day care						
Liquid Food (Children) (ng/mL)	All children - at home	125	1.6	--	--	--	--
	Home children - at home	64	1.6	--	--	--	--
	Day care children - at home	61	1.6	--	--	--	--
	Day care children - at day care	23	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home	120	4.2	--	--	--	--
	Home children - at home	64	3.1	--	--	--	--
	Day care children - at home	56	5.4	--	--	--	--
	Day care children - at day care						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-22b. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	<MDL	<MDL	1.00	3.03	5.88
	Home Children - at home	66	<MDL	<MDL	<MDL	0.800	1.71	3.69
	Day care Children - at home	62	<MDL	<MDL	0.460	1.48	3.64	5.88
	Day care Children - at day care	20	<MDL	<MDL	0.325	2.46	6.17	6.50
Outdoor Air (ng/m ³)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	0.760	2.26
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	0.840	1.74
	Day care Children - at home	61	<MDL	<MDL	<MDL	<MDL	0.510	2.26
	Day care Children - at day care	13	<MDL	<MDL	<MDL	0.350	0.660	0.660
Soil (ng/g)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	3.28	30.5
	Home Children - at home	65	<MDL	<MDL	<MDL	<MDL	1.81	30.5
	Day care Children - at home	61	<MDL	<MDL	<MDL	<MDL	3.55	15.4
	Day care Children - at day care	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - at home	120	<MDL	<MDL	32.3	123	820	7,390
	Home Children - at home	66	<MDL	22.2	47.5	155	863	7,390
	Day care Children - at home	54	<MDL	<MDL	<MDL	70.7	698	2,460
	Day care Children - at day care	20	<MDL	<MDL	23.0	41.1	77.5	93.7
Indoor Floor Dust (ng/m ²)	All Children - at home	120	<MDL	<MDL	36.1	94.3	548	5,570
	Home Children - at home	66	<MDL	16.8	67.3	176	599	5,570
	Day care Children - at home	54	<MDL	<MDL	<MDL	52.7	496	2,910
	Day care Children - at day care	20	<MDL	<MDL	56.0	178	988	1,330
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	<MDL	61.9	61.9
	Home Children - at home	0						
	Day care Children - at home	13	<MDL	<MDL	<MDL	<MDL	61.9	61.9
	Day care Children - at day care	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	0						
	Home Children - at home	0						
	Day care Children - at home	0						
	Day care Children - at day care	0						
Dermal Wipe (Children) (ng/m ²)	All Children - at home	98	<MDL	<MDL	<MDL	<MDL	187	438
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	184	438
	Day care Children - at home	32	<MDL	<MDL	<MDL	<MDL	187	306
	Day care Children - at day care	32	<MDL	<MDL	<MDL	<MDL	<MDL	208
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	98	<MDL	<MDL	<MDL	<MDL	80.8	217
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	<MDL	217
	Day care Children - at home	32	<MDL	<MDL	<MDL	<MDL	80.8	144
Solid Food (Children) (ng/g)	All Children - at home	129	<MDL	<MDL	0.350	0.840	2.12	4.36
	Home Children - at home	66	<MDL	<MDL	<MDL	0.920	1.83	4.36
	Day care Children - at home	63	<MDL	<MDL	0.430	0.780	2.12	3.47
	Day care Children - at day care	24	<MDL	<MDL	<MDL	0.575	1.55	2.17
Solid Food (Adults) (ng/g)	All Children - at home	128	<MDL	<MDL	0.265	0.890	2.53	4.00
	Home Children - at home	66	<MDL	<MDL	<MDL	0.820	2.33	4.00
	Day care Children - at home	62	<MDL	<MDL	0.280	1.05	2.53	3.00
Liquid Food (Children) (ng/mL)	All Children - at home	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.600
	Home Children - at home	64	<MDL	<MDL	<MDL	<MDL	<MDL	0.210
	Day care Children - at home	61	<MDL	<MDL	<MDL	<MDL	<MDL	0.600
	Day care Children - at day care	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home	120	<MDL	<MDL	<MDL	<MDL	<MDL	0.400
	Home Children - at home	64	<MDL	<MDL	<MDL	<MDL	<MDL	0.300
	Day care Children - at home	56	<MDL	<MDL	<MDL	<MDL	0.210	0.400

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-23a. Dieldrin (60-57-1): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	41.4	--	--	--	--
	Home children - at home	66	40.9	--	--	--	--
	Day care children - at home	62	41.9	--	--	--	--
	Day care children - at day care	20	30.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	12.6	--	--	--	--
	Home children - at home	65	13.8	--	--	--	--
	Day care children - at home	62	11.3	--	--	--	--
	Day care children - at day care	13	23.1	--	--	--	--
Soil (ng/g)	All children - at home	129	14.0	--	--	--	--
	Home children - at home	66	10.6	--	--	--	--
	Day care children - at home	63	17.5	--	--	--	--
	Day care children - at day care	13	7.7	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	121	43.0	--	--	--	--
	Home children - at home	66	47.0	--	--	--	--
	Day care children - at home	55	38.2	--	--	--	--
	Day care children - at day care	19	57.9	161	390	20.0	2.44
Indoor Floor Dust (ng/m ²)	All children - at home	121	43.0	--	--	--	--
	Home children - at home	66	47.0	--	--	--	--
	Day care children - at home	55	38.2	--	--	--	--
	Day care children - at day care	19	57.9	878	2,420	80.2	2.60
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	28.6	--	--	--	--
	Home children - at home	10	20.0	--	--	--	--
	Day care children - at home	18	33.3	--	--	--	--
	Day care children - at day care	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	16.7	--	--	--	--
	Home children - at home	10	10.0	--	--	--	--
	Day care children - at home	8	25.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	22.2	--	--	--	--
	Home children - at home	10	30.0	--	--	--	--
	Day care children - at home	8	12.5	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	4.2	--	--	--	--
	Home children - at home	66	6.1	--	--	--	--
	Day care children - at home	30	0.0	--	--	--	--
	Day care children - at day care	31	3.2	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	6.2	--	--	--	--
	Home children - at home	66	7.6	--	--	--	--
	Day care children - at home	31	3.2	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	129	2.3	--	--	--	--
	Home children - at home	66	1.5	--	--	--	--
	Day care children - at home	63	3.2	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	64	0.0	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-23b. Dieldrin (60-57-1): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	1.08	7.47	56.3
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.720	4.39	8.04
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	1.77	7.73	56.3
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	1.72	4.81	4.93
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.400	1.60
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.300	0.610
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.420	1.60
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.500	0.500
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	9.78	321
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	3.49	141
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	28.1	321
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	2.49	2.49
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	55.0	158	473
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	55.0	95.5	203
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	55.9	229	473
	Day care Children - <i>at day care</i>	19	<MDL	<MDL	20.3	147	1,730	1,730
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	47.2	492	1,900
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	31.6	512	1,060
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	65.9	492	1,900
	Day care Children - <i>at day care</i>	19	<MDL	<MDL	128	635	10,700	10,700
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	35.4	200	813
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	200	200
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	50.0	813	813
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	580	580
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	531	531
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	580	580
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	229	229
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	71.7	194	194
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	229	229
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	2,100
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	600	2,100
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	2,240
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	960	12,000
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	960	12,000
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	2,130
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	1.58
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.430
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	1.58
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-24a. Endrin (72-20-8): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	33.6	--	--	--	--
	Home children - at home	66	36.4	--	--	--	--
	Day care children - at home	62	30.6	--	--	--	--
	Day care children - at day care	20	35.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	39.4	--	--	--	--
	Home children - at home	65	43.1	--	--	--	--
	Day care children - at home	62	35.5	--	--	--	--
	Day care children - at day care	13	53.8	0.304	0.330	0.159	1.25
Soil (ng/g)	All children - at home	129	3.9	--	--	--	--
	Home children - at home	66	4.5	--	--	--	--
	Day care children - at home	63	3.2	--	--	--	--
	Day care children - at day care	13	7.7	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	121	19.0	--	--	--	--
	Home children - at home	66	22.7	--	--	--	--
	Day care children - at home	55	14.5	--	--	--	--
	Day care children - at day care	20	15.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - at home	121	19.0	--	--	--	--
	Home children - at home	66	22.7	--	--	--	--
	Day care children - at home	55	14.5	--	--	--	--
	Day care children - at day care	20	15.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	14.3	--	--	--	--
	Home children - at home	10	20.0	--	--	--	--
	Day care children - at home	18	11.1	--	--	--	--
	Day care children - at day care	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	27.8	--	--	--	--
	Home children - at home	10	10.0	--	--	--	--
	Day care children - at home	8	50.0	40.4	45.7	18.4	1.45
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	11.1	--	--	--	--
	Home children - at home	10	20.0	--	--	--	--
	Day care children - at home	8	0.0	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	3.1	--	--	--	--
	Home children - at home	66	4.5	--	--	--	--
	Day care children - at home	30	0.0	--	--	--	--
	Day care children - at day care	31	3.2	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	1.0	--	--	--	--
	Home children - at home	66	1.5	--	--	--	--
	Day care children - at home	31	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	129	0.8	--	--	--	--
	Home children - at home	66	1.5	--	--	--	--
	Day care children - at home	63	0.0	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	64	0.0	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-24b. Endrin (72-20-8): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	0.465	1.59	15.1
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.430	1.13	15.1
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.500	1.59	2.58
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	0.305	1.22	1.64
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	0.460	0.950	1.49
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	0.510	1.02	1.49
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.430	0.680	1.05
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	0.170	0.400	1.04	1.04
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	5.44
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	5.44
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	4.06
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	3.03	3.03
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	118	317
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	239	317
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	64.4	204
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	111	159
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	109	2,700
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	129	2,700
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	109	803
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	259	338
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	342	448
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	448	448
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	342	342
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	44.5	254	254
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	254	254
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	64.3	131	131
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	223	223
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	223	223
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	1,200
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	1,200
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	434
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	151
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	151
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	0.467
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.380
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-25a. Heptachlor (76-44-8): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	92.2	29.3	66.5	7.34	1.89
	Home children - at home	66	92.4	30.2	73.0	6.76	1.92
	Day care children - at home	62	91.9	28.5	59.4	8.02	1.86
	Day care children - at day care	20	100.0	39.4	87.0	8.87	1.52
Outdoor Air (ng/m ³)	All children - at home	127	60.6	1.22	4.15	0.282	1.50
	Home children - at home	65	56.9	1.39	5.03	0.261	1.57
	Day care children - at home	62	64.5	1.04	3.00	0.305	1.43
	Day care children - at day care	13	69.2	5.31	15.0	0.530	2.17
Soil (ng/g)	All children - at home	129	3.1	--	--	--	--
	Home children - at home	66	3.0	--	--	--	--
	Day care children - at home	63	3.2	--	--	--	--
	Day care children - at day care	13	23.1	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	120	40.8	--	--	--	--
	Home children - at home	65	41.5	--	--	--	--
	Day care children - at home	55	40.0	--	--	--	--
	Day care children - at day care	20	55.0	192	322	19.9	2.61
Indoor Floor Dust (ng/m ²)	All children - at home	120	40.8	--	--	--	--
	Home children - at home	65	41.5	--	--	--	--
	Day care children - at home	55	40.0	--	--	--	--
	Day care children - at day care	20	55.0	1,680	3,540	88.0	3.11
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	39.3	--	--	--	--
	Home children - at home	10	30.0	--	--	--	--
	Day care children - at home	18	44.4	--	--	--	--
	Day care children - at day care	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	33.3	--	--	--	--
	Home children - at home	10	40.0	--	--	--	--
	Day care children - at home	8	25.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	27.8	--	--	--	--
	Home children - at home	10	40.0	--	--	--	--
	Day care children - at home	8	12.5	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	21.9	--	--	--	--
	Home children - at home	66	22.7	--	--	--	--
	Day care children - at home	30	20.0	--	--	--	--
	Day care children - at day care	31	22.6	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	17.5	--	--	--	--
	Home children - at home	66	18.2	--	--	--	--
	Day care children - at home	31	16.1	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	129	14.0	--	--	--	--
	Home children - at home	66	19.7	--	--	--	--
	Day care children - at home	63	7.9	--	--	--	--
	Day care children - at day care	24	12.5	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	64	0.0	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-25b. Heptachlor (76-44-8): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	128	<MDL	3.96	6.80	21.4	124	465
	Home Children - at home	66	<MDL	3.35	5.60	27.0	124	465
	Day care Children - at home	62	<MDL	4.63	8.00	19.1	120	379
	Day care Children - at day care	20	1.40	3.38	5.40	10.8	284	287
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	0.290	0.750	4.68	39.3
	Home Children - at home	65	<MDL	<MDL	0.230	0.580	4.79	39.3
	Day care Children - at home	62	<MDL	<MDL	0.395	0.940	2.00	20.4
	Day care Children - at day care	13	<MDL	<MDL	0.540	1.43	54.8	54.8
Soil (ng/g)	All Children - at home	129	<MDL	<MDL	<MDL	<MDL	<MDL	86.5
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	<MDL	86.5
	Day care Children - at home	63	<MDL	<MDL	<MDL	<MDL	<MDL	5.16
	Day care Children - at day care	13	<MDL	<MDL	<MDL	<MDL	2.03	2.03
Indoor Floor Dust (ng/g)	All Children - at home	120	<MDL	<MDL	<MDL	68.2	552	1,610
	Home Children - at home	65	<MDL	<MDL	<MDL	65.7	476	1,430
	Day care Children - at home	55	<MDL	<MDL	<MDL	73.3	627	1,610
	Day care Children - at day care	20	<MDL	<MDL	19.4	256	942	1,040
Indoor Floor Dust (ng/m ²)	All Children - at home	120	<MDL	<MDL	<MDL	94.0	1,340	2,860
	Home Children - at home	65	<MDL	<MDL	<MDL	122	1,900	2,630
	Day care Children - at home	55	<MDL	<MDL	<MDL	54.4	782	2,860
	Day care Children - at day care	20	<MDL	<MDL	88.5	1,700	11,700	12,200
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	28	<MDL	<MDL	<MDL	55.0	124	142
	Home Children - at home	10	<MDL	<MDL	<MDL	77.3	142	142
	Day care Children - at home	18	<MDL	<MDL	<MDL	40.4	102	102
	Day care Children - at day care	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	27.2	1,010	1,010
	Home Children - at home	10	<MDL	<MDL	<MDL	69.1	1,010	1,010
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	85.5	85.5
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	18	<MDL	<MDL	<MDL	12.1	283	283
	Home Children - at home	10	<MDL	<MDL	<MDL	74.1	283	283
	Day care Children - at home	8	<MDL	<MDL	<MDL	<MDL	12.1	12.1
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	<MDL	<MDL	397	1,540
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	360	1,540
	Day care Children - at home	30	<MDL	<MDL	<MDL	<MDL	727	984
	Day care Children - at day care	31	<MDL	<MDL	<MDL	<MDL	508	527
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	396	2,020
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	219	918
	Day care Children - at home	31	<MDL	<MDL	<MDL	<MDL	533	2,020
Solid Food (Children) (ng/g)	All Children - at home	129	<MDL	<MDL	<MDL	<MDL	0.730	1.53
	Home Children - at home	66	<MDL	<MDL	<MDL	<MDL	0.770	1.25
	Day care Children - at home	63	<MDL	<MDL	<MDL	<MDL	0.450	1.53
	Day care Children - at day care	24	<MDL	<MDL	<MDL	<MDL	0.510	0.690
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-26a. Indeno[1,2,3-cd]pyrene (193-39-5): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	52.3	0.200	0.233	0.127	0.883
	Home children - at home	66	50.0	0.201	0.253	0.124	0.883
	Day care children - at home	62	54.8	0.198	0.213	0.130	0.890
	Day care children - at day care	20	40.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	56.7	0.205	0.258	0.131	0.880
	Home children - at home	65	58.5	0.248	0.318	0.151	0.941
	Day care children - at home	62	54.8	0.160	0.165	0.112	0.792
	Day care children - at day care	13	69.2	0.142	0.201	0.088	0.876
Soil (ng/g)	All children - at home	128	70.3	36.4	143	2.14	1.99
	Home children - at home	65	72.3	19.8	102	1.90	1.73
	Day care children - at home	63	68.3	53.5	176	2.41	2.23
	Day care children - at day care	13	76.9	19.7	49.1	4.02	1.81
Indoor Floor Dust (ng/g)	All children - at home	118	100.0	412	1,060	183	1.07
	Home children - at home	63	100.0	310	471	190	0.924
	Day care children - at home	55	100.0	528	1,460	175	1.22
	Day care children - at day care	20	100.0	1,090	3,360	301	1.22
Indoor Floor Dust (ng/m ²)	All children - at home	118	100.0	855	3,910	197	1.54
	Home children - at home	63	100.0	449	606	192	1.53
	Day care children - at home	55	100.0	1,320	5,690	204	1.56
	Day care children - at day care	20	100.0	3,570	7,850	1,330	1.28
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	82.1	323	1,350	24.9	1.68
	Home children - at home	10	60.0	12.5	12.1	9.39	0.741
	Day care children - at home	18	94.4	495	1,670	42.8	1.82
	Day care children - at day care	1	100.0	12.3	.	12.3	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	22.2	--	--	--	--
	Home children - at home	10	20.0	--	--	--	--
	Day care children - at home	8	25.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	18	66.7	38.0	51.3	13.9	1.49
	Home children - at home	10	60.0	31.0	49.8	11.1	1.46
	Day care children - at home	8	75.0	46.7	55.2	18.4	1.58
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	28.1	--	--	--	--
	Home children - at home	66	25.8	--	--	--	--
	Day care children - at home	30	33.3	--	--	--	--
	Day care children - at day care	31	45.2	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	20.6	--	--	--	--
	Home children - at home	66	15.2	--	--	--	--
	Day care children - at home	31	32.3	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	128	0.8	--	--	--	--
	Home children - at home	66	0.0	--	--	--	--
	Day care children - at home	62	1.6	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	127	0.0	--	--	--	--
	Home children - at home	65	0.0	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-26b. Indeno[1,2,3-*cd*]pyrene (193-39-5): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	0.090	0.230	0.760	1.21
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.200	0.860	1.12
	Day care Children - <i>at home</i>	62	<MDL	<MDL	0.105	0.260	0.620	1.21
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	0.105	0.220	0.230
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	0.100	0.270	0.610	1.89
	Home Children - <i>at home</i>	65	<MDL	<MDL	0.130	0.300	0.750	1.89
	Day care Children - <i>at home</i>	62	<MDL	<MDL	0.090	0.180	0.470	0.850
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	0.064	0.130	0.770	0.770
Soil (ng/g)	All Children - <i>at home</i>	128	<MDL	<MDL	1.23	5.26	116	924
	Home Children - <i>at home</i>	65	<MDL	<MDL	1.25	4.06	52.7	820
	Day care Children - <i>at home</i>	63	<MDL	<MDL	1.15	10.2	441	924
	Day care Children - <i>at day care</i>	13	<MDL	2.12	4.40	6.93	181	181
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	118	27.0	81.2	163	322	1,540	10,000
	Home Children - <i>at home</i>	63	27.6	90.5	207	322	657	3,260
	Day care Children - <i>at home</i>	55	27.0	77.7	134	324	2,190	10,000
	Day care Children - <i>at day care</i>	20	66.8	140	234	520	8,230	15,300
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	118	2.80	75.7	200	514	2,140	41,300
	Home Children - <i>at home</i>	63	2.80	87.5	240	534	1,770	2,900
	Day care Children - <i>at home</i>	55	22.2	61.7	155	443	3,440	41,300
	Day care Children - <i>at day care</i>	20	193	513	1,140	2,890	22,700	35,600
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	9.27	16.6	45.7	1,020	7,130
	Home Children - <i>at home</i>	10	<MDL	<MDL	7.89	15.7	44.1	44.1
	Day care Children - <i>at home</i>	18	<MDL	14.1	27.1	59.6	7,130	7,130
	Day care Children - <i>at day care</i>	1	12.3	12.3	12.3	12.3	12.3	12.3
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	57.9	57.9
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	57.9	57.9
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	22.7	22.7
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	8.78	82.4	154	154
	Home Children - <i>at home</i>	10	<MDL	<MDL	7.02	29.9	154	154
	Day care Children - <i>at home</i>	8	<MDL	<MDL	12.6	104	127	127
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	50.1	186	2,920
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	40.4	160	1,810
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	86.8	299	2,920
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	78.9	3,100	4,220
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	83.3	521
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	83.3	521
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	21.6	83.0	114
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	<MDL	0.467
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.467
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-27a. Lindane (58-89-9): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	12.5	--	--	--	--
	Home children - <i>at home</i>	66	10.6	--	--	--	--
	Day care children - <i>at home</i>	62	14.5	--	--	--	--
	Day care children - <i>at day care</i>	20	20.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	11.8	--	--	--	--
	Home children - <i>at home</i>	65	6.2	--	--	--	--
	Day care children - <i>at home</i>	62	17.7	--	--	--	--
	Day care children - <i>at day care</i>	13	7.7	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	6.2	--	--	--	--
	Home children - <i>at home</i>	66	3.0	--	--	--	--
	Day care children - <i>at home</i>	63	9.5	--	--	--	--
	Day care children - <i>at day care</i>	13	7.7	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	14.0	--	--	--	--
	Home children - <i>at home</i>	66	13.6	--	--	--	--
	Day care children - <i>at home</i>	55	14.5	--	--	--	--
	Day care children - <i>at day care</i>	20	20.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	14.0	--	--	--	--
	Home children - <i>at home</i>	66	13.6	--	--	--	--
	Day care children - <i>at home</i>	55	14.5	--	--	--	--
	Day care children - <i>at day care</i>	20	20.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	10.7	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	18	16.7	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	27.8	--	--	--	--
	Home children - <i>at home</i>	10	30.0	--	--	--	--
	Day care children - <i>at home</i>	8	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	2.1	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	30	3.3	--	--	--	--
	Day care children - <i>at day care</i>	31	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	5.2	--	--	--	--
	Home children - <i>at home</i>	66	4.5	--	--	--	--
	Day care children - <i>at home</i>	31	6.5	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	7.8	--	--	--	--
	Home children - <i>at home</i>	66	7.6	--	--	--	--
	Day care children - <i>at home</i>	63	7.9	--	--	--	--
	Day care children - <i>at day care</i>	24	4.2	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	2.4	--	--	--	--
	Home children - <i>at home</i>	64	1.6	--	--	--	--
	Day care children - <i>at home</i>	62	3.2	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-27b. Lindane (58-89-9): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	7.73	18.5
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	7.44	17.3
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	9.97	18.5
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	7.05	8.97
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.420	6.15
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.230	6.15
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.440	2.01
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.110	0.110
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	0.679	60.2
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	4.51
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	0.700	60.2
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.930	0.930
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	51.2	000
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	48.3	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	148	000
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	51.4	53.6
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	43.3	418
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	34.7	270
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	118	418
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	304	347
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	19.9	24.1
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	24.1	24.1
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	575	2,300	2,300
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	575	2,250	2,250
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	2,300	2,300
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	67.4
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	67.4
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	39.6
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	40.5	625
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	75.5
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	521	625
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	0.840	12.4
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.390	12.4
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	0.840	1.87
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	<MDL	0.520
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.200
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	0.200
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.100
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-28a. Nonylphenol (104-40-5): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	10.9	--	--	--	--
	Home children - at home	66	12.1	--	--	--	--
	Day care children - at home	62	9.7	--	--	--	--
	Day care children - at day care	20	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	2.4	--	--	--	--
	Home children - at home	65	3.1	--	--	--	--
	Day care children - at home	62	1.6	--	--	--	--
	Day care children - at day care	13	0.0	--	--	--	--
Soil (ng/g)	All children - at home	97	2.1	--	--	--	--
	Home children - at home	50	4.0	--	--	--	--
	Day care children - at home	47	0.0	--	--	--	--
	Day care children - at day care	7	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	53	3.8	--	--	--	--
	Home children - at home	32	6.3	--	--	--	--
	Day care children - at home	21	0.0	--	--	--	--
	Day care children - at day care	14	7.1	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - at home	53	3.8	--	--	--	--
	Home children - at home	32	6.3	--	--	--	--
	Day care children - at home	21	0.0	--	--	--	--
	Day care children - at day care	14	7.1	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	0.0	--	--	--	--
	Home children - at home	10	0.0	--	--	--	--
	Day care children - at home	18	0.0	--	--	--	--
	Day care children - at day care	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	0.0	--	--	--	--
	Home children - at home	10	0.0	--	--	--	--
	Day care children - at home	8	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	16	6.3	--	--	--	--
	Home children - at home	8	12.5	--	--	--	--
	Day care children - at home	8	0.0	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	0.0	--	--	--	--
	Home children - at home	66	0.0	--	--	--	--
	Day care children - at home	30	0.0	--	--	--	--
	Day care children - at day care	31	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	3.1	--	--	--	--
	Home children - at home	66	0.0	--	--	--	--
	Day care children - at home	31	9.7	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	129	3.1	--	--	--	--
	Home children - at home	66	3.0	--	--	--	--
	Day care children - at home	63	3.2	--	--	--	--
	Day care children - at day care	23	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	127	4.7	--	--	--	--
	Home children - at home	65	6.2	--	--	--	--
	Day care children - at home	62	3.2	--	--	--	--
	Day care children - at day care	24	4.2	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-28b. Nonylphenol (104-40-5): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	2.29	102
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	2.15	102
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	2.29	6.55
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	21.3
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	<MDL	2.19
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	21.3
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	11.0
	Home Children - <i>at home</i>	50	<MDL	<MDL	<MDL	<MDL	<MDL	11.0
	Day care Children - <i>at home</i>	47	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	7	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	53	<MDL	<MDL	<MDL	<MDL	<MDL	70.7
	Home Children - <i>at home</i>	32	<MDL	<MDL	<MDL	<MDL	70.7	70.7
	Day care Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	14	<MDL	<MDL	<MDL	<MDL	35.4	35.4
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	53	<MDL	<MDL	<MDL	<MDL	<MDL	197
	Home Children - <i>at home</i>	32	<MDL	<MDL	<MDL	<MDL	92.6	167
	Day care Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	14	<MDL	<MDL	<MDL	<MDL	280	280
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	16	<MDL	<MDL	<MDL	<MDL	208	208
	Home Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	208	208
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	1,710
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	185	1,710
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	4.65
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	1.21
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	4.65
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	1.45
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.390	1.03
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	1.45
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	<MDL	0.340
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-29a. Pentachloronitrobenzene (82-68-8): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	13.3	--	--	--	--
	Home children - <i>at home</i>	66	9.1	--	--	--	--
	Day care children - <i>at home</i>	62	17.7	--	--	--	--
	Day care children - <i>at day care</i>	20	15.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	2.4	--	--	--	--
	Home children - <i>at home</i>	65	3.1	--	--	--	--
	Day care children - <i>at home</i>	62	1.6	--	--	--	--
	Day care children - <i>at day care</i>	13	7.7	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	2.5	--	--	--	--
	Home children - <i>at home</i>	66	4.5	--	--	--	--
	Day care children - <i>at home</i>	55	0.0	--	--	--	--
	Day care children - <i>at day care</i>	20	5.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	2.5	--	--	--	--
	Home children - <i>at home</i>	66	4.5	--	--	--	--
	Day care children - <i>at home</i>	55	0.0	--	--	--	--
	Day care children - <i>at day care</i>	20	5.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	18	0.0	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	30	0.0	--	--	--	--
	Day care children - <i>at day care</i>	31	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	1.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	31	3.2	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	0.8	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	1.6	--	--	--	--
	Day care children - <i>at day care</i>	24	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	1.6	--	--	--	--
	Home children - <i>at home</i>	64	1.6	--	--	--	--
	Day care children - <i>at home</i>	62	1.6	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-29b. Pentachloronitrobenzene (82-68-8): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	1.18	13.6
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.420	13.6
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	1.49	12.5
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	0.900	1.17
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.410
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.410
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.150
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.530	0.530
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	<MDL	70.7
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	7.86
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	<MDL	44.4
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	44.4
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	42.7
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	252
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	252
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	0.710
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.710
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.060
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	0.060
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.030
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-30a. Pentachlorophenol (87-86-5): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	96.9	3.10	4.67	1.46	1.26
	Home children - at home	66	95.5	3.05	5.35	1.24	1.33
	Day care children - at home	62	98.4	3.15	3.86	1.75	1.17
	Day care children - at day care	20	100.0	5.12	13.9	1.71	1.17
Outdoor Air (ng/m ³)	All children - at home	126	94.4	1.54	4.66	0.798	1.05
	Home children - at home	65	90.8	1.22	1.27	0.724	1.16
	Day care children - at home	61	98.4	1.88	6.58	0.883	0.920
	Day care children - at day care	13	100.0	0.960	0.607	0.815	0.586
Soil (ng/g)	All children - at home	126	32.5	--	--	--	--
	Home children - at home	65	24.6	--	--	--	--
	Day care children - at home	61	41.0	--	--	--	--
	Day care children - at day care	13	23.1	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	121	91.7	172	419	65.5	1.42
	Home children - at home	66	92.4	169	237	80.8	1.24
	Day care children - at home	55	90.9	176	567	51.0	1.58
	Day care children - at day care	20	100.0	104	134	63.3	1.08
Indoor Floor Dust (ng/m ²)	All children - at home	121	91.7	452	1,140	68.2	2.04
	Home children - at home	66	92.4	524	1,200	76.5	2.08
	Day care children - at home	55	90.9	366	1,070	59.4	1.99
	Day care children - at day care	20	100.0	1,100	2,130	281	1.94
Hard Floor Surface Wipes (ng/m ²)	All children - at home	13	46.2	--	--	--	--
	Home children - at home						
	Day care children - at home	13	46.2	--	--	--	--
	Day care children - at day care	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home						
	Home children - at home						
	Day care children - at home						
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home						
	Home children - at home						
	Day care children - at home						
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	98	35.7	--	--	--	--
	Home children - at home	66	34.8	--	--	--	--
	Day care children - at home	32	37.5	--	--	--	--
	Day care children - at day care	32	18.8	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	98	30.6	--	--	--	--
	Home children - at home	66	24.2	--	--	--	--
	Day care children - at home	32	43.8	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	129	6.2	--	--	--	--
	Home children - at home	66	7.6	--	--	--	--
	Day care children - at home	63	4.8	--	--	--	--
	Day care children - at day care	24	12.5	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home	128	8.6	--	--	--	--
	Home children - at home	66	4.5	--	--	--	--
	Day care children - at home	62	12.9	--	--	--	--
Liquid Food (Children) (ng/mL)	All children - at home	125	2.4	--	--	--	--
	Home children - at home	64	1.6	--	--	--	--
	Day care children - at home	61	3.3	--	--	--	--
	Day care children - at day care	23	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home	119	0.8	--	--	--	--
	Home children - at home	64	1.6	--	--	--	--
	Day care children - at home	55	0.0	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-30b. Pentachlorophenol (87-86-5): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	0.595	1.50	3.29	12.0	27.5
	Home Children - <i>at home</i>	66	<MDL	0.490	1.19	2.39	14.6	27.5
	Day care Children - <i>at home</i>	62	<MDL	0.730	1.96	3.80	9.71	23.7
	Day care Children - <i>at day care</i>	20	0.500	0.770	1.16	3.75	36.3	63.3
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	126	<MDL	0.500	0.910	1.45	3.26	52.1
	Home Children - <i>at home</i>	65	<MDL	0.400	0.910	1.59	3.35	7.71
	Day care Children - <i>at home</i>	61	<MDL	0.510	0.910	1.40	2.16	52.1
	Day care Children - <i>at day care</i>	13	0.350	0.470	0.770	1.10	2.25	2.25
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	0.690	2.88	9.14
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	2.14	9.14
	Day care Children - <i>at home</i>	61	<MDL	<MDL	<MDL	0.980	3.17	6.86
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	2.25	2.25
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	29.4	59.8	177	492	4,220
	Home Children - <i>at home</i>	66	<MDL	35.9	68.6	202	730	1,220
	Day care Children - <i>at home</i>	55	<MDL	20.9	54.4	150	471	4,220
	Day care Children - <i>at day care</i>	20	3.38	32.4	81.3	122	407	632
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	15.9	73.1	270	2,150	7,460
	Home Children - <i>at home</i>	66	<MDL	15.9	81.6	291	3,540	6,590
	Day care Children - <i>at home</i>	55	<MDL	13.9	69.1	218	1,990	7,460
	Day care Children - <i>at day care</i>	20	2.35	114	427	901	6,740	9,060
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	64.0	156	156
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>	13	<MDL	<MDL	<MDL	64.0	156	156
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	98	<MDL	<MDL	<MDL	172	495	712
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	145	516	712
	Day care Children - <i>at home</i>	32	<MDL	<MDL	<MDL	200	419	440
	Day care Children - <i>at day care</i>	32	<MDL	<MDL	<MDL	<MDL	344	436
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	98	<MDL	<MDL	<MDL	49.4	155	273
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	123	261
	Day care Children - <i>at home</i>	32	<MDL	<MDL	<MDL	79.9	158	273
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	0.270	1.07
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.300	0.580
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	1.07
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	0.770	1.17
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	0.380	1.16
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.660
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.440	1.16
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.250
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	0.220
	Day care Children - <i>at home</i>	61	<MDL	<MDL	<MDL	<MDL	<MDL	0.250
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>	119	<MDL	<MDL	<MDL	<MDL	<MDL	0.520
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	0.520
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-31a. *cis*-Permethrin (61949-76-6): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	66.4	2.13	5.15	0.463	1.76
	Home children - <i>at home</i>	66	59.1	1.37	2.54	0.361	1.70
	Day care children - <i>at home</i>	62	74.2	2.94	6.87	0.603	1.81
	Day care children - <i>at day care</i>	20	55.0	0.506	0.779	0.199	1.35
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	15.7	--	--	--	--
	Home children - <i>at home</i>	65	7.7	--	--	--	--
	Day care children - <i>at home</i>	62	24.2	--	--	--	--
	Day care children - <i>at day care</i>	13	38.5	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	22.5	--	--	--	--
	Home children - <i>at home</i>	66	25.8	--	--	--	--
	Day care children - <i>at home</i>	63	19.0	--	--	--	--
	Day care children - <i>at day care</i>	13	7.7	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	100.0	6,080	29,400	995	1.53
	Home children - <i>at home</i>	66	100.0	3,880	9,780	1,030	1.52
	Day care children - <i>at home</i>	55	100.0	8,710	42,300	959	1.56
	Day care children - <i>at day care</i>	20	100.0	3,500	6,760	1,140	1.46
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	100.0	9,750	30,200	1,040	2.18
	Home children - <i>at home</i>	66	100.0	9,630	25,300	972	2.31
	Day care children - <i>at home</i>	55	100.0	9,900	35,500	1,120	2.03
	Day care children - <i>at day care</i>	20	100.0	54,400	196,000	5,070	2.12
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	92.9	1,610	2,630	353	2.06
	Home children - <i>at home</i>	10	90.0	1,930	2,810	460	2.31
	Day care children - <i>at home</i>	18	94.4	1,440	2,590	305	1.97
	Day care children - <i>at day care</i>	1	100.0	938	.	938	.
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	83.3	30,500	117,000	443	3.19
	Home children - <i>at home</i>	10	80.0	52,300	158,000	486	3.66
	Day care children - <i>at home</i>	8	87.5	3,100	5,080	395	2.72
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	83.3	1,640	3,190	196	2.56
	Home children - <i>at home</i>	10	90.0	1,560	2,710	292	2.38
	Day care children - <i>at home</i>	8	75.0	1,740	3,910	118	2.84
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	86.5	9,210	65,400	712	1.90
	Home children - <i>at home</i>	66	83.3	2,540	6,640	526	1.85
	Day care children - <i>at home</i>	30	93.3	23,900	116,000	1,390	1.86
	Day care children - <i>at day care</i>	31	93.5	1,660	3,850	665	1.37
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	73.2	11,400	104,000	200	2.12
	Home children - <i>at home</i>	66	72.7	698	1,540	157	1.87
	Day care children - <i>at home</i>	31	74.2	34,100	184,000	333	2.54
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	45.7	--	--	--	--
	Home children - <i>at home</i>	66	47.0	--	--	--	--
	Day care children - <i>at home</i>	63	44.4	--	--	--	--
	Day care children - <i>at day care</i>	24	25.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	123	17.9	--	--	--	--
	Home children - <i>at home</i>	62	14.5	--	--	--	--
	Day care children - <i>at home</i>	61	21.3	--	--	--	--
	Day care children - <i>at day care</i>	22	13.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-31b. *cis*-Permethrin (61949-76-6): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	0.580	1.57	7.90	34.4
	Home Children - <i>at home</i>	66	<MDL	<MDL	0.295	1.16	7.33	14.2
	Day care Children - <i>at home</i>	62	<MDL	<MDL	0.665	1.74	14.6	34.4
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	0.110	0.685	2.45	3.05
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.480	1.62
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.230	0.990
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.480	1.62
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	0.100	0.450	0.450
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	13.4	1,360
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.540	16.5	1,360
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	6.98	28.5
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	2.55	2.55
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	67.1	347	804	1,850	21,100	311,000
	Home Children - <i>at home</i>	66	67.1	379	951	2,420	21,100	56,000
	Day care Children - <i>at home</i>	55	114	286	802	1,550	24,300	311,000
	Day care Children - <i>at day care</i>	20	113	455	806	2,230	19,700	29,000
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	11.8	260	1,030	4,110	49,400	230,000
	Home Children - <i>at home</i>	66	16.2	131	1,030	4,030	49,400	162,000
	Day care Children - <i>at home</i>	55	11.8	364	1,030	4,720	51,400	230,000
	Day care Children - <i>at day care</i>	20	48.6	1,810	6,940	17,800	469,000	883,000
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	71.2	443	1,920	8,320	8,740
	Home Children - <i>at home</i>	10	<MDL	70.1	702	3,800	8,740	8,740
	Day care Children - <i>at home</i>	18	<MDL	72.2	244	1,470	8,320	8,320
	Day care Children - <i>at day care</i>	1	938	938	938	938	938	938
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	61.5	596	3,610	501,000	501,000
	Home Children - <i>at home</i>	10	<MDL	19.0	633	3,170	501,000	501,000
	Day care Children - <i>at home</i>	8	<MDL	67.8	365	4,730	14,500	14,500
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	37.6	229	1,390	11,300	11,300
	Home Children - <i>at home</i>	10	<MDL	37.6	309	1,390	8,620	8,620
	Day care Children - <i>at home</i>	8	<MDL	<MDL	124	1,160	11,300	11,300
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	262	621	2,560	14,600	640,000
	Home Children - <i>at home</i>	66	<MDL	174	530	2,000	8,070	47,300
	Day care Children - <i>at home</i>	30	<MDL	567	1,490	3,440	23,600	640,000
	Day care Children - <i>at day care</i>	31	<MDL	353	727	1,500	3,130	21,900
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	197	807	3,910	1,020,000
	Home Children - <i>at home</i>	66	<MDL	<MDL	160	704	3,580	10,300
	Day care Children - <i>at home</i>	31	<MDL	<MDL	537	1,260	14,000	1,020,000
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	0.587	15.6	80.7
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.500	15.6	22.8
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	0.630	13.6	80.7
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	5.17	218
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	123	<MDL	<MDL	<MDL	<MDL	0.330	1.02
	Home Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.280	1.02
	Day care Children - <i>at home</i>	61	<MDL	<MDL	<MDL	<MDL	0.330	0.530
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.060	0.550
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-32a. *trans*-Permethrin (61949-77-7): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	65.6	1.92	5.22	0.382	1.71
	Home children - <i>at home</i>	66	57.6	1.26	2.49	0.304	1.67
	Day care children - <i>at home</i>	62	74.2	2.62	7.02	0.487	1.74
	Day care children - <i>at day care</i>	20	50.0	0.451	0.681	0.185	1.32
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	15.7	--	--	--	--
	Home children - <i>at home</i>	65	7.7	--	--	--	--
	Day care children - <i>at home</i>	62	24.2	--	--	--	--
	Day care children - <i>at day care</i>	13	38.5	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	22.5	--	--	--	--
	Home children - <i>at home</i>	66	25.8	--	--	--	--
	Day care children - <i>at home</i>	63	19.0	--	--	--	--
	Day care children - <i>at day care</i>	13	7.7	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	100.0	6,120	30,400	835	1.64
	Home children - <i>at home</i>	66	100.0	3,810	10,000	898	1.58
	Day care children - <i>at home</i>	55	100.0	8,900	43,800	764	1.71
	Day care children - <i>at day care</i>	20	100.0	3,600	7,120	1,110	1.45
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	100.0	9,420	29,900	869	2.25
	Home children - <i>at home</i>	66	100.0	9,030	24,300	851	2.34
	Day care children - <i>at home</i>	55	100.0	9,890	35,700	891	2.17
	Day care children - <i>at day care</i>	20	100.0	55,900	202,000	4,900	2.09
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	92.9	1,570	2,680	268	2.22
	Home children - <i>at home</i>	10	90.0	2,020	3,220	388	2.40
	Day care children - <i>at home</i>	18	94.4	1,320	2,400	218	2.15
	Day care children - <i>at day care</i>	1	100.0	732	.	732	.
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	83.3	34,800	135,000	414	3.26
	Home children - <i>at home</i>	10	80.0	60,100	181,000	485	3.74
	Day care children - <i>at home</i>	8	87.5	3,300	5,590	340	2.77
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	83.3	1,750	3,380	183	2.63
	Home children - <i>at home</i>	10	90.0	1,730	3,000	279	2.51
	Day care children - <i>at home</i>	8	75.0	1,760	4,030	108	2.85
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	86.5	9,310	68,100	548	1.93
	Home children - <i>at home</i>	66	83.3	2,760	7,270	454	1.93
	Day care children - <i>at home</i>	30	93.3	23,700	121,000	830	1.90
	Day care children - <i>at day care</i>	31	93.5	1,400	3,770	455	1.39
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	73.2	12,000	110,000	162	2.13
	Home children - <i>at home</i>	66	72.7	836	1,990	137	1.95
	Day care children - <i>at home</i>	31	74.2	35,800	195,000	231	2.47
	Day care children - <i>at day care</i>						
Solid Food (Children) (ng/g)	All children - <i>at home</i>	128	46.1	--	--	--	--
	Home children - <i>at home</i>	66	47.0	--	--	--	--
	Day care children - <i>at home</i>	62	45.2	--	--	--	--
	Day care children - <i>at day care</i>	24	25.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	121	16.5	--	--	--	--
	Home children - <i>at home</i>	62	14.5	--	--	--	--
	Day care children - <i>at home</i>	59	18.6	--	--	--	--
	Day care children - <i>at day care</i>	22	13.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-32b. *trans*-Permethrin (61949-77-7): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	0.360	1.26	7.62	40.9
	Home Children - <i>at home</i>	66	<MDL	<MDL	0.200	1.15	4.97	14.4
	Day care Children - <i>at home</i>	62	<MDL	<MDL	0.440	1.55	13.3	40.9
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	0.690	2.14	2.76
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.260	1.01
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.160	0.260
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.400	1.01
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	0.070	0.340	0.340
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	17.9	1,610
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.580	23.6	1,610
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	8.51	26.4
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	2.20	2.20
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	51.3	267	629	1,850	19,400	322,000
	Home Children - <i>at home</i>	66	51.3	283	803	2,510	19,400	55,900
	Day care Children - <i>at home</i>	55	62.7	231	504	1,600	31,200	322,000
	Day care Children - <i>at day care</i>	20	125	542	856	1,830	20,900	29,900
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	5.62	147	853	3,810	44,200	226,000
	Home Children - <i>at home</i>	66	12.7	110	705	3,850	44,200	161,000
	Day care Children - <i>at home</i>	55	5.62	273	911	3,810	66,000	226,000
	Day care Children - <i>at day care</i>	20	53.3	1,370	4,090	13,800	488,000	912,000
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	47.1	399	1,880	8,260	10,100
	Home Children - <i>at home</i>	10	<MDL	46.6	517	3,940	10,100	10,100
	Day care Children - <i>at home</i>	18	<MDL	47.5	116	1,500	8,260	8,260
	Day care Children - <i>at day care</i>	1	732	732	732	732	732	732
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	56.5	261	3,750	574,000	574,000
	Home Children - <i>at home</i>	10	<MDL	17.7	695	3,750	574,000	574,000
	Day care Children - <i>at home</i>	8	<MDL	69.5	157	5,150	15,700	15,700
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	29.5	205	1,660	11,600	11,600
	Home Children - <i>at home</i>	10	<MDL	29.5	247	1,660	9,490	9,490
	Day care Children - <i>at home</i>	8	<MDL	<MDL	104	1,130	11,600	11,600
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	148	490	1,800	12,700	667,000
	Home Children - <i>at home</i>	66	<MDL	114	349	2,240	10,500	47,700
	Day care Children - <i>at home</i>	30	<MDL	279	891	1,630	12,700	667,000
	Day care Children - <i>at day care</i>	31	<MDL	203	358	1,210	2,630	21,300
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	132	715	5,390	1,090,000
	Home Children - <i>at home</i>	66	<MDL	<MDL	102	715	4,630	10,800
	Day care Children - <i>at home</i>	31	<MDL	<MDL	229	850	7,390	1,090,000
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	0.580	8.70	70.4
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.410	9.34	20.9
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.587	8.29	70.4
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	2.96	149
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	0.160	0.840
	Home Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.280	0.840
	Day care Children - <i>at home</i>	59	<MDL	<MDL	<MDL	<MDL	0.080	0.640
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.050	0.660
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-33a. PCB 44 (41464-39-5): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	46.9	--	--	--	--
	Home children - <i>at home</i>	66	51.5	0.230	0.359	0.097	1.28
	Day care children - <i>at home</i>	62	41.9	--	--	--	--
	Day care children - <i>at day care</i>	20	55.0	0.706	1.02	0.176	1.91
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	22.0	--	--	--	--
	Home children - <i>at home</i>	65	16.9	--	--	--	--
	Day care children - <i>at home</i>	62	27.4	--	--	--	--
	Day care children - <i>at day care</i>	13	46.2	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	1.6	--	--	--	--
	Home children - <i>at home</i>	66	3.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	15.7	--	--	--	--
	Home children - <i>at home</i>	66	9.1	--	--	--	--
	Day care children - <i>at home</i>	55	23.6	--	--	--	--
	Day care children - <i>at day care</i>	20	45.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	15.7	--	--	--	--
	Home children - <i>at home</i>	66	9.1	--	--	--	--
	Day care children - <i>at home</i>	55	23.6	--	--	--	--
	Day care children - <i>at day care</i>	20	45.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	10.7	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	18	11.1	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	22.2	--	--	--	--
	Home children - <i>at home</i>	10	20.0	--	--	--	--
	Day care children - <i>at home</i>	8	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	11.1	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	8	12.5	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	1.0	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	30	0.0	--	--	--	--
	Day care children - <i>at day care</i>	31	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	3.1	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	31	6.5	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	1.6	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	63	1.6	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-33b. PCB 44 (41464-39-5): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	0.270	1.31	6.16
	Home Children - <i>at home</i>	66	<MDL	<MDL	0.067	0.250	1.12	1.67
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.410	1.40	6.16
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	0.250	0.980	3.09	3.21
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.140	0.410
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.110	0.320
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.050	0.160	0.410
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	0.080	0.480	0.480
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	1.31
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	1.31
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	23.6	70.7
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	23.6	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	23.6	24.2
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	12.6	38.9	44.6
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	22.5	181
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	17.5	181
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	42.1	50.8
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	128	247	257
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	11.1	49.1
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	49.1	49.1
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	11.1	11.1
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	23.9	23.9
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	23.9	23.9
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	13.6	13.6
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	59.0	59.0
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	54.0	54.0
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	59.0	59.0
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	55.8
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	55.8
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	50.6
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	50.6
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	22.4	29.3
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	0.467
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.080
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.467
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-34a. PCB 52 (35693-99-3): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	89.1	0.853	1.73	0.469	1.14
	Home children - at home	66	93.9	0.624	0.618	0.477	0.770
	Day care children - at home	62	83.9	1.10	2.39	0.459	1.44
	Day care children - at day care	20	100.0	1.19	1.42	0.698	1.01
Outdoor Air (ng/m ³)	All children - at home	127	62.2	0.105	0.112	0.073	0.840
	Home children - at home	65	50.8	0.084	0.090	0.059	0.796
	Day care children - at home	62	74.2	0.128	0.128	0.092	0.827
	Day care children - at day care	13	92.3	0.177	0.214	0.106	1.02
Soil (ng/g)	All children - at home	129	3.9	--	--	--	--
	Home children - at home	66	4.5	--	--	--	--
	Day care children - at home	63	3.2	--	--	--	--
	Day care children - at day care	13	7.7	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	121	32.2	--	--	--	--
	Home children - at home	66	24.2	--	--	--	--
	Day care children - at home	55	41.8	--	--	--	--
	Day care children - at day care	20	60.0	16.6	20.3	7.35	1.40
Indoor Floor Dust (ng/m ²)	All children - at home	121	32.2	--	--	--	--
	Home children - at home	66	24.2	--	--	--	--
	Day care children - at home	55	41.8	--	--	--	--
	Day care children - at day care	20	60.0	130	171	32.6	2.13
Hard Floor Surface Wipes (ng/m ²)	All children - at home	28	25.0	--	--	--	--
	Home children - at home	10	10.0	--	--	--	--
	Day care children - at home	18	33.3	--	--	--	--
	Day care children - at day care	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	18	22.2	--	--	--	--
	Home children - at home	10	20.0	--	--	--	--
	Day care children - at home	8	25.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	16	6.3	--	--	--	--
	Home children - at home	9	11.1	--	--	--	--
	Day care children - at home	7	0.0	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	9.4	--	--	--	--
	Home children - at home	66	12.1	--	--	--	--
	Day care children - at home	30	3.3	--	--	--	--
	Day care children - at day care	31	6.5	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	4.1	--	--	--	--
	Home children - at home	66	3.0	--	--	--	--
	Day care children - at home	31	6.5	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	129	7.0	--	--	--	--
	Home children - at home	66	4.5	--	--	--	--
	Day care children - at home	63	9.5	--	--	--	--
	Day care children - at day care	23	8.7	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	64	0.0	--	--	--	--
	Day care children - at home	62	0.0	--	--	--	--
	Day care children - at day care	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-34b. PCB 52 (35693-99-3): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	0.370	0.535	0.755	2.91	18.3
	Home Children - <i>at home</i>	66	<MDL	0.370	0.495	0.670	1.43	4.71
	Day care Children - <i>at home</i>	62	<MDL	0.420	0.575	0.840	3.20	18.3
	Day care Children - <i>at day care</i>	20	0.210	0.300	0.505	1.19	4.51	5.09
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	0.090	0.130	0.280	0.920
	Home Children - <i>at home</i>	65	<MDL	<MDL	0.050	0.100	0.240	0.490
	Day care Children - <i>at home</i>	62	<MDL	<MDL	0.120	0.140	0.280	0.920
	Day care Children - <i>at day care</i>	13	<MDL	0.060	0.080	0.200	0.790	0.790
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	3.81
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	3.81
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.720
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.594	0.594
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	7.07	30.5	93.9
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	54.5	93.9
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	7.07	30.5	56.3
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	8.20	17.2	60.9	63.5
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	8.15	43.3	447
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	47.5	447
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	9.77	43.3	49.5
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	46.6	201	517	531
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	25.7	106
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	106	106
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	7.86	25.7	25.7
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	50.1	50.1
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	50.1	50.1
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	32.1	32.1
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	16	<MDL	<MDL	<MDL	<MDL	20.5	20.5
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	20.5	20.5
	Day care Children - <i>at home</i>	7	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	73.9	144
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	73.9	144
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	96.9
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	40.8	46.7
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	58.1
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	58.1
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	31.5	41.6
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	0.150	0.950
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.320
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	0.150	0.950
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	0.080	0.140
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-35a. PCB 70 (32698-11-1): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	45.3	--	--	--	--
	Home children - <i>at home</i>	66	48.5	--	--	--	--
	Day care children - <i>at home</i>	62	41.9	--	--	--	--
	Day care children - <i>at day care</i>	20	60.0	0.289	0.486	0.100	1.43
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	15.7	--	--	--	--
	Home children - <i>at home</i>	65	12.3	--	--	--	--
	Day care children - <i>at home</i>	62	19.4	--	--	--	--
	Day care children - <i>at day care</i>	13	38.5	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	1.6	--	--	--	--
	Home children - <i>at home</i>	66	3.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	18.2	--	--	--	--
	Home children - <i>at home</i>	66	12.1	--	--	--	--
	Day care children - <i>at home</i>	55	25.5	--	--	--	--
	Day care children - <i>at day care</i>	20	45.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	18.2	--	--	--	--
	Home children - <i>at home</i>	66	12.1	--	--	--	--
	Day care children - <i>at home</i>	55	25.5	--	--	--	--
	Day care children - <i>at day care</i>	20	45.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	14.3	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	18	16.7	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	16.7	--	--	--	--
	Home children - <i>at home</i>	10	20.0	--	--	--	--
	Day care children - <i>at home</i>	8	12.5	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	16.7	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	8	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	3.1	--	--	--	--
	Home children - <i>at home</i>	66	3.0	--	--	--	--
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Solid Food (Children) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-35b. PCB 70 (32698-11-1): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	0.150	0.580	3.22
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.150	0.270	1.57
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.150	0.950	3.22
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	0.090	0.190	1.59	1.72
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.070	0.320
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.064	0.140
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.100	0.320
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	0.050	0.430	0.430
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	1.51
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	1.51
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	23.6	70.7
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	23.6	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	5.60	23.6	53.6
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	13.1	27.2	32.8
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	27.6	94.8
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	17.5	94.8
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	7.65	40.4	43.3
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	87.7	214	237
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	15.5	68.3
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	68.3	68.3
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	15.5	15.5
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	20.6	20.6
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	20.2	20.2
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	20.6	20.6
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	24.1	24.1
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	24.1	24.1
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	20.8	20.8
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	99.2
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	99.2
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	97.3
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	17.7
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	17.7
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-36a. PCB 77 (32598-13-3): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	20	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	0.0	--	--	--	--
	Home children - <i>at home</i>	65	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	55	0.0	--	--	--	--
	Day care children - <i>at day care</i>	20	0.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	55	0.0	--	--	--	--
	Day care children - <i>at day care</i>	20	0.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	18	0.0	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	30	0.0	--	--	--	--
	Day care children - <i>at day care</i>	31	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	31	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-36b. PCB 77 (32598-13-3): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-37a. PCB 95 (38379-99-6): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	75.8	0.192	0.580	0.092	0.938
	Home children - <i>at home</i>	66	74.2	0.144	0.303	0.090	0.809
	Day care children - <i>at home</i>	62	77.4	0.243	0.773	0.094	1.07
	Day care children - <i>at day care</i>	20	70.0	0.187	0.240	0.100	1.15
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	40.9	--	--	--	--
	Home children - <i>at home</i>	65	27.7	--	--	--	--
	Day care children - <i>at home</i>	62	54.8	0.065	0.077	0.048	0.667
	Day care children - <i>at day care</i>	13	76.9	0.080	0.085	0.057	0.815
Soil (ng/g)	All children - <i>at home</i>	129	3.1	--	--	--	--
	Home children - <i>at home</i>	66	3.0	--	--	--	--
	Day care children - <i>at home</i>	63	3.2	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	35.5	--	--	--	--
	Home children - <i>at home</i>	66	34.8	--	--	--	--
	Day care children - <i>at home</i>	55	36.4	--	--	--	--
	Day care children - <i>at day care</i>	20	50.0	6.88	8.16	3.99	1.05
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	35.5	--	--	--	--
	Home children - <i>at home</i>	66	34.8	--	--	--	--
	Day care children - <i>at home</i>	55	36.4	--	--	--	--
	Day care children - <i>at day care</i>	20	50.0	59.7	96.7	17.7	1.73
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	14.3	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	18	16.7	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	22.2	--	--	--	--
	Home children - <i>at home</i>	10	20.0	--	--	--	--
	Day care children - <i>at home</i>	8	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	15	13.3	--	--	--	--
	Home children - <i>at home</i>	10	20.0	--	--	--	--
	Day care children - <i>at home</i>	5	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	9.4	--	--	--	--
	Home children - <i>at home</i>	66	12.1	--	--	--	--
	Day care children - <i>at home</i>	30	3.3	--	--	--	--
	Day care children - <i>at day care</i>	31	3.2	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	9.3	--	--	--	--
	Home children - <i>at home</i>	66	10.6	--	--	--	--
	Day care children - <i>at home</i>	31	6.5	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	3.1	--	--	--	--
	Home children - <i>at home</i>	66	4.5	--	--	--	--
	Day care children - <i>at home</i>	63	1.6	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-37b. PCB 95 (38379-99-6): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	0.050	0.090	0.145	0.410	5.96
	Home Children - <i>at home</i>	66	<MDL	<MDL	0.090	0.140	0.280	2.49
	Day care Children - <i>at home</i>	62	<MDL	0.050	0.085	0.160	0.580	5.96
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	0.105	0.185	0.755	0.990
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	0.064	0.120	0.530
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	0.060	0.080	0.160
	Day care Children - <i>at home</i>	62	<MDL	<MDL	0.040	0.070	0.150	0.530
	Day care Children - <i>at day care</i>	13	<MDL	0.040	0.050	0.070	0.330	0.330
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	5.34
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	5.34
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.830
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	4.92	23.6	73.4
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	4.58	23.6	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	5.00	23.6	73.4
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	8.26	28.2	31.4
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	6.46	36.2	143
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	6.46	36.2	143
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	9.61	37.9	43.3
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	56.1	316	333
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	23.5	59.8
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	59.8	59.8
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	23.5	23.5
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	27.7	27.7
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	27.7	27.7
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	24.5	24.5
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	29.0	29.0
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	29.0	29.0
	Day care Children - <i>at home</i>	5	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	66.1	130
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	68.2	130
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	65.3
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	42.7
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	29.4	43.8
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	28.2	36.7
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	32.3	43.8
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	0.467
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.180
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.467
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-38a. PCB 101 (37680-73-2): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	52.3	0.162	0.477	0.070	1.02
	Home children - <i>at home</i>	66	59.1	0.136	0.327	0.076	0.893
	Day care children - <i>at home</i>	62	45.2	--	--	--	--
	Day care children - <i>at day care</i>	20	60.0	0.175	0.236	0.088	1.19
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	22.8	--	--	--	--
	Home children - <i>at home</i>	65	16.9	--	--	--	--
	Day care children - <i>at home</i>	62	29.0	--	--	--	--
	Day care children - <i>at day care</i>	13	61.5	0.092	0.135	0.052	1.01
Soil (ng/g)	All children - <i>at home</i>	129	3.9	--	--	--	--
	Home children - <i>at home</i>	66	3.0	--	--	--	--
	Day care children - <i>at home</i>	63	4.8	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	34.7	--	--	--	--
	Home children - <i>at home</i>	66	34.8	--	--	--	--
	Day care children - <i>at home</i>	55	34.5	--	--	--	--
	Day care children - <i>at day care</i>	20	55.0	8.09	9.34	4.29	1.18
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	34.7	--	--	--	--
	Home children - <i>at home</i>	66	34.8	--	--	--	--
	Day care children - <i>at home</i>	55	34.5	--	--	--	--
	Day care children - <i>at day care</i>	20	55.0	68.8	120	19.0	1.72
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	7.1	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	18	5.6	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	16.7	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	8	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	15	20.0	--	--	--	--
	Home children - <i>at home</i>	9	22.2	--	--	--	--
	Day care children - <i>at home</i>	6	16.7	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	11.5	--	--	--	--
	Home children - <i>at home</i>	66	15.2	--	--	--	--
	Day care children - <i>at home</i>	30	3.3	--	--	--	--
	Day care children - <i>at day care</i>	31	6.5	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	12.4	--	--	--	--
	Home children - <i>at home</i>	66	15.2	--	--	--	--
	Day care children - <i>at home</i>	31	6.5	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-38b. PCB 101 (37680-73-2): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	0.060	0.120	0.410	4.49
	Home Children - <i>at home</i>	66	<MDL	<MDL	0.075	0.120	0.310	2.67
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.110	0.580	4.49
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	0.080	0.180	0.745	0.950
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.120	0.560
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.070	0.150
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.050	0.150	0.560
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	0.050	0.080	0.510	0.510
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	7.84
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	7.84
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	1.04
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	7.07	23.6	147
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	7.07	23.6	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	7.07	30.4	147
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	4.33	11.4	30.9	31.2
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	7.79	43.3	168
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	7.59	64.2	168
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	9.61	42.1	75.8
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	15.8	65.6	380	470
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	35.8	73.4
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	73.4	73.4
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	35.8	35.8
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	38.7	38.7
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	14.0	14.0
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	38.7	38.7
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	24.0	24.0
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	22.7	22.7
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	24.0	24.0
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	73.9	181
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	101	181
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	63.1
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	53.7	56.7
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	32.3	62.3
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	32.3	53.6
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	18.0	62.3
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-39a. PCB 105 (32598-14-4): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	7.0	--	--	--	--
	Home children - <i>at home</i>	66	9.1	--	--	--	--
	Day care children - <i>at home</i>	62	4.8	--	--	--	--
	Day care children - <i>at day care</i>	20	5.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	0.8	--	--	--	--
	Home children - <i>at home</i>	65	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	1.6	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	2.3	--	--	--	--
	Home children - <i>at home</i>	66	3.0	--	--	--	--
	Day care children - <i>at home</i>	63	1.6	--	--	--	--
	Day care children - <i>at day care</i>	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	5.8	--	--	--	--
	Home children - <i>at home</i>	66	3.0	--	--	--	--
	Day care children - <i>at home</i>	55	9.1	--	--	--	--
	Day care children - <i>at day care</i>	20	5.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	5.8	--	--	--	--
	Home children - <i>at home</i>	66	3.0	--	--	--	--
	Day care children - <i>at home</i>	55	9.1	--	--	--	--
	Day care children - <i>at day care</i>	20	5.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	18	0.0	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	22.2	--	--	--	--
	Home children - <i>at home</i>	10	30.0	--	--	--	--
	Day care children - <i>at home</i>	8	12.5	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	1.0	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	30	0.0	--	--	--	--
	Day care children - <i>at day care</i>	31	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	1.0	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	31	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-39b. PCB 105 (32598-14-4): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	0.090	0.360
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.090	0.360
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.260
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	0.064
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.080
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.080
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	2.23
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	2.23
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	1.09
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	23.6	70.7
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	23.6	46.7
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	7.86
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	17.5	43.3
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	19.6
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	24.1	43.3
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	229
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	27.1	27.1
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	12.6	27.1	27.1
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	20.6	20.6
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	65.4
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	65.4
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	135
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	135
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-40a. PCB 110 (38380-03-9): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	40.6	--	--	--	--
	Home children - <i>at home</i>	66	47.0	--	--	--	--
	Day care children - <i>at home</i>	62	33.9	--	--	--	--
	Day care children - <i>at day care</i>	20	50.0	0.128	0.155	0.075	1.03
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	16.5	--	--	--	--
	Home children - <i>at home</i>	65	15.4	--	--	--	--
	Day care children - <i>at home</i>	62	17.7	--	--	--	--
	Day care children - <i>at day care</i>	13	46.2	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	7.0	--	--	--	--
	Home children - <i>at home</i>	66	6.1	--	--	--	--
	Day care children - <i>at home</i>	63	7.9	--	--	--	--
	Day care children - <i>at day care</i>	12	8.3	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	37.2	--	--	--	--
	Home children - <i>at home</i>	66	36.4	--	--	--	--
	Day care children - <i>at home</i>	55	38.2	--	--	--	--
	Day care children - <i>at day care</i>	20	70.0	8.16	7.23	5.18	1.05
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	37.2	--	--	--	--
	Home children - <i>at home</i>	66	36.4	--	--	--	--
	Day care children - <i>at home</i>	55	38.2	--	--	--	--
	Day care children - <i>at day care</i>	20	70.0	67.5	131	22.9	1.52
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	21.4	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	18	27.8	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	27.8	--	--	--	--
	Home children - <i>at home</i>	10	20.0	--	--	--	--
	Day care children - <i>at home</i>	8	37.5	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	10	10.0	--	--	--	--
	Home children - <i>at home</i>	6	16.7	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	14.6	--	--	--	--
	Home children - <i>at home</i>	66	21.2	--	--	--	--
	Day care children - <i>at home</i>	30	0.0	--	--	--	--
	Day care children - <i>at day care</i>	31	6.5	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	11.3	--	--	--	--
	Home children - <i>at home</i>	66	15.2	--	--	--	--
	Day care children - <i>at home</i>	31	3.2	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-40b. PCB 110 (38380-03-9): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	0.120	0.340	2.29
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.120	0.280	1.77
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.130	0.390	2.29
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	0.140	0.495	0.610
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.080	0.420
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.070	0.100
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.110	0.420
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	0.057	0.320	0.320
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	0.570	7.66
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.510	7.66
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	0.679	1.42
	Day care Children - <i>at day care</i>	12	<MDL	<MDL	<MDL	<MDL	0.670	0.670
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	7.15	23.6	176
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	7.15	23.6	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	9.06	25.0	176
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	6.74	10.9	22.7	25.2
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	9.07	43.3	151
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	7.81	68.9	151
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	9.77	42.1	91.0
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	19.6	60.8	407	574
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	36.8	56.8
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	56.8	56.8
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	7.59	36.8	36.8
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	10.6	29.9	29.9
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	22.3	22.3
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	11.9	29.9	29.9
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	16.4	16.4
	Home Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	16.4	16.4
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	110	220
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	145	220
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	41.5	92.2
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	42.3	61.6
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	42.3	61.6
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	52.0
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-41a. PCB 118 (31508-00-6): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	23.4	--	--	--	--
	Home children - <i>at home</i>	66	25.8	--	--	--	--
	Day care children - <i>at home</i>	62	21.0	--	--	--	--
	Day care children - <i>at day care</i>	20	25.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	6.3	--	--	--	--
	Home children - <i>at home</i>	65	3.1	--	--	--	--
	Day care children - <i>at home</i>	62	9.7	--	--	--	--
	Day care children - <i>at day care</i>	13	30.8	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	4.7	--	--	--	--
	Home children - <i>at home</i>	66	4.5	--	--	--	--
	Day care children - <i>at home</i>	63	4.8	--	--	--	--
	Day care children - <i>at day care</i>	13	15.4	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	24.0	--	--	--	--
	Home children - <i>at home</i>	66	24.2	--	--	--	--
	Day care children - <i>at home</i>	55	23.6	--	--	--	--
	Day care children - <i>at day care</i>	20	40.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	24.0	--	--	--	--
	Home children - <i>at home</i>	66	24.2	--	--	--	--
	Day care children - <i>at home</i>	55	23.6	--	--	--	--
	Day care children - <i>at day care</i>	20	40.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	10.7	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	18	11.1	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	16.7	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	37.5	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	33.3	--	--	--	--
	Home children - <i>at home</i>	10	30.0	--	--	--	--
	Day care children - <i>at home</i>	8	37.5	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	11.5	--	--	--	--
	Home children - <i>at home</i>	66	16.7	--	--	--	--
	Day care children - <i>at home</i>	30	0.0	--	--	--	--
	Day care children - <i>at day care</i>	31	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	7.2	--	--	--	--
	Home children - <i>at home</i>	66	9.1	--	--	--	--
	Day care children - <i>at home</i>	31	3.2	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-41b. PCB 118 (31508-00-6): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	0.200	1.09
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	0.064	0.190	1.09
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.220	0.960
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	0.225	0.240
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.064	0.230
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.150
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.070	0.230
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	0.057	0.240	0.240
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	5.66
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	5.66
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	1.41
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.610	0.610
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	23.6	153
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	23.6	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	23.6	153
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	9.29	14.4	14.7
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	36.8	87.5
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	36.8	87.5
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	42.1	78.8
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	26.8	291	448
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	24.5	43.4
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	43.4	43.4
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	24.5	24.5
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	19.0	19.0
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	7.96	19.0	19.0
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	10.3	15.5	15.5
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	9.82	15.5	15.5
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	10.9	11.5	11.5
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	74.8	143
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	110	143
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	27.3	40.0
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	27.3	40.0
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	31.1
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-42a. PCB 138 (35065-28-2): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	12.5	--	--	--	--
	Home children - <i>at home</i>	66	13.6	--	--	--	--
	Day care children - <i>at home</i>	62	11.3	--	--	--	--
	Day care children - <i>at day care</i>	20	15.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	1.6	--	--	--	--
	Home children - <i>at home</i>	65	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	3.2	--	--	--	--
	Day care children - <i>at day care</i>	13	15.4	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	9.3	--	--	--	--
	Home children - <i>at home</i>	66	9.1	--	--	--	--
	Day care children - <i>at home</i>	63	9.5	--	--	--	--
	Day care children - <i>at day care</i>	13	15.4	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	18.2	--	--	--	--
	Home children - <i>at home</i>	66	18.2	--	--	--	--
	Day care children - <i>at home</i>	55	18.2	--	--	--	--
	Day care children - <i>at day care</i>	20	30.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	18.2	--	--	--	--
	Home children - <i>at home</i>	66	18.2	--	--	--	--
	Day care children - <i>at home</i>	55	18.2	--	--	--	--
	Day care children - <i>at day care</i>	20	30.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	3.6	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	18	5.6	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	3.1	--	--	--	--
	Home children - <i>at home</i>	66	4.5	--	--	--	--
	Day care children - <i>at home</i>	30	0.0	--	--	--	--
	Day care children - <i>at day care</i>	31	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	2.1	--	--	--	--
	Home children - <i>at home</i>	66	3.0	--	--	--	--
	Day care children - <i>at home</i>	31	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-42b. PCB 138 (35065-28-2): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	0.120	0.480
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.120	0.480
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.120	0.480
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	0.135	0.150
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.120
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.120
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.130	0.130
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	1.07	7.67
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	1.07	7.67
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	1.02	1.68
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.640	0.640
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	23.6	115
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	23.6	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	23.6	115
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	3.28	18.7	21.2
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	42.1	298
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	61.4	298
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	42.1	59.2
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	17.7	301	493
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	17.2
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	17.2	17.2
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	127
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	127
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	41.3
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	41.3
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-43a. PCB 153 (35065-27-1): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	20.3	--	--	--	--
	Home children - <i>at home</i>	66	19.7	--	--	--	--
	Day care children - <i>at home</i>	62	21.0	--	--	--	--
	Day care children - <i>at day care</i>	20	25.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	1.6	--	--	--	--
	Home children - <i>at home</i>	65	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	3.2	--	--	--	--
	Day care children - <i>at day care</i>	13	15.4	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	9.3	--	--	--	--
	Home children - <i>at home</i>	66	9.1	--	--	--	--
	Day care children - <i>at home</i>	63	9.5	--	--	--	--
	Day care children - <i>at day care</i>	13	7.7	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	28.9	--	--	--	--
	Home children - <i>at home</i>	66	30.3	--	--	--	--
	Day care children - <i>at home</i>	55	27.3	--	--	--	--
	Day care children - <i>at day care</i>	20	40.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	28.9	--	--	--	--
	Home children - <i>at home</i>	66	30.3	--	--	--	--
	Day care children - <i>at home</i>	55	27.3	--	--	--	--
	Day care children - <i>at day care</i>	20	40.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	3.6	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	18	5.6	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	11.1	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	8	12.5	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	16.7	--	--	--	--
	Home children - <i>at home</i>	10	20.0	--	--	--	--
	Day care children - <i>at home</i>	8	12.5	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	5.2	--	--	--	--
	Home children - <i>at home</i>	66	7.6	--	--	--	--
	Day care children - <i>at home</i>	30	0.0	--	--	--	--
	Day care children - <i>at day care</i>	31	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	3.1	--	--	--	--
	Home children - <i>at home</i>	66	4.5	--	--	--	--
	Day care children - <i>at home</i>	31	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-43b. PCB 153 (35065-27-1): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	0.170	0.480
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.130	0.480
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.170	0.430
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	0.150	0.180
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.140	0.140
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	1.19	5.06
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	1.19	5.06
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	0.990	3.85
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	1.13	1.13
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	6.60	23.6	106
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	7.07	23.6	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	5.62	28.9	106
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	7.10	18.6	20.8
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	7.90	43.3	327
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	7.90	68.8	327
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	8.11	42.1	54.4
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	35.0	195	274
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	27.1
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	27.1	27.1
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	17.6	17.6
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	13.6	13.6
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	17.6	17.6
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	29.0	29.0
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	29.0	29.0
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	8.20	8.20
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	40.4	115
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	42.4	115
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	81.5
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	81.5
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-44a. PCB 180 (35065-29-3): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	128	5.5	--	--	--	--
	Home children - <i>at home</i>	66	4.5	--	--	--	--
	Day care children - <i>at home</i>	62	6.5	--	--	--	--
	Day care children - <i>at day care</i>	20	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	0.0	--	--	--	--
	Home children - <i>at home</i>	65	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	13	7.7	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	129	7.8	--	--	--	--
	Home children - <i>at home</i>	66	9.1	--	--	--	--
	Day care children - <i>at home</i>	63	6.3	--	--	--	--
	Day care children - <i>at day care</i>	13	7.7	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	121	10.7	--	--	--	--
	Home children - <i>at home</i>	66	10.6	--	--	--	--
	Day care children - <i>at home</i>	55	10.9	--	--	--	--
	Day care children - <i>at day care</i>	20	20.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	121	10.7	--	--	--	--
	Home children - <i>at home</i>	66	10.6	--	--	--	--
	Day care children - <i>at home</i>	55	10.9	--	--	--	--
	Day care children - <i>at day care</i>	20	20.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	28	3.6	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	18	5.6	--	--	--	--
	Day care children - <i>at day care</i>	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	18	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	18	5.6	--	--	--	--
	Home children - <i>at home</i>	10	10.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	1.0	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	30	0.0	--	--	--	--
	Day care children - <i>at day care</i>	31	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	1.0	--	--	--	--
	Home children - <i>at home</i>	66	1.5	--	--	--	--
	Day care children - <i>at home</i>	31	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	129	0.0	--	--	--	--
	Home children - <i>at home</i>	66	0.0	--	--	--	--
	Day care children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	64	0.0	--	--	--	--
	Day care children - <i>at home</i>	62	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-44b. PCB 180 (35065-29-3): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	0.064	0.420
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	0.130
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.064	0.420
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.070	0.070
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	0.700	3.24
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.690	2.64
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	0.700	3.24
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	0.890	0.890
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	23.6	70.7
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	23.6	70.7
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	23.6	39.6
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	14.7	20.6
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	22.5	174
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	33.6	174
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	22.5	43.3
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	200	266
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	11.0
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	11.0	11.0
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	79.6	79.6
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	79.6	79.6
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	94.1
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	94.1
	Day care Children - <i>at home</i>	30	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	966
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	966
	Day care Children - <i>at home</i>	31	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-45a. 2,4,5-T (2,4,5-trichlorophenoxyacetic acid) (93-76-5): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	7.0	--	--	--	--
	Home children - at home	66	7.6	--	--	--	--
	Day care children - at home	62	6.5	--	--	--	--
	Day care children - at day care	20	5.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	126	8.7	--	--	--	--
	Home children - at home	65	10.8	--	--	--	--
	Day care children - at home	61	6.6	--	--	--	--
	Day care children - at day care	13	7.7	--	--	--	--
Soil (ng/g)	All children - at home	126	0.8	--	--	--	--
	Home children - at home	65	1.5	--	--	--	--
	Day care children - at home	61	0.0	--	--	--	--
	Day care children - at day care	13	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	121	0.0	--	--	--	--
	Home children - at home	66	0.0	--	--	--	--
	Day care children - at home	55	0.0	--	--	--	--
	Day care children - at day care	20	5.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - at home	121	0.0	--	--	--	--
	Home children - at home	66	0.0	--	--	--	--
	Day care children - at home	55	0.0	--	--	--	--
	Day care children - at day care	20	5.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - at home	13	0.0	--	--	--	--
	Home children - at home						
	Day care children - at home	13	0.0	--	--	--	--
	Day care children - at day care	1	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home						
	Home children - at home						
	Day care children - at home						
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home						
	Home children - at home						
	Day care children - at home						
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	98	0.0	--	--	--	--
	Home children - at home	66	0.0	--	--	--	--
	Day care children - at home	32	0.0	--	--	--	--
	Day care children - at day care	32	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	98	0.0	--	--	--	--
	Home children - at home	66	0.0	--	--	--	--
	Day care children - at home	32	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	129	1.6	--	--	--	--
	Home children - at home	66	3.0	--	--	--	--
	Day care children - at home	63	0.0	--	--	--	--
	Day care children - at day care	24	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home	128	0.8	--	--	--	--
	Home children - at home	66	0.0	--	--	--	--
	Day care children - at home	62	1.6	--	--	--	--
Liquid Food (Children) (ng/mL)	All children - at home	125	0.0	--	--	--	--
	Home children - at home	64	0.0	--	--	--	--
	Day care children - at home	61	0.0	--	--	--	--
	Day care children - at day care	23	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home	120	0.0	--	--	--	--
	Home children - at home	64	0.0	--	--	--	--
	Day care children - at home	56	0.0	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-45b. 2,4,5-T (2,4,5-trichlorophenoxyacetic acid) (93-76-5): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	0.670	2.12
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	0.590	1.04
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	0.790	2.12
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	0.630
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	0.490	1.66
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	0.590	1.56
	Day care Children - <i>at home</i>	61	<MDL	<MDL	<MDL	<MDL	0.330	1.66
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	2.21	2.21
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	1.12
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	<MDL	<MDL	1.12
	Day care Children - <i>at home</i>	61	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	23.6
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	20	<MDL	<MDL	<MDL	<MDL	<MDL	43.1
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	0						
	Day care Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	0						
	Home Children - <i>at home</i>	0						
	Day care Children - <i>at home</i>	0						
	Day care Children - <i>at day care</i>	0						
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	98	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	32	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	32	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	98	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	32	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	<MDL	<MDL	<MDL	1.47
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	1.47
	Day care Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>	128	<MDL	<MDL	<MDL	<MDL	<MDL	1.37
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	1.37
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	61	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table I-46a. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Summaries of concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	128	99.2	5.00	13.3	1.91	1.30
	Home children - at home	66	98.5	3.63	7.14	1.57	1.27
	Day care children - at home	62	100.0	6.46	17.6	2.36	1.32
	Day care children - at day care	20	95.0	2.61	3.26	1.08	1.47
Outdoor Air (ng/m ³)	All children - at home	127	89.0	0.466	0.951	0.251	0.963
	Home children - at home	65	92.3	0.421	0.667	0.247	0.927
	Day care children - at home	62	85.5	0.513	1.18	0.257	1.01
	Day care children - at day care	13	76.9	0.211	0.193	0.143	0.942
Soil (ng/g)	All children - at home	129	71.3	3.61	14.9	0.616	1.44
	Home children - at home	66	63.6	4.18	15.9	0.513	1.56
	Day care children - at home	63	79.4	3.02	13.9	0.746	1.29
	Day care children - at day care	13	46.2	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	121	100.0	309	791	105	1.37
	Home children - at home	66	100.0	282	577	110	1.37
	Day care children - at home	55	100.0	341	994	99.1	1.38
	Day care children - at day care	20	100.0	93.9	100	51.0	1.30
Indoor Floor Dust (ng/m ²)	All children - at home	121	100.0	1,050	3,810	109	2.24
	Home children - at home	66	100.0	609	1,400	104	2.23
	Day care children - at home	55	100.0	1,580	5,410	116	2.26
	Day care children - at day care	20	100.0	836	1,260	226	1.86
Hard Floor Surface Wipes (ng/m ²)	All children - at home	13	100.0	65.9	63.5	48.3	0.771
	Home children - at home						
	Day care children - at home	13	100.0	65.9	63.5	48.3	0.771
	Day care children - at day care	1	100.0	52.5	.	52.5	.
Food Preparation Surface Wipes (ng/m ²)	All children - at home						
	Home children - at home						
	Day care children - at home						
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home						
	Home children - at home						
	Day care children - at home						
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	99	100.0	230	215	181	0.655
	Home children - at home	66	100.0	238	247	184	0.659
	Day care children - at home	33	100.0	213	130	176	0.657
	Day care children - at day care	32	87.5	122	75.7	99.4	0.681
Dermal Wipe (Adults) (ng/m ²)	All children - at home	98	100.0	125	127	93.3	0.724
	Home children - at home	66	100.0	124	149	84.8	0.793
	Day care children - at home	32	100.0	128	61.8	114	0.510
Solid Food (Children) (ng/g)	All children - at home	128	98.4	3.05	2.79	2.09	0.972
	Home children - at home	66	98.5	3.52	3.23	2.46	0.951
	Day care children - at home	62	98.4	2.55	2.14	1.77	0.972
	Day care children - at day care	24	100.0	3.78	3.34	2.83	0.843
Solid Food (Adults) (ng/g)	All children - at home	129	98.4	3.65	3.92	2.41	0.996
	Home children - at home	66	98.5	3.71	4.02	2.45	0.980
	Day care children - at home	63	98.4	3.59	3.83	2.36	1.02
Liquid Food (Children) (ng/mL)	All children - at home	127	41.7	--	--	--	--
	Home children - at home	65	47.7	--	--	--	--
	Day care children - at home	62	35.5	--	--	--	--
	Day care children - at day care	24	58.3	0.088	0.076	0.046	1.34
Liquid Food (Adults) (ng/mL)	All children - at home	121	35.5	--	--	--	--
	Home children - at home	64	35.9	--	--	--	--
	Day care children - at home	57	35.1	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table I-46b. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Reported Concentrations in NC multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	128	<MDL	0.875	1.94	3.97	19.4	135
	Home Children - <i>at home</i>	66	<MDL	0.680	1.56	3.20	13.6	51.3
	Day care Children - <i>at home</i>	62	0.090	1.17	2.17	5.12	20.1	135
	Day care Children - <i>at day care</i>	20	<MDL	0.335	0.930	4.85	9.39	9.80
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	0.130	0.230	0.400	1.76	9.06
	Home Children - <i>at home</i>	65	<MDL	0.140	0.210	0.400	1.33	4.77
	Day care Children - <i>at home</i>	62	<MDL	0.130	0.275	0.400	1.83	9.06
	Day care Children - <i>at day care</i>	13	<MDL	0.080	0.130	0.300	0.700	0.700
Soil (ng/g)	All Children - <i>at home</i>	129	<MDL	<MDL	0.570	1.25	10.7	111
	Home Children - <i>at home</i>	66	<MDL	<MDL	0.340	0.910	13.1	94.3
	Day care Children - <i>at home</i>	63	<MDL	0.280	0.820	1.67	4.42	111
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	<MDL	0.350	1.70	1.70
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	121	2.50	50.4	95.8	222	1,070	6,860
	Home Children - <i>at home</i>	66	2.50	48.5	111	240	1,070	3,820
	Day care Children - <i>at home</i>	55	3.96	50.4	87.0	173	1,220	6,860
	Day care Children - <i>at day care</i>	20	3.16	27.0	65.8	105	333	370
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	121	0.080	26.6	83.3	514	3,690	32,700
	Home Children - <i>at home</i>	66	0.080	23.9	91.6	514	2,770	9,670
	Day care Children - <i>at home</i>	55	0.120	27.7	76.7	553	5,980	32,700
	Day care Children - <i>at day care</i>	20	4.08	67.9	205	820	3,570	3,670
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	19.6	27.5	49.7	61.7	237	237
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>	13	19.6	27.5	49.7	61.7	237	237
	Day care Children - <i>at day care</i>	1	52.5	52.5	52.5	52.5	52.5	52.5
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	99	41.1	121	191	264	543	1,660
	Home Children - <i>at home</i>	66	50.0	120	191	249	543	1,660
	Day care Children - <i>at home</i>	33	41.1	124	174	283	452	625
	Day care Children - <i>at day care</i>	32	<MDL	66.3	102	170	288	322
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	98	19.2	56.7	89.2	151	298	863
	Home Children - <i>at home</i>	66	19.2	51.0	80.9	126	464	863
	Day care Children - <i>at home</i>	32	30.9	78.6	112	168	256	298
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	128	<MDL	1.45	2.27	3.81	8.57	18.1
	Home Children - <i>at home</i>	66	<MDL	1.69	2.63	4.25	10.1	18.1
	Day care Children - <i>at home</i>	62	<MDL	1.32	1.99	2.99	6.15	11.1
	Day care Children - <i>at day care</i>	24	0.250	2.35	2.92	4.49	6.59	17.5
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>	129	<MDL	1.75	2.72	4.08	10.4	25.4
	Home Children - <i>at home</i>	66	<MDL	1.75	2.67	3.68	10.4	25.4
	Day care Children - <i>at home</i>	63	<MDL	1.65	2.77	4.36	7.15	23.1
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	0.140	0.410	0.850
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	0.140	0.280	0.760
	Day care Children - <i>at home</i>	62	<MDL	<MDL	<MDL	0.130	0.600	0.850
	Day care Children - <i>at day care</i>	24	<MDL	<MDL	0.100	0.140	0.210	0.240
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	0.120	0.260	0.340
	Home Children - <i>at home</i>	64	<MDL	<MDL	<MDL	0.120	0.220	0.280
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	0.120	0.290	0.340

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Appendix J

Descriptive Statistics of CTEPP Pollutant/Metabolite Measurements in OH Multimedia Samples

This appendix contains tables of descriptive statistics of OH multimedia data for the following pollutants and metabolites:

Pollutant/Metabolite	Table Numbers	Pollutant/Metabolite	Table Numbers
Aldrin	Tables J-1a, J-1b	Endrin	Tables J-24a, J-24b
Atrazine	Tables J-2a, J-2b	Heptachlor	Tables J-25a, J-25b
Benz[<i>a</i>]anthracene	Tables J-3a, J-3b	Indeno[1,2,3- <i>cd</i>]pyrene	Tables J-26a, J-26b
Benzo[<i>b</i>]fluoranthene	Tables J-4a, J-4b	IMP	Tables J-27a, J-27b
Benzo[<i>k</i>]fluoranthene	Tables J-5a, J-5b	Lindane	Tables J-28a, J-28b
Benzo[<i>ghi</i>]perylene	Tables J-6a, J-6b	Nonylphenol	Tables J-29a, J-29b
Benzo[<i>a</i>]pyrene	Tables J-7a, J-7b	Pentachloronitrobenzene	Tables J-30a, J-30b
Benzo[<i>e</i>]pyrene	Tables J-8a, J-8b	Pentachlorophenol	Tables J-31a, J-31b
Benzylbutylphthalate	Tables J-9a, J-9b	<i>cis</i> -Permethrin	Tables J-32a, J-32b
Bisphenol-A	Tables J-10a, J-10b	<i>trans</i> -Permethrin	Tables J-33a, J-33b
<i>alpha</i> -Chlordane	Tables J-11a, J-11b	PCB 44	Tables J-34a, J-34b
<i>gamma</i> -Chlordane	Tables J-12a, J-12b	PCB 52	Tables J-35a, J-35b
Chlorpyrifos	Tables J-13a, J-13b	PCB 70	Tables J-36a, J-36b
Chrysene	Tables J-14a, J-14b	PCB 77	Tables J-37a, J-37b
Cyfluthrin	Tables J-15a, J-15b	PCB 95	Tables J-38a, J-38b
Diazinon	Tables J-16a, J-16b	PCB 101	Tables J-39a, J-39b
Dibenzo[<i>a,h</i>]anthracene	Tables J-17a, J-17b	PCB 105	Tables J-40a, J-40b
Di- <i>n</i> -butylphthalate	Tables J-18a, J-18b	PCB 110	Tables J-41a, J-41b
Dicamba	Tables J-19a, J-19b	PCB 118	Tables J-42a, J-42b
<i>p,p'</i> -DDE	Tables J-20a, J-20b	PCB 138	Tables J-43a, J-43b
<i>p,p'</i> -DDT	Tables J-21a, J-21b	PCB 153	Tables J-44a, J-44b
2,4-D	Tables J-22a, J-22b	PCB 180	Tables J-45a, J-45b
Dieldrin	Tables J-23a, J-23b	2,4,5-T	Tables J-46a, J-46b
		3,5,6-TCP	Tables J-47a, J-47b

For each media type, descriptive statistics are presented separately for the following four groups of samples:

- Samples collected at the homes of study participants
 - Samples collected at the homes of stay-at-home children only
 - Samples collected at the homes of day-care children only
- Samples collected at participating day care centers

Table J-1a. Aldrin (309-00-2): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	3.2	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	56	7.1	--	--	--	--
	Day care children - at day care	22	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	1.6	--	--	--	--
	Home children - at home	69	1.4	--	--	--	--
	Day care children - at home	58	1.7	--	--	--	--
	Day care children - at day care	16	0.0	--	--	--	--
Soil (ng/g)	All children - at home	127	2.4	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	58	5.2	--	--	--	--
	Day care children - at day care	16	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	120	0.8	--	--	--	--
	Home children - at home	63	0.0	--	--	--	--
	Day care children - at home	57	1.8	--	--	--	--
	Day care children - at day care	23	17.4	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - at home	120	0.8	--	--	--	--
	Home children - at home	63	0.0	--	--	--	--
	Day care children - at home	57	1.8	--	--	--	--
	Day care children - at day care	23	17.4	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	4.8	--	--	--	--
	Home children - at home	15	6.7	--	--	--	--
	Day care children - at home	6	0.0	--	--	--	--
	Day care children - at day care	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	0.0	--	--	--	--
	Home children - at home	9	0.0	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	0.0	--	--	--	--
	Home children - at home	9	0.0	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	97	1.0	--	--	--	--
	Home children - at home	68	0.0	--	--	--	--
	Day care children - at home	29	3.4	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	28	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	125	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	56	0.0	--	--	--	--
	Day care children - at day care	29	3.4	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	3.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-1b. Aldrin (309-00-2): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	<MDL	<MDL	243
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	56	<MDL	<MDL	<MDL	<MDL	1.28	243
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.490
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.490
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	<MDL	0.290
	Day care Children - at day care	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	187
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	2.08	187
	Day care Children - at day care	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - at home	120	<MDL	<MDL	<MDL	<MDL	<MDL	94.6
	Home Children - at home	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	94.6
	Day care Children - at day care	23	<MDL	<MDL	<MDL	<MDL	207	220
Indoor Floor Dust (ng/m ²)	All Children - at home	120	<MDL	<MDL	<MDL	<MDL	<MDL	144
	Home Children - at home	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	144
	Day care Children - at day care	23	<MDL	<MDL	<MDL	<MDL	76.0	81.7
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	<MDL	<MDL	<MDL	<MDL	28.3
	Home Children - at home	15	<MDL	<MDL	<MDL	<MDL	28.3	28.3
	Day care Children - at home	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	<MDL	1,580
	Home Children - at home	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	29	<MDL	<MDL	<MDL	<MDL	<MDL	1,580
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - at home	125	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	56	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	<MDL	0.580
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	28	<MDL	<MDL	<MDL	<MDL	<MDL	0.270
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-2a. Atrazine (1912-24-9): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Drinking Water (ng/mL)	All children - <i>at home</i>	125	56.8	0.078	0.124	0.029	1.42
	Home children - <i>at home</i>	67	50.7	0.080	0.146	0.026	1.47
	Day care children - <i>at home</i>	58	63.8	0.076	0.095	0.034	1.36
	Day care children - <i>at day care</i>	16	75.0	0.107	0.144	0.048	1.39

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-2b. Atrazine (1912-24-9): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Drinking Water (ng/mL)	All Children - <i>at home</i>	125	<MDL	<MDL	0.036	0.086	0.296	0.915
	Home Children - <i>at home</i>	67	<MDL	<MDL	0.012	0.086	0.322	0.915
	Day care Children - <i>at home</i>	58	<MDL	<MDL	0.042	0.129	0.296	0.455
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	0.047	0.135	0.554	0.554

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-3a. Benz[a]anthracene (56-55-3): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	39.2	--	--	--	--
	Home children - at home	69	34.8	--	--	--	--
	Day care children - at home	56	44.6	--	--	--	--
	Day care children - at day care	22	31.8	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	111	25.2	--	--	--	--
	Home children - at home	60	21.7	--	--	--	--
	Day care children - at home	51	29.4	--	--	--	--
	Day care children - at day care	14	28.6	--	--	--	--
Soil (ng/g)	All children - at home	126	90.5	156	369	16.1	2.43
	Home children - at home	68	92.6	105	227	13.6	2.28
	Day care children - at home	58	87.9	216	481	19.6	2.59
	Day care children - at day care	16	100.0	51.1	76.1	15.3	1.81
Indoor Floor Dust (ng/g)	All children - at home	120	100.0	1,620	3,780	575	1.29
	Home children - at home	63	100.0	1,390	2,850	496	1.34
	Day care children - at home	57	100.0	1,880	4,610	676	1.23
	Day care children - at day care	23	100.0	1,810	1,490	1,390	0.749
Indoor Floor Dust (ng/m ²)	All children - at home	120	100.0	1,740	2,850	630	1.49
	Home children - at home	63	100.0	1,530	3,200	443	1.54
	Day care children - at home	57	100.0	1,970	2,410	931	1.34
	Day care children - at day care	23	100.0	11,100	13,100	3,700	1.90
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	95.2	37.3	34.9	26.2	0.861
	Home children - at home	15	93.3	26.1	20.9	20.0	0.758
	Day care children - at home	6	100.0	65.2	48.2	51.1	0.779
	Day care children - at day care	3	100.0	18.3	18.7	13.1	0.964
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	30.8	--	--	--	--
	Home children - at home	9	22.2	--	--	--	--
	Day care children - at home	4	50.0	7.70	4.11	7.01	0.485
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	61.5	12.7	16.8	7.92	0.930
	Home children - at home	9	44.4	--	--	--	--
	Day care children - at home	4	100.0	12.4	2.86	12.2	0.225
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	61.5	149	352	65.2	1.04
	Home children - at home	67	59.7	162	411	62.6	1.07
	Day care children - at home	29	65.5	119	140	71.5	0.986
	Day care children - at day care	29	58.6	191	518	62.4	1.21
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	54.6	30.2	34.3	22.5	0.671
	Home children - at home	69	50.7	30.8	38.9	21.8	0.708
	Day care children - at home	28	64.3	28.8	19.7	24.2	0.575
Solid Food (Children) (ng/g)	All children - at home	127	31.5	--	--	--	--
	Home children - at home	69	33.3	--	--	--	--
	Day care children - at home	58	29.3	--	--	--	--
	Day care children - at day care	29	13.8	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	3.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-3b. Benz[a]anthracene (56-55-3): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	0.130	0.410	1.94
	Home Children - at home	69	<MDL	<MDL	<MDL	0.100	0.260	0.560
	Day care Children - at home	56	<MDL	<MDL	<MDL	0.175	0.570	1.94
	Day care Children - at day care	22	<MDL	<MDL	<MDL	0.090	0.130	0.170
Outdoor Air (ng/m ³)	All Children - at home	111	<MDL	<MDL	<MDL	0.070	0.200	0.460
	Home Children - at home	60	<MDL	<MDL	<MDL	<MDL	0.185	0.290
	Day care Children - at home	51	<MDL	<MDL	<MDL	0.090	0.240	0.460
	Day care Children - at day care	14	<MDL	<MDL	<MDL	0.064	0.350	0.350
Soil (ng/g)	All Children - at home	126	<MDL	1.95	15.4	93.1	835	2,380
	Home Children - at home	68	<MDL	1.60	14.9	53.3	599	1,360
	Day care Children - at home	58	<MDL	2.41	16.8	146	1,280	2,380
	Day care Children - at day care	16	1.06	3.24	19.9	67.6	266	266
Indoor Floor Dust (ng/g)	All Children - at home	120	41.4	224	565	1,040	7,560	27,600
	Home Children - at home	63	41.4	207	475	920	6,120	15,100
	Day care Children - at home	57	87.5	256	707	1,170	9,740	27,600
	Day care Children - at day care	23	273	786	1,780	2,210	3,780	7,180
Indoor Floor Dust (ng/m ²)	All Children - at home	120	23.7	218	619	1,860	7,410	18,700
	Home Children - at home	63	23.7	145	314	1,260	6,720	18,700
	Day care Children - at home	57	42.0	384	1,010	2,630	8,320	9,890
	Day care Children - at day care	23	68.2	514	6,220	22,400	37,700	47,700
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	18.3	22.5	45.0	113	136
	Home Children - at home	15	<MDL	10.6	19.8	29.2	74.9	74.9
	Day care Children - at home	6	21.4	22.5	49.2	113	136	136
	Day care Children - at day care	3	7.17	7.17	7.93	39.9	39.9	39.9
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	7.45	28.1	28.1
	Home Children - at home	9	<MDL	<MDL	<MDL	<MDL	28.1	28.1
	Day care Children - at home	4	<MDL	<MDL	<MDL	10.5	13.6	13.6
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	<MDL	8.38	13.0	66.1	66.1
	Home Children - at home	9	<MDL	<MDL	<MDL	8.38	66.1	66.1
	Day care Children - at home	4	9.69	10.3	11.9	14.6	16.2	16.2
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	43.4	111	509	2,680
	Home Children - at home	67	<MDL	<MDL	41.6	95.0	509	2,680
	Day care Children - at home	29	<MDL	<MDL	69.2	132	484	513
	Day care Children - at day care	29	<MDL	<MDL	40.7	99.6	619	2,780
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	20.4	32.2	90.0	205
	Home Children - at home	69	<MDL	<MDL	15.7	31.4	93.5	205
	Day care Children - at home	28	<MDL	<MDL	25.3	32.5	84.4	90.0
Solid Food (Children) (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	0.090	0.190	7.26
	Home Children - at home	69	<MDL	<MDL	<MDL	0.090	0.140	7.26
	Day care Children - at home	58	<MDL	<MDL	<MDL	0.090	1.02	2.25
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	0.092	0.160
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	28	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-4a. Benzo[b]fluoranthene (205-99-2): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	27.2	--	--	--	--
	Home children - at home	69	21.7	--	--	--	--
	Day care children - at home	56	33.9	--	--	--	--
	Day care children - at day care	22	27.3	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	35.4	--	--	--	--
	Home children - at home	69	27.5	--	--	--	--
	Day care children - at home	58	44.8	--	--	--	--
	Day care children - at day care	16	43.8	--	--	--	--
Soil (ng/g)	All children - at home	126	90.5	253	565	27.0	2.49
	Home children - at home	68	91.2	189	385	24.4	2.36
	Day care children - at home	58	89.7	329	718	30.4	2.65
	Day care children - at day care	16	100.0	87.4	126	29.6	1.67
Indoor Floor Dust (ng/g)	All children - at home	120	100.0	3,820	8,820	1,470	1.23
	Home children - at home	63	100.0	3,170	5,970	1,330	1.24
	Day care children - at home	57	100.0	4,540	11,200	1,640	1.22
	Day care children - at day care	23	100.0	4,740	3,780	3,700	0.722
Indoor Floor Dust (ng/m ²)	All children - at home	120	100.0	4,240	7,470	1,610	1.43
	Home children - at home	63	100.0	3,900	8,860	1,180	1.46
	Day care children - at home	57	100.0	4,630	5,610	2,260	1.32
	Day care children - at day care	23	100.0	30,500	35,700	9,830	1.90
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	95.2	87.0	77.6	56.8	1.04
	Home children - at home	15	93.3	63.1	50.3	43.3	1.00
	Day care children - at home	6	100.0	147	105	112	0.860
	Day care children - at day care	3	100.0	90.5	63.8	73.8	0.823
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	46.2	--	--	--	--
	Home children - at home	9	33.3	--	--	--	--
	Day care children - at home	4	75.0	14.5	8.17	12.5	0.681
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	92.3	46.7	68.8	23.2	1.21
	Home children - at home	9	88.9	47.3	82.4	18.3	1.36
	Day care children - at home	4	100.0	45.1	28.5	39.9	0.547
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	83.3	419	1,100	156	1.24
	Home children - at home	67	82.1	494	1,300	160	1.31
	Day care children - at home	29	86.2	245	250	148	1.08
	Day care children - at day care	29	82.8	464	1,120	135	1.44
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	71.1	69.8	92.3	41.9	0.970
	Home children - at home	69	69.6	77.0	105	43.2	1.04
	Day care children - at home	28	75.0	52.1	42.8	38.8	0.792
Solid Food (Children) (ng/g)	All children - at home	127	40.9	--	--	--	--
	Home children - at home	69	40.6	--	--	--	--
	Day care children - at home	58	41.4	--	--	--	--
	Day care children - at day care	29	31.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.8	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	1.8	--	--	--	--
	Day care children - at day care	28	7.1	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-4b. Benzo[b]fluoranthene (205-99-2): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	0.110	0.550	4.00
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.260	1.26
	Day care Children - at home	56	<MDL	<MDL	<MDL	0.150	0.770	4.00
	Day care Children - at day care	22	<MDL	<MDL	<MDL	0.110	0.260	0.340
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	0.160	0.500	1.90
	Home Children - at home	69	<MDL	<MDL	<MDL	0.130	0.370	1.17
	Day care Children - at home	58	<MDL	<MDL	<MDL	0.170	0.590	1.90
	Day care Children - at day care	16	<MDL	<MDL	<MDL	0.130	0.360	0.360
Soil (ng/g)	All Children - at home	126	<MDL	4.23	33.1	177	1,240	3,800
	Home Children - at home	68	<MDL	4.30	31.8	93.9	1,100	1,930
	Day care Children - at home	58	<MDL	4.05	33.4	230	2,040	3,800
	Day care Children - at day care	16	1.75	6.72	34.6	96.7	452	452
Indoor Floor Dust (ng/g)	All Children - at home	120	121	640	1,550	2,400	17,500	69,000
	Home Children - at home	63	121	607	1,340	2,160	12,800	34,000
	Day care Children - at home	57	192	709	1,750	2,500	26,000	69,000
	Day care Children - at day care	23	824	2,280	4,190	5,700	9,690	18,500
Indoor Floor Dust (ng/m ²)	All Children - at home	120	73.9	574	1,750	3,980	18,400	52,500
	Home Children - at home	63	73.9	463	924	2,590	16,800	52,500
	Day care Children - at home	57	101	1,140	2,430	5,850	20,000	24,500
	Day care Children - at day care	23	206	1,480	13,400	61,100	97,200	117,000
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	38.5	53.5	133	217	311
	Home Children - at home	15	<MDL	19.7	49.3	94.4	161	161
	Day care Children - at home	6	38.8	41.0	137	217	311	311
	Day care Children - at day care	3	30.8	30.8	83.0	158	158	158
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	14.7	49.8	49.8
	Home Children - at home	9	<MDL	<MDL	<MDL	12.1	49.8	49.8
	Day care Children - at home	4	<MDL	<MDL	14.2	19.8	24.8	24.8
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	13.7	24.8	37.7	257	257
	Home Children - at home	9	<MDL	8.16	13.8	24.8	257	257
	Day care Children - at home	4	25.2	27.8	34.1	62.5	87.2	87.2
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	80.0	125	353	1,270	8,810
	Home Children - at home	67	<MDL	77.4	124	354	1,450	8,810
	Day care Children - at home	29	<MDL	84.1	151	300	685	1,070
	Day care Children - at day care	29	<MDL	44.6	102	322	1,770	5,830
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	42.6	78.5	211	561
	Home Children - at home	69	<MDL	<MDL	44.0	78.9	288	561
	Day care Children - at home	28	<MDL	<MDL	41.7	74.1	131	200
Solid Food (Children) (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	0.130	0.270	10.2
	Home Children - at home	69	<MDL	<MDL	<MDL	0.130	0.230	10.2
	Day care Children - at home	58	<MDL	<MDL	<MDL	0.130	1.33	2.89
	Day care Children - at day care	29	<MDL	<MDL	<MDL	0.110	0.180	0.350
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
	Day care Children - at day care	28	<MDL	<MDL	<MDL	<MDL	0.040	0.120
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-5a. Benzo[k]fluoranthene (207-08-9): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	20.8	--	--	--	--
	Home children - at home	69	14.5	--	--	--	--
	Day care children - at home	56	28.6	--	--	--	--
	Day care children - at day care	22	22.7	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	24.4	--	--	--	--
	Home children - at home	69	20.3	--	--	--	--
	Day care children - at home	58	29.3	--	--	--	--
	Day care children - at day care	16	31.3	--	--	--	--
Soil (ng/g)	All children - at home	126	91.3	95.5	207	13.2	2.21
	Home children - at home	68	91.2	71.3	143	11.4	2.12
	Day care children - at home	58	91.4	124	262	15.7	2.32
	Day care children - at day care	16	100.0	35.0	46.9	13.6	1.60
Indoor Floor Dust (ng/g)	All children - at home	120	100.0	1,360	3,070	521	1.24
	Home children - at home	63	100.0	1,170	2,270	478	1.26
	Day care children - at home	57	100.0	1,570	3,770	574	1.23
	Day care children - at day care	23	100.0	1,700	1,300	1,360	0.686
Indoor Floor Dust (ng/m ²)	All children - at home	120	100.0	1,490	2,620	572	1.40
	Home children - at home	63	100.0	1,400	3,150	426	1.44
	Day care children - at home	57	100.0	1,590	1,890	790	1.29
	Day care children - at day care	23	100.0	10,300	12,100	3,620	1.77
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	90.5	37.6	32.2	25.8	0.934
	Home children - at home	15	86.7	28.2	23.4	20.1	0.885
	Day care children - at home	6	100.0	61.2	41.1	48.4	0.797
	Day care children - at day care	3	100.0	28.5	27.8	20.4	0.993
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	38.5	--	--	--	--
	Home children - at home	9	33.3	--	--	--	--
	Day care children - at home	4	50.0	7.32	3.49	6.78	0.437
	Day care children - at day care	13	84.6	18.3	28.2	10.4	0.988
Transferable Residues (ng/m ²)	All children - at home	9	77.8	19.4	34.1	8.97	1.14
	Home children - at home	4	100.0	15.6	7.64	14.3	0.482
	Day care children - at home						
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	77.1	174	384	82.6	1.04
	Home children - at home	67	74.6	184	449	78.9	1.05
	Day care children - at home	29	82.8	151	157	91.9	1.02
	Day care children - at day care	29	58.6	177	342	71.8	1.23
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	61.9	36.9	37.7	26.5	0.755
	Home children - at home	69	63.8	38.6	41.8	27.0	0.781
	Day care children - at home	28	57.1	32.7	25.3	25.4	0.697
Solid Food (Children) (ng/g)	All children - at home	127	18.1	--	--	--	--
	Home children - at home	69	17.4	--	--	--	--
	Day care children - at home	58	19.0	--	--	--	--
	Day care children - at day care	29	6.9	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	7.1	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-5b. Benzo[k]fluoranthene (207-08-9): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	<MDL	0.170	0.720
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.170	0.260
	Day care Children - at home	56	<MDL	<MDL	<MDL	0.090	0.200	0.720
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	0.100	0.180
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	0.140	0.330
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.140	0.330
	Day care Children - at home	58	<MDL	<MDL	<MDL	0.090	0.160	0.250
	Day care Children - at day care	16	<MDL	<MDL	<MDL	0.064	0.150	0.150
Soil (ng/g)	All Children - at home	126	<MDL	2.43	11.8	71.4	461	1,350
	Home Children - at home	68	<MDL	2.00	12.0	35.8	418	727
	Day care Children - at home	58	<MDL	3.11	10.5	93.3	809	1,350
	Day care Children - at day care	16	0.880	5.68	15.0	45.0	166	166
Indoor Floor Dust (ng/g)	All Children - at home	120	39.6	248	518	884	6,420	22,900
	Home Children - at home	63	39.6	242	423	834	4,620	12,400
	Day care Children - at home	57	69.7	254	616	900	9,010	22,900
	Day care Children - at day care	23	406	837	1,520	1,960	3,720	6,390
Indoor Floor Dust (ng/m ²)	All Children - at home	120	40.2	202	591	1,400	6,090	18,300
	Home Children - at home	63	40.2	152	322	1,000	5,580	18,300
	Day care Children - at home	57	48.5	321	803	2,050	6,610	8,120
	Day care Children - at day care	23	102	701	4,540	20,900	33,600	40,100
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	14.6	22.3	57.7	86.3	123
	Home Children - at home	15	<MDL	10.0	21.1	41.2	79.3	79.3
	Day care Children - at home	6	17.3	20.6	60.0	86.3	123	123
	Day care Children - at day care	3	8.55	8.55	16.5	60.3	60.3	60.3
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	7.59	24.1	24.1
	Home Children - at home	9	<MDL	<MDL	<MDL	7.59	24.1	24.1
	Day care Children - at home	4	<MDL	<MDL	<MDL	9.76	12.3	12.3
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	4.78	9.25	15.5	109	109
	Home Children - at home	9	<MDL	4.65	6.01	13.3	109	109
	Day care Children - at home	4	8.20	10.4	14.0	20.8	26.1	26.1
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	38.1	64.3	151	548	3,150
	Home Children - at home	67	<MDL	<MDL	62.3	120	497	3,150
	Day care Children - at home	29	<MDL	44.7	82.5	211	548	554
	Day care Children - at day care	29	<MDL	<MDL	48.8	133	705	1,730
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	21.9	44.8	109	219
	Home Children - at home	69	<MDL	<MDL	22.0	42.5	143	219
	Day care Children - at home	28	<MDL	<MDL	20.8	51.5	80.0	95.2
Solid Food (Children) (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	0.150	3.48
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.120	3.48
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	0.560	0.930
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	0.150	0.260
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	28	<MDL	<MDL	<MDL	<MDL	0.040	0.080
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-6a. Benzo[ghi]perylene (191-24-2): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	26.4	--	--	--	--
	Home children - at home	69	18.8	--	--	--	--
	Day care children - at home	56	35.7	--	--	--	--
	Day care children - at day care	22	27.3	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	22.0	--	--	--	--
	Home children - at home	69	20.3	--	--	--	--
	Day care children - at home	58	24.1	--	--	--	--
	Day care children - at day care	16	31.3	--	--	--	--
Soil (ng/g)	All children - at home	126	89.7	131	297	14.5	2.37
	Home children - at home	68	91.2	96.4	198	13.0	2.26
	Day care children - at home	58	87.9	171	381	16.5	2.51
	Day care children - at day care	16	100.0	43.9	64.7	13.9	1.75
Indoor Floor Dust (ng/g)	All children - at home	120	100.0	1,950	4,310	780	1.22
	Home children - at home	63	100.0	1,670	3,220	709	1.27
	Day care children - at home	57	100.0	2,260	5,280	866	1.22
	Day care children - at day care	23	100.0	2,530	1,800	2,030	0.700
Indoor Floor Dust (ng/m ²)	All children - at home	120	100.0	2,200	3,720	855	1.42
	Home children - at home	63	100.0	2,000	4,370	632	1.45
	Day care children - at home	57	100.0	2,410	2,860	1,190	1.32
	Day care children - at day care	23	100.0	16,800	19,500	5,390	1.92
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	90.5	50.5	42.8	33.9	0.995
	Home children - at home	15	86.7	36.3	27.8	25.7	0.936
	Day care children - at home	6	100.0	86.1	55.2	67.2	0.850
	Day care children - at day care	3	100.0	37.6	40.9	25.5	1.04
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	30.8	--	--	--	--
	Home children - at home	9	22.2	--	--	--	--
	Day care children - at home	4	50.0	8.27	5.10	7.31	0.551
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	84.6	33.0	49.5	17.0	1.18
	Home children - at home	9	77.8	34.7	59.9	13.9	1.36
	Day care children - at home	4	100.0	29.4	13.5	26.9	0.492
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	79.2	252	529	108	1.17
	Home children - at home	67	77.6	263	609	101	1.19
	Day care children - at home	29	82.8	227	271	124	1.14
	Day care children - at day care	29	72.4	218	422	86.8	1.24
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	63.9	40.6	48.6	28.0	0.781
	Home children - at home	69	66.7	44.2	55.3	29.2	0.825
	Day care children - at home	28	57.1	31.8	23.9	25.3	0.664
Solid Food (Children) (ng/g)	All children - at home	127	4.7	--	--	--	--
	Home children - at home	69	2.9	--	--	--	--
	Day care children - at home	58	6.9	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-6b. Benzo[ghi]perylene (191-24-2): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	0.120	0.280	1.02
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.170	0.630
	Day care Children - at home	56	<MDL	<MDL	<MDL	0.175	0.380	1.02
	Day care Children - at day care	22	<MDL	<MDL	<MDL	0.120	2.43	4.95
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	0.200	0.370
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.190	0.340
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	0.200	0.370
	Day care Children - at day care	16	<MDL	<MDL	<MDL	0.082	0.220	0.220
Soil (ng/g)	All Children - at home	126	<MDL	1.91	16.1	84.3	644	2,060
	Home Children - at home	68	<MDL	1.57	16.6	47.3	571	981
	Day care Children - at home	58	<MDL	2.20	15.7	111	1,160	2,060
	Day care Children - at day care	16	0.980	3.39	19.4	46.7	229	229
Indoor Floor Dust (ng/g)	All Children - at home	120	68.9	317	772	1,320	8,560	33,400
	Home Children - at home	63	87.0	299	702	1,210	5,960	17,000
	Day care Children - at home	57	68.9	328	905	1,420	11,500	33,400
	Day care Children - at day care	23	463	1,280	2,250	3,130	5,010	8,650
Indoor Floor Dust (ng/m ²)	All Children - at home	120	42.3	319	925	2,200	8,710	26,000
	Home Children - at home	63	42.3	239	495	1,420	8,280	26,000
	Day care Children - at home	57	46.0	523	1,350	3,170	10,400	11,900
	Day care Children - at day care	23	116	873	7,100	33,600	57,500	58,200
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	19.5	28.1	73.9	114	165
	Home Children - at home	15	<MDL	14.8	26.2	64.0	94.4	94.4
	Day care Children - at home	6	20.9	26.1	95.7	114	165	165
	Day care Children - at day care	3	13.2	13.2	14.8	84.8	84.8	84.8
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	7.66	27.2	27.2
	Home Children - at home	9	<MDL	<MDL	<MDL	<MDL	27.2	27.2
	Day care Children - at home	4	<MDL	<MDL	<MDL	11.7	15.7	15.7
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	6.97	18.5	39.5	190	190
	Home Children - at home	9	<MDL	4.87	14.7	23.5	190	190
	Day care Children - at home	4	15.9	17.8	29.6	41.0	42.5	42.5
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	43.2	92.5	189	870	4,100
	Home Children - at home	67	<MDL	38.9	74.7	202	670	4,100
	Day care Children - at home	29	<MDL	53.0	145	177	870	1,070
	Day care Children - at day care	29	<MDL	<MDL	77.7	162	1,020	2,080
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	24.9	49.9	145	326
	Home Children - at home	69	<MDL	<MDL	25.7	49.9	181	326
	Day care Children - at home	28	<MDL	<MDL	24.2	45.7	75.5	106
Solid Food (Children) (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	8.05
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	8.05
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	0.650	2.95
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-7a. Benzo[a]pyrene (50-32-8): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	18.4	--	--	--	--
	Home children - at home	69	10.1	--	--	--	--
	Day care children - at home	56	28.6	--	--	--	--
	Day care children - at day care	22	18.2	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	15.0	--	--	--	--
	Home children - at home	69	17.4	--	--	--	--
	Day care children - at home	58	12.1	--	--	--	--
	Day care children - at day care	16	18.8	--	--	--	--
Soil (ng/g)	All children - at home	126	89.7	173	411	17.3	2.46
	Home children - at home	68	91.2	121	258	14.9	2.34
	Day care children - at home	58	87.9	234	535	20.7	2.61
	Day care children - at day care	16	100.0	57.8	88.7	16.3	1.87
Indoor Floor Dust (ng/g)	All children - at home	120	100.0	2,220	5,260	793	1.28
	Home children - at home	63	100.0	1,870	3,790	706	1.30
	Day care children - at home	57	100.0	2,590	6,530	902	1.25
	Day care children - at day care	23	100.0	2,340	1,840	1,820	0.728
Indoor Floor Dust (ng/m ²)	All children - at home	120	100.0	2,300	3,750	870	1.45
	Home children - at home	63	100.0	2,030	4,160	630	1.49
	Day care children - at home	57	100.0	2,610	3,240	1,240	1.33
	Day care children - at day care	23	100.0	14,100	16,400	4,830	1.85
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	85.7	42.1	39.8	27.7	0.996
	Home children - at home	15	80.0	30.4	25.5	21.1	0.949
	Day care children - at home	6	100.0	71.4	55.5	54.5	0.822
	Day care children - at day care	3	100.0	23.3	21.0	17.4	0.938
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	30.8	--	--	--	--
	Home children - at home	9	22.2	--	--	--	--
	Day care children - at home	4	50.0	7.92	4.68	7.08	0.522
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	84.6	25.9	36.5	14.1	1.12
	Home children - at home	9	77.8	26.2	44.3	11.1	1.28
	Day care children - at home	4	100.0	25.3	9.79	23.9	0.393
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	69.8	234	622	88.7	1.16
	Home children - at home	67	67.2	263	733	85.9	1.21
	Day care children - at home	29	75.9	167	202	95.6	1.07
	Day care children - at day care	29	65.5	259	610	83.5	1.31
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	57.7	38.5	46.9	26.3	0.784
	Home children - at home	69	59.4	41.1	52.2	27.1	0.816
	Day care children - at home	28	53.6	32.2	29.9	24.3	0.706
Solid Food (Children) (ng/g)	All children - at home	127	18.9	--	--	--	--
	Home children - at home	69	18.8	--	--	--	--
	Day care children - at home	58	19.0	--	--	--	--
	Day care children - at day care	29	10.3	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-7b. Benzo[a]pyrene (50-32-8): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	<MDL	0.360	2.45
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.134	0.920
	Day care Children - at home	56	<MDL	<MDL	<MDL	0.090	0.670	2.45
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	0.360	0.850
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	0.120	0.310
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.120	0.200
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	0.160	0.310
	Day care Children - at day care	16	<MDL	<MDL	<MDL	<MDL	0.230	0.230
Soil (ng/g)	All Children - at home	126	<MDL	2.42	17.8	122	777	3,000
	Home Children - at home	68	<MDL	1.54	17.3	59.8	726	1,460
	Day care Children - at home	58	<MDL	2.96	19.4	156	1,320	3,000
	Day care Children - at day care	16	0.810	3.47	19.6	72.2	319	319
Indoor Floor Dust (ng/g)	All Children - at home	120	76.0	331	721	1,430	11,000	40,800
	Home Children - at home	63	76.0	284	669	1,200	7,320	20,300
	Day care Children - at home	57	99.7	355	940	1,460	13,400	40,800
	Day care Children - at day care	23	466	983	2,110	3,200	4,740	8,660
Indoor Floor Dust (ng/m ²)	All Children - at home	120	35.5	320	898	2,260	9,980	25,000
	Home Children - at home	63	35.5	215	459	1,600	8,720	25,000
	Day care Children - at home	57	51.3	490	1,340	3,210	11,200	14,500
	Day care Children - at day care	23	116	776	7,830	22,600	45,500	54,700
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	18.9	31.9	61.7	107	164
	Home Children - at home	15	<MDL	10.2	24.7	35.2	94.9	94.9
	Day care Children - at home	6	19.5	27.2	55.4	107	164	164
	Day care Children - at day care	3	7.31	7.31	15.4	47.1	47.1	47.1
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	7.17	14.8	14.8
	Home Children - at home	9	<MDL	<MDL	<MDL	<MDL	12.8	12.8
	Day care Children - at home	4	<MDL	<MDL	<MDL	11.0	14.8	14.8
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	5.44	15.1	27.5	141	141
	Home Children - at home	9	<MDL	4.87	6.84	26.2	141	141
	Day care Children - at home	4	15.1	18.0	24.2	32.7	37.9	37.9
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	<MDL	72.2	160	708	5,060
	Home Children - at home	67	<MDL	<MDL	67.8	158	708	5,060
	Day care Children - at home	29	<MDL	40.7	91.3	162	659	809
	Day care Children - at day care	29	<MDL	<MDL	65.3	149	1,200	3,130
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	21.7	41.5	124	280
	Home Children - at home	69	<MDL	<MDL	22.8	46.2	124	280
	Day care Children - at home	28	<MDL	<MDL	18.0	40.3	99.7	134
Solid Food (Children) (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	0.160	13.2
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.140	13.2
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	0.790	5.04
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	0.120	0.160
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-8a. Benzo[e]pyrene (192-97-2): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	21.6	--	--	--	--
	Home children - at home	69	14.5	--	--	--	--
	Day care children - at home	56	30.4	--	--	--	--
	Day care children - at day care	22	22.7	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	25.2	--	--	--	--
	Home children - at home	69	23.2	--	--	--	--
	Day care children - at home	58	27.6	--	--	--	--
	Day care children - at day care	16	31.3	--	--	--	--
Soil (ng/g)	All children - at home	126	89.7	127	279	15.3	2.33
	Home children - at home	68	91.2	92.5	190	13.7	2.19
	Day care children - at home	58	87.9	167	354	17.5	2.50
	Day care children - at day care	16	100.0	47.1	71.7	14.8	1.74
Indoor Floor Dust (ng/g)	All children - at home	120	100.0	2,050	4,640	801	1.21
	Home children - at home	63	100.0	1,740	3,350	732	1.22
	Day care children - at home	57	100.0	2,380	5,750	886	1.21
	Day care children - at day care	23	100.0	2,500	1,880	1,990	0.703
Indoor Floor Dust (ng/m ²)	All children - at home	120	100.0	2,270	3,920	878	1.41
	Home children - at home	63	100.0	2,080	4,640	653	1.44
	Day care children - at home	57	100.0	2,470	2,940	1,220	1.31
	Day care children - at day care	23	100.0	16,300	19,100	5,290	1.89
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	95.2	58.4	54.3	38.1	1.00
	Home children - at home	15	93.3	40.0	31.4	28.8	0.900
	Day care children - at home	6	100.0	104	74.0	76.8	0.955
	Day care children - at day care	3	100.0	47.9	40.0	37.4	0.869
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	38.5	--	--	--	--
	Home children - at home	9	33.3	--	--	--	--
	Day care children - at home	4	50.0	8.44	5.58	7.35	0.578
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	92.3	26.2	34.9	15.7	1.01
	Home children - at home	9	88.9	26.4	42.5	12.8	1.16
	Day care children - at home	4	100.0	25.7	7.28	25.0	0.262
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	82.3	250	555	114	1.10
	Home children - at home	67	80.6	275	652	112	1.14
	Day care children - at home	29	86.2	192	199	119	1.02
	Day care children - at day care	29	82.8	240	496	92.4	1.23
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	69.1	51.0	54.5	34.6	0.852
	Home children - at home	69	68.1	56.3	61.1	36.9	0.902
	Day care children - at home	28	71.4	38.1	30.4	29.6	0.704
Solid Food (Children) (ng/g)	All children - at home	127	21.3	--	--	--	--
	Home children - at home	69	18.8	--	--	--	--
	Day care children - at home	58	24.1	--	--	--	--
	Day care children - at day care	29	10.3	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	3.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-8b. Benzo[e]pyrene (192-97-2): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	<MDL	0.290	1.20
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.134	0.530
	Day care Children - at home	56	<MDL	<MDL	<MDL	0.115	0.370	1.20
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	0.280	0.490
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	0.090	0.200	0.340
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.170	0.290
	Day care Children - at home	58	<MDL	<MDL	<MDL	0.100	0.240	0.340
	Day care Children - at day care	16	<MDL	<MDL	<MDL	0.085	0.180	0.180
Soil (ng/g)	All Children - at home	126	<MDL	2.14	16.2	95.7	741	1,860
	Home Children - at home	68	<MDL	1.82	15.7	45.1	521	913
	Day care Children - at home	58	<MDL	2.28	17.3	116	966	1,860
	Day care Children - at day care	16	0.930	3.89	19.2	44.8	259	259
Indoor Floor Dust (ng/g)	All Children - at home	120	82.0	348	830	1,340	9,290	36,100
	Home Children - at home	63	82.0	338	695	1,260	7,030	18,400
	Day care Children - at home	57	111	361	930	1,410	13,400	36,100
	Day care Children - at day care	23	470	1,230	2,210	2,970	5,350	9,120
Indoor Floor Dust (ng/m ²)	All Children - at home	120	46.6	315	924	2,190	9,480	27,000
	Home Children - at home	63	46.6	231	487	1,530	8,650	27,000
	Day care Children - at home	57	55.6	540	1,290	3,160	10,300	12,800
	Day care Children - at day care	23	117	786	6,960	33,000	51,000	62,100
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	20.8	34.5	91.9	128	220
	Home Children - at home	15	<MDL	15.0	31.2	62.1	111	111
	Day care Children - at home	6	20.8	26.5	116	128	220	220
	Day care Children - at day care	3	16.4	16.4	34.4	92.8	92.8	92.8
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	7.38	33.2	33.2
	Home Children - at home	9	<MDL	<MDL	<MDL	7.03	33.2	33.2
	Day care Children - at home	4	<MDL	<MDL	<MDL	12.0	16.6	16.6
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	6.62	16.9	24.9	137	137
	Home Children - at home	9	<MDL	5.83	11.6	16.9	137	137
	Day care Children - at home	4	20.0	20.9	23.3	30.6	36.2	36.2
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	55.0	102	215	759	4,440
	Home Children - at home	67	<MDL	51.2	91.3	204	759	4,440
	Day care Children - at home	29	<MDL	62.8	120	229	638	781
	Day care Children - at day care	29	<MDL	36.3	66.5	155	1,070	2,510
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	35.4	59.8	156	340
	Home Children - at home	69	<MDL	<MDL	39.5	64.6	178	340
	Day care Children - at home	28	<MDL	<MDL	26.2	50.0	91.5	143
Solid Food (Children) (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	0.140	3.69
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.100	3.69
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	0.700	1.24
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	0.110	0.140
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	28	<MDL	<MDL	<MDL	<MDL	<MDL	0.070
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-9a. Benzylbutylphthalate (85-68-7): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	32.8	--	--	--	--
	Home children - <i>at home</i>	69	24.6	--	--	--	--
	Day care children - <i>at home</i>	56	42.9	--	--	--	--
	Day care children - <i>at day care</i>	22	31.8	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	126	9.5	--	--	--	--
	Home children - <i>at home</i>	69	10.1	--	--	--	--
	Day care children - <i>at home</i>	57	8.8	--	--	--	--
	Day care children - <i>at day care</i>	16	18.8	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	127	37.8	--	--	--	--
	Home children - <i>at home</i>	69	46.4	--	--	--	--
	Day care children - <i>at home</i>	58	27.6	--	--	--	--
	Day care children - <i>at day care</i>	16	31.3	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	118	100.0	29,400	44,500	16,700	1.06
	Home children - <i>at home</i>	62	100.0	23,600	26,300	14,600	0.993
	Day care children - <i>at home</i>	56	100.0	35,800	58,000	19,300	1.12
	Day care children - <i>at day care</i>	23	100.0	56,300	96,500	35,400	0.802
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	118	100.0	55,400	112,000	17,500	1.51
	Home children - <i>at home</i>	62	100.0	33,000	57,000	12,300	1.43
	Day care children - <i>at home</i>	56	100.0	80,100	148,000	25,900	1.52
	Day care children - <i>at day care</i>	23	100.0	356,000	613,000	94,000	1.83
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	76.2	113,000	265,000	10,800	2.23
	Home children - <i>at home</i>	15	66.7	21,200	44,700	5,200	1.59
	Day care children - <i>at home</i>	6	100.0	342,000	432,000	66,000	2.70
	Day care children - <i>at day care</i>	3	100.0	438,000	399,000	339,000	0.846
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	53.8	3,090	2,420	2,390	0.730
	Home children - <i>at home</i>	9	44.4	--	--	--	--
	Day care children - <i>at home</i>	4	75.0	4,550	3,350	3,570	0.845
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	100.0	6,460	3,750	5,660	0.526
	Home children - <i>at home</i>	9	100.0	5,050	2,080	4,680	0.422
	Day care children - <i>at home</i>	4	100.0	9,630	5,020	8,680	0.528
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	46.4	--	--	--	--
	Home children - <i>at home</i>	68	41.2	--	--	--	--
	Day care children - <i>at home</i>	29	58.6	22,100	21,100	14,900	0.886
	Day care children - <i>at day care</i>	29	41.4	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	46.4	--	--	--	--
	Home children - <i>at home</i>	69	46.4	--	--	--	--
	Day care children - <i>at home</i>	28	46.4	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	91	58.2	36.1	59.5	14.1	1.31
	Home children - <i>at home</i>	47	48.9	--	--	--	--
	Day care children - <i>at home</i>	44	68.2	38.7	56.3	17.2	1.28
	Day care children - <i>at day care</i>	15	53.3	36.6	85.6	11.7	1.33
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	97	7.2	--	--	--	--
	Home children - <i>at home</i>	51	7.8	--	--	--	--
	Day care children - <i>at home</i>	46	6.5	--	--	--	--
	Day care children - <i>at day care</i>	25	4.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-9b. Benzylbutylphthalate (85-68-7): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	48.9	170	469
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	135	193
	Day care Children - at home	56	<MDL	<MDL	<MDL	70.6	274	469
	Day care Children - at day care	22	<MDL	<MDL	<MDL	49.6	98.6	124
Outdoor Air (ng/m ³)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	42.4	677
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	49.8	677
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	42.4	88.1
	Day care Children - at day care	16	<MDL	<MDL	<MDL	<MDL	70.0	70.0
Soil (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	219	3,590	0,000
	Home Children - at home	69	<MDL	<MDL	<MDL	1,030	4,760	0,000
	Day care Children - at home	58	<MDL	<MDL	<MDL	12.1	2,400	2,710
	Day care Children - at day care	16	<MDL	<MDL	<MDL	21.4	2,670	2,670
Indoor Floor Dust (ng/g)	All Children - at home	118	732	8,170	17,300	33,000	101,000	380,000
	Home Children - at home	62	1,710	6,770	15,300	24,300	77,100	115,000
	Day care Children - at home	56	732	10,600	17,700	38,400	117,000	380,000
	Day care Children - at day care	23	10,200	21,600	28,800	53,200	94,900	489,000
Indoor Floor Dust (ng/m ²)	All Children - at home	118	629	5,480	16,300	53,100	275,000	639,000
	Home Children - at home	62	629	4,580	9,220	36,000	104,000	316,000
	Day care Children - at home	56	1,140	7,050	28,100	66,800	524,000	639,000
	Day care Children - at day care	23	6,060	13,900	94,400	430,000	1,700,000	2,560,000
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	1,790	5,560	72,100	614,000	1,080,000
	Home Children - at home	15	<MDL	<MDL	4,830	12,800	161,000	161,000
	Day care Children - at home	6	1,970	3,150	175,000	614,000	1,080,000	1,080,000
	Day care Children - at day care	3	203,000	203,000	213,000	899,000	899,000	899,000
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	2,040	4,950	9,010	9,010
	Home Children - at home	9	<MDL	<MDL	<MDL	3,390	5,500	5,500
	Day care Children - at home	4	<MDL	<MDL	3,970	6,990	9,010	9,010
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	2,530	4,410	5,390	6,970	15,900	15,900
	Home Children - at home	9	2,530	3,540	4,490	6,570	8,800	8,800
	Day care Children - at home	4	5,310	5,600	8,640	13,700	15,900	15,900
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	21,900	68,400	176,000
	Home Children - at home	68	<MDL	<MDL	<MDL	16,300	60,600	176,000
	Day care Children - at home	29	<MDL	<MDL	14,200	36,200	68,400	81,000
	Day care Children - at day care	29	<MDL	<MDL	<MDL	20,200	93,300	159,000
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	11,200	36,500	114,000
	Home Children - at home	69	<MDL	<MDL	<MDL	8,980	44,200	114,000
	Day care Children - at home	28	<MDL	<MDL	<MDL	15,400	25,400	25,600
Solid Food (Children) (ng/g)	All Children - at home	91	<MDL	<MDL	11.2	35.5	165	334
	Home Children - at home	47	<MDL	<MDL	<MDL	32.7	163	334
	Day care Children - at home	44	<MDL	<MDL	16.6	44.8	188	242
	Day care Children - at day care	15	<MDL	<MDL	9.00	34.3	341	341
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	39.1	81.1
	Home Children - at home	51	<MDL	<MDL	<MDL	<MDL	26.9	81.1
	Day care Children - at home	46	<MDL	<MDL	<MDL	<MDL	39.1	59.2
	Day care Children - at day care	25	<MDL	<MDL	<MDL	<MDL	<MDL	30.2
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-10a. Bisphenol-A (80-05-7): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	63.2	2.19	3.98	1.25	0.856
	Home children - at home	69	59.4	1.69	3.76	1.05	0.710
	Day care children - at home	56	67.9	2.80	4.19	1.53	0.975
	Day care children - at day care	22	72.7	1.29	1.44	0.992	0.642
Outdoor Air (ng/m ³)	All children - at home	103	34.0	--	--	--	--
	Home children - at home	59	30.5	--	--	--	--
	Day care children - at home	44	38.6	--	--	--	--
	Day care children - at day care	16	43.8	--	--	--	--
Soil (ng/g)	All children - at home	126	2.4	--	--	--	--
	Home children - at home	68	2.9	--	--	--	--
	Day care children - at home	58	1.7	--	--	--	--
	Day care children - at day care	14	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	116	47.4	--	--	--	--
	Home children - at home	61	54.1	60.0	84.4	39.9	0.792
	Day care children - at home	55	40.0	--	--	--	--
	Day care children - at day care	23	69.6	41.2	26.6	34.8	0.573
Indoor Floor Dust (ng/m ²)	All children - at home	116	47.4	--	--	--	--
	Home children - at home	61	54.1	76.9	217	32.2	1.04
	Day care children - at home	55	40.0	--	--	--	--
	Day care children - at day care	23	69.6	213	235	92.6	1.54
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	95.2	2,660	5,360	789	1.53
	Home children - at home	15	93.3	1,190	2,730	446	1.26
	Day care children - at home	6	100.0	6,340	8,440	3,280	1.24
	Day care children - at day care	3	100.0	450	186	425	0.410
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	84.6	940	1,030	411	1.76
	Home children - at home	9	88.9	527	418	290	1.66
	Day care children - at home	4	75.0	1,870	1,450	894	1.96
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	7	71.4	269	275	145	1.33
	Home children - at home	5	60.0	166	181	91.4	1.26
	Day care children - at home	2	100.0	526	372	455	0.778
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	97	99.0	7,810	10,200	5,410	0.835
	Home children - at home	68	98.5	8,530	11,800	5,660	0.890
	Day care children - at home	29	100.0	6,120	4,550	4,870	0.694
	Day care children - at day care	29	89.7	5,070	8,780	2,140	1.68
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	99.0	6,420	7,190	4,100	0.981
	Home children - at home	69	98.6	6,650	7,530	4,120	1.03
	Day care children - at home	28	100.0	5,870	6,370	4,070	0.861
Solid Food (Children) (ng/g)	All children - at home	127	100.0	7.60	16.8	3.98	0.961
	Home children - at home	69	100.0	5.75	6.22	3.76	0.902
	Day care children - at home	58	100.0	9.80	23.9	4.26	1.03
	Day care children - at day care	29	100.0	4.38	3.73	3.36	0.728
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	111	69.4	0.761	1.66	0.279	1.60
	Home children - at home	58	70.7	0.648	0.759	0.279	1.60
	Day care children - at home	53	67.9	0.884	2.28	0.279	1.61
	Day care children - at day care	25	80.0	0.848	1.01	0.425	1.44
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-10b. Bisphenol-A (80-05-7): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	0.980	1.73	8.63	30.3
	Home Children - at home	69	<MDL	<MDL	0.950	1.36	3.66	30.3
	Day care Children - at home	56	<MDL	<MDL	1.14	2.07	16.5	19.9
	Day care Children - at day care	22	<MDL	<MDL	0.920	1.48	1.80	7.42
Outdoor Air (ng/m ³)	All Children - at home	103	<MDL	<MDL	<MDL	0.920	1.70	19.0
	Home Children - at home	59	<MDL	<MDL	<MDL	0.860	1.68	13.2
	Day care Children - at home	44	<MDL	<MDL	<MDL	0.940	7.63	19.0
	Day care Children - at day care	16	<MDL	<MDL	<MDL	0.682	6.94	6.94
Soil (ng/g)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	18.7
	Home Children - at home	68	<MDL	<MDL	<MDL	<MDL	<MDL	5.63
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	<MDL	18.7
	Day care Children - at day care	14	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - at home	116	<MDL	<MDL	<MDL	47.1	141	589
	Home Children - at home	61	<MDL	<MDL	35.4	54.6	177	589
	Day care Children - at home	55	<MDL	<MDL	<MDL	40.1	82.4	114
	Day care Children - at day care	23	<MDL	<MDL	28.3	60.0	71.5	123
Indoor Floor Dust (ng/m ²)	All Children - at home	116	<MDL	<MDL	<MDL	54.9	295	1,650
	Home Children - at home	61	<MDL	<MDL	30.1	48.7	306	1,650
	Day care Children - at home	55	<MDL	<MDL	<MDL	63.0	223	441
	Day care Children - at day care	23	<MDL	<MDL	157	287	688	765
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	278	662	1,290	11,000	22,900
	Home Children - at home	15	<MDL	182	442	881	11,000	11,000
	Day care Children - at home	6	883	960	2,980	7,300	22,900	22,900
	Day care Children - at day care	3	288	288	408	653	653	653
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	208	502	1,350	3,570	3,570
	Home Children - at home	9	<MDL	208	489	773	1,350	1,350
	Day care Children - at home	4	<MDL	<MDL	1,930	2,870	3,570	3,570
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	7	<MDL	<MDL	263	425	789	789
	Home Children - at home	5	<MDL	<MDL	53.8	290	425	425
	Day care Children - at home	2	263	263	526	789	789	789
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	97	<MDL	3,360	5,570	9,160	19,700	94,200
	Home Children - at home	68	<MDL	3,470	5,590	9,920	19,700	94,200
	Day care Children - at home	29	1,210	3,150	5,020	7,070	19,000	20,300
	Day care Children - at day care	29	<MDL	1,860	2,980	4,170	14,500	47,200
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	2,390	4,440	6,810	25,100	36,000
	Home Children - at home	69	<MDL	2,320	4,600	7,390	25,100	36,000
	Day care Children - at home	28	624	2,430	4,400	6,120	12,600	33,500
Solid Food (Children) (ng/g)	All Children - at home	127	0.900	1.98	3.64	6.83	22.7	161
	Home Children - at home	69	0.900	1.89	3.30	7.97	18.4	36.5
	Day care Children - at home	58	1.01	2.11	3.67	6.26	41.4	161
	Day care Children - at day care	29	0.950	2.22	3.52	4.46	11.9	18.6
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	111	<MDL	<MDL	0.470	0.730	1.96	16.3
	Home Children - at home	58	<MDL	<MDL	0.455	0.710	3.17	3.28
	Day care Children - at home	53	<MDL	<MDL	0.470	0.730	1.65	16.3
	Day care Children - at day care	25	<MDL	0.400	0.510	1.19	1.75	4.97
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-11a. *alpha*-Chlordane (5103-71-9): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	92.8	1.15	2.69	0.370	1.30
	Home children - <i>at home</i>	69	92.8	1.44	3.35	0.400	1.39
	Day care children - <i>at home</i>	56	92.9	0.796	1.50	0.336	1.19
	Day care children - <i>at day care</i>	22	95.5	0.237	0.190	0.193	0.628
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	55.9	0.233	0.606	0.126	0.873
	Home children - <i>at home</i>	69	59.4	0.215	0.277	0.135	0.877
	Day care children - <i>at home</i>	58	51.7	0.254	0.848	0.115	0.868
	Day care children - <i>at day care</i>	16	56.3	0.098	0.098	0.075	0.676
Soil (ng/g)	All children - <i>at home</i>	127	56.7	59.5	440	1.57	2.02
	Home children - <i>at home</i>	69	59.4	24.6	83.8	1.66	1.99
	Day care children - <i>at home</i>	58	53.4	101	645	1.47	2.08
	Day care children - <i>at day care</i>	16	37.5	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	84.2	44.1	118	13.4	1.36
	Home children - <i>at home</i>	63	84.1	61.0	157	16.0	1.45
	Day care children - <i>at home</i>	57	84.2	25.4	42.5	11.0	1.23
	Day care children - <i>at day care</i>	23	95.7	13.2	7.49	11.5	0.514
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	84.2	86.4	250	14.6	1.80
	Home children - <i>at home</i>	63	84.1	108	321	14.2	1.90
	Day care children - <i>at home</i>	57	84.2	62.8	133	15.1	1.69
	Day care children - <i>at day care</i>	23	95.7	85.5	86.2	30.7	1.83
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	28.6	--	--	--	--
	Home children - <i>at home</i>	15	20.0	--	--	--	--
	Day care children - <i>at home</i>	6	50.0	8.11	4.36	7.26	0.501
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	15.4	--	--	--	--
	Home children - <i>at home</i>	9	22.2	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	23.1	--	--	--	--
	Home children - <i>at home</i>	9	22.2	--	--	--	--
	Day care children - <i>at home</i>	4	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	30.9	--	--	--	--
	Home children - <i>at home</i>	68	33.8	--	--	--	--
	Day care children - <i>at home</i>	29	24.1	--	--	--	--
	Day care children - <i>at day care</i>	29	3.4	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	34.0	--	--	--	--
	Home children - <i>at home</i>	69	37.7	--	--	--	--
	Day care children - <i>at home</i>	28	25.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	125	8.0	--	--	--	--
	Home children - <i>at home</i>	69	11.6	--	--	--	--
	Day care children - <i>at home</i>	56	3.6	--	--	--	--
	Day care children - <i>at day care</i>	29	3.4	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-11b. *alpha*-Chlordane (5103-71-9): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	0.160	0.260	0.680	5.60	19.7
	Home Children - <i>at home</i>	69	<MDL	0.170	0.280	0.680	8.50	19.7
	Day care Children - <i>at home</i>	56	<MDL	0.150	0.230	0.690	4.38	8.82
	Day care Children - <i>at day care</i>	22	<MDL	0.150	0.180	0.230	0.470	0.960
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	0.100	0.200	0.640	6.48
	Home Children - <i>at home</i>	69	<MDL	<MDL	0.110	0.210	0.730	1.56
	Day care Children - <i>at home</i>	58	<MDL	<MDL	0.090	0.170	0.420	6.48
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	0.064	0.080	0.410	0.410
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	0.760	3.70	141	4,910
	Home Children - <i>at home</i>	69	<MDL	<MDL	0.840	4.13	141	472
	Day care Children - <i>at home</i>	58	<MDL	<MDL	0.645	3.14	302	4,910
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	0.930	1.35	1.35
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	5.46	11.0	31.4	146	794
	Home Children - <i>at home</i>	63	<MDL	5.22	13.3	33.5	345	794
	Day care Children - <i>at home</i>	57	<MDL	5.70	7.86	23.8	120	244
	Day care Children - <i>at day care</i>	23	<MDL	8.04	10.8	16.6	29.2	35.0
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	3.73	11.4	50.1	458	2,040
	Home Children - <i>at home</i>	63	<MDL	3.21	10.9	51.2	525	2,040
	Day care Children - <i>at home</i>	57	<MDL	4.45	11.9	48.9	401	721
	Day care Children - <i>at day care</i>	23	<MDL	4.76	40.9	172	234	236
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	6.97	28.9	383
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	383	383
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	12.1	14.9	14.9
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	14.1	14.1
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	14.1	14.1
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	5.70	5.70
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	5.70	5.70
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	5.13	5.13
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	52.5	314	739
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	58.2	357	739
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	96.4	153
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	59.3
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	33.9	169	384
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	34.6	197	384
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	67.0	106
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.090	0.180
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.100	0.180
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	0.092
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-12a. gamma-Chlordane (5103-74-2): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	96.0	1.84	5.72	0.505	1.36
	Home children - at home	69	95.7	2.42	7.44	0.542	1.46
	Day care children - at home	56	96.4	1.13	2.12	0.463	1.22
	Day care children - at day care	22	100.0	0.320	0.233	0.263	0.623
Outdoor Air (ng/m ³)	All children - at home	127	58.3	0.260	0.704	0.135	0.909
	Home children - at home	69	62.3	0.235	0.290	0.147	0.898
	Day care children - at home	58	53.4	0.290	0.997	0.122	0.920
	Day care children - at day care	16	62.5	0.104	0.101	0.080	0.667
Soil (ng/g)	All children - at home	127	52.8	62.8	504	1.34	1.97
	Home children - at home	69	58.0	22.2	82.5	1.39	1.90
	Day care children - at home	58	46.6	--	--	--	--
	Day care children - at day care	16	37.5	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	120	83.3	50.3	135	14.4	1.39
	Home children - at home	63	82.5	70.4	179	17.2	1.50
	Day care children - at home	57	84.2	28.2	48.7	11.8	1.25
	Day care children - at day care	23	95.7	15.1	8.17	13.2	0.523
Indoor Floor Dust (ng/m ²)	All children - at home	120	83.3	92.6	257	15.8	1.83
	Home children - at home	63	82.5	114	324	15.3	1.94
	Day care children - at home	57	84.2	69.0	151	16.3	1.72
	Day care children - at day care	23	95.7	99.6	104	35.2	1.86
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	28.6	--	--	--	--
	Home children - at home	15	20.0	--	--	--	--
	Day care children - at home	6	50.0	7.75	4.30	6.99	0.471
	Day care children - at day care	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	15.4	--	--	--	--
	Home children - at home	9	22.2	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	23.1	--	--	--	--
	Home children - at home	9	22.2	--	--	--	--
	Day care children - at home	4	25.0	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	97	32.0	--	--	--	--
	Home children - at home	68	35.3	--	--	--	--
	Day care children - at home	29	24.1	--	--	--	--
	Day care children - at day care	29	3.4	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	34.0	--	--	--	--
	Home children - at home	69	37.7	--	--	--	--
	Day care children - at home	28	25.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	125	6.4	--	--	--	--
	Home children - at home	69	10.1	--	--	--	--
	Day care children - at home	56	1.8	--	--	--	--
	Day care children - at day care	29	3.4	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-12b. gamma-Chlordane (5103-74-2): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	0.220	0.360	1.13	8.93	55.0
	Home Children - <i>at home</i>	69	<MDL	0.230	0.380	1.16	11.7	55.0
	Day care Children - <i>at home</i>	56	<MDL	0.215	0.320	0.965	5.91	11.8
	Day care Children - <i>at day care</i>	22	0.070	0.190	0.255	0.380	0.640	1.14
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	0.110	0.240	0.610	7.61
	Home Children - <i>at home</i>	69	<MDL	<MDL	0.120	0.260	0.890	1.43
	Day care Children - <i>at home</i>	58	<MDL	<MDL	0.100	0.190	0.490	7.61
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	0.070	0.095	0.430	0.430
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	0.620	2.38	110	5,640
	Home Children - <i>at home</i>	69	<MDL	<MDL	0.650	2.05	110	510
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	2.38	235	5,640
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	0.775	1.15	1.15
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	5.55	12.2	36.0	153	853
	Home Children - <i>at home</i>	63	<MDL	5.65	14.5	39.9	619	853
	Day care Children - <i>at home</i>	57	<MDL	5.45	8.66	23.1	138	292
	Day care Children - <i>at day care</i>	23	<MDL	10.2	12.8	18.7	31.7	37.2
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	3.82	12.3	53.3	478	2,090
	Home Children - <i>at home</i>	63	<MDL	3.21	12.1	56.9	497	2,090
	Day care Children - <i>at home</i>	57	<MDL	4.60	14.2	47.3	332	863
	Day care Children - <i>at day care</i>	23	<MDL	6.02	52.6	195	253	349
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	7.45	33.0	644
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	644	644
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	8.48	15.9	15.9
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	15.6	15.6
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	15.6	15.6
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	8.25	8.25
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	8.25	8.25
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	7.94	7.94
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	56.7	360	1,130
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	67.7	367	1,130
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	109	182
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	46.7
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	30.2	203	562
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	34.1	241	562
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	85.6	118
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.090	0.150
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.100	0.150
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.090
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	0.092
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-13a. Chlorpyrifos (2921-88-2): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	98.4	6.42	14.8	2.16	1.35
	Home children - at home	69	98.6	6.40	14.9	2.00	1.37
	Day care children - at home	56	98.2	6.44	14.9	2.38	1.33
	Day care children - at day care	22	100.0	5.20	5.59	2.92	1.13
Outdoor Air (ng/m ³)	All children - at home	112	75.0	0.420	0.785	0.219	1.04
	Home children - at home	60	85.0	0.415	0.847	0.238	0.917
	Day care children - at home	52	63.5	0.425	0.715	0.198	1.17
	Day care children - at day care	14	71.4	0.154	0.112	0.118	0.781
Soil (ng/g)	All children - at home	127	39.4	--	--	--	--
	Home children - at home	69	52.2	46.3	352	1.47	1.74
	Day care children - at home	58	24.1	--	--	--	--
	Day care children - at day care	16	37.5	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	120	100.0	871	5,030	70.4	1.63
	Home children - at home	63	100.0	415	2,160	64.5	1.45
	Day care children - at home	57	100.0	1,380	6,940	77.6	1.81
	Day care children - at day care	23	100.0	272	285	168	1.01
Indoor Floor Dust (ng/m ²)	All children - at home	120	100.0	1,060	5,400	77.2	1.93
	Home children - at home	63	100.0	283	759	57.5	1.63
	Day care children - at home	57	100.0	1,920	7,740	107	2.18
	Day care children - at day care	23	100.0	1,910	3,330	445	1.91
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	85.7	1,940	8,410	42.9	2.17
	Home children - at home	15	80.0	118	270	27.4	1.62
	Day care children - at home	6	100.0	6,510	15,700	132	3.06
	Day care children - at day care	3	33.3	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	61.5	677	2,110	25.4	2.30
	Home children - at home	9	66.7	126	315	19.7	1.77
	Day care children - at home	4	50.0	1,920	3,810	44.6	3.50
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	84.6	2,500	8,920	25.8	2.43
	Home children - at home	9	77.8	29.0	47.1	12.0	1.34
	Day care children - at home	4	100.0	8,070	16,100	143	3.63
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	97	57.7	1,810	15,000	110	1.56
	Home children - at home	68	57.4	298	620	103	1.36
	Day care children - at home	29	58.6	5,360	27,400	129	1.97
	Day care children - at day care	29	62.1	362	1,060	101	1.39
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	62.9	452	2,890	56.1	1.55
	Home children - at home	69	60.9	137	271	47.9	1.34
	Day care children - at home	28	67.9	1,230	5,340	82.7	1.93
Solid Food (Children) (ng/g)	All children - at home	125	65.6	0.380	0.608	0.193	1.10
	Home children - at home	69	71.0	0.331	0.499	0.192	0.989
	Day care children - at home	56	58.9	0.441	0.720	0.194	1.23
	Day care children - at day care	29	69.0	0.204	0.190	0.145	0.817
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	6.3	--	--	--	--
	Home children - at home	69	7.2	--	--	--	--
	Day care children - at home	57	5.3	--	--	--	--
	Day care children - at day care	28	10.7	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-13b. Chlorpyrifos (2921-88-2): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	0.890	1.67	4.82	23.3	98.0
	Home Children - at home	69	<MDL	0.800	1.58	4.35	36.9	84.0
	Day care Children - at home	56	<MDL	1.03	2.10	5.96	18.7	98.0
	Day care Children - at day care	22	0.510	1.12	2.05	8.90	12.6	21.7
Outdoor Air (ng/m ³)	All Children - at home	112	<MDL	<MDL	0.200	0.425	1.36	6.50
	Home Children - at home	60	<MDL	0.135	0.235	0.400	1.22	6.50
	Day care Children - at home	52	<MDL	<MDL	0.150	0.460	1.67	4.40
	Day care Children - at day care	14	<MDL	<MDL	0.105	0.240	0.400	0.400
Soil (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	3.92	13.8	2,930
	Home Children - at home	69	<MDL	<MDL	0.620	5.65	18.5	2,930
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	9.90	80.4
	Day care Children - at day care	16	<MDL	<MDL	<MDL	1.32	6.16	6.16
Indoor Floor Dust (ng/g)	All Children - at home	120	3.62	23.1	52.0	149	1,410	49,600
	Home Children - at home	63	6.20	23.1	53.0	146	836	17,200
	Day care Children - at home	57	3.62	22.8	49.3	151	1,580	49,600
	Day care Children - at day care	23	40.6	67.0	174	430	897	1,110
Indoor Floor Dust (ng/m ²)	All Children - at home	120	1.17	19.5	63.7	196	3,490	54,100
	Home Children - at home	63	2.68	16.3	56.3	122	1,340	4,440
	Day care Children - at home	57	1.17	24.8	92.2	371	13,700	54,100
	Day care Children - at day care	23	33.9	81.8	448	1,880	8,870	13,400
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	8.41	26.1	128	1,060	38,600
	Home Children - at home	15	<MDL	7.08	23.7	128	1,060	1,060
	Day care Children - at home	6	8.41	13.8	71.3	280	38,600	38,600
	Day care Children - at day care	3	<MDL	<MDL	<MDL	7.24	7.24	7.24
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	11.9	57.0	7,630	7,630
	Home Children - at home	9	<MDL	<MDL	11.9	57.0	964	964
	Day care Children - at home	4	<MDL	<MDL	<MDL	3,830	7,630	7,630
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	5.09	20.5	36.2	32,200	32,200
	Home Children - at home	9	<MDL	4.65	7.41	22.4	149	149
	Day care Children - at home	4	14.8	19.5	30.2	16,100	32,200	32,200
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	97	<MDL	<MDL	111	292	1,740	148,000
	Home Children - at home	68	<MDL	<MDL	112	285	1,740	3,670
	Day care Children - at home	29	<MDL	<MDL	94.4	296	1,690	148,000
	Day care Children - at day care	29	<MDL	<MDL	97.6	215	752	5,780
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	48.9	137	1,120	28,400
	Home Children - at home	69	<MDL	<MDL	47.4	103	994	1,230
	Day care Children - at home	28	<MDL	<MDL	54.5	266	1,740	28,400
Solid Food (Children) (ng/g)	All Children - at home	125	<MDL	<MDL	0.190	0.390	1.56	3.51
	Home Children - at home	69	<MDL	<MDL	0.190	0.370	1.05	3.51
	Day care Children - at home	56	<MDL	<MDL	0.190	0.480	2.83	3.43
	Day care Children - at day care	29	<MDL	<MDL	0.140	0.240	0.560	0.880
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	0.060	0.270
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.060	0.240
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	0.060	0.270
	Day care Children - at day care	28	<MDL	<MDL	<MDL	<MDL	0.180	0.650
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-14a. Chrysene (218-01-9): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	39.2	--	--	--	--
	Home children - <i>at home</i>	69	30.4	--	--	--	--
	Day care children - <i>at home</i>	56	50.0	0.227	0.426	0.123	0.927
	Day care children - <i>at day care</i>	22	59.1	0.091	0.047	0.082	0.458
Outdoor Air (ng/m ³)	All children - <i>at home</i>	110	46.4	--	--	--	--
	Home children - <i>at home</i>	58	43.1	--	--	--	--
	Day care children - <i>at home</i>	52	50.0	0.142	0.115	0.109	0.688
	Day care children - <i>at day care</i>	15	73.3	0.139	0.118	0.104	0.773
Soil (ng/g)	All children - <i>at home</i>	126	92.1	145	316	17.9	2.32
	Home children - <i>at home</i>	68	92.6	102	208	15.7	2.17
	Day care children - <i>at home</i>	58	91.4	196	404	20.9	2.50
	Day care children - <i>at day care</i>	16	100.0	57.1	86.2	18.7	1.69
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	100.0	2,240	5,400	802	1.26
	Home children - <i>at home</i>	63	100.0	1,860	3,700	729	1.27
	Day care children - <i>at home</i>	57	100.0	2,660	6,810	892	1.25
	Day care children - <i>at day care</i>	23	100.0	2,630	2,060	2,050	0.735
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	100.0	2,390	4,250	879	1.44
	Home children - <i>at home</i>	63	100.0	2,240	5,080	650	1.49
	Day care children - <i>at home</i>	57	100.0	2,550	3,120	1,230	1.32
	Day care children - <i>at day care</i>	23	100.0	16,000	18,900	5,450	1.85
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	95.2	71.6	62.5	47.6	1.00
	Home children - <i>at home</i>	15	93.3	50.1	41.8	35.3	0.938
	Day care children - <i>at home</i>	6	100.0	125	76.8	100	0.800
	Day care children - <i>at day care</i>	3	100.0	94.3	67.4	68.1	1.14
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	46.2	--	--	--	--
	Home children - <i>at home</i>	9	33.3	--	--	--	--
	Day care children - <i>at home</i>	4	75.0	10.8	5.75	9.68	0.562
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	84.6	25.0	34.0	14.0	1.10
	Home children - <i>at home</i>	9	77.8	25.6	41.5	11.2	1.26
	Day care children - <i>at home</i>	4	100.0	23.5	5.42	23.0	0.253
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	79.2	247	467	108	1.17
	Home children - <i>at home</i>	67	77.6	258	536	102	1.19
	Day care children - <i>at home</i>	29	82.8	222	246	123	1.14
	Day care children - <i>at day care</i>	29	82.8	271	579	104	1.24
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	70.1	46.1	52.3	31.9	0.802
	Home children - <i>at home</i>	69	66.7	48.0	59.7	31.1	0.856
	Day care children - <i>at home</i>	28	78.6	41.3	26.6	33.8	0.660
Solid Food (Children) (ng/g)	All children - <i>at home</i>	127	38.6	--	--	--	--
	Home children - <i>at home</i>	69	42.0	--	--	--	--
	Day care children - <i>at home</i>	58	34.5	--	--	--	--
	Day care children - <i>at day care</i>	29	24.1	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	28	3.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-14b. Chrysene (218-01-9): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	0.120	0.530	2.96
	Home Children - at home	69	<MDL	<MDL	<MDL	0.100	0.200	0.600
	Day care Children - at home	56	<MDL	<MDL	<MDL	0.200	0.850	2.96
	Day care Children - at day care	22	<MDL	<MDL	0.072	0.110	0.190	0.220
Outdoor Air (ng/m ³)	All Children - at home	110	<MDL	<MDL	<MDL	0.140	0.400	0.550
	Home Children - at home	58	<MDL	<MDL	<MDL	0.120	0.380	0.550
	Day care Children - at home	52	<MDL	<MDL	<MDL	0.210	0.410	0.470
	Day care Children - at day care	15	<MDL	<MDL	0.090	0.170	0.400	0.400
Soil (ng/g)	All Children - at home	126	<MDL	2.60	18.6	91.0	739	1,820
	Home Children - at home	68	<MDL	2.23	19.0	61.7	605	1,120
	Day care Children - at home	58	<MDL	3.24	17.1	145	1,350	1,820
	Day care Children - at day care	16	1.25	5.13	19.8	63.2	310	310
Indoor Floor Dust (ng/g)	All Children - at home	120	62.6	340	776	1,340	10,600	39,200
	Home Children - at home	63	62.6	326	721	1,130	8,510	20,600
	Day care Children - at home	57	119	344	896	1,360	15,500	39,200
	Day care Children - at day care	23	426	1,280	2,430	3,210	7,030	9,360
Indoor Floor Dust (ng/m ²)	All Children - at home	120	45.2	311	905	2,420	10,100	28,500
	Home Children - at home	63	45.2	240	485	1,510	10,600	28,500
	Day care Children - at home	57	61.8	523	1,240	3,390	9,570	13,900
	Day care Children - at day care	23	106	700	7,840	29,600	49,100	68,400
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	26.2	42.8	93.9	176	230
	Home Children - at home	15	<MDL	16.4	40.5	73.5	165	165
	Day care Children - at home	6	34.5	39.6	136	176	230	230
	Day care Children - at day care	3	18.3	18.3	117	147	147	147
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	12.8	38.5	38.5
	Home Children - at home	9	<MDL	<MDL	<MDL	12.8	38.5	38.5
	Day care Children - at home	4	<MDL	<MDL	10.1	15.1	18.3	18.3
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	5.75	16.1	26.5	131	131
	Home Children - at home	9	<MDL	5.39	6.40	18.7	131	131
	Day care Children - at home	4	16.1	19.6	24.8	27.5	28.5	28.5
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	96	<MDL	45.3	88.7	212	857	2,810
	Home Children - at home	67	<MDL	43.7	77.8	203	883	2,810
	Day care Children - at home	29	<MDL	53.5	137	213	735	857
	Day care Children - at day care	29	<MDL	46.4	90.7	186	1,090	2,990
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	30.7	51.7	135	302
	Home Children - at home	69	<MDL	<MDL	29.3	49.1	175	302
	Day care Children - at home	28	<MDL	20.6	36.6	56.4	89.7	123
Solid Food (Children) (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	0.100	0.310	4.26
	Home Children - at home	69	<MDL	<MDL	<MDL	0.100	0.300	4.26
	Day care Children - at home	58	<MDL	<MDL	<MDL	0.090	0.880	1.25
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	0.140	0.170
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	28	<MDL	<MDL	<MDL	<MDL	<MDL	0.080
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-15a. Cyfluthrin (68359-37-5): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	1.6	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	56	3.6	--	--	--	--
	Day care children - at day care	22	9.1	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	125	0.8	--	--	--	--
	Home children - at home	67	0.0	--	--	--	--
	Day care children - at home	58	1.7	--	--	--	--
	Day care children - at day care	16	0.0	--	--	--	--
Soil (ng/g)	All children - at home	127	17.3	--	--	--	--
	Home children - at home	69	17.4	--	--	--	--
	Day care children - at home	58	17.2	--	--	--	--
	Day care children - at day care	16	25.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	119	73.9	329	482	148	1.35
	Home children - at home	63	79.4	346	498	161	1.30
	Day care children - at home	56	67.9	310	467	134	1.42
	Day care children - at day care	23	73.9	389	323	221	1.32
Indoor Floor Dust (ng/m ²)	All children - at home	119	73.9	557	1,040	160	1.72
	Home children - at home	63	79.4	477	994	144	1.57
	Day care children - at home	56	67.9	648	1,100	180	1.88
	Day care children - at day care	23	73.9	3,710	4,990	587	2.67
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	9.5	--	--	--	--
	Home children - at home	15	6.7	--	--	--	--
	Day care children - at home	6	16.7	--	--	--	--
	Day care children - at day care	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	0.0	--	--	--	--
	Home children - at home	9	0.0	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	0.0	--	--	--	--
	Home children - at home	9	0.0	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	97	11.3	--	--	--	--
	Home children - at home	68	14.7	--	--	--	--
	Day care children - at home	29	3.4	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	4.1	--	--	--	--
	Home children - at home	69	4.3	--	--	--	--
	Day care children - at home	28	3.6	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	125	3.2	--	--	--	--
	Home children - at home	69	2.9	--	--	--	--
	Day care children - at home	56	3.6	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.8	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	1.8	--	--	--	--
	Day care children - at day care	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-15b. Cyfluthrin (68359-37-5): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	<MDL	<MDL	9.44
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	56	<MDL	<MDL	<MDL	<MDL	<MDL	9.44
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	3.30	4.80
Outdoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	<MDL	<MDL	2.86
	Home Children - at home	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	<MDL	2.86
	Day care Children - at day care	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	64.2	644
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	53.3	95.2
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	92.0	644
	Day care Children - at day care	16	<MDL	<MDL	<MDL	<MDL	42.2	42.2
Indoor Floor Dust (ng/g)	All Children - at home	119	<MDL	<MDL	195	384	1,280	3,040
	Home Children - at home	63	<MDL	67.4	185	398	1,280	3,020
	Day care Children - at home	56	<MDL	<MDL	218	357	930	3,040
	Day care Children - at day care	23	<MDL	<MDL	336	648	890	1,010
Indoor Floor Dust (ng/m ²)	All Children - at home	119	<MDL	<MDL	177	538	2,450	6,640
	Home Children - at home	63	<MDL	44.1	129	472	1,600	6,560
	Day care Children - at home	56	<MDL	<MDL	303	836	2,800	6,640
	Day care Children - at day care	23	<MDL	<MDL	1,400	7,420	10,800	19,000
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	<MDL	<MDL	<MDL	405	784
	Home Children - at home	15	<MDL	<MDL	<MDL	<MDL	405	405
	Day care Children - at home	6	<MDL	<MDL	<MDL	<MDL	784	784
	Day care Children - at day care	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	1,200	26,600
	Home Children - at home	68	<MDL	<MDL	<MDL	<MDL	1,200	3,230
	Day care Children - at home	29	<MDL	<MDL	<MDL	<MDL	<MDL	26,600
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	<MDL	3,210
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	1,760
	Day care Children - at home	28	<MDL	<MDL	<MDL	<MDL	<MDL	3,210
Solid Food (Children) (ng/g)	All Children - at home	125	<MDL	<MDL	<MDL	<MDL	<MDL	21.9
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	21.9
	Day care Children - at home	56	<MDL	<MDL	<MDL	<MDL	<MDL	1.20
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.690
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.690
	Day care Children - at day care	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-16a. Diazinon (333-41-5): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	97.6	11.8	51.4	1.32	1.62
	Home children - at home	69	97.1	8.00	33.6	1.16	1.49
	Day care children - at home	56	98.2	16.5	67.3	1.57	1.77
	Day care children - at day care	22	100.0	11.6	21.0	2.05	1.89
Outdoor Air (ng/m ³)	All children - at home	127	74.8	1.20	7.33	0.199	1.21
	Home children - at home	69	81.2	2.02	9.90	0.238	1.43
	Day care children - at home	58	67.2	0.226	0.193	0.161	0.829
	Day care children - at day care	16	68.8	0.262	0.548	0.116	1.08
Soil (ng/g)	All children - at home	127	33.9	--	--	--	--
	Home children - at home	69	43.5	--	--	--	--
	Day care children - at home	58	22.4	--	--	--	--
	Day care children - at day care	16	18.8	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	120	95.8	1,360	8,470	34.3	1.97
	Home children - at home	63	96.8	2,120	11,400	33.2	2.07
	Day care children - at home	57	94.7	519	2,800	35.6	1.86
	Day care children - at day care	23	100.0	260	472	73.7	1.57
Indoor Floor Dust (ng/m ²)	All children - at home	120	95.8	939	5,920	37.6	2.02
	Home children - at home	63	96.8	593	2,350	29.6	1.96
	Day care children - at home	57	94.7	1,320	8,250	48.9	2.08
	Day care children - at day care	23	100.0	994	2,650	196	1.78
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	38.1	--	--	--	--
	Home children - at home	15	26.7	--	--	--	--
	Day care children - at home	6	66.7	16.4	16.0	11.7	0.868
	Day care children - at day care	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	30.8	--	--	--	--
	Home children - at home	9	44.4	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	53.8	93.4	287	11.3	1.71
	Home children - at home	9	55.6	132	344	15.1	1.96
	Day care children - at home	4	50.0	7.52	6.34	5.84	0.803
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	97	35.1	--	--	--	--
	Home children - at home	68	30.9	--	--	--	--
	Day care children - at home	29	44.8	--	--	--	--
	Day care children - at day care	29	37.9	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	42.3	--	--	--	--
	Home children - at home	69	40.6	--	--	--	--
	Day care children - at home	28	46.4	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	125	15.2	--	--	--	--
	Home children - at home	69	8.7	--	--	--	--
	Day care children - at home	56	23.2	--	--	--	--
	Day care children - at day care	29	24.1	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	1.6	--	--	--	--
	Home children - at home	69	2.9	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	3.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-16b. Diazinon (333-41-5): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	0.530	0.970	2.19	46.4	483
	Home Children - at home	69	<MDL	0.550	0.890	1.94	28.5	248
	Day care Children - at home	56	<MDL	0.480	1.23	2.59	97.6	483
	Day care Children - at day care	22	0.260	0.440	0.960	10.2	58.9	59.6
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	0.170	0.350	1.49	78.9
	Home Children - at home	69	<MDL	0.100	0.170	0.380	3.67	78.9
	Day care Children - at home	58	<MDL	<MDL	0.160	0.330	0.670	0.810
	Day care Children - at day care	16	<MDL	<MDL	0.080	0.170	2.27	2.27
Soil (ng/g)	All Children - at home	127	<MDL	<MDL	<MDL	0.990	4.72	28,500
	Home Children - at home	69	<MDL	<MDL	<MDL	1.49	13.9	28,500
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	1.55	4.72
	Day care Children - at day care	16	<MDL	<MDL	<MDL	<MDL	7.07	7.07
Indoor Floor Dust (ng/g)	All Children - at home	120	<MDL	9.72	19.8	73.2	1,710	79,900
	Home Children - at home	63	<MDL	9.04	17.6	76.2	2,140	79,900
	Day care Children - at home	57	<MDL	10.3	24.8	70.1	1,050	21,100
	Day care Children - at day care	23	5.08	28.4	40.0	210	1,610	1,630
Indoor Floor Dust (ng/m ²)	All Children - at home	120	<MDL	11.1	21.7	90.9	3,140	62,400
	Home Children - at home	63	<MDL	10.4	16.8	41.7	2,950	14,700
	Day care Children - at home	57	<MDL	15.3	48.2	144	3,330	62,400
	Day care Children - at day care	23	6.25	44.2	218	564	3,940	12,500
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	<MDL	<MDL	13.2	75.6	478
	Home Children - at home	15	<MDL	<MDL	<MDL	13.0	478	478
	Day care Children - at home	6	<MDL	<MDL	11.3	19.0	47.1	47.1
	Day care Children - at day care	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	10.5	2,090	2,090
	Home Children - at home	9	<MDL	<MDL	<MDL	32.5	2,090	2,090
	Day care Children - at home	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	<MDL	7.32	19.8	1,050	1,050
	Home Children - at home	9	<MDL	<MDL	10.8	32.2	1,050	1,050
	Day care Children - at home	4	<MDL	<MDL	<MDL	11.9	16.5	16.5
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	68.0	749	38,200
	Home Children - at home	68	<MDL	<MDL	<MDL	53.9	368	38,200
	Day care Children - at home	29	<MDL	<MDL	<MDL	123	802	2,060
	Day care Children - at day care	29	<MDL	<MDL	<MDL	67.4	432	927
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	46.2	375	5,320
	Home Children - at home	69	<MDL	<MDL	<MDL	38.5	264	5,320
	Day care Children - at home	28	<MDL	<MDL	<MDL	67.2	911	3,730
Solid Food (Children) (ng/g)	All Children - at home	125	<MDL	<MDL	<MDL	<MDL	0.180	0.720
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	0.120	0.340
	Day care Children - at home	56	<MDL	<MDL	<MDL	<MDL	0.400	0.720
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	0.200	0.230
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.050
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.050
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	28	<MDL	<MDL	<MDL	<MDL	<MDL	0.040
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-17a. Dibenzo[a,h]anthracene (53-70-3): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	0.8	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	56	1.8	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	58	0.0	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	126	73.8	34.0	80.7	4.43	2.14
	Home children - <i>at home</i>	68	72.1	24.7	50.8	3.98	2.03
	Day care children - <i>at home</i>	58	75.9	45.0	105	5.02	2.27
	Day care children - <i>at day care</i>	16	81.3	10.9	16.2	3.57	1.69
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	99.2	410	878	165	1.24
	Home children - <i>at home</i>	63	98.4	352	663	146	1.27
	Day care children - <i>at home</i>	57	100.0	474	1,070	187	1.21
	Day care children - <i>at day care</i>	23	100.0	530	356	432	0.678
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	99.2	472	795	180	1.46
	Home children - <i>at home</i>	63	98.4	423	920	131	1.51
	Day care children - <i>at home</i>	57	100.0	526	632	258	1.33
	Day care children - <i>at day care</i>	23	100.0	3,570	4,080	1,150	1.93
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	66.7	11.9	8.75	9.51	0.663
	Home children - <i>at home</i>	15	53.3	8.89	5.48	7.68	0.533
	Day care children - <i>at home</i>	6	100.0	19.4	11.3	16.2	0.696
	Day care children - <i>at day care</i>	3	33.3	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	7.7	--	--	--	--
	Home children - <i>at home</i>	9	11.1	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	15.4	--	--	--	--
	Home children - <i>at home</i>	9	11.1	--	--	--	--
	Day care children - <i>at home</i>	4	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	27.1	--	--	--	--
	Home children - <i>at home</i>	67	22.4	--	--	--	--
	Day care children - <i>at home</i>	29	37.9	--	--	--	--
	Day care children - <i>at day care</i>	29	34.5	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	5.2	--	--	--	--
	Home children - <i>at home</i>	69	7.2	--	--	--	--
	Day care children - <i>at home</i>	28	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	127	1.6	--	--	--	--
	Home children - <i>at home</i>	69	1.4	--	--	--	--
	Day care children - <i>at home</i>	58	1.7	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-17b. Dibenzo[a,h]anthracene (53-70-3): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.410
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.410
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	4.18	21.6	157	604
	Home Children - <i>at home</i>	68	<MDL	<MDL	3.81	11.9	147	260
	Day care Children - <i>at home</i>	58	<MDL	0.710	4.36	29.1	276	604
	Day care Children - <i>at day care</i>	16	<MDL	0.835	4.78	11.3	57.6	57.6
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	75.9	172	280	1,890	6,590
	Home Children - <i>at home</i>	63	<MDL	70.8	151	242	1,200	3,520
	Day care Children - <i>at home</i>	57	12.7	76.3	196	336	2,020	6,590
	Day care Children - <i>at day care</i>	23	90.1	279	473	659	1,090	1,670
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	65.0	189	494	1,830	5,470
	Home Children - <i>at home</i>	63	<MDL	54.2	108	282	1,600	5,470
	Day care Children - <i>at home</i>	57	8.79	127	269	659	2,340	2,680
	Day care Children - <i>at day care</i>	23	22.5	172	1,470	7,060	11,600	12,800
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	7.72	18.2	31.3	33.1
	Home Children - <i>at home</i>	15	<MDL	<MDL	7.10	12.8	21.9	21.9
	Day care Children - <i>at home</i>	6	6.36	7.72	18.9	31.3	33.1	33.1
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	17.9	17.9	17.9
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	6.90	6.90
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	6.90	6.90
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	48.3	48.3
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	48.3	48.3
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	4.43	4.43
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	44.7	197	1,240
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	126	1,240
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	76.3	197	199
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	42.7	253	578
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	19.1	50.1
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	29.7	50.1
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.700
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.700
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	0.170
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-18a. Di-*n*-butylphthalate (84-74-2): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	96.8	268	180	208	0.806
	Home children - at home	69	98.6	254	136	208	0.730
	Day care children - at home	56	94.6	285	222	208	0.898
	Day care children - at day care	22	100.0	495	426	386	0.661
Outdoor Air (ng/m ³)	All children - at home	126	48.4	--	--	--	--
	Home children - at home	69	46.4	--	--	--	--
	Day care children - at home	57	50.9	61.0	67.1	38.1	0.925
	Day care children - at day care	16	56.3	51.0	80.9	27.5	1.02
Soil (ng/g)	All children - at home	124	60.5	301	572	72.8	1.62
	Home children - at home	67	73.1	436	703	118	1.70
	Day care children - at home	57	45.6	--	--	--	--
	Day care children - at day care	16	37.5	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	119	100.0	7,100	5,840	5,470	0.725
	Home children - at home	63	100.0	7,450	5,610	5,700	0.761
	Day care children - at home	56	100.0	6,710	6,100	5,220	0.686
	Day care children - at day care	23	100.0	15,700	10,100	13,700	0.519
Indoor Floor Dust (ng/m ²)	All children - at home	119	100.0	13,100	25,700	5,910	1.19
	Home children - at home	63	100.0	10,500	22,900	5,080	1.11
	Day care children - at home	56	100.0	16,100	28,400	7,000	1.27
	Day care children - at day care	23	100.0	117,000	148,000	36,400	1.89
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	66.7	8,750	12,500	4,600	1.15
	Home children - at home	15	60.0	8,700	14,200	4,200	1.19
	Day care children - at home	6	83.3	8,880	7,680	5,750	1.13
	Day care children - at day care	3	100.0	74,300	58,500	44,400	1.53
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	84.6	5,060	2,570	4,280	0.664
	Home children - at home	9	88.9	5,260	2,320	4,590	0.622
	Day care children - at home	4	75.0	4,610	3,440	3,660	0.826
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	100.0	9,740	4,790	8,910	0.421
	Home children - at home	9	100.0	8,900	3,390	8,350	0.376
	Day care children - at home	4	100.0	11,600	7,370	10,300	0.539
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	97	40.2	--	--	--	--
	Home children - at home	68	30.9	--	--	--	--
	Day care children - at home	29	62.1	23,500	20,400	16,600	0.860
	Day care children - at day care	29	58.6	18,800	22,800	13,100	0.791
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	45.4	--	--	--	--
	Home children - at home	69	36.2	--	--	--	--
	Day care children - at home	28	67.9	19,200	22,400	10,700	1.11
Solid Food (Children) (ng/g)	All children - at home	91	26.4	--	--	--	--
	Home children - at home	47	25.5	--	--	--	--
	Day care children - at home	44	27.3	--	--	--	--
	Day care children - at day care	15	13.3	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	96	3.1	--	--	--	--
	Home children - at home	51	3.9	--	--	--	--
	Day care children - at home	45	2.2	--	--	--	--
	Day care children - at day care	25	4.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-18b. Di-*n*-butylphthalate (84-74-2): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	147	249	359	561	1,150
	Home Children - at home	69	<MDL	154	255	359	483	574
	Day care Children - at home	56	<MDL	140	234	358	683	1,150
	Day care Children - at day care	22	159	250	318	535	1,480	1,500
Outdoor Air (ng/m ³)	All Children - at home	126	<MDL	<MDL	<MDL	71.8	227	518
	Home Children - at home	69	<MDL	<MDL	<MDL	58.6	151	518
	Day care Children - at home	57	<MDL	<MDL	24.1	73.8	237	259
	Day care Children - at day care	16	<MDL	<MDL	20.9	46.8	335	335
Soil (ng/g)	All Children - at home	124	<MDL	<MDL	45.9	171	1,430	3,510
	Home Children - at home	67	<MDL	<MDL	90.0	655	1,990	3,510
	Day care Children - at home	57	<MDL	<MDL	<MDL	61.1	960	1,200
	Day care Children - at day care	16	<MDL	<MDL	<MDL	136	1,170	1,170
Indoor Floor Dust (ng/g)	All Children - at home	119	790	3,400	5,220	8,060	20,000	38,800
	Home Children - at home	63	1,040	3,180	6,130	8,850	20,000	22,800
	Day care Children - at home	56	790	3,600	4,820	7,800	16,500	38,800
	Day care Children - at day care	23	4,060	9,970	14,800	17,300	22,800	56,300
Indoor Floor Dust (ng/m ²)	All Children - at home	119	341	2,640	5,680	13,100	43,400	180,000
	Home Children - at home	63	465	2,610	4,920	11,000	27,000	176,000
	Day care Children - at home	56	341	2,650	6,450	16,200	75,200	180,000
	Day care Children - at day care	23	1,590	5,120	53,200	161,000	485,000	494,000
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	<MDL	6,950	8,650	21,200	58,100
	Home Children - at home	15	<MDL	<MDL	6,760	8,650	58,100	58,100
	Day care Children - at home	6	<MDL	1,750	7,390	14,300	21,200	21,200
	Day care Children - at day care	3	7,580	7,580	99,000	116,000	116,000	116,000
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	3,840	5,520	6,960	9,420	9,420
	Home Children - at home	9	<MDL	4,010	5,800	6,960	7,960	7,960
	Day care Children - at home	4	<MDL	<MDL	3,880	6,680	9,420	9,420
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	5,520	6,450	7,480	11,900	22,600	22,600
	Home Children - at home	9	5,520	6,050	7,290	11,900	14,500	14,500
	Day care Children - at home	4	7,060	7,270	8,460	16,000	22,600	22,600
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	21,300	72,200	281,000
	Home Children - at home	68	<MDL	<MDL	<MDL	12,900	72,200	281,000
	Day care Children - at home	29	<MDL	<MDL	17,700	31,600	58,800	85,300
	Day care Children - at day care	29	<MDL	<MDL	13,900	20,700	38,900	125,000
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	15,200	87,900	373,000
	Home Children - at home	69	<MDL	<MDL	<MDL	11,200	112,000	373,000
	Day care Children - at home	28	<MDL	<MDL	11,400	25,800	73,700	87,900
Solid Food (Children) (ng/g)	All Children - at home	91	<MDL	<MDL	<MDL	28.8	189	560
	Home Children - at home	47	<MDL	<MDL	<MDL	28.8	151	257
	Day care Children - at home	44	<MDL	<MDL	<MDL	30.1	189	560
	Day care Children - at day care	15	<MDL	<MDL	<MDL	<MDL	175	175
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home	96	<MDL	<MDL	<MDL	<MDL	<MDL	148
	Home Children - at home	51	<MDL	<MDL	<MDL	<MDL	<MDL	49.6
	Day care Children - at home	45	<MDL	<MDL	<MDL	<MDL	<MDL	148
	Day care Children - at day care	25	<MDL	<MDL	<MDL	<MDL	<MDL	30.8
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-19a. Dicamba (1918-00-9): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	123	0.8	--	--	--	--
	Home children - <i>at home</i>	67	1.5	--	--	--	--
	Day care children - <i>at home</i>	56	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	121	3.3	--	--	--	--
	Home children - <i>at home</i>	67	4.5	--	--	--	--
	Day care children - <i>at home</i>	54	1.9	--	--	--	--
	Day care children - <i>at day care</i>	15	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	127	3.9	--	--	--	--
	Home children - <i>at home</i>	69	4.3	--	--	--	--
	Day care children - <i>at home</i>	58	3.4	--	--	--	--
	Day care children - <i>at day care</i>	16	6.3	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	119	47.1	--	--	--	--
	Home children - <i>at home</i>	62	51.6	43.5	99.8	11.1	1.62
	Day care children - <i>at home</i>	57	42.1	--	--	--	--
	Day care children - <i>at day care</i>	23	52.2	34.8	70.8	10.8	1.40
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	119	47.1	--	--	--	--
	Home children - <i>at home</i>	62	51.6	58.6	140	10.0	1.82
	Day care children - <i>at home</i>	57	42.1	--	--	--	--
	Day care children - <i>at day care</i>	23	52.2	228	655	28.6	2.03
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	9	0.0	--	--	--	--
	Home children - <i>at home</i>	6	0.0	--	--	--	--
	Day care children - <i>at home</i>	3	0.0	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	3	0.0	--	--	--	--
	Home children - <i>at home</i>	1	0.0	--	--	--	--
	Day care children - <i>at home</i>	2	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	3	0.0	--	--	--	--
	Home children - <i>at home</i>	1	0.0	--	--	--	--
	Day care children - <i>at home</i>	2	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	4.2	--	--	--	--
	Home children - <i>at home</i>	67	4.5	--	--	--	--
	Day care children - <i>at home</i>	29	3.4	--	--	--	--
	Day care children - <i>at day care</i>	29	3.4	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	1.0	--	--	--	--
	Home children - <i>at home</i>	68	1.5	--	--	--	--
	Day care children - <i>at home</i>	29	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	127	11.8	--	--	--	--
	Home children - <i>at home</i>	69	14.5	--	--	--	--
	Day care children - <i>at home</i>	58	8.6	--	--	--	--
	Day care children - <i>at day care</i>	29	13.8	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>	127	15.0	--	--	--	--
	Home children - <i>at home</i>	69	13.0	--	--	--	--
	Day care children - <i>at home</i>	58	17.2	--	--	--	--
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>	122	0.8	--	--	--	--
	Home children - <i>at home</i>	67	0.0	--	--	--	--
	Day care children - <i>at home</i>	55	1.8	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-19b. Dicamba (1918-00-9): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	123	<MDL	<MDL	<MDL	<MDL	<MDL	0.269
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	<MDL	0.269
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	<MDL	1.16
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	<MDL	0.440
	Day care Children - <i>at home</i>	54	<MDL	<MDL	<MDL	<MDL	<MDL	1.16
	Day care Children - <i>at day care</i>	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	51.6
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	1.06
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	51.6
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	140	140
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	119	<MDL	<MDL	<MDL	28.6	130	586
	Home Children - <i>at home</i>	62	<MDL	<MDL	9.26	37.3	176	586
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	15.6	83.3	302
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	8.92	17.1	240	260
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	119	<MDL	<MDL	<MDL	27.3	260	770
	Home Children - <i>at home</i>	62	<MDL	<MDL	5.55	36.0	266	770
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	23.2	183	653
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	30.1	90.0	1,280	2,980
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	2	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	2	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	172
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	<MDL	172
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	135
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	89.2
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	31.8
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	30.8
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.660	3.29
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	1.13	3.29
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	0.660	1.52
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	2.86	7.28
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.670	3.91
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.510	2.12
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	0.730	3.91
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>	122	<MDL	<MDL	<MDL	<MDL	<MDL	0.410
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	<MDL	0.410

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-20a. *p,p'*-DDE (72-55-9): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	35.2	--	--	--	--
	Home children - <i>at home</i>	69	36.2	--	--	--	--
	Day care children - <i>at home</i>	56	33.9	--	--	--	--
	Day care children - <i>at day care</i>	22	36.4	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	3.1	--	--	--	--
	Home children - <i>at home</i>	69	4.3	--	--	--	--
	Day care children - <i>at home</i>	58	1.7	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	127	45.7	--	--	--	--
	Home children - <i>at home</i>	69	44.9	--	--	--	--
	Day care children - <i>at home</i>	58	46.6	--	--	--	--
	Day care children - <i>at day care</i>	16	12.5	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	48.3	--	--	--	--
	Home children - <i>at home</i>	63	49.2	--	--	--	--
	Day care children - <i>at home</i>	57	47.4	--	--	--	--
	Day care children - <i>at day care</i>	23	43.5	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	48.3	--	--	--	--
	Home children - <i>at home</i>	63	49.2	--	--	--	--
	Day care children - <i>at home</i>	57	47.4	--	--	--	--
	Day care children - <i>at day care</i>	23	43.5	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	14.3	--	--	--	--
	Home children - <i>at home</i>	15	13.3	--	--	--	--
	Day care children - <i>at home</i>	6	16.7	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>			--	--	--	--
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>			--	--	--	--
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	5.2	--	--	--	--
	Home children - <i>at home</i>	68	7.4	--	--	--	--
	Day care children - <i>at home</i>	29	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	5.2	--	--	--	--
	Home children - <i>at home</i>	69	5.8	--	--	--	--
	Day care children - <i>at home</i>	28	3.6	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	125	76.8	0.292	0.456	0.183	0.876
	Home children - <i>at home</i>	69	75.4	0.272	0.463	0.169	0.860
	Day care children - <i>at home</i>	56	78.6	0.316	0.450	0.203	0.892
	Day care children - <i>at day care</i>	29	55.2	0.172	0.134	0.127	0.797
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	7.9	--	--	--	--
	Home children - <i>at home</i>	69	11.6	--	--	--	--
	Day care children - <i>at home</i>	57	3.5	--	--	--	--
	Day care children - <i>at day care</i>	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-20b. *p,p'*-DDE (72-55-9): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	0.150	0.440	2.20
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.170	0.480	2.20
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	0.130	0.360	0.510
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	0.100	0.290	1.57
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.090
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	1.71	32.1	491
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	1.57	32.1	94.5
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	1.76	44.2	491
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	2.26	2.26
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	16.3	42.5	223
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	15.2	43.8	223
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	16.7	35.8	64.3
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	13.0	60.3	84.3
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	23.6	95.5	1,020
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	22.8	85.4	1,020
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	29.5	117	388
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	132	442	481
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	19.5	20.1
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	20.1	20.1
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	19.5	19.5
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	39.0	98.2
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	41.6	98.2
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	17.2	31.0
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	15.3	31.0
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	18.7
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	125	<MDL	0.100	0.190	0.300	0.760	3.55
	Home Children - <i>at home</i>	69	<MDL	0.100	0.160	0.270	0.980	3.55
	Day care Children - <i>at home</i>	56	<MDL	0.140	0.210	0.365	0.760	3.24
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	0.110	0.280	0.410	0.520
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	0.050	0.470
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.080	0.470
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.220
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-21a. *p,p'*-DDT (50-29-3): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	24.0	--	--	--	--
	Home children - <i>at home</i>	69	29.0	--	--	--	--
	Day care children - <i>at home</i>	56	17.9	--	--	--	--
	Day care children - <i>at day care</i>	22	9.1	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	2.4	--	--	--	--
	Home children - <i>at home</i>	69	2.9	--	--	--	--
	Day care children - <i>at home</i>	58	1.7	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	127	32.3	--	--	--	--
	Home children - <i>at home</i>	69	29.0	--	--	--	--
	Day care children - <i>at home</i>	58	36.2	--	--	--	--
	Day care children - <i>at day care</i>	16	6.3	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	41.7	--	--	--	--
	Home children - <i>at home</i>	63	46.0	--	--	--	--
	Day care children - <i>at home</i>	57	36.8	--	--	--	--
	Day care children - <i>at day care</i>	23	26.1	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	41.7	--	--	--	--
	Home children - <i>at home</i>	63	46.0	--	--	--	--
	Day care children - <i>at home</i>	57	36.8	--	--	--	--
	Day care children - <i>at day care</i>	23	26.1	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	19.0	--	--	--	--
	Home children - <i>at home</i>	15	13.3	--	--	--	--
	Day care children - <i>at home</i>	6	33.3	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	7.7	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	25.0	--	--	--	--
	Day care children - <i>at day care</i>			--	--	--	--
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>			--	--	--	--
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	1.0	--	--	--	--
	Home children - <i>at home</i>	68	1.5	--	--	--	--
	Day care children - <i>at home</i>	29	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	7.2	--	--	--	--
	Home children - <i>at home</i>	69	8.7	--	--	--	--
	Day care children - <i>at home</i>	28	3.6	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	125	4.0	--	--	--	--
	Home children - <i>at home</i>	69	4.3	--	--	--	--
	Day care children - <i>at home</i>	56	3.6	--	--	--	--
	Day care children - <i>at day care</i>	29	10.3	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	2.4	--	--	--	--
	Home children - <i>at home</i>	69	2.9	--	--	--	--
	Day care children - <i>at home</i>	57	1.8	--	--	--	--
	Day care children - <i>at day care</i>	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-21b. *p,p'*-DDT (50-29-3): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.540	2.27
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.160	0.610	2.27
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	0.520	0.560
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.250	1.15
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.080
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	3.40	67.1	1,500
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	1.14	33.5	104
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	5.19	100	1,500
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	5.47	5.47
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	38.9	174	7,400
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	44.4	147	7,400
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	29.1	213	580
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	9.08	91.6	115
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	34.3	383	5,940
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	35.0	260	5,940
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	33.5	417	836
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	40.3	920	1,030
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	426	532
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	532	532
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	65.3	426	426
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	23.6	23.6
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	23.6	23.6
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	3,850
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	3,850
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	135	322
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	146	322
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	20.0
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	1.06
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	1.06
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.960
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	0.300	0.360
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.090
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-22a. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	123	44.7	--	--	--	--
	Home children - at home	67	49.3	--	--	--	--
	Day care children - at home	56	39.3	--	--	--	--
	Day care children - at day care	22	40.9	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	116	32.8	--	--	--	--
	Home children - at home	65	33.8	--	--	--	--
	Day care children - at home	51	31.4	--	--	--	--
	Day care children - at day care	14	28.6	--	--	--	--
Soil (ng/g)	All children - at home	127	41.7	--	--	--	--
	Home children - at home	69	44.9	--	--	--	--
	Day care children - at home	58	37.9	--	--	--	--
	Day care children - at day care	16	18.8	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	119	95.8	579	2,080	137	1.65
	Home children - at home	62	98.4	731	2,760	170	1.58
	Day care children - at home	57	93.0	414	835	108	1.69
	Day care children - at day care	23	100.0	391	612	171	1.27
Indoor Floor Dust (ng/m ²)	All children - at home	119	95.8	769	2,220	151	1.72
	Home children - at home	62	98.4	942	2,790	154	1.81
	Day care children - at home	57	93.0	580	1,340	149	1.64
	Day care children - at day care	23	100.0	2,310	5,820	454	1.87
Hard Floor Surface Wipes (ng/m ²)	All children - at home	9	55.6	58.1	86.0	26.5	1.25
	Home children - at home	6	50.0	55.4	102	21.3	1.28
	Day care children - at home	3	66.7	63.6	58.7	40.7	1.31
	Day care children - at day care	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	3	0.0	--	--	--	--
	Home children - at home	1	0.0	--	--	--	--
	Day care children - at home	2	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	3	33.3	--	--	--	--
	Home children - at home	1	100.0	8.86	.	8.86	.
	Day care children - at home	2	0.0	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	39.6	--	--	--	--
	Home children - at home	67	49.3	--	--	--	--
	Day care children - at home	29	17.2	--	--	--	--
	Day care children - at day care	29	17.2	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	53.6	100	166	57.3	0.948
	Home children - at home	68	63.2	102	108	66.8	0.909
	Day care children - at home	29	31.0	--	--	--	--
	Day care children - at day care						
Solid Food (Children) (ng/g)	All children - at home	127	41.7	--	--	--	--
	Home children - at home	69	43.5	--	--	--	--
	Day care children - at home	58	39.7	--	--	--	--
	Day care children - at day care	29	24.1	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home	127	45.7	--	--	--	--
	Home children - at home	69	47.8	--	--	--	--
	Day care children - at home	58	43.1	--	--	--	--
	Day care children - at day care						
Liquid Food (Children) (ng/mL)	All children - at home	126	4.0	--	--	--	--
	Home children - at home	69	2.9	--	--	--	--
	Day care children - at home	57	5.3	--	--	--	--
	Day care children - at day care	28	7.1	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home	122	6.6	--	--	--	--
	Home children - at home	67	6.0	--	--	--	--
	Day care children - at home	55	7.3	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-22b. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	123	<MDL	<MDL	<MDL	0.600	1.48	2.35
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	0.750	1.60	2.01
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	0.335	1.10	2.35
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	0.880	4.65	11.4
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	116	<MDL	<MDL	<MDL	0.240	1.19	3.16
	Home Children - <i>at home</i>	65	<MDL	<MDL	<MDL	0.320	1.57	3.16
	Day care Children - <i>at home</i>	51	<MDL	<MDL	<MDL	0.200	0.550	0.900
	Day care Children - <i>at day care</i>	14	<MDL	<MDL	<MDL	0.260	0.410	0.410
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	1.10	6.73	26.5
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	1.16	4.56	13.3
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	0.950	9.11	26.5
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	353	353
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	119	<MDL	51.0	122	350	2,010	21,700
	Home Children - <i>at home</i>	62	<MDL	66.3	156	451	1,730	21,700
	Day care Children - <i>at home</i>	57	<MDL	44.6	102	253	2,010	4,970
	Day care Children - <i>at day care</i>	23	22.8	67.7	140	519	2,030	2,360
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	119	<MDL	57.2	121	381	5,390	19,400
	Home Children - <i>at home</i>	62	<MDL	46.2	123	421	5,390	19,400
	Day care Children - <i>at home</i>	57	<MDL	71.6	121	302	2,950	7,430
	Day care Children - <i>at day care</i>	23	14.8	109	636	1,440	10,800	27,000
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	9	<MDL	<MDL	18.3	55.0	264	264
	Home Children - <i>at home</i>	6	<MDL	<MDL	<MDL	21.0	264	264
	Day care Children - <i>at home</i>	3	<MDL	<MDL	55.0	126	126	126
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	2	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	3	<MDL	<MDL	<MDL	8.86	8.86	8.86
	Home Children - <i>at home</i>	1	8.86	8.86	8.86	8.86	8.86	8.86
	Day care Children - <i>at home</i>	2	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	139	597	1,430
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	253	699	1,430
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	237	423
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	307	373
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	38.5	118	310	1,400
	Home Children - <i>at home</i>	68	<MDL	<MDL	59.6	140	277	660
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	53.1	332	1,400
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	0.480	1.75	27.6
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.430	1.87	20.2
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	0.530	1.71	27.6
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	3.88	6.73
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	0.490	1.83	6.71
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.580	2.13	3.69
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	0.450	1.11	6.71
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	2.75
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.270
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	0.220	2.75
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	0.230	0.990
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>	122	<MDL	<MDL	<MDL	<MDL	0.210	0.780
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	0.200	0.780
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	0.360	0.420

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-23a. Dieldrin (60-57-1): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	12.0	--	--	--	--
	Home children - <i>at home</i>	69	11.6	--	--	--	--
	Day care children - <i>at home</i>	56	12.5	--	--	--	--
	Day care children - <i>at day care</i>	22	13.6	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	7.9	--	--	--	--
	Home children - <i>at home</i>	69	5.8	--	--	--	--
	Day care children - <i>at home</i>	58	10.3	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	127	18.9	--	--	--	--
	Home children - <i>at home</i>	69	18.8	--	--	--	--
	Day care children - <i>at home</i>	58	19.0	--	--	--	--
	Day care children - <i>at day care</i>	16	6.3	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	18.3	--	--	--	--
	Home children - <i>at home</i>	63	20.6	--	--	--	--
	Day care children - <i>at home</i>	57	15.8	--	--	--	--
	Day care children - <i>at day care</i>	23	34.8	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	18.3	--	--	--	--
	Home children - <i>at home</i>	63	20.6	--	--	--	--
	Day care children - <i>at home</i>	57	15.8	--	--	--	--
	Day care children - <i>at day care</i>	23	34.8	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	4.8	--	--	--	--
	Home children - <i>at home</i>	15	6.7	--	--	--	--
	Day care children - <i>at home</i>	6	0.0	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>			--	--	--	--
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	23.1	--	--	--	--
	Home children - <i>at home</i>	9	22.2	--	--	--	--
	Day care children - <i>at home</i>	4	25.0	--	--	--	--
	Day care children - <i>at day care</i>			--	--	--	--
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	1.0	--	--	--	--
	Home children - <i>at home</i>	68	1.5	--	--	--	--
	Day care children - <i>at home</i>	29	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	28	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	125	8.0	--	--	--	--
	Home children - <i>at home</i>	69	5.8	--	--	--	--
	Day care children - <i>at home</i>	56	10.7	--	--	--	--
	Day care children - <i>at day care</i>	29	10.3	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-23b. Dieldrin (60-57-1): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.770	11.6
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.830	8.31
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	0.770	11.6
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.310	3.27
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.210	3.08
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.190	3.08
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	0.410	1.53
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	21.7	3,330
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	21.7	3,330
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	49.8	411
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	1.01	1.01
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	107	366
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	106	366
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	113	148
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	50.6	111	451
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	204	4,170
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	146	4,170
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	222	603
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	148	1,250	2,370
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	23.4
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	23.4	23.4
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	208	208
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	208	208
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	110	110
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	5,510
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	5,510
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.350	1.45
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.260	0.470
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	0.440	1.45
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	0.840	2.62
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-24a. Endrin (72-20-8): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	11.2	--	--	--	--
	Home children - at home	69	10.1	--	--	--	--
	Day care children - at home	56	12.5	--	--	--	--
	Day care children - at day care	22	18.2	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	18.9	--	--	--	--
	Home children - at home	69	15.9	--	--	--	--
	Day care children - at home	58	22.4	--	--	--	--
	Day care children - at day care	16	18.8	--	--	--	--
Soil (ng/g)	All children - at home	127	3.1	--	--	--	--
	Home children - at home	69	2.9	--	--	--	--
	Day care children - at home	58	3.4	--	--	--	--
	Day care children - at day care	16	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	120	2.5	--	--	--	--
	Home children - at home	63	1.6	--	--	--	--
	Day care children - at home	57	3.5	--	--	--	--
	Day care children - at day care	23	30.4	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - at home	120	2.5	--	--	--	--
	Home children - at home	63	1.6	--	--	--	--
	Day care children - at home	57	3.5	--	--	--	--
	Day care children - at day care	23	30.4	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	0.0	--	--	--	--
	Home children - at home	15	0.0	--	--	--	--
	Day care children - at home	6	0.0	--	--	--	--
	Day care children - at day care	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	0.0	--	--	--	--
	Home children - at home	9	0.0	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care			--	--	--	--
Transferable Residues (ng/m ²)	All children - at home	13	7.7	--	--	--	--
	Home children - at home	9	11.1	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care			--	--	--	--
Dermal Wipe (Children) (ng/m ²)	All children - at home	97	4.1	--	--	--	--
	Home children - at home	68	4.4	--	--	--	--
	Day care children - at home	29	3.4	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	2.1	--	--	--	--
	Home children - at home	69	2.9	--	--	--	--
	Day care children - at home	28	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	125	0.8	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	56	1.8	--	--	--	--
	Day care children - at day care	29	3.4	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-24b. Endrin (72-20-8): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.590	11.7
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.490	0.820
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	0.650	11.7
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.500	1.06
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.610	1.15
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.780	1.15
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	0.580	0.910
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	1.09	1.09
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	37.7
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	37.7
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	10.1
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	<MDL	173
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	26.4
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	173
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	34.9	316	488
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	<MDL	490
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	38.0
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	490
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	76.6	899	2,560
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	494	494
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	494	494
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	2,950
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	2,950
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	276
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	278
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	278
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	2.07
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	2.07
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	0.360
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-25a. Heptachlor (76-44-8): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	33.6	--	--	--	--
	Home children - <i>at home</i>	69	39.1	--	--	--	--
	Day care children - <i>at home</i>	56	26.8	--	--	--	--
	Day care children - <i>at day care</i>	22	36.4	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	18.9	--	--	--	--
	Home children - <i>at home</i>	69	26.1	--	--	--	--
	Day care children - <i>at home</i>	58	10.3	--	--	--	--
	Day care children - <i>at day care</i>	16	12.5	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	127	2.4	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	58	5.2	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	5.8	--	--	--	--
	Home children - <i>at home</i>	63	6.3	--	--	--	--
	Day care children - <i>at home</i>	57	5.3	--	--	--	--
	Day care children - <i>at day care</i>	23	4.3	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	5.8	--	--	--	--
	Home children - <i>at home</i>	63	6.3	--	--	--	--
	Day care children - <i>at home</i>	57	5.3	--	--	--	--
	Day care children - <i>at day care</i>	23	4.3	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	4.8	--	--	--	--
	Home children - <i>at home</i>	15	6.7	--	--	--	--
	Day care children - <i>at home</i>	6	0.0	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>			--	--	--	--
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>			--	--	--	--
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	3.1	--	--	--	--
	Home children - <i>at home</i>	68	2.9	--	--	--	--
	Day care children - <i>at home</i>	29	3.4	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	2.1	--	--	--	--
	Home children - <i>at home</i>	69	2.9	--	--	--	--
	Day care children - <i>at home</i>	28	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	125	9.6	--	--	--	--
	Home children - <i>at home</i>	69	14.5	--	--	--	--
	Day care children - <i>at home</i>	56	3.6	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	28	7.1	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-25b. Heptachlor (76-44-8): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	1.53	23.1	305
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	1.88	23.5	305
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	0.420	16.8	32.1
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	1.31	2.46	4.33
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.690	7.65
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.100	0.690	1.54
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	0.710	7.65
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	0.170	0.170
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	213
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	14.1	213
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	16.4	641
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	17.7	641
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	12.8	98.5
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	35.4
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	34.1	346
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	38.0	346
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	30.1	147
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	46.8
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	165
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	165	165
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	752
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	752
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	41.8
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	530
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	530
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.330	2.08
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.340	0.430
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	2.08
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	0.160	0.240
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-26a. Indeno[1,2,3-cd]pyrene (193-39-5): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	19.2	--	--	--	--
	Home children - at home	69	10.1	--	--	--	--
	Day care children - at home	56	30.4	--	--	--	--
	Day care children - at day care	22	22.7	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	15.0	--	--	--	--
	Home children - at home	69	11.6	--	--	--	--
	Day care children - at home	58	19.0	--	--	--	--
	Day care children - at day care	16	31.3	--	--	--	--
Soil (ng/g)	All children - at home	126	89.7	151	357	14.7	2.43
	Home children - at home	68	91.2	112	238	13.2	2.32
	Day care children - at home	58	87.9	195	457	16.7	2.56
	Day care children - at day care	16	100.0	46.1	67.2	14.5	1.76
Indoor Floor Dust (ng/g)	All children - at home	120	100.0	2,040	4,660	765	1.26
	Home children - at home	63	100.0	1,730	3,450	694	1.26
	Day care children - at home	57	100.0	2,370	5,730	850	1.26
	Day care children - at day care	23	100.0	2,580	1,930	2,040	0.718
Indoor Floor Dust (ng/m ²)	All children - at home	120	100.0	2,240	3,930	838	1.45
	Home children - at home	63	100.0	2,070	4,650	620	1.48
	Day care children - at home	57	100.0	2,430	2,980	1,170	1.34
	Day care children - at day care	23	100.0	17,100	19,700	5,430	1.93
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	95.2	54.4	48.3	36.1	0.981
	Home children - at home	15	93.3	39.6	34.3	27.7	0.916
	Day care children - at home	6	100.0	91.4	61.2	70.2	0.868
	Day care children - at day care	3	100.0	40.7	44.4	27.6	1.04
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	30.8	--	--	--	--
	Home children - at home	9	22.2	--	--	--	--
	Day care children - at home	4	50.0	8.18	5.15	7.21	0.552
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	69.2	20.9	27.6	11.2	1.14
	Home children - at home	9	66.7	23.5	33.0	10.9	1.27
	Day care children - at home	4	75.0	15.1	9.60	11.8	0.933
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	75.0	233	568	93.9	1.16
	Home children - at home	67	70.1	255	667	88.1	1.21
	Day care children - at home	29	86.2	183	206	109	1.05
	Day care children - at day care	29	65.5	237	501	85.1	1.29
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	60.8	39.4	44.7	26.9	0.795
	Home children - at home	69	60.9	40.6	48.2	27.0	0.817
	Day care children - at home	28	60.7	36.5	35.1	26.7	0.753
Solid Food (Children) (ng/g)	All children - at home	127	3.9	--	--	--	--
	Home children - at home	69	1.4	--	--	--	--
	Day care children - at home	58	6.9	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	3.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-26b. Indeno[1,2,3-*cd*]pyrene (193-39-5): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.250	1.40
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.148	0.710
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	0.120	0.300	1.40
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.650	1.61
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.150	0.260
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.140	0.260
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	0.180	0.230
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	0.072	0.140	0.140
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	2.10	14.8	102	723	2,510
	Home Children - <i>at home</i>	68	<MDL	1.49	14.8	49.2	696	1,190
	Day care Children - <i>at home</i>	58	<MDL	2.21	15.2	123	1,440	2,510
	Day care Children - <i>at day care</i>	16	1.00	3.30	20.0	51.4	237	237
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	51.2	323	785	1,280	9,390	35,800
	Home Children - <i>at home</i>	63	81.3	282	696	1,180	5,950	18,600
	Day care Children - <i>at home</i>	57	51.2	327	879	1,490	12,600	35,800
	Day care Children - <i>at day care</i>	23	442	1,270	2,200	3,190	4,960	9,350
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	38.6	320	952	2,190	9,520	26,800
	Home Children - <i>at home</i>	63	38.6	219	491	1,370	8,450	26,800
	Day care Children - <i>at home</i>	57	41.7	489	1,250	3,200	11,200	12,700
	Day care Children - <i>at day care</i>	23	110	859	7,330	34,100	55,100	60,000
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	21.9	31.0	74.6	132	176
	Home Children - <i>at home</i>	15	<MDL	14.7	29.9	54.1	117	117
	Day care Children - <i>at home</i>	6	23.5	25.1	95.9	132	176	176
	Day care Children - <i>at day care</i>	3	14.8	14.8	15.4	91.9	91.9	91.9
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	7.24	34.1	34.1
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	34.1	34.1
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	11.5	15.7	15.7
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	12.7	18.9	99.9	99.9
	Home Children - <i>at home</i>	9	<MDL	<MDL	8.16	17.5	99.9	99.9
	Day care Children - <i>at home</i>	4	<MDL	<MDL	15.8	22.3	25.7	25.7
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	80.0	177	657	4,590
	Home Children - <i>at home</i>	67	<MDL	<MDL	57.9	176	629	4,590
	Day care Children - <i>at home</i>	29	<MDL	41.6	130	179	657	811
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	69.6	167	1,030	2,530
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	21.8	41.1	159	232
	Home Children - <i>at home</i>	69	<MDL	<MDL	21.8	40.8	166	232
	Day care Children - <i>at home</i>	28	<MDL	<MDL	21.3	45.4	120	159
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	8.27
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	8.27
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	0.490	2.51
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-27a. IMP (2-isopropyl-6-methyl-4-pyrimidinol) (2814-20-2): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	96.0	1.41	3.55	0.625	1.07
	Home children - at home	69	97.1	1.00	1.50	0.580	0.953
	Day care children - at home	56	94.6	1.91	5.02	0.685	1.21
	Day care children - at day care	22	90.9	2.16	4.03	0.726	1.46
Outdoor Air (ng/m ³)	All children - at home	126	84.9	1.24	4.93	0.360	1.26
	Home children - at home	69	88.4	1.90	6.59	0.457	1.39
	Day care children - at home	57	80.7	0.455	0.551	0.269	1.03
	Day care children - at day care	15	93.3	3.49	11.4	0.331	1.76
Soil (ng/g)	All children - at home	125	40.8	--	--	--	--
	Home children - at home	67	44.8	--	--	--	--
	Day care children - at home	58	36.2	--	--	--	--
	Day care children - at day care	16	37.5	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	120	87.5	84.0	313	16.4	1.52
	Home children - at home	63	85.7	70.9	277	14.3	1.49
	Day care children - at home	57	89.5	98.4	350	19.0	1.56
	Day care children - at day care	23	87.0	73.0	155	18.8	1.68
Indoor Floor Dust (ng/m ²)	All children - at home	120	87.5	106	341	18.0	1.74
	Home children - at home	63	85.7	64.5	213	12.8	1.62
	Day care children - at home	57	89.5	152	439	26.2	1.81
	Day care children - at day care	23	87.0	181	367	49.9	1.74
Hard Floor Surface Wipes (ng/m ²)	All children - at home	9	44.4	--	--	--	--
	Home children - at home	6	33.3	--	--	--	--
	Day care children - at home	3	66.7	47.2	37.0	28.3	1.52
	Day care children - at day care	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	3	0.0	--	--	--	--
	Home children - at home	1	0.0	--	--	--	--
	Day care children - at home	2	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	3	0.0	--	--	--	--
	Home children - at home	1	0.0	--	--	--	--
	Day care children - at home	2	0.0	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	98	29.6	--	--	--	--
	Home children - at home	69	30.4	--	--	--	--
	Day care children - at home	29	27.6	--	--	--	--
	Day care children - at day care	29	24.1	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	21.6	--	--	--	--
	Home children - at home	68	16.2	--	--	--	--
	Day care children - at home	29	34.5	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	40	87.5	0.524	0.538	0.358	0.870
	Home children - at home	26	96.2	0.615	0.600	0.433	0.838
	Day care children - at home	14	71.4	0.353	0.354	0.251	0.842
	Day care children - at day care	10	70.0	0.249	0.215	0.190	0.740
Solid Food (Adults) (ng/g)	All children - at home	34	88.2	0.703	0.890	0.451	0.947
	Home children - at home	21	81.0	0.808	1.10	0.461	1.10
	Day care children - at home	13	100.0	0.533	0.348	0.435	0.677
Liquid Food (Children) (ng/mL)	All children - at home	38	26.3	--	--	--	--
	Home children - at home	25	28.0	--	--	--	--
	Day care children - at home	13	23.1	--	--	--	--
	Day care children - at day care	7	57.1	0.084	0.072	0.045	1.41
Liquid Food (Adults) (ng/mL)	All children - at home	44	34.1	--	--	--	--
	Home children - at home	20	40.0	--	--	--	--
	Day care children - at home	24	29.2	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%. Note that IMP data for solid and liquid food samples are to be interpreted with caution due to recoveries being below 50%.

Table J-27b. IMP (2-isopropyl-6-methyl-4-pyrimidinol) (2814-20-2): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	0.350	0.530	1.00	5.38	27.4
	Home Children - at home	69	<MDL	0.350	0.500	0.810	4.29	8.95
	Day care Children - at home	56	<MDL	0.395	0.595	1.06	6.28	27.4
	Day care Children - at day care	22	<MDL	0.360	0.540	2.21	13.4	14.9
Outdoor Air (ng/m ³)	All Children - at home	126	<MDL	0.140	0.360	0.770	2.01	49.6
	Home Children - at home	69	<MDL	0.200	0.440	0.970	10.5	49.6
	Day care Children - at home	57	<MDL	0.130	0.320	0.510	1.80	2.72
	Day care Children - at day care	15	<MDL	0.120	0.180	0.770	44.5	44.5
Soil (ng/g)	All Children - at home	125	<MDL	<MDL	<MDL	0.430	2.07	162
	Home Children - at home	67	<MDL	<MDL	<MDL	0.470	3.34	162
	Day care Children - at home	58	<MDL	<MDL	<MDL	0.310	1.40	6.09
	Day care Children - at day care	16	<MDL	<MDL	<MDL	0.440	1.43	1.43
Indoor Floor Dust (ng/g)	All Children - at home	120	<MDL	6.19	14.3	40.7	270	2,450
	Home Children - at home	63	<MDL	5.14	11.0	42.5	155	2,130
	Day care Children - at home	57	<MDL	9.20	17.8	39.2	550	2,450
	Day care Children - at day care	23	<MDL	7.84	16.7	38.2	312	696
Indoor Floor Dust (ng/m ²)	All Children - at home	120	<MDL	5.53	14.8	52.6	456	2,900
	Home Children - at home	63	<MDL	3.13	14.0	29.1	155	1,240
	Day care Children - at home	57	<MDL	7.73	21.1	81.9	542	2,900
	Day care Children - at day care	23	<MDL	11.3	63.6	200	721	1,700
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	9	<MDL	<MDL	<MDL	30.0	73.1	73.1
	Home Children - at home	6	<MDL	<MDL	<MDL	11.7	30.0	30.0
	Day care Children - at home	3	<MDL	<MDL	63.7	73.1	73.1	73.1
	Day care Children - at day care	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	2	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	2	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	98	<MDL	<MDL	<MDL	40.4	174	644
	Home Children - at home	69	<MDL	<MDL	<MDL	40.4	106	644
	Day care Children - at home	29	<MDL	<MDL	<MDL	33.4	182	183
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	173	404
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	42.9	279
	Home Children - at home	68	<MDL	<MDL	<MDL	<MDL	38.1	279
	Day care Children - at home	29	<MDL	<MDL	<MDL	23.9	70.8	85.7
	Day care Children - at day care							
Solid Food (Children) (ng/g)	All Children - at home	40	<MDL	0.260	0.325	0.635	1.56	2.74
	Home Children - at home	26	<MDL	0.300	0.385	0.680	1.65	2.74
	Day care Children - at home	14	<MDL	<MDL	0.295	0.330	1.46	1.46
	Day care Children - at day care	10	<MDL	<MDL	0.165	0.280	0.730	0.730
Solid Food (Adults) (ng/g)	All Children - at home	34	<MDL	0.270	0.480	0.910	1.93	5.16
	Home Children - at home	21	<MDL	0.270	0.490	0.940	1.93	5.16
	Day care Children - at home	13	0.140	0.270	0.440	0.700	1.29	1.29
	Day care Children - at day care							
Liquid Food (Children) (ng/mL)	All Children - at home	38	<MDL	<MDL	<MDL	0.100	0.260	0.720
	Home Children - at home	25	<MDL	<MDL	<MDL	0.100	0.180	0.260
	Day care Children - at home	13	<MDL	<MDL	<MDL	<MDL	0.720	0.720
	Day care Children - at day care	7	<MDL	<MDL	0.110	0.150	0.170	0.170
Liquid Food (Adults) (ng/mL)	All Children - at home	44	<MDL	<MDL	<MDL	0.185	4.57	24.9
	Home Children - at home	20	<MDL	<MDL	<MDL	0.490	2.70	4.57
	Day care Children - at home	24	<MDL	<MDL	<MDL	0.135	18.1	24.9
	Day care Children - at day care							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Note that IMP data for solid and liquid food samples are to be interpreted with caution due to recoveries being below 50%.

Table J-28a. Lindane (58-89-9): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	4.8	--	--	--	--
	Home children - at home	69	4.3	--	--	--	--
	Day care children - at home	56	5.4	--	--	--	--
	Day care children - at day care	22	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	127	3.1	--	--	--	--
	Home children - at home	69	4.3	--	--	--	--
	Day care children - at home	58	1.7	--	--	--	--
	Day care children - at day care	16	6.3	--	--	--	--
Soil (ng/g)	All children - at home	127	0.8	--	--	--	--
	Home children - at home	69	1.4	--	--	--	--
	Day care children - at home	58	0.0	--	--	--	--
	Day care children - at day care	16	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	120	10.0	--	--	--	--
	Home children - at home	63	12.7	--	--	--	--
	Day care children - at home	57	7.0	--	--	--	--
	Day care children - at day care	23	17.4	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - at home	120	10.0	--	--	--	--
	Home children - at home	63	12.7	--	--	--	--
	Day care children - at home	57	7.0	--	--	--	--
	Day care children - at day care	23	17.4	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	0.0	--	--	--	--
	Home children - at home	15	0.0	--	--	--	--
	Day care children - at home	6	0.0	--	--	--	--
	Day care children - at day care	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	0.0	--	--	--	--
	Home children - at home	9	0.0	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care			--	--	--	--
Transferable Residues (ng/m ²)	All children - at home	13	0.0	--	--	--	--
	Home children - at home	9	0.0	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care			--	--	--	--
Dermal Wipe (Children) (ng/m ²)	All children - at home	97	2.1	--	--	--	--
	Home children - at home	68	2.9	--	--	--	--
	Day care children - at home	29	0.0	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	2.1	--	--	--	--
	Home children - at home	69	2.9	--	--	--	--
	Day care children - at home	28	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	125	3.2	--	--	--	--
	Home children - at home	69	2.9	--	--	--	--
	Day care children - at home	56	3.6	--	--	--	--
	Day care children - at day care	29	3.4	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home	126	0.8	--	--	--	--
	Home children - at home	69	1.4	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	3.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-28b. Lindane (58-89-9): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	16.0
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	16.0
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	0.340	8.98
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	1.07
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	1.07
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	0.280
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	0.170	0.170
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.610
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.610
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	14.1	74.7
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	17.7	74.7
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	7.86	16.3
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	49.0	57.5
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	23.5	250
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	21.0	250
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	26.0	30.1
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	216	391
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	149
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	149
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	325
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	325
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	1.77
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	1.51
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	1.77
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	9.78
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	0.090
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-29a. Nonylphenol (104-40-5): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	0.8	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	56	1.8	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	58	0.0	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	73	2.7	--	--	--	--
	Home children - <i>at home</i>	40	2.5	--	--	--	--
	Day care children - <i>at home</i>	33	3.0	--	--	--	--
	Day care children - <i>at day care</i>	9	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	18	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>	10	10.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	18	0.0	--	--	--	--
	Home children - <i>at home</i>	10	0.0	--	--	--	--
	Day care children - <i>at home</i>	8	0.0	--	--	--	--
	Day care children - <i>at day care</i>	10	10.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	0.0	--	--	--	--
	Home children - <i>at home</i>	15	0.0	--	--	--	--
	Day care children - <i>at home</i>	6	0.0	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	12	8.3	--	--	--	--
	Home children - <i>at home</i>	8	12.5	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	98	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	29	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	3.1	--	--	--	--
	Home children - <i>at home</i>	69	2.9	--	--	--	--
	Day care children - <i>at home</i>	28	3.6	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	127	0.8	--	--	--	--
	Home children - <i>at home</i>	69	1.4	--	--	--	--
	Day care children - <i>at home</i>	58	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	3.4	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-29b. Nonylphenol (104-40-5): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	1.36
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.900
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	73	<MDL	<MDL	<MDL	<MDL	<MDL	16.1
	Home Children - <i>at home</i>	40	<MDL	<MDL	<MDL	<MDL	<MDL	16.1
	Day care Children - <i>at home</i>	33	<MDL	<MDL	<MDL	<MDL	<MDL	7.26
	Day care Children - <i>at day care</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	10	<MDL	<MDL	<MDL	<MDL	70.7	70.7
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	18	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	10	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	10	<MDL	<MDL	<MDL	<MDL	162	162
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	12	<MDL	<MDL	<MDL	<MDL	630	630
	Home Children - <i>at home</i>	8	<MDL	<MDL	<MDL	<MDL	630	630
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	98	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	853
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	853
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	172
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	1.06
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	1.06
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	1.07
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-30a. Pentachloronitrobenzene (82-68-8): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	9.6	--	--	--	--
	Home children - <i>at home</i>	69	7.2	--	--	--	--
	Day care children - <i>at home</i>	56	12.5	--	--	--	--
	Day care children - <i>at day care</i>	22	18.2	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	3.1	--	--	--	--
	Home children - <i>at home</i>	69	1.4	--	--	--	--
	Day care children - <i>at home</i>	58	5.2	--	--	--	--
	Day care children - <i>at day care</i>	16	6.3	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	127	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	58	0.0	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	0.0	--	--	--	--
	Home children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	4.3	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	0.0	--	--	--	--
	Home children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	4.3	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	0.0	--	--	--	--
	Home children - <i>at home</i>	15	0.0	--	--	--	--
	Day care children - <i>at home</i>	6	0.0	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	2.1	--	--	--	--
	Home children - <i>at home</i>	68	2.9	--	--	--	--
	Day care children - <i>at home</i>	29	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	1.0	--	--	--	--
	Home children - <i>at home</i>	69	1.4	--	--	--	--
	Day care children - <i>at home</i>	28	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	125	0.8	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	56	1.8	--	--	--	--
	Day care children - <i>at day care</i>	29	6.9	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-30b. Pentachloronitrobenzene (82-68-8): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.690	4.45
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.500	1.38
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	0.860	4.45
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	1.98	2.24
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	1.02
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	1.02
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	0.170	0.780
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	0.090	0.090
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	7.07
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	130
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	63.2
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	63.2
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	52.8
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	52.8
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.450
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.450
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	0.400	0.730
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-31a. Pentachlorophenol (87-86-5): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	123	91.9	4.92	8.94	2.06	1.39
	Home children - at home	67	95.5	6.14	11.2	2.79	1.23
	Day care children - at home	56	87.5	3.46	4.77	1.43	1.50
	Day care children - at day care	22	68.2	2.80	4.04	0.898	1.82
Outdoor Air (ng/m ³)	All children - at home	106	60.4	1.04	1.77	0.413	1.37
	Home children - at home	56	71.4	1.19	1.71	0.552	1.34
	Day care children - at home	50	48.0	--	--	--	--
	Day care children - at day care	13	53.8	0.934	1.48	0.299	1.64
Soil (ng/g)	All children - at home	127	51.2	3.39	7.63	1.03	1.45
	Home children - at home	69	50.7	2.58	4.75	0.969	1.36
	Day care children - at home	58	51.7	4.36	9.99	1.10	1.56
	Day care children - at day care	16	37.5	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	119	94.1	112	219	59.9	1.10
	Home children - at home	62	95.2	133	292	65.8	1.06
	Day care children - at home	57	93.0	90.2	85.4	54.1	1.13
	Day care children - at day care	23	91.3	81.9	145	41.5	1.09
Indoor Floor Dust (ng/m ²)	All children - at home	119	94.1	242	690	66.2	1.65
	Home children - at home	62	95.2	196	645	59.4	1.56
	Day care children - at home	57	93.0	293	739	74.5	1.75
	Day care children - at day care	23	91.3	597	1,250	110	2.14
Hard Floor Surface Wipes (ng/m ²)	All children - at home	9	44.4	--	--	--	--
	Home children - at home	6	33.3	--	--	--	--
	Day care children - at home	3	66.7	47.0	56.0	27.8	1.25
	Day care children - at day care	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	3	0.0	--	--	--	--
	Home children - at home	1	0.0	--	--	--	--
	Day care children - at home	2	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	3	33.3	--	--	--	--
	Home children - at home	1	0.0	--	--	--	--
	Day care children - at home	2	50.0	70.3	95.1	20.7	2.68
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	50.0	142	205	96.5	0.757
	Home children - at home	67	49.3	--	--	--	--
	Day care children - at home	29	51.7	110	88.8	86.3	0.667
	Day care children - at day care	29	20.7	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	51.5	79.3	93.7	51.8	0.860
	Home children - at home	68	44.1	--	--	--	--
	Day care children - at home	29	69.0	85.2	66.1	62.1	0.836
Solid Food (Children) (ng/g)	All children - at home	127	21.3	--	--	--	--
	Home children - at home	69	20.3	--	--	--	--
	Day care children - at home	58	22.4	--	--	--	--
	Day care children - at day care	29	13.8	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home	127	25.2	--	--	--	--
	Home children - at home	69	21.7	--	--	--	--
	Day care children - at home	58	29.3	--	--	--	--
Liquid Food (Children) (ng/mL)	All children - at home	126	3.2	--	--	--	--
	Home children - at home	69	4.3	--	--	--	--
	Day care children - at home	57	1.8	--	--	--	--
	Day care children - at day care	28	3.6	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home	122	5.7	--	--	--	--
	Home children - at home	67	4.5	--	--	--	--
	Day care children - at home	55	7.3	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-31b. Pentachlorophenol (87-86-5): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	123	<MDL	1.19	2.14	4.54	18.3	73.3
	Home Children - <i>at home</i>	67	<MDL	1.42	2.76	4.89	25.0	73.3
	Day care Children - <i>at home</i>	56	<MDL	0.550	1.44	4.14	15.0	23.6
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	1.32	4.09	10.6	16.8
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	106	<MDL	<MDL	0.430	1.18	4.09	11.6
	Home Children - <i>at home</i>	56	<MDL	<MDL	0.785	1.25	4.09	10.6
	Day care Children - <i>at home</i>	50	<MDL	<MDL	<MDL	0.790	4.12	11.6
	Day care Children - <i>at day care</i>	13	<MDL	<MDL	0.220	1.15	5.36	5.36
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	0.730	2.83	14.2	62.2
	Home Children - <i>at home</i>	69	<MDL	<MDL	0.730	2.66	12.1	32.3
	Day care Children - <i>at home</i>	58	<MDL	<MDL	0.760	3.35	21.6	62.2
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	0.820	6.60	6.60
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	119	<MDL	28.3	59.8	137	345	2,250
	Home Children - <i>at home</i>	62	<MDL	29.8	61.1	132	352	2,250
	Day care Children - <i>at home</i>	57	<MDL	25.8	53.6	144	278	399
	Day care Children - <i>at day care</i>	23	<MDL	22.6	35.6	77.8	165	712
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	119	<MDL	20.0	74.6	245	758	5,300
	Home Children - <i>at home</i>	62	<MDL	20.0	82.9	186	385	5,110
	Day care Children - <i>at home</i>	57	<MDL	23.8	65.1	287	808	5,300
	Day care Children - <i>at day care</i>	23	<MDL	30.2	00.0	663	2,310	5,690
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	9	<MDL	<MDL	<MDL	21.0	111	111
	Home Children - <i>at home</i>	6	<MDL	<MDL	<MDL	21.0	25.2	25.2
	Day care Children - <i>at home</i>	3	<MDL	<MDL	19.8	111	111	111
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	2	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	3	<MDL	<MDL	<MDL	138	138	138
	Home Children - <i>at home</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	2	<MDL	<MDL	<MDL	138	138	138
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	147	440	1,790
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	158	455	1,790
	Day care Children - <i>at home</i>	29	<MDL	<MDL	62.9	134	339	346
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	149	319
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	37.4	108	242	620
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	91.7	263	620
	Day care Children - <i>at home</i>	29	<MDL	<MDL	52.0	124	242	242
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.620	0.910
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.480	0.910
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	0.660	0.790
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	0.330	0.420
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	0.250	0.530	0.760
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.540	0.670
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	0.300	0.530	0.760
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.390
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.390
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.210
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	0.240
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>	122	<MDL	<MDL	<MDL	<MDL	0.220	1.50
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	<MDL	0.540
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	0.230	1.50

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-32a. *cis*-Permethrin (61949-76-6): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	21.6	--	--	--	--
	Home children - <i>at home</i>	69	15.9	--	--	--	--
	Day care children - <i>at home</i>	56	28.6	--	--	--	--
	Day care children - <i>at day care</i>	22	27.3	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	23.6	--	--	--	--
	Home children - <i>at home</i>	69	23.2	--	--	--	--
	Day care children - <i>at home</i>	58	24.1	--	--	--	--
	Day care children - <i>at day care</i>	16	6.3	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	127	6.3	--	--	--	--
	Home children - <i>at home</i>	69	10.1	--	--	--	--
	Day care children - <i>at home</i>	58	1.7	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	100.0	2,320	8,050	572	1.47
	Home children - <i>at home</i>	63	100.0	1,360	3,170	515	1.25
	Day care children - <i>at home</i>	57	100.0	3,380	11,200	643	1.68
	Day care children - <i>at day care</i>	23	100.0	1,460	1,300	968	0.967
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	100.0	8,250	43,200	627	2.01
	Home children - <i>at home</i>	63	100.0	3,740	14,000	459	1.85
	Day care children - <i>at home</i>	57	100.0	13,200	60,800	886	2.14
	Day care children - <i>at day care</i>	23	100.0	7,750	13,600	2,570	1.60
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	71.4	2,800	11,300	107	2.52
	Home children - <i>at home</i>	15	60.0	350	528	63.2	2.30
	Day care children - <i>at home</i>	6	100.0	8,930	21,100	401	2.79
	Day care children - <i>at day care</i>	3	66.7	41.4	31.6	25.9	1.45
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	38.5	--	--	--	--
	Home children - <i>at home</i>	9	33.3	--	--	--	--
	Day care children - <i>at home</i>	4	50.0	1,960	3,890	53.4	3.48
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	69.2	349	813	40.7	2.23
	Home children - <i>at home</i>	9	55.6	156	380	19.4	2.08
	Day care children - <i>at home</i>	4	100.0	782	1,380	216	1.73
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	87.6	1,390	3,000	388	1.59
	Home children - <i>at home</i>	68	86.8	987	1,990	331	1.48
	Day care children - <i>at home</i>	29	89.7	2,330	4,480	564	1.78
	Day care children - <i>at day care</i>	29	79.3	1,470	2,890	344	1.87
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	77.3	582	1,650	133	1.68
	Home children - <i>at home</i>	69	73.9	433	1,130	112	1.64
	Day care children - <i>at home</i>	28	85.7	951	2,510	204	1.71
Solid Food (Children) (ng/g)	All children - <i>at home</i>	125	31.2	--	--	--	--
	Home children - <i>at home</i>	69	23.2	--	--	--	--
	Day care children - <i>at home</i>	56	41.1	--	--	--	--
	Day care children - <i>at day care</i>	29	24.1	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	125	0.0	--	--	--	--
	Home children - <i>at home</i>	68	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-32b. *cis*-Permethrin (61949-76-6): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	1.63	5.39
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	1.04	2.33
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	0.673	3.54	5.39
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	0.306	0.881	6.50
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.973	1.78
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.973	1.78
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	1.04	1.39
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	0.564	0.564
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	2.73	1,450
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	4.56	1,450
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	6.84
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	16.6	197	470	1,550	7,630	79,600
	Home Children - <i>at home</i>	63	62.8	244	400	1,100	4,660	23,200
	Day care Children - <i>at home</i>	57	16.6	181	560	1,740	19,500	79,600
	Day care Children - <i>at day care</i>	23	127	418	1,010	1,850	3,830	4,630
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	17.4	145	447	2,520	38,500	454,000
	Home Children - <i>at home</i>	63	17.4	119	319	1,490	13,400	103,000
	Day care Children - <i>at home</i>	57	26.1	175	608	3,500	47,000	454,000
	Day care Children - <i>at day care</i>	23	87.7	719	2,710	6,750	48,200	50,300
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	89.4	639	1,930	52,000
	Home Children - <i>at home</i>	15	<MDL	<MDL	58.3	639	1,930	1,930
	Day care Children - <i>at home</i>	6	14.0	66.8	373	725	52,000	52,000
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	59.2	60.1	60.1	60.1
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	56.0	7,800	7,800
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	56.0	113	113
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	3,920	7,800	7,800
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	37.2	118	2,850	2,850
	Home Children - <i>at home</i>	9	<MDL	<MDL	23.3	37.2	1,160	1,160
	Day care Children - <i>at home</i>	4	75.0	81.1	102	1,480	2,850	2,850
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	172	331	946	8,350	20,500
	Home Children - <i>at home</i>	68	<MDL	165	311	897	3,940	11,600
	Day care Children - <i>at home</i>	29	<MDL	238	450	1,460	9,740	20,500
	Day care Children - <i>at day care</i>	29	<MDL	104	353	1,400	6,480	13,900
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	39.3	171	366	2,140	11,200
	Home Children - <i>at home</i>	69	<MDL	<MDL	134	262	1,340	8,540
	Day care Children - <i>at home</i>	28	<MDL	75.1	232	494	8,060	11,200
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	0.190	8.83	560
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	5.93	29.6
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	0.270	21.6	560
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	2.21	31.0
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-33a. *trans*-Permethrin (61949-77-7): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	18.4	--	--	--	--
	Home children - <i>at home</i>	69	13.0	--	--	--	--
	Day care children - <i>at home</i>	56	25.0	--	--	--	--
	Day care children - <i>at day care</i>	22	22.7	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	20.5	--	--	--	--
	Home children - <i>at home</i>	69	17.4	--	--	--	--
	Day care children - <i>at home</i>	58	24.1	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	124	6.5	--	--	--	--
	Home children - <i>at home</i>	67	10.4	--	--	--	--
	Day care children - <i>at home</i>	57	1.8	--	--	--	--
	Day care children - <i>at day care</i>	14	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	118	100.0	2,340	8,320	453	1.60
	Home children - <i>at home</i>	62	100.0	1,420	4,220	409	1.38
	Day care children - <i>at home</i>	56	100.0	3,360	11,200	508	1.82
	Day care children - <i>at day care</i>	22	100.0	1,260	1,220	784	1.02
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	118	100.0	7,640	42,600	475	2.08
	Home children - <i>at home</i>	62	100.0	3,260	11,000	350	1.94
	Day care children - <i>at home</i>	56	100.0	12,500	60,600	665	2.18
	Day care children - <i>at day care</i>	22	100.0	7,260	14,000	2,020	1.75
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	71.4	2,810	11,200	106	2.56
	Home children - <i>at home</i>	15	60.0	376	565	63.6	2.34
	Day care children - <i>at home</i>	6	100.0	8,890	21,000	385	2.83
	Day care children - <i>at day care</i>	3	66.7	38.8	31.2	24.4	1.41
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	38.5	--	--	--	--
	Home children - <i>at home</i>	9	33.3	--	--	--	--
	Day care children - <i>at home</i>	4	50.0	1,990	3,950	54.6	3.49
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	69.2	292	790	33.1	2.11
	Home children - <i>at home</i>	9	55.6	76.5	170	15.4	1.81
	Day care children - <i>at home</i>	4	100.0	775	1,400	185	1.83
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	87.6	1,350	3,360	321	1.60
	Home children - <i>at home</i>	68	86.8	877	1,970	260	1.46
	Day care children - <i>at home</i>	29	89.7	2,440	5,270	526	1.80
	Day care children - <i>at day care</i>	29	79.3	1,490	3,250	302	1.86
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	77.3	586	1,970	113	1.65
	Home children - <i>at home</i>	69	73.9	356	944	93.3	1.57
	Day care children - <i>at home</i>	28	85.7	1,150	3,340	183	1.77
Solid Food (Children) (ng/g)	All children - <i>at home</i>	125	31.2	--	--	--	--
	Home children - <i>at home</i>	69	23.2	--	--	--	--
	Day care children - <i>at home</i>	56	41.1	--	--	--	--
	Day care children - <i>at day care</i>	29	24.1	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>	125	0.0	--	--	--	--
	Home children - <i>at home</i>	68	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-33b. *trans*-Permethrin (61949-77-7): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	1.04	6.79
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.730	2.37
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	2.74	6.79
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.662	6.84
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.669	1.32
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.814	1.32
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	0.669	0.999
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	124	<MDL	<MDL	<MDL	<MDL	2.06	1,400
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	3.21	1,400
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	2.78
	Day care Children - <i>at day care</i>	14	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	118	16.5	132	344	1,270	9,210	78,800
	Home Children - <i>at home</i>	62	53.5	148	313	1,040	4,290	31,900
	Day care Children - <i>at home</i>	56	16.5	119	459	1,600	18,200	78,800
	Day care Children - <i>at day care</i>	22	126	362	554	1,860	3,420	3,950
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	118	15.1	110	295	1,430	38,600	450,000
	Home Children - <i>at home</i>	62	15.1	84.0	212	1,200	12,300	65,100
	Day care Children - <i>at home</i>	56	20.1	133	497	2,900	43,900	450,000
	Day care Children - <i>at day care</i>	22	73.6	467	2,630	5,690	47,200	51,700
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	93.7	706	2,040	51,800
	Home Children - <i>at home</i>	15	<MDL	<MDL	48.8	724	2,040	2,040
	Day care Children - <i>at home</i>	6	11.7	63.7	367	706	51,800	51,800
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	45.2	66.2	66.2	66.2
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	50.7	7,910	7,910
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	50.7	109	109
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	3,980	7,910	7,910
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	30.8	79.5	2,880	2,880
	Home Children - <i>at home</i>	9	<MDL	<MDL	18.2	30.8	524	524
	Day care Children - <i>at home</i>	4	64.0	71.6	79.3	1,480	2,880	2,880
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	132	270	718	7,690	21,000
	Home Children - <i>at home</i>	68	<MDL	115	207	567	4,810	10,200
	Day care Children - <i>at home</i>	29	<MDL	190	449	1,300	19,600	21,000
	Day care Children - <i>at day care</i>	29	<MDL	109	276	869	8,330	15,300
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	29.8	129	257	1,630	13,700
	Home Children - <i>at home</i>	69	<MDL	<MDL	98.8	221	1,120	7,030
	Day care Children - <i>at home</i>	28	<MDL	61.2	224	357	12,100	13,700
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	0.180	7.96	448
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	5.62	21.2
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	0.250	13.6	448
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	1.42	26.7
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-34a. PCB 44 (41464-39-5): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	31.2	--	--	--	--
	Home children - <i>at home</i>	69	27.5	--	--	--	--
	Day care children - <i>at home</i>	56	35.7	--	--	--	--
	Day care children - <i>at day care</i>	22	31.8	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	126	15.9	--	--	--	--
	Home children - <i>at home</i>	69	18.8	--	--	--	--
	Day care children - <i>at home</i>	57	12.3	--	--	--	--
	Day care children - <i>at day care</i>	16	12.5	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	126	14.3	--	--	--	--
	Home children - <i>at home</i>	69	11.6	--	--	--	--
	Day care children - <i>at home</i>	57	17.5	--	--	--	--
	Day care children - <i>at day care</i>	16	18.8	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	27.5	--	--	--	--
	Home children - <i>at home</i>	63	30.2	--	--	--	--
	Day care children - <i>at home</i>	57	24.6	--	--	--	--
	Day care children - <i>at day care</i>	23	8.7	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	27.5	--	--	--	--
	Home children - <i>at home</i>	63	30.2	--	--	--	--
	Day care children - <i>at home</i>	57	24.6	--	--	--	--
	Day care children - <i>at day care</i>	23	8.7	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	9.5	--	--	--	--
	Home children - <i>at home</i>	15	0.0	--	--	--	--
	Day care children - <i>at home</i>	6	33.3	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	7.7	--	--	--	--
	Home children - <i>at home</i>	9	11.1	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	15.4	--	--	--	--
	Home children - <i>at home</i>	9	22.2	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	10.3	--	--	--	--
	Home children - <i>at home</i>	68	11.8	--	--	--	--
	Day care children - <i>at home</i>	29	6.9	--	--	--	--
	Day care children - <i>at day care</i>	29	3.4	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	6.2	--	--	--	--
	Home children - <i>at home</i>	69	8.7	--	--	--	--
	Day care children - <i>at home</i>	28	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-34b. PCB 44 (41464-39-5): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	0.150	1.05	3.66
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.170	1.05	1.83
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	0.150	1.17	3.66
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	0.100	0.320	0.830
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	0.140	0.250
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.170	0.250
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	0.110	0.160
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	0.450	0.450
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	5.23	21.5
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	4.71	18.3
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	5.46	21.5
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	5.06	5.06
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	7.07	27.2	57.1
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	9.44	25.3	57.1
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	32.1	55.7
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	7.07	12.5
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	8.88	37.0	336
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	7.88	35.9	90.7
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	83.2	336
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	41.9	65.8
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	7.93	8.18
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	7.93	8.18	8.18
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	10.6	10.6
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	10.6	10.6
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	41.3	41.3
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	41.3	41.3
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	42.9	55.5
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	42.9	55.5
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	40.8	43.6
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	36.3
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	26.1	41.3
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	28.7	41.3
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-35a. PCB 52 (35693-99-3): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	86.4	0.662	0.922	0.342	1.26
	Home children - <i>at home</i>	69	82.6	0.643	0.831	0.317	1.35
	Day care children - <i>at home</i>	56	91.1	0.686	1.03	0.375	1.16
	Day care children - <i>at day care</i>	22	95.5	0.575	0.411	0.460	0.787
Outdoor Air (ng/m ³)	All children - <i>at home</i>	125	63.2	0.145	0.131	0.093	1.00
	Home children - <i>at home</i>	69	63.8	0.146	0.126	0.095	0.996
	Day care children - <i>at home</i>	56	62.5	0.145	0.137	0.091	1.01
	Day care children - <i>at day care</i>	15	86.7	0.192	0.265	0.112	1.02
Soil (ng/g)	All children - <i>at home</i>	126	20.6	--	--	--	--
	Home children - <i>at home</i>	69	15.9	--	--	--	--
	Day care children - <i>at home</i>	57	26.3	--	--	--	--
	Day care children - <i>at day care</i>	16	18.8	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	46.7	--	--	--	--
	Home children - <i>at home</i>	63	49.2	--	--	--	--
	Day care children - <i>at home</i>	57	43.9	--	--	--	--
	Day care children - <i>at day care</i>	23	69.6	10.5	10.7	7.18	0.919
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	46.7	--	--	--	--
	Home children - <i>at home</i>	63	49.2	--	--	--	--
	Day care children - <i>at home</i>	57	43.9	--	--	--	--
	Day care children - <i>at day care</i>	23	69.6	61.0	82.1	19.1	1.82
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	38.1	--	--	--	--
	Home children - <i>at home</i>	15	33.3	--	--	--	--
	Day care children - <i>at home</i>	6	50.0	8.08	3.90	7.34	0.477
	Day care children - <i>at day care</i>	3	33.3	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	7.7	--	--	--	--
	Home children - <i>at home</i>	9	11.1	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	12	50.0	22.1	23.5	13.0	1.06
	Home children - <i>at home</i>	8	37.5	--	--	--	--
	Day care children - <i>at home</i>	4	75.0	19.7	19.9	14.2	0.886
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	96	17.7	--	--	--	--
	Home children - <i>at home</i>	67	22.4	--	--	--	--
	Day care children - <i>at home</i>	29	6.9	--	--	--	--
	Day care children - <i>at day care</i>	29	10.3	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	22.7	--	--	--	--
	Home children - <i>at home</i>	69	26.1	--	--	--	--
	Day care children - <i>at home</i>	28	14.3	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	126	5.6	--	--	--	--
	Home children - <i>at home</i>	69	4.3	--	--	--	--
	Day care children - <i>at home</i>	57	7.0	--	--	--	--
	Day care children - <i>at day care</i>	29	6.9	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-35b. PCB 52 (35693-99-3): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	0.210	0.420	0.650	2.40	6.76
	Home Children - <i>at home</i>	69	<MDL	0.170	0.420	0.650	2.40	4.34
	Day care Children - <i>at home</i>	56	<MDL	0.240	0.405	0.705	2.93	6.76
	Day care Children - <i>at day care</i>	22	<MDL	0.380	0.485	0.620	0.860	2.17
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	0.110	0.220	0.400	0.630
	Home Children - <i>at home</i>	69	<MDL	<MDL	0.130	0.220	0.400	0.610
	Day care Children - <i>at home</i>	56	<MDL	<MDL	0.105	0.220	0.460	0.630
	Day care Children - <i>at day care</i>	15	<MDL	0.070	0.100	0.230	1.07	1.07
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	10.6	50.2
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	9.19	47.4
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	0.590	12.0	50.2
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	9.39	9.39
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	12.3	37.8	129
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	14.1	39.2	129
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	10.1	36.0	57.3
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	7.24	11.3	27.0	50.6
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	14.9	50.3	235
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	11.0	44.1	121
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	15.4	71.2	235
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	26.4	84.8	255	266
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	7.45	12.7	13.0
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	7.17	8.69	8.69
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	12.7	13.0	13.0
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	6.97	6.97	6.97
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	10.2	10.2
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	10.2	10.2
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	12	<MDL	<MDL	<MDL	41.2	70.8	70.8
	Home Children - <i>at home</i>	8	<MDL	<MDL	<MDL	43.6	70.8	70.8
	Day care Children - <i>at home</i>	4	<MDL	<MDL	11.7	31.3	49.2	49.2
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	56.7	84.0
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	61.5	84.0
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	49.4	56.7
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	36.5	55.3
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	36.8	58.8
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	18.9	36.8	58.8
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	27.4	40.4
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	0.090	0.470
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.270
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	0.130	0.470
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	0.180	0.180
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-36a. PCB 70 (32698-11-1): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	34.4	--	--	--	--
	Home children - <i>at home</i>	69	39.1	--	--	--	--
	Day care children - <i>at home</i>	56	28.6	--	--	--	--
	Day care children - <i>at day care</i>	22	45.5	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	126	14.3	--	--	--	--
	Home children - <i>at home</i>	69	15.9	--	--	--	--
	Day care children - <i>at home</i>	57	12.3	--	--	--	--
	Day care children - <i>at day care</i>	16	12.5	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	126	18.3	--	--	--	--
	Home children - <i>at home</i>	69	13.0	--	--	--	--
	Day care children - <i>at home</i>	57	24.6	--	--	--	--
	Day care children - <i>at day care</i>	16	25.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	25.8	--	--	--	--
	Home children - <i>at home</i>	63	30.2	--	--	--	--
	Day care children - <i>at home</i>	57	21.1	--	--	--	--
	Day care children - <i>at day care</i>	23	21.7	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	25.8	--	--	--	--
	Home children - <i>at home</i>	63	30.2	--	--	--	--
	Day care children - <i>at home</i>	57	21.1	--	--	--	--
	Day care children - <i>at day care</i>	23	21.7	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	52.4	7.26	3.65	6.69	0.385
	Home children - <i>at home</i>	15	53.3	6.47	1.72	6.26	0.261
	Day care children - <i>at home</i>	6	50.0	9.26	6.18	7.89	0.597
	Day care children - <i>at day care</i>	3	33.3	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	15.4	--	--	--	--
	Home children - <i>at home</i>	9	11.1	--	--	--	--
	Day care children - <i>at home</i>	4	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	23.1	--	--	--	--
	Home children - <i>at home</i>	9	22.2	--	--	--	--
	Day care children - <i>at home</i>	4	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	95	17.9	--	--	--	--
	Home children - <i>at home</i>	66	21.2	--	--	--	--
	Day care children - <i>at home</i>	29	10.3	--	--	--	--
	Day care children - <i>at day care</i>	29	13.8	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	11.3	--	--	--	--
	Home children - <i>at home</i>	69	13.0	--	--	--	--
	Day care children - <i>at home</i>	28	7.1	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-36b. PCB 70 (32698-11-1): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	0.120	0.620	3.31
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.120	0.870	1.33
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	0.110	0.590	3.31
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	0.110	0.380	0.600
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	0.110	0.200
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.110	0.140
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	0.120	0.200
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	0.430	0.430
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	8.28	32.4
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	7.24	24.3
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	12.8	32.4
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	6.90	6.90
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	7.00	24.9	101
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	10.1	27.3	101
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	22.3	30.5
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	7.07	8.20
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	8.39	29.8	127
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	6.78	38.0	95.0
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	29.5	127
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	65.5	160
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	6.30	8.48	11.9	20.5
	Home Children - <i>at home</i>	15	<MDL	<MDL	6.30	7.45	9.31	9.31
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	11.9	20.5	20.5
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	10.4	10.4	10.4
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	11.9	11.9
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	11.9	11.9
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	7.66	7.66
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	31.0	31.0
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	31.0	31.0
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	29.0	29.0
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	95	<MDL	<MDL	<MDL	<MDL	63.9	86.5
	Home Children - <i>at home</i>	66	<MDL	<MDL	<MDL	<MDL	63.9	86.5
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	54.0	73.8
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	43.9	47.0
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	27.1	52.4
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	28.3	52.4
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	21.1	21.6
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-37a. PCB 77 (32598-13-3): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	56	0.0	--	--	--	--
	Day care children - <i>at day care</i>	22	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	58	0.0	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	126	0.8	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	1.8	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	0.0	--	--	--	--
	Home children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	0.0	--	--	--	--
	Home children - <i>at home</i>	63	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	23	0.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	0.0	--	--	--	--
	Home children - <i>at home</i>	15	0.0	--	--	--	--
	Day care children - <i>at home</i>	6	0.0	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	28	0.0	--	--	--	--
	Day care children - <i>at day care</i>	97	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	68	0.0	--	--	--	--
	Home children - <i>at home</i>	29	0.0	--	--	--	--
	Day care children - <i>at home</i>	29	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-37b. PCB 77 (32598-13-3): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	2.54
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	2.54
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-38a. PCB 95 (38379-99-6): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	60.0	0.222	0.469	0.094	1.17
	Home children - at home	69	59.4	0.198	0.347	0.093	1.14
	Day care children - at home	56	60.7	0.251	0.588	0.096	1.23
	Day care children - at day care	22	77.3	0.157	0.186	0.097	0.970
Outdoor Air (ng/m ³)	All children - at home	127	35.4	--	--	--	--
	Home children - at home	69	34.8	--	--	--	--
	Day care children - at home	58	36.2	--	--	--	--
	Day care children - at day care	16	43.8	--	--	--	--
Soil (ng/g)	All children - at home	126	23.0	--	--	--	--
	Home children - at home	69	17.4	--	--	--	--
	Day care children - at home	57	29.8	--	--	--	--
	Day care children - at day care	16	25.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	120	37.5	--	--	--	--
	Home children - at home	63	39.7	--	--	--	--
	Day care children - at home	57	35.1	--	--	--	--
	Day care children - at day care	23	65.2	6.29	4.49	4.87	0.769
Indoor Floor Dust (ng/m ²)	All children - at home	120	37.5	--	--	--	--
	Home children - at home	63	39.7	--	--	--	--
	Day care children - at home	57	35.1	--	--	--	--
	Day care children - at day care	23	65.2	34.2	40.4	12.9	1.65
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	4.8	--	--	--	--
	Home children - at home	15	6.7	--	--	--	--
	Day care children - at home	6	0.0	--	--	--	--
	Day care children - at day care	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	0.0	--	--	--	--
	Home children - at home	9	0.0	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	30.8	--	--	--	--
	Home children - at home	9	33.3	--	--	--	--
	Day care children - at home	4	25.0	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	97	7.2	--	--	--	--
	Home children - at home	68	8.8	--	--	--	--
	Day care children - at home	29	3.4	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	10.3	--	--	--	--
	Home children - at home	69	8.7	--	--	--	--
	Day care children - at home	28	14.3	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	126	0.8	--	--	--	--
	Home children - at home	69	1.4	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						
	Day care children - at day care						
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-38b. PCB 95 (38379-99-6): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	0.110	0.170	0.930	3.96
	Home Children - <i>at home</i>	69	<MDL	<MDL	0.110	0.170	0.930	1.88
	Day care Children - <i>at home</i>	56	<MDL	<MDL	0.105	0.190	1.49	3.96
	Day care Children - <i>at day care</i>	22	<MDL	0.060	0.100	0.180	0.470	0.810
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	0.110	0.190	0.330
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.110	0.180	0.330
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	0.100	0.230	0.250
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	0.085	1.04	1.04
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	8.84	75.9
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	7.98	58.1
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	0.850	14.8	75.9
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	7.66	7.66
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	7.72	30.6	176
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	8.36	31.2	176
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	7.07	29.9	78.4
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	6.00	7.46	14.3	19.6
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	9.29	37.2	349
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	8.35	37.2	144
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	11.9	37.2	349
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	16.2	61.7	110	135
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	8.14
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	8.14	8.14
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	11.8	50.0	50.0
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	11.8	50.0	50.0
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	29.4	29.4
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	49.6	86.4
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	49.6	86.4
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	62.2
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	27.3	49.5
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	35.9	49.5
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	20.9	27.3
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.110
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-39a. PCB 101 (37680-73-2): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	52.8	0.226	0.594	0.085	1.22
	Home children - <i>at home</i>	69	47.8	--	--	--	--
	Day care children - <i>at home</i>	56	58.9	0.280	0.805	0.097	1.26
	Day care children - <i>at day care</i>	22	68.2	0.165	0.225	0.089	1.10
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	23.6	--	--	--	--
	Home children - <i>at home</i>	69	15.9	--	--	--	--
	Day care children - <i>at home</i>	58	32.8	--	--	--	--
	Day care children - <i>at day care</i>	16	37.5	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	126	25.4	--	--	--	--
	Home children - <i>at home</i>	69	20.3	--	--	--	--
	Day care children - <i>at home</i>	57	31.6	--	--	--	--
	Day care children - <i>at day care</i>	16	25.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	41.7	--	--	--	--
	Home children - <i>at home</i>	63	44.4	--	--	--	--
	Day care children - <i>at home</i>	57	38.6	--	--	--	--
	Day care children - <i>at day care</i>	23	60.9	7.63	6.63	5.31	0.910
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	41.7	--	--	--	--
	Home children - <i>at home</i>	63	44.4	--	--	--	--
	Day care children - <i>at home</i>	57	38.6	--	--	--	--
	Day care children - <i>at day care</i>	23	60.9	41.8	53.4	14.1	1.72
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	9.5	--	--	--	--
	Home children - <i>at home</i>	15	0.0	--	--	--	--
	Day care children - <i>at home</i>	6	33.3	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	46.2	--	--	--	--
	Home children - <i>at home</i>	9	44.4	--	--	--	--
	Day care children - <i>at home</i>	4	50.0	9.78	8.31	7.88	0.706
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	11.3	--	--	--	--
	Home children - <i>at home</i>	68	11.8	--	--	--	--
	Day care children - <i>at home</i>	29	10.3	--	--	--	--
	Day care children - <i>at day care</i>	29	3.4	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	12.4	--	--	--	--
	Home children - <i>at home</i>	69	13.0	--	--	--	--
	Day care children - <i>at home</i>	28	10.7	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	126	0.8	--	--	--	--
	Home children - <i>at home</i>	69	1.4	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-39b. PCB 101 (37680-73-2): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	0.090	0.190	1.02	5.90
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.170	1.02	1.78
	Day care Children - <i>at home</i>	56	<MDL	<MDL	0.100	0.220	1.10	5.90
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	0.100	0.150	0.690	0.900
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	0.150	0.360
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.140	0.360
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	0.100	0.180	0.250
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	0.075	0.940	0.940
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	0.560	14.6	107
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	12.0	80.4
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	1.32	21.6	107
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	12.4	12.4
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	8.87	46.0	273
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	10.1	46.4	273
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	7.72	40.5	94.3
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	6.10	10.5	17.6	28.4
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	13.6	60.4	416
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	9.34	58.0	170
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	14.5	70.0	416
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	16.2	52.4	149	170
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	7.52	17.2
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	7.52	17.2	17.2
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	12.2	51.5	51.5
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	12.2	51.5	51.5
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	14.2	22.2	22.2
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	65.3	112
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	65.3	112
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	43.0	73.1
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	42.0
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	40.9	84.0
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	56.0	84.0
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	30.4	40.9
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.210
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.210
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-40a. PCB 105 (32598-14-4): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	4.8	--	--	--	--
	Home children - <i>at home</i>	69	4.3	--	--	--	--
	Day care children - <i>at home</i>	56	5.4	--	--	--	--
	Day care children - <i>at day care</i>	22	9.1	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	2.4	--	--	--	--
	Home children - <i>at home</i>	69	1.4	--	--	--	--
	Day care children - <i>at home</i>	58	3.4	--	--	--	--
	Day care children - <i>at day care</i>	16	6.3	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	126	20.6	--	--	--	--
	Home children - <i>at home</i>	69	15.9	--	--	--	--
	Day care children - <i>at home</i>	57	26.3	--	--	--	--
	Day care children - <i>at day care</i>	16	12.5	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	13.3	--	--	--	--
	Home children - <i>at home</i>	63	15.9	--	--	--	--
	Day care children - <i>at home</i>	57	10.5	--	--	--	--
	Day care children - <i>at day care</i>	23	17.4	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	13.3	--	--	--	--
	Home children - <i>at home</i>	63	15.9	--	--	--	--
	Day care children - <i>at home</i>	57	10.5	--	--	--	--
	Day care children - <i>at day care</i>	23	17.4	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	14.3	--	--	--	--
	Home children - <i>at home</i>	15	13.3	--	--	--	--
	Day care children - <i>at home</i>	6	16.7	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	7.7	--	--	--	--
	Home children - <i>at home</i>	9	11.1	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	5.2	--	--	--	--
	Home children - <i>at home</i>	68	7.4	--	--	--	--
	Day care children - <i>at home</i>	29	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	1.0	--	--	--	--
	Home children - <i>at home</i>	69	1.4	--	--	--	--
	Day care children - <i>at home</i>	28	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-40b. PCB 105 (32598-14-4): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	<MDL	2.46
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.260
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	0.110	2.46
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.220	0.350
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.250
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.090
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	0.250
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	0.110	0.110
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	2.03	83.3
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	1.87	28.5
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	0.590	16.7	83.3
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	1.82	1.82
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	19.7	197
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	24.4	197
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	15.3	27.2
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	24.7	39.2
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	<MDL	41.7	140
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	<MDL	45.4	77.3
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	35.3	140
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	76.1	197
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	8.14	12.4
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	8.14	8.14
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	12.4	12.4
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	39.0	39.0
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	39.0	39.0
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	39.0	113
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	50.6	113
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	26.5
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	26.5
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-41a. PCB 110 (38380-03-9): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	125	46.4	--	--	--	--
	Home children - at home	69	44.9	--	--	--	--
	Day care children - at home	56	48.2	--	--	--	--
	Day care children - at day care	22	27.3	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	126	19.8	--	--	--	--
	Home children - at home	69	21.7	--	--	--	--
	Day care children - at home	57	17.5	--	--	--	--
	Day care children - at day care	16	31.3	--	--	--	--
Soil (ng/g)	All children - at home	126	31.7	--	--	--	--
	Home children - at home	69	26.1	--	--	--	--
	Day care children - at home	57	38.6	--	--	--	--
	Day care children - at day care	16	25.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	120	45.0	--	--	--	--
	Home children - at home	63	46.0	--	--	--	--
	Day care children - at home	57	43.9	--	--	--	--
	Day care children - at day care	23	60.9	8.93	9.41	5.92	0.946
Indoor Floor Dust (ng/m ²)	All children - at home	120	45.0	--	--	--	--
	Home children - at home	63	46.0	--	--	--	--
	Day care children - at home	57	43.9	--	--	--	--
	Day care children - at day care	23	60.9	51.8	76.4	15.7	1.77
Hard Floor Surface Wipes (ng/m ²)	All children - at home	21	42.9	--	--	--	--
	Home children - at home	15	40.0	--	--	--	--
	Day care children - at home	6	50.0	8.83	7.30	7.25	0.620
	Day care children - at day care	3	33.3	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	13	0.0	--	--	--	--
	Home children - at home	9	0.0	--	--	--	--
	Day care children - at home	4	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	13	46.2	--	--	--	--
	Home children - at home	9	44.4	--	--	--	--
	Day care children - at home	4	50.0	10.0	7.87	8.40	0.638
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	11.5	--	--	--	--
	Home children - at home	67	13.4	--	--	--	--
	Day care children - at home	29	6.9	--	--	--	--
	Day care children - at day care	29	6.9	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	13.4	--	--	--	--
	Home children - at home	69	14.5	--	--	--	--
	Day care children - at home	28	10.7	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	126	0.8	--	--	--	--
	Home children - at home	69	1.4	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home						
	Home children - at home						
	Day care children - at home						
Liquid Food (Children) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						
	Day care children - at day care						
Liquid Food (Adults) (ng/mL)	All children - at home						
	Home children - at home						
	Day care children - at home						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-41b. PCB 110 (38380-03-9): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	0.150	0.720	5.60
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.150	0.630	1.24
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	0.155	0.740	5.60
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	0.090	0.710	0.750
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	0.150	0.240
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.150	0.230
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	0.170	0.240
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	0.085	0.660	0.660
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	0.980	9.48	170
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.530	8.12	86.2
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	1.19	34.2	170
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	7.77	7.77
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	10.5	45.6	340
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	12.3	47.6	340
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	8.12	43.5	67.8
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	7.06	9.78	23.0	44.2
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	13.9	69.7	361
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	11.9	78.4	164
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	15.4	61.1	361
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	16.2	45.4	232	272
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	7.66	10.3	23.4
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	7.66	10.3	10.3
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	8.97	23.4	23.4
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	7.24	7.24	7.24
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	10.4	41.5	41.5
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	10.4	41.5	41.5
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	14.0	21.8	21.8
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	56.7	152
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	56.7	152
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	56.1	90.5
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	36.3	64.2
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	55.1	171
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	75.0	171
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	44.8	55.1
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.200
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.200
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-42a. PCB 118 (31508-00-6): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	24.0	--	--	--	--
	Home children - <i>at home</i>	69	21.7	--	--	--	--
	Day care children - <i>at home</i>	56	26.8	--	--	--	--
	Day care children - <i>at day care</i>	22	18.2	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	126	6.3	--	--	--	--
	Home children - <i>at home</i>	69	5.8	--	--	--	--
	Day care children - <i>at home</i>	57	7.0	--	--	--	--
	Day care children - <i>at day care</i>	16	25.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	126	30.2	--	--	--	--
	Home children - <i>at home</i>	69	26.1	--	--	--	--
	Day care children - <i>at home</i>	57	35.1	--	--	--	--
	Day care children - <i>at day care</i>	16	25.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	40.0	--	--	--	--
	Home children - <i>at home</i>	63	41.3	--	--	--	--
	Day care children - <i>at home</i>	57	38.6	--	--	--	--
	Day care children - <i>at day care</i>	23	47.8	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	40.0	--	--	--	--
	Home children - <i>at home</i>	63	41.3	--	--	--	--
	Day care children - <i>at home</i>	57	38.6	--	--	--	--
	Day care children - <i>at day care</i>	23	47.8	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	19.0	--	--	--	--
	Home children - <i>at home</i>	15	20.0	--	--	--	--
	Day care children - <i>at home</i>	6	16.7	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	23.1	--	--	--	--
	Home children - <i>at home</i>	9	22.2	--	--	--	--
	Day care children - <i>at home</i>	4	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	10.3	--	--	--	--
	Home children - <i>at home</i>	68	11.8	--	--	--	--
	Day care children - <i>at home</i>	29	6.9	--	--	--	--
	Day care children - <i>at day care</i>	29	6.9	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	7.2	--	--	--	--
	Home children - <i>at home</i>	69	5.8	--	--	--	--
	Day care children - <i>at home</i>	28	10.7	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	126	1.6	--	--	--	--
	Home children - <i>at home</i>	69	2.9	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-42b. PCB 118 (31508-00-6): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.340	5.65
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.340	0.660
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	0.095	0.340	5.65
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.530	0.800
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	0.090	0.200
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.090	0.200
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	0.100	0.130
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	0.330	0.330
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	0.790	5.76	178
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.500	4.78	70.2
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	1.04	29.9	178
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	4.70	4.70
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	8.39	39.7	367
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	10.1	39.9	367
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	7.22	39.5	50.3
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	8.41	17.0	29.6
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	12.7	44.4	239
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	9.34	44.9	127
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	14.7	43.8	239
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	64.6	155	187
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	8.07	15.9
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	8.07	8.07
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	15.9	15.9
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	21.4	21.4
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	21.4	21.4
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	12.3	12.3
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	49.5	102
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	49.5	102
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	36.3	69.8
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	50.8	54.3
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	24.4	45.6
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	21.8	45.6
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	34.2	42.2
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.130
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.130
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-43a. PCB 138 (35065-28-2): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	8.8	--	--	--	--
	Home children - <i>at home</i>	69	5.8	--	--	--	--
	Day care children - <i>at home</i>	56	12.5	--	--	--	--
	Day care children - <i>at day care</i>	22	13.6	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	1.6	--	--	--	--
	Home children - <i>at home</i>	69	2.9	--	--	--	--
	Day care children - <i>at home</i>	58	0.0	--	--	--	--
	Day care children - <i>at day care</i>	16	12.5	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	126	31.7	--	--	--	--
	Home children - <i>at home</i>	69	29.0	--	--	--	--
	Day care children - <i>at home</i>	57	35.1	--	--	--	--
	Day care children - <i>at day care</i>	16	25.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	28.3	--	--	--	--
	Home children - <i>at home</i>	63	30.2	--	--	--	--
	Day care children - <i>at home</i>	57	26.3	--	--	--	--
	Day care children - <i>at day care</i>	23	26.1	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	28.3	--	--	--	--
	Home children - <i>at home</i>	63	30.2	--	--	--	--
	Day care children - <i>at home</i>	57	26.3	--	--	--	--
	Day care children - <i>at day care</i>	23	26.1	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	0.0	--	--	--	--
	Home children - <i>at home</i>	15	0.0	--	--	--	--
	Day care children - <i>at home</i>	6	0.0	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	7.7	--	--	--	--
	Home children - <i>at home</i>	9	11.1	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	2.1	--	--	--	--
	Home children - <i>at home</i>	68	2.9	--	--	--	--
	Day care children - <i>at home</i>	29	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	1.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	28	3.6	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	126	0.8	--	--	--	--
	Home children - <i>at home</i>	69	1.4	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-43b. PCB 138 (35065-28-2): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.130	2.83
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.100	0.270
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	0.190	2.83
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.150	0.450
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	0.100
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.100
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	0.170	0.170
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	0.980	6.54	183
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.600	4.93	75.5
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	1.73	44.0	183
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	4.94	4.94
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	5.99	29.6	335
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	9.10	43.1	335
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	4.28	23.8	31.1
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	7.07	15.1	15.8
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	8.92	49.4	177
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	7.20	66.8	77.1
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	10.4	30.1	177
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	30.1	121	170
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	6.20	6.20
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	6.20	6.20
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	67.2
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	67.2
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	53.8
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	53.8
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.090
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.090
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-44a. PCB 153 (35065-27-1): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	16.8	--	--	--	--
	Home children - <i>at home</i>	69	15.9	--	--	--	--
	Day care children - <i>at home</i>	56	17.9	--	--	--	--
	Day care children - <i>at day care</i>	22	18.2	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	58	0.0	--	--	--	--
	Day care children - <i>at day care</i>	16	12.5	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	126	34.1	--	--	--	--
	Home children - <i>at home</i>	69	29.0	--	--	--	--
	Day care children - <i>at home</i>	57	40.4	--	--	--	--
	Day care children - <i>at day care</i>	16	31.3	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	40.0	--	--	--	--
	Home children - <i>at home</i>	63	41.3	--	--	--	--
	Day care children - <i>at home</i>	57	38.6	--	--	--	--
	Day care children - <i>at day care</i>	23	47.8	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	40.0	--	--	--	--
	Home children - <i>at home</i>	63	41.3	--	--	--	--
	Day care children - <i>at home</i>	57	38.6	--	--	--	--
	Day care children - <i>at day care</i>	23	47.8	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	4.8	--	--	--	--
	Home children - <i>at home</i>	15	0.0	--	--	--	--
	Day care children - <i>at home</i>	6	16.7	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	23.1	--	--	--	--
	Home children - <i>at home</i>	9	22.2	--	--	--	--
	Day care children - <i>at home</i>	4	25.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	4.1	--	--	--	--
	Home children - <i>at home</i>	68	4.4	--	--	--	--
	Day care children - <i>at home</i>	29	3.4	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	2.1	--	--	--	--
	Home children - <i>at home</i>	69	1.4	--	--	--	--
	Day care children - <i>at home</i>	28	3.6	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	126	1.6	--	--	--	--
	Home children - <i>at home</i>	69	1.4	--	--	--	--
	Day care children - <i>at home</i>	57	1.8	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-44b. PCB 153 (35065-27-1): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	125	<MDL	<MDL	<MDL	<MDL	0.250	2.51
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	0.190	0.290
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	0.370	2.51
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	0.200	0.540
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	0.230	0.230
Soil (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	1.02	6.60	114
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.680	5.37	54.1
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	1.53	42.7	114
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	0.895	5.39	5.39
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	9.86	37.0	254
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	11.4	38.3	254
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	7.96	35.7	49.8
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	8.78	36.0	39.0
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	<MDL	<MDL	10.5	61.0	158
	Home Children - <i>at home</i>	63	<MDL	<MDL	<MDL	9.21	63.5	128
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	12.3	41.5	158
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	87.1	300	374
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	21	<MDL	<MDL	<MDL	<MDL	<MDL	24.5
	Home Children - <i>at home</i>	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	24.5	24.5
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	13	<MDL	<MDL	<MDL	<MDL	25.7	25.7
	Home Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	19.0	19.0
	Day care Children - <i>at home</i>	4	<MDL	<MDL	<MDL	<MDL	25.7	25.7
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	53.2
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	53.2
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	37.0
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	104
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	22.3
	Day care Children - <i>at home</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	104
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.090
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.090
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.090
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							
	Day care Children - <i>at day care</i>							
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>							
	Home Children - <i>at home</i>							
	Day care Children - <i>at home</i>							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-45a. PCB 180 (35065-29-3): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - <i>at home</i>	125	2.4	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	56	5.4	--	--	--	--
	Day care children - <i>at day care</i>	22	4.5	--	--	--	--
Outdoor Air (ng/m ³)	All children - <i>at home</i>	127	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	58	0.0	--	--	--	--
	Day care children - <i>at day care</i>	16	0.0	--	--	--	--
Soil (ng/g)	All children - <i>at home</i>	126	22.2	--	--	--	--
	Home children - <i>at home</i>	69	17.4	--	--	--	--
	Day care children - <i>at home</i>	57	28.1	--	--	--	--
	Day care children - <i>at day care</i>	16	18.8	--	--	--	--
Indoor Floor Dust (ng/g)	All children - <i>at home</i>	120	16.7	--	--	--	--
	Home children - <i>at home</i>	63	20.6	--	--	--	--
	Day care children - <i>at home</i>	57	12.3	--	--	--	--
	Day care children - <i>at day care</i>	23	13.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - <i>at home</i>	120	16.7	--	--	--	--
	Home children - <i>at home</i>	63	20.6	--	--	--	--
	Day care children - <i>at home</i>	57	12.3	--	--	--	--
	Day care children - <i>at day care</i>	23	13.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - <i>at home</i>	21	0.0	--	--	--	--
	Home children - <i>at home</i>	15	0.0	--	--	--	--
	Day care children - <i>at home</i>	6	0.0	--	--	--	--
	Day care children - <i>at day care</i>	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Transferable Residues (ng/m ²)	All children - <i>at home</i>	13	0.0	--	--	--	--
	Home children - <i>at home</i>	9	0.0	--	--	--	--
	Day care children - <i>at home</i>	4	0.0	--	--	--	--
	Day care children - <i>at day care</i>						
Dermal Wipe (Children) (ng/m ²)	All children - <i>at home</i>	97	0.0	--	--	--	--
	Home children - <i>at home</i>	68	0.0	--	--	--	--
	Day care children - <i>at home</i>	29	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - <i>at home</i>	97	1.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	28	3.6	--	--	--	--
Solid Food (Children) (ng/g)	All children - <i>at home</i>	126	0.0	--	--	--	--
	Home children - <i>at home</i>	69	0.0	--	--	--	--
	Day care children - <i>at home</i>	57	0.0	--	--	--	--
	Day care children - <i>at day care</i>	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
Liquid Food (Children) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						
	Day care children - <i>at day care</i>						
Liquid Food (Adults) (ng/mL)	All children - <i>at home</i>						
	Home children - <i>at home</i>						
	Day care children - <i>at home</i>						

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-45b. PCB 180 (35065-29-3): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - at home	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.300
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	56	<MDL	<MDL	<MDL	<MDL	0.110	0.300
	Day care Children - at day care	22	<MDL	<MDL	<MDL	<MDL	<MDL	0.330
Outdoor Air (ng/m ³)	All Children - at home	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	1.91	47.9
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	1.00	14.9
	Day care Children - at home	57	<MDL	<MDL	<MDL	0.700	25.4	47.9
	Day care Children - at day care	16	<MDL	<MDL	<MDL	<MDL	1.51	1.51
Indoor Floor Dust (ng/g)	All Children - at home	120	<MDL	<MDL	<MDL	<MDL	17.7	125
	Home Children - at home	63	<MDL	<MDL	<MDL	<MDL	28.0	125
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	10.1	18.9
	Day care Children - at day care	23	<MDL	<MDL	<MDL	<MDL	12.0	18.7
Indoor Floor Dust (ng/m ²)	All Children - at home	120	<MDL	<MDL	<MDL	<MDL	21.2	173
	Home Children - at home	63	<MDL	<MDL	<MDL	<MDL	20.0	173
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	29.5	35.8
	Day care Children - at day care	23	<MDL	<MDL	<MDL	<MDL	119	200
Hard Floor Surface Wipes (ng/m ²)	All Children - at home	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Transferable Residues (ng/m ²)	All Children - at home	13	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	4	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care							
Dermal Wipe (Children) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - at home	97	<MDL	<MDL	<MDL	<MDL	<MDL	150
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	28	<MDL	<MDL	<MDL	<MDL	<MDL	150
Solid Food (Children) (ng/g)	All Children - at home	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - at home	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at home	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - at day care	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
Liquid Food (Children) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							
	Day care Children - at day care							
Liquid Food (Adults) (ng/mL)	All Children - at home							
	Home Children - at home							
	Day care Children - at home							

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries.

Table J-46a. 2,4,5-T (2,4,5-trichlorophenoxyacetic acid) (93-76-5): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	123	0.0	--	--	--	--
	Home children - at home	67	0.0	--	--	--	--
	Day care children - at home	56	0.0	--	--	--	--
	Day care children - at day care	22	0.0	--	--	--	--
Outdoor Air (ng/m ³)	All children - at home	121	0.8	--	--	--	--
	Home children - at home	67	0.0	--	--	--	--
	Day care children - at home	54	1.9	--	--	--	--
	Day care children - at day care	15	0.0	--	--	--	--
Soil (ng/g)	All children - at home	127	3.9	--	--	--	--
	Home children - at home	69	2.9	--	--	--	--
	Day care children - at home	58	5.2	--	--	--	--
	Day care children - at day care	16	0.0	--	--	--	--
Indoor Floor Dust (ng/g)	All children - at home	119	3.4	--	--	--	--
	Home children - at home	62	3.2	--	--	--	--
	Day care children - at home	57	3.5	--	--	--	--
	Day care children - at day care	23	0.0	--	--	--	--
Indoor Floor Dust (ng/m ²)	All children - at home	119	3.4	--	--	--	--
	Home children - at home	62	3.2	--	--	--	--
	Day care children - at home	57	3.5	--	--	--	--
	Day care children - at day care	23	0.0	--	--	--	--
Hard Floor Surface Wipes (ng/m ²)	All children - at home	9	0.0	--	--	--	--
	Home children - at home	6	0.0	--	--	--	--
	Day care children - at home	3	0.0	--	--	--	--
	Day care children - at day care	3	0.0	--	--	--	--
Food Preparation Surface Wipes (ng/m ²)	All children - at home	3	0.0	--	--	--	--
	Home children - at home	1	0.0	--	--	--	--
	Day care children - at home	2	0.0	--	--	--	--
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	3	0.0	--	--	--	--
	Home children - at home	1	0.0	--	--	--	--
	Day care children - at home	2	0.0	--	--	--	--
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	96	1.0	--	--	--	--
	Home children - at home	67	1.5	--	--	--	--
	Day care children - at home	29	0.0	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Dermal Wipe (Adults) (ng/m ²)	All children - at home	97	0.0	--	--	--	--
	Home children - at home	68	0.0	--	--	--	--
	Day care children - at home	29	0.0	--	--	--	--
Solid Food (Children) (ng/g)	All children - at home	127	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	58	0.0	--	--	--	--
	Day care children - at day care	29	0.0	--	--	--	--
Solid Food (Adults) (ng/g)	All children - at home	127	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	58	0.0	--	--	--	--
Liquid Food (Children) (ng/mL)	All children - at home	126	0.0	--	--	--	--
	Home children - at home	69	0.0	--	--	--	--
	Day care children - at home	57	0.0	--	--	--	--
	Day care children - at day care	28	0.0	--	--	--	--
Liquid Food (Adults) (ng/mL)	All children - at home	122	0.8	--	--	--	--
	Home children - at home	67	0.0	--	--	--	--
	Day care children - at home	55	1.8	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-46b. 2,4,5-T (2,4,5-trichlorophenoxyacetic acid) (93-76-5): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	123	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	56	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	22	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	121	<MDL	<MDL	<MDL	<MDL	<MDL	0.730
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	54	<MDL	<MDL	<MDL	<MDL	<MDL	0.730
	Day care Children - <i>at day care</i>	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	68.1
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	68.1
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	0.410	3.52
	Day care Children - <i>at day care</i>	16	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	119	<MDL	<MDL	<MDL	<MDL	<MDL	531
	Home Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	531
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	43.0
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	119	<MDL	<MDL	<MDL	<MDL	<MDL	563
	Home Children - <i>at home</i>	62	<MDL	<MDL	<MDL	<MDL	<MDL	563
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	73.0
	Day care Children - <i>at day care</i>	23	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	9	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	2	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	2	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	96	<MDL	<MDL	<MDL	<MDL	<MDL	3,610
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	<MDL	3,610
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	97	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	29	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>	127	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>	122	<MDL	<MDL	<MDL	<MDL	<MDL	10.4
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	<MDL	<MDL	10.4

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Table J-47a. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Summaries of concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Indoor Air (ng/m ³)	All children - at home	123	100.0	2.05	4.97	0.815	1.14
	Home children - at home	69	100.0	2.30	6.02	0.791	1.21
	Day care children - at home	54	100.0	1.73	3.20	0.847	1.05
	Day care children - at day care	21	100.0	1.50	1.25	1.01	0.976
Outdoor Air (ng/m ³)	All children - at home	118	88.1	0.338	0.504	0.226	0.814
	Home children - at home	64	93.8	0.373	0.618	0.248	0.783
	Day care children - at home	54	81.5	0.295	0.322	0.202	0.844
	Day care children - at day care	15	86.7	0.204	0.137	0.161	0.763
Soil (ng/g)	All children - at home	127	80.3	3.99	15.3	0.821	1.47
	Home children - at home	69	78.3	5.02	19.2	0.799	1.58
	Day care children - at home	58	82.8	2.76	8.66	0.847	1.35
	Day care children - at day care	16	81.3	1.15	1.57	0.601	1.15
Indoor Floor Dust (ng/g)	All children - at home	120	99.2	153	348	51.0	1.31
	Home children - at home	63	98.4	127	271	46.5	1.29
	Day care children - at home	57	100.0	180	418	56.6	1.33
	Day care children - at day care	23	100.0	93.8	105	62.3	0.890
Indoor Floor Dust (ng/m ²)	All children - at home	120	99.2	436	2,360	55.9	1.77
	Home children - at home	63	98.4	176	395	41.5	1.68
	Day care children - at home	57	100.0	723	3,390	77.9	1.83
	Day care children - at day care	23	100.0	493	867	165	1.64
Hard Floor Surface Wipes (ng/m ²)	All children - at home	9	88.9	49.5	105	16.2	1.32
	Home children - at home	6	83.3	61.5	130	15.0	1.54
	Day care children - at home	3	100.0	25.6	22.7	18.9	0.994
	Day care children - at day care	3	100.0	10.6	4.23	10.0	0.377
Food Preparation Surface Wipes (ng/m ²)	All children - at home	3	66.7	7.15	2.08	6.93	0.315
	Home children - at home	1	100.0	8.97	.	8.97	.
	Day care children - at home	2	50.0	6.23	1.92	6.09	0.312
	Day care children - at day care						
Transferable Residues (ng/m ²)	All children - at home	3	33.3	--	--	--	--
	Home children - at home	1	0.0	--	--	--	--
	Day care children - at home	2	50.0	13.9	15.2	8.74	1.46
	Day care children - at day care						
Dermal Wipe (Children) (ng/m ²)	All children - at home	98	96.9	154	120	121	0.686
	Home children - at home	69	95.7	167	134	128	0.730
	Day care children - at home	29	100.0	124	70.9	107	0.558
	Day care children - at day care	29	89.7	116	73.7	95.8	0.662
Dermal Wipe (Adults) (ng/m ²)	All children - at home	94	92.6	53.7	40.1	42.5	0.687
	Home children - at home	65	93.8	55.8	44.4	43.1	0.709
	Day care children - at home	29	89.7	48.9	28.3	40.9	0.644
Solid Food (Children) (ng/g)	All children - at home	127	99.2	2.55	2.60	1.70	0.990
	Home children - at home	69	100.0	2.90	3.04	2.01	0.898
	Day care children - at home	58	98.3	2.15	1.89	1.39	1.06
	Day care children - at day care	29	100.0	2.81	4.97	1.66	0.871
Solid Food (Adults) (ng/g)	All children - at home	127	99.2	3.74	5.98	2.05	1.08
	Home children - at home	69	100.0	4.62	6.46	2.76	0.975
	Day care children - at home	58	98.3	2.69	5.22	1.44	1.09
Liquid Food (Children) (ng/mL)	All children - at home	126	33.3	--	--	--	--
	Home children - at home	69	34.8	--	--	--	--
	Day care children - at home	57	31.6	--	--	--	--
	Day care children - at day care	28	53.6	0.188	0.309	0.072	1.52
Liquid Food (Adults) (ng/mL)	All children - at home	122	35.2	--	--	--	--
	Home children - at home	67	41.8	--	--	--	--
	Day care children - at home	55	27.3	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples. Multiple or replicate sample results at a given location have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table J-47b. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Reported Concentrations in OH multimedia samples collected from the homes and day care centers of preschool children who stay at home or attend day care during the day.^a

Medium	Group	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Indoor Air (ng/m ³)	All Children - <i>at home</i>	123	0.090	0.410	0.630	1.58	9.31	42.0
	Home Children - <i>at home</i>	69	0.090	0.360	0.550	1.59	9.66	42.0
	Day care Children - <i>at home</i>	54	0.110	0.460	0.670	1.39	9.31	18.9
	Day care Children - <i>at day care</i>	21	0.150	0.520	0.710	2.70	3.78	3.89
Outdoor Air (ng/m ³)	All Children - <i>at home</i>	118	<MDL	0.130	0.225	0.370	0.960	4.86
	Home Children - <i>at home</i>	64	<MDL	0.155	0.240	0.420	0.870	4.86
	Day care Children - <i>at home</i>	54	<MDL	0.110	0.215	0.350	1.02	1.81
	Day care Children - <i>at day care</i>	15	<MDL	0.090	0.170	0.310	0.500	0.500
Soil (ng/g)	All Children - <i>at home</i>	127	<MDL	0.230	0.700	2.02	8.86	127
	Home Children - <i>at home</i>	69	<MDL	0.230	0.570	2.31	9.33	127
	Day care Children - <i>at home</i>	58	<MDL	0.280	0.810	2.01	8.86	64.1
	Day care Children - <i>at day care</i>	16	<MDL	0.215	0.625	1.34	6.30	6.30
Indoor Floor Dust (ng/g)	All Children - <i>at home</i>	120	<MDL	23.7	41.0	89.8	824	1,960
	Home Children - <i>at home</i>	63	<MDL	21.9	39.1	84.7	538	1,610
	Day care Children - <i>at home</i>	57	4.14	25.6	43.3	94.8	1,600	1,960
	Day care Children - <i>at day care</i>	23	15.3	35.8	57.7	141	194	503
Indoor Floor Dust (ng/m ²)	All Children - <i>at home</i>	120	<MDL	18.0	38.1	171	1,580	25,400
	Home Children - <i>at home</i>	63	<MDL	13.5	33.8	115	1,070	1,990
	Day care Children - <i>at home</i>	57	1.53	21.5	45.1	251	2,760	25,400
	Day care Children - <i>at day care</i>	23	7.53	42.6	175	664	1,660	4,020
Hard Floor Surface Wipes (ng/m ²)	All Children - <i>at home</i>	9	<MDL	7.93	9.03	18.9	327	327
	Home Children - <i>at home</i>	6	<MDL	7.93	8.93	11.2	327	327
	Day care Children - <i>at home</i>	3	6.97	6.97	18.9	50.9	50.9	50.9
	Day care Children - <i>at day care</i>	3	7.52	7.52	8.76	15.4	15.4	15.4
Food Preparation Surface Wipes (ng/m ²)	All Children - <i>at home</i>	3	<MDL	<MDL	7.59	8.97	8.97	8.97
	Home Children - <i>at home</i>	1	8.97	8.97	8.97	8.97	8.97	8.97
	Day care Children - <i>at home</i>	2	<MDL	<MDL	<MDL	7.59	7.59	7.59
	Day care Children - <i>at day care</i>							
Transferable Residues (ng/m ²)	All Children - <i>at home</i>	3	<MDL	<MDL	<MDL	24.6	24.6	24.6
	Home Children - <i>at home</i>	1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day care Children - <i>at home</i>	2	<MDL	<MDL	<MDL	24.6	24.6	24.6
	Day care Children - <i>at day care</i>							
Dermal Wipe (Children) (ng/m ²)	All Children - <i>at home</i>	98	<MDL	78.6	117	193	335	670
	Home Children - <i>at home</i>	69	<MDL	79.3	128	214	542	670
	Day care Children - <i>at home</i>	29	42.4	70.2	104	169	264	308
	Day care Children - <i>at day care</i>	29	<MDL	62.2	106	152	281	356
Dermal Wipe (Adults) (ng/m ²)	All Children - <i>at home</i>	94	<MDL	26.6	42.2	63.2	145	198
	Home Children - <i>at home</i>	65	<MDL	26.6	42.0	63.5	153	198
	Day care Children - <i>at home</i>	29	<MDL	32.0	47.8	55.0	109	115
Solid Food (Children) (ng/g)	All Children - <i>at home</i>	127	<MDL	1.01	1.86	3.35	5.85	23.2
	Home Children - <i>at home</i>	69	0.280	1.31	2.47	3.52	6.35	23.2
	Day care Children - <i>at home</i>	58	<MDL	0.760	1.60	2.93	5.40	9.45
	Day care Children - <i>at day care</i>	29	0.380	0.980	1.49	2.47	8.06	27.2
Solid Food (Adults) (ng/g)	All Children - <i>at home</i>	127	<MDL	1.00	2.09	3.98	12.2	45.0
	Home Children - <i>at home</i>	69	0.340	1.45	2.55	5.17	13.3	45.0
	Day care Children - <i>at home</i>	58	<MDL	0.750	1.50	2.82	8.87	39.1
Liquid Food (Children) (ng/mL)	All Children - <i>at home</i>	126	<MDL	<MDL	<MDL	0.140	1.22	2.33
	Home Children - <i>at home</i>	69	<MDL	<MDL	<MDL	0.140	1.10	2.33
	Day care Children - <i>at home</i>	57	<MDL	<MDL	<MDL	0.130	1.32	2.32
	Day care Children - <i>at day care</i>	28	<MDL	<MDL	0.105	0.175	0.790	1.51
Liquid Food (Adults) (ng/mL)	All Children - <i>at home</i>	122	<MDL	<MDL	<MDL	0.190	1.53	5.94
	Home Children - <i>at home</i>	67	<MDL	<MDL	<MDL	0.190	1.34	2.81
	Day care Children - <i>at home</i>	55	<MDL	<MDL	<MDL	0.140	3.23	5.94

^a Multiple or replicate sample results at a given location have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by 10 for liquid food samples and by the square root of 2 for all other samples), averaged, and exponentiated back to regular units prior to summarizing the data across locations. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of locations having data entering into the summaries. Reported measures of 0 ng/mL in liquid food do not enter into the descriptive statistics.

Appendix K

Detailed Results of Statistical Analyses to Test for Significant Differences in Multimedia Pollutant Measurements Between Selected Strata, by State and Media Type

Table K-1. Estimated Ratio Between Selected Strata of Geometric Mean Pollutant Levels in NC Multimedia Samples, and 95% Confidence Intervals on This Ratio, for Pollutants Detected in At Least 50% of Samples

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Benz[a]anthracene						
Outdoor Air	1.58* (1.04,2.40)	0.95 (0.69,1.31)	1.49 (0.88,2.50)	1.67 (0.87,3.21)	1.27 (0.85,1.89)	1.32 (0.69,2.54)
Soil	1.30 (0.52,3.26)	2.55** (1.27,5.13)	0.48 (0.15,1.51)	0.47 (0.11,1.99)	0.97 (0.40,2.32)	0.49 (0.12,2.07)
Dust (ng/g)	0.92 (0.54,1.59)	0.54** (0.36,0.83)	0.52 (0.27,1.01)	0.49 (0.21,1.12)	0.89 (0.53,1.50)	0.55 (0.24,1.28)
Dust (ng/m ²)	0.78 (0.39,1.55)	1.57 (0.92,2.68)	0.12** (0.05,0.27)	0.12** (0.04,0.33)	0.97 (0.50,1.90)	0.12** (0.04,0.35)
Hard Floor Surface Wipes	2.20 (0.36,13.28)	1.19 (0.27,5.20)			0.22* (0.05,0.94)	
Transferable Residues	0.20 (0.03,1.28)	0.54 (0.11,2.56)			1.90 (0.42,8.69)	
Benzo[b]fluoranthene						
Indoor Air	1.44 (0.92,2.24)	1.95** (1.39,2.74)	1.08 (0.61,1.90)	1.13 (0.56,2.31)	1.11 (0.73,1.69)	1.02 (0.50,2.09)
Outdoor Air	1.48 (0.89,2.47)	1.15 (0.78,1.70)	1.41 (0.75,2.65)	1.62 (0.73,3.57)	1.32 (0.81,2.13)	1.23 (0.56,2.73)
Soil	1.27 (0.47,3.39)	2.54* (1.20,5.37)	0.50 (0.15,1.72)	0.51 (0.11,2.39)	1.04 (0.41,2.64)	0.50 (0.11,2.32)
Dust (ng/g)	0.91 (0.53,1.58)	0.57** (0.37,0.86)	0.55 (0.28,1.07)	0.48 (0.21,1.12)	0.78 (0.46,1.33)	0.62 (0.26,1.44)
Dust (ng/m ²)	0.77 (0.38,1.56)	1.63 (0.94,2.81)	0.12** (0.05,0.29)	0.12** (0.04,0.34)	0.86 (0.43,1.70)	0.13** (0.05,0.40)
Hard Floor Surface Wipes	1.73 (0.30,10.08)	1.70 (0.40,7.21)			0.14** (0.03,0.60)	
Transferable Residues	0.72 (0.06,8.28)	0.62 (0.08,4.83)			0.65 (0.09,4.88)	
Benzo[k]fluoranthene						
Outdoor Air	1.28 (0.93,1.76)	1.15 (0.90,1.46)	1.42 (0.96,2.12)	1.63 (0.99,2.69)	1.32 (0.97,1.79)	1.24 (0.75,2.05)
Soil	1.30 (0.55,3.08)	2.21* (1.15,4.26)	0.49 (0.17,1.42)	0.50 (0.13,1.90)	1.04 (0.46,2.35)	0.48 (0.12,1.85)
Dust (ng/g)	0.87 (0.50,1.49)	0.56** (0.37,0.86)	0.57 (0.29,1.10)	0.52 (0.23,1.20)	0.84 (0.50,1.43)	0.62 (0.27,1.44)
Dust (ng/m ²)	0.73 (0.36,1.48)	1.62 (0.93,2.80)	0.13** (0.05,0.30)	0.12** (0.04,0.36)	0.92 (0.46,1.83)	0.13** (0.04,0.40)
Hard Floor Surface Wipes	2.14 (0.42,10.88)	1.80 (0.47,6.82)			0.31 (0.08,1.15)	

Table K-1. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Transferable Residues	0.62 (0.10,3.82)	0.58 (0.12,2.68)			0.66 (0.15,2.95)	
Benzo[ghi]perylene						
Indoor Air	1.34 (0.90,2.01)	1.76** (1.29,2.40)	1.39 (0.84,2.30)	1.49 (0.79,2.81)	1.15 (0.78,1.70)	1.29 (0.68,2.45)
Outdoor Air	1.37 (0.88,2.15)	1.41 (1.00,1.98)	1.41 (0.81,2.46)	1.72 (0.86,3.47)	1.50 (0.97,2.30)	1.15 (0.57,2.33)
Soil	1.19 (0.49,2.89)	2.49** (1.27,4.90)	0.54 (0.18,1.63)	0.54 (0.14,2.16)	1.00 (0.43,2.31)	0.54 (0.13,2.18)
Dust (ng/g)	0.99 (0.60,1.65)	0.57** (0.38,0.84)	0.55 (0.29,1.02)	0.52 (0.24,1.14)	0.91 (0.55,1.49)	0.58 (0.26,1.27)
Dust (ng/m ²)	0.84 (0.42,1.69)	1.64 (0.95,2.82)	0.12** (0.05,0.29)	0.12** (0.04,0.36)	0.99 (0.50,1.96)	0.12** (0.04,0.37)
Hard Floor Surface Wipes	2.16 (0.46,10.20)	1.66 (0.47,5.93)			0.28* (0.08,0.97)	
Transferable Residues	0.79 (0.16,4.03)	0.62 (0.16,2.44)			1.33 (0.35,5.10)	
Benzo[a]pyrene						
Indoor Air	1.16 (0.78,1.72)	1.94** (1.43,2.62)	1.42 (0.86,2.34)	1.48 (0.79,2.76)	1.08 (0.74,1.58)	1.37 (0.73,2.57)
Outdoor Air	1.47* (1.01,2.15)	1.13 (0.84,1.50)	1.39 (0.87,2.21)	1.62 (0.90,2.90)	1.36 (0.95,1.94)	1.19 (0.66,2.15)
Soil	1.20 (0.48,3.01)	2.30* (1.14,4.63)	0.50 (0.16,1.58)	0.48 (0.11,2.02)	0.92 (0.38,2.19)	0.52 (0.12,2.22)
Dust (ng/g)	1.07 (0.63,1.82)	0.55** (0.37,0.84)	0.57 (0.30,1.09)	0.54 (0.24,1.21)	0.89 (0.53,1.49)	0.61 (0.27,1.38)
Dust (ng/m ²)	0.90 (0.45,1.79)	1.59 (0.93,2.72)	0.13** (0.06,0.30)	0.13** (0.04,0.36)	0.97 (0.50,1.89)	0.13** (0.04,0.38)
Hard Floor Surface Wipes	1.88 (0.33,10.75)	1.20 (0.29,5.02)			0.25 (0.06,1.03)	
Transferable Residues	1.27 (0.13,11.96)	0.46 (0.07,3.07)			0.53 (0.08,3.40)	
Benzo[e]pyrene						
Outdoor Air	1.26 (0.87,1.84)	1.21 (0.91,1.60)	1.45 (0.91,2.30)	1.71 (0.96,3.06)	1.40 (0.98,1.99)	1.22 (0.68,2.20)
Soil	1.15 (0.47,2.79)	2.49** (1.27,4.88)	0.55 (0.18,1.66)	0.53 (0.13,2.13)	0.93 (0.40,2.16)	0.57 (0.14,2.29)
Dust (ng/g)	0.94 (0.56,1.59)	0.60* (0.40,0.90)	0.55 (0.29,1.05)	0.51 (0.23,1.15)	0.87 (0.52,1.45)	0.59 (0.26,1.34)
Dust (ng/m ²)	0.79 (0.39,1.60)	1.72 (1.00,2.96)	0.12** (0.05,0.29)	0.12** (0.04,0.36)	0.95 (0.48,1.88)	0.13** (0.04,0.38)

Table K-1. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Hard Floor Surface Wipes	2.11 (0.40,11.03)	1.59 (0.41,6.18)			0.29 (0.08,1.12)	
Transferable Residues	1.22 (0.18,8.36)	0.54 (0.11,2.74)			0.56 (0.11,2.73)	
Benzylbutylphthalate						
Dust (ng/g)	0.82 (0.53,1.27)	1.76** (1.23,2.50)	0.48** (0.34,0.67)	0.49** (0.32,0.77)	1.06 (0.64,1.73)	0.47** (0.29,0.74)
Dust (ng/m ²)	0.58 (0.27,1.25)	4.75** (2.62,8.64)	0.10** (0.04,0.25)	0.10** (0.03,0.32)	1.01 (0.48,2.14)	0.10** (0.03,0.32)
Hard Floor Surface Wipes	2.86 (0.59,13.79)	1.50 (0.41,5.44)			0.72 (0.20,2.56)	
Food Preparation Surface Wipes	0.76 (0.14,4.08)	0.57 (0.14,2.34)			0.67 (0.17,2.70)	
Transferable Residues	8.94 (0.05,1626.9)	13.44 (0.19,941.47)			3.62 (0.07,175.15)	
Bisphenol-A						
Indoor Air	1.11 (0.69,1.78)	1.37 (0.96,1.97)	1.77 (0.98,3.19)	2.05 (0.98,4.27)	1.33 (0.85,2.09)	1.53 (0.73,3.22)
Hard Floor Surface Wipes	1.31 (0.28,5.99)	1.10 (0.31,3.82)			0.23* (0.07,0.81)	
Food Preparation Surface Wipes	0.68 (0.17,2.75)	1.08 (0.33,3.52)			1.28 (0.40,4.06)	
Transferable Residues	0.90 (0.29,2.83)	0.70 (0.27,1.83)			1.14 (0.44,2.92)	
Solid Food (Children)	0.96 (0.53,1.75)	0.86 (0.54,1.35)	1.30 (0.65,2.60)	1.15 (0.48,2.75)	0.78 (0.44,1.38)	1.47 (0.61,3.56)
Liquid Food (Children)	1.03 (0.50,2.09)	1.04 (0.60,1.79)	0.53 (0.24,1.14)	0.63 (0.24,1.68)	1.42 (0.71,2.85)	0.44 (0.16,1.19)
<i>alpha</i>-Chlordane						
Indoor Air	0.68 (0.34,1.37)	1.53 (0.90,2.60)	1.35 (0.56,3.25)	1.32 (0.44,3.97)	0.96 (0.49,1.86)	1.38 (0.46,4.17)
Outdoor Air	1.25 (0.76,2.03)	1.36 (0.94,1.98)	0.44** (0.24,0.81)	0.42* (0.20,0.90)	0.89 (0.56,1.42)	0.47 (0.22,1.01)
Dust (ng/g)	0.77 (0.39,1.53)	0.72 (0.42,1.23)	0.42* (0.19,0.97)	0.49 (0.17,1.38)	1.33 (0.69,2.58)	0.37 (0.13,1.06)
Dust (ng/m ²)	0.64 (0.25,1.63)	2.13* (1.03,4.41)	0.09** (0.03,0.29)	0.11** (0.03,0.46)	1.40 (0.56,3.46)	0.08** (0.02,0.34)
Hard Floor Surface Wipes	1.40 (0.30,6.45)	1.38 (0.39,4.81)			0.93 (0.27,3.22)	
Food Preparation Surface Wipes	1.90 (0.32,11.20)	2.55 (0.57,11.32)			1.78 (0.41,7.68)	

Table K-1. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
<i>gamma-Chlordane</i>						
Indoor Air	0.70 (0.34,1.44)	1.58 (0.90,2.75)	1.31 (0.52,3.29)	1.30 (0.41,4.15)	1.00 (0.50,2.00)	1.31 (0.41,4.19)
Outdoor Air	1.21 (0.70,2.10)	1.60* (1.05,2.43)	0.41* (0.21,0.80)	0.38* (0.16,0.88)	0.85 (0.50,1.44)	0.44 (0.19,1.04)
Dust (ng/g)	0.76 (0.38,1.54)	0.73 (0.42,1.26)	0.40* (0.17,0.95)	0.47 (0.16,1.37)	1.34 (0.68,2.66)	0.35 (0.12,1.04)
Dust (ng/m ²)	0.62 (0.24,1.61)	2.09 (0.99,4.40)	0.09** (0.03,0.28)	0.10** (0.02,0.44)	1.37 (0.54,3.47)	0.07** (0.02,0.33)
Hard Floor Surface Wipes	1.59 (0.30,8.27)	1.98 (0.51,7.66)			1.09 (0.29,4.14)	
Food Preparation Surface Wipes	2.42 (0.31,18.59)	3.29 (0.59,18.31)			2.16 (0.40,11.63)	
<i>Chlorpyrifos</i>						
Indoor Air	0.94 (0.50,1.77)	1.36 (0.84,2.21)	1.78 (0.81,3.92)	1.54 (0.57,4.15)	0.75 (0.41,1.38)	2.05 (0.76,5.57)
Outdoor Air	0.73 (0.41,1.31)	0.64* (0.41,1.00)	1.45 (0.70,3.00)	1.05 (0.42,2.62)	0.53* (0.30,0.92)	2.00 (0.80,5.00)
Dust (ng/g)	0.76 (0.41,1.42)	0.94 (0.58,1.53)	1.01 (0.46,2.22)	0.93 (0.35,2.50)	0.86 (0.47,1.56)	1.09 (0.40,2.96)
Dust (ng/m ²)	0.62 (0.25,1.52)	2.88** (1.43,5.80)	0.27* (0.09,0.84)	0.25 (0.06,1.06)	0.91 (0.38,2.16)	0.28 (0.07,1.19)
Hard Floor Surface Wipes	0.78 (0.16,3.75)	1.12 (0.31,4.06)			1.39 (0.39,4.95)	
Food Preparation Surface Wipes	0.85 (0.10,7.47)	4.28 (0.69,26.65)			1.11 (0.19,6.67)	
Transferable Residues	1.45 (0.19,10.80)	1.80 (0.33,9.77)			1.30 (0.25,6.83)	
Solid Food (Children)	1.20 (0.69,2.11)	1.37 (0.89,2.09)	1.39 (0.72,2.69)	1.54 (0.67,3.51)	1.21 (0.71,2.08)	1.26 (0.55,2.90)
<i>Chrysene</i>						
Indoor Air	1.34 (0.91,1.98)	1.76** (1.31,2.37)	1.28 (0.78,2.12)	1.46 (0.78,2.74)	1.30 (0.90,1.89)	1.13 (0.60,2.12)
Outdoor Air	1.49 (0.99,2.22)	1.09 (0.80,1.49)	1.21 (0.74,2.00)	1.33 (0.71,2.50)	1.21 (0.83,1.78)	1.10 (0.59,2.07)
Soil	1.21 (0.48,3.03)	2.53** (1.26,5.09)	0.49 (0.16,1.53)	0.48 (0.11,2.00)	0.95 (0.40,2.28)	0.50 (0.12,2.12)
Dust (ng/g)	0.96 (0.54,1.68)	0.59* (0.38,0.91)	0.55 (0.28,1.10)	0.49 (0.21,1.18)	0.81 (0.47,1.40)	0.61 (0.26,1.47)
Dust (ng/m ²)	0.81 (0.39,1.65)	1.69 (0.97,2.96)	0.12** (0.05,0.30)	0.12** (0.04,0.35)	0.88 (0.44,1.77)	0.13** (0.04,0.40)

Table K-1. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Hard Floor Surface Wipes	2.17 (0.40,11.59)	1.95 (0.49,7.70)			0.44 (0.11,1.69)	
Food Preparation Surface Wipes	0.99 (0.41,2.41)	1.42 (0.67,3.00)			1.22 (0.59,2.55)	
Transferable Residues	0.76 (0.09,6.83)	0.71 (0.11,4.51)			0.98 (0.16,6.01)	
Cyfluthrin						
Transferable Residues	0.87 (0.09,8.35)	1.60 (0.24,10.72)			1.77 (0.28,11.40)	
Diazinon						
Indoor Air	0.95 (0.43,2.11)	3.59** (1.95,6.61)	0.82 (0.30,2.24)	0.92 (0.26,3.23)	1.25 (0.58,2.68)	0.73 (0.21,2.61)
Outdoor Air	1.16 (0.69,1.94)	0.90 (0.61,1.34)	1.41 (0.74,2.69)	1.40 (0.62,3.13)	0.98 (0.60,1.60)	1.43 (0.63,3.21)
Dust (ng/g)	0.86 (0.40,1.85)	2.06* (1.14,3.72)	0.36* (0.14,0.96)	0.45 (0.13,1.53)	1.55 (0.74,3.23)	0.29 (0.09,1.00)
Dust (ng/m ²)	0.70 (0.27,1.81)	6.32** (3.02,13.23)	0.10** (0.03,0.33)	0.12** (0.03,0.57)	1.64 (0.66,4.11)	0.08** (0.02,0.35)
Hard Floor Surface Wipes	0.69 (0.08,6.28)	0.97 (0.16,5.88)			2.66 (0.45,15.85)	
Food Preparation Surface Wipes	1.06 (0.06,20.46)	1.98 (0.16,23.83)			1.17 (0.10,13.41)	
Transferable Residues	0.79 (0.03,22.00)	0.21 (0.01,3.51)			0.54 (0.03,8.45)	
Dibenzo[a,h]anthracene						
Soil	1.39 (0.66,2.90)	1.69 (0.96,2.96)	0.58 (0.23,1.45)	0.53 (0.17,1.69)	0.85 (0.42,1.71)	0.63 (0.20,2.00)
Dust (ng/g)	0.79 (0.46,1.36)	0.57** (0.37,0.87)	0.52* (0.27,1.00)	0.49 (0.21,1.12)	0.91 (0.54,1.53)	0.54 (0.23,1.25)
Dust (ng/m ²)	0.67 (0.32,1.37)	1.64 (0.94,2.87)	0.12** (0.05,0.28)	0.12** (0.04,0.35)	0.99 (0.49,2.00)	0.12** (0.04,0.36)
Di-n-butylphthalate						
Indoor Air	1.08 (0.80,1.44)	1.04 (0.83,1.30)	0.56** (0.39,0.80)	0.48** (0.30,0.75)	0.72* (0.54,0.95)	0.66 (0.42,1.04)
Dust (ng/g)	1.17 (0.82,1.66)	0.91 (0.69,1.21)	0.50** (0.34,0.73)	0.54** (0.34,0.85)	1.15 (0.80,1.64)	0.47** (0.29,0.75)
Dust (ng/m ²)	0.92 (0.47,1.79)	2.56** (1.52,4.32)	0.10** (0.05,0.23)	0.11** (0.04,0.30)	1.11 (0.58,2.14)	0.10** (0.04,0.27)
Hard Floor Surface Wipes	1.85 (0.72,4.78)	1.14 (0.52,2.48)			0.60 (0.28,1.29)	
Food Preparation Surface Wipes	0.52 (0.07,3.79)	1.89 (0.36,9.98)			0.83 (0.16,4.23)	

Table K-1. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Transferable Residues	5.93 (0.10,352.99)	2.34 (0.12,45.67)			3.06 (0.19,50.52)	
<i>p,p'</i>-DDE						
Solid Food (Children)	1.12 (0.68,1.85)	1.20 (0.82,1.75)	0.94 (0.54,1.64)	1.05 (0.52,2.12)	1.25 (0.77,2.03)	0.84 (0.42,1.71)
2,4-D (2,4-dichlorophenoxyacetic acid)						
Dust (ng/g)	3.20** (1.52,6.74)	0.22** (0.13,0.39)	1.79 (0.76,4.25)	2.85 (0.97,8.41)	2.53** (1.24,5.17)	1.13 (0.37,3.40)
Dust (ng/m ²)	2.64* (1.15,6.07)	0.65 (0.34,1.23)	0.40 (0.15,1.05)	0.65 (0.19,2.20)	2.67* (1.20,5.93)	0.24* (0.07,0.84)
Solid Food (Children)	1.60* (1.07,2.41)	1.11 (0.82,1.52)	1.27 (0.87,1.86)	1.20 (0.74,1.95)	0.89 (0.59,1.35)	1.35 (0.83,2.18)
Solid Food (Adults)	1.37 (0.82,2.26)	1.19 (0.81,1.75)			1.05 (0.71,1.53)	
Heptachlor						
Indoor Air	0.82 (0.34,1.94)	1.38 (0.71,2.68)	0.73 (0.24,2.22)	0.68 (0.17,2.75)	0.87 (0.38,1.99)	0.78 (0.19,3.17)
Outdoor Air	0.99 (0.47,2.07)	1.26 (0.71,2.22)	0.54 (0.21,1.34)	0.52 (0.17,1.66)	0.96 (0.47,1.94)	0.55 (0.17,1.75)
Indeno[1,2,3-<i>cd</i>]pyrene						
Indoor Air	1.22 (0.84,1.78)	1.90** (1.42,2.54)	1.41 (0.87,2.27)	1.50 (0.82,2.74)	1.14 (0.79,1.63)	1.32 (0.72,2.41)
Outdoor Air	1.25 (0.84,1.88)	1.26 (0.92,1.71)	1.44 (0.87,2.37)	1.71 (0.91,3.20)	1.41 (0.96,2.07)	1.21 (0.65,2.28)
Soil	1.20 (0.48,2.98)	2.61** (1.31,5.22)	0.50 (0.16,1.54)	0.51 (0.12,2.11)	1.05 (0.44,2.49)	0.48 (0.12,2.02)
Dust (ng/g)	1.12 (0.67,1.86)	0.59** (0.40,0.88)	0.54 (0.29,1.01)	0.55 (0.25,1.19)	1.01 (0.62,1.66)	0.54 (0.25,1.19)
Dust (ng/m ²)	0.94 (0.47,1.89)	1.69 (0.98,2.92)	0.12** (0.05,0.29)	0.13** (0.04,0.38)	1.11 (0.56,2.19)	0.12** (0.04,0.34)
Hard Floor Surface Wipes	1.90 (0.38,9.58)	1.51 (0.40,5.67)			0.25* (0.07,0.91)	
Transferable Residues	1.20 (0.17,8.45)	0.52 (0.10,2.71)			0.55 (0.11,2.77)	
Pentachlorophenol						
Indoor Air	0.75 (0.43,1.33)	1.77* (1.14,2.73)	0.83 (0.41,1.65)	0.75 (0.31,1.78)	0.81 (0.47,1.41)	0.92 (0.38,2.20)
Outdoor Air	0.67 (0.42,1.07)	0.69* (0.48,0.98)	0.99 (0.55,1.77)	0.83 (0.40,1.72)	0.71 (0.45,1.11)	1.17 (0.56,2.45)
Dust (ng/g)	0.90 (0.47,1.74)	0.86 (0.52,1.44)	1.07 (0.48,2.37)	1.35 (0.50,3.65)	1.59 (0.84,2.99)	0.85 (0.31,2.34)

Table K-1. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Dust (ng/m ²)	0.75 (0.29,1.91)	2.56* (1.24,5.30)	0.24* (0.07,0.74)	0.30 (0.07,1.28)	1.67 (0.68,4.12)	0.18* (0.04,0.79)
cis-Permethrin						
Indoor Air	1.00 (0.48,2.09)	4.17** (2.37,7.34)	2.07 (0.83,5.14)	1.95 (0.62,6.11)	0.89 (0.44,1.81)	2.19 (0.69,6.91)
Dust (ng/g)	1.09 (0.53,2.27)	1.07 (0.61,1.89)	0.82 (0.33,2.01)	0.87 (0.28,2.68)	1.14 (0.56,2.30)	0.76 (0.24,2.40)
Dust (ng/m ²)	0.90 (0.33,2.47)	3.19** (1.47,6.95)	0.18** (0.05,0.62)	0.20* (0.04,0.92)	1.20 (0.46,3.15)	0.16* (0.03,0.79)
Hard Floor Surface Wipes	0.38 (0.04,3.44)	1.39 (0.23,8.46)			1.57 (0.26,9.34)	
Food Preparation Surface Wipes	0.81 (0.02,42.25)	13.61 (0.49,381.09)			1.72 (0.07,45.10)	
Transferable Residues	0.15 (0.01,4.02)	1.27 (0.08,19.64)			2.79 (0.19,40.91)	
trans-Permethrin						
Indoor Air	1.04 (0.51,2.14)	3.85** (2.22,6.68)	1.88 (0.78,4.52)	1.80 (0.60,5.43)	0.93 (0.46,1.85)	1.95 (0.64,5.91)
Dust (ng/g)	1.04 (0.48,2.26)	0.97 (0.53,1.77)	0.73 (0.28,1.90)	0.80 (0.24,2.66)	1.22 (0.58,2.58)	0.66 (0.19,2.22)
Dust (ng/m ²)	0.86 (0.30,2.45)	2.89* (1.28,6.49)	0.16** (0.04,0.58)	0.18* (0.04,0.91)	1.28 (0.47,3.52)	0.14* (0.03,0.73)
Hard Floor Surface Wipes	0.38 (0.04,4.02)	1.41 (0.20,9.75)			1.86 (0.27,12.59)	
Food Preparation Surface Wipes	1.17 (0.02,69.94)	13.15 (0.42,412.15)			1.95 (0.07,57.09)	
Transferable Residues	0.17 (0.01,5.11)	1.33 (0.08,22.83)			2.93 (0.18,47.31)	
PCB 52						
Indoor Air	0.82 (0.49,1.36)	0.84 (0.57,1.24)	0.74 (0.40,1.37)	0.77 (0.36,1.66)	1.07 (0.66,1.75)	0.72 (0.33,1.56)
Outdoor Air	1.11 (0.75,1.64)	0.87 (0.65,1.18)	0.71 (0.44,1.16)	0.56 (0.31,1.04)	0.63* (0.43,0.92)	0.90 (0.48,1.65)
PCB 95						
Indoor Air	0.93 (0.60,1.45)	1.11 (0.79,1.57)	1.00 (0.59,1.69)	1.02 (0.53,1.98)	1.05 (0.68,1.62)	0.97 (0.50,1.89)
PCB 101						
Indoor Air	0.79 (0.49,1.27)	1.02 (0.71,1.48)	0.87 (0.49,1.56)	0.98 (0.47,2.03)	1.26 (0.79,2.00)	0.78 (0.37,1.62)

Table K-1. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)						
Indoor Air	1.07 (0.58,1.99)	1.03 (0.65,1.66)	1.96 (0.90,4.31)	1.59 (0.60,4.25)	0.66 (0.36,1.18)	2.42 (0.90,6.51)
Outdoor Air	0.85 (0.54,1.33)	0.65* (0.46,0.92)	1.84* (1.06,3.21)	1.72 (0.86,3.45)	0.87 (0.57,1.33)	1.97 (0.98,3.97)
Soil	0.75 (0.39,1.44)	1.09 (0.67,1.80)	2.29* (1.02,5.15)	1.87 (0.68,5.18)	0.67 (0.36,1.24)	2.80* (1.00,7.78)
Dust (ng/g)	0.75 (0.40,1.40)	1.15 (0.71,1.88)	1.92 (0.91,4.06)	1.99 (0.78,5.09)	1.08 (0.58,1.99)	1.85 (0.71,4.80)
Dust (ng/m ²)	0.62 (0.23,1.66)	3.40** (1.58,7.33)	0.42 (0.12,1.40)	0.44 (0.10,2.02)	1.13 (0.44,2.95)	0.39 (0.08,1.82)
Solid Food (Children)	0.94 (0.62,1.42)	0.48** (0.35,0.66)	0.75 (0.47,1.21)	0.80 (0.44,1.45)	1.12 (0.76,1.67)	0.71 (0.39,1.30)
Solid Food (Adults)	1.04 (0.64,1.69)	0.72 (0.49,1.04)			0.97 (0.67,1.40)	

* Significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Significantly different from 1 at the 0.01 level.

Table K-2. Estimated Ratio Between Selected Strata of Geometric Mean Pollutant Levels in OH Multimedia Samples, and 95% Confidence Intervals on This Ratio, for Pollutants Detected in At Least 50% of Samples

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Atrazine						
Drinking Water	1.21 (0.56,2.60)	0.88 (0.50,1.53)	0.57 (0.27,1.20)	0.52 (0.21,1.32)	0.83 (0.43,1.63)	0.63 (0.24,1.65)
Benz[a]anthracene						
Soil	0.84 (0.23,3.08)	1.94 (0.77,4.92)	0.98 (0.28,3.44)	0.86 (0.18,4.15)	0.77 (0.25,2.38)	1.11 (0.22,5.73)
Dust (ng/g)	3.97** (2.06,7.64)	0.58* (0.36,0.95)	0.45* (0.24,0.86)	0.36** (0.16,0.81)	0.64 (0.36,1.15)	0.56 (0.24,1.31)
Dust (ng/m ²)	3.19** (1.40,7.26)	0.94 (0.51,1.74)	0.17** (0.07,0.37)	0.11** (0.04,0.31)	0.47* (0.23,0.97)	0.24** (0.08,0.69)
Hard Floor Surface Wipes		1.10 (0.47,2.56)	2.00 (0.55,7.19)	1.33 (0.27,6.53)	0.44 (0.14,1.40)	3.00 (0.53,16.90)
Transferable Residues		0.84 (0.11,6.34)			0.62 (0.08,4.68)	
Benzo[b]fluoranthene						
Soil	0.79 (0.21,2.96)	1.86 (0.72,4.80)	0.84 (0.23,3.00)	0.78 (0.16,3.85)	0.87 (0.28,2.72)	0.90 (0.17,4.75)
Dust (ng/g)	3.63** (1.94,6.80)	0.57* (0.36,0.91)	0.44** (0.24,0.81)	0.37** (0.17,0.80)	0.70 (0.40,1.23)	0.52 (0.23,1.17)
Dust (ng/m ²)	2.92** (1.31,6.49)	0.92 (0.51,1.68)	0.16** (0.07,0.35)	0.11** (0.04,0.31)	0.51 (0.25,1.05)	0.22** (0.08,0.63)
Hard Floor Surface Wipes		1.17 (0.45,3.07)	0.93 (0.21,4.19)	0.66 (0.11,4.08)	0.50 (0.13,1.93)	1.32 (0.18,9.50)
Transferable Residues		0.50 (0.04,6.82)			0.39 (0.03,5.32)	
Benzo[k]fluoranthene						
Soil	0.80 (0.25,2.60)	2.17 (0.94,5.03)	0.86 (0.28,2.67)	0.77 (0.19,3.17)	0.79 (0.29,2.19)	0.97 (0.22,4.24)
Dust (ng/g)	3.35** (1.77,6.31)	0.58* (0.36,0.93)	0.43** (0.23,0.79)	0.36** (0.17,0.79)	0.73 (0.41,1.28)	0.50 (0.22,1.13)
Dust (ng/m ²)	2.70* (1.24,5.90)	0.94 (0.52,1.68)	0.16** (0.07,0.34)	0.11** (0.04,0.30)	0.53 (0.26,1.06)	0.22** (0.08,0.59)
Hard Floor Surface Wipes		1.00 (0.38,2.64)	1.30 (0.30,5.58)	0.88 (0.15,5.33)	0.46 (0.12,1.72)	1.93 (0.27,13.64)
Transferable Residues		0.62 (0.07,5.50)			0.57 (0.06,5.13)	
Benzo[ghi]perylene						
Soil	0.79 (0.22,2.81)	2.10 (0.85,5.19)	0.94 (0.28,3.18)	0.88 (0.19,4.05)	0.87 (0.29,2.60)	1.01 (0.20,4.95)

Table K-2. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Dust (ng/g)	3.28** (1.76,6.14)	0.56* (0.35,0.89)	0.43** (0.23,0.79)	0.36** (0.17,0.78)	0.71 (0.41,1.24)	0.50 (0.22,1.13)
Dust (ng/m ²)	2.64* (1.18,5.88)	0.91 (0.50,1.65)	0.16** (0.07,0.34)	0.11** (0.04,0.30)	0.52 (0.25,1.06)	0.22** (0.08,0.61)
Hard Floor Surface Wipes		0.96 (0.36,2.55)	1.21 (0.28,5.32)	0.78 (0.12,4.91)	0.42 (0.11,1.57)	1.88 (0.25,13.86)
Transferable Residues		0.24 (0.03,2.10)			0.30 (0.03,2.62)	
Benzo[a]pyrene						
Soil	0.76 (0.20,2.86)	1.94 (0.76,4.99)	0.98 (0.28,3.51)	0.87 (0.18,4.30)	0.79 (0.25,2.46)	1.11 (0.21,5.85)
Dust (ng/g)	3.57** (1.85,6.88)	0.55* (0.34,0.90)	0.49* (0.26,0.93)	0.40* (0.18,0.90)	0.68 (0.38,1.22)	0.59 (0.25,1.37)
Dust (ng/m ²)	2.87* (1.28,6.46)	0.89 (0.49,1.63)	0.18** (0.08,0.39)	0.13** (0.05,0.34)	0.50 (0.24,1.02)	0.25** (0.09,0.72)
Hard Floor Surface Wipes		1.05 (0.38,2.90)	1.74 (0.38,7.98)	1.10 (0.17,7.25)	0.40 (0.10,1.61)	2.75 (0.36,21.22)
Transferable Residues		1.62 (0.15,17.52)			0.74 (0.07,7.95)	
Benzo[e]pyrene						
Soil	0.80 (0.23,2.77)	2.00 (0.82,4.87)	0.94 (0.28,3.12)	0.87 (0.19,3.91)	0.86 (0.29,2.51)	1.01 (0.21,4.86)
Dust (ng/g)	3.40** (1.83,6.33)	0.57* (0.36,0.90)	0.45* (0.24,0.82)	0.38** (0.17,0.81)	0.72 (0.41,1.25)	0.53 (0.24,1.17)
Dust (ng/m ²)	2.73* (1.24,6.04)	0.92 (0.51,1.66)	0.16** (0.07,0.36)	0.12** (0.04,0.31)	0.52 (0.26,1.06)	0.23** (0.08,0.63)
Hard Floor Surface Wipes		1.04 (0.39,2.73)	1.10 (0.26,4.75)	0.75 (0.12,4.54)	0.46 (0.12,1.74)	1.62 (0.23,11.51)
Transferable Residues		0.85 (0.09,8.29)			0.55 (0.06,5.32)	
Benzylbutylphthalate						
Dust (ng/g)	0.73 (0.41,1.30)	1.50 (0.98,2.30)	0.41** (0.23,0.71)	0.38** (0.19,0.76)	0.86 (0.52,1.43)	0.44* (0.21,0.91)
Dust (ng/m ²)	0.56 (0.25,1.28)	2.52** (1.37,4.63)	0.14** (0.06,0.32)	0.11** (0.04,0.30)	0.59 (0.29,1.23)	0.19** (0.07,0.53)
Hard Floor Surface Wipes		3.52 (0.53,23.30)	0.06 (0.00,1.09)	0.03 (0.00,1.09)	0.27 (0.02,3.77)	0.11 (0.00,5.42)
Food Preparation Surface Wipes		0.67 (0.16,2.85)			0.37 (0.09,1.57)	
Transferable Residues		0.90 (0.41,2.00)			0.53 (0.24,1.17)	

Table K-2. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Bisphenol-A						
Indoor Air	1.03 (0.67,1.58)	1.29 (0.95,1.76)	1.26 (0.83,1.91)	1.02 (0.61,1.71)	0.65* (0.45,0.95)	1.56 (0.91,2.69)
Dust (ng/g)	1.18 (0.83,1.68)	0.89 (0.69,1.17)	0.98 (0.70,1.38)	1.13 (0.74,1.74)	1.33 (0.97,1.83)	0.85 (0.54,1.33)
Dust (ng/m ²)	0.86 (0.48,1.53)	1.47 (0.95,2.26)	0.33** (0.19,0.59)	0.32** (0.15,0.65)	0.91 (0.54,1.53)	0.35** (0.17,0.73)
Hard Floor Surface Wipes		2.53 (0.71,8.97)	2.80 (0.41,18.99)	1.45 (0.13,15.57)	0.27 (0.05,1.49)	5.44 (0.41,71.90)
Food Preparation Surface Wipes		1.53 (0.06,37.26)			0.13 (0.01,3.16)	
Transferable Residues		10.40 (0.02,4435.5)			1.62 (0.00,1758.9)	
Solid Food (Children)	1.15 (0.72,1.86)	1.20 (0.85,1.69)	1.09 (0.70,1.67)	1.02 (0.59,1.75)	0.88 (0.58,1.34)	1.16 (0.65,2.05)
Liquid Food (Children)	1.45 (0.55,3.79)	0.94 (0.49,1.82)	0.67 (0.32,1.40)	0.65 (0.25,1.68)	0.96 (0.42,2.19)	0.68 (0.25,1.84)
<i>alpha</i>-Chlordane						
Indoor Air	0.91 (0.46,1.77)	1.32 (0.82,2.14)	1.82 (0.96,3.48)	2.00 (0.89,4.49)	1.21 (0.67,2.16)	1.66 (0.71,3.87)
Outdoor Air	1.34 (0.84,2.12)	0.95 (0.68,1.32)	1.63* (1.05,2.54)	1.74 (1.00,3.04)	1.14 (0.77,1.70)	1.53 (0.86,2.73)
Soil	1.07 (0.38,3.05)	2.12* (1.00,4.47)	2.80* (1.02,7.67)	3.30 (0.93,11.66)	1.39 (0.56,3.42)	2.37 (0.64,8.87)
Dust (ng/g)	1.37 (0.69,2.73)	1.24 (0.74,2.06)	1.12 (0.57,2.22)	1.30 (0.56,3.06)	1.35 (0.74,2.49)	0.96 (0.40,2.35)
Dust (ng/m ²)	1.10 (0.42,2.91)	2.00 (0.97,4.14)	0.41 (0.16,1.07)	0.41 (0.12,1.35)	0.98 (0.41,2.34)	0.41 (0.12,1.45)
<i>gamma</i>-Chlordane						
Indoor Air	0.93 (0.46,1.87)	1.30 (0.78,2.15)	1.82 (0.92,3.59)	1.99 (0.85,4.66)	1.20 (0.65,2.21)	1.66 (0.68,4.04)
Outdoor Air	1.35 (0.84,2.16)	0.97 (0.69,1.36)	1.62* (1.02,2.55)	1.76 (0.99,3.11)	1.18 (0.79,1.78)	1.49 (0.82,2.70)
Soil	1.06 (0.38,2.95)	2.00 (0.96,4.14)	2.55 (0.95,6.81)	2.96 (0.86,10.13)	1.35 (0.56,3.25)	2.19 (0.61,7.92)
Dust (ng/g)	1.28 (0.63,2.60)	1.28 (0.75,2.17)	1.06 (0.52,2.13)	1.23 (0.51,2.98)	1.36 (0.73,2.56)	0.90 (0.36,2.27)
Dust (ng/m ²)	1.03 (0.38,2.75)	2.07 (0.99,4.33)	0.39 (0.15,1.02)	0.38 (0.11,1.30)	0.99 (0.41,2.39)	0.39 (0.11,1.39)
Chlorpyrifos						
Indoor Air	1.64 (0.80,3.37)	1.63 (0.97,2.74)	0.76 (0.38,1.52)	0.75 (0.31,1.79)	0.98 (0.52,1.84)	0.76 (0.31,1.90)

Table K-2. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Outdoor Air	1.57 (0.92,2.68)	0.97 (0.64,1.48)	1.74* (1.01,3.00)	1.91 (0.96,3.79)	1.20 (0.72,1.99)	1.59 (0.78,3.25)
Dust (ng/g)	1.52 (0.67,3.44)	2.09* (1.14,3.86)	0.37* (0.17,0.84)	0.36* (0.13,0.99)	0.92 (0.45,1.91)	0.39 (0.13,1.12)
Dust (ng/m ²)	1.22 (0.45,3.32)	3.39** (1.61,7.15)	0.14** (0.05,0.37)	0.11** (0.03,0.38)	0.67 (0.28,1.64)	0.17** (0.05,0.60)
Food Preparation Surface Wipes		7.51 (0.13,443.21)			0.40 (0.01,23.68)	
Transferable Residues		18.35 (0.36,924.03)			0.17 (0.00,8.50)	
Solid Food (Children)	1.28 (0.75,2.19)	2.06** (1.39,3.04)	1.17 (0.74,1.85)	1.32 (0.75,2.34)	1.28 (0.78,2.08)	1.04 (0.56,1.91)
Chrysene						
Soil	0.92 (0.26,3.17)	1.79 (0.74,4.34)	0.89 (0.27,2.94)	0.79 (0.18,3.53)	0.79 (0.27,2.31)	1.00 (0.21,4.76)
Dust (ng/g)	3.71** (1.96,7.04)	0.56* (0.35,0.90)	0.43** (0.23,0.82)	0.37** (0.17,0.80)	0.71 (0.40,1.25)	0.52 (0.23,1.18)
Dust (ng/m ²)	2.99** (1.34,6.69)	0.91 (0.50,1.66)	0.16** (0.07,0.35)	0.11** (0.04,0.31)	0.51 (0.25,1.05)	0.22** (0.08,0.62)
Transferable Residues		0.83 (0.08,8.64)			0.57 (0.06,5.99)	
Cyfluthrin						
Dust (ng/g)	2.33* (1.14,4.77)	1.31 (0.76,2.26)	0.62 (0.31,1.22)	0.73 (0.31,1.70)	1.40 (0.73,2.67)	0.52 (0.21,1.28)
Dust (ng/m ²)	1.96 (0.73,5.27)	2.12* (1.01,4.45)	0.23** (0.09,0.60)	0.23* (0.07,0.77)	1.02 (0.42,2.46)	0.23* (0.06,0.80)
Diazinon						
Indoor Air	1.04 (0.44,2.49)	1.67 (0.89,3.12)	0.78 (0.34,1.80)	0.66 (0.23,1.88)	0.72 (0.34,1.53)	0.92 (0.31,2.74)
Outdoor Air	2.70** (1.54,4.73)	0.60* (0.40,0.89)	1.68 (0.97,2.88)	1.83 (0.93,3.61)	1.19 (0.74,1.94)	1.53 (0.76,3.11)
Dust (ng/g)	1.79 (0.67,4.78)	1.39 (0.67,2.88)	0.46 (0.18,1.21)	0.40 (0.12,1.33)	0.75 (0.31,1.79)	0.54 (0.15,1.89)
Dust (ng/m ²)	1.45 (0.52,4.02)	2.24* (1.04,4.82)	0.17** (0.06,0.46)	0.13** (0.04,0.44)	0.54 (0.22,1.35)	0.23* (0.06,0.86)
Transferable Residues		3.32 (0.44,24.99)			1.92 (0.26,14.44)	
Dibenzo[a,h]anthracene						
Soil	0.80 (0.26,2.51)	2.09 (0.93,4.72)	1.14 (0.38,3.41)	1.08 (0.27,4.26)	0.90 (0.34,2.40)	1.20 (0.29,5.03)
Dust (ng/g)	3.66** (1.94,6.89)	0.58* (0.36,0.93)	0.42** (0.22,0.78)	0.34** (0.16,0.75)	0.69 (0.39,1.21)	0.50 (0.22,1.13)

Table K-2. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Dust (ng/m ²)	2.94* (1.30,6.66)	0.94 (0.51,1.74)	0.15** (0.07,0.34)	0.11** (0.04,0.29)	0.50 (0.24,1.04)	0.22** (0.08,0.62)
Di-n-butylphthalate						
Indoor Air	0.76 (0.49,1.18)	0.99 (0.72,1.35)	0.56** (0.37,0.86)	0.56* (0.33,0.95)	0.99 (0.68,1.45)	0.56* (0.32,0.99)
Soil	0.70 (0.29,1.64)	0.90 (0.48,1.67)	1.55 (0.67,3.55)	2.78 (0.98,7.85)	3.23** (1.53,6.83)	0.86 (0.29,2.55)
Dust (ng/g)	1.44 (0.99,2.12)	1.09 (0.82,1.44)	0.38** (0.26,0.56)	0.41** (0.25,0.65)	1.13 (0.81,1.59)	0.36** (0.22,0.59)
Dust (ng/m ²)	1.16 (0.58,2.33)	1.76* (1.05,2.96)	0.14** (0.07,0.28)	0.13** (0.05,0.30)	0.82 (0.44,1.53)	0.15** (0.06,0.38)
Hard Floor Surface Wipes		1.34 (0.35,5.09)	0.16 (0.02,1.19)	0.17 (0.01,2.04)	1.10 (0.18,6.77)	0.15 (0.01,2.30)
Food Preparation Surface Wipes		0.55 (0.16,1.83)			0.58 (0.17,1.96)	
Transferable Residues		1.47 (0.63,3.44)			0.86 (0.37,2.01)	
p,p'-DDE						
Solid Food (Children)	1.23 (0.76,1.97)	0.94 (0.66,1.33)	1.45 (0.96,2.18)	1.26 (0.75,2.11)	0.76 (0.49,1.17)	1.66 (0.95,2.88)
2,4-D (2,4-dichlorophenoxyacetic acid)						
Dust (ng/g)	2.38* (1.03,5.48)	0.24** (0.13,0.45)	1.02 (0.46,2.28)	0.99 (0.36,2.71)	0.94 (0.46,1.94)	1.05 (0.37,3.00)
Dust (ng/m ²)	1.79 (0.67,4.80)	0.39* (0.19,0.81)	0.38* (0.15,0.97)	0.31 (0.10,1.03)	0.70 (0.30,1.64)	0.45 (0.13,1.56)
Indeno[1,2,3-cd]pyrene						
Soil	0.84 (0.23,3.06)	1.97 (0.78,4.98)	0.92 (0.26,3.20)	0.85 (0.18,4.07)	0.86 (0.28,2.64)	0.99 (0.19,5.04)
Dust (ng/g)	3.43** (1.79,6.54)	0.56* (0.35,0.91)	0.41** (0.22,0.78)	0.35** (0.16,0.78)	0.72 (0.40,1.28)	0.49 (0.21,1.12)
Dust (ng/m ²)	2.75* (1.22,6.22)	0.91 (0.50,1.68)	0.15** (0.07,0.34)	0.11** (0.04,0.30)	0.52 (0.25,1.08)	0.21** (0.07,0.59)
Hard Floor Surface Wipes		0.92 (0.34,2.47)	1.24 (0.28,5.53)	0.82 (0.13,5.26)	0.44 (0.11,1.68)	1.88 (0.25,14.08)
Transferable Residues		0.24 (0.03,1.91)			0.49 (0.06,3.86)	
IMP (2-isopropyl-6-methyl-4-pyrimidinol)						
Indoor Air	1.25 (0.68,2.31)	1.66* (1.07,2.58)	0.95 (0.53,1.71)	0.91 (0.44,1.91)	0.92 (0.54,1.57)	0.99 (0.46,2.14)
Outdoor Air	3.87** (2.00,7.48)	0.48** (0.30,0.76)	1.15 (0.61,2.18)	1.32 (0.59,2.91)	1.30 (0.75,2.26)	1.01 (0.44,2.31)

Table K-2. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Dust (ng/g)	0.91 (0.39,2.15)	1.19 (0.63,2.26)	1.05 (0.46,2.43)	0.86 (0.30,2.43)	0.66 (0.31,1.41)	1.30 (0.43,3.88)
Dust (ng/m ²)	0.74 (0.29,1.88)	1.93 (0.96,3.89)	0.39* (0.16,0.98)	0.27* (0.09,0.86)	0.48 (0.21,1.10)	0.57 (0.17,1.88)
Solid Food (Children)	1.44 (0.88,2.37)	0.86 (0.60,1.23)	1.30 (0.85,1.99)	1.38 (0.81,2.35)	1.13 (0.72,1.76)	1.23 (0.70,2.16)
Solid Food (Adults)	1.13 (0.56,2.27)	0.67 (0.42,1.06)			0.90 (0.58,1.39)	
Pentachlorophenol						
Indoor Air	0.59 (0.27,1.31)	0.93 (0.52,1.66)	2.16* (1.01,4.65)	3.02* (1.16,7.87)	1.95 (0.97,3.91)	1.55 (0.57,4.22)
Outdoor Air	1.67 (0.73,3.82)	0.67 (0.37,1.23)	1.46 (0.64,3.33)	1.80 (0.64,5.05)	1.51 (0.74,3.10)	1.19 (0.41,3.45)
Dust (ng/g)	0.89 (0.49,1.60)	1.11 (0.72,1.71)	1.20 (0.69,2.10)	1.21 (0.60,2.45)	1.02 (0.61,1.71)	1.19 (0.57,2.46)
Dust (ng/m ²)	0.67 (0.26,1.76)	1.79 (0.89,3.60)	0.44 (0.17,1.09)	0.38 (0.12,1.20)	0.76 (0.33,1.74)	0.50 (0.15,1.67)
cis-Permethrin						
Dust (ng/g)	0.62 (0.29,1.31)	1.36 (0.78,2.39)	0.55 (0.26,1.14)	0.52 (0.21,1.32)	0.91 (0.47,1.78)	0.57 (0.22,1.50)
Dust (ng/m ²)	0.50 (0.18,1.40)	2.21* (1.02,4.76)	0.20** (0.07,0.55)	0.16** (0.05,0.57)	0.66 (0.27,1.66)	0.25* (0.07,0.92)
Hard Floor Surface Wipes		3.46 (0.27,43.85)	8.06 (0.14,463.8)	5.03 (0.04,656.05)	0.39 (0.01,13.96)	12.92 (0.07,2565.9)
Transferable Residues		7.19 (0.11,474.66)			0.26 (0.00,17.14)	
trans-Permethrin						
Dust (ng/g)	0.66 (0.29,1.51)	1.40 (0.76,2.61)	0.55 (0.24,1.25)	0.54 (0.19,1.50)	0.94 (0.45,1.97)	0.57 (0.20,1.66)
Dust (ng/m ²)	0.51 (0.18,1.49)	2.22 (1.00,4.93)	0.19** (0.07,0.54)	0.16** (0.04,0.58)	0.68 (0.26,1.76)	0.23* (0.06,0.91)
Hard Floor Surface Wipes		3.78 (0.29,49.88)	8.98 (0.13,628.5)	5.82 (0.04,896.71)	0.42 (0.01,16.55)	13.86 (0.06,3300.1)
Transferable Residues		6.27 (0.14,274.20)			0.20 (0.00,8.85)	
PCB 52						
Indoor Air	0.74 (0.37,1.45)	0.90 (0.55,1.45)	0.74 (0.39,1.42)	0.64 (0.29,1.43)	0.75 (0.42,1.35)	0.85 (0.37,1.98)
Outdoor Air	1.30 (0.75,2.24)	0.84 (0.56,1.25)	0.82 (0.48,1.41)	0.81 (0.41,1.59)	0.98 (0.61,1.57)	0.83 (0.41,1.68)
Dust (ng/g)	1.03 (0.58,1.81)	0.98 (0.64,1.51)	0.66 (0.38,1.14)	0.73 (0.37,1.45)	1.22 (0.73,2.04)	0.60 (0.29,1.23)

Table K-2. (cont.)

Medium	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Dust (ng/m ²)	0.84 (0.40,1.75)	1.59 (0.92,2.76)	0.24** (0.12,0.49)	0.23** (0.09,0.55)	0.89 (0.46,1.71)	0.26** (0.10,0.65)
Transferable Residues		2.85 (0.26,30.75)			1.42 (0.13,15.29)	
PCB 95						
Indoor Air	0.82 (0.40,1.65)	0.91 (0.57,1.44)	1.03 (0.56,1.89)	0.98 (0.48,1.99)	0.90 (0.50,1.63)	1.09 (0.51,2.34)
PCB 101						
Indoor Air	0.68 (0.35,1.31)	0.77 (0.48,1.25)	1.07 (0.67,1.71)	0.90 (0.51,1.61)	0.71 (0.39,1.30)	1.27 (0.65,2.45)
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)						
Indoor Air	1.28 (0.70,2.33)	1.72* (1.11,2.66)	0.79 (0.44,1.42)	0.83 (0.40,1.71)	1.09 (0.64,1.86)	0.75 (0.35,1.63)
Outdoor Air	1.22 (0.78,1.92)	0.90 (0.66,1.23)	1.35 (0.89,2.06)	1.45 (0.86,2.46)	1.15 (0.79,1.67)	1.26 (0.73,2.18)
Soil	2.80** (1.32,5.96)	0.90 (0.52,1.54)	1.27 (0.61,2.62)	1.17 (0.47,2.91)	0.86 (0.45,1.64)	1.37 (0.53,3.54)
Dust (ng/g)	1.84 (0.92,3.67)	1.45 (0.87,2.43)	0.78 (0.40,1.54)	0.74 (0.31,1.72)	0.88 (0.48,1.64)	0.83 (0.34,2.02)
Dust (ng/m ²)	1.48 (0.57,3.84)	2.35* (1.15,4.79)	0.29** (0.11,0.73)	0.23* (0.07,0.75)	0.64 (0.28,1.50)	0.36 (0.10,1.22)
Hard Floor Surface Wipes	2.72 (0.05,151.89)	2.67 (0.33,21.31)	2.52 (0.19,33.93)	1.90 (0.07,50.12)	0.57 (0.02,15.35)	3.34 (0.06,178.39)
Solid Food (Children)	1.05 (0.62,1.79)	1.16 (0.79,1.70)	0.98 (0.62,1.55)	1.19 (0.67,2.12)	1.48 (0.93,2.38)	0.80 (0.44,1.48)
Solid Food (Adults)	1.14 (0.62,2.09)	1.10 (0.72,1.69)			1.87** (1.24,2.82)	

* Significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Significantly different from 1 at the 0.01 level.

Table K-3. Results of Statistical Analyses to Investigate the Significance of Environment, Urbanicity, and Income Status on Analyte Levels in Selected NC Multimedia Samples^(a)

Medium	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Benz[a]anthracene							
Outdoor Air	0.032*	0.754	0.121				
Soil	0.573	0.009**	0.448				
Dust (ng/g)	0.770	0.005**	0.129				
Dust (ng/m ²)	0.469	0.101	<0.001**	<0.001**	<0.001**	0.995	<0.001**
Hard Floor Surface Wipes	0.374	0.807	0.042*			0.042*	
Transferable Residues	0.085	0.412	0.380				
Benzo[b]fluoranthene							
Indoor Air	0.110	<0.001**	0.816				
Outdoor Air	0.126	0.470	0.226				
Soil	0.637	0.015*	0.543				
Dust (ng/g)	0.746	0.009**	0.110				
Dust (ng/m ²)	0.467	0.080	<0.001**	<0.001**	<0.001**	0.853	<0.001**
Hard Floor Surface Wipes	0.528	0.455	0.010*			0.010*	
Transferable Residues	0.775	0.622	0.652				
Benzo[k]fluoranthene							
Outdoor Air	0.133	0.274	0.023*	0.081	0.054	0.085	0.566
Soil	0.546	0.018*	0.416				
Dust (ng/g)	0.602	0.008**	0.178				
Dust (ng/m ²)	0.380	0.085	<0.001**	<0.001**	<0.001**	0.958	<0.001**
Hard Floor Surface Wipes	0.345	0.372	0.077				
Transferable Residues	0.578	0.456	0.557				
Benzo[ghi]perylene							
Indoor Air	0.153	<0.001**	0.303				
Outdoor Air	0.164	0.052	0.042*	0.227	0.160	0.070	0.883
Soil	0.700	0.008**	0.547				
Dust (ng/g)	0.980	0.005**	0.146				
Dust (ng/m ²)	0.616	0.076	<0.001**	<0.001**	<0.001**	1.000	<0.001**
Hard Floor Surface Wipes	0.316	0.416	0.045*			0.045*	
Transferable Residues	0.764	0.467	0.653				

Table K-3. (cont.)

	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Medium							
Benzo[a]pyrene							
Indoor Air	0.454	<0.001**	0.340				
Outdoor Air	0.043*	0.417	0.051				
Soil	0.697	0.020*	0.477				
Dust (ng/g)	0.805	0.005**	0.198				
Dust (ng/m ²)	0.760	0.088	<0.001**	<0.001**	<0.001**	0.994	<0.001**
Hard Floor Surface Wipes	0.461	0.790	0.055				
Transferable Residues	0.824	0.399	0.480				
Benzo[e]pyrene							
Outdoor Air	0.217	0.198	0.026*	0.117	0.078	0.072	0.690
Soil	0.755	0.008**	0.558				
Dust (ng/g)	0.820	0.013*	0.151				
Dust (ng/m ²)	0.515	0.051	<0.001**	<0.001**	<0.001**	0.984	<0.001**
Hard Floor Surface Wipes	0.363	0.486	0.072				
Transferable Residues	0.829	0.431	0.443				
Benzylbutylphthalate							
Dust (ng/g)	0.349	0.003**	<0.001**	<0.001**	0.001**	0.960	0.001**
Dust (ng/m ²)	0.164	<0.001**	<0.001**	<0.001**	<0.001**	0.999	<0.001**
Hard Floor Surface Wipes	0.181	0.522	0.595				
Food Preparation Surface Wipes	0.726	0.404	0.551				
Transferable Residues	0.307	0.165	0.409				
Bisphenol-A							
Indoor Air	0.653	0.084	0.052				
Hard Floor Surface Wipes	0.721	0.880	0.023*			0.023*	
Food Preparation Surface Wipes	0.562	0.890	0.655				
Transferable Residues	0.851	0.440	0.770				
Solid Food (Children)	0.892	0.510	0.447				
Liquid Food (Children)	0.942	0.885	0.131				
alpha-Chlordane							
Indoor Air	0.282	0.117	0.785				
Outdoor Air	0.373	0.105	0.027*	0.009**	0.021*	0.830	0.054
Dust (ng/g)	0.451	0.226	0.081				

Table K-3. (cont.)

	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Medium							
Dust (ng/m ²)	0.345	0.041*	<0.001**	<0.001**	0.001**	0.655	<0.001**
Hard Floor Surface Wipes	0.655	0.604	0.908				
Food Preparation Surface Wipes	0.449	0.200	0.410				
<i>gamma-Chlordane</i>							
Indoor Air	0.328	0.110	0.849				
Outdoor Air	0.497	0.030*	0.028*	0.010*	0.021*	0.753	0.065
Dust (ng/g)	0.444	0.251	0.073				
Dust (ng/m ²)	0.323	0.053	<0.001**	<0.001**	0.001**	0.695	<0.001**
Hard Floor Surface Wipes	0.568	0.306	0.898				
Food Preparation Surface Wipes	0.370	0.160	0.343				
Chlorpyrifos							
Indoor Air	0.848	0.213	0.196				
Outdoor Air	0.288	0.048*	0.017*	0.310	0.990	0.020*	0.174
Dust (ng/g)	0.384	0.805	0.828				
Dust (ng/m ²)	0.289	0.003**	0.074				
Hard Floor Surface Wipes	0.745	0.859	0.603				
Food Preparation Surface Wipes	0.875	0.110	0.901				
Transferable Residues	0.700	0.469	0.738				
Solid Food (Children)	0.516	0.147	0.416				
Chrysene							
Indoor Air	0.139	<0.001**	0.154				
Outdoor Air	0.053	0.572	0.369				
Soil	0.684	0.009**	0.463				
Dust (ng/g)	0.877	0.018*	0.149				
Dust (ng/m ²)	0.552	0.063	<0.001**	<0.001**	<0.001**	0.906	<0.001**
Hard Floor Surface Wipes	0.351	0.326	0.218				
Food Preparation Surface Wipes	0.981	0.334	0.567				
Transferable Residues	0.794	0.700	0.986				
Cyfluthrin							
Transferable Residues	0.899	0.603	0.521				
Diazinon							

Table K-3. (cont.)

Medium	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Indoor Air	0.901	<0.001**	0.734				
Outdoor Air	0.580	0.613	0.568				
Dust (ng/g)	0.698	0.017*	0.051				
Dust (ng/m ²)	0.460	<0.001**	0.001**	<0.001**	0.004**	0.405	<0.001**
Hard Floor Surface Wipes	0.735	0.971	0.269				
Food Preparation Surface Wipes	0.965	0.566	0.892				
Transferable Residues	0.881	0.256	0.641				
Dibenzo[a,h]anthracene							
Soil	0.381	0.066	0.430				
Dust (ng/g)	0.394	0.009**	0.128				
Dust (ng/m ²)	0.267	0.083	<0.001**	<0.001**	<0.001**	1.000	<0.001**
Di-n-butylphthalate							
Indoor Air	0.624	0.744	<0.001**	0.002**	<0.001**	0.017*	0.084
Dust (ng/g)	0.381	0.519	0.001**	0.001**	0.006**	0.617	0.001**
Dust (ng/m ²)	0.803	0.001**	<0.001**	<0.001**	<0.001**	0.922	<0.001**
Hard Floor Surface Wipes	0.194	0.730	0.180				
Food Preparation Surface Wipes	0.494	0.428	0.805				
Transferable Residues	0.259	0.431	0.293				
p,p'-DDE							
Solid Food (Children)	0.655	0.352	0.543				
2,4-D (2,4-dichlorophenoxyacetic acid)							
Dust (ng/g)	0.002**	<0.001**	0.004**	0.182	0.059	0.007**	0.964
Dust (ng/m ²)	0.023*	0.181	0.004**	0.063	0.677	0.011*	0.022*
Solid Food (Children)	0.024*	0.493	0.340				
Solid Food (Adults)	0.224	0.366	0.817				
Heptachlor							
Indoor Air	0.642	0.333	0.793				
Outdoor Air	0.975	0.424	0.403				
Indeno[1,2,3-cd]pyrene							
Indoor Air	0.300	<0.001**	0.263				
Outdoor Air	0.267	0.144	0.040*	0.152	0.111	0.092	0.748
Soil	0.694	0.007**	0.473				

Table K-3. (cont.)

	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Medium							
Dust (ng/g)	0.663	0.009**	0.154				
Dust (ng/m ²)	0.862	0.058	<0.001**	<0.001**	<0.001**	0.931	<0.001**
Hard Floor Surface Wipes	0.420	0.528	0.037*			0.037*	
Transferable Residues	0.846	0.411	0.445				
Pentachlorophenol							
Indoor Air	0.324	0.011*	0.578				
Outdoor Air	0.097	0.041*	0.190				
Dust (ng/g)	0.759	0.569	0.224				
Dust (ng/m ²)	0.538	0.011*	0.022*	0.014*	0.126	0.374	0.018*
cis-Permethrin							
Indoor Air	0.998	<0.001**	0.270				
Dust (ng/g)	0.807	0.805	0.826				
Dust (ng/m ²)	0.843	0.004**	0.024*	0.007**	0.036*	0.896	0.019*
Hard Floor Surface Wipes	0.374	0.707	0.606				
Food Preparation Surface Wipes	0.909	0.115	0.726				
Transferable Residues	0.239	0.856	0.426				
trans-Permethrin							
Indoor Air	0.909	<0.001**	0.356				
Dust (ng/g)	0.923	0.917	0.667				
Dust (ng/m ²)	0.774	0.011*	0.019*	0.006**	0.035*	0.826	0.015*
Hard Floor Surface Wipes	0.405	0.718	0.511				
Food Preparation Surface Wipes	0.936	0.131	0.677				
Transferable Residues	0.286	0.831	0.422				
PCB 52							
Indoor Air	0.439	0.377	0.596				
Outdoor Air	0.609	0.372	0.006**	0.167	0.071	0.011*	0.904
PCB 95							
Indoor Air	0.741	0.534	0.963				
PCB 101							
Indoor Air	0.329	0.897	0.455				
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Indoor Air	0.820	0.891	0.061				

Table K-3. (cont.)

	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Medium							
Outdoor Air	0.472	0.015*	0.075				
Soil	0.381	0.718	0.045*	0.046*	0.313	0.278	0.049*
Dust (ng/g)	0.361	0.568	0.214				
Dust (ng/m ²)	0.336	0.002**	0.348				
Solid Food (Children)	0.768	<0.001**	0.390				
Solid Food (Adults)	0.881	0.076	0.853				

^(a) For a given analyte, the media listed in this table represent those media for which statistical analysis was performed (i.e., having at least 50% detected results).

^(b) In the last four columns of this table, significance levels are specified only when the environment effect was significant at the 0.05 level (column 4 of this table). These significance levels in these last three rows are adjusted based upon Tukey's studentized range approach to controlling the overall Type I error rate (i.e., incorrectly declaring at least one pair of environments significantly different).

* Implies statistical significance at the 0.05 level, but not at the 0.01 level.

** Implies statistical significance at the 0.01 level.

Table K-4. Results of Statistical Analyses to Investigate the Significance of Environment, Urbanicity, and Income Status on Analyte Levels in Selected OH Multimedia Samples^(a)

Medium	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Atrazine							
Drinking Water (ng/mL)	0.629	0.639	0.253				
Benz[a]anthracene							
Soil	0.790	0.161	0.862				
Dust (ng/g)	<0.001**	0.029*	0.009**	0.016*	0.009**	0.177	0.239
Dust (ng/m ²)	0.006**	0.839	<0.001**	<0.001**	<0.001**	0.041*	0.005**
Hard Floor Surface Wipes		0.817	0.157				
Transferable Residues		0.842	0.592				
Benzo[b]fluoranthene							
Soil	0.721	0.195	0.917				
Dust (ng/g)	<0.001**	0.019*	0.009**	0.009**	0.007**	0.300	0.139
Dust (ng/m ²)	0.009**	0.788	<0.001**	<0.001**	<0.001**	0.071	0.002**
Hard Floor Surface Wipes		0.730	0.411				
Transferable Residues		0.548	0.421				
Benzo[k]fluoranthene							
Soil	0.713	0.069	0.829				
Dust (ng/g)	<0.001**	0.024*	0.010*	0.008**	0.007**	0.379	0.112
Dust (ng/m ²)	0.013*	0.824	<0.001**	<0.001**	<0.001**	0.082	0.001**
Hard Floor Surface Wipes		0.995	0.330				
Transferable Residues		0.617	0.568				
Benzo[ghi]perylene							
Soil	0.717	0.106	0.951				
Dust (ng/g)	<0.001**	0.016*	0.008**	0.007**	0.006**	0.324	0.112
Dust (ng/m ²)	0.018*	0.753	<0.001**	<0.001**	<0.001**	0.079	0.002**
Hard Floor Surface Wipes		0.924	0.264				
Transferable Residues		0.165	0.231				
Benzo[a]pyrene							
Soil	0.686	0.166	0.881				
Dust (ng/g)	<0.001**	0.017*	0.023*	0.029*	0.023*	0.265	0.302
Dust (ng/m ²)	0.011*	0.705	<0.001**	<0.001**	<0.001**	0.058	0.006**
Hard Floor Surface Wipes		0.914	0.231				

Table K-4. (cont.)

	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Medium							
Transferable Residues		0.647	0.769				
Benzo[e]pyrene							
Soil	0.721	0.125	0.938				
Dust (ng/g)	<0.001**	0.017*	0.011*	0.010*	0.009**	0.331	0.142
Dust (ng/m ²)	0.014*	0.778	<0.001**	<0.001**	<0.001**	0.078	0.002**
Hard Floor Surface Wipes		0.937	0.344				
Transferable Residues		0.874	0.551				
Benzylbutylphthalate							
Dust (ng/g)	0.284	0.062	0.006**	0.002**	0.004**	0.761	0.024*
Dust (ng/m ²)	0.167	0.003**	<0.001**	<0.001**	<0.001**	0.209	0.001**
Hard Floor Surface Wipes		0.177	0.059				
Food Preparation Surface Wipes		0.533	0.148				
Transferable Residues		0.762	0.099				
Solid Food (Children)	0.226	0.349	0.290				
Bisphenol-A							
Indoor Air	0.903	0.107	0.019*	0.267	0.996	0.021*	0.128
Dust (ng/g)	0.356	0.407	0.106				
Dust (ng/m ²)	0.610	0.081	0.001**	<0.001**	0.001**	0.904	0.003**
Hard Floor Surface Wipes		0.141	0.126				
Food Preparation Surface Wipes		0.763	0.174				
Transferable Residues		0.128	0.543				
Solid Food (Children)	0.555	0.294	0.723				
Liquid Food (Children)	0.448	0.859	0.533				
<i>alpha</i>-Chlordane							
Indoor Air	0.772	0.255	0.128				
Outdoor Air	0.216	0.754	0.064				
Soil	0.897	0.049*	0.083				
Dust (ng/g)	0.364	0.415	0.462				
Dust (ng/m ²)	0.847	0.061	0.185				
<i>gamma</i>-Chlordane							
Indoor Air	0.830	0.315	0.158				
Outdoor Air	0.214	0.847	0.066				

Table K-4. (cont.)

	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Medium							
Soil	0.906	0.062	0.115				
Dust (ng/g)	0.494	0.359	0.493				
Dust (ng/m ²)	0.960	0.053	0.157				
Chlorpyrifos							
Indoor Air	0.179	0.065	0.724				
Outdoor Air	0.099	0.896	0.086				
Dust (ng/g)	0.316	0.018*	0.054				
Dust (ng/m ²)	0.695	0.002**	<0.001**	<0.001**	<0.001**	0.542	0.004**
Food Preparation Surface Wipes		0.281	0.613				
Transferable Residues		0.123	0.319				
Solid Food (Children)	0.361	<0.001**	0.348				
Chrysene							
Soil	0.889	0.198	0.852				
Dust (ng/g)	<0.001**	0.018*	0.010*	0.010*	0.008**	0.323	0.142
Dust (ng/m ²)	0.008**	0.748	<0.001**	<0.001**	<0.001**	0.076	0.002**
Transferable Residues		0.855	0.594				
Cyfluthrin							
Dust (ng/g)	0.021*	0.320	0.202				
Dust (ng/m ²)	0.182	0.047*	0.012*	0.003**	0.013*	0.999	0.017*
Diazinon							
Indoor Air	0.921	0.107	0.468				
Outdoor Air	0.001**	0.012*	0.107				
Dust (ng/g)	0.239	0.378	0.193				
Dust (ng/m ²)	0.478	0.038*	0.001**	0.001**	<0.001**	0.255	0.025*
Transferable Residues		0.202	0.469				
Dibenzo[a,h]anthracene							
Soil	0.704	0.076	0.946				
Dust (ng/g)	<0.001**	0.025*	0.005**	0.006**	0.004**	0.257	0.115
Dust (ng/m ²)	0.010*	0.847	<0.001**	<0.001**	<0.001**	0.066	0.002**
Di-n-butylphthalate							
Indoor Air	0.215	0.927	0.029*	0.008**	0.029*	0.998	0.043*
Soil	0.405	0.733	0.001**	0.300	0.055	0.001**	0.943
Dust (ng/g)	0.059	0.565	<0.001**	<0.001**	<0.001**	0.664	<0.001**

Table K-4. (cont.)

	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Medium							
Dust (ng/m ²)	0.669	0.033*	<0.001**	<0.001**	<0.001**	0.736	<0.001**
Hard Floor Surface Wipes		0.648	0.184				
Food Preparation Surface Wipes		0.275	0.328				
Transferable Residues		0.318	0.688				
<i>p,p'</i>-DDE							
Solid Food (Children)	0.400	0.722	0.085				
2,4-D (2,4-dichlorophenoxyacetic acid)							
Dust (ng/g)	0.042*	<0.001**	0.980				
Dust (ng/m ²)	0.247	0.011*	0.069				
Indeno[1,2,3-<i>cd</i>]pyrene							
Soil	0.788	0.148	0.941				
Dust (ng/g)	<0.001**	0.021*	0.008**	0.007**	0.006**	0.360	0.104
Dust (ng/m ²)	0.015*	0.772	<0.001**	<0.001**	<0.001**	0.089	0.002**
Hard Floor Surface Wipes		0.861	0.309				
Transferable Residues		0.149	0.444				
IMP (2-isopropyl-6-methyl-4-pyrimidinol)							
Indoor Air	0.469	0.025*	0.923				
Outdoor Air	<0.001**	0.002**	0.466				
Dust (ng/g)	0.835	0.585	0.430				
Dust (ng/m ²)	0.522	0.063	0.012*	0.045*	0.022*	0.094	0.499
Solid Food (Children)	0.146	0.401	0.352				
Solid Food (Adults)	0.724	0.085	0.620				
<i>cis</i>-Permethrin							
Dust (ng/g)	0.209	0.276	0.248				
Dust (ng/m ²)	0.185	0.044*	0.004**	0.002**	0.002**	0.540	0.034*
Hard Floor Surface Wipes		0.315	0.456				
Transferable Residues		0.302	0.472				
<i>trans</i>-Permethrin							
Dust (ng/g)	0.322	0.279	0.347				
Dust (ng/m ²)	0.216	0.051	0.005**	0.002**	0.003**	0.602	0.033*
Hard Floor Surface Wipes		0.290	0.458				
Transferable Residues		0.288	0.351				

Table K-4. (cont.)

	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Medium							
Pentachlorophenol							
Indoor Air	0.193	0.808	0.009**	0.048*	0.019*	0.062	0.555
Outdoor Air	0.222	0.193	0.242				
Dust (ng/g)	0.695	0.627	0.801				
Dust (ng/m ²)	0.414	0.100	0.137				
PCB 52							
Indoor Air	0.370	0.661	0.304				
Outdoor Air	0.344	0.384	0.761				
Dust (ng/g)	0.930	0.940	0.235				
Dust (ng/m ²)	0.640	0.099	<0.001**	<0.001**	<0.001**	0.904	0.002**
Transferable Residues		0.323	0.732				
PCB 95							
Indoor Air	0.565	0.680	0.907				
PCB 101							
Indoor Air	0.241	0.289	0.398				
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Indoor Air	0.424	0.016*	0.686				
Outdoor Air	0.375	0.510	0.226				
Soil	0.008**	0.693	0.711				
Dust (ng/g)	0.084	0.156	0.677				
Dust (ng/m ²)	0.418	0.019*	0.014*	0.010*	0.010*	0.436	0.119
Hard Floor Surface Wipes	0.564	0.291	0.664				
Solid Food (Children)	0.844	0.448	0.141				
Solid Food (Adults)	0.680	0.660	0.003**			0.003**	

^(a) For a given analyte, the media listed in this table represent those media for which statistical analysis was performed (i.e., having at least 50% detected results). In columns 2 through 4 of this table, cells are blank when insufficient data are available for the given pollutant and sample medium to allow the statistical test specified in the column heading to be performed.

^(b) In the last four columns of this table, significance levels are specified only when the environment effect was significant at the 0.05 level (column 4 of this table). These significance levels in these last three rows are adjusted based upon Tukey's studentized range approach to controlling the overall Type I error rate (i.e., incorrectly declaring at least one pair of environments significantly different).

* Implies statistical significance at the 0.05 level, but not at the 0.01 level.

** Implies statistical significance at the 0.01 level.

Table K-5. Estimated Ratio Between Selected Strata of Geometric Mean Pollutant Levels in NC Dermal Wipe Samples, and 95% Confidence Intervals on This Ratio, for Pollutants Detected in At Least 50% of Samples

Type of Dermal Wipe Sample	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
<i>alpha</i>-Chlordane						
Children	0.69 (0.42,1.13)	1.08 (0.73,1.60)	1.14 (0.83,1.59)	1.02 (0.61,1.71)	0.80 (0.48,1.33)	1.28 (0.84,1.96)
Adults	0.73 (0.39,1.37)	0.94 (0.57,1.54)			0.87 (0.52,1.45)	
<i>gamma</i>-Chlordane						
Children	0.68 (0.36,1.28)	1.22 (0.75,1.99)	1.10 (0.77,1.56)	0.98 (0.52,1.83)	0.79 (0.42,1.49)	1.23 (0.81,1.88)
Adults	0.80 (0.39,1.63)	1.00 (0.57,1.74)			0.90 (0.50,1.59)	
Chlorpyrifos						
Children	0.97 (0.44,2.18)	1.54 (0.88,2.71)	1.75* (1.12,2.72)	1.59 (0.64,3.93)	0.83 (0.34,2.06)	1.91** (1.27,2.89)
Adults	1.47 (0.66,3.26)	1.91* (1.02,3.57)			0.87 (0.46,1.66)	
Diazinon						
Adults	1.26 (0.57,2.78)	1.59 (0.86,2.96)			0.81 (0.43,1.52)	
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)						
Children	1.16 (0.83,1.63)	1.22 (0.95,1.57)	1.88** (1.43,2.47)	1.99** (1.40,2.84)	1.12 (0.79,1.60)	1.77** (1.20,2.60)
Adults	0.73 (0.50,1.07)	1.47* (1.10,1.98)			0.83 (0.61,1.13)	
Benzylbutylphthalate						
Children	0.78 (0.42,1.45)	1.64* (1.04,2.58)	1.41 (0.95,2.09)	1.32 (0.67,2.58)	0.87 (0.44,1.71)	1.51 (0.93,2.45)
Adults	1.23 (0.69,2.18)	1.43 (0.91,2.25)			1.47 (0.92,2.34)	
Di-n-butylphthalate						
Children	1.34 (0.68,2.64)	0.76 (0.49,1.17)	0.83 (0.49,1.38)	0.57 (0.27,1.20)	0.48 (0.23,1.00)	1.20 (0.59,2.44)
Adults	2.44 (1.00,5.98)	0.91 (0.45,1.85)			0.46* (0.22,0.95)	
Bisphenol-A						
Children	0.94 (0.46,1.91)	0.82 (0.48,1.40)	0.33** (0.19,0.58)	0.39* (0.19,0.82)	1.40 (0.66,2.97)	0.28** (0.12,0.63)
Adults	2.61** (1.29,5.28)	0.85 (0.49,1.49)			1.56 (0.88,2.75)	
cis-Permethrin						
Children	0.58 (0.21,1.63)	2.00 (0.90,4.42)	1.39 (0.77,2.51)	0.91 (0.33,2.56)	0.43 (0.15,1.23)	2.10* (1.01,4.40)
Adults	0.59 (0.18,1.97)	1.47 (0.57,3.78)			0.51 (0.20,1.36)	
trans-Permethrin						
Children	0.52 (0.20,1.38)	2.03 (0.95,4.35)	1.45 (0.83,2.54)	1.17 (0.44,3.12)	0.65 (0.24,1.74)	1.80 (0.93,3.49)
Adults	0.45 (0.13,1.47)	1.74 (0.68,4.45)			0.66 (0.25,1.74)	

* Significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Significantly different from 1 at the 0.01 level.

Table K-6. Estimated Ratio Between Selected Strata of Geometric Mean Pollutant Levels in OH Dermal Wipe Samples, and 95% Confidence Intervals on This Ratio, for Pollutants Detected in At Least 50% of Samples

Type of Dermal Wipe Sample	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
Benz[a]anthracene						
Children	1.92 (0.92,4.00)	0.78 (0.50,1.22)	1.13 (0.71,1.79)	0.97 (0.47,2.00)	0.73 (0.35,1.52)	1.32 (0.72,2.40)
Adults	1.45 (0.91,2.32)	0.83 (0.59,1.17)			0.85 (0.60,1.21)	
Benzo[b]fluoranthene						
Children	2.33 (0.99,5.50)	0.70 (0.42,1.17)	1.17 (0.66,2.05)	1.08 (0.46,2.51)	0.85 (0.37,1.99)	1.26 (0.59,2.70)
Adults	1.69 (0.87,3.27)	0.70 (0.43,1.15)			1.02 (0.62,1.70)	
Benzo[k]fluoranthene						
Children	1.75 (0.85,3.63)	0.72 (0.45,1.14)	1.22 (0.77,1.93)	1.00 (0.49,2.06)	0.68 (0.33,1.39)	1.48 (0.81,2.69)
Adults	1.39 (0.82,2.36)	0.85 (0.58,1.26)			1.00 (0.67,1.50)	
Benzo[ghi]perylene						
Children	1.94 (0.86,4.37)	0.75 (0.46,1.22)	1.37 (0.82,2.28)	1.10 (0.49,2.47)	0.65 (0.29,1.46)	1.70 (0.87,3.30)
Adults	1.60 (0.95,2.70)	0.70 (0.48,1.04)			0.97 (0.65,1.44)	
Benzo[a]pyrene						
Children	1.85 (0.82,4.18)	0.65 (0.40,1.07)	1.10 (0.66,1.83)	0.94 (0.42,2.12)	0.74 (0.33,1.66)	1.28 (0.66,2.47)
Adults	1.47 (0.86,2.53)	0.81 (0.54,1.21)			0.99 (0.65,1.49)	
Benzo[e]pyrene						
Children	1.90 (0.87,4.13)	0.82 (0.52,1.30)	1.30 (0.81,2.09)	1.19 (0.55,2.58)	0.84 (0.39,1.82)	1.42 (0.77,2.61)
Adults	1.56 (0.88,2.78)	0.83 (0.55,1.28)			1.17 (0.75,1.81)	
Bisphenol-A						
Children	1.11 (0.54,2.28)	1.13 (0.67,1.88)	2.90** (1.74,4.85)	3.15** (1.57,6.34)	1.18 (0.59,2.37)	2.67** (1.30,5.49)
Adults	1.40 (0.72,2.75)	1.31 (0.80,2.16)			1.04 (0.62,1.75)	
Chlorpyrifos						
Children	1.03 (0.40,2.63)	2.53** (1.29,4.96)	1.29 (0.73,2.27)	1.18 (0.49,2.85)	0.84 (0.35,2.02)	1.41 (0.68,2.95)
Adults	1.79 (0.72,4.48)	4.08** (2.07,8.04)			0.82 (0.41,1.65)	
Chrysene						
Children	1.69 (0.75,3.79)	0.71 (0.43,1.16)	1.10 (0.67,1.83)	0.89 (0.40,1.98)	0.65 (0.29,1.45)	1.36 (0.71,2.63)
Adults	1.81* (1.05,3.12)	0.79 (0.53,1.19)			0.87 (0.57,1.32)	
2,4-D (2,4-dichlorophenoxyacetic acid)						
Adults	1.63 (0.94,2.80)	1.31 (0.87,1.97)			2.25** (1.49,3.39)	
Indeno[1,2,3-cd]pyrene						
Children	2.00 (0.88,4.53)	0.78 (0.48,1.26)	1.24 (0.75,2.06)	1.02 (0.45,2.30)	0.68 (0.30,1.53)	1.50 (0.78,2.89)
Adults	1.51 (0.88,2.60)	0.75 (0.50,1.12)			0.87 (0.57,1.32)	
Pentachlorophenol						
Adults	0.88 (0.50,1.55)	1.25 (0.81,1.90)			0.80 (0.52,1.22)	

Table K-6. (cont.)

Type of Dermal Wipe Sample	Estimated Ratio of Geometric Means (95% CI)					
	Urban vs. Rural	Low Income vs. Mid/High Income	Home vs. Day Care Environments	Home Environment (for Home Children) vs. Day Care Environment	Home Environment (for Home Children) vs. Home Environment (for Day Care Children)	Home Environment (for Day Care Children) vs. Day Care Environment
<i>cis</i> -Permethrin						
Children	0.60 (0.20,1.78)	1.45 (0.68,3.08)	1.11 (0.63,1.97)	0.92 (0.32,2.69)	0.69 (0.24,2.01)	1.34 (0.72,2.50)
Adults	0.36 (0.12,1.11)	1.30 (0.57,2.96)			0.58 (0.25,1.37)	
<i>trans</i> -Permethrin						
Children	0.51 (0.17,1.52)	1.26 (0.59,2.70)	1.11 (0.63,1.93)	0.81 (0.28,2.36)	0.54 (0.18,1.56)	1.51 (0.84,2.72)
Adults	0.39 (0.13,1.19)	1.33 (0.59,2.99)			0.57 (0.24,1.31)	
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)						
Children	0.86 (0.56,1.31)	1.28 (0.93,1.75)	1.25 (0.95,1.65)	1.45 (0.97,2.18)	1.35 (0.90,2.02)	1.08 (0.74,1.56)
Adults	1.12 (0.72,1.75)	1.28 (0.91,1.79)			1.11 (0.80,1.56)	

* Significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Significantly different from 1 at the 0.01 level.

Table K-7. Results of Statistical Analyses to Investigate the Significance of Environment, Urbanicity, and Income Status on NC Dermal Wipe Loading Data^(a)

Type of Dermal Wipe Sample	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Benzylbutylphthalate							
Children	0.424	0.032*	0.127				
Adults	0.487	0.121	0.107				
Bisphenol-A							
Children	0.862	0.459	0.001**	<0.001**	0.010*	0.519	0.001**
Adults	0.008**	0.574	0.127				
<i>alpha</i>-Chlordane							
Children	0.136	0.686	0.334				
Adults	0.325	0.792	0.595				
<i>gamma</i>-Chlordane							
Children	0.226	0.419	0.437				
Adults	0.534	0.992	0.703				
Chlorpyrifos							
Children	0.948	0.130	0.002**	0.014*	0.434	0.877	0.001**
Adults	0.344	0.044*	0.674				
Diazinon							
Adults	0.559	0.139	0.502				
Di-<i>n</i>-butylphthalate							
Children	0.384	0.207	0.057				
Adults	0.051	0.803	0.036*			0.036*	
<i>cis</i>-Permethrin							
Children	0.289	0.087	0.038*	0.274	0.975	0.135	0.047*
Adults	0.392	0.417	0.177				
<i>trans</i>-Permethrin							
Children	0.187	0.069	0.105				
Adults	0.183	0.246	0.399				
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Children	0.368	0.115	<0.001**	<0.001**	<0.001**	0.705	0.002**
Adults	0.108	0.010*	0.230				

^(a) For a given analyte, the media listed in this table represent those media for which statistical analysis was performed (i.e., having at least 50% detected results).

^(b) In the last four columns of this table, significance levels are specified only when the environment effect was significant at the 0.05 level (column 4 of this table). These significance levels in these last three rows are adjusted based upon Tukey's studentized range approach to controlling the overall Type I error rate (i.e., incorrectly declaring at least one pair of environments significantly different).

* Implies statistical significance at the 0.05 level, but not at the 0.01 level.

** Implies statistical significance at the 0.01 level.

Table K-8. Results of Statistical Analyses to Investigate the Significance of Environment, Urbanicity, and Income Status on OH Dermal Wipe Loading Data^(a)

Type of Dermal Wipe Sample	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
Benz[a]anthracene							
Children	0.082	0.275	0.455				
Adults	0.115	0.275	0.370				
Benzo[b]fluoranthene							
Children	0.053	0.166	0.755				
Adults	0.121	0.158	0.930				
Benzo[k]fluoranthene							
Children	0.129	0.152	0.237				
Adults	0.217	0.422	0.993				
Benzo[ghi]perylene							
Children	0.108	0.231	0.153				
Adults	0.076	0.075	0.875				
Benzo[a]pyrene							
Children	0.139	0.089	0.565				
Adults	0.160	0.292	0.948				
Benzo[e]pyrene							
Children	0.104	0.388	0.396				
Adults	0.128	0.401	0.490				
Bisphenol-A							
Children	0.774	0.644	<0.001**	<0.001**	0.001**	0.836	0.005**
Adults	0.319	0.279	0.867				
Chlorpyrifos							
Children	0.948	0.008**	0.539				
Adults	0.210	<0.001**	0.577				
Chrysene							
Children	0.199	0.169	0.360				
Adults	0.033*	0.254	0.508				
2,4-D (2,4-dichlorophenoxyacetic acid)							
Adults	0.079	0.199	<0.001**			<0.001**	
Indeno[1,2,3-cd]pyrene							
Children	0.095	0.298	0.283				
Adults	0.135	0.159	0.503				
Pentachlorophenol							
Adults	0.663	0.308	0.295				

Table K-8. (cont.)

Type of Dermal Wipe Sample	Significance Levels Associated with ...				Results of Comparisons Between ^(b) ...		
	Test for Significant Urbanicity Effect	Test for Significant Income Status Effect	Test for Significant Environment Effect	Test for Significant Difference Between Home and Day Care Environments	Home Environment (for Home Children) and Day Care Environment (for Day Care Children)	Home Environment (for Home Children) and Home Environment (for Day Care Children)	Home Environment (for Day Care Children) and Day Care Environment
<i>cis</i> -Permethrin							
Children	0.354	0.330	0.465				
Adults	0.075	0.536	0.211				
<i>trans</i> -Permethrin							
Children	0.223	0.544	0.159				
Adults	0.097	0.490	0.181				
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Children	0.469	0.125	0.083				
Adults	0.617	0.150	0.527				

^(a) For a given analyte, the media listed in this table represent those media for which statistical analysis was performed (i.e., having at least 50% detected results).

^(b) In the last four columns of this table, significance levels are specified only when the environment effect was significant at the 0.05 level (column 4 of this table). These significance levels in these last three rows are adjusted based upon Tukey's studentized range approach to controlling the overall Type I error rate (i.e., incorrectly declaring at least one pair of environments significantly different).

* Implies statistical significance at the 0.05 level, but not at the 0.01 level.

** Implies statistical significance at the 0.01 level.

Appendix L

Descriptive Statistics of Potential Exposure Level and Potential Absorbed Dose Estimates for Target Pollutants in Participating NC Children

This appendix contains tables of descriptive statistics of potential exposure and potential absorbed dose estimates (expressed in both ng and pmole units) in NC children for the following pollutants and metabolites:

Pollutant/Metabolite	Table Numbers for Potential Exposure Summaries	Table Numbers for Potential Absorbed Dose Summaries
Benz[a]anthracene	Tables L-1a, L-1b	Tables L-1c, L-1d
Benzo[b]fluoranthene	Tables L-2a, L-2b	Tables L-2c, L-2d
Benzo[k]fluoranthene	Tables L-3a, L-3b	Tables L-3c, L-3d
Benzo[ghi]perylene	Tables L-4a, L-4b	Tables L-4c, L-4d
Benzo[a]pyrene	Tables L-5a, L-5b	Tables L-5c, L-5d
Benzo[e]pyrene	Tables L-6a, L-6b	Tables L-6c, L-6d
Benzylbutylphthalate	Tables L-7a, L-7b	Tables L-7c, L-7d
Bisphenol-A	Tables L-8a, L-8b	Tables L-8c, L-8d
<i>alpha</i> -Chlordane	Tables L-9a, L-9b	Tables L-9c, L-9d
<i>gamma</i> -Chlordane	Tables L-10a, L-10b	Tables L-10c, L-10d
Chlorpyrifos	Tables L-11a, L-11b	Tables L-11c, L-11d
Chrysene	Tables L-12a, L-12b	Tables L-12c, L-12d
Cyfluthrin	Tables L-13a, L-13b	Tables L-13c, L-13d
Diazinon	Tables L-14a, L-14b	Tables L-14c, L-14d
Dibenzo[a,h]anthracene	Tables L-15a, L-15b	Tables L-15c, L-15d
Di- <i>n</i> -butylphthalate	Tables L-16a, L-16b	Tables L-16c, L-16d
<i>p,p'</i> -DDE	Tables L-17a, L-17b	Tables L-17c, L-17d
2,4-D (2,4-dichlorophenoxyacetic acid)	Tables L-18a, L-18b	Tables L-18c, L-18d
Heptachlor	Tables L-19a, L-19b	Tables L-19c, L-19d
Indeno[1,2,3- <i>cd</i>]pyrene	Tables L-20a, L-20b	Tables L-20c, L-20d
Pentachlorophenol	Tables L-21a, L-21b	Tables L-21c, L-21d
<i>cis</i> -Permethrin	Tables L-22a, L-22b	Tables L-22c, L-22d
<i>trans</i> -Permethrin	Tables L-23a, L-23b	Tables L-23c, L-24d
PCB 52	Tables L-24a, L-24b	Tables L-24c, L-24d
PCB 95	Tables L-25a, L-25b	Tables L-25c, L-25d
PCB 101	Tables L-26a, L-26b	Tables L-26c, L-26d
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)	Tables L-27a, L-27b	Tables L-27c, L-27d

Descriptive statistics are presented separately for the following groups of NC child participants:

- All participants
- Participants from urban areas
- Participants from rural areas
- Participants from low-income areas
- Participants from middle/upper-income areas
- Stay-at-home children
- Day care children

Table L-1a. Benz[a]anthracene (56-55-3): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	81.5	1.58	2.58	0.973	0.843
	Urban	103	82.5	1.68	2.73	1.02	0.870
	Rural	21	76.2	1.10	1.59	0.777	0.667
	Low Income	55	83.6	1.59	1.84	1.07	0.803
	Mid/High Income	65	80.0	1.54	3.07	0.892	0.853
	Home Children	65	69.2	1.83	3.30	1.01	0.918
	Day Care Children	59	94.9	1.31	1.38	0.934	0.758
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	41.4	--	--	--	--
	Urban	107	39.3	--	--	--	--
	Rural	21	52.4	51.4	38.1	41.3	0.667
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	37.9	--	--	--	--
	Home Children	66	37.9	--	--	--	--
	Day Care Children	62	45.2	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	19.8	45.8	6.85	1.26
	Urban	95	100.0	18.1	42.6	6.90	1.21
	Rural	21	100.0	27.4	58.9	6.64	1.52
	Low Income	52	100.0	11.9	20.6	5.90	1.14
	Mid/High Income	60	100.0	27.6	59.9	8.20	1.36
	Home Children	62	100.0	13.2	26.2	5.60	1.17
	Day Care Children	54	100.0	27.4	60.4	8.63	1.33
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	81.5	6.93	11.3	4.26	0.843
	Urban	103	82.5	7.36	12.0	4.46	0.870
	Rural	21	76.2	4.80	6.95	3.40	0.667
	Low Income	55	83.6	6.95	8.04	4.69	0.803
	Mid/High Income	65	80.0	6.74	13.4	3.91	0.853
	Home Children	65	69.2	8.00	14.5	4.43	0.918
	Day Care Children	59	94.9	5.74	6.04	4.09	0.758
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	41.4	--	--	--	--
	Urban	107	39.3	--	--	--	--
	Rural	21	52.4	225	167	181	0.667
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	37.9	--	--	--	--
	Home Children	66	37.9	--	--	--	--
	Day Care Children	62	45.2	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	86.6	201	30.0	1.26
	Urban	95	100.0	79.2	187	30.2	1.21
	Rural	21	100.0	120	258	29.1	1.52
	Low Income	52	100.0	52.0	90.0	25.9	1.14
	Mid/High Income	60	100.0	121	262	35.9	1.36
	Home Children	62	100.0	57.7	115	24.5	1.17
	Day Care Children	54	100.0	120	265	37.8	1.33

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-1b. Benz[a]anthracene (56-55-3): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	0.528	0.746	1.44	6.12	23.8
	Urban	103	<MDL	0.528	0.779	1.80	6.12	23.8
	Rural	21	<MDL	0.527	0.616	0.963	1.81	7.84
	Low Income	55	<MDL	0.528	0.881	1.80	7.56	7.84
	Mid/High Income	65	<MDL	0.528	0.616	1.24	4.10	23.8
	Home Children	65	<MDL	<MDL	0.608	1.74	7.56	23.8
	Day Care Children	59	<MDL	0.540	0.779	1.38	5.37	6.16
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	<MDL	<MDL	<MDL	43.5	140	258
	Urban	107	<MDL	<MDL	<MDL	41.8	144	258
	Rural	21	<MDL	<MDL	40.0	53.6	133	140
	Low Income	58	<MDL	<MDL	<MDL	44.1	195	258
	Mid/High Income	66	<MDL	<MDL	<MDL	42.9	140	188
	Home Children	66	<MDL	<MDL	<MDL	35.4	133	195
	Day Care Children	62	<MDL	<MDL	<MDL	45.2	140	258
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	0.526	3.12	5.52	11.8	129	319
	Urban	95	0.526	3.35	5.97	11.9	121	319
	Rural	21	1.11	2.83	4.60	9.67	129	233
	Low Income	52	0.526	3.18	5.40	11.5	49.1	130
	Mid/High Income	60	1.21	3.38	5.87	15.0	158	319
	Home Children	62	0.526	2.99	4.49	11.2	44.8	130
	Day Care Children	54	1.11	3.48	7.41	14.1	169	319
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	2.31	3.27	6.31	26.8	104
	Urban	103	<MDL	2.31	3.41	7.87	26.8	104
	Rural	21	<MDL	2.31	2.70	4.22	7.91	34.4
	Low Income	55	<MDL	2.31	3.86	7.87	33.1	34.4
	Mid/High Income	65	<MDL	2.31	2.70	5.43	17.9	104
	Home Children	65	<MDL	<MDL	2.66	7.64	33.1	104
	Day Care Children	59	<MDL	2.37	3.41	6.05	23.5	27.0
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	<MDL	<MDL	<MDL	191	615	1,130
	Urban	107	<MDL	<MDL	<MDL	183	631	1,130
	Rural	21	<MDL	<MDL	175	235	582	615
	Low Income	58	<MDL	<MDL	<MDL	193	856	1,130
	Mid/High Income	66	<MDL	<MDL	<MDL	188	615	825
	Home Children	66	<MDL	<MDL	<MDL	155	582	856
	Day Care Children	62	<MDL	<MDL	<MDL	198	615	1,130
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	2.30	13.7	24.2	51.8	564	1,400
	Urban	95	2.30	14.7	26.1	52.1	530	1,400
	Rural	21	4.86	12.4	20.2	42.4	564	1,020
	Low Income	52	2.30	13.9	23.7	50.5	215	571
	Mid/High Income	60	5.29	14.8	25.7	65.7	690	1,400
	Home Children	62	2.30	13.1	19.7	48.9	196	571
	Day Care Children	54	4.86	15.3	32.5	61.9	742	1,400

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-1c. Benz[a]anthracene (56-55-3): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	81.5	0.050	0.086	0.029	0.888
	Urban	103	82.5	0.054	0.093	0.031	0.916
	Rural	21	76.2	0.031	0.041	0.022	0.689
	Low Income	55	83.6	0.054	0.093	0.031	0.914
	Mid/High Income	65	80.0	0.047	0.083	0.028	0.867
	Home Children	65	69.2	0.061	0.112	0.032	0.967
	Day Care Children	59	94.9	0.037	0.040	0.026	0.787
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	41.4	--	--	--	--
	Urban	107	39.3	--	--	--	--
	Rural	21	52.4	1.45	1.13	1.16	0.646
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	37.9	--	--	--	--
	Home Children	66	37.9	--	--	--	--
	Day Care Children	62	45.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	0.620	1.43	0.203	1.32
	Urban	95	100.0	0.556	1.30	0.206	1.25
	Rural	21	100.0	0.907	1.96	0.186	1.64
	Low Income	52	100.0	0.353	0.637	0.166	1.19
	Mid/High Income	60	100.0	0.884	1.87	0.255	1.40
	Home Children	62	100.0	0.471	1.01	0.176	1.27
	Day Care Children	54	100.0	0.791	1.80	0.239	1.37
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	81.5	0.219	0.378	0.127	0.888
	Urban	103	82.5	0.236	0.406	0.135	0.916
	Rural	21	76.2	0.134	0.179	0.096	0.689
	Low Income	55	83.6	0.236	0.407	0.134	0.914
	Mid/High Income	65	80.0	0.205	0.363	0.122	0.867
	Home Children	65	69.2	0.269	0.492	0.141	0.967
	Day Care Children	59	94.9	0.163	0.176	0.114	0.787
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	41.4	--	--	--	--
	Urban	107	39.3	--	--	--	--
	Rural	21	52.4	6.33	4.93	5.08	0.646
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	37.9	--	--	--	--
	Home Children	66	37.9	--	--	--	--
	Day Care Children	62	45.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	2.72	6.28	0.888	1.32
	Urban	95	100.0	2.44	5.68	0.904	1.25
	Rural	21	100.0	3.97	8.58	0.817	1.64
	Low Income	52	100.0	1.55	2.79	0.729	1.19
	Mid/High Income	60	100.0	3.87	8.21	1.12	1.40
	Home Children	62	100.0	2.06	4.44	0.769	1.27
	Day Care Children	54	100.0	3.47	7.87	1.05	1.37

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-1d. Benz[a]anthracene (56-55-3): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	0.016	0.023	0.046	0.146	0.624
	Urban	103	<MDL	0.016	0.024	0.049	0.146	0.624
	Rural	21	<MDL	0.014	0.018	0.026	0.052	0.201
	Low Income	55	<MDL	0.016	0.027	0.051	0.201	0.614
	Mid/High Income	65	<MDL	0.016	0.020	0.046	0.135	0.624
	Home Children	65	<MDL	<MDL	0.023	0.049	0.201	0.624
	Day Care Children	59	<MDL	0.015	0.022	0.039	0.125	0.206
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	<MDL	<MDL	<MDL	1.35	4.30	7.17
	Urban	107	<MDL	<MDL	<MDL	1.24	4.62	7.17
	Rural	21	<MDL	<MDL	1.01	1.48	3.86	4.30
	Low Income	58	<MDL	<MDL	<MDL	1.37	4.30	7.02
	Mid/High Income	66	<MDL	<MDL	<MDL	1.26	4.62	7.17
	Home Children	66	<MDL	<MDL	<MDL	1.06	4.30	7.17
	Day Care Children	62	<MDL	<MDL	<MDL	1.38	3.86	7.02
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.016	0.088	0.175	0.365	4.17	9.25
	Urban	95	0.016	0.096	0.201	0.408	2.63	9.25
	Rural	21	0.022	0.069	0.133	0.280	4.69	7.33
	Low Income	52	0.016	0.076	0.175	0.326	1.44	4.10
	Mid/High Income	60	0.035	0.103	0.190	0.518	5.49	9.25
	Home Children	62	0.016	0.085	0.137	0.308	1.41	5.33
	Day Care Children	54	0.022	0.102	0.219	0.408	5.65	9.25
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	0.070	0.102	0.202	0.638	2.73
	Urban	103	<MDL	0.071	0.105	0.213	0.638	2.73
	Rural	21	<MDL	0.062	0.079	0.113	0.229	0.880
	Low Income	55	<MDL	0.071	0.119	0.222	0.880	2.69
	Mid/High Income	65	<MDL	0.070	0.087	0.201	0.592	2.73
	Home Children	65	<MDL	<MDL	0.102	0.216	0.880	2.73
	Day Care Children	59	<MDL	0.064	0.097	0.172	0.546	0.901
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	<MDL	<MDL	<MDL	5.91	18.8	31.4
	Urban	107	<MDL	<MDL	<MDL	5.42	20.2	31.4
	Rural	21	<MDL	<MDL	4.44	6.47	16.9	18.8
	Low Income	58	<MDL	<MDL	<MDL	5.99	18.8	30.7
	Mid/High Income	66	<MDL	<MDL	<MDL	5.52	20.2	31.4
	Home Children	66	<MDL	<MDL	<MDL	4.65	18.8	31.4
	Day Care Children	62	<MDL	<MDL	<MDL	6.03	16.9	30.7
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.069	0.386	0.766	1.60	18.3	40.5
	Urban	95	0.069	0.422	0.880	1.79	11.5	40.5
	Rural	21	0.097	0.303	0.584	1.23	20.5	32.1
	Low Income	52	0.069	0.333	0.766	1.43	6.29	18.0
	Mid/High Income	60	0.153	0.452	0.832	2.27	24.1	40.5
	Home Children	62	0.069	0.374	0.601	1.35	6.18	23.4
	Day Care Children	54	0.097	0.449	0.960	1.79	24.8	40.5

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-2a. Benzo[b]fluoranthene (205-99-2): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	80.6	2.08	2.17	1.39	0.870
	Urban	103	79.6	2.19	2.28	1.46	0.889
	Rural	21	85.7	1.50	1.43	1.11	0.748
	Low Income	55	92.7	2.51	2.18	1.79	0.837
	Mid/High Income	65	69.2	1.73	2.17	1.12	0.866
	Home Children	65	75.4	1.98	2.42	1.26	0.887
	Day Care Children	59	86.4	2.19	1.86	1.55	0.845
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	45.3	--	--	--	--
	Urban	107	44.9	--	--	--	--
	Rural	21	47.6	--	--	--	--
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	47.0	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	62	54.8	42.3	19.0	38.7	0.429
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	50.0	130	17.5	1.25
	Urban	95	100.0	41.0	86.4	17.5	1.18
	Rural	21	100.0	90.7	244	17.3	1.57
	Low Income	52	100.0	32.6	55.3	16.0	1.16
	Mid/High Income	60	100.0	67.7	171	19.9	1.33
	Home Children	62	100.0	28.7	53.3	13.7	1.13
	Day Care Children	54	100.0	74.5	179	23.0	1.34
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	80.6	8.23	8.59	5.51	0.870
	Urban	103	79.6	8.70	9.03	5.77	0.889
	Rural	21	85.7	5.94	5.65	4.39	0.748
	Low Income	55	92.7	9.96	8.64	7.09	0.837
	Mid/High Income	65	69.2	6.87	8.60	4.42	0.866
	Home Children	65	75.4	7.83	9.61	4.98	0.887
	Day Care Children	59	86.4	8.67	7.38	6.16	0.845
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	45.3	--	--	--	--
	Urban	107	44.9	--	--	--	--
	Rural	21	47.6	--	--	--	--
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	47.0	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	62	54.8	168	75.4	153	0.429
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	198	514	69.2	1.25
	Urban	95	100.0	163	343	69.3	1.18
	Rural	21	100.0	359	966	68.7	1.57
	Low Income	52	100.0	129	219	63.5	1.16
	Mid/High Income	60	100.0	269	680	78.7	1.33
	Home Children	62	100.0	114	211	54.4	1.13
	Day Care Children	54	100.0	295	709	91.1	1.34

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-2b. Benzo[b]fluoranthene (205-99-2): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	0.595	1.21	2.74	5.58	14.5
	Urban	103	<MDL	0.616	1.37	2.85	5.58	14.5
	Rural	21	<MDL	0.569	0.913	2.20	2.99	6.56
	Low Income	55	<MDL	0.819	1.69	3.23	7.90	9.50
	Mid/High Income	65	<MDL	<MDL	0.765	2.17	5.08	14.5
	Home Children	65	<MDL	0.577	1.06	2.30	6.56	14.5
	Day Care Children	59	<MDL	0.684	1.43	3.09	5.53	9.50
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	<MDL	<MDL	<MDL	45.5	97.2	131
	Urban	107	<MDL	<MDL	<MDL	45.8	86.5	131
	Rural	21	<MDL	<MDL	<MDL	44.5	97.2	116
	Low Income	58	<MDL	<MDL	<MDL	55.2	105	116
	Mid/High Income	66	<MDL	<MDL	<MDL	42.9	77.7	131
	Home Children	66	<MDL	<MDL	<MDL	38.6	105	131
	Day Care Children	62	<MDL	<MDL	39.4	47.6	78.5	106
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	0.639	8.69	13.9	31.5	279	1,090
	Urban	95	0.639	9.20	15.5	32.3	174	640
	Rural	21	3.00	6.05	11.4	30.8	326	1,090
	Low Income	52	0.639	8.24	16.8	32.4	146	335
	Mid/High Income	60	2.55	9.25	12.6	36.1	331	1,090
	Home Children	62	0.639	6.72	11.5	24.9	71.1	335
	Day Care Children	54	3.00	9.45	19.6	34.1	336	1,090
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	2.36	4.79	10.9	22.1	57.6
	Urban	103	<MDL	2.44	5.45	11.3	22.1	57.6
	Rural	21	<MDL	2.25	3.62	8.71	11.9	26.0
	Low Income	55	<MDL	3.25	6.70	12.8	31.3	37.7
	Mid/High Income	65	<MDL	<MDL	3.03	8.61	20.1	57.6
	Home Children	65	<MDL	2.29	4.21	9.11	26.0	57.6
	Day Care Children	59	<MDL	2.71	5.68	12.2	21.9	37.7
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	<MDL	<MDL	<MDL	180	385	519
	Urban	107	<MDL	<MDL	<MDL	182	343	519
	Rural	21	<MDL	<MDL	<MDL	176	385	459
	Low Income	58	<MDL	<MDL	<MDL	219	414	459
	Mid/High Income	66	<MDL	<MDL	<MDL	170	308	519
	Home Children	66	<MDL	<MDL	<MDL	153	414	519
	Day Care Children	62	<MDL	<MDL	156	189	311	421
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	2.53	34.4	55.1	125	1,100	4,330
	Urban	95	2.53	36.5	61.6	128	689	2,540
	Rural	21	11.9	24.0	45.4	122	1,290	4,330
	Low Income	52	2.53	32.7	66.5	128	577	1,330
	Mid/High Income	60	10.1	36.6	50.1	143	1,310	4,330
	Home Children	62	2.53	26.6	45.8	98.7	282	1,330
	Day Care Children	54	11.9	37.4	77.7	135	1,330	4,330

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-2c. Benzo[b]fluoranthene (205-99-2): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	80.6	0.066	0.084	0.041	0.908
	Urban	103	79.6	0.071	0.090	0.044	0.932
	Rural	21	85.7	0.041	0.037	0.031	0.726
	Low Income	55	92.7	0.079	0.102	0.051	0.907
	Mid/High Income	65	69.2	0.055	0.068	0.035	0.903
	Home Children	65	75.4	0.068	0.104	0.040	0.939
	Day Care Children	59	86.4	0.063	0.055	0.043	0.878
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	45.3	--	--	--	--
	Urban	107	44.9	--	--	--	--
	Rural	21	47.6	--	--	--	--
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	47.0	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	62	54.8	1.20	0.558	1.08	0.455
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	1.55	4.04	0.516	1.30
	Urban	95	100.0	1.24	2.56	0.523	1.22
	Rural	21	100.0	2.93	7.77	0.486	1.67
	Low Income	52	100.0	0.964	1.69	0.452	1.21
	Mid/High Income	60	100.0	2.14	5.34	0.618	1.36
	Home Children	62	100.0	0.993	1.91	0.431	1.22
	Day Care Children	54	100.0	2.19	5.51	0.636	1.37
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	80.6	0.260	0.334	0.164	0.908
	Urban	103	79.6	0.280	0.358	0.174	0.932
	Rural	21	85.7	0.163	0.145	0.123	0.726
	Low Income	55	92.7	0.315	0.405	0.203	0.907
	Mid/High Income	65	69.2	0.219	0.268	0.138	0.903
	Home Children	65	75.4	0.270	0.414	0.158	0.939
	Day Care Children	59	86.4	0.249	0.219	0.172	0.878
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	45.3	--	--	--	--
	Urban	107	44.9	--	--	--	--
	Rural	21	47.6	--	--	--	--
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	47.0	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	62	54.8	4.75	2.21	4.30	0.455
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	6.14	16.0	2.05	1.30
	Urban	95	100.0	4.93	10.2	2.07	1.22
	Rural	21	100.0	11.6	30.8	1.93	1.67
	Low Income	52	100.0	3.82	6.71	1.79	1.21
	Mid/High Income	60	100.0	8.48	21.2	2.45	1.36
	Home Children	62	100.0	3.93	7.58	1.71	1.22
	Day Care Children	54	100.0	8.67	21.8	2.52	1.37

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-2d. Benzo[b]fluoranthene (205-99-2): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	0.020	0.035	0.079	0.198	0.700
	Urban	103	<MDL	0.020	0.041	0.087	0.207	0.700
	Rural	21	<MDL	0.017	0.029	0.059	0.087	0.168
	Low Income	55	<MDL	0.025	0.048	0.096	0.207	0.700
	Mid/High Income	65	<MDL	<MDL	0.026	0.065	0.193	0.410
	Home Children	65	<MDL	0.020	0.031	0.070	0.215	0.700
	Day Care Children	59	<MDL	0.020	0.041	0.087	0.170	0.249
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	<MDL	<MDL	<MDL	1.40	2.79	4.60
	Urban	107	<MDL	<MDL	<MDL	1.44	2.79	4.60
	Rural	21	<MDL	<MDL	<MDL	1.29	2.55	3.75
	Low Income	58	<MDL	<MDL	<MDL	1.56	3.12	3.75
	Mid/High Income	66	<MDL	<MDL	<MDL	1.21	2.17	4.60
	Home Children	66	<MDL	<MDL	<MDL	1.06	3.42	4.60
	Day Care Children	62	<MDL	<MDL	1.11	1.46	2.23	3.12
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.019	0.229	0.455	0.882	9.48	34.4
	Urban	95	0.019	0.264	0.471	0.886	5.03	18.5
	Rural	21	0.075	0.171	0.300	0.847	10.6	34.4
	Low Income	52	0.019	0.189	0.507	0.874	4.46	10.5
	Mid/High Income	60	0.074	0.265	0.432	1.24	10.9	34.4
	Home Children	62	0.019	0.211	0.382	0.836	2.46	10.5
	Day Care Children	54	0.075	0.271	0.559	0.944	11.2	34.4
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	0.079	0.139	0.314	0.785	2.77
	Urban	103	<MDL	0.081	0.163	0.345	0.821	2.77
	Rural	21	<MDL	0.066	0.115	0.233	0.344	0.666
	Low Income	55	<MDL	0.098	0.189	0.382	0.821	2.77
	Mid/High Income	65	<MDL	<MDL	0.103	0.256	0.764	1.63
	Home Children	65	<MDL	0.081	0.124	0.279	0.850	2.77
	Day Care Children	59	<MDL	0.078	0.163	0.344	0.672	0.988
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	<MDL	<MDL	<MDL	5.54	11.1	18.2
	Urban	107	<MDL	<MDL	<MDL	5.69	11.1	18.2
	Rural	21	<MDL	<MDL	<MDL	5.12	10.1	14.9
	Low Income	58	<MDL	<MDL	<MDL	6.17	12.4	14.9
	Mid/High Income	66	<MDL	<MDL	<MDL	4.80	8.60	18.2
	Home Children	66	<MDL	<MDL	<MDL	4.21	13.6	18.2
	Day Care Children	62	<MDL	<MDL	4.39	5.77	8.82	12.4
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.075	0.909	1.80	3.50	37.6	136
	Urban	95	0.075	1.05	1.87	3.51	20.0	73.5
	Rural	21	0.297	0.678	1.19	3.36	41.9	136
	Low Income	52	0.075	0.749	2.01	3.47	17.7	41.7
	Mid/High Income	60	0.293	1.05	1.71	4.93	43.2	136
	Home Children	62	0.075	0.838	1.51	3.31	9.75	41.7
	Day Care Children	54	0.297	1.08	2.21	3.74	44.4	136

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-3a. Benzo[k]fluoranthene (207-08-9): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	67.7	0.825	0.601	0.707	0.502
	Urban	103	68.0	0.842	0.624	0.717	0.515
	Rural	21	66.7	0.741	0.476	0.660	0.438
	Low Income	55	72.7	0.962	0.725	0.809	0.536
	Mid/High Income	65	61.5	0.703	0.463	0.622	0.449
	Home Children	65	60.0	0.819	0.699	0.680	0.530
	Day Care Children	59	76.3	0.831	0.476	0.739	0.471
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	21.9	--	--	--	--
	Urban	107	20.6	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	58	31.0	--	--	--	--
	Mid/High Income	66	13.6	--	--	--	--
	Home Children	66	19.7	--	--	--	--
	Day Care Children	62	24.2	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	17.3	40.7	6.10	1.26
	Urban	95	100.0	14.6	30.8	6.05	1.20
	Rural	21	100.0	29.2	69.7	6.33	1.53
	Low Income	52	100.0	11.4	19.6	5.40	1.20
	Mid/High Income	60	100.0	23.2	53.0	7.07	1.31
	Home Children	62	100.0	11.0	21.2	4.98	1.15
	Day Care Children	54	100.0	24.4	54.5	7.70	1.34
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	67.7	3.27	2.38	2.80	0.502
	Urban	103	68.0	3.34	2.47	2.84	0.515
	Rural	21	66.7	2.94	1.89	2.62	0.438
	Low Income	55	72.7	3.81	2.87	3.21	0.536
	Mid/High Income	65	61.5	2.79	1.83	2.47	0.449
	Home Children	65	60.0	3.25	2.77	2.69	0.530
	Day Care Children	59	76.3	3.30	1.89	2.93	0.471
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	21.9	--	--	--	--
	Urban	107	20.6	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	58	31.0	--	--	--	--
	Mid/High Income	66	13.6	--	--	--	--
	Home Children	66	19.7	--	--	--	--
	Day Care Children	62	24.2	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	68.4	161	24.2	1.26
	Urban	95	100.0	57.9	122	24.0	1.20
	Rural	21	100.0	116	276	25.1	1.53
	Low Income	52	100.0	45.0	77.8	21.4	1.20
	Mid/High Income	60	100.0	92.0	210	28.0	1.31
	Home Children	62	100.0	43.5	84.2	19.7	1.15
	Day Care Children	54	100.0	96.9	216	30.5	1.34

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-3b. Benzo[k]fluoranthene (207-08-9): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	0.613	0.850	2.24	4.14
	Urban	103	<MDL	<MDL	0.623	0.857	2.24	4.14
	Rural	21	<MDL	<MDL	0.541	0.843	1.22	2.59
	Low Income	55	<MDL	<MDL	0.714	1.04	2.59	4.14
	Mid/High Income	65	<MDL	<MDL	0.530	0.734	1.55	3.26
	Home Children	65	<MDL	<MDL	0.530	0.796	2.57	4.14
	Day Care Children	59	<MDL	0.528	0.714	0.890	1.79	3.00
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	51.8	74.5
	Urban	107	<MDL	<MDL	<MDL	<MDL	51.1	74.5
	Rural	21	<MDL	<MDL	<MDL	39.2	52.4	52.5
	Low Income	58	<MDL	<MDL	<MDL	41.5	52.5	58.6
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	49.7	74.5
	Home Children	66	<MDL	<MDL	<MDL	<MDL	52.4	74.5
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	50.7	58.6
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	0.155	2.89	4.85	10.8	98.5	298
	Urban	95	0.155	3.07	4.95	11.1	82.3	222
	Rural	21	0.992	2.40	4.09	8.60	126	298
	Low Income	52	0.155	2.58	5.08	9.94	49.6	117
	Mid/High Income	60	1.14	3.13	4.81	14.1	122	298
	Home Children	62	0.155	2.69	4.31	8.60	26.7	117
	Day Care Children	54	0.992	3.00	5.99	11.2	126	298
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	2.43	3.37	8.88	16.4
	Urban	103	<MDL	<MDL	2.47	3.40	8.88	16.4
	Rural	21	<MDL	<MDL	2.15	3.34	4.83	10.3
	Low Income	55	<MDL	<MDL	2.83	4.12	10.3	16.4
	Mid/High Income	65	<MDL	<MDL	2.10	2.91	6.15	12.9
	Home Children	65	<MDL	<MDL	2.10	3.15	10.2	16.4
	Day Care Children	59	<MDL	2.09	2.83	3.53	7.10	11.9
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	205	295
	Urban	107	<MDL	<MDL	<MDL	<MDL	203	295
	Rural	21	<MDL	<MDL	<MDL	155	208	208
	Low Income	58	<MDL	<MDL	<MDL	165	208	232
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	197	295
	Home Children	66	<MDL	<MDL	<MDL	<MDL	208	295
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	201	232
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	0.614	11.4	19.2	42.9	390	1,180
	Urban	95	0.614	12.2	19.6	43.9	326	881
	Rural	21	3.93	9.51	16.2	34.1	499	1,180
	Low Income	52	0.614	10.2	20.1	39.4	197	464
	Mid/High Income	60	4.53	12.4	19.1	55.8	482	1,180
	Home Children	62	0.614	10.7	17.1	34.1	106	464
	Day Care Children	54	3.93	11.9	23.7	44.4	499	1,180

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-3c. Benzo[k]fluoranthene (207-08-9): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	67.7	0.026	0.024	0.021	0.558
	Urban	103	68.0	0.027	0.025	0.022	0.580
	Rural	21	66.7	0.021	0.012	0.019	0.425
	Low Income	55	72.7	0.029	0.030	0.023	0.613
	Mid/High Income	65	61.5	0.023	0.017	0.019	0.515
	Home Children	65	60.0	0.028	0.030	0.022	0.600
	Day Care Children	59	76.3	0.024	0.013	0.021	0.512
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	21.9	--	--	--	--
	Urban	107	20.6	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	58	31.0	--	--	--	--
	Mid/High Income	66	13.6	--	--	--	--
	Home Children	66	19.7	--	--	--	--
	Day Care Children	62	24.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	0.540	1.28	0.180	1.31
	Urban	95	100.0	0.448	0.937	0.181	1.23
	Rural	21	100.0	0.955	2.26	0.178	1.64
	Low Income	52	100.0	0.337	0.598	0.152	1.25
	Mid/High Income	60	100.0	0.744	1.67	0.220	1.35
	Home Children	62	100.0	0.388	0.801	0.156	1.25
	Day Care Children	54	100.0	0.714	1.66	0.213	1.37
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	67.7	0.102	0.094	0.084	0.558
	Urban	103	68.0	0.106	0.101	0.086	0.580
	Rural	21	66.7	0.082	0.048	0.074	0.425
	Low Income	55	72.7	0.117	0.120	0.092	0.613
	Mid/High Income	65	61.5	0.090	0.067	0.077	0.515
	Home Children	65	60.0	0.110	0.120	0.086	0.600
	Day Care Children	59	76.3	0.093	0.053	0.082	0.512
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	21.9	--	--	--	--
	Urban	107	20.6	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	58	31.0	--	--	--	--
	Mid/High Income	66	13.6	--	--	--	--
	Home Children	66	19.7	--	--	--	--
	Day Care Children	62	24.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	2.14	5.08	0.715	1.31
	Urban	95	100.0	1.78	3.71	0.717	1.23
	Rural	21	100.0	3.79	8.95	0.704	1.64
	Low Income	52	100.0	1.34	2.37	0.603	1.25
	Mid/High Income	60	100.0	2.95	6.63	0.871	1.35
	Home Children	62	100.0	1.54	3.17	0.619	1.25
	Day Care Children	54	100.0	2.83	6.59	0.844	1.37

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-3d. Benzo[k]fluoranthene (207-08-9): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	0.019	0.026	0.063	0.202
	Urban	103	<MDL	<MDL	0.019	0.027	0.063	0.202
	Rural	21	<MDL	<MDL	0.017	0.021	0.035	0.066
	Low Income	55	<MDL	<MDL	0.020	0.032	0.079	0.202
	Mid/High Income	65	<MDL	<MDL	0.018	0.024	0.059	0.116
	Home Children	65	<MDL	<MDL	0.018	0.024	0.068	0.202
	Day Care Children	59	<MDL	0.015	0.020	0.027	0.047	0.079
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	1.58	2.85
	Urban	107	<MDL	<MDL	<MDL	<MDL	1.58	2.85
	Rural	21	<MDL	<MDL	<MDL	1.03	1.38	1.70
	Low Income	58	<MDL	<MDL	<MDL	1.22	1.58	1.70
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	1.87	2.85
	Home Children	66	<MDL	<MDL	<MDL	<MDL	1.70	2.85
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	1.57	1.87
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.005	0.082	0.153	0.318	3.68	9.38
	Urban	95	0.005	0.092	0.162	0.330	1.78	6.45
	Rural	21	0.025	0.061	0.114	0.249	4.08	9.38
	Low Income	52	0.005	0.072	0.162	0.304	1.61	3.68
	Mid/High Income	60	0.033	0.092	0.154	0.441	4.02	9.38
	Home Children	62	0.005	0.075	0.137	0.291	0.950	3.97
	Day Care Children	54	0.025	0.092	0.185	0.333	4.08	9.38
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	0.074	0.105	0.251	0.801
	Urban	103	<MDL	<MDL	0.076	0.106	0.251	0.801
	Rural	21	<MDL	<MDL	0.067	0.085	0.140	0.263
	Low Income	55	<MDL	<MDL	0.078	0.127	0.312	0.801
	Mid/High Income	65	<MDL	<MDL	0.070	0.096	0.234	0.459
	Home Children	65	<MDL	<MDL	0.072	0.096	0.271	0.801
	Day Care Children	59	<MDL	0.061	0.078	0.108	0.187	0.312
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	6.28	11.3
	Urban	107	<MDL	<MDL	<MDL	<MDL	6.28	11.3
	Rural	21	<MDL	<MDL	<MDL	4.08	5.46	6.72
	Low Income	58	<MDL	<MDL	<MDL	4.83	6.28	6.76
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	7.40	11.3
	Home Children	66	<MDL	<MDL	<MDL	<MDL	6.72	11.3
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	6.20	7.40
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.018	0.326	0.606	1.26	14.6	37.2
	Urban	95	0.018	0.364	0.643	1.31	7.05	25.5
	Rural	21	0.098	0.243	0.452	0.988	16.2	37.2
	Low Income	52	0.018	0.284	0.644	1.20	6.37	14.6
	Mid/High Income	60	0.131	0.366	0.609	1.75	15.9	37.2
	Home Children	62	0.018	0.296	0.544	1.15	3.77	15.7
	Day Care Children	54	0.098	0.364	0.732	1.32	16.2	37.2

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-4a. Benzo[ghi]perylene (191-24-2): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	79.8	1.76	2.00	1.21	0.806
	Urban	103	81.6	1.84	2.11	1.25	0.820
	Rural	21	71.4	1.37	1.33	1.02	0.731
	Low Income	55	92.7	1.99	1.62	1.51	0.744
	Mid/High Income	65	67.7	1.58	2.31	0.991	0.825
	Home Children	65	73.8	1.86	2.44	1.16	0.882
	Day Care Children	59	86.4	1.65	1.38	1.26	0.718
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	1.6	--	--	--	--
	Urban	107	1.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	1.7	--	--	--	--
	Mid/High Income	66	1.5	--	--	--	--
	Home Children	66	1.5	--	--	--	--
	Day Care Children	62	1.6	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	25.4	64.1	9.87	1.19
	Urban	95	100.0	20.7	37.0	10.0	1.11
	Rural	21	100.0	46.6	129	9.20	1.53
	Low Income	52	100.0	17.3	27.7	8.70	1.15
	Mid/High Income	60	100.0	33.5	84.9	11.4	1.24
	Home Children	62	100.0	16.1	26.5	8.30	1.08
	Day Care Children	54	100.0	36.0	88.9	12.0	1.29
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	79.8	6.38	7.24	4.37	0.806
	Urban	103	81.6	6.66	7.63	4.52	0.820
	Rural	21	71.4	4.98	4.81	3.70	0.731
	Low Income	55	92.7	7.22	5.85	5.47	0.744
	Mid/High Income	65	67.7	5.71	8.37	3.58	0.825
	Home Children	65	73.8	6.74	8.82	4.18	0.882
	Day Care Children	59	86.4	5.98	5.00	4.58	0.718
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	1.6	--	--	--	--
	Urban	107	1.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	1.7	--	--	--	--
	Mid/High Income	66	1.5	--	--	--	--
	Home Children	66	1.5	--	--	--	--
	Day Care Children	62	1.6	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	91.9	232	35.7	1.19
	Urban	95	100.0	74.9	134	36.3	1.11
	Rural	21	100.0	169	467	33.3	1.53
	Low Income	52	100.0	62.5	100	31.5	1.15
	Mid/High Income	60	100.0	121	307	41.3	1.24
	Home Children	62	100.0	58.3	96.0	30.1	1.08
	Day Care Children	54	100.0	130	322	43.6	1.29

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-4b. Benzo[ghi]perylene (191-24-2): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	0.586	1.04	2.12	5.72	14.9
	Urban	103	<MDL	0.625	1.07	2.17	5.83	14.9
	Rural	21	<MDL	<MDL	0.787	1.56	4.26	5.72
	Low Income	55	<MDL	0.893	1.49	2.44	5.83	7.34
	Mid/High Income	65	<MDL	<MDL	0.779	1.21	5.53	14.9
	Home Children	65	<MDL	<MDL	0.849	1.76	5.90	14.9
	Day Care Children	59	<MDL	0.803	1.11	2.17	4.77	7.34
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	373
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	373
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	45.2
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	373
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	373
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	45.8
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	0.532	5.09	8.55	18.1	111	585
	Urban	95	0.532	5.32	8.86	20.8	103	260
	Rural	21	1.48	3.42	5.61	14.4	151	585
	Low Income	52	0.532	4.15	8.92	15.1	72.3	163
	Mid/High Income	60	2.06	5.33	7.85	24.0	143	585
	Home Children	62	0.532	4.66	7.08	14.7	45.1	163
	Day Care Children	54	1.48	5.49	10.4	22.7	151	585
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	2.12	3.78	7.67	20.7	53.8
	Urban	103	<MDL	2.26	3.89	7.85	21.1	53.8
	Rural	21	<MDL	<MDL	2.85	5.65	15.4	20.7
	Low Income	55	<MDL	3.23	5.41	8.85	21.1	26.6
	Mid/High Income	65	<MDL	<MDL	2.82	4.37	20.0	53.8
	Home Children	65	<MDL	<MDL	3.07	6.36	21.4	53.8
	Day Care Children	59	<MDL	2.90	4.00	7.85	17.3	26.6
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	1,350
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	1,350
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	164
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	1,350
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	1,350
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	166
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	1.92	18.4	30.9	65.4	402	2,120
	Urban	95	1.92	19.2	32.1	75.4	373	940
	Rural	21	5.34	12.4	20.3	52.1	548	2,120
	Low Income	52	1.92	15.0	32.3	54.8	262	590
	Mid/High Income	60	7.44	19.3	28.4	86.8	519	2,120
	Home Children	62	1.92	16.9	25.6	53.2	163	590
	Day Care Children	54	5.34	19.9	37.8	82.0	548	2,120

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-4c. Benzo[ghi]perylene (191-24-2): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	79.8	0.056	0.074	0.036	0.854
	Urban	103	81.6	0.060	0.079	0.038	0.879
	Rural	21	71.4	0.037	0.034	0.029	0.696
	Low Income	55	92.7	0.061	0.064	0.043	0.788
	Mid/High Income	65	67.7	0.053	0.083	0.031	0.905
	Home Children	65	73.8	0.064	0.095	0.037	0.941
	Day Care Children	59	86.4	0.047	0.037	0.035	0.754
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	1.6	--	--	--	--
	Urban	107	1.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	1.7	--	--	--	--
	Mid/High Income	66	1.5	--	--	--	--
	Home Children	66	1.5	--	--	--	--
	Day Care Children	62	1.6	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	0.793	2.02	0.292	1.25
	Urban	95	100.0	0.636	1.12	0.300	1.16
	Rural	21	100.0	1.50	4.10	0.258	1.64
	Low Income	52	100.0	0.516	0.848	0.245	1.21
	Mid/High Income	60	100.0	1.07	2.67	0.355	1.28
	Home Children	62	100.0	0.559	0.962	0.260	1.18
	Day Care Children	54	100.0	1.06	2.76	0.333	1.32
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	79.8	0.202	0.267	0.130	0.854
	Urban	103	81.6	0.216	0.286	0.136	0.879
	Rural	21	71.4	0.136	0.123	0.104	0.696
	Low Income	55	92.7	0.219	0.233	0.157	0.788
	Mid/High Income	65	67.7	0.192	0.300	0.112	0.905
	Home Children	65	73.8	0.233	0.344	0.133	0.941
	Day Care Children	59	86.4	0.169	0.136	0.128	0.754
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	1.6	--	--	--	--
	Urban	107	1.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	1.7	--	--	--	--
	Mid/High Income	66	1.5	--	--	--	--
	Home Children	66	1.5	--	--	--	--
	Day Care Children	62	1.6	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	2.87	7.29	1.06	1.25
	Urban	95	100.0	2.30	4.06	1.09	1.16
	Rural	21	100.0	5.44	14.8	0.935	1.64
	Low Income	52	100.0	1.87	3.07	0.887	1.21
	Mid/High Income	60	100.0	3.87	9.66	1.28	1.28
	Home Children	62	100.0	2.02	3.48	0.942	1.18
	Day Care Children	54	100.0	3.84	9.98	1.21	1.32

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-4d. Benzo[gh]perylene (191-24-2): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	0.019	0.029	0.057	0.177	0.528
	Urban	103	<MDL	0.019	0.029	0.067	0.184	0.528
	Rural	21	<MDL	<MDL	0.022	0.042	0.114	0.146
	Low Income	55	<MDL	0.024	0.042	0.073	0.168	0.420
	Mid/High Income	65	<MDL	<MDL	0.023	0.047	0.210	0.528
	Home Children	65	<MDL	<MDL	0.029	0.055	0.224	0.528
	Day Care Children	59	<MDL	0.022	0.036	0.063	0.124	0.184
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	10.0
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	10.0
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	1.57
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	10.0
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	10.0
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	1.87
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.016	0.136	0.254	0.540	4.33	18.4
	Urban	95	0.016	0.144	0.273	0.609	2.47	7.53
	Rural	21	0.037	0.096	0.166	0.417	4.90	18.4
	Low Income	52	0.016	0.108	0.262	0.462	2.34	5.13
	Mid/High Income	60	0.057	0.164	0.262	0.747	4.71	18.4
	Home Children	62	0.016	0.128	0.246	0.468	1.77	5.13
	Day Care Children	54	0.037	0.147	0.289	0.565	4.90	18.4
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	0.067	0.107	0.208	0.642	1.91
	Urban	103	<MDL	0.068	0.107	0.243	0.665	1.91
	Rural	21	<MDL	<MDL	0.081	0.151	0.414	0.530
	Low Income	55	<MDL	0.087	0.153	0.263	0.608	1.52
	Mid/High Income	65	<MDL	<MDL	0.083	0.171	0.760	1.91
	Home Children	65	<MDL	<MDL	0.105	0.200	0.811	1.91
	Day Care Children	59	<MDL	0.079	0.130	0.229	0.450	0.665
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	36.3
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	36.3
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	5.67
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	36.3
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	36.3
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	6.76
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.057	0.491	0.920	1.96	15.7	66.6
	Urban	95	0.057	0.522	0.988	2.21	8.93	27.2
	Rural	21	0.134	0.349	0.602	1.51	17.7	66.6
	Low Income	52	0.057	0.390	0.947	1.67	8.48	18.6
	Mid/High Income	60	0.205	0.593	0.947	2.70	17.0	66.6
	Home Children	62	0.057	0.464	0.889	1.69	6.42	18.6
	Day Care Children	54	0.134	0.532	1.05	2.05	17.7	66.6

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-5a. Benzo[a]pyrene (50-32-8): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	75.0	1.49	1.69	1.02	0.795
	Urban	103	73.8	1.47	1.58	1.03	0.778
	Rural	21	81.0	1.60	2.20	0.987	0.893
	Low Income	55	81.8	1.90	1.85	1.35	0.809
	Mid/High Income	65	67.7	1.13	1.49	0.797	0.706
	Home Children	65	63.1	1.47	1.92	0.951	0.830
	Day Care Children	59	88.1	1.51	1.40	1.11	0.753
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	24.2	--	--	--	--
	Urban	107	25.2	--	--	--	--
	Rural	21	19.0	--	--	--	--
	Low Income	58	24.1	--	--	--	--
	Mid/High Income	66	22.7	--	--	--	--
	Home Children	66	24.2	--	--	--	--
	Day Care Children	62	24.2	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	27.3	68.1	9.83	1.24
	Urban	95	100.0	22.8	46.0	10.1	1.15
	Rural	21	100.0	47.6	127	8.79	1.60
	Low Income	52	100.0	16.7	26.7	8.44	1.11
	Mid/High Income	60	100.0	37.8	90.5	11.7	1.34
	Home Children	62	100.0	16.9	28.0	8.17	1.14
	Day Care Children	54	100.0	39.2	94.3	12.2	1.32
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	75.0	5.90	6.69	4.06	0.795
	Urban	103	73.8	5.81	6.24	4.09	0.778
	Rural	21	81.0	6.36	8.71	3.91	0.893
	Low Income	55	81.8	7.52	7.33	5.33	0.809
	Mid/High Income	65	67.7	4.47	5.91	3.16	0.706
	Home Children	65	63.1	5.84	7.63	3.77	0.830
	Day Care Children	59	88.1	5.97	5.53	4.40	0.753
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	24.2	--	--	--	--
	Urban	107	25.2	--	--	--	--
	Rural	21	19.0	--	--	--	--
	Low Income	58	24.1	--	--	--	--
	Mid/High Income	66	22.7	--	--	--	--
	Home Children	66	24.2	--	--	--	--
	Day Care Children	62	24.2	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	108	270	39.0	1.24
	Urban	95	100.0	90.4	182	39.9	1.15
	Rural	21	100.0	189	504	34.8	1.60
	Low Income	52	100.0	66.2	106	33.4	1.11
	Mid/High Income	60	100.0	150	359	46.4	1.34
	Home Children	62	100.0	67.0	111	32.4	1.14
	Day Care Children	54	100.0	155	374	48.2	1.32

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-5b. Benzo[a]pyrene (50-32-8): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	0.796	1.70	4.18	10.1
	Urban	103	<MDL	<MDL	0.889	1.70	3.93	9.27
	Rural	21	<MDL	0.507	0.588	1.87	4.18	10.1
	Low Income	55	<MDL	0.621	1.31	2.51	6.15	10.1
	Mid/High Income	65	<MDL	<MDL	0.577	1.15	2.95	9.27
	Home Children	65	<MDL	<MDL	0.595	1.56	3.93	10.1
	Day Care Children	59	<MDL	0.588	1.04	1.73	5.31	7.15
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	68.7	192
	Urban	107	<MDL	<MDL	<MDL	39.0	77.3	192
	Rural	21	<MDL	<MDL	<MDL	<MDL	50.9	63.7
	Low Income	58	<MDL	<MDL	<MDL	<MDL	77.3	176
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	51.1	192
	Home Children	66	<MDL	<MDL	<MDL	<MDL	77.3	192
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	67.9	176
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	0.843	4.40	7.68	18.3	148	568
	Urban	95	0.843	4.60	8.85	18.8	118	343
	Rural	21	1.22	3.00	5.65	14.2	185	568
	Low Income	52	0.898	4.27	7.05	15.5	72.0	154
	Mid/High Income	60	0.843	5.06	8.26	23.0	184	568
	Home Children	62	0.843	4.26	6.62	16.5	53.3	154
	Day Care Children	54	1.22	4.60	10.3	19.2	185	568
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	3.16	6.74	16.6	39.8
	Urban	103	<MDL	<MDL	3.52	6.73	15.6	36.8
	Rural	21	<MDL	2.01	2.33	7.43	16.6	39.8
	Low Income	55	<MDL	2.46	5.19	9.96	24.4	39.8
	Mid/High Income	65	<MDL	<MDL	2.29	4.57	11.7	36.8
	Home Children	65	<MDL	<MDL	2.36	6.20	15.6	39.8
	Day Care Children	59	<MDL	2.33	4.13	6.86	21.0	28.3
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	272	762
	Urban	107	<MDL	<MDL	<MDL	155	306	762
	Rural	21	<MDL	<MDL	<MDL	<MDL	202	253
	Low Income	58	<MDL	<MDL	<MDL	<MDL	306	698
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	203	762
	Home Children	66	<MDL	<MDL	<MDL	<MDL	306	762
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	269	698
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	3.34	17.4	30.4	72.6	585	2,250
	Urban	95	3.34	18.2	35.1	74.6	466	1,360
	Rural	21	4.84	11.9	22.4	56.4	733	2,250
	Low Income	52	3.56	16.9	27.9	61.3	285	609
	Mid/High Income	60	3.34	20.1	32.7	91.1	727	2,250
	Home Children	62	3.34	16.9	26.2	65.3	211	609
	Day Care Children	54	4.84	18.2	40.6	76.1	733	2,250

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-5c. Benzo[a]pyrene (50-32-8): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	75.0	0.046	0.056	0.031	0.829
	Urban	103	73.8	0.046	0.057	0.031	0.822
	Rural	21	81.0	0.044	0.057	0.028	0.877
	Low Income	55	81.8	0.057	0.059	0.039	0.858
	Mid/High Income	65	67.7	0.037	0.055	0.025	0.768
	Home Children	65	63.1	0.049	0.068	0.030	0.870
	Day Care Children	59	88.1	0.043	0.039	0.031	0.790
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	24.2	--	--	--	--
	Urban	107	25.2	--	--	--	--
	Rural	21	19.0	--	--	--	--
	Low Income	58	24.1	--	--	--	--
	Mid/High Income	66	22.7	--	--	--	--
	Home Children	66	24.2	--	--	--	--
	Day Care Children	62	24.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	0.854	2.13	0.291	1.30
	Urban	95	100.0	0.703	1.40	0.302	1.19
	Rural	21	100.0	1.54	4.05	0.247	1.72
	Low Income	52	100.0	0.501	0.825	0.238	1.17
	Mid/High Income	60	100.0	1.20	2.83	0.364	1.38
	Home Children	62	100.0	0.593	1.05	0.256	1.23
	Day Care Children	54	100.0	1.15	2.90	0.336	1.37
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	75.0	0.183	0.224	0.121	0.829
	Urban	103	73.8	0.184	0.224	0.124	0.822
	Rural	21	81.0	0.174	0.227	0.110	0.877
	Low Income	55	81.8	0.224	0.234	0.153	0.858
	Mid/High Income	65	67.7	0.148	0.217	0.099	0.768
	Home Children	65	63.1	0.194	0.271	0.120	0.870
	Day Care Children	59	88.1	0.170	0.156	0.123	0.790
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	24.2	--	--	--	--
	Urban	107	25.2	--	--	--	--
	Rural	21	19.0	--	--	--	--
	Low Income	58	24.1	--	--	--	--
	Mid/High Income	66	22.7	--	--	--	--
	Home Children	66	24.2	--	--	--	--
	Day Care Children	62	24.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	3.39	8.45	1.15	1.30
	Urban	95	100.0	2.79	5.54	1.20	1.19
	Rural	21	100.0	6.09	16.0	0.978	1.72
	Low Income	52	100.0	1.98	3.27	0.943	1.17
	Mid/High Income	60	100.0	4.77	11.2	1.44	1.38
	Home Children	62	100.0	2.35	4.17	1.02	1.23
	Day Care Children	54	100.0	4.57	11.5	1.33	1.37

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-5d. Benzo[a]pyrene (50-32-8): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	0.025	0.055	0.133	0.329
	Urban	103	<MDL	<MDL	0.027	0.054	0.133	0.329
	Rural	21	<MDL	0.015	0.018	0.059	0.121	0.258
	Low Income	55	<MDL	0.018	0.038	0.072	0.188	0.293
	Mid/High Income	65	<MDL	<MDL	0.019	0.041	0.098	0.329
	Home Children	65	<MDL	<MDL	0.021	0.049	0.258	0.329
	Day Care Children	59	<MDL	0.016	0.029	0.059	0.133	0.188
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	2.23	8.47
	Urban	107	<MDL	<MDL	<MDL	1.10	2.43	8.47
	Rural	21	<MDL	<MDL	<MDL	<MDL	1.33	1.67
	Low Income	58	<MDL	<MDL	<MDL	<MDL	2.43	5.39
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	1.97	8.47
	Home Children	66	<MDL	<MDL	<MDL	<MDL	2.43	8.47
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	2.08	5.39
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.024	0.127	0.246	0.573	4.84	17.9
	Urban	95	0.024	0.137	0.265	0.595	2.66	9.94
	Rural	21	0.027	0.083	0.147	0.408	5.99	17.9
	Low Income	52	0.027	0.118	0.234	0.424	2.29	4.84
	Mid/High Income	60	0.024	0.147	0.268	0.752	6.03	17.9
	Home Children	62	0.024	0.118	0.220	0.471	2.04	5.18
	Day Care Children	54	0.027	0.135	0.284	0.595	6.08	17.9
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	0.098	0.220	0.526	1.31
	Urban	103	<MDL	<MDL	0.105	0.214	0.526	1.31
	Rural	21	<MDL	0.059	0.072	0.233	0.481	1.02
	Low Income	55	<MDL	0.070	0.149	0.285	0.745	1.16
	Mid/High Income	65	<MDL	<MDL	0.077	0.164	0.390	1.31
	Home Children	65	<MDL	<MDL	0.085	0.195	1.02	1.31
	Day Care Children	59	<MDL	0.065	0.113	0.234	0.526	0.745
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	8.82	33.6
	Urban	107	<MDL	<MDL	<MDL	4.37	9.64	33.6
	Rural	21	<MDL	<MDL	<MDL	<MDL	5.29	6.62
	Low Income	58	<MDL	<MDL	<MDL	<MDL	9.64	21.4
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	7.80	33.6
	Home Children	66	<MDL	<MDL	<MDL	<MDL	9.64	33.6
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	8.23	21.4
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.097	0.503	0.976	2.27	19.2	70.9
	Urban	95	0.097	0.544	1.05	2.36	10.6	39.4
	Rural	21	0.108	0.327	0.582	1.62	23.7	70.9
	Low Income	52	0.108	0.467	0.927	1.68	9.07	19.2
	Mid/High Income	60	0.097	0.582	1.06	2.98	23.9	70.9
	Home Children	62	0.097	0.466	0.870	1.87	8.08	20.5
	Day Care Children	54	0.108	0.537	1.12	2.36	24.1	70.9

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-6a. Benzo[e]pyrene (192-97-2): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	73.4	1.04	0.817	0.845	0.608
	Urban	103	73.8	1.05	0.800	0.858	0.611
	Rural	21	71.4	0.979	0.913	0.785	0.603
	Low Income	55	83.6	1.28	0.936	1.04	0.622
	Mid/High Income	65	63.1	0.840	0.660	0.704	0.544
	Home Children	65	66.2	0.988	0.856	0.786	0.616
	Day Care Children	59	81.4	1.10	0.775	0.916	0.594
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	36.7	--	--	--	--
	Urban	107	36.4	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	58	41.4	--	--	--	--
	Mid/High Income	66	31.8	--	--	--	--
	Home Children	66	33.3	--	--	--	--
	Day Care Children	62	40.3	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	27.0	70.2	9.78	1.22
	Urban	95	100.0	21.8	43.3	9.80	1.14
	Rural	21	100.0	50.2	137	9.67	1.55
	Low Income	52	100.0	17.6	28.3	8.88	1.15
	Mid/High Income	60	100.0	36.4	93.4	11.1	1.29
	Home Children	62	100.0	16.2	28.7	8.01	1.10
	Day Care Children	54	100.0	39.3	97.3	12.3	1.32
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	73.4	4.13	3.24	3.35	0.608
	Urban	103	73.8	4.18	3.17	3.40	0.611
	Rural	21	71.4	3.88	3.62	3.11	0.603
	Low Income	55	83.6	5.06	3.71	4.12	0.622
	Mid/High Income	65	63.1	3.33	2.62	2.79	0.544
	Home Children	65	66.2	3.92	3.39	3.12	0.616
	Day Care Children	59	81.4	4.36	3.07	3.63	0.594
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	36.7	--	--	--	--
	Urban	107	36.4	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	58	41.4	--	--	--	--
	Mid/High Income	66	31.8	--	--	--	--
	Home Children	66	33.3	--	--	--	--
	Day Care Children	62	40.3	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	107	278	38.7	1.22
	Urban	95	100.0	86.6	172	38.8	1.14
	Rural	21	100.0	199	545	38.3	1.55
	Low Income	52	100.0	69.6	112	35.2	1.15
	Mid/High Income	60	100.0	144	370	43.9	1.29
	Home Children	62	100.0	64.3	114	31.8	1.10
	Day Care Children	54	100.0	156	386	48.7	1.32

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-6b. Benzo[e]pyrene (192-97-2): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	0.733	1.21	2.52	4.59
	Urban	103	<MDL	<MDL	0.744	1.21	2.52	4.46
	Rural	21	<MDL	<MDL	0.580	1.19	1.69	4.59
	Low Income	55	<MDL	0.580	0.960	1.69	3.64	4.59
	Mid/High Income	65	<MDL	<MDL	0.541	1.01	2.21	4.30
	Home Children	65	<MDL	<MDL	0.589	1.11	2.68	4.59
	Day Care Children	59	<MDL	0.548	0.932	1.35	2.52	4.46
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	<MDL	<MDL	<MDL	41.1	71.8	145
	Urban	107	<MDL	<MDL	<MDL	41.5	72.8	145
	Rural	21	<MDL	<MDL	<MDL	40.0	63.7	69.3
	Low Income	58	<MDL	<MDL	<MDL	44.1	76.0	145
	Mid/High Income	66	<MDL	<MDL	<MDL	37.7	60.6	107
	Home Children	66	<MDL	<MDL	<MDL	34.4	69.3	107
	Day Care Children	62	<MDL	<MDL	<MDL	42.0	74.3	145
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	0.391	4.63	7.75	17.8	138	619
	Urban	95	0.391	5.11	7.92	18.0	103	314
	Rural	21	1.49	4.04	6.19	12.6	171	619
	Low Income	52	0.391	4.23	8.97	15.9	70.5	168
	Mid/High Income	60	1.88	5.29	7.19	21.8	168	619
	Home Children	62	0.391	4.32	6.94	12.6	40.5	168
	Day Care Children	54	1.49	5.29	10.1	18.6	171	619
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	2.90	4.80	9.99	18.2
	Urban	103	<MDL	<MDL	2.95	4.80	9.99	17.7
	Rural	21	<MDL	<MDL	2.30	4.72	6.70	18.2
	Low Income	55	<MDL	2.30	3.80	6.70	14.4	18.2
	Mid/High Income	65	<MDL	<MDL	2.14	4.01	8.78	17.0
	Home Children	65	<MDL	<MDL	2.34	4.39	10.6	18.2
	Day Care Children	59	<MDL	2.17	3.69	5.34	9.99	17.7
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	<MDL	<MDL	<MDL	163	285	574
	Urban	107	<MDL	<MDL	<MDL	165	288	574
	Rural	21	<MDL	<MDL	<MDL	159	253	275
	Low Income	58	<MDL	<MDL	<MDL	175	301	574
	Mid/High Income	66	<MDL	<MDL	<MDL	149	240	423
	Home Children	66	<MDL	<MDL	<MDL	137	275	423
	Day Care Children	62	<MDL	<MDL	<MDL	167	295	574
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	1.55	18.4	30.7	70.6	549	2,450
	Urban	95	1.55	20.2	31.4	71.5	409	1,250
	Rural	21	5.89	16.0	24.5	50.1	676	2,450
	Low Income	52	1.55	16.8	35.5	63.0	279	666
	Mid/High Income	60	7.44	21.0	28.5	86.3	667	2,450
	Home Children	62	1.55	17.1	27.5	50.1	161	666
	Day Care Children	54	5.89	21.0	40.1	73.9	676	2,450

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-6c. Benzo[e]pyrene (192-97-2): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	73.4	0.032	0.028	0.025	0.639
	Urban	103	73.8	0.033	0.029	0.026	0.650
	Rural	21	71.4	0.027	0.023	0.022	0.576
	Low Income	55	83.6	0.038	0.032	0.030	0.664
	Mid/High Income	65	63.1	0.027	0.023	0.022	0.601
	Home Children	65	66.2	0.033	0.032	0.025	0.655
	Day Care Children	59	81.4	0.031	0.022	0.026	0.626
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	36.7	--	--	--	--
	Urban	107	36.4	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	58	41.4	--	--	--	--
	Mid/High Income	66	31.8	--	--	--	--
	Home Children	66	33.3	--	--	--	--
	Day Care Children	62	40.3	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	0.842	2.20	0.289	1.27
	Urban	95	100.0	0.669	1.30	0.293	1.19
	Rural	21	100.0	1.62	4.38	0.271	1.65
	Low Income	52	100.0	0.521	0.863	0.250	1.20
	Mid/High Income	60	100.0	1.16	2.93	0.345	1.33
	Home Children	62	100.0	0.569	1.06	0.251	1.19
	Day Care Children	54	100.0	1.15	3.01	0.340	1.35
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	73.4	0.127	0.110	0.100	0.639
	Urban	103	73.8	0.131	0.114	0.103	0.650
	Rural	21	71.4	0.106	0.092	0.087	0.576
	Low Income	55	83.6	0.150	0.129	0.118	0.664
	Mid/High Income	65	63.1	0.108	0.092	0.087	0.601
	Home Children	65	66.2	0.129	0.128	0.099	0.655
	Day Care Children	59	81.4	0.124	0.088	0.101	0.626
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	36.7	--	--	--	--
	Urban	107	36.4	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	58	41.4	--	--	--	--
	Mid/High Income	66	31.8	--	--	--	--
	Home Children	66	33.3	--	--	--	--
	Day Care Children	62	40.3	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	3.34	8.73	1.15	1.27
	Urban	95	100.0	2.65	5.17	1.16	1.19
	Rural	21	100.0	6.43	17.3	1.08	1.65
	Low Income	52	100.0	2.06	3.42	0.992	1.20
	Mid/High Income	60	100.0	4.60	11.6	1.37	1.33
	Home Children	62	100.0	2.25	4.21	0.996	1.19
	Day Care Children	54	100.0	4.58	11.9	1.35	1.35

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-6d. Benzo[e]pyrene (192-97-2): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	0.022	0.038	0.084	0.185
	Urban	103	<MDL	<MDL	0.023	0.038	0.084	0.185
	Rural	21	<MDL	<MDL	0.018	0.032	0.045	0.118
	Low Income	55	<MDL	0.017	0.027	0.045	0.117	0.185
	Mid/High Income	65	<MDL	<MDL	0.019	0.031	0.082	0.153
	Home Children	65	<MDL	<MDL	0.020	0.036	0.085	0.185
	Day Care Children	59	<MDL	0.016	0.025	0.038	0.070	0.117
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	<MDL	<MDL	<MDL	1.19	2.29	3.19
	Urban	107	<MDL	<MDL	<MDL	1.21	2.32	3.19
	Rural	21	<MDL	<MDL	<MDL	1.03	1.67	2.24
	Low Income	58	<MDL	<MDL	<MDL	1.43	2.64	3.19
	Mid/High Income	66	<MDL	<MDL	<MDL	1.10	1.87	3.16
	Home Children	66	<MDL	<MDL	<MDL	1.06	2.29	3.16
	Day Care Children	62	<MDL	<MDL	<MDL	1.22	1.87	3.19
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.012	0.132	0.245	0.513	5.14	19.5
	Urban	95	0.012	0.146	0.255	0.555	2.50	9.11
	Rural	21	0.037	0.096	0.172	0.367	5.52	19.5
	Low Income	52	0.012	0.120	0.262	0.482	2.28	5.28
	Mid/High Income	60	0.052	0.153	0.233	0.709	5.53	19.5
	Home Children	62	0.012	0.127	0.224	0.480	1.52	5.28
	Day Care Children	54	0.037	0.146	0.296	0.555	5.54	19.5
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	0.087	0.149	0.333	0.734
	Urban	103	<MDL	<MDL	0.090	0.151	0.333	0.734
	Rural	21	<MDL	<MDL	0.070	0.126	0.180	0.466
	Low Income	55	<MDL	0.067	0.109	0.180	0.463	0.734
	Mid/High Income	65	<MDL	<MDL	0.075	0.124	0.325	0.605
	Home Children	65	<MDL	<MDL	0.079	0.144	0.338	0.734
	Day Care Children	59	<MDL	0.063	0.101	0.151	0.279	0.463
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	<MDL	<MDL	<MDL	4.70	9.08	12.7
	Urban	107	<MDL	<MDL	<MDL	4.80	9.20	12.7
	Rural	21	<MDL	<MDL	<MDL	4.08	6.62	8.90
	Low Income	58	<MDL	<MDL	<MDL	5.68	10.5	12.7
	Mid/High Income	66	<MDL	<MDL	<MDL	4.38	7.40	12.5
	Home Children	66	<MDL	<MDL	<MDL	4.21	9.08	12.5
	Day Care Children	62	<MDL	<MDL	<MDL	4.83	7.40	12.7
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.046	0.522	0.970	2.03	20.4	77.2
	Urban	95	0.046	0.577	1.01	2.20	9.90	36.1
	Rural	21	0.147	0.381	0.680	1.45	21.9	77.2
	Low Income	52	0.046	0.478	1.04	1.91	9.05	20.9
	Mid/High Income	60	0.205	0.606	0.922	2.81	21.9	77.2
	Home Children	62	0.046	0.503	0.889	1.90	6.02	20.9
	Day Care Children	54	0.147	0.578	1.17	2.20	21.9	77.2

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-7a. Benzylbutylphthalate (85-68-7): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	44.4	--	--	--	--
	Urban	103	47.6	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	55	54.5	1,570	5,820	624	0.924
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	65	36.9	--	--	--	--
	Day Care Children	59	52.5	714	827	529	0.670
Potential Exposure via Dietary Ingestion (ng/day)	Overall	81	14.8	--	--	--	--
	Urban	65	15.4	--	--	--	--
	Rural	16	12.5	--	--	--	--
	Low Income	34	11.8	--	--	--	--
	Mid/High Income	44	18.2	--	--	--	--
	Home Children	48	8.3	--	--	--	--
	Day Care Children	33	24.2	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	111	100.0	2,430	3,540	1,060	1.31
	Urban	95	100.0	2,280	3,390	1,010	1.31
	Rural	16	100.0	3,310	4,380	1,480	1.32
	Low Income	45	100.0	3,740	4,340	1,710	1.44
	Mid/High Income	62	100.0	1,590	2,610	798	1.11
	Home Children	63	100.0	2,170	3,340	846	1.38
	Day Care Children	48	100.0	2,770	3,800	1,430	1.16
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	44.4	--	--	--	--
	Urban	103	47.6	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	55	54.5	5,020	18,600	2,000	0.924
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	65	36.9	--	--	--	--
	Day Care Children	59	52.5	2,290	2,650	1,690	0.670
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	81	14.8	--	--	--	--
	Urban	65	15.4	--	--	--	--
	Rural	16	12.5	--	--	--	--
	Low Income	34	11.8	--	--	--	--
	Mid/High Income	44	18.2	--	--	--	--
	Home Children	48	8.3	--	--	--	--
	Day Care Children	33	24.2	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	111	100.0	7,790	11,300	3,400	1.31
	Urban	95	100.0	7,310	10,800	3,220	1.31
	Rural	16	100.0	10,600	14,000	4,730	1.32
	Low Income	45	100.0	12,000	13,900	5,470	1.44
	Mid/High Income	62	100.0	5,100	8,370	2,550	1.11
	Home Children	63	100.0	6,960	10,700	2,710	1.38
	Day Care Children	48	100.0	8,870	12,200	4,590	1.16

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-7b. Benzylbutylphthalate (85-68-7): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	<MDL	808	2,340	43,500
	Urban	103	<MDL	<MDL	<MDL	847	2,360	43,500
	Rural	21	<MDL	<MDL	<MDL	498	999	2,340
	Low Income	55	<MDL	<MDL	498	999	2,580	43,500
	Mid/High Income	65	<MDL	<MDL	<MDL	574	1,860	3,580
	Home Children	65	<MDL	<MDL	<MDL	805	2,340	43,500
	Day Care Children	59	<MDL	<MDL	401	812	2,360	5,530
Potential Exposure via Dietary Ingestion (ng/day)	Overall	81	<MDL	<MDL	<MDL	<MDL	46,600	255,000
	Urban	65	<MDL	<MDL	<MDL	<MDL	46,600	160,000
	Rural	16	<MDL	<MDL	<MDL	<MDL	255,000	255,000
	Low Income	34	<MDL	<MDL	<MDL	<MDL	57,400	255,000
	Mid/High Income	44	<MDL	<MDL	<MDL	<MDL	38,300	160,000
	Home Children	48	<MDL	<MDL	<MDL	<MDL	47,200	255,000
	Day Care Children	33	<MDL	<MDL	<MDL	<MDL	46,600	160,000
Potential Exposure via Indirect Ingestion (ng/day)	Overall	111	28.4	368	923	2,620	10,200	19,000
	Urban	95	28.4	358	899	2,620	10,200	19,000
	Rural	16	240	507	1,270	4,560	14,300	14,300
	Low Income	45	28.4	564	2,130	4,500	12,300	19,000
	Mid/High Income	62	106	337	714	1,550	4,530	14,300
	Home Children	63	28.4	306	666	2,130	9,880	14,300
	Day Care Children	48	128	609	1,390	3,150	12,300	19,000
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	<MDL	2,590	7,480	139,000
	Urban	103	<MDL	<MDL	<MDL	2,710	7,550	139,000
	Rural	21	<MDL	<MDL	<MDL	1,600	3,200	7,480
	Low Income	55	<MDL	<MDL	1,600	3,200	8,270	139,000
	Mid/High Income	65	<MDL	<MDL	<MDL	1,840	5,960	11,500
	Home Children	65	<MDL	<MDL	<MDL	2,580	7,480	139,000
	Day Care Children	59	<MDL	<MDL	1,280	2,600	7,550	17,700
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	81	<MDL	<MDL	<MDL	<MDL	149,000	815,000
	Urban	65	<MDL	<MDL	<MDL	<MDL	149,000	514,000
	Rural	16	<MDL	<MDL	<MDL	<MDL	815,000	815,000
	Low Income	34	<MDL	<MDL	<MDL	<MDL	184,000	815,000
	Mid/High Income	44	<MDL	<MDL	<MDL	<MDL	123,000	514,000
	Home Children	48	<MDL	<MDL	<MDL	<MDL	151,000	815,000
	Day Care Children	33	<MDL	<MDL	<MDL	<MDL	149,000	514,000
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	111	91.0	1,180	2,960	8,380	32,800	60,800
	Urban	95	91.0	1,150	2,880	8,380	32,800	60,800
	Rural	16	767	1,620	4,050	14,600	45,700	45,700
	Low Income	45	91.0	1,810	6,820	14,400	39,400	60,800
	Mid/High Income	62	340	1,080	2,290	4,960	14,500	45,700
	Home Children	63	91.0	981	2,130	6,820	31,600	45,700
	Day Care Children	48	410	1,950	4,440	10,100	39,400	60,800

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-7c. Benzylbutylphthalate (85-68-7): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	44.4	--	--	--	--
	Urban	103	47.6	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	55	54.5	46.2	165	17.9	0.998
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	65	36.9	--	--	--	--
	Day Care Children	59	52.5	20.3	24.7	14.8	0.698
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	81	14.8	--	--	--	--
	Urban	65	15.4	--	--	--	--
	Rural	16	12.5	--	--	--	--
	Low Income	34	11.8	--	--	--	--
	Mid/High Income	44	18.2	--	--	--	--
	Home Children	48	8.3	--	--	--	--
	Day Care Children	33	24.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	111	100.0	76.1	119	31.9	1.35
	Urban	95	100.0	71.9	113	30.4	1.35
	Rural	16	100.0	101	152	42.9	1.33
	Low Income	45	100.0	110	137	48.6	1.47
	Mid/High Income	62	100.0	55.3	103	25.1	1.16
	Home Children	63	100.0	72.7	117	26.7	1.44
	Day Care Children	48	100.0	80.5	123	40.3	1.18
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	44.4	--	--	--	--
	Urban	103	47.6	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	55	54.5	148	527	57.2	0.998
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	65	36.9	--	--	--	--
	Day Care Children	59	52.5	65.0	79.1	47.2	0.698
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	81	14.8	--	--	--	--
	Urban	65	15.4	--	--	--	--
	Rural	16	12.5	--	--	--	--
	Low Income	34	11.8	--	--	--	--
	Mid/High Income	44	18.2	--	--	--	--
	Home Children	48	8.3	--	--	--	--
	Day Care Children	33	24.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	111	100.0	244	382	102	1.35
	Urban	95	100.0	230	363	97.2	1.35
	Rural	16	100.0	322	485	137	1.33
	Low Income	45	100.0	351	439	156	1.47
	Mid/High Income	62	100.0	177	329	80.5	1.16
	Home Children	63	100.0	233	375	85.5	1.44
	Day Care Children	48	100.0	258	394	129	1.18

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-7d. Benzylbutylphthalate (85-68-7): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	<MDL	25.7	81.3	1,230
	Urban	103	<MDL	<MDL	<MDL	27.4	84.2	1,230
	Rural	21	<MDL	<MDL	<MDL	12.4	28.9	59.8
	Low Income	55	<MDL	<MDL	13.2	29.6	85.9	1,230
	Mid/High Income	65	<MDL	<MDL	<MDL	16.6	48.6	93.9
	Home Children	65	<MDL	<MDL	<MDL	27.6	84.2	1,230
	Day Care Children	59	<MDL	<MDL	12.2	22.8	70.2	169
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	81	<MDL	<MDL	<MDL	<MDL	1,530	5,190
	Urban	65	<MDL	<MDL	<MDL	<MDL	1,530	4,420
	Rural	16	<MDL	<MDL	<MDL	<MDL	5,190	5,190
	Low Income	34	<MDL	<MDL	<MDL	<MDL	2,110	5,190
	Mid/High Income	44	<MDL	<MDL	<MDL	<MDL	868	4,420
	Home Children	48	<MDL	<MDL	<MDL	<MDL	1,530	5,190
	Day Care Children	33	<MDL	<MDL	<MDL	<MDL	1,550	4,420
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	111	0.763	11.4	25.9	82.8	296	746
	Urban	95	0.763	10.2	25.3	82.8	296	746
	Rural	16	6.71	16.6	40.5	132	582	582
	Low Income	45	0.763	15.5	62.7	146	296	746
	Mid/High Income	62	3.16	10.1	21.9	57.5	204	582
	Home Children	63	0.763	9.91	20.9	70.4	322	582
	Day Care Children	48	4.41	19.3	38.0	85.5	287	746
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	<MDL	82.4	260	3,930
	Urban	103	<MDL	<MDL	<MDL	87.8	269	3,930
	Rural	21	<MDL	<MDL	<MDL	39.8	92.7	192
	Low Income	55	<MDL	<MDL	42.1	94.9	275	3,930
	Mid/High Income	65	<MDL	<MDL	<MDL	53.0	155	301
	Home Children	65	<MDL	<MDL	<MDL	88.2	269	3,930
	Day Care Children	59	<MDL	<MDL	39.2	72.8	225	541
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	81	<MDL	<MDL	<MDL	<MDL	4,890	16,600
	Urban	65	<MDL	<MDL	<MDL	<MDL	4,890	14,100
	Rural	16	<MDL	<MDL	<MDL	<MDL	16,600	16,600
	Low Income	34	<MDL	<MDL	<MDL	<MDL	6,750	16,600
	Mid/High Income	44	<MDL	<MDL	<MDL	<MDL	2,780	14,100
	Home Children	48	<MDL	<MDL	<MDL	<MDL	4,890	16,600
	Day Care Children	33	<MDL	<MDL	<MDL	<MDL	4,970	14,100
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	111	2.44	36.4	83.0	265	947	2,390
	Urban	95	2.44	32.5	81.1	265	947	2,390
	Rural	16	21.5	53.1	129	423	1,860	1,860
	Low Income	45	2.44	49.7	201	466	947	2,390
	Mid/High Income	62	10.1	32.4	70.2	184	652	1,860
	Home Children	63	2.44	31.7	67.0	225	1,030	1,860
	Day Care Children	48	14.1	61.7	122	274	918	2,390

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-8a. Bisphenol-A (80-05-7): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	82.3	32.7	119	15.5	0.911
	Urban	103	80.6	34.6	130	15.6	0.923
	Rural	21	90.5	23.4	26.3	15.3	0.875
	Low Income	55	87.3	25.6	34.2	16.7	0.840
	Mid/High Income	65	80.0	38.3	161	14.4	0.939
	Home Children	65	81.5	43.7	162	16.5	1.03
	Day Care Children	59	83.1	20.5	24.4	14.6	0.762
Potential Exposure via Dietary Ingestion (ng/day)	Overall	129	98.4	4,540	6,690	2,640	1.06
	Urban	108	98.1	4,550	7,130	2,560	1.08
	Rural	21	100.0	4,470	3,770	3,120	0.931
	Low Income	59	98.3	4,190	3,490	2,910	0.947
	Mid/High Income	66	98.5	5,000	8,740	2,530	1.14
	Home Children	66	97.0	2,900	3,070	1,710	1.09
	Day Care Children	63	100.0	6,250	8,750	4,150	0.823
Potential Exposure via Indirect Ingestion (ng/day)	Overall	107	41.1	--	--	--	--
	Urban	87	39.1	--	--	--	--
	Rural	20	50.0	5.08	15.4	1.33	1.29
	Low Income	42	54.8	2.02	2.83	1.16	0.995
	Mid/High Income	61	34.4	--	--	--	--
	Home Children	63	22.2	--	--	--	--
	Day Care Children	44	68.2	2.03	2.12	1.37	0.855
Potential Exposure – Aggregated (ng/day)	Overall	102	100.0	4,190	6,190	2,500	1.03
	Urban	82	100.0	4,090	6,660	2,350	1.06
	Rural	20	100.0	4,580	3,830	3,220	0.919
	Low Income	38	100.0	3,860	3,280	2,660	0.949
	Mid/High Income	60	100.0	4,530	7,630	2,490	1.08
	Home Children	62	100.0	3,040	3,120	1,850	1.05
	Day Care Children	40	100.0	5,960	8,880	3,980	0.814
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	82.3	143	521	68.1	0.911
	Urban	103	80.6	151	569	68.2	0.923
	Rural	21	90.5	103	115	67.2	0.875
	Low Income	55	87.3	112	150	73.1	0.840
	Mid/High Income	65	80.0	168	706	63.2	0.939
	Home Children	65	81.5	191	711	72.1	1.03
	Day Care Children	59	83.1	89.9	107	63.9	0.762
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	129	98.4	19,900	29,300	11,600	1.06
	Urban	108	98.1	19,900	31,200	11,200	1.08
	Rural	21	100.0	19,600	16,500	13,700	0.931
	Low Income	59	98.3	18,400	15,300	12,700	0.947
	Mid/High Income	66	98.5	21,900	38,300	11,100	1.14
	Home Children	66	97.0	12,700	13,400	7,510	1.09
	Day Care Children	63	100.0	27,400	38,300	18,200	0.823
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	107	41.1	--	--	--	--
	Urban	87	39.1	--	--	--	--
	Rural	20	50.0	22.2	67.4	5.83	1.29
	Low Income	42	54.8	8.87	12.4	5.06	0.995
	Mid/High Income	61	34.4	--	--	--	--
	Home Children	63	22.2	--	--	--	--
	Day Care Children	44	68.2	8.88	9.31	6.02	0.855
Potential Exposure – Aggregated (pmoles/day)	Overall	102	100.0	18,300	27,100	10,900	1.03
	Urban	82	100.0	17,900	29,200	10,300	1.06
	Rural	20	100.0	20,100	16,800	14,100	0.919
	Low Income	38	100.0	16,900	14,300	11,700	0.949
	Mid/High Income	60	100.0	19,800	33,400	10,900	1.08
	Home Children	62	100.0	13,300	13,700	8,100	1.05
	Day Care Children	40	100.0	26,100	38,900	17,400	0.814

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-8b. Bisphenol-A (80-05-7): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	7.49	13.6	23.9	69.3	1,310
	Urban	103	<MDL	7.44	14.0	24.3	63.2	1,310
	Rural	21	<MDL	7.55	12.4	22.2	92.3	95.9
	Low Income	55	<MDL	7.96	14.0	28.2	92.1	194
	Mid/High Income	65	<MDL	7.18	12.7	22.2	63.2	1,310
	Home Children	65	<MDL	7.66	12.1	29.7	92.3	1,310
	Day Care Children	59	<MDL	7.44	14.1	22.1	63.2	165
Potential Exposure via Dietary Ingestion (ng/day)	Overall	129	<MDL	1,540	2,720	5,410	11,800	57,200
	Urban	108	<MDL	1,540	2,570	5,260	11,800	57,200
	Rural	21	359	1,500	3,470	6,020	11,200	15,000
	Low Income	59	<MDL	1,770	2,940	5,620	12,600	16,200
	Mid/High Income	66	<MDL	1,210	2,500	5,450	11,800	57,200
	Home Children	66	<MDL	735	1,750	3,780	10,500	12,800
	Day Care Children	63	787	2,260	4,200	6,140	15,000	57,200
Potential Exposure via Indirect Ingestion (ng/day)	Overall	107	<MDL	<MDL	<MDL	2.36	7.63	70.0
	Urban	87	<MDL	<MDL	<MDL	2.36	7.53	12.1
	Rural	20	<MDL	<MDL	<MDL	2.08	38.8	70.0
	Low Income	42	<MDL	<MDL	1.22	1.70	10.2	12.1
	Mid/High Income	61	<MDL	<MDL	<MDL	2.74	7.53	70.0
	Home Children	63	<MDL	<MDL	<MDL	<MDL	11.7	70.0
	Day Care Children	44	<MDL	<MDL	1.28	2.26	7.53	10.2
Potential Exposure – Aggregated (ng/day)	Overall	102	203	1,500	2,560	5,240	11,300	57,200
	Urban	82	203	1,500	2,210	5,140	10,500	57,200
	Rural	20	452	1,500	3,640	6,500	13,100	15,000
	Low Income	38	203	1,590	2,640	5,140	12,700	12,800
	Mid/High Income	60	249	1,360	2,460	5,440	11,200	57,200
	Home Children	62	203	895	1,930	4,240	10,500	12,800
	Day Care Children	40	820	2,110	3,920	6,150	13,900	57,200
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	32.8	59.5	105	304	5,740
	Urban	103	<MDL	32.6	61.3	106	277	5,740
	Rural	21	<MDL	33.1	54.1	97.1	405	420
	Low Income	55	<MDL	34.9	61.4	124	403	849
	Mid/High Income	65	<MDL	31.4	55.8	97.4	277	5,740
	Home Children	65	<MDL	33.6	52.9	130	405	5,740
	Day Care Children	59	<MDL	32.6	61.8	96.8	277	721
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	129	<MDL	6,740	11,900	23,700	51,800	250,000
	Urban	108	<MDL	6,740	11,300	23,000	51,800	250,000
	Rural	21	1,570	6,590	15,200	26,300	49,200	65,800
	Low Income	59	<MDL	7,740	12,900	24,600	55,300	71,200
	Mid/High Income	66	<MDL	5,300	10,900	23,900	51,800	250,000
	Home Children	66	<MDL	3,220	7,670	16,600	45,900	56,000
	Day Care Children	63	3,450	9,920	18,400	26,900	65,800	250,000
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	107	<MDL	<MDL	<MDL	10.3	33.4	307
	Urban	87	<MDL	<MDL	<MDL	10.3	33.0	52.9
	Rural	20	<MDL	<MDL	<MDL	9.13	170	307
	Low Income	42	<MDL	<MDL	5.33	7.44	44.7	52.9
	Mid/High Income	61	<MDL	<MDL	<MDL	12.0	33.0	307
	Home Children	63	<MDL	<MDL	<MDL	<MDL	51.2	307
	Day Care Children	44	<MDL	<MDL	5.59	9.88	33.0	44.7
Potential Exposure – Aggregated (pmoles/day)	Overall	102	889	6,560	11,200	22,900	49,300	251,000
	Urban	82	889	6,560	9,660	22,500	45,900	251,000
	Rural	20	1,980	6,570	16,000	28,500	57,500	65,800
	Low Income	38	889	6,990	11,600	22,500	55,600	56,100
	Mid/High Income	60	1,090	5,960	10,800	23,800	48,900	251,000
	Home Children	62	889	3,920	8,440	18,600	45,900	56,100
	Day Care Children	40	3,590	9,260	17,200	26,900	60,700	251,000

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-8c. Bisphenol-A (80-05-7): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	82.3	1.02	3.65	0.464	0.964
	Urban	103	80.6	1.08	3.99	0.471	0.976
	Rural	21	90.5	0.679	0.772	0.431	0.921
	Low Income	55	87.3	0.797	1.12	0.477	0.940
	Mid/High Income	65	80.0	1.20	4.94	0.450	0.973
	Home Children	65	81.5	1.39	4.97	0.523	1.07
	Day Care Children	59	83.1	0.598	0.751	0.406	0.814
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	129	98.4	135	186	78.8	1.06
	Urban	108	98.1	137	199	77.2	1.09
	Rural	21	100.0	123	102	87.7	0.899
	Low Income	59	98.3	123	111	83.1	0.975
	Mid/High Income	66	98.5	151	237	79.1	1.13
	Home Children	66	97.0	92.8	99.0	54.3	1.10
	Day Care Children	63	100.0	179	240	116	0.873
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	107	41.1	--	--	--	--
	Urban	87	39.1	--	--	--	--
	Rural	20	50.0	0.188	0.630	0.038	1.38
	Low Income	42	54.8	0.065	0.099	0.033	1.10
	Mid/High Income	61	34.4	--	--	--	--
	Home Children	63	22.2	--	--	--	--
	Day Care Children	44	68.2	0.060	0.066	0.039	0.911
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	102	100.0	125	175	75.6	1.03
	Urban	82	100.0	125	189	72.4	1.06
	Rural	20	100.0	126	104	90.6	0.885
	Low Income	38	100.0	109	90.5	76.4	0.958
	Mid/High Income	60	100.0	141	215	78.9	1.07
	Home Children	62	100.0	97.7	101	59.1	1.07
	Day Care Children	40	100.0	169	246	111	0.851
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	82.3	4.45	16.0	2.03	0.964
	Urban	103	80.6	4.75	17.5	2.06	0.976
	Rural	21	90.5	2.97	3.38	1.89	0.921
	Low Income	55	87.3	3.49	4.89	2.09	0.940
	Mid/High Income	65	80.0	5.27	21.6	1.97	0.973
	Home Children	65	81.5	6.11	21.8	2.29	1.07
	Day Care Children	59	83.1	2.62	3.29	1.78	0.814
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	129	98.4	591	815	345	1.06
	Urban	108	98.1	601	870	338	1.09
	Rural	21	100.0	539	447	384	0.899
	Low Income	59	98.3	537	486	364	0.975
	Mid/High Income	66	98.5	660	1,040	347	1.13
	Home Children	66	97.0	406	434	238	1.10
	Day Care Children	63	100.0	784	1,050	510	0.873
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	107	41.1	--	--	--	--
	Urban	87	39.1	--	--	--	--
	Rural	20	50.0	0.825	2.76	0.164	1.38
	Low Income	42	54.8	0.286	0.436	0.145	1.10
	Mid/High Income	61	34.4	--	--	--	--
	Home Children	63	22.2	--	--	--	--
	Day Care Children	44	68.2	0.263	0.289	0.169	0.911
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	102	100.0	550	767	331	1.03
	Urban	82	100.0	549	827	317	1.06
	Rural	20	100.0	554	456	397	0.885
	Low Income	38	100.0	477	397	335	0.958
	Mid/High Income	60	100.0	616	944	346	1.07
	Home Children	62	100.0	428	441	259	1.07
	Day Care Children	40	100.0	738	1,080	485	0.851

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-8d. Bisphenol-A (80-05-7): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	0.229	0.407	0.775	2.73	40.1
	Urban	103	<MDL	0.231	0.412	0.786	2.73	40.1
	Rural	21	<MDL	0.219	0.387	0.654	2.61	2.85
	Low Income	55	<MDL	0.231	0.429	0.786	4.41	5.47
	Mid/High Income	65	<MDL	0.230	0.387	0.676	2.18	40.1
	Home Children	65	<MDL	0.230	0.412	0.888	2.85	40.1
	Day Care Children	59	<MDL	0.228	0.400	0.644	1.83	4.90
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	129	<MDL	44.4	74.4	155	381	1,570
	Urban	108	<MDL	43.4	71.0	160	381	1,570
	Rural	21	10.1	46.8	106	141	285	413
	Low Income	59	<MDL	45.3	77.9	164	381	577
	Mid/High Income	66	<MDL	41.3	70.9	185	406	1,570
	Home Children	66	<MDL	25.4	52.4	129	341	406
	Day Care Children	63	16.0	62.0	109	204	420	1,570
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	107	<MDL	<MDL	<MDL	0.082	0.245	2.86
	Urban	87	<MDL	<MDL	<MDL	0.086	0.245	0.560
	Rural	20	<MDL	<MDL	<MDL	0.057	1.55	2.86
	Low Income	42	<MDL	<MDL	0.031	0.056	0.312	0.475
	Mid/High Income	61	<MDL	<MDL	<MDL	0.083	0.240	2.86
	Home Children	63	<MDL	<MDL	<MDL	<MDL	0.370	2.86
	Day Care Children	44	<MDL	<MDL	0.037	0.079	0.224	0.312
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	102	2.28	42.4	71.4	153	342	1,570
	Urban	82	2.28	42.4	67.1	153	342	1,570
	Rural	20	12.8	43.3	108	171	351	414
	Low Income	38	2.28	42.8	76.0	153	333	381
	Mid/High Income	60	9.47	42.0	71.7	171	375	1,570
	Home Children	62	2.28	28.7	55.0	141	342	407
	Day Care Children	40	16.3	61.8	110	201	373	1,570
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	1.00	1.78	3.39	11.9	176
	Urban	103	<MDL	1.01	1.80	3.44	11.9	176
	Rural	21	<MDL	0.958	1.70	2.87	11.4	12.5
	Low Income	55	<MDL	1.01	1.88	3.44	19.3	24.0
	Mid/High Income	65	<MDL	1.01	1.70	2.96	9.53	176
	Home Children	65	<MDL	1.01	1.81	3.89	12.5	176
	Day Care Children	59	<MDL	0.997	1.75	2.82	8.02	21.5
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	129	<MDL	194	326	680	1,670	6,900
	Urban	108	<MDL	190	311	700	1,670	6,900
	Rural	21	44.4	205	463	616	1,250	1,810
	Low Income	59	<MDL	198	341	720	1,670	2,530
	Mid/High Income	66	<MDL	181	311	811	1,780	6,900
	Home Children	66	<MDL	111	230	566	1,490	1,780
	Day Care Children	63	69.9	272	479	892	1,840	6,900
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	107	<MDL	<MDL	<MDL	0.359	1.07	12.5
	Urban	87	<MDL	<MDL	<MDL	0.377	1.07	2.45
	Rural	20	<MDL	<MDL	<MDL	0.252	6.78	12.5
	Low Income	42	<MDL	<MDL	0.135	0.246	1.37	2.08
	Mid/High Income	61	<MDL	<MDL	<MDL	0.366	1.05	12.5
	Home Children	63	<MDL	<MDL	<MDL	<MDL	1.62	12.5
	Day Care Children	44	<MDL	<MDL	0.163	0.345	0.982	1.37
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	102	9.99	186	313	671	1,500	6,900
	Urban	82	9.99	186	294	671	1,500	6,900
	Rural	20	55.9	190	473	751	1,540	1,810
	Low Income	38	9.99	188	333	671	1,460	1,670
	Mid/High Income	60	41.5	184	314	749	1,640	6,900
	Home Children	62	9.99	126	241	617	1,500	1,780
	Day Care Children	40	71.6	271	482	879	1,630	6,900

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-9a. alpha-Chlordane (5103-71-9) : Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	98.4	28.0	56.6	10.2	1.33
	Urban	103	98.1	25.8	56.1	9.43	1.29
	Rural	21	100.0	38.8	59.1	14.8	1.46
	Low Income	55	100.0	29.2	50.6	12.7	1.19
	Mid/High Income	65	98.5	22.3	41.7	8.49	1.34
	Home Children	65	96.9	29.1	65.0	8.58	1.46
	Day Care Children	59	100.0	26.8	46.1	12.3	1.15
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	28.8	--	--	--	--
	Urban	104	29.8	--	--	--	--
	Rural	21	23.8	--	--	--	--
	Low Income	57	36.8	--	--	--	--
	Mid/High Income	64	20.3	--	--	--	--
	Home Children	65	16.9	--	--	--	--
	Day Care Children	60	41.7	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	96.7	4.81	7.44	1.71	1.51
	Urban	99	97.0	4.51	7.70	1.53	1.50
	Rural	21	95.2	6.22	6.06	2.94	1.49
	Low Income	52	100.0	4.43	6.04	1.74	1.48
	Mid/High Income	64	93.8	5.15	8.55	1.67	1.56
	Home Children	66	93.9	4.03	6.63	1.40	1.50
	Day Care Children	54	100.0	5.75	8.29	2.20	1.49
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	98.4	68.3	138	24.8	1.33
	Urban	103	98.1	62.9	137	23.0	1.29
	Rural	21	100.0	94.8	144	36.0	1.46
	Low Income	55	100.0	71.4	124	31.0	1.19
	Mid/High Income	65	98.5	54.5	102	20.7	1.34
	Home Children	65	96.9	70.9	159	20.9	1.46
	Day Care Children	59	100.0	65.4	112	30.0	1.15
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	28.8	--	--	--	--
	Urban	104	29.8	--	--	--	--
	Rural	21	23.8	--	--	--	--
	Low Income	57	36.8	--	--	--	--
	Mid/High Income	64	20.3	--	--	--	--
	Home Children	65	16.9	--	--	--	--
	Day Care Children	60	41.7	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	96.7	11.7	18.2	4.18	1.51
	Urban	99	97.0	11.0	18.8	3.73	1.50
	Rural	21	95.2	15.2	14.8	7.18	1.49
	Low Income	52	100.0	10.8	14.7	4.25	1.48
	Mid/High Income	64	93.8	12.6	20.9	4.07	1.56
	Home Children	66	93.9	9.85	16.2	3.41	1.50
	Day Care Children	54	100.0	14.0	20.2	5.37	1.49

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-9b. alpha-Chlordane (5103-71-9) : Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	3.80	8.30	23.5	153	402
	Urban	103	<MDL	3.74	7.74	18.9	84.9	402
	Rural	21	1.76	4.70	15.0	41.5	173	221
	Low Income	55	1.90	5.34	11.0	24.0	172	227
	Mid/High Income	65	<MDL	2.99	6.14	21.5	79.6	264
	Home Children	65	<MDL	2.90	4.79	23.6	84.9	402
	Day Care Children	59	1.96	5.34	11.3	23.4	172	227
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	<MDL	<MDL	39.6	68.7	247
	Urban	104	<MDL	<MDL	<MDL	39.6	68.7	247
	Rural	21	<MDL	<MDL	<MDL	<MDL	56.3	89.3
	Low Income	57	<MDL	<MDL	<MDL	41.1	89.3	199
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	56.3	247
	Home Children	65	<MDL	<MDL	<MDL	<MDL	51.1	89.3
	Day Care Children	60	<MDL	<MDL	<MDL	43.5	163	247
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	<MDL	0.484	1.60	6.22	22.1	37.0
	Urban	99	<MDL	0.470	1.41	4.52	26.5	37.0
	Rural	21	<MDL	0.629	5.57	9.53	16.1	22.4
	Low Income	52	0.120	0.480	1.57	6.62	20.8	26.5
	Mid/High Income	64	<MDL	0.483	1.64	5.74	29.8	37.0
	Home Children	66	<MDL	0.476	1.18	4.52	18.7	33.5
	Day Care Children	54	0.159	0.686	2.27	7.95	26.5	37.0
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	9.28	20.3	57.4	373	981
	Urban	103	<MDL	9.13	18.9	46.2	207	981
	Rural	21	4.31	11.5	36.6	101	422	538
	Low Income	55	4.65	13.0	26.9	58.7	420	553
	Mid/High Income	65	<MDL	7.30	15.0	52.4	194	644
	Home Children	65	<MDL	7.09	11.7	57.6	207	981
	Day Care Children	59	4.78	13.0	27.7	57.1	420	553
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	96.7	168	603
	Urban	104	<MDL	<MDL	<MDL	96.6	168	603
	Rural	21	<MDL	<MDL	<MDL	<MDL	137	218
	Low Income	57	<MDL	<MDL	<MDL	100	218	486
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	137	603
	Home Children	65	<MDL	<MDL	<MDL	<MDL	125	218
	Day Care Children	60	<MDL	<MDL	<MDL	106	399	603
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	<MDL	1.18	3.89	15.2	53.8	90.2
	Urban	99	<MDL	1.15	3.44	11.0	64.8	90.2
	Rural	21	<MDL	1.53	13.6	23.3	39.4	54.8
	Low Income	52	0.292	1.17	3.82	16.1	50.9	64.8
	Mid/High Income	64	<MDL	1.18	4.00	14.0	72.6	90.2
	Home Children	66	<MDL	1.16	2.87	11.0	45.6	81.8
	Day Care Children	54	0.388	1.67	5.53	19.4	64.8	90.2

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-9c. alpha-Chlordane (5103-71-9) : Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	98.4	0.822	1.53	0.304	1.34
	Urban	103	98.1	0.766	1.49	0.285	1.32
	Rural	21	100.0	1.10	1.70	0.415	1.45
	Low Income	55	100.0	0.845	1.42	0.364	1.21
	Mid/High Income	65	98.5	0.735	1.43	0.265	1.38
	Home Children	65	96.9	0.866	1.68	0.272	1.47
	Day Care Children	59	100.0	0.774	1.35	0.342	1.19
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	28.8	--	--	--	--
	Urban	104	29.8	--	--	--	--
	Rural	21	23.8	--	--	--	--
	Low Income	57	36.8	--	--	--	--
	Mid/High Income	64	20.3	--	--	--	--
	Home Children	65	16.9	--	--	--	--
	Day Care Children	60	41.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	96.7	0.145	0.227	0.051	1.54
	Urban	99	97.0	0.138	0.237	0.046	1.54
	Rural	21	95.2	0.179	0.174	0.083	1.52
	Low Income	52	100.0	0.122	0.159	0.049	1.48
	Mid/High Income	64	93.8	0.167	0.274	0.052	1.63
	Home Children	66	93.9	0.130	0.199	0.044	1.56
	Day Care Children	54	100.0	0.164	0.259	0.061	1.52
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	98.4	2.01	3.73	0.741	1.34
	Urban	103	98.1	1.87	3.64	0.696	1.32
	Rural	21	100.0	2.68	4.14	1.01	1.45
	Low Income	55	100.0	2.06	3.47	0.888	1.21
	Mid/High Income	65	98.5	1.79	3.49	0.646	1.38
	Home Children	65	96.9	2.11	4.11	0.665	1.47
	Day Care Children	59	100.0	1.89	3.29	0.835	1.19
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	28.8	--	--	--	--
	Urban	104	29.8	--	--	--	--
	Rural	21	23.8	--	--	--	--
	Low Income	57	36.8	--	--	--	--
	Mid/High Income	64	20.3	--	--	--	--
	Home Children	65	16.9	--	--	--	--
	Day Care Children	60	41.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	96.7	0.354	0.554	0.125	1.54
	Urban	99	97.0	0.336	0.579	0.113	1.54
	Rural	21	95.2	0.438	0.424	0.202	1.52
	Low Income	52	100.0	0.298	0.389	0.120	1.48
	Mid/High Income	64	93.8	0.408	0.670	0.128	1.63
	Home Children	66	93.9	0.317	0.484	0.108	1.56
	Day Care Children	54	100.0	0.400	0.631	0.149	1.52

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-9d. alpha-Chlordane (5103-71-9) : Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	0.109	0.237	0.738	3.83	9.37
	Urban	103	<MDL	0.108	0.233	0.580	3.22	9.37
	Rural	21	0.061	0.123	0.384	1.20	5.61	5.93
	Low Income	55	0.050	0.159	0.299	0.832	5.57	6.24
	Mid/High Income	65	<MDL	0.096	0.223	0.709	2.28	9.37
	Home Children	65	<MDL	0.084	0.171	0.978	3.22	9.37
	Day Care Children	59	0.036	0.159	0.312	0.580	5.57	6.24
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	1.19	1.89	10.1
	Urban	104	<MDL	<MDL	<MDL	1.22	1.89	10.1
	Rural	21	<MDL	<MDL	<MDL	<MDL	1.82	2.40
	Low Income	57	<MDL	<MDL	<MDL	1.23	2.40	6.83
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	1.58	10.1
	Home Children	65	<MDL	<MDL	<MDL	<MDL	1.46	2.40
	Day Care Children	60	<MDL	<MDL	<MDL	1.31	3.30	10.1
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	<MDL	0.015	0.048	0.200	0.641	1.51
	Urban	99	<MDL	0.014	0.042	0.160	0.731	1.51
	Rural	21	<MDL	0.023	0.175	0.286	0.468	0.618
	Low Income	52	0.004	0.014	0.050	0.200	0.468	0.731
	Mid/High Income	64	<MDL	0.015	0.044	0.204	0.773	1.51
	Home Children	66	<MDL	0.014	0.035	0.167	0.582	0.923
	Day Care Children	54	0.003	0.022	0.063	0.239	0.731	1.51
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	0.265	0.579	1.80	9.34	22.9
	Urban	103	<MDL	0.264	0.568	1.42	7.87	22.9
	Rural	21	0.149	0.300	0.937	2.93	13.7	14.5
	Low Income	55	0.122	0.388	0.728	2.03	13.6	15.2
	Mid/High Income	65	<MDL	0.233	0.544	1.73	5.56	22.9
	Home Children	65	<MDL	0.205	0.418	2.39	7.87	22.9
	Day Care Children	59	0.087	0.388	0.761	1.42	13.6	15.2
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	2.91	4.60	24.6
	Urban	104	<MDL	<MDL	<MDL	2.97	4.60	24.6
	Rural	21	<MDL	<MDL	<MDL	<MDL	4.45	5.85
	Low Income	57	<MDL	<MDL	<MDL	3.01	5.85	16.7
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	3.86	24.6
	Home Children	65	<MDL	<MDL	<MDL	<MDL	3.56	5.85
	Day Care Children	60	<MDL	<MDL	<MDL	3.20	8.05	24.6
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	<MDL	0.037	0.117	0.487	1.56	3.68
	Urban	99	<MDL	0.035	0.102	0.390	1.78	3.68
	Rural	21	<MDL	0.056	0.428	0.697	1.14	1.51
	Low Income	52	0.009	0.035	0.123	0.487	1.14	1.78
	Mid/High Income	64	<MDL	0.036	0.107	0.497	1.89	3.68
	Home Children	66	<MDL	0.035	0.086	0.408	1.42	2.25
	Day Care Children	54	0.008	0.053	0.154	0.582	1.78	3.68

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-10a. gamma-Chlordane (5103-74-2): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	100.0	50.3	94.7	18.2	1.38
	Urban	103	100.0	44.5	88.4	16.7	1.34
	Rural	21	100.0	78.7	119	27.7	1.55
	Low Income	55	100.0	56.3	93.5	23.2	1.28
	Mid/High Income	65	100.0	37.6	58.5	14.9	1.38
	Home Children	65	100.0	52.4	112	15.1	1.52
	Day Care Children	59	100.0	48.0	72.5	22.3	1.19
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	21.6	--	--	--	--
	Urban	104	21.2	--	--	--	--
	Rural	21	23.8	--	--	--	--
	Low Income	57	28.1	--	--	--	--
	Mid/High Income	64	14.1	--	--	--	--
	Home Children	65	15.4	--	--	--	--
	Day Care Children	60	28.3	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	98.3	7.05	10.3	2.54	1.53
	Urban	98	99.0	6.32	10.1	2.24	1.50
	Rural	21	95.2	10.5	10.9	4.50	1.58
	Low Income	51	100.0	7.30	10.1	2.62	1.56
	Mid/High Income	64	96.9	6.90	10.7	2.44	1.54
	Home Children	65	96.9	6.23	10.2	2.05	1.56
	Day Care Children	54	100.0	8.04	10.5	3.27	1.48
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	100.0	123	231	44.4	1.38
	Urban	103	100.0	109	216	40.7	1.34
	Rural	21	100.0	192	292	67.7	1.55
	Low Income	55	100.0	137	228	56.7	1.28
	Mid/High Income	65	100.0	91.9	143	36.5	1.38
	Home Children	65	100.0	128	272	36.9	1.52
	Day Care Children	59	100.0	117	177	54.4	1.19
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	21.6	--	--	--	--
	Urban	104	21.2	--	--	--	--
	Rural	21	23.8	--	--	--	--
	Low Income	57	28.1	--	--	--	--
	Mid/High Income	64	14.1	--	--	--	--
	Home Children	65	15.4	--	--	--	--
	Day Care Children	60	28.3	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	98.3	17.2	25.2	6.19	1.53
	Urban	98	99.0	15.4	24.6	5.48	1.50
	Rural	21	95.2	25.6	26.7	11.0	1.58
	Low Income	51	100.0	17.8	24.7	6.40	1.56
	Mid/High Income	64	96.9	16.8	26.1	5.96	1.54
	Home Children	65	96.9	15.2	24.8	5.01	1.56
	Day Care Children	54	100.0	19.6	25.7	7.99	1.48

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-10b. gamma-Chlordane (5103-74-2): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	1.00	6.15	12.7	55.4	225	678
	Urban	103	1.00	6.00	12.2	46.4	173	678
	Rural	21	3.29	8.31	20.8	101	257	495
	Low Income	55	3.10	9.17	18.3	59.6	281	495
	Mid/High Income	65	1.00	5.10	11.7	48.4	141	341
	Home Children	65	1.00	4.22	9.41	66.4	161	678
	Day Care Children	59	3.41	9.30	19.7	46.9	257	337
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	74.6	224
	Urban	104	<MDL	<MDL	<MDL	<MDL	72.7	224
	Rural	21	<MDL	<MDL	<MDL	<MDL	79.8	148
	Low Income	57	<MDL	<MDL	<MDL	41.9	148	224
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	51.1	212
	Home Children	65	<MDL	<MDL	<MDL	<MDL	51.1	148
	Day Care Children	60	<MDL	<MDL	<MDL	43.1	171	224
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	<MDL	0.709	2.69	8.33	32.0	55.3
	Urban	98	<MDL	0.686	2.18	6.79	32.0	55.3
	Rural	21	<MDL	0.925	7.00	17.3	29.1	38.2
	Low Income	51	0.154	0.709	2.30	9.88	30.8	39.8
	Mid/High Income	64	<MDL	0.681	2.98	7.31	32.0	55.3
	Home Children	65	<MDL	0.659	1.41	6.81	22.0	55.3
	Day Care Children	54	0.223	0.956	3.43	9.88	32.5	41.9
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	2.44	15.0	31.0	135	549	1,650
	Urban	103	2.44	14.7	29.8	113	423	1,650
	Rural	21	8.03	20.3	50.8	247	627	1,210
	Low Income	55	7.57	22.4	44.8	145	687	1,210
	Mid/High Income	65	2.44	12.4	28.5	118	344	832
	Home Children	65	2.44	10.3	23.0	162	393	1,650
	Day Care Children	59	8.33	22.7	48.1	114	627	823
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	182	546
	Urban	104	<MDL	<MDL	<MDL	<MDL	177	546
	Rural	21	<MDL	<MDL	<MDL	<MDL	195	360
	Low Income	57	<MDL	<MDL	<MDL	102	360	546
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	125	517
	Home Children	65	<MDL	<MDL	<MDL	<MDL	125	360
	Day Care Children	60	<MDL	<MDL	<MDL	105	418	546
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	<MDL	1.73	6.56	20.3	78.1	135
	Urban	98	<MDL	1.67	5.33	16.6	78.1	135
	Rural	21	<MDL	2.26	17.1	42.2	71.0	93.2
	Low Income	51	0.377	1.73	5.62	24.1	75.1	97.0
	Mid/High Income	64	<MDL	1.66	7.28	17.8	78.1	135
	Home Children	65	<MDL	1.61	3.44	16.6	53.6	135
	Day Care Children	54	0.545	2.33	8.38	24.1	79.3	102

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-10c. gamma-Chlordane (5103-74-2): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	100.0	1.48	2.51	0.543	1.39
	Urban	103	100.0	1.33	2.32	0.504	1.36
	Rural	21	100.0	2.19	3.28	0.779	1.53
	Low Income	55	100.0	1.63	2.67	0.665	1.29
	Mid/High Income	65	100.0	1.24	1.99	0.466	1.42
	Home Children	65	100.0	1.56	2.80	0.480	1.52
	Day Care Children	59	100.0	1.39	2.16	0.621	1.24
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	21.6	--	--	--	--
	Urban	104	21.2	--	--	--	--
	Rural	21	23.8	--	--	--	--
	Low Income	57	28.1	--	--	--	--
	Mid/High Income	64	14.1	--	--	--	--
	Home Children	65	15.4	--	--	--	--
	Day Care Children	60	28.3	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	98.3	0.213	0.312	0.076	1.56
	Urban	98	99.0	0.195	0.311	0.068	1.54
	Rural	21	95.2	0.297	0.312	0.126	1.59
	Low Income	51	100.0	0.202	0.277	0.074	1.55
	Mid/High Income	64	96.9	0.226	0.346	0.077	1.61
	Home Children	65	96.9	0.201	0.307	0.065	1.60
	Day Care Children	54	100.0	0.227	0.321	0.091	1.50
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	100.0	3.60	6.12	1.32	1.39
	Urban	103	100.0	3.25	5.65	1.23	1.36
	Rural	21	100.0	5.34	7.99	1.90	1.53
	Low Income	55	100.0	3.97	6.51	1.62	1.29
	Mid/High Income	65	100.0	3.02	4.87	1.14	1.42
	Home Children	65	100.0	3.80	6.84	1.17	1.52
	Day Care Children	59	100.0	3.38	5.26	1.52	1.24
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	21.6	--	--	--	--
	Urban	104	21.2	--	--	--	--
	Rural	21	23.8	--	--	--	--
	Low Income	57	28.1	--	--	--	--
	Mid/High Income	64	14.1	--	--	--	--
	Home Children	65	15.4	--	--	--	--
	Day Care Children	60	28.3	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	98.3	0.520	0.762	0.185	1.56
	Urban	98	99.0	0.476	0.758	0.165	1.54
	Rural	21	95.2	0.725	0.760	0.308	1.59
	Low Income	51	100.0	0.494	0.675	0.180	1.55
	Mid/High Income	64	96.9	0.552	0.845	0.188	1.61
	Home Children	65	96.9	0.491	0.749	0.159	1.60
	Day Care Children	54	100.0	0.554	0.783	0.221	1.50

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-10d. gamma-Chlordane (5103-74-2): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	0.041	0.188	0.422	1.61	6.43	13.3
	Urban	103	0.041	0.185	0.403	1.43	4.68	12.7
	Rural	21	0.102	0.247	0.533	3.10	7.29	13.3
	Low Income	55	0.081	0.251	0.493	1.43	7.75	13.3
	Mid/High Income	65	0.041	0.158	0.345	1.76	4.43	12.1
	Home Children	65	0.041	0.134	0.338	2.32	4.68	13.3
	Day Care Children	59	0.060	0.256	0.517	1.43	7.29	10.9
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	2.59	8.64
	Urban	104	<MDL	<MDL	<MDL	<MDL	2.34	8.64
	Rural	21	<MDL	<MDL	<MDL	<MDL	2.59	3.96
	Low Income	57	<MDL	<MDL	<MDL	1.10	3.96	7.02
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	1.46	8.64
	Home Children	65	<MDL	<MDL	<MDL	<MDL	1.37	3.96
	Day Care Children	60	<MDL	<MDL	<MDL	1.24	3.64	8.64
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	<MDL	0.021	0.083	0.286	0.843	1.71
	Urban	98	<MDL	0.021	0.056	0.214	0.842	1.71
	Rural	21	<MDL	0.027	0.240	0.453	0.843	1.11
	Low Income	51	0.005	0.021	0.058	0.310	0.843	1.11
	Mid/High Income	64	<MDL	0.021	0.087	0.263	0.842	1.71
	Home Children	65	<MDL	0.021	0.045	0.217	0.842	1.56
	Day Care Children	54	0.005	0.033	0.102	0.297	0.843	1.71
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	0.100	0.459	1.03	3.92	15.7	32.5
	Urban	103	0.100	0.451	0.983	3.48	11.4	30.9
	Rural	21	0.248	0.602	1.30	7.56	17.8	32.5
	Low Income	55	0.199	0.613	1.20	3.50	18.9	32.5
	Mid/High Income	65	0.100	0.386	0.843	4.29	10.8	29.6
	Home Children	65	0.100	0.328	0.826	5.66	11.4	32.5
	Day Care Children	59	0.148	0.625	1.26	3.48	17.8	26.6
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	6.31	21.1
	Urban	104	<MDL	<MDL	<MDL	<MDL	5.71	21.1
	Rural	21	<MDL	<MDL	<MDL	<MDL	6.31	9.67
	Low Income	57	<MDL	<MDL	<MDL	2.69	9.67	17.1
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	3.56	21.1
	Home Children	65	<MDL	<MDL	<MDL	<MDL	3.34	9.67
	Day Care Children	60	<MDL	<MDL	<MDL	3.03	8.89	21.1
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	<MDL	0.052	0.201	0.697	2.06	4.17
	Urban	98	<MDL	0.051	0.136	0.523	2.05	4.17
	Rural	21	<MDL	0.065	0.586	1.11	2.06	2.70
	Low Income	51	0.012	0.051	0.140	0.755	2.06	2.70
	Mid/High Income	64	<MDL	0.051	0.212	0.641	2.05	4.17
	Home Children	65	<MDL	0.051	0.111	0.530	2.05	3.81
	Day Care Children	54	0.012	0.082	0.250	0.725	2.06	4.17

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-11a. Chlorpyrifos (2921-88-2): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	100.0	121	216	56.0	1.18
	Urban	103	100.0	120	227	54.1	1.17
	Rural	21	100.0	124	156	66.3	1.23
	Low Income	55	100.0	135	241	65.5	1.17
	Mid/High Income	65	100.0	111	201	48.7	1.20
	Home Children	65	100.0	109	191	46.3	1.26
	Day Care Children	59	100.0	134	242	69.2	1.05
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	78.4	209	676	85.3	1.15
	Urban	104	80.8	229	740	87.5	1.19
	Rural	21	66.7	108	82.9	75.3	0.944
	Low Income	57	82.5	275	963	98.2	1.16
	Mid/High Income	64	75.0	159	261	77.2	1.15
	Home Children	65	70.8	268	926	74.8	1.33
	Day Care Children	60	86.7	145	149	98.4	0.902
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	100.0	15.5	29.0	6.23	1.30
	Urban	97	100.0	13.4	21.4	5.96	1.24
	Rural	20	100.0	25.5	51.9	7.78	1.58
	Low Income	51	100.0	19.4	36.9	6.96	1.42
	Mid/High Income	62	100.0	12.4	21.4	5.48	1.22
	Home Children	65	100.0	13.8	23.6	5.46	1.29
	Day Care Children	52	100.0	17.7	34.7	7.36	1.31
Potential Exposure – Aggregated (ng/day)	Overall	109	100.0	359	801	174	1.06
	Urban	89	100.0	381	878	172	1.10
	Rural	20	100.0	264	250	183	0.883
	Low Income	45	100.0	483	1,150	211	1.13
	Mid/High Income	60	100.0	279	409	152	1.03
	Home Children	63	100.0	398	1,010	156	1.18
	Day Care Children	46	100.0	305	343	203	0.863
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	100.0	345	617	160	1.18
	Urban	103	100.0	343	649	154	1.17
	Rural	21	100.0	354	445	189	1.23
	Low Income	55	100.0	384	688	187	1.17
	Mid/High Income	65	100.0	318	574	139	1.20
	Home Children	65	100.0	311	546	132	1.26
	Day Care Children	59	100.0	382	691	197	1.05
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	78.4	596	1,930	243	1.15
	Urban	104	80.8	654	2,110	250	1.19
	Rural	21	66.7	309	236	215	0.944
	Low Income	57	82.5	786	2,750	280	1.16
	Mid/High Income	64	75.0	453	745	220	1.15
	Home Children	65	70.8	765	2,640	213	1.33
	Day Care Children	60	86.7	414	426	281	0.902
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	100.0	44.2	82.7	17.8	1.30
	Urban	97	100.0	38.3	61.0	17.0	1.24
	Rural	20	100.0	72.7	148	22.2	1.58
	Low Income	51	100.0	55.4	105	19.8	1.42
	Mid/High Income	62	100.0	35.5	60.9	15.6	1.22
	Home Children	65	100.0	39.3	67.4	15.6	1.29
	Day Care Children	52	100.0	50.4	98.9	21.0	1.31
Potential Exposure – Aggregated (pmoles/day)	Overall	109	100.0	1,020	2,280	497	1.06
	Urban	89	100.0	1,090	2,500	492	1.10
	Rural	20	100.0	753	713	522	0.883
	Low Income	45	100.0	1,380	3,280	601	1.13
	Mid/High Income	60	100.0	797	1,170	434	1.03
	Home Children	63	100.0	1,140	2,890	445	1.18
	Day Care Children	46	100.0	871	980	578	0.863

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-11b. Chlorpyrifos (2921-88-2): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	2.57	22.6	47.2	108	403	1,640
	Urban	103	3.47	22.6	44.2	105	397	1,640
	Rural	21	2.57	43.9	65.0	127	522	567
	Low Income	55	2.57	34.4	60.9	131	522	1,640
	Mid/High Income	65	3.47	21.6	38.7	92.7	403	1,250
	Home Children	65	2.57	19.2	39.7	93.5	403	1,250
	Day Care Children	59	6.23	35.9	59.9	131	575	1,640
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	33.0	81.1	187	644	7,300
	Urban	104	<MDL	32.2	78.3	192	751	7,300
	Rural	21	<MDL	<MDL	106	164	244	265
	Low Income	57	<MDL	41.5	92.4	202	751	7,300
	Mid/High Income	64	<MDL	<MDL	75.1	178	644	1,620
	Home Children	65	<MDL	<MDL	75.0	161	906	7,300
	Day Care Children	60	<MDL	53.1	104	204	362	979
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	0.286	2.80	5.16	14.8	80.4	233
	Urban	97	0.286	2.82	4.98	12.7	80.4	96.5
	Rural	20	0.773	2.09	7.12	25.6	145	233
	Low Income	51	0.692	2.43	6.21	23.9	74.8	233
	Mid/High Income	62	0.286	2.82	4.96	9.56	80.4	94.1
	Home Children	65	0.623	2.38	4.48	10.4	85.9	96.5
	Day Care Children	52	0.286	3.19	6.75	19.7	57.6	233
Potential Exposure – Aggregated (ng/day)	Overall	109	23.2	78.9	152	295	1,180	7,630
	Urban	89	23.2	78.1	133	315	1,400	7,630
	Rural	20	27.2	119	179	249	822	847
	Low Income	45	27.2	104	187	404	1,180	7,630
	Mid/High Income	60	23.2	72.1	120	264	1,170	2,240
	Home Children	63	23.2	68.9	123	266	1,400	7,630
	Day Care Children	46	54.0	104	177	315	938	1,830
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	7.34	64.6	135	309	1,150	4,680
	Urban	103	9.91	64.4	126	301	1,130	4,680
	Rural	21	7.34	125	186	361	1,490	1,620
	Low Income	55	7.34	98.1	174	372	1,490	4,680
	Mid/High Income	65	9.91	61.7	110	265	1,150	3,570
	Home Children	65	7.34	54.7	113	267	1,150	3,570
	Day Care Children	59	17.8	102	171	372	1,640	4,680
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	94.2	231	534	1,840	20,800
	Urban	104	<MDL	91.7	223	547	2,140	20,800
	Rural	21	<MDL	<MDL	302	468	695	757
	Low Income	57	<MDL	118	263	575	2,140	20,800
	Mid/High Income	64	<MDL	<MDL	214	507	1,840	4,610
	Home Children	65	<MDL	<MDL	214	459	2,580	20,800
	Day Care Children	60	<MDL	151	296	581	1,030	2,790
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	0.816	7.99	14.7	42.2	229	665
	Urban	97	0.816	8.03	14.2	36.3	229	275
	Rural	20	2.21	5.97	20.3	72.9	415	665
	Low Income	51	1.97	6.94	17.7	68.3	213	665
	Mid/High Income	62	0.816	8.03	14.2	27.3	229	268
	Home Children	65	1.78	6.79	12.8	29.6	245	275
	Day Care Children	52	0.816	9.10	19.2	56.3	164	665
Potential Exposure – Aggregated (pmoles/day)	Overall	109	66.2	225	433	841	3,360	21,800
	Urban	89	66.2	223	380	898	3,990	21,800
	Rural	20	77.5	341	512	710	2,350	2,420
	Low Income	45	77.5	297	534	1,150	3,360	21,800
	Mid/High Income	60	66.2	206	343	754	3,330	6,400
	Home Children	63	66.2	197	350	758	3,990	21,800
	Day Care Children	46	154	297	505	898	2,680	5,220

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-11c. Chlorpyrifos (2921-88-2): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	100.0	3.61	6.65	1.67	1.17
	Urban	103	100.0	3.68	7.11	1.64	1.17
	Rural	21	100.0	3.25	3.75	1.86	1.19
	Low Income	55	100.0	3.89	7.50	1.88	1.16
	Mid/High Income	65	100.0	3.46	6.11	1.52	1.21
	Home Children	65	100.0	3.25	5.43	1.47	1.23
	Day Care Children	59	100.0	4.00	7.81	1.93	1.10
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	78.4	6.14	20.0	2.54	1.13
	Urban	104	80.8	6.78	21.9	2.64	1.18
	Rural	21	66.7	2.95	2.24	2.11	0.889
	Low Income	57	82.5	7.97	28.6	2.79	1.17
	Mid/High Income	64	75.0	4.78	7.45	2.42	1.11
	Home Children	65	70.8	8.00	27.5	2.37	1.30
	Day Care Children	60	86.7	4.12	4.30	2.74	0.927
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	100.0	0.456	0.798	0.186	1.31
	Urban	97	100.0	0.409	0.646	0.180	1.26
	Rural	20	100.0	0.683	1.31	0.217	1.57
	Low Income	51	100.0	0.528	0.946	0.196	1.42
	Mid/High Income	62	100.0	0.403	0.683	0.173	1.25
	Home Children	65	100.0	0.426	0.709	0.173	1.30
	Day Care Children	52	100.0	0.494	0.902	0.203	1.34
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	109	100.0	10.6	23.8	5.18	1.05
	Urban	89	100.0	11.4	26.1	5.20	1.10
	Rural	20	100.0	7.02	6.07	5.12	0.833
	Low Income	45	100.0	13.9	34.3	5.89	1.14
	Mid/High Income	60	100.0	8.57	11.9	4.77	1.01
	Home Children	63	100.0	11.9	29.9	4.96	1.14
	Day Care Children	46	100.0	8.81	10.8	5.50	0.929
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	100.0	10.3	19.0	4.77	1.17
	Urban	103	100.0	10.5	20.3	4.67	1.17
	Rural	21	100.0	9.27	10.7	5.31	1.19
	Low Income	55	100.0	11.1	21.4	5.35	1.16
	Mid/High Income	65	100.0	9.88	17.4	4.33	1.21
	Home Children	65	100.0	9.28	15.5	4.19	1.23
	Day Care Children	59	100.0	11.4	22.3	5.50	1.10
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	78.4	17.5	57.2	7.25	1.13
	Urban	104	80.8	19.3	62.5	7.53	1.18
	Rural	21	66.7	8.41	6.38	6.03	0.889
	Low Income	57	82.5	22.7	81.7	7.97	1.17
	Mid/High Income	64	75.0	13.6	21.2	6.90	1.11
	Home Children	65	70.8	22.8	78.3	6.76	1.30
	Day Care Children	60	86.7	11.8	12.3	7.82	0.927
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	100.0	1.30	2.28	0.530	1.31
	Urban	97	100.0	1.17	1.84	0.513	1.26
	Rural	20	100.0	1.95	3.73	0.620	1.57
	Low Income	51	100.0	1.51	2.70	0.558	1.42
	Mid/High Income	62	100.0	1.15	1.95	0.494	1.25
	Home Children	65	100.0	1.21	2.02	0.493	1.30
	Day Care Children	52	100.0	1.41	2.57	0.580	1.34
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	109	100.0	30.2	67.8	14.8	1.05
	Urban	89	100.0	32.5	74.5	14.8	1.10
	Rural	20	100.0	20.0	17.3	14.6	0.833
	Low Income	45	100.0	39.6	97.7	16.8	1.14
	Mid/High Income	60	100.0	24.5	34.1	13.6	1.01
	Home Children	63	100.0	34.0	85.3	14.1	1.14
	Day Care Children	46	100.0	25.1	30.7	15.7	0.929

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-11d. Chlorpyrifos (2921-88-2): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	0.064	0.753	1.42	3.63	11.2	53.1
	Urban	103	0.142	0.739	1.32	3.94	11.2	53.1
	Rural	21	0.064	0.805	1.94	3.48	10.7	15.2
	Low Income	55	0.064	0.805	1.57	3.99	11.0	53.1
	Mid/High Income	65	0.142	0.745	1.24	3.34	12.7	36.2
	Home Children	65	0.064	0.707	1.25	3.19	11.2	36.2
	Day Care Children	59	0.146	0.906	1.57	3.99	17.1	53.1
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	1.01	2.50	5.33	20.2	217
	Urban	104	<MDL	1.01	2.47	5.73	24.4	217
	Rural	21	<MDL	<MDL	2.68	4.30	6.78	7.13
	Low Income	57	<MDL	1.33	2.73	5.64	20.2	217
	Mid/High Income	64	<MDL	<MDL	2.40	5.57	24.4	43.4
	Home Children	65	<MDL	<MDL	2.31	4.57	26.3	217
	Day Care Children	60	<MDL	1.29	2.85	5.80	10.7	27.7
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	0.008	0.079	0.156	0.443	2.39	5.84
	Urban	97	0.008	0.084	0.156	0.342	2.39	3.05
	Rural	20	0.021	0.060	0.210	0.789	3.75	5.84
	Low Income	51	0.021	0.074	0.162	0.619	2.01	5.84
	Mid/High Income	62	0.008	0.081	0.147	0.293	2.39	3.05
	Home Children	65	0.019	0.078	0.150	0.340	2.50	3.05
	Day Care Children	52	0.008	0.084	0.168	0.548	1.67	5.84
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	109	0.680	2.49	4.59	8.84	31.7	227
	Urban	89	0.947	2.29	4.10	9.29	39.5	227
	Rural	20	0.680	2.83	4.86	7.75	21.4	22.8
	Low Income	45	0.680	2.84	4.91	11.3	31.7	227
	Mid/High Income	60	0.947	2.17	4.16	8.67	34.7	65.0
	Home Children	63	0.680	2.17	4.04	8.84	39.5	227
	Day Care Children	46	1.02	2.66	4.82	9.29	29.9	59.3
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	0.184	2.15	4.05	10.3	32.0	151
	Urban	103	0.404	2.11	3.76	11.2	32.0	151
	Rural	21	0.184	2.30	5.52	9.94	30.4	43.4
	Low Income	55	0.184	2.30	4.48	11.4	31.3	151
	Mid/High Income	65	0.404	2.13	3.53	9.53	36.2	103
	Home Children	65	0.184	2.02	3.56	9.10	32.0	103
	Day Care Children	59	0.416	2.59	4.48	11.4	48.8	151
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	2.88	7.12	15.2	57.6	620
	Urban	104	<MDL	2.88	7.04	16.3	69.7	620
	Rural	21	<MDL	<MDL	7.64	12.3	19.3	20.3
	Low Income	57	<MDL	3.80	7.78	16.1	57.6	620
	Mid/High Income	64	<MDL	<MDL	6.85	15.9	69.7	124
	Home Children	65	<MDL	<MDL	6.58	13.0	74.9	620
	Day Care Children	60	<MDL	3.69	8.13	16.5	30.6	78.9
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	0.022	0.225	0.446	1.26	6.83	16.7
	Urban	97	0.022	0.240	0.445	0.976	6.83	8.70
	Rural	20	0.059	0.171	0.600	2.25	10.7	16.7
	Low Income	51	0.059	0.212	0.463	1.77	5.73	16.7
	Mid/High Income	62	0.022	0.232	0.420	0.837	6.83	8.70
	Home Children	65	0.055	0.222	0.429	0.968	7.14	8.70
	Day Care Children	52	0.022	0.240	0.479	1.56	4.76	16.7
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	109	1.94	7.09	13.1	25.2	90.3	648
	Urban	89	2.70	6.52	11.7	26.5	113	648
	Rural	20	1.94	8.07	13.9	22.1	60.9	64.9
	Low Income	45	1.94	8.11	14.0	32.2	90.3	648
	Mid/High Income	60	2.70	6.20	11.9	24.7	98.9	185
	Home Children	63	1.94	6.20	11.5	25.2	113	648
	Day Care Children	46	2.91	7.60	13.8	26.5	85.2	169

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-12a. Chrysene (218-01-9): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	87.1	1.67	2.04	1.14	0.792
	Urban	103	89.3	1.71	1.96	1.18	0.789
	Rural	21	76.2	1.49	2.46	0.937	0.795
	Low Income	55	92.7	1.99	2.08	1.39	0.807
	Mid/High Income	65	81.5	1.39	2.00	0.957	0.735
	Home Children	65	80.0	1.80	2.53	1.12	0.872
	Day Care Children	59	94.9	1.52	1.31	1.16	0.700
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	44.5	--	--	--	--
	Urban	107	43.0	--	--	--	--
	Rural	21	52.4	46.5	28.7	39.4	0.594
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	43.9	--	--	--	--
	Home Children	66	45.5	--	--	--	--
	Day Care Children	62	43.5	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	30.2	81.1	9.49	1.29
	Urban	95	100.0	24.9	58.7	9.56	1.21
	Rural	21	100.0	54.2	145	9.18	1.63
	Low Income	52	100.0	17.6	30.8	8.39	1.17
	Mid/High Income	60	100.0	42.8	108	11.1	1.39
	Home Children	62	100.0	17.0	34.1	7.50	1.15
	Day Care Children	54	100.0	45.4	112	12.4	1.39
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	87.1	7.31	8.94	4.98	0.792
	Urban	103	89.3	7.47	8.57	5.18	0.789
	Rural	21	76.2	6.54	10.8	4.11	0.795
	Low Income	55	92.7	8.71	9.12	6.07	0.807
	Mid/High Income	65	81.5	6.08	8.75	4.19	0.735
	Home Children	65	80.0	7.89	11.1	4.89	0.872
	Day Care Children	59	94.9	6.67	5.76	5.08	0.700
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	44.5	--	--	--	--
	Urban	107	43.0	--	--	--	--
	Rural	21	52.4	204	126	173	0.594
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	43.9	--	--	--	--
	Home Children	66	45.5	--	--	--	--
	Day Care Children	62	43.5	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	132	355	41.6	1.29
	Urban	95	100.0	109	257	41.9	1.21
	Rural	21	100.0	237	633	40.2	1.63
	Low Income	52	100.0	77.0	135	36.8	1.17
	Mid/High Income	60	100.0	187	473	48.5	1.39
	Home Children	62	100.0	74.6	149	32.9	1.15
	Day Care Children	54	100.0	199	490	54.5	1.39

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-12b. Chrysene (218-01-9): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	0.579	0.847	1.95	4.70	15.2
	Urban	103	<MDL	0.599	0.924	1.99	4.70	15.2
	Rural	21	<MDL	0.528	0.719	1.34	2.80	11.8
	Low Income	55	<MDL	0.719	1.23	2.28	6.30	11.8
	Mid/High Income	65	<MDL	0.566	0.647	1.67	3.79	15.2
	Home Children	65	<MDL	0.559	0.776	1.99	6.30	15.2
	Day Care Children	59	<MDL	0.634	0.924	1.72	4.58	6.04
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	<MDL	<MDL	<MDL	42.0	90.5	198
	Urban	107	<MDL	<MDL	<MDL	41.1	71.2	198
	Rural	21	<MDL	<MDL	39.2	53.6	92.1	128
	Low Income	58	<MDL	<MDL	<MDL	42.0	90.5	198
	Mid/High Income	66	<MDL	<MDL	<MDL	41.0	92.1	192
	Home Children	66	<MDL	<MDL	<MDL	34.4	82.5	121
	Day Care Children	62	<MDL	<MDL	<MDL	44.1	92.1	198
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	0.739	4.23	7.53	18.3	190	638
	Urban	95	0.739	4.51	7.99	19.1	127	441
	Rural	21	1.17	3.01	5.11	13.8	212	638
	Low Income	52	0.739	4.12	8.71	18.3	79.5	190
	Mid/High Income	60	1.40	4.72	7.53	22.4	224	638
	Home Children	62	0.739	4.01	6.33	13.3	38.0	190
	Day Care Children	54	1.17	4.70	10.8	19.4	235	638
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	2.54	3.71	8.52	20.6	66.5
	Urban	103	<MDL	2.63	4.05	8.73	20.6	66.5
	Rural	21	<MDL	2.31	3.15	5.85	12.3	51.9
	Low Income	55	<MDL	3.15	5.38	10.0	27.6	51.9
	Mid/High Income	65	<MDL	2.48	2.83	7.33	16.6	66.5
	Home Children	65	<MDL	2.45	3.40	8.73	27.6	66.5
	Day Care Children	59	<MDL	2.78	4.05	7.52	20.0	26.4
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	<MDL	<MDL	<MDL	184	396	869
	Urban	107	<MDL	<MDL	<MDL	180	312	869
	Rural	21	<MDL	<MDL	172	235	404	559
	Low Income	58	<MDL	<MDL	<MDL	184	396	869
	Mid/High Income	66	<MDL	<MDL	<MDL	180	404	842
	Home Children	66	<MDL	<MDL	<MDL	151	362	528
	Day Care Children	62	<MDL	<MDL	<MDL	193	404	869
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	3.24	18.5	33.0	80.3	832	2,800
	Urban	95	3.24	19.8	35.0	83.7	558	1,930
	Rural	21	5.12	13.2	22.4	60.5	930	2,800
	Low Income	52	3.24	18.0	38.2	80.3	348	832
	Mid/High Income	60	6.12	20.7	33.0	98.2	979	2,800
	Home Children	62	3.24	17.6	27.7	58.1	166	832
	Day Care Children	54	5.12	20.6	47.3	84.9	1,030	2,800

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-12c. Chrysene (218-01-9): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	87.1	0.052	0.072	0.034	0.834
	Urban	103	89.3	0.055	0.074	0.036	0.833
	Rural	21	76.2	0.041	0.063	0.026	0.808
	Low Income	55	92.7	0.064	0.090	0.040	0.910
	Mid/High Income	65	81.5	0.043	0.055	0.030	0.753
	Home Children	65	80.0	0.061	0.093	0.035	0.918
	Day Care Children	59	94.9	0.043	0.039	0.032	0.735
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	44.5	--	--	--	--
	Urban	107	43.0	--	--	--	--
	Rural	21	52.4	1.29	0.787	1.11	0.563
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	43.9	--	--	--	--
	Home Children	66	45.5	--	--	--	--
	Day Care Children	62	43.5	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	0.938	2.52	0.281	1.33
	Urban	95	100.0	0.754	1.75	0.286	1.23
	Rural	21	100.0	1.77	4.63	0.258	1.74
	Low Income	52	100.0	0.517	0.949	0.236	1.19
	Mid/High Income	60	100.0	1.35	3.36	0.344	1.43
	Home Children	62	100.0	0.599	1.28	0.235	1.22
	Day Care Children	54	100.0	1.33	3.41	0.344	1.42
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	87.1	0.229	0.317	0.149	0.834
	Urban	103	89.3	0.239	0.325	0.156	0.833
	Rural	21	76.2	0.181	0.276	0.115	0.808
	Low Income	55	92.7	0.282	0.392	0.174	0.910
	Mid/High Income	65	81.5	0.188	0.240	0.131	0.753
	Home Children	65	80.0	0.265	0.405	0.155	0.918
	Day Care Children	59	94.9	0.190	0.169	0.141	0.735
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	44.5	--	--	--	--
	Urban	107	43.0	--	--	--	--
	Rural	21	52.4	5.67	3.45	4.85	0.563
	Low Income	58	44.8	--	--	--	--
	Mid/High Income	66	43.9	--	--	--	--
	Home Children	66	45.5	--	--	--	--
	Day Care Children	62	43.5	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	4.11	11.1	1.23	1.33
	Urban	95	100.0	3.30	7.65	1.25	1.23
	Rural	21	100.0	7.75	20.3	1.13	1.74
	Low Income	52	100.0	2.26	4.16	1.04	1.19
	Mid/High Income	60	100.0	5.93	14.7	1.51	1.43
	Home Children	62	100.0	2.63	5.62	1.03	1.22
	Day Care Children	54	100.0	5.81	15.0	1.51	1.42

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-12d. Chrysene (218-01-9): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	0.018	0.027	0.053	0.140	0.566
	Urban	103	<MDL	0.018	0.029	0.058	0.140	0.566
	Rural	21	<MDL	0.015	0.020	0.041	0.081	0.303
	Low Income	55	<MDL	0.020	0.035	0.078	0.248	0.566
	Mid/High Income	65	<MDL	0.017	0.023	0.047	0.114	0.398
	Home Children	65	<MDL	0.018	0.027	0.061	0.248	0.566
	Day Care Children	59	<MDL	0.017	0.027	0.050	0.140	0.158
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	<MDL	<MDL	<MDL	1.30	2.54	4.81
	Urban	107	<MDL	<MDL	<MDL	1.23	2.24	4.81
	Rural	21	<MDL	<MDL	1.01	1.61	2.93	3.19
	Low Income	58	<MDL	<MDL	<MDL	1.33	2.93	4.37
	Mid/High Income	66	<MDL	<MDL	<MDL	1.27	2.54	4.81
	Home Children	66	<MDL	<MDL	<MDL	1.06	2.33	3.95
	Day Care Children	62	<MDL	<MDL	<MDL	1.49	2.54	4.81
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.022	0.123	0.232	0.441	5.98	20.1
	Urban	95	0.022	0.129	0.251	0.510	3.77	12.8
	Rural	21	0.029	0.079	0.147	0.400	6.88	20.1
	Low Income	52	0.022	0.116	0.222	0.428	2.43	5.98
	Mid/High Income	60	0.038	0.139	0.251	0.701	7.36	20.1
	Home Children	62	0.022	0.092	0.211	0.407	1.39	6.49
	Day Care Children	54	0.029	0.131	0.325	0.576	7.84	20.1
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	0.078	0.118	0.230	0.613	2.48
	Urban	103	<MDL	0.079	0.129	0.253	0.613	2.48
	Rural	21	<MDL	0.067	0.088	0.179	0.356	1.33
	Low Income	55	<MDL	0.088	0.154	0.342	1.09	2.48
	Mid/High Income	65	<MDL	0.073	0.101	0.206	0.498	1.74
	Home Children	65	<MDL	0.079	0.118	0.269	1.09	2.48
	Day Care Children	59	<MDL	0.076	0.118	0.218	0.613	0.693
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	<MDL	<MDL	<MDL	5.69	11.1	21.1
	Urban	107	<MDL	<MDL	<MDL	5.41	9.82	21.1
	Rural	21	<MDL	<MDL	4.44	7.03	12.8	14.0
	Low Income	58	<MDL	<MDL	<MDL	5.84	12.8	19.1
	Mid/High Income	66	<MDL	<MDL	<MDL	5.55	11.1	21.1
	Home Children	66	<MDL	<MDL	<MDL	4.65	10.2	17.3
	Day Care Children	62	<MDL	<MDL	<MDL	6.53	11.1	21.1
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.096	0.540	1.02	1.93	26.2	88.0
	Urban	95	0.096	0.565	1.10	2.23	16.5	56.0
	Rural	21	0.128	0.347	0.643	1.75	30.1	88.0
	Low Income	52	0.096	0.506	0.970	1.87	10.7	26.2
	Mid/High Income	60	0.168	0.611	1.10	3.07	32.2	88.0
	Home Children	62	0.096	0.404	0.923	1.78	6.11	28.4
	Day Care Children	54	0.128	0.573	1.42	2.52	34.3	88.0

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-13a. Cyfluthrin (68359-37-5): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	6.5	--	--	--	--
	Urban	103	6.8	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	55	12.7	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	59	13.6	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	Overall	120	8.3	--	--	--	--
	Urban	100	9.0	--	--	--	--
	Rural	20	5.0	--	--	--	--
	Low Income	55	14.5	--	--	--	--
	Mid/High Income	61	3.3	--	--	--	--
	Home Children	64	4.7	--	--	--	--
	Day Care Children	56	12.5	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	60.2	15.9	33.3	4.04	1.69
	Urban	97	60.8	14.2	29.1	4.07	1.62
	Rural	21	57.1	23.6	48.5	3.91	2.01
	Low Income	52	65.4	15.1	33.7	3.75	1.77
	Mid/High Income	62	56.5	17.3	34.3	4.25	1.68
	Home Children	66	56.1	16.5	37.3	4.01	1.67
	Day Care Children	52	65.4	15.2	27.9	4.07	1.73
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	6.5	--	--	--	--
	Urban	103	6.8	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	55	12.7	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	59	13.6	--	--	--	--
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	120	8.3	--	--	--	--
	Urban	100	9.0	--	--	--	--
	Rural	20	5.0	--	--	--	--
	Low Income	55	14.5	--	--	--	--
	Mid/High Income	61	3.3	--	--	--	--
	Home Children	64	4.7	--	--	--	--
	Day Care Children	56	12.5	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	60.2	36.6	76.8	9.30	1.69
	Urban	97	60.8	32.8	67.1	9.36	1.62
	Rural	21	57.1	54.2	112	9.00	2.01
	Low Income	52	65.4	34.7	77.6	8.63	1.77
	Mid/High Income	62	56.5	39.8	78.9	9.79	1.68
	Home Children	66	56.1	37.9	85.8	9.24	1.67
	Day Care Children	52	65.4	34.9	64.3	9.37	1.73

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-13b. Cyfluthrin (68359-37-5): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	6.46	1,050
	Urban	103	<MDL	<MDL	<MDL	<MDL	6.46	1,050
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	6.72
	Low Income	55	<MDL	<MDL	<MDL	<MDL	7.55	1,050
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	6.30
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	7.55	1,050
Potential Exposure via Dietary Ingestion (ng/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	485	2,370
	Urban	100	<MDL	<MDL	<MDL	<MDL	500	2,370
	Rural	20	<MDL	<MDL	<MDL	<MDL	<MDL	459
	Low Income	55	<MDL	<MDL	<MDL	<MDL	563	2,370
	Mid/High Income	61	<MDL	<MDL	<MDL	<MDL	<MDL	531
	Home Children	64	<MDL	<MDL	<MDL	<MDL	<MDL	531
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	563	2,370
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	<MDL	<MDL	3.57	12.4	67.9	227
	Urban	97	<MDL	<MDL	3.67	12.4	62.4	227
	Rural	21	<MDL	<MDL	2.66	12.2	163	164
	Low Income	52	<MDL	<MDL	4.85	12.3	51.5	227
	Mid/High Income	62	<MDL	<MDL	3.33	16.6	93.4	164
	Home Children	66	<MDL	<MDL	3.42	13.7	93.4	227
	Day Care Children	52	<MDL	<MDL	4.58	11.4	62.4	164
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	14.9	2,420
	Urban	103	<MDL	<MDL	<MDL	<MDL	14.9	2,420
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	15.5
	Low Income	55	<MDL	<MDL	<MDL	<MDL	17.4	2,420
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	14.5
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	17.4	2,420
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	1,120	5,450
	Urban	100	<MDL	<MDL	<MDL	<MDL	1,150	5,450
	Rural	20	<MDL	<MDL	<MDL	<MDL	<MDL	1,060
	Low Income	55	<MDL	<MDL	<MDL	<MDL	1,300	5,450
	Mid/High Income	61	<MDL	<MDL	<MDL	<MDL	<MDL	1,220
	Home Children	64	<MDL	<MDL	<MDL	<MDL	<MDL	1,220
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	1,300	5,450
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	<MDL	<MDL	8.22	28.5	156	523
	Urban	97	<MDL	<MDL	8.46	28.5	144	523
	Rural	21	<MDL	<MDL	6.13	28.2	375	378
	Low Income	52	<MDL	<MDL	11.2	28.3	119	523
	Mid/High Income	62	<MDL	<MDL	7.68	38.3	215	378
	Home Children	66	<MDL	<MDL	7.87	31.5	215	523
	Day Care Children	52	<MDL	<MDL	10.5	26.3	144	378

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-13c. Cyfluthrin (68359-37-5): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	6.5	--	--	--	--
	Urban	103	6.8	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	55	12.7	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	59	13.6	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	120	8.3	--	--	--	--
	Urban	100	9.0	--	--	--	--
	Rural	20	5.0	--	--	--	--
	Low Income	55	14.5	--	--	--	--
	Mid/High Income	61	3.3	--	--	--	--
	Home Children	64	4.7	--	--	--	--
	Day Care Children	56	12.5	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	60.2	0.527	1.22	0.120	1.74
	Urban	97	60.8	0.471	1.08	0.123	1.67
	Rural	21	57.1	0.784	1.76	0.110	2.10
	Low Income	52	65.4	0.491	1.29	0.106	1.82
	Mid/High Income	62	56.5	0.582	1.21	0.134	1.73
	Home Children	66	56.1	0.581	1.44	0.127	1.71
	Day Care Children	52	65.4	0.459	0.875	0.112	1.79
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	6.5	--	--	--	--
	Urban	103	6.8	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	55	12.7	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	59	13.6	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	120	8.3	--	--	--	--
	Urban	100	9.0	--	--	--	--
	Rural	20	5.0	--	--	--	--
	Low Income	55	14.5	--	--	--	--
	Mid/High Income	61	3.3	--	--	--	--
	Home Children	64	4.7	--	--	--	--
	Day Care Children	56	12.5	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	60.2	1.21	2.82	0.277	1.74
	Urban	97	60.8	1.09	2.48	0.283	1.67
	Rural	21	57.1	1.81	4.04	0.253	2.10
	Low Income	52	65.4	1.13	2.96	0.243	1.82
	Mid/High Income	62	56.5	1.34	2.79	0.309	1.73
	Home Children	66	56.1	1.34	3.33	0.293	1.71
	Day Care Children	52	65.4	1.06	2.01	0.259	1.79

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-13d. Cyfluthrin (68359-37-5): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	0.212	37.4
	Urban	103	<MDL	<MDL	<MDL	<MDL	0.213	37.4
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	0.190
	Low Income	55	<MDL	<MDL	<MDL	<MDL	0.323	37.4
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.230
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	0.228	37.4
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	14.6	70.3
	Urban	100	<MDL	<MDL	<MDL	<MDL	16.0	70.3
	Rural	20	<MDL	<MDL	<MDL	<MDL	<MDL	12.8
	Low Income	55	<MDL	<MDL	<MDL	<MDL	16.2	70.3
	Mid/High Income	61	<MDL	<MDL	<MDL	<MDL	<MDL	19.4
	Home Children	64	<MDL	<MDL	<MDL	<MDL	<MDL	13.3
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	19.4	70.3
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	<MDL	<MDL	0.126	0.420	2.02	8.94
	Urban	97	<MDL	<MDL	0.127	0.349	2.02	8.94
	Rural	21	<MDL	<MDL	0.075	0.420	5.17	6.64
	Low Income	52	<MDL	<MDL	0.139	0.373	1.49	8.94
	Mid/High Income	62	<MDL	<MDL	0.115	0.539	2.94	6.64
	Home Children	66	<MDL	<MDL	0.118	0.502	2.94	8.94
	Day Care Children	52	<MDL	<MDL	0.134	0.332	2.02	5.17
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	0.487	86.1
	Urban	103	<MDL	<MDL	<MDL	<MDL	0.491	86.1
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	0.437
	Low Income	55	<MDL	<MDL	<MDL	<MDL	0.744	86.1
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.529
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	0.524	86.1
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	33.6	162
	Urban	100	<MDL	<MDL	<MDL	<MDL	36.7	162
	Rural	20	<MDL	<MDL	<MDL	<MDL	<MDL	29.5
	Low Income	55	<MDL	<MDL	<MDL	<MDL	37.3	162
	Mid/High Income	61	<MDL	<MDL	<MDL	<MDL	<MDL	44.7
	Home Children	64	<MDL	<MDL	<MDL	<MDL	<MDL	30.6
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	44.7	162
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	<MDL	<MDL	0.289	0.967	4.66	20.6
	Urban	97	<MDL	<MDL	0.292	0.804	4.66	20.6
	Rural	21	<MDL	<MDL	0.173	0.967	11.9	15.3
	Low Income	52	<MDL	<MDL	0.319	0.859	3.44	20.6
	Mid/High Income	62	<MDL	<MDL	0.264	1.24	6.77	15.3
	Home Children	66	<MDL	<MDL	0.272	1.16	6.77	20.6
	Day Care Children	52	<MDL	<MDL	0.308	0.766	4.66	11.9

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-14a. Diazinon (333-41-5): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	100.0	255	1,440	23.7	1.65
	Urban	103	100.0	296	1,570	23.7	1.73
	Rural	21	100.0	56.1	105	23.7	1.23
	Low Income	55	100.0	144	312	47.3	1.42
	Mid/High Income	65	100.0	363	1,970	13.5	1.63
	Home Children	65	100.0	293	1,680	17.9	1.69
	Day Care Children	59	100.0	214	1,120	32.5	1.56
Potential Exposure via Dietary Ingestion (ng/day)	Overall	124	31.5	--	--	--	--
	Urban	103	32.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	57	42.1	--	--	--	--
	Mid/High Income	63	22.2	--	--	--	--
	Home Children	64	21.9	--	--	--	--
	Day Care Children	60	41.7	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	97.5	21.7	81.9	1.56	1.98
	Urban	97	96.9	25.5	89.9	1.52	2.09
	Rural	21	100.0	4.04	5.85	1.76	1.42
	Low Income	52	100.0	30.7	94.9	3.28	1.97
	Mid/High Income	62	95.2	15.3	72.1	0.824	1.82
	Home Children	66	95.5	19.1	84.1	1.22	1.91
	Day Care Children	52	100.0	25.1	79.6	2.14	2.04
Potential Exposure – Aggregated (ng/day)	Overall	109	100.0	354	1,720	68.1	1.21
	Urban	88	100.0	413	1,910	68.2	1.28
	Rural	21	100.0	106	148	68.0	0.868
	Low Income	46	100.0	224	436	97.8	1.15
	Mid/High Income	59	100.0	473	2,310	52.2	1.21
	Home Children	63	100.0	374	1,930	55.3	1.26
	Day Care Children	46	100.0	327	1,410	90.8	1.07
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	100.0	839	4,720	78.0	1.65
	Urban	103	100.0	973	5,170	78.0	1.73
	Rural	21	100.0	184	346	78.0	1.23
	Low Income	55	100.0	472	1,030	155	1.42
	Mid/High Income	65	100.0	1,190	6,460	44.5	1.63
	Home Children	65	100.0	962	5,530	58.7	1.69
	Day Care Children	59	100.0	704	3,680	107	1.56
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	124	31.5	--	--	--	--
	Urban	103	32.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	57	42.1	--	--	--	--
	Mid/High Income	63	22.2	--	--	--	--
	Home Children	64	21.9	--	--	--	--
	Day Care Children	60	41.7	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	97.5	71.3	269	5.13	1.98
	Urban	97	96.9	83.9	295	4.99	2.09
	Rural	21	100.0	13.3	19.2	5.79	1.42
	Low Income	52	100.0	101	312	10.8	1.97
	Mid/High Income	62	95.2	50.4	237	2.71	1.82
	Home Children	66	95.5	62.6	276	3.99	1.91
	Day Care Children	52	100.0	82.3	261	7.04	2.04
Potential Exposure – Aggregated (pmoles/day)	Overall	109	100.0	1,160	5,650	224	1.21
	Urban	88	100.0	1,360	6,280	224	1.28
	Rural	21	100.0	349	486	223	0.868
	Low Income	46	100.0	737	1,430	321	1.15
	Mid/High Income	59	100.0	1,560	7,590	171	1.21
	Home Children	63	100.0	1,230	6,330	182	1.26
	Day Care Children	46	100.0	1,070	4,630	298	1.07

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-14b. Diazinon (333-41-5): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	2.48	6.79	16.9	63.3	353	13,400
	Urban	103	2.48	5.94	16.0	64.3	353	13,400
	Rural	21	3.81	10.3	17.4	60.6	130	487
	Low Income	55	4.79	15.7	36.9	130	487	1,910
	Mid/High Income	65	2.48	4.46	7.86	27.7	197	13,400
	Home Children	65	2.48	5.64	11.6	32.8	487	13,400
	Day Care Children	59	2.52	10.3	28.4	106	288	8,660
Potential Exposure via Dietary Ingestion (ng/day)	Overall	124	<MDL	<MDL	<MDL	43.3	97.2	1,420
	Urban	103	<MDL	<MDL	<MDL	42.9	85.8	1,420
	Rural	21	<MDL	<MDL	<MDL	44.1	97.2	216
	Low Income	57	<MDL	<MDL	<MDL	51.7	216	485
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	65.5	1,420
	Home Children	64	<MDL	<MDL	<MDL	<MDL	216	1,420
	Day Care Children	60	<MDL	<MDL	<MDL	52.3	79.4	473
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	<MDL	0.417	0.984	4.26	150	622
	Urban	97	<MDL	0.411	0.816	4.26	179	622
	Rural	21	0.130	0.800	2.34	4.06	15.3	24.7
	Low Income	52	0.125	0.816	2.65	7.16	179	622
	Mid/High Income	62	<MDL	0.259	0.556	1.62	26.7	501
	Home Children	66	<MDL	0.357	0.805	3.03	56.7	622
	Day Care Children	52	0.059	0.533	1.24	5.48	179	501
Potential Exposure – Aggregated (ng/day)	Overall	109	14.6	30.4	51.6	110	544	15,100
	Urban	88	14.6	30.2	49.4	97.8	544	15,100
	Rural	21	19.1	38.0	56.4	112	218	708
	Low Income	46	20.8	37.2	78.1	181	708	2,520
	Mid/High Income	59	14.6	27.0	39.3	60.1	285	15,100
	Home Children	63	14.6	27.0	35.7	63.6	708	15,100
	Day Care Children	46	26.3	46.0	65.9	141	450	9,630
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	8.16	22.3	55.7	208	1,160	44,200
	Urban	103	8.16	19.5	52.6	211	1,160	44,200
	Rural	21	12.5	33.7	57.0	199	429	1,600
	Low Income	55	15.7	51.5	121	429	1,600	6,270
	Mid/High Income	65	8.16	14.7	25.8	90.9	648	44,200
	Home Children	65	8.16	18.5	38.1	108	1,600	44,200
	Day Care Children	59	8.29	33.7	93.2	349	946	28,400
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	124	<MDL	<MDL	<MDL	142	319	4,670
	Urban	103	<MDL	<MDL	<MDL	141	282	4,670
	Rural	21	<MDL	<MDL	<MDL	145	319	709
	Low Income	57	<MDL	<MDL	<MDL	170	709	1,590
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	215	4,670
	Home Children	64	<MDL	<MDL	<MDL	<MDL	709	4,670
	Day Care Children	60	<MDL	<MDL	<MDL	172	261	1,550
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	<MDL	1.37	3.23	14.0	494	2,040
	Urban	97	<MDL	1.35	2.68	14.0	587	2,040
	Rural	21	0.426	2.63	7.68	13.4	50.3	81.0
	Low Income	52	0.409	2.68	8.69	23.5	587	2,040
	Mid/High Income	62	<MDL	0.850	1.83	5.31	87.6	1,650
	Home Children	66	<MDL	1.17	2.64	9.96	186	2,040
	Day Care Children	52	0.195	1.75	4.07	18.0	587	1,650
Potential Exposure – Aggregated (pmoles/day)	Overall	109	48.0	99.9	169	360	1,790	49,700
	Urban	88	48.0	99.3	162	321	1,790	49,700
	Rural	21	62.8	125	185	368	715	2,330
	Low Income	46	68.4	122	257	594	2,330	8,270
	Mid/High Income	59	48.0	88.7	129	197	936	49,700
	Home Children	63	48.0	88.7	117	209	2,330	49,700
	Day Care Children	46	86.3	151	217	463	1,480	31,600

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-14c. Diazinon (333-41-5): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	100.0	7.40	41.3	0.708	1.64
	Urban	103	100.0	8.59	45.2	0.717	1.71
	Rural	21	100.0	1.54	2.74	0.666	1.23
	Low Income	55	100.0	4.14	9.32	1.35	1.42
	Mid/High Income	65	100.0	10.6	56.4	0.422	1.65
	Home Children	65	100.0	8.38	47.6	0.567	1.65
	Day Care Children	59	100.0	6.32	33.4	0.905	1.60
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	124	31.5	--	--	--	--
	Urban	103	32.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	57	42.1	--	--	--	--
	Mid/High Income	63	22.2	--	--	--	--
	Home Children	64	21.9	--	--	--	--
	Day Care Children	60	41.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	97.5	0.613	2.28	0.047	1.99
	Urban	97	96.9	0.718	2.50	0.046	2.10
	Rural	21	100.0	0.125	0.224	0.049	1.41
	Low Income	52	100.0	0.819	2.53	0.092	1.95
	Mid/High Income	62	95.2	0.474	2.13	0.026	1.88
	Home Children	66	95.5	0.550	2.30	0.039	1.91
	Day Care Children	52	100.0	0.692	2.28	0.059	2.07
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	109	100.0	10.2	49.4	2.02	1.18
	Urban	88	100.0	11.9	54.9	2.04	1.25
	Rural	21	100.0	2.90	3.83	1.91	0.834
	Low Income	46	100.0	6.30	13.0	2.74	1.13
	Mid/High Income	59	100.0	13.8	66.2	1.63	1.20
	Home Children	63	100.0	10.8	54.5	1.74	1.23
	Day Care Children	46	100.0	9.41	41.9	2.46	1.09
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	100.0	24.3	136	2.33	1.64
	Urban	103	100.0	28.2	149	2.36	1.71
	Rural	21	100.0	5.07	9.00	2.19	1.23
	Low Income	55	100.0	13.6	30.6	4.45	1.42
	Mid/High Income	65	100.0	34.7	185	1.39	1.65
	Home Children	65	100.0	27.5	156	1.86	1.65
	Day Care Children	59	100.0	20.8	110	2.97	1.60
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	124	31.5	--	--	--	--
	Urban	103	32.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	57	42.1	--	--	--	--
	Mid/High Income	63	22.2	--	--	--	--
	Home Children	64	21.9	--	--	--	--
	Day Care Children	60	41.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	97.5	2.01	7.49	0.153	1.99
	Urban	97	96.9	2.36	8.22	0.151	2.10
	Rural	21	100.0	0.411	0.735	0.163	1.41
	Low Income	52	100.0	2.69	8.31	0.303	1.95
	Mid/High Income	62	95.2	1.56	7.00	0.085	1.88
	Home Children	66	95.5	1.81	7.54	0.127	1.91
	Day Care Children	52	100.0	2.27	7.48	0.194	2.07
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	109	100.0	33.5	162	6.63	1.18
	Urban	88	100.0	39.2	180	6.72	1.25
	Rural	21	100.0	9.54	12.6	6.27	0.834
	Low Income	46	100.0	20.7	42.7	9.01	1.13
	Mid/High Income	59	100.0	45.3	217	5.34	1.20
	Home Children	63	100.0	35.3	179	5.73	1.23
	Day Care Children	46	100.0	30.9	138	8.10	1.09

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-14d. Diazinon (333-41-5): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	0.059	0.201	0.507	1.71	10.2	380
	Urban	103	0.059	0.198	0.518	1.74	10.2	380
	Rural	21	0.113	0.267	0.487	1.38	3.78	12.5
	Low Income	55	0.129	0.469	1.07	3.78	12.5	60.1
	Mid/High Income	65	0.059	0.153	0.255	0.824	5.82	380
	Home Children	65	0.088	0.176	0.378	1.08	12.5	380
	Day Care Children	59	0.059	0.323	0.824	3.00	10.2	258
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	124	<MDL	<MDL	<MDL	1.24	2.55	40.2
	Urban	103	<MDL	<MDL	<MDL	1.23	2.49	40.2
	Rural	21	<MDL	<MDL	<MDL	1.26	2.55	5.53
	Low Income	57	<MDL	<MDL	<MDL	1.51	5.53	15.3
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	1.76	40.2
	Home Children	64	<MDL	<MDL	<MDL	<MDL	5.53	40.2
	Day Care Children	60	<MDL	<MDL	<MDL	1.36	2.27	14.1
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	<MDL	0.012	0.030	0.126	3.82	16.7
	Urban	97	<MDL	0.012	0.029	0.126	4.28	16.7
	Rural	21	0.004	0.020	0.072	0.117	0.444	1.01
	Low Income	52	0.003	0.023	0.082	0.159	4.28	16.7
	Mid/High Income	62	<MDL	0.009	0.018	0.053	1.09	14.9
	Home Children	66	<MDL	0.010	0.028	0.094	2.31	16.7
	Day Care Children	52	0.002	0.013	0.042	0.140	4.28	14.9
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	109	0.401	0.965	1.44	2.60	15.8	428
	Urban	88	0.401	0.944	1.40	2.72	15.8	428
	Rural	21	0.701	1.23	1.66	2.31	6.31	18.1
	Low Income	46	0.401	1.37	1.97	4.93	18.1	79.2
	Mid/High Income	59	0.460	0.853	1.32	1.72	11.1	428
	Home Children	63	0.401	0.846	1.31	2.18	18.1	428
	Day Care Children	46	0.474	1.37	1.68	3.83	11.5	287
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	0.194	0.661	1.67	5.63	33.6	1,250
	Urban	103	0.194	0.652	1.70	5.73	33.6	1,250
	Rural	21	0.373	0.879	1.60	4.53	12.4	41.0
	Low Income	55	0.423	1.54	3.53	12.4	41.0	197
	Mid/High Income	65	0.194	0.502	0.836	2.71	19.1	1,250
	Home Children	65	0.288	0.578	1.24	3.54	41.0	1,250
	Day Care Children	59	0.194	1.06	2.71	9.85	33.6	847
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	124	<MDL	<MDL	<MDL	4.06	8.37	132
	Urban	103	<MDL	<MDL	<MDL	4.06	8.17	132
	Rural	21	<MDL	<MDL	<MDL	4.14	8.37	18.2
	Low Income	57	<MDL	<MDL	<MDL	4.95	18.2	50.2
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	5.78	132
	Home Children	64	<MDL	<MDL	<MDL	<MDL	18.2	132
	Day Care Children	60	<MDL	<MDL	<MDL	4.48	7.47	46.2
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	<MDL	0.040	0.100	0.414	12.5	54.9
	Urban	97	<MDL	0.040	0.095	0.414	14.1	54.9
	Rural	21	0.013	0.065	0.235	0.385	1.46	3.30
	Low Income	52	0.011	0.075	0.271	0.522	14.1	54.9
	Mid/High Income	62	<MDL	0.028	0.060	0.176	3.57	49.0
	Home Children	66	<MDL	0.034	0.091	0.310	7.59	54.9
	Day Care Children	52	0.005	0.043	0.137	0.461	14.1	49.0
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	109	1.32	3.17	4.73	8.54	51.9	1,400
	Urban	88	1.32	3.10	4.59	8.93	51.9	1,400
	Rural	21	2.30	4.04	5.45	7.59	20.7	59.6
	Low Income	46	1.32	4.49	6.47	16.2	59.6	260
	Mid/High Income	59	1.51	2.80	4.33	5.66	36.4	1,400
	Home Children	63	1.32	2.78	4.30	7.16	59.6	1,400
	Day Care Children	46	1.56	4.51	5.52	12.6	37.7	942

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-15a. Dibenzo[a,h]anthracene (53-70-3): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	9.7	--	--	--	--
	Urban	103	11.7	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	55	12.7	--	--	--	--
	Mid/High Income	65	7.7	--	--	--	--
	Home Children	65	10.8	--	--	--	--
	Day Care Children	59	8.5	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	0.0	--	--	--	--
	Urban	107	0.0	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	0.0	--	--	--	--
	Mid/High Income	66	0.0	--	--	--	--
	Home Children	66	0.0	--	--	--	--
	Day Care Children	62	0.0	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	98.3	5.62	12.2	2.28	1.22
	Urban	96	97.9	5.02	9.69	2.23	1.20
	Rural	21	100.0	8.36	20.1	2.50	1.35
	Low Income	52	100.0	4.10	6.48	2.08	1.20
	Mid/High Income	61	98.4	7.20	15.7	2.59	1.26
	Home Children	63	96.8	3.90	6.62	1.88	1.18
	Day Care Children	54	100.0	7.63	16.3	2.85	1.25
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	9.7	--	--	--	--
	Urban	103	11.7	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	55	12.7	--	--	--	--
	Mid/High Income	65	7.7	--	--	--	--
	Home Children	65	10.8	--	--	--	--
	Day Care Children	59	8.5	--	--	--	--
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	0.0	--	--	--	--
	Urban	107	0.0	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	0.0	--	--	--	--
	Mid/High Income	66	0.0	--	--	--	--
	Home Children	66	0.0	--	--	--	--
	Day Care Children	62	0.0	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	98.3	20.2	43.7	8.18	1.22
	Urban	96	97.9	18.0	34.8	8.01	1.20
	Rural	21	100.0	30.0	72.2	8.98	1.35
	Low Income	52	100.0	14.7	23.3	7.48	1.20
	Mid/High Income	61	98.4	25.9	56.2	9.31	1.26
	Home Children	63	96.8	14.0	23.8	6.74	1.18
	Day Care Children	54	100.0	27.4	58.5	10.2	1.25

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-15b. Dibenzo[a,h]anthracene (53-70-3): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	0.640	1.72
	Urban	103	<MDL	<MDL	<MDL	<MDL	0.704	1.72
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	55	<MDL	<MDL	<MDL	<MDL	0.752	1.72
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	0.587	0.623
	Home Children	65	<MDL	<MDL	<MDL	<MDL	0.590	1.72
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	0.717	0.752
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	<MDL	1.14	1.89	4.19	26.4	91.2
	Urban	96	<MDL	1.14	1.96	4.77	24.6	70.4
	Rural	21	0.380	1.09	1.82	3.76	26.4	91.2
	Low Income	52	0.034	1.09	2.16	4.02	17.1	39.5
	Mid/High Income	61	<MDL	1.19	1.73	5.50	29.7	91.2
	Home Children	63	<MDL	0.991	1.53	3.76	10.5	39.5
	Day Care Children	54	0.297	1.39	2.58	4.88	36.6	91.2
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	2.30	6.19
	Urban	103	<MDL	<MDL	<MDL	<MDL	2.53	6.19
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	55	<MDL	<MDL	<MDL	<MDL	2.70	6.19
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	2.11	2.24
	Home Children	65	<MDL	<MDL	<MDL	<MDL	2.12	6.19
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	2.58	2.70
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	<MDL	4.10	6.79	15.0	95.0	328
	Urban	96	<MDL	4.11	7.04	17.1	88.5	253
	Rural	21	1.36	3.90	6.52	13.5	95.0	328
	Low Income	52	0.123	3.93	7.76	14.5	61.6	142
	Mid/High Income	61	<MDL	4.29	6.20	19.7	107	328
	Home Children	63	<MDL	3.56	5.51	13.5	37.6	142
	Day Care Children	54	1.07	5.00	9.27	17.5	131	328

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-15c. Dibenzo[a,h]anthracene (53-70-3): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	9.7	--	--	--	--
	Urban	103	11.7	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	55	12.7	--	--	--	--
	Mid/High Income	65	7.7	--	--	--	--
	Home Children	65	10.8	--	--	--	--
	Day Care Children	59	8.5	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	0.0	--	--	--	--
	Urban	107	0.0	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	0.0	--	--	--	--
	Mid/High Income	66	0.0	--	--	--	--
	Home Children	66	0.0	--	--	--	--
	Day Care Children	62	0.0	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	98.3	0.176	0.382	0.067	1.28
	Urban	96	97.9	0.155	0.295	0.067	1.24
	Rural	21	100.0	0.270	0.648	0.070	1.44
	Low Income	52	100.0	0.122	0.200	0.059	1.24
	Mid/High Income	61	98.4	0.231	0.490	0.081	1.30
	Home Children	63	96.8	0.136	0.243	0.059	1.27
	Day Care Children	54	100.0	0.222	0.495	0.079	1.28
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	9.7	--	--	--	--
	Urban	103	11.7	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	55	12.7	--	--	--	--
	Mid/High Income	65	7.7	--	--	--	--
	Home Children	65	10.8	--	--	--	--
	Day Care Children	59	8.5	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	0.0	--	--	--	--
	Urban	107	0.0	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	0.0	--	--	--	--
	Mid/High Income	66	0.0	--	--	--	--
	Home Children	66	0.0	--	--	--	--
	Day Care Children	62	0.0	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	98.3	0.631	1.37	0.242	1.28
	Urban	96	97.9	0.557	1.06	0.240	1.24
	Rural	21	100.0	0.970	2.33	0.252	1.44
	Low Income	52	100.0	0.437	0.717	0.211	1.24
	Mid/High Income	61	98.4	0.829	1.76	0.290	1.30
	Home Children	63	96.8	0.489	0.874	0.212	1.27
	Day Care Children	54	100.0	0.796	1.78	0.283	1.28

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-15d. Dibenzo[a,h]anthracene (53-70-3): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	0.021	0.135
	Urban	103	<MDL	<MDL	<MDL	<MDL	0.021	0.135
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	55	<MDL	<MDL	<MDL	<MDL	0.023	0.135
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	0.021	0.023
	Home Children	65	<MDL	<MDL	<MDL	<MDL	0.021	0.135
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	0.020	0.023
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	<MDL	0.033	0.058	0.131	1.08	2.87
	Urban	96	<MDL	0.034	0.060	0.138	0.555	2.04
	Rural	21	0.010	0.028	0.046	0.109	1.08	2.87
	Low Income	52	0.001	0.029	0.063	0.126	0.530	1.24
	Mid/High Income	61	<MDL	0.037	0.056	0.168	1.09	2.87
	Home Children	63	<MDL	0.026	0.052	0.129	0.393	1.24
	Day Care Children	54	0.009	0.035	0.067	0.138	1.22	2.87
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	0.074	0.487
	Urban	103	<MDL	<MDL	<MDL	<MDL	0.075	0.487
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	55	<MDL	<MDL	<MDL	<MDL	0.083	0.487
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	0.074	0.084
	Home Children	65	<MDL	<MDL	<MDL	<MDL	0.075	0.487
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	0.073	0.083
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	<MDL	0.119	0.207	0.469	3.87	10.3
	Urban	96	<MDL	0.122	0.216	0.497	1.99	7.33
	Rural	21	0.034	0.101	0.164	0.392	3.87	10.3
	Low Income	52	0.004	0.105	0.227	0.453	1.90	4.46
	Mid/High Income	61	<MDL	0.132	0.201	0.603	3.90	10.3
	Home Children	63	<MDL	0.093	0.186	0.463	1.41	4.46
	Day Care Children	54	0.033	0.126	0.239	0.495	4.39	10.3

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-16a. Di-*n*-butylphthalate (84-74-2): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	100.0	2,400	1,770	1,980	0.606
	Urban	103	100.0	2,520	1,900	2,040	0.636
	Rural	21	100.0	1,810	685	1,680	0.409
	Low Income	55	100.0	2,680	2,150	2,190	0.585
	Mid/High Income	65	100.0	2,150	1,330	1,810	0.611
	Home Children	65	100.0	1,710	908	1,500	0.528
	Day Care Children	59	100.0	3,150	2,150	2,670	0.545
Potential Exposure via Dietary Ingestion (ng/day)	Overall	86	61.6	70,900	78,000	43,000	1.00
	Urban	69	63.8	68,000	73,200	41,700	1.00
	Rural	17	52.9	82,500	96,700	48,900	1.02
	Low Income	38	50.0	66,700	80,000	38,500	1.02
	Mid/High Income	46	69.6	68,600	67,100	44,800	0.965
	Home Children	51	49.0	--	--	--	--
	Day Care Children	35	80.0	79,600	71,400	54,400	0.902
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	100.0	539	724	339	0.911
	Urban	96	100.0	563	775	349	0.922
	Rural	21	100.0	427	411	299	0.872
	Low Income	51	100.0	560	624	354	0.980
	Mid/High Income	62	100.0	493	753	327	0.797
	Home Children	63	100.0	544	903	302	0.974
	Day Care Children	54	100.0	533	439	390	0.820
Potential Exposure – Aggregated (ng/day)	Overall	78	100.0	72,900	76,600	47,100	0.927
	Urban	61	100.0	69,600	70,500	45,900	0.917
	Rural	17	100.0	84,700	96,800	51,600	0.987
	Low Income	32	100.0	71,500	79,300	44,300	0.962
	Mid/High Income	44	100.0	67,800	64,400	46,700	0.880
	Home Children	47	100.0	65,300	82,300	38,700	0.973
	Day Care Children	31	100.0	84,300	66,600	63,400	0.777
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	100.0	8,610	6,360	7,100	0.606
	Urban	103	100.0	9,040	6,820	7,340	0.636
	Rural	21	100.0	6,490	2,460	6,030	0.409
	Low Income	55	100.0	9,630	7,730	7,870	0.585
	Mid/High Income	65	100.0	7,710	4,770	6,500	0.611
	Home Children	65	100.0	6,150	3,260	5,400	0.528
	Day Care Children	59	100.0	11,300	7,730	9,600	0.545
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	86	61.6	255,000	280,000	155,000	1.00
	Urban	69	63.8	244,000	263,000	150,000	1.00
	Rural	17	52.9	296,000	348,000	176,000	1.02
	Low Income	38	50.0	240,000	287,000	138,000	1.02
	Mid/High Income	46	69.6	247,000	241,000	161,000	0.965
	Home Children	51	49.0	--	--	--	--
	Day Care Children	35	80.0	286,000	256,000	195,000	0.902
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	100.0	1,940	2,600	1,220	0.911
	Urban	96	100.0	2,020	2,780	1,250	0.922
	Rural	21	100.0	1,530	1,480	1,070	0.872
	Low Income	51	100.0	2,010	2,240	1,270	0.980
	Mid/High Income	62	100.0	1,770	2,710	1,170	0.797
	Home Children	63	100.0	1,950	3,240	1,080	0.974
	Day Care Children	54	100.0	1,920	1,580	1,400	0.820
Potential Exposure – Aggregated (pmoles/day)	Overall	78	100.0	262,000	275,000	169,000	0.927
	Urban	61	100.0	250,000	253,000	165,000	0.917
	Rural	17	100.0	304,000	348,000	186,000	0.987
	Low Income	32	100.0	257,000	285,000	159,000	0.962
	Mid/High Income	44	100.0	243,000	231,000	168,000	0.880
	Home Children	47	100.0	235,000	296,000	139,000	0.973
	Day Care Children	31	100.0	303,000	239,000	228,000	0.777

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-16b. Di-*n*-butylphthalate (84-74-2): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	313	1,380	1,840	2,850	5,740	10,000
	Urban	103	313	1,360	1,900	2,970	6,450	10,000
	Rural	21	551	1,520	1,630	2,200	3,090	3,220
	Low Income	55	806	1,520	1,860	2,900	9,330	10,000
	Mid/High Income	65	313	1,340	1,790	2,750	4,040	8,730
	Home Children	65	313	1,160	1,540	2,060	3,250	5,740
	Day Care Children	59	1,190	1,770	2,550	3,480	9,330	10,000
Potential Exposure via Dietary Ingestion (ng/day)	Overall	86	<MDL	<MDL	39,300	93,100	241,000	362,000
	Urban	69	<MDL	<MDL	39,500	87,300	228,000	362,000
	Rural	17	<MDL	<MDL	39,000	112,000	348,000	348,000
	Low Income	38	<MDL	<MDL	<MDL	104,000	241,000	362,000
	Mid/High Income	46	<MDL	<MDL	47,000	87,300	219,000	281,000
	Home Children	51	<MDL	<MDL	<MDL	76,000	268,000	362,000
	Day Care Children	35	<MDL	26,500	49,800	115,000	241,000	281,000
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	50.9	167	346	596	1,670	5,640
	Urban	96	50.9	164	348	624	1,680	5,640
	Rural	21	57.4	219	331	439	1,310	1,670
	Low Income	51	57.4	154	352	664	1,480	3,640
	Mid/High Income	62	89.9	182	311	497	1,630	5,640
	Home Children	63	50.9	145	290	496	1,680	5,640
	Day Care Children	54	87.0	204	410	664	1,480	2,220
Potential Exposure – Aggregated (ng/day)	Overall	78	9,090	21,600	42,900	94,800	270,000	365,000
	Urban	61	9,090	20,700	43,400	88,200	212,000	365,000
	Rural	17	14,900	23,200	42,500	113,000	350,000	350,000
	Low Income	32	13,500	20,000	30,300	111,000	230,000	365,000
	Mid/High Income	44	9,090	24,800	47,600	85,000	212,000	283,000
	Home Children	47	9,090	17,900	27,800	81,900	270,000	365,000
	Day Care Children	31	15,600	32,800	62,800	116,000	230,000	283,000
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	1,120	4,940	6,620	10,200	20,600	36,000
	Urban	103	1,120	4,870	6,810	10,700	23,200	36,000
	Rural	21	1,980	5,470	5,840	7,900	11,100	11,600
	Low Income	55	2,900	5,460	6,680	10,400	33,500	36,000
	Mid/High Income	65	1,120	4,820	6,420	9,890	14,500	31,400
	Home Children	65	1,120	4,170	5,540	7,400	11,700	20,600
	Day Care Children	59	4,260	6,360	9,150	12,500	33,500	36,000
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	86	<MDL	<MDL	141,000	334,000	865,000	1,300,000
	Urban	69	<MDL	<MDL	142,000	313,000	818,000	1,300,000
	Rural	17	<MDL	<MDL	140,000	401,000	1,250,000	1,250,000
	Low Income	38	<MDL	<MDL	<MDL	373,000	865,000	1,300,000
	Mid/High Income	46	<MDL	<MDL	169,000	313,000	785,000	1,010,000
	Home Children	51	<MDL	<MDL	<MDL	273,000	963,000	1,300,000
	Day Care Children	35	<MDL	95,300	179,000	412,000	865,000	1,010,000
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	183	598	1,240	2,140	6,010	20,300
	Urban	96	183	591	1,250	2,240	6,030	20,300
	Rural	21	206	788	1,190	1,580	4,720	6,010
	Low Income	51	206	552	1,260	2,380	5,300	13,100
	Mid/High Income	62	323	655	1,120	1,790	5,870	20,300
	Home Children	63	183	519	1,040	1,780	6,030	20,300
	Day Care Children	54	313	734	1,470	2,380	5,300	7,970
Potential Exposure – Aggregated (pmoles/day)	Overall	78	32,700	77,700	154,000	341,000	969,000	1,310,000
	Urban	61	32,700	74,400	156,000	317,000	762,000	1,310,000
	Rural	17	53,500	83,400	153,000	407,000	1,260,000	1,260,000
	Low Income	32	48,600	71,900	109,000	399,000	826,000	1,310,000
	Mid/High Income	44	32,700	89,100	171,000	305,000	762,000	1,020,000
	Home Children	47	32,700	64,200	99,700	294,000	969,000	1,310,000
	Day Care Children	31	56,100	118,000	226,000	418,000	826,000	1,020,000

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-16c. Di-*n*-butylphthalate (84-74-2): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	100.0	72.9	57.5	59.0	0.628
	Urban	103	100.0	77.3	61.5	61.8	0.651
	Rural	21	100.0	51.6	22.2	47.2	0.448
	Low Income	55	100.0	81.6	74.3	62.7	0.668
	Mid/High Income	65	100.0	65.8	37.1	56.4	0.586
	Home Children	65	100.0	56.7	41.3	47.8	0.577
	Day Care Children	59	100.0	90.8	67.2	74.4	0.605
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	86	61.6	2,090	2,340	1,260	1.00
	Urban	69	63.8	2,020	2,260	1,240	0.994
	Rural	17	52.9	2,370	2,740	1,380	1.05
	Low Income	38	50.0	1,660	1,700	1,050	0.948
	Mid/High Income	46	69.6	2,290	2,540	1,390	1.01
	Home Children	51	49.0	--	--	--	--
	Day Care Children	35	80.0	2,160	1,940	1,480	0.895
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	100.0	16.9	24.1	10.1	0.976
	Urban	96	100.0	17.7	25.6	10.5	0.981
	Rural	21	100.0	13.1	15.3	8.39	0.955
	Low Income	51	100.0	16.5	18.4	9.95	1.05
	Mid/High Income	62	100.0	16.3	27.1	10.2	0.848
	Home Children	63	100.0	18.2	30.5	9.50	1.06
	Day Care Children	54	100.0	15.3	13.4	10.8	0.867
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	78	100.0	2,100	2,190	1,360	0.921
	Urban	61	100.0	2,010	2,030	1,340	0.898
	Rural	17	100.0	2,430	2,740	1,450	1.03
	Low Income	32	100.0	1,730	1,500	1,180	0.893
	Mid/High Income	44	100.0	2,190	2,340	1,440	0.912
	Home Children	47	100.0	1,990	2,450	1,190	0.976
	Day Care Children	31	100.0	2,260	1,760	1,690	0.799
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	100.0	262	207	212	0.628
	Urban	103	100.0	278	221	222	0.651
	Rural	21	100.0	185	79.7	169	0.448
	Low Income	55	100.0	293	267	225	0.668
	Mid/High Income	65	100.0	236	133	203	0.586
	Home Children	65	100.0	204	148	172	0.577
	Day Care Children	59	100.0	326	242	267	0.605
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	86	61.6	7,510	8,420	4,530	1.00
	Urban	69	63.8	7,270	8,100	4,440	0.994
	Rural	17	52.9	8,500	9,830	4,940	1.05
	Low Income	38	50.0	5,970	6,120	3,780	0.948
	Mid/High Income	46	69.6	8,220	9,140	5,010	1.01
	Home Children	51	49.0	--	--	--	--
	Day Care Children	35	80.0	7,770	6,990	5,330	0.895
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	100.0	60.5	86.6	36.2	0.976
	Urban	96	100.0	63.5	92.0	37.7	0.981
	Rural	21	100.0	47.0	54.8	30.1	0.955
	Low Income	51	100.0	59.4	66.1	35.8	1.05
	Mid/High Income	62	100.0	58.7	97.2	36.7	0.848
	Home Children	63	100.0	65.4	110	34.1	1.06
	Day Care Children	54	100.0	54.9	48.1	38.7	0.867
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	78	100.0	7,540	7,880	4,900	0.921
	Urban	61	100.0	7,200	7,300	4,810	0.898
	Rural	17	100.0	8,730	9,850	5,220	1.03
	Low Income	32	100.0	6,200	5,380	4,250	0.893
	Mid/High Income	44	100.0	7,890	8,410	5,160	0.912
	Home Children	47	100.0	7,160	8,810	4,260	0.976
	Day Care Children	31	100.0	8,110	6,310	6,060	0.799

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-16d. Di-*n*-butylphthalate (84-74-2): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	9.31	40.3	55.7	84.8	182	325
	Urban	103	9.31	40.8	58.6	88.5	224	325
	Rural	21	16.0	37.0	47.1	62.9	97.2	104
	Low Income	55	22.8	39.9	55.0	88.5	302	325
	Mid/High Income	65	9.31	41.8	59.2	83.8	130	224
	Home Children	65	9.31	34.9	47.8	68.3	113	302
	Day Care Children	59	22.7	49.7	64.3	109	264	325
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	86	<MDL	<MDL	1,100	2,700	7,740	11,400
	Urban	69	<MDL	<MDL	1,090	2,700	7,370	11,400
	Rural	17	<MDL	<MDL	1,260	2,440	9,830	9,830
	Low Income	38	<MDL	<MDL	<MDL	2,440	5,110	7,370
	Mid/High Income	46	<MDL	<MDL	1,310	2,930	8,270	11,400
	Home Children	51	<MDL	<MDL	<MDL	2,620	9,630	11,400
	Day Care Children	35	<MDL	717	1,340	3,500	7,370	7,740
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	0.950	4.91	9.68	18.4	61.7	200
	Urban	96	0.950	4.89	10.2	19.0	61.7	200
	Rural	21	1.54	5.00	8.68	11.9	38.1	68.3
	Low Income	51	1.27	4.48	11.2	19.5	56.4	97.7
	Mid/High Income	62	2.47	5.42	9.64	15.6	48.6	200
	Home Children	63	0.950	4.65	9.04	17.1	68.3	200
	Day Care Children	54	1.73	4.91	10.7	20.8	39.3	67.9
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	78	286	652	1,250	2,910	7,800	11,400
	Urban	61	286	652	1,160	2,910	5,220	11,400
	Rural	17	426	701	1,380	2,490	9,880	9,880
	Low Income	32	363	506	900	2,530	4,520	5,220
	Mid/High Income	44	286	737	1,350	2,950	7,800	11,400
	Home Children	47	286	530	856	2,550	8,350	11,400
	Day Care Children	31	391	944	1,580	3,560	5,220	7,800
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	33.4	145	200	305	655	1,170
	Urban	103	33.4	147	211	318	803	1,170
	Rural	21	57.4	133	169	226	349	375
	Low Income	55	81.9	143	197	318	1,080	1,170
	Mid/High Income	65	33.4	150	213	301	469	803
	Home Children	65	33.4	125	172	245	407	1,080
	Day Care Children	59	81.7	179	231	393	947	1,170
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	86	<MDL	<MDL	3,940	9,700	27,800	40,800
	Urban	69	<MDL	<MDL	3,900	9,700	26,500	40,800
	Rural	17	<MDL	<MDL	4,540	8,780	35,300	35,300
	Low Income	38	<MDL	<MDL	<MDL	8,780	18,400	26,500
	Mid/High Income	46	<MDL	<MDL	4,700	10,500	29,700	40,800
	Home Children	51	<MDL	<MDL	<MDL	9,410	34,600	40,800
	Day Care Children	35	<MDL	2,580	4,800	12,600	26,500	27,800
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	3.41	17.7	34.8	66.2	222	720
	Urban	96	3.41	17.6	36.8	68.3	222	720
	Rural	21	5.54	18.0	31.2	42.8	137	245
	Low Income	51	4.55	16.1	40.1	70.1	203	351
	Mid/High Income	62	8.89	19.5	34.6	55.9	175	720
	Home Children	63	3.41	16.7	32.5	61.5	245	720
	Day Care Children	54	6.22	17.7	38.4	74.8	141	244
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	78	1,030	2,340	4,480	10,400	28,000	41,100
	Urban	61	1,030	2,340	4,150	10,400	18,700	41,100
	Rural	17	1,530	2,520	4,950	8,930	35,500	35,500
	Low Income	32	1,310	1,820	3,230	9,090	16,200	18,700
	Mid/High Income	44	1,030	2,650	4,860	10,600	28,000	41,100
	Home Children	47	1,030	1,900	3,070	9,160	30,000	41,100
	Day Care Children	31	1,400	3,390	5,660	12,800	18,700	28,000

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-17a. *p,p'*-DDE (72-55-9): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	36.3	--	--	--	--
	Urban	103	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	55	49.1	--	--	--	--
	Mid/High Income	65	26.2	--	--	--	--
	Home Children	65	30.8	--	--	--	--
	Day Care Children	59	42.4	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	76.8	126	112	84.4	0.942
	Urban	104	77.9	124	110	83.7	0.923
	Rural	21	71.4	138	124	88.5	1.06
	Low Income	57	78.9	131	113	89.4	0.922
	Mid/High Income	64	75.0	121	112	80.3	0.951
	Home Children	65	70.8	104	94.7	68.5	0.959
	Day Care Children	60	83.3	150	125	106	0.877
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	56.7	0.624	1.49	0.241	1.27
	Urban	99	52.5	0.575	1.48	0.224	1.24
	Rural	21	76.2	0.853	1.55	0.339	1.38
	Low Income	52	73.1	0.699	1.89	0.273	1.23
	Mid/High Income	64	45.3	--	--	--	--
	Home Children	66	42.4	--	--	--	--
	Day Care Children	54	74.1	0.757	1.93	0.272	1.31
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	36.3	--	--	--	--
	Urban	103	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	55	49.1	--	--	--	--
	Mid/High Income	65	26.2	--	--	--	--
	Home Children	65	30.8	--	--	--	--
	Day Care Children	59	42.4	--	--	--	--
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	76.8	397	352	266	0.942
	Urban	104	77.9	389	346	263	0.923
	Rural	21	71.4	435	390	278	1.06
	Low Income	57	78.9	412	356	281	0.922
	Mid/High Income	64	75.0	381	351	252	0.951
	Home Children	65	70.8	328	298	216	0.959
	Day Care Children	60	83.3	470	392	333	0.877
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	56.7	1.96	4.69	0.758	1.27
	Urban	99	52.5	1.81	4.66	0.705	1.24
	Rural	21	76.2	2.68	4.87	1.07	1.38
	Low Income	52	73.1	2.20	5.93	0.858	1.23
	Mid/High Income	64	45.3	--	--	--	--
	Home Children	66	42.4	--	--	--	--
	Day Care Children	54	74.1	2.38	6.06	0.855	1.31

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-17b. *p,p'*-DDE (72-55-9): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	<MDL	0.846	2.70	15.8
	Urban	103	<MDL	<MDL	<MDL	0.814	2.72	15.8
	Rural	21	<MDL	<MDL	<MDL	0.910	2.43	2.64
	Low Income	55	<MDL	<MDL	<MDL	1.39	3.44	15.8
	Mid/High Income	65	<MDL	<MDL	<MDL	0.684	1.45	7.27
	Home Children	65	<MDL	<MDL	<MDL	0.804	1.58	7.27
	Day Care Children	59	<MDL	<MDL	<MDL	1.14	3.44	15.8
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	42.7	87.5	170	357	545
	Urban	104	<MDL	42.2	86.9	169	357	545
	Rural	21	<MDL	<MDL	144	171	415	445
	Low Income	57	<MDL	43.1	94.0	175	345	545
	Mid/High Income	64	<MDL	<MDL	84.1	160	404	445
	Home Children	65	<MDL	<MDL	70.5	144	320	357
	Day Care Children	60	<MDL	58.8	106	181	419	545
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	<MDL	<MDL	0.214	0.573	2.59	13.4
	Urban	99	<MDL	<MDL	0.196	0.542	2.41	13.4
	Rural	21	<MDL	0.141	0.374	0.769	2.78	7.00
	Low Income	52	<MDL	<MDL	0.258	0.632	1.99	13.4
	Mid/High Income	64	<MDL	<MDL	<MDL	0.551	2.78	7.00
	Home Children	66	<MDL	<MDL	<MDL	0.562	2.41	7.00
	Day Care Children	54	<MDL	<MDL	0.266	0.584	3.51	13.4
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	<MDL	2.66	8.50	49.6
	Urban	103	<MDL	<MDL	<MDL	2.56	8.56	49.6
	Rural	21	<MDL	<MDL	<MDL	2.86	7.65	8.30
	Low Income	55	<MDL	<MDL	<MDL	4.38	10.8	49.6
	Mid/High Income	65	<MDL	<MDL	<MDL	2.15	4.56	22.9
	Home Children	65	<MDL	<MDL	<MDL	2.53	4.96	22.9
	Day Care Children	59	<MDL	<MDL	<MDL	3.59	10.8	49.6
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	134	275	535	1,120	1,710
	Urban	104	<MDL	133	273	531	1,120	1,710
	Rural	21	<MDL	<MDL	453	538	1,300	1,400
	Low Income	57	<MDL	136	296	551	1,080	1,710
	Mid/High Income	64	<MDL	<MDL	265	504	1,270	1,400
	Home Children	65	<MDL	<MDL	222	453	1,010	1,120
	Day Care Children	60	<MDL	185	333	569	1,320	1,710
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	<MDL	<MDL	0.673	1.80	8.15	42.1
	Urban	99	<MDL	<MDL	0.616	1.70	7.58	42.1
	Rural	21	<MDL	0.445	1.17	2.42	8.73	22.0
	Low Income	52	<MDL	<MDL	0.810	1.99	6.25	42.1
	Mid/High Income	64	<MDL	<MDL	<MDL	1.73	8.73	22.0
	Home Children	66	<MDL	<MDL	<MDL	1.77	7.58	22.0
	Day Care Children	54	<MDL	<MDL	0.836	1.84	11.0	42.1

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-17c. *p,p'*-DDE (72-55-9): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	36.3	--	--	--	--
	Urban	103	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	55	49.1	--	--	--	--
	Mid/High Income	65	26.2	--	--	--	--
	Home Children	65	30.8	--	--	--	--
	Day Care Children	59	42.4	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	76.8	3.81	3.41	2.52	0.960
	Urban	104	77.9	3.78	3.38	2.52	0.946
	Rural	21	71.4	3.92	3.63	2.48	1.05
	Low Income	57	78.9	3.92	3.57	2.54	0.998
	Mid/High Income	64	75.0	3.72	3.33	2.51	0.924
	Home Children	65	70.8	3.39	3.12	2.17	0.996
	Day Care Children	60	83.3	4.26	3.67	2.95	0.901
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	56.7	0.020	0.048	0.007	1.31
	Urban	99	52.5	0.018	0.045	0.007	1.27
	Rural	21	76.2	0.029	0.062	0.010	1.48
	Low Income	52	73.1	0.020	0.057	0.008	1.24
	Mid/High Income	64	45.3	--	--	--	--
	Home Children	66	42.4	--	--	--	--
	Day Care Children	54	74.1	0.021	0.058	0.008	1.32
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	36.3	--	--	--	--
	Urban	103	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	55	49.1	--	--	--	--
	Mid/High Income	65	26.2	--	--	--	--
	Home Children	65	30.8	--	--	--	--
	Day Care Children	59	42.4	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	76.8	12.0	10.7	7.91	0.960
	Urban	104	77.9	11.9	10.6	7.93	0.946
	Rural	21	71.4	12.3	11.4	7.81	1.05
	Low Income	57	78.9	12.3	11.2	7.99	0.998
	Mid/High Income	64	75.0	11.7	10.5	7.91	0.924
	Home Children	65	70.8	10.7	9.82	6.82	0.996
	Day Care Children	60	83.3	13.4	11.5	9.28	0.901
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	56.7	0.061	0.152	0.023	1.31
	Urban	99	52.5	0.055	0.141	0.021	1.27
	Rural	21	76.2	0.090	0.195	0.030	1.48
	Low Income	52	73.1	0.063	0.179	0.024	1.24
	Mid/High Income	64	45.3	--	--	--	--
	Home Children	66	42.4	--	--	--	--
	Day Care Children	54	74.1	0.067	0.183	0.024	1.32

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-17d. p,p' -DDE (72-55-9): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	<MDL	0.026	0.090	0.362
	Urban	103	<MDL	<MDL	<MDL	0.026	0.099	0.362
	Rural	21	<MDL	<MDL	<MDL	0.024	0.064	0.085
	Low Income	55	<MDL	<MDL	<MDL	0.043	0.104	0.362
	Mid/High Income	65	<MDL	<MDL	<MDL	0.022	0.053	0.276
	Home Children	65	<MDL	<MDL	<MDL	0.022	0.088	0.276
	Day Care Children	59	<MDL	<MDL	<MDL	0.031	0.104	0.362
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	1.21	2.64	5.26	11.2	14.0
	Urban	104	<MDL	1.23	2.61	5.35	11.1	14.0
	Rural	21	<MDL	<MDL	3.14	5.12	12.3	13.0
	Low Income	57	<MDL	1.24	2.67	5.67	12.2	14.0
	Mid/High Income	64	<MDL	<MDL	2.61	4.66	11.2	13.0
	Home Children	65	<MDL	<MDL	2.23	4.97	10.5	11.2
	Day Care Children	60	<MDL	1.67	3.10	5.35	12.5	14.0
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	<MDL	<MDL	0.007	0.016	0.082	0.410
	Urban	99	<MDL	<MDL	0.006	0.014	0.080	0.410
	Rural	21	<MDL	0.004	0.011	0.022	0.083	0.286
	Low Income	52	<MDL	<MDL	0.008	0.014	0.048	0.410
	Mid/High Income	64	<MDL	<MDL	<MDL	0.015	0.083	0.286
	Home Children	66	<MDL	<MDL	<MDL	0.019	0.083	0.286
	Day Care Children	54	<MDL	<MDL	0.009	0.014	0.080	0.410
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	<MDL	0.082	0.283	1.14
	Urban	103	<MDL	<MDL	<MDL	0.082	0.312	1.14
	Rural	21	<MDL	<MDL	<MDL	0.075	0.201	0.269
	Low Income	55	<MDL	<MDL	<MDL	0.134	0.326	1.14
	Mid/High Income	65	<MDL	<MDL	<MDL	0.069	0.168	0.868
	Home Children	65	<MDL	<MDL	<MDL	0.069	0.278	0.868
	Day Care Children	59	<MDL	<MDL	<MDL	0.099	0.326	1.14
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	3.81	8.30	16.5	35.3	43.9
	Urban	104	<MDL	3.86	8.22	16.8	34.9	43.9
	Rural	21	<MDL	<MDL	9.88	16.1	38.5	41.0
	Low Income	57	<MDL	3.91	8.40	17.8	38.4	43.9
	Mid/High Income	64	<MDL	<MDL	8.22	14.7	35.3	41.0
	Home Children	65	<MDL	<MDL	7.00	15.6	33.2	35.3
	Day Care Children	60	<MDL	5.26	9.73	16.8	39.2	43.9
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	<MDL	<MDL	0.023	0.050	0.256	1.29
	Urban	99	<MDL	<MDL	0.019	0.043	0.253	1.29
	Rural	21	<MDL	0.011	0.034	0.068	0.260	0.898
	Low Income	52	<MDL	<MDL	0.025	0.045	0.151	1.29
	Mid/High Income	64	<MDL	<MDL	<MDL	0.048	0.262	0.898
	Home Children	66	<MDL	<MDL	<MDL	0.061	0.260	0.898
	Day Care Children	54	<MDL	<MDL	0.028	0.043	0.253	1.29

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-18a. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	122	63.1	6.30	7.12	3.34	1.17
	Urban	101	62.4	6.59	7.38	3.45	1.19
	Rural	21	66.7	4.89	5.63	2.85	1.04
	Low Income	54	75.9	8.54	8.43	4.91	1.16
	Mid/High Income	64	54.7	4.63	5.38	2.51	1.09
	Home Children	65	46.2	--	--	--	--
	Day Care Children	57	82.5	9.27	8.26	5.61	1.13
Potential Exposure via Dietary Ingestion (ng/day)	Overall	124	65.3	271	303	179	0.892
	Urban	106	68.9	288	321	186	0.930
	Rural	18	44.4	--	--	--	--
	Low Income	58	67.2	254	207	189	0.792
	Mid/High Income	62	61.3	284	378	166	0.991
	Home Children	65	47.7	--	--	--	--
	Day Care Children	59	84.7	305	294	225	0.756
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	88.8	10.1	34.5	1.59	1.79
	Urban	96	93.8	11.9	37.7	2.05	1.75
	Rural	20	65.0	1.52	3.24	0.457	1.48
	Low Income	50	80.0	1.02	1.10	0.586	1.13
	Mid/High Income	62	95.2	14.2	43.0	2.92	1.77
	Home Children	65	87.7	14.4	44.2	2.51	1.81
	Day Care Children	51	90.2	4.62	13.6	0.884	1.61
Potential Exposure – Aggregated (ng/day)	Overall	105	96.2	279	302	188	0.871
	Urban	88	97.7	298	322	197	0.911
	Rural	17	88.2	180	127	150	0.591
	Low Income	45	95.6	265	208	200	0.776
	Mid/High Income	56	96.4	282	368	172	0.947
	Home Children	63	93.7	264	344	162	0.941
	Day Care Children	42	100.0	301	227	236	0.707
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	122	63.1	28.5	32.2	15.1	1.17
	Urban	101	62.4	29.8	33.4	15.6	1.19
	Rural	21	66.7	22.1	25.5	12.9	1.04
	Low Income	54	75.9	38.6	38.1	22.2	1.16
	Mid/High Income	64	54.7	20.9	24.4	11.4	1.09
	Home Children	65	46.2	--	--	--	--
	Day Care Children	57	82.5	41.9	37.4	25.4	1.13
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	124	65.3	1,230	1,370	811	0.892
	Urban	106	68.9	1,300	1,450	843	0.930
	Rural	18	44.4	--	--	--	--
	Low Income	58	67.2	1,150	935	853	0.792
	Mid/High Income	62	61.3	1,290	1,710	749	0.991
	Home Children	65	47.7	--	--	--	--
	Day Care Children	59	84.7	1,380	1,330	1,020	0.756
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	88.8	45.6	156	7.17	1.79
	Urban	96	93.8	53.6	171	9.30	1.75
	Rural	20	65.0	6.87	14.6	2.07	1.48
	Low Income	50	80.0	4.60	4.99	2.65	1.13
	Mid/High Income	62	95.2	64.0	194	13.2	1.77
	Home Children	65	87.7	64.9	200	11.4	1.81
	Day Care Children	51	90.2	20.9	61.6	4.00	1.61
Potential Exposure – Aggregated (pmoles/day)	Overall	105	96.2	1,260	1,370	852	0.871
	Urban	88	97.7	1,350	1,460	891	0.911
	Rural	17	88.2	814	573	679	0.591
	Low Income	45	95.6	1,200	939	904	0.776
	Mid/High Income	56	96.4	1,280	1,660	778	0.947
	Home Children	63	93.7	1,190	1,560	734	0.941
	Day Care Children	42	100.0	1,360	1,020	1,070	0.707

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-18b. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	122	<MDL	<MDL	4.00	8.15	20.5	34.8
	Urban	101	<MDL	<MDL	4.49	8.79	20.9	34.8
	Rural	21	<MDL	<MDL	3.14	5.70	18.1	18.5
	Low Income	54	<MDL	1.44	6.22	11.9	25.9	34.8
	Mid/High Income	64	<MDL	<MDL	1.31	6.34	17.2	20.5
	Home Children	65	<MDL	<MDL	<MDL	5.72	14.2	20.5
	Day Care Children	57	<MDL	1.53	6.99	14.1	25.9	34.8
Potential Exposure via Dietary Ingestion (ng/day)	Overall	124	<MDL	<MDL	188	319	881	1,920
	Urban	106	<MDL	<MDL	195	347	908	1,920
	Rural	18	<MDL	<MDL	<MDL	233	544	544
	Low Income	58	<MDL	<MDL	194	335	780	908
	Mid/High Income	62	<MDL	<MDL	169	306	951	1,920
	Home Children	65	<MDL	<MDL	<MDL	292	835	1,920
	Day Care Children	59	<MDL	133	215	335	908	1,840
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	<MDL	0.453	1.45	4.40	47.6	321
	Urban	96	<MDL	0.542	1.91	4.65	76.9	321
	Rural	20	<MDL	<MDL	0.308	0.980	9.90	14.0
	Low Income	50	<MDL	0.253	0.568	1.28	2.88	5.02
	Mid/High Income	62	<MDL	0.898	2.92	11.2	47.6	321
	Home Children	65	<MDL	0.799	2.30	5.94	76.9	321
	Day Care Children	51	<MDL	0.253	0.592	2.41	25.2	83.4
Potential Exposure – Aggregated (ng/day)	Overall	105	<MDL	96.4	193	343	836	2,250
	Urban	88	<MDL	94.2	203	381	917	2,250
	Rural	17	<MDL	99.9	121	234	551	551
	Low Income	45	<MDL	112	207	358	724	917
	Mid/High Income	56	<MDL	83.6	165	311	985	2,250
	Home Children	63	<MDL	81.4	131	322	836	2,250
	Day Care Children	42	52.6	137	237	368	801	961
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	122	<MDL	<MDL	18.1	36.9	92.9	157
	Urban	101	<MDL	<MDL	20.3	39.8	94.5	157
	Rural	21	<MDL	<MDL	14.2	25.8	82.1	83.5
	Low Income	54	<MDL	6.50	28.2	53.8	117	157
	Mid/High Income	64	<MDL	<MDL	5.93	28.7	77.8	92.9
	Home Children	65	<MDL	<MDL	<MDL	25.9	64.2	92.9
	Day Care Children	57	<MDL	6.92	31.6	63.7	117	157
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	124	<MDL	<MDL	852	1,440	3,980	8,710
	Urban	106	<MDL	<MDL	882	1,570	4,110	8,710
	Rural	18	<MDL	<MDL	<MDL	1,050	2,460	2,460
	Low Income	58	<MDL	<MDL	879	1,510	3,530	4,110
	Mid/High Income	62	<MDL	<MDL	765	1,380	4,300	8,710
	Home Children	65	<MDL	<MDL	<MDL	1,320	3,780	8,710
	Day Care Children	59	<MDL	603	975	1,510	4,110	8,320
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	<MDL	2.05	6.56	19.9	215	1,450
	Urban	96	<MDL	2.45	8.65	21.1	348	1,450
	Rural	20	<MDL	<MDL	1.39	4.43	44.8	63.4
	Low Income	50	<MDL	1.15	2.57	5.79	13.0	22.7
	Mid/High Income	62	<MDL	4.06	13.2	50.7	215	1,450
	Home Children	65	<MDL	3.61	10.4	26.9	348	1,450
	Day Care Children	51	<MDL	1.15	2.68	10.9	114	377
Potential Exposure – Aggregated (pmoles/day)	Overall	105	<MDL	436	873	1,550	3,780	10,200
	Urban	88	<MDL	426	920	1,720	4,150	10,200
	Rural	17	<MDL	452	547	1,060	2,490	2,490
	Low Income	45	<MDL	506	936	1,620	3,280	4,150
	Mid/High Income	56	<MDL	378	746	1,410	4,460	10,200
	Home Children	63	<MDL	368	591	1,460	3,780	10,200
	Day Care Children	42	238	619	1,070	1,660	3,620	4,350

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-18c. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	122	63.1	0.189	0.223	0.100	1.15
	Urban	101	62.4	0.200	0.232	0.104	1.18
	Rural	21	66.7	0.137	0.163	0.080	1.02
	Low Income	54	75.9	0.249	0.259	0.140	1.17
	Mid/High Income	64	54.7	0.146	0.181	0.079	1.08
	Home Children	65	46.2	--	--	--	--
	Day Care Children	57	82.5	0.270	0.251	0.156	1.18
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	124	65.3	8.10	9.00	5.31	0.894
	Urban	106	68.9	8.67	9.52	5.57	0.934
	Rural	18	44.4	--	--	--	--
	Low Income	58	67.2	7.31	6.60	5.29	0.809
	Mid/High Income	62	61.3	8.80	11.0	5.20	0.987
	Home Children	65	47.7	--	--	--	--
	Day Care Children	59	84.7	8.54	8.01	6.29	0.759
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	88.8	0.320	1.09	0.047	1.85
	Urban	96	93.8	0.376	1.19	0.062	1.80
	Rural	20	65.0	0.051	0.128	0.013	1.55
	Low Income	50	80.0	0.033	0.043	0.017	1.23
	Mid/High Income	62	95.2	0.463	1.37	0.092	1.80
	Home Children	65	87.7	0.466	1.40	0.080	1.86
	Day Care Children	51	90.2	0.134	0.396	0.025	1.64
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	105	96.2	8.33	9.35	5.56	0.875
	Urban	88	97.7	9.00	9.97	5.88	0.916
	Rural	17	88.2	4.91	3.49	4.16	0.551
	Low Income	45	95.6	7.33	6.02	5.47	0.782
	Mid/High Income	56	96.4	8.99	11.5	5.43	0.957
	Home Children	63	93.7	8.46	11.0	5.09	0.966
	Day Care Children	42	100.0	8.15	6.29	6.35	0.707
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	122	63.1	0.856	1.01	0.450	1.15
	Urban	101	62.4	0.904	1.05	0.471	1.18
	Rural	21	66.7	0.622	0.738	0.363	1.02
	Low Income	54	75.9	1.13	1.17	0.632	1.17
	Mid/High Income	64	54.7	0.662	0.818	0.356	1.08
	Home Children	65	46.2	--	--	--	--
	Day Care Children	57	82.5	1.22	1.13	0.705	1.18
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	124	65.3	36.6	40.7	24.0	0.894
	Urban	106	68.9	39.2	43.1	25.2	0.934
	Rural	18	44.4	--	--	--	--
	Low Income	58	67.2	33.1	29.9	24.0	0.809
	Mid/High Income	62	61.3	39.8	49.6	23.5	0.987
	Home Children	65	47.7	--	--	--	--
	Day Care Children	59	84.7	38.7	36.3	28.5	0.759
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	88.8	1.45	4.93	0.215	1.85
	Urban	96	93.8	1.70	5.38	0.282	1.80
	Rural	20	65.0	0.231	0.579	0.058	1.55
	Low Income	50	80.0	0.150	0.195	0.075	1.23
	Mid/High Income	62	95.2	2.10	6.21	0.416	1.80
	Home Children	65	87.7	2.11	6.34	0.360	1.86
	Day Care Children	51	90.2	0.606	1.79	0.111	1.64
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	105	96.2	37.7	42.3	25.1	0.875
	Urban	88	97.7	40.7	45.1	26.6	0.916
	Rural	17	88.2	22.2	15.8	18.8	0.551
	Low Income	45	95.6	33.2	27.2	24.8	0.782
	Mid/High Income	56	96.4	40.7	52.1	24.6	0.957
	Home Children	63	93.7	38.3	49.6	23.0	0.966
	Day Care Children	42	100.0	36.9	28.4	28.7	0.707

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-18d. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	122	<MDL	<MDL	0.099	0.250	0.607	1.04
	Urban	101	<MDL	<MDL	0.101	0.262	0.712	1.04
	Rural	21	<MDL	<MDL	0.084	0.133	0.508	0.514
	Low Income	54	<MDL	0.038	0.165	0.356	0.800	1.04
	Mid/High Income	64	<MDL	<MDL	0.042	0.199	0.508	0.905
	Home Children	65	<MDL	<MDL	<MDL	0.154	0.401	0.905
	Day Care Children	57	<MDL	0.043	0.205	0.425	0.765	1.04
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	124	<MDL	<MDL	4.84	9.75	24.2	60.6
	Urban	106	<MDL	<MDL	5.23	10.9	30.3	60.6
	Rural	18	<MDL	<MDL	<MDL	5.73	15.8	15.8
	Low Income	58	<MDL	<MDL	5.05	9.42	17.9	34.6
	Mid/High Income	62	<MDL	<MDL	4.29	9.01	31.5	60.6
	Home Children	65	<MDL	<MDL	<MDL	8.55	24.2	60.6
	Day Care Children	59	<MDL	3.74	6.09	10.7	30.3	43.1
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	<MDL	0.012	0.042	0.144	1.42	10.1
	Urban	96	<MDL	0.014	0.065	0.159	2.23	10.1
	Rural	20	<MDL	<MDL	0.009	0.028	0.365	0.571
	Low Income	50	<MDL	0.007	0.014	0.042	0.147	0.198
	Mid/High Income	62	<MDL	0.024	0.089	0.411	1.42	10.1
	Home Children	65	<MDL	0.016	0.074	0.211	2.23	10.1
	Day Care Children	51	<MDL	0.007	0.015	0.066	0.591	2.42
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	105	<MDL	2.95	4.93	9.75	22.5	70.8
	Urban	88	<MDL	3.08	5.69	12.0	24.2	70.8
	Rural	17	<MDL	2.86	3.35	5.75	16.0	16.0
	Low Income	45	<MDL	3.17	5.75	9.45	18.4	30.6
	Mid/High Income	56	<MDL	2.42	4.03	9.29	31.6	70.8
	Home Children	63	<MDL	2.68	3.73	9.21	24.2	70.8
	Day Care Children	42	1.95	3.31	6.32	10.2	18.5	30.6
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	122	<MDL	<MDL	0.446	1.13	2.75	4.69
	Urban	101	<MDL	<MDL	0.456	1.18	3.22	4.69
	Rural	21	<MDL	<MDL	0.381	0.601	2.30	2.32
	Low Income	54	<MDL	0.170	0.745	1.61	3.62	4.69
	Mid/High Income	64	<MDL	<MDL	0.188	0.900	2.30	4.09
	Home Children	65	<MDL	<MDL	<MDL	0.695	1.81	4.09
	Day Care Children	57	<MDL	0.196	0.928	1.92	3.46	4.69
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	124	<MDL	<MDL	21.9	44.1	109	274
	Urban	106	<MDL	<MDL	23.7	49.4	137	274
	Rural	18	<MDL	<MDL	<MDL	25.9	71.3	71.3
	Low Income	58	<MDL	<MDL	22.8	42.6	80.9	157
	Mid/High Income	62	<MDL	<MDL	19.4	40.8	143	274
	Home Children	65	<MDL	<MDL	<MDL	38.7	109	274
	Day Care Children	59	<MDL	16.9	27.5	48.3	137	195
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	<MDL	0.055	0.189	0.651	6.41	45.7
	Urban	96	<MDL	0.063	0.292	0.721	10.1	45.7
	Rural	20	<MDL	<MDL	0.043	0.129	1.65	2.58
	Low Income	50	<MDL	0.029	0.065	0.188	0.663	0.894
	Mid/High Income	62	<MDL	0.109	0.404	1.86	6.41	45.7
	Home Children	65	<MDL	0.074	0.335	0.956	10.1	45.7
	Day Care Children	51	<MDL	0.029	0.068	0.300	2.67	10.9
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	105	<MDL	13.4	22.3	44.1	102	320
	Urban	88	<MDL	13.9	25.8	54.2	110	320
	Rural	17	<MDL	13.0	15.1	26.0	72.3	72.3
	Low Income	45	<MDL	14.3	26.0	42.8	83.1	138
	Mid/High Income	56	<MDL	11.0	18.2	42.0	143	320
	Home Children	63	<MDL	12.1	16.9	41.7	110	320
	Day Care Children	42	8.80	15.0	28.6	46.2	83.6	138

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-19a. Heptachlor (76-44-8): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	97.6	205	400	76.4	1.39
	Urban	103	99.0	182	399	71.7	1.25
	Rural	21	90.5	317	394	104	1.92
	Low Income	55	98.2	215	355	87.8	1.43
	Mid/High Income	65	96.9	169	345	66.3	1.31
	Home Children	65	95.4	195	453	57.5	1.53
	Day Care Children	59	100.0	216	337	104	1.14
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	18.4	--	--	--	--
	Urban	104	19.2	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	57	19.3	--	--	--	--
	Mid/High Income	64	17.2	--	--	--	--
	Home Children	65	20.0	--	--	--	--
	Day Care Children	60	16.7	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	54.6	5.32	13.7	0.764	2.24
	Urban	98	54.1	5.18	14.6	0.717	2.21
	Rural	21	57.1	5.96	8.43	1.03	2.39
	Low Income	51	51.0	5.38	9.67	0.740	2.41
	Mid/High Income	64	54.7	5.15	16.5	0.702	2.13
	Home Children	65	43.1	--	--	--	--
	Day Care Children	54	68.5	5.29	8.73	1.10	2.22
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	97.6	549	1,070	205	1.39
	Urban	103	99.0	488	1,070	192	1.25
	Rural	21	90.5	849	1,060	279	1.92
	Low Income	55	98.2	577	951	235	1.43
	Mid/High Income	65	96.9	453	925	178	1.31
	Home Children	65	95.4	523	1,210	154	1.53
	Day Care Children	59	100.0	578	901	280	1.14
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	18.4	--	--	--	--
	Urban	104	19.2	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	57	19.3	--	--	--	--
	Mid/High Income	64	17.2	--	--	--	--
	Home Children	65	20.0	--	--	--	--
	Day Care Children	60	16.7	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	54.6	14.2	36.6	2.05	2.24
	Urban	98	54.1	13.9	39.0	1.92	2.21
	Rural	21	57.1	16.0	22.6	2.76	2.39
	Low Income	51	51.0	14.4	25.9	1.98	2.41
	Mid/High Income	64	54.7	13.8	44.2	1.88	2.13
	Home Children	65	43.1	--	--	--	--
	Day Care Children	54	68.5	14.2	23.4	2.96	2.22

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-19b. Heptachlor (76-44-8): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	34.5	62.4	204	732	2,470
	Urban	103	<MDL	31.2	56.0	193	670	2,470
	Rural	21	<MDL	36.4	79.8	511	1,170	1,260
	Low Income	55	<MDL	40.3	69.0	255	1,170	2,000
	Mid/High Income	65	<MDL	28.6	51.1	182	681	2,470
	Home Children	65	<MDL	28.5	39.5	158	732	2,470
	Day Care Children	59	15.0	45.6	72.5	255	917	2,000
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	272	591
	Urban	104	<MDL	<MDL	<MDL	<MDL	272	591
	Rural	21	<MDL	<MDL	<MDL	<MDL	208	321
	Low Income	57	<MDL	<MDL	<MDL	<MDL	305	356
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	250	591
	Home Children	65	<MDL	<MDL	<MDL	<MDL	305	591
	Day Care Children	60	<MDL	<MDL	<MDL	<MDL	258	356
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	<MDL	<MDL	0.915	5.85	20.6	129
	Urban	98	<MDL	<MDL	0.815	4.88	20.6	129
	Rural	21	<MDL	<MDL	1.10	7.00	19.5	31.6
	Low Income	51	<MDL	<MDL	0.930	5.93	29.0	50.1
	Mid/High Income	64	<MDL	<MDL	0.626	4.56	15.1	129
	Home Children	65	<MDL	<MDL	<MDL	4.14	20.6	129
	Day Care Children	54	<MDL	<MDL	1.98	6.42	19.5	50.1
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	92.5	167	548	1,960	6,600
	Urban	103	<MDL	83.5	150	518	1,800	6,600
	Rural	21	<MDL	97.6	214	1,370	3,130	3,360
	Low Income	55	<MDL	108	185	684	3,130	5,350
	Mid/High Income	65	<MDL	76.7	137	486	1,820	6,600
	Home Children	65	<MDL	76.4	106	423	1,960	6,600
	Day Care Children	59	40.1	122	194	684	2,460	5,350
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	730	1,580
	Urban	104	<MDL	<MDL	<MDL	<MDL	730	1,580
	Rural	21	<MDL	<MDL	<MDL	<MDL	557	859
	Low Income	57	<MDL	<MDL	<MDL	<MDL	818	954
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	669	1,580
	Home Children	65	<MDL	<MDL	<MDL	<MDL	818	1,580
	Day Care Children	60	<MDL	<MDL	<MDL	<MDL	691	954
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	<MDL	<MDL	2.45	15.7	55.3	345
	Urban	98	<MDL	<MDL	2.18	13.1	55.3	345
	Rural	21	<MDL	<MDL	2.93	18.8	52.4	84.7
	Low Income	51	<MDL	<MDL	2.49	15.9	77.7	134
	Mid/High Income	64	<MDL	<MDL	1.68	12.2	40.4	345
	Home Children	65	<MDL	<MDL	<MDL	11.1	55.3	345
	Day Care Children	54	<MDL	<MDL	5.29	17.2	52.4	134

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-19c. Heptachlor (76-44-8): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	97.6	6.37	13.8	2.28	1.39
	Urban	103	99.0	5.91	14.4	2.17	1.27
	Rural	21	90.5	8.64	10.7	2.93	1.90
	Low Income	55	98.2	6.39	11.0	2.51	1.44
	Mid/High Income	65	96.9	5.98	15.5	2.07	1.33
	Home Children	65	95.4	6.55	16.5	1.83	1.54
	Day Care Children	59	100.0	6.18	10.2	2.91	1.17
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	18.4	--	--	--	--
	Urban	104	19.2	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	57	19.3	--	--	--	--
	Mid/High Income	64	17.2	--	--	--	--
	Home Children	65	20.0	--	--	--	--
	Day Care Children	60	16.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	54.6	0.177	0.591	0.023	2.26
	Urban	98	54.1	0.178	0.643	0.022	2.24
	Rural	21	57.1	0.170	0.241	0.029	2.41
	Low Income	51	51.0	0.144	0.234	0.021	2.40
	Mid/High Income	64	54.7	0.204	0.780	0.022	2.19
	Home Children	65	43.1	--	--	--	--
	Day Care Children	54	68.5	0.143	0.211	0.031	2.21
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	97.6	17.1	37.0	6.11	1.39
	Urban	103	99.0	15.8	38.5	5.80	1.27
	Rural	21	90.5	23.1	28.6	7.84	1.90
	Low Income	55	98.2	17.1	29.4	6.74	1.44
	Mid/High Income	65	96.9	16.0	41.5	5.54	1.33
	Home Children	65	95.4	17.6	44.3	4.89	1.54
	Day Care Children	59	100.0	16.5	27.3	7.80	1.17
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	18.4	--	--	--	--
	Urban	104	19.2	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	57	19.3	--	--	--	--
	Mid/High Income	64	17.2	--	--	--	--
	Home Children	65	20.0	--	--	--	--
	Day Care Children	60	16.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	54.6	0.473	1.58	0.061	2.26
	Urban	98	54.1	0.477	1.72	0.058	2.24
	Rural	21	57.1	0.455	0.645	0.077	2.41
	Low Income	51	51.0	0.386	0.627	0.056	2.40
	Mid/High Income	64	54.7	0.545	2.09	0.059	2.19
	Home Children	65	43.1	--	--	--	--
	Day Care Children	54	68.5	0.382	0.564	0.082	2.21

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-19d. Heptachlor (76-44-8): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	1.04	1.71	6.10	28.9	118
	Urban	103	<MDL	0.980	1.64	5.26	21.4	118
	Rural	21	<MDL	1.33	2.25	14.0	31.4	31.4
	Low Income	55	<MDL	1.14	2.04	7.06	31.4	64.6
	Mid/High Income	65	<MDL	0.874	1.54	5.36	21.4	118
	Home Children	65	<MDL	0.808	1.37	3.81	31.4	118
	Day Care Children	59	0.253	1.32	2.29	7.06	28.9	64.6
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	9.15	15.9
	Urban	104	<MDL	<MDL	<MDL	<MDL	9.15	15.9
	Rural	21	<MDL	<MDL	<MDL	<MDL	5.45	9.29
	Low Income	57	<MDL	<MDL	<MDL	<MDL	9.29	10.9
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	9.15	15.9
	Home Children	65	<MDL	<MDL	<MDL	<MDL	9.15	15.9
	Day Care Children	60	<MDL	<MDL	<MDL	<MDL	8.59	10.9
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	<MDL	<MDL	0.028	0.163	0.650	6.17
	Urban	98	<MDL	<MDL	0.028	0.140	0.650	6.17
	Rural	21	<MDL	<MDL	0.031	0.286	0.566	0.916
	Low Income	51	<MDL	<MDL	0.028	0.165	0.779	0.916
	Mid/High Income	64	<MDL	<MDL	0.019	0.151	0.594	6.17
	Home Children	65	<MDL	<MDL	<MDL	0.144	0.650	6.17
	Day Care Children	54	<MDL	<MDL	0.056	0.213	0.594	0.916
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	2.79	4.58	16.3	77.3	316
	Urban	103	<MDL	2.63	4.41	14.1	57.4	316
	Rural	21	<MDL	3.56	6.03	37.5	84.1	84.2
	Low Income	55	<MDL	3.06	5.47	18.9	84.1	173
	Mid/High Income	65	<MDL	2.34	4.12	14.4	57.4	316
	Home Children	65	<MDL	2.16	3.67	10.2	84.1	316
	Day Care Children	59	0.679	3.53	6.12	18.9	77.3	173
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	24.5	42.5
	Urban	104	<MDL	<MDL	<MDL	<MDL	24.5	42.5
	Rural	21	<MDL	<MDL	<MDL	<MDL	14.6	24.9
	Low Income	57	<MDL	<MDL	<MDL	<MDL	24.9	29.2
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	24.5	42.5
	Home Children	65	<MDL	<MDL	<MDL	<MDL	24.5	42.5
	Day Care Children	60	<MDL	<MDL	<MDL	<MDL	23.0	29.2
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	<MDL	<MDL	0.075	0.436	1.74	16.5
	Urban	98	<MDL	<MDL	0.075	0.375	1.74	16.5
	Rural	21	<MDL	<MDL	0.083	0.765	1.52	2.45
	Low Income	51	<MDL	<MDL	0.076	0.442	2.09	2.45
	Mid/High Income	64	<MDL	<MDL	0.051	0.404	1.59	16.5
	Home Children	65	<MDL	<MDL	<MDL	0.386	1.74	16.5
	Day Care Children	54	<MDL	<MDL	0.150	0.570	1.59	2.45

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-20a. Indeno[1,2,3-cd]pyrene (193-39-5): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	75.0	1.41	1.49	1.000	0.768
	Urban	103	75.7	1.44	1.51	1.01	0.778
	Rural	21	71.4	1.28	1.40	0.928	0.735
	Low Income	55	87.3	1.77	1.61	1.30	0.766
	Mid/High Income	65	64.6	1.12	1.35	0.795	0.712
	Home Children	65	64.6	1.43	1.71	0.949	0.805
	Day Care Children	59	86.4	1.40	1.21	1.06	0.728
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	0.8	--	--	--	--
	Urban	107	0.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	1.7	--	--	--	--
	Mid/High Income	66	0.0	--	--	--	--
	Home Children	66	0.0	--	--	--	--
	Day Care Children	62	1.6	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	24.6	65.9	9.26	1.20
	Urban	95	100.0	20.8	39.8	9.54	1.14
	Rural	21	100.0	41.7	131	8.10	1.45
	Low Income	52	100.0	16.8	28.0	8.18	1.17
	Mid/High Income	60	100.0	32.4	87.5	10.7	1.23
	Home Children	62	100.0	16.1	27.3	8.02	1.11
	Day Care Children	54	100.0	34.3	91.6	10.9	1.29
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	75.0	5.12	5.38	3.62	0.768
	Urban	103	75.7	5.22	5.46	3.67	0.778
	Rural	21	71.4	4.62	5.08	3.36	0.735
	Low Income	55	87.3	6.41	5.84	4.69	0.766
	Mid/High Income	65	64.6	4.04	4.89	2.88	0.712
	Home Children	65	64.6	5.17	6.20	3.43	0.805
	Day Care Children	59	86.4	5.06	4.37	3.83	0.728
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	0.8	--	--	--	--
	Urban	107	0.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	1.7	--	--	--	--
	Mid/High Income	66	0.0	--	--	--	--
	Home Children	66	0.0	--	--	--	--
	Day Care Children	62	1.6	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	88.9	239	33.5	1.20
	Urban	95	100.0	75.2	144	34.5	1.14
	Rural	21	100.0	151	474	29.3	1.45
	Low Income	52	100.0	60.9	101	29.6	1.17
	Mid/High Income	60	100.0	117	317	38.8	1.23
	Home Children	62	100.0	58.2	98.8	29.0	1.11
	Day Care Children	54	100.0	124	332	39.5	1.29

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-20b. Indeno[1,2,3-cd]pyrene (193-39-5): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	0.827	1.59	5.07	7.82
	Urban	103	<MDL	0.551	0.831	1.68	5.07	7.82
	Rural	21	<MDL	<MDL	0.623	1.48	3.04	6.67
	Low Income	55	<MDL	0.671	1.19	2.19	6.31	6.67
	Mid/High Income	65	<MDL	<MDL	0.584	1.01	3.94	7.82
	Home Children	65	<MDL	<MDL	0.711	1.33	6.31	7.82
	Day Care Children	59	<MDL	0.577	0.910	1.87	4.07	6.40
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	51.1
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	51.1
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	45.2
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	45.8
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	0.552	4.59	7.42	18.3	117	604
	Urban	95	0.552	5.09	8.01	20.0	108	285
	Rural	21	1.25	3.80	5.31	13.8	117	604
	Low Income	52	0.552	3.83	7.64	14.6	75.5	163
	Mid/High Income	60	1.47	5.47	7.56	21.6	135	604
	Home Children	62	0.552	4.30	6.64	15.9	41.2	163
	Day Care Children	54	1.25	4.89	9.55	20.9	148	604
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	2.99	5.76	18.3	28.3
	Urban	103	<MDL	1.99	3.01	6.07	18.3	28.3
	Rural	21	<MDL	<MDL	2.25	5.34	11.0	24.1
	Low Income	55	<MDL	2.43	4.30	7.94	22.8	24.1
	Mid/High Income	65	<MDL	<MDL	2.11	3.66	14.3	28.3
	Home Children	65	<MDL	<MDL	2.57	4.83	22.8	28.3
	Day Care Children	59	<MDL	2.09	3.29	6.75	14.7	23.1
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	185
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	185
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	164
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	166
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	2.00	16.6	26.9	66.1	422	2,180
	Urban	95	2.00	18.4	29.0	72.2	390	1,030
	Rural	21	4.53	13.8	19.2	50.0	422	2,180
	Low Income	52	2.00	13.9	27.6	52.7	273	588
	Mid/High Income	60	5.34	19.8	27.3	78.2	488	2,180
	Home Children	62	2.00	15.6	24.0	57.7	149	588
	Day Care Children	54	4.53	17.7	34.6	75.6	537	2,180

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-20c. Indeno[1,2,3-cd]pyrene (193-39-5): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	75.0	0.045	0.059	0.030	0.807
	Urban	103	75.7	0.047	0.063	0.031	0.826
	Rural	21	71.4	0.035	0.036	0.026	0.711
	Low Income	55	87.3	0.055	0.072	0.037	0.818
	Mid/High Income	65	64.6	0.037	0.047	0.025	0.775
	Home Children	65	64.6	0.050	0.076	0.030	0.857
	Day Care Children	59	86.4	0.039	0.033	0.030	0.756
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	0.8	--	--	--	--
	Urban	107	0.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	1.7	--	--	--	--
	Mid/High Income	66	0.0	--	--	--	--
	Home Children	66	0.0	--	--	--	--
	Day Care Children	62	1.6	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	0.765	2.07	0.274	1.25
	Urban	95	100.0	0.636	1.20	0.286	1.18
	Rural	21	100.0	1.35	4.17	0.227	1.57
	Low Income	52	100.0	0.500	0.850	0.231	1.22
	Mid/High Income	60	100.0	1.03	2.75	0.333	1.27
	Home Children	62	100.0	0.558	1.00	0.252	1.19
	Day Care Children	54	100.0	1.00	2.83	0.302	1.32
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	75.0	0.162	0.215	0.108	0.807
	Urban	103	75.7	0.169	0.228	0.111	0.826
	Rural	21	71.4	0.127	0.130	0.094	0.711
	Low Income	55	87.3	0.200	0.261	0.134	0.818
	Mid/High Income	65	64.6	0.133	0.169	0.090	0.775
	Home Children	65	64.6	0.180	0.273	0.109	0.857
	Day Care Children	59	86.4	0.143	0.120	0.107	0.756
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	0.8	--	--	--	--
	Urban	107	0.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	58	1.7	--	--	--	--
	Mid/High Income	66	0.0	--	--	--	--
	Home Children	66	0.0	--	--	--	--
	Day Care Children	62	1.6	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	2.77	7.48	0.992	1.25
	Urban	95	100.0	2.30	4.34	1.03	1.18
	Rural	21	100.0	4.88	15.1	0.823	1.57
	Low Income	52	100.0	1.81	3.07	0.835	1.22
	Mid/High Income	60	100.0	3.73	9.94	1.21	1.27
	Home Children	62	100.0	2.02	3.62	0.911	1.19
	Day Care Children	54	100.0	3.63	10.2	1.09	1.32

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-20d. Indeno[1,2,3-cd]pyrene (193-39-5): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	0.025	0.048	0.168	0.492
	Urban	103	<MDL	0.017	0.025	0.050	0.168	0.492
	Rural	21	<MDL	<MDL	0.019	0.042	0.082	0.171
	Low Income	55	<MDL	0.018	0.034	0.064	0.171	0.492
	Mid/High Income	65	<MDL	<MDL	0.020	0.038	0.150	0.278
	Home Children	65	<MDL	<MDL	0.023	0.044	0.178	0.492
	Day Care Children	59	<MDL	0.016	0.026	0.054	0.123	0.168
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	1.87
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	1.87
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	1.57
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	1.87
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.016	0.131	0.244	0.521	4.10	19.0
	Urban	95	0.016	0.139	0.249	0.560	2.58	8.27
	Rural	21	0.031	0.101	0.179	0.401	4.75	19.0
	Low Income	52	0.016	0.102	0.255	0.435	2.45	5.11
	Mid/High Income	60	0.043	0.166	0.244	0.697	4.85	19.0
	Home Children	62	0.016	0.125	0.220	0.495	1.62	5.11
	Day Care Children	54	0.031	0.133	0.269	0.560	4.95	19.0
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	0.090	0.173	0.607	1.78
	Urban	103	<MDL	0.061	0.090	0.181	0.607	1.78
	Rural	21	<MDL	<MDL	0.067	0.153	0.296	0.618
	Low Income	55	<MDL	0.066	0.122	0.232	0.618	1.78
	Mid/High Income	65	<MDL	<MDL	0.071	0.136	0.542	1.01
	Home Children	65	<MDL	<MDL	0.083	0.161	0.645	1.78
	Day Care Children	59	<MDL	0.059	0.095	0.196	0.446	0.607
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	6.76
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	6.76
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	5.67
	Mid/High Income	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	66	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	62	<MDL	<MDL	<MDL	<MDL	<MDL	6.76
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.059	0.473	0.883	1.88	14.8	68.7
	Urban	95	0.059	0.504	0.901	2.03	9.34	29.9
	Rural	21	0.113	0.366	0.647	1.45	17.2	68.7
	Low Income	52	0.059	0.369	0.921	1.57	8.85	18.5
	Mid/High Income	60	0.155	0.602	0.883	2.52	17.6	68.7
	Home Children	62	0.059	0.451	0.797	1.79	5.85	18.5
	Day Care Children	54	0.113	0.481	0.975	2.03	17.9	68.7

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-21a. Pentachlorophenol (87-86-5): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	122	99.2	26.1	41.5	13.9	1.03
	Urban	101	99.0	21.1	28.1	12.8	0.956
	Rural	21	100.0	50.2	75.8	20.9	1.29
	Low Income	54	100.0	26.6	32.7	17.9	0.846
	Mid/High Income	64	98.4	26.6	48.9	11.5	1.16
	Home Children	65	98.5	22.9	40.3	10.8	1.10
	Day Care Children	57	100.0	29.8	42.9	18.6	0.871
Potential Exposure via Dietary Ingestion (ng/day)	Overall	124	15.3	--	--	--	--
	Urban	106	17.0	--	--	--	--
	Rural	18	5.6	--	--	--	--
	Low Income	58	15.5	--	--	--	--
	Mid/High Income	62	16.1	--	--	--	--
	Home Children	65	9.2	--	--	--	--
	Day Care Children	59	22.0	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	96.6	7.42	12.1	3.31	1.29
	Urban	96	96.9	7.48	12.4	3.26	1.32
	Rural	21	95.2	7.17	11.2	3.54	1.12
	Low Income	50	100.0	7.77	12.6	3.42	1.33
	Mid/High Income	63	93.7	7.46	12.2	3.30	1.29
	Home Children	65	93.8	8.02	13.0	3.54	1.28
	Day Care Children	52	100.0	6.68	11.0	3.03	1.30
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	122	99.2	98.0	156	52.3	1.03
	Urban	101	99.0	79.2	105	48.0	0.956
	Rural	21	100.0	188	284	78.6	1.29
	Low Income	54	100.0	99.8	123	67.2	0.846
	Mid/High Income	64	98.4	00.0	184	43.1	1.16
	Home Children	65	98.5	85.9	151	40.6	1.10
	Day Care Children	57	100.0	112	161	69.7	0.871
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	124	15.3	--	--	--	--
	Urban	106	17.0	--	--	--	--
	Rural	18	5.6	--	--	--	--
	Low Income	58	15.5	--	--	--	--
	Mid/High Income	62	16.1	--	--	--	--
	Home Children	65	9.2	--	--	--	--
	Day Care Children	59	22.0	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	96.6	27.9	45.5	12.4	1.29
	Urban	96	96.9	28.1	46.4	12.2	1.32
	Rural	21	95.2	26.9	42.0	13.3	1.12
	Low Income	50	100.0	29.2	47.2	12.8	1.33
	Mid/High Income	63	93.7	28.0	45.7	12.4	1.29
	Home Children	65	93.8	30.1	48.7	13.3	1.28
	Day Care Children	52	100.0	25.1	41.5	11.4	1.30

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-21b. Pentachlorophenol (87-86-5): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	122	<MDL	6.69	12.2	26.1	110	229
	Urban	101	<MDL	6.27	11.6	25.8	67.6	199
	Rural	21	2.22	9.88	16.7	29.3	211	229
	Low Income	54	3.17	9.88	16.8	29.3	83.7	211
	Mid/High Income	64	<MDL	5.40	9.46	20.5	146	229
	Home Children	65	<MDL	5.11	9.65	16.7	110	211
	Day Care Children	57	4.71	9.69	16.7	29.1	146	229
Potential Exposure via Dietary Ingestion (ng/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	192	421
	Urban	106	<MDL	<MDL	<MDL	<MDL	197	421
	Rural	18	<MDL	<MDL	<MDL	<MDL	149	149
	Low Income	58	<MDL	<MDL	<MDL	<MDL	397	421
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	192	416
	Home Children	65	<MDL	<MDL	<MDL	<MDL	155	264
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	416	421
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	<MDL	1.42	3.35	7.94	31.6	72.7
	Urban	96	<MDL	1.40	3.40	8.16	25.3	72.7
	Rural	21	<MDL	1.75	2.93	5.11	38.0	40.6
	Low Income	50	0.178	1.75	3.52	6.53	31.6	72.7
	Mid/High Income	63	<MDL	1.39	3.06	8.69	25.3	69.2
	Home Children	65	<MDL	1.42	3.46	8.09	38.0	72.7
	Day Care Children	52	0.178	1.47	2.99	6.89	23.5	69.2
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	122	<MDL	25.1	45.9	97.8	412	861
	Urban	101	<MDL	23.5	43.5	96.8	254	747
	Rural	21	8.35	37.1	62.7	110	792	861
	Low Income	54	11.9	37.1	63.0	110	314	792
	Mid/High Income	64	<MDL	20.3	35.5	76.8	550	861
	Home Children	65	<MDL	19.2	36.2	62.7	412	792
	Day Care Children	57	17.7	36.4	62.5	109	550	861
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	722	1,580
	Urban	106	<MDL	<MDL	<MDL	<MDL	740	1,580
	Rural	18	<MDL	<MDL	<MDL	<MDL	559	559
	Low Income	58	<MDL	<MDL	<MDL	<MDL	1,490	1,580
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	722	1,560
	Home Children	65	<MDL	<MDL	<MDL	<MDL	582	993
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	1,560	1,580
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	<MDL	5.34	12.6	29.8	119	273
	Urban	96	<MDL	5.26	12.8	30.6	94.9	273
	Rural	21	<MDL	6.56	11.0	19.2	143	152
	Low Income	50	0.668	6.56	13.2	24.5	119	273
	Mid/High Income	63	<MDL	5.21	11.5	32.6	94.9	260
	Home Children	65	<MDL	5.34	13.0	30.4	143	273
	Day Care Children	52	0.668	5.53	11.2	25.9	88.3	260

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-21c. Pentachlorophenol (87-86-5): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	122	99.2	0.799	1.26	0.416	1.04
	Urban	101	99.0	0.675	0.980	0.387	0.974
	Rural	21	100.0	1.40	2.10	0.588	1.26
	Low Income	54	100.0	0.816	1.08	0.509	0.908
	Mid/High Income	64	98.4	0.816	1.44	0.359	1.13
	Home Children	65	98.5	0.746	1.29	0.344	1.11
	Day Care Children	57	100.0	0.860	1.24	0.516	0.909
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	124	15.3	--	--	--	--
	Urban	106	17.0	--	--	--	--
	Rural	18	5.6	--	--	--	--
	Low Income	58	15.5	--	--	--	--
	Mid/High Income	62	16.1	--	--	--	--
	Home Children	65	9.2	--	--	--	--
	Day Care Children	59	22.0	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	96.6	0.221	0.332	0.099	1.32
	Urban	96	96.9	0.222	0.331	0.099	1.35
	Rural	21	95.2	0.217	0.346	0.099	1.19
	Low Income	50	100.0	0.222	0.349	0.097	1.35
	Mid/High Income	63	93.7	0.230	0.329	0.104	1.32
	Home Children	65	93.8	0.250	0.369	0.112	1.30
	Day Care Children	52	100.0	0.185	0.279	0.085	1.33
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	122	99.2	3.00	4.74	1.56	1.04
	Urban	101	99.0	2.53	3.68	1.45	0.974
	Rural	21	100.0	5.25	7.87	2.21	1.26
	Low Income	54	100.0	3.06	4.04	1.91	0.908
	Mid/High Income	64	98.4	3.07	5.40	1.35	1.13
	Home Children	65	98.5	2.80	4.84	1.29	1.11
	Day Care Children	57	100.0	3.23	4.65	1.94	0.909
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	124	15.3	--	--	--	--
	Urban	106	17.0	--	--	--	--
	Rural	18	5.6	--	--	--	--
	Low Income	58	15.5	--	--	--	--
	Mid/High Income	62	16.1	--	--	--	--
	Home Children	65	9.2	--	--	--	--
	Day Care Children	59	22.0	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	96.6	0.831	1.25	0.372	1.32
	Urban	96	96.9	0.834	1.24	0.371	1.35
	Rural	21	95.2	0.815	1.30	0.373	1.19
	Low Income	50	100.0	0.832	1.31	0.365	1.35
	Mid/High Income	63	93.7	0.865	1.24	0.390	1.32
	Home Children	65	93.8	0.939	1.39	0.422	1.30
	Day Care Children	52	100.0	0.695	1.05	0.317	1.33

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-21d. Pentachlorophenol (87-86-5): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	122	<MDL	0.198	0.344	0.775	4.65	6.31
	Urban	101	<MDL	0.196	0.322	0.726	2.18	5.77
	Rural	21	0.091	0.318	0.431	0.850	5.78	6.31
	Low Income	54	0.094	0.260	0.462	0.851	3.10	5.40
	Mid/High Income	64	<MDL	0.168	0.270	0.611	4.74	6.31
	Home Children	65	<MDL	0.156	0.277	0.519	4.65	5.77
	Day Care Children	57	0.127	0.260	0.410	0.850	4.74	6.31
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	6.13	15.3
	Urban	106	<MDL	<MDL	<MDL	<MDL	7.01	15.3
	Rural	18	<MDL	<MDL	<MDL	<MDL	3.83	3.83
	Low Income	58	<MDL	<MDL	<MDL	<MDL	10.5	15.3
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	6.13	11.7
	Home Children	65	<MDL	<MDL	<MDL	<MDL	4.16	11.7
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	10.5	15.3
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	<MDL	0.038	0.105	0.260	0.967	1.95
	Urban	96	<MDL	0.038	0.107	0.267	0.898	1.95
	Rural	21	<MDL	0.039	0.081	0.134	1.13	1.24
	Low Income	50	0.005	0.039	0.108	0.251	0.967	1.95
	Mid/High Income	63	<MDL	0.036	0.105	0.273	0.898	1.62
	Home Children	65	<MDL	0.041	0.120	0.273	1.13	1.95
	Day Care Children	52	0.005	0.036	0.091	0.226	0.681	1.62
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	122	<MDL	0.742	1.29	2.91	17.5	23.7
	Urban	101	<MDL	0.735	1.21	2.73	8.20	21.7
	Rural	21	0.340	1.19	1.62	3.19	21.7	23.7
	Low Income	54	0.354	0.974	1.74	3.20	11.6	20.3
	Mid/High Income	64	<MDL	0.632	1.01	2.29	17.8	23.7
	Home Children	65	<MDL	0.587	1.04	1.95	17.5	21.7
	Day Care Children	57	0.475	0.974	1.54	3.19	17.8	23.7
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	124	<MDL	<MDL	<MDL	<MDL	23.0	57.5
	Urban	106	<MDL	<MDL	<MDL	<MDL	26.3	57.5
	Rural	18	<MDL	<MDL	<MDL	<MDL	14.4	14.4
	Low Income	58	<MDL	<MDL	<MDL	<MDL	39.6	57.5
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	23.0	43.7
	Home Children	65	<MDL	<MDL	<MDL	<MDL	15.6	43.7
	Day Care Children	59	<MDL	<MDL	<MDL	<MDL	39.6	57.5
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	<MDL	0.144	0.396	0.975	3.63	7.33
	Urban	96	<MDL	0.143	0.400	1.00	3.37	7.33
	Rural	21	<MDL	0.146	0.302	0.503	4.25	4.66
	Low Income	50	0.018	0.146	0.405	0.944	3.63	7.33
	Mid/High Income	63	<MDL	0.136	0.396	1.03	3.37	6.09
	Home Children	65	<MDL	0.153	0.451	1.03	4.25	7.33
	Day Care Children	52	0.018	0.136	0.342	0.849	2.56	6.09

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-22a. *cis*-Permethrin (61949-76-6): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	75.8	13.2	28.5	4.17	1.46
	Urban	103	72.8	13.0	29.4	3.88	1.49
	Rural	21	90.5	13.9	24.8	5.86	1.26
	Low Income	55	92.7	22.4	39.9	8.11	1.43
	Mid/High Income	65	61.5	5.88	9.38	2.43	1.27
	Home Children	65	61.5	9.35	17.5	3.13	1.45
	Day Care Children	59	91.5	17.3	36.8	5.71	1.42
Potential Exposure via Dietary Ingestion (ng/day)	Overall	122	60.7	2,870	14,200	132	1.97
	Urban	102	63.7	3,360	15,500	142	2.03
	Rural	20	45.0	--	--	--	--
	Low Income	56	64.3	5,430	20,700	151	2.13
	Mid/High Income	62	56.5	677	1,570	114	1.83
	Home Children	63	50.8	621	1,560	88.8	1.83
	Day Care Children	59	71.2	5,270	20,100	200	2.04
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	100.0	220	670	48.4	1.57
	Urban	99	100.0	209	601	47.4	1.62
	Rural	21	100.0	271	946	53.3	1.36
	Low Income	52	100.0	118	181	58.1	1.19
	Mid/High Income	64	100.0	314	895	43.6	1.85
	Home Children	66	100.0	233	721	44.1	1.62
	Day Care Children	54	100.0	203	608	54.3	1.52
Potential Exposure – Aggregated (ng/day)	Overall	109	100.0	3,290	15,000	306	1.71
	Urban	89	100.0	3,880	16,500	329	1.77
	Rural	20	100.0	656	1,240	218	1.41
	Low Income	45	100.0	6,510	22,900	322	1.85
	Mid/High Income	60	100.0	1,030	1,760	298	1.62
	Home Children	62	100.0	867	1,690	224	1.57
	Day Care Children	47	100.0	6,490	22,400	460	1.82
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	75.8	33.6	72.9	10.6	1.46
	Urban	103	72.8	33.2	75.0	9.93	1.49
	Rural	21	90.5	35.5	63.3	15.0	1.26
	Low Income	55	92.7	57.2	102	20.7	1.43
	Mid/High Income	65	61.5	15.0	24.0	6.20	1.27
	Home Children	65	61.5	23.9	44.8	8.00	1.45
	Day Care Children	59	91.5	44.3	94.1	14.6	1.42
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	122	60.7	7,330	36,200	336	1.97
	Urban	102	63.7	8,590	39,500	364	2.03
	Rural	20	45.0	--	--	--	--
	Low Income	56	64.3	13,900	52,800	387	2.13
	Mid/High Income	62	56.5	1,730	4,030	290	1.83
	Home Children	63	50.8	1,590	3,990	227	1.83
	Day Care Children	59	71.2	13,500	51,500	512	2.04
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	100.0	561	1,710	124	1.57
	Urban	99	100.0	534	1,540	121	1.62
	Rural	21	100.0	692	2,420	136	1.36
	Low Income	52	100.0	301	464	149	1.19
	Mid/High Income	64	100.0	803	2,290	111	1.85
	Home Children	66	100.0	596	1,840	113	1.62
	Day Care Children	54	100.0	519	1,550	139	1.52
Potential Exposure – Aggregated (pmoles/day)	Overall	109	100.0	8,410	38,200	781	1.71
	Urban	89	100.0	9,930	42,200	842	1.77
	Rural	20	100.0	1,680	3,180	558	1.41
	Low Income	45	100.0	16,600	58,600	824	1.85
	Mid/High Income	60	100.0	2,630	4,510	761	1.62
	Home Children	62	100.0	2,220	4,330	573	1.57
	Day Care Children	47	100.0	16,600	57,300	1,180	1.82

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-22b. *cis*-Permethrin (61949-76-6): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	1.10	4.64	10.5	51.6	193
	Urban	103	<MDL	<MDL	4.61	10.6	51.6	193
	Rural	21	<MDL	2.26	5.85	10.3	49.9	109
	Low Income	55	<MDL	3.38	7.20	20.1	112	193
	Mid/High Income	65	<MDL	<MDL	1.47	6.43	25.9	51.6
	Home Children	65	<MDL	<MDL	2.26	7.89	49.9	109
	Day Care Children	59	<MDL	1.91	5.84	11.7	112	193
Potential Exposure via Dietary Ingestion (ng/day)	Overall	122	<MDL	<MDL	84.7	365	6,830	93,300
	Urban	102	<MDL	<MDL	89.6	372	6,900	93,300
	Rural	20	<MDL	<MDL	<MDL	346	2,490	3,720
	Low Income	56	<MDL	<MDL	91.1	321	89,000	93,300
	Mid/High Income	62	<MDL	<MDL	70.9	372	4,450	7,270
	Home Children	63	<MDL	<MDL	62.0	282	4,450	6,900
	Day Care Children	59	<MDL	<MDL	98.7	394	89,000	93,300
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	1.71	17.1	48.1	113	718	4,540
	Urban	99	1.71	14.8	47.1	116	831	4,540
	Rural	21	6.85	20.4	49.7	67.0	221	4,390
	Low Income	52	5.49	21.2	62.0	129	421	1,090
	Mid/High Income	64	1.71	12.5	34.5	113	2,510	4,540
	Home Children	66	1.71	13.2	40.1	110	1,090	4,540
	Day Care Children	54	3.63	17.3	55.8	135	604	4,390
Potential Exposure – Aggregated (ng/day)	Overall	109	21.7	88.9	246	656	6,840	93,300
	Urban	89	21.7	104	271	679	6,990	93,300
	Rural	20	36.5	73.9	187	455	4,170	4,560
	Low Income	45	43.1	97.0	246	419	89,700	93,300
	Mid/High Income	60	21.7	83.9	263	819	5,400	7,290
	Home Children	62	21.7	63.3	165	550	4,630	6,990
	Day Care Children	47	42.3	127	364	860	89,700	93,300
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	2.81	11.8	26.8	132	492
	Urban	103	<MDL	<MDL	11.8	27.2	132	492
	Rural	21	<MDL	5.78	15.0	26.3	128	278
	Low Income	55	<MDL	8.64	18.4	51.4	285	492
	Mid/High Income	65	<MDL	<MDL	3.76	16.4	66.1	132
	Home Children	65	<MDL	<MDL	5.78	20.2	128	278
	Day Care Children	59	<MDL	4.89	14.9	29.9	285	492
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	122	<MDL	<MDL	217	933	17,500	238,000
	Urban	102	<MDL	<MDL	229	951	17,600	238,000
	Rural	20	<MDL	<MDL	<MDL	885	6,350	9,510
	Low Income	56	<MDL	<MDL	233	821	228,000	238,000
	Mid/High Income	62	<MDL	<MDL	181	951	11,400	18,600
	Home Children	63	<MDL	<MDL	159	721	11,400	17,600
	Day Care Children	59	<MDL	<MDL	252	1,010	228,000	238,000
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	4.38	43.6	123	289	1,830	11,600
	Urban	99	4.38	37.9	120	296	2,120	11,600
	Rural	21	17.5	52.2	127	171	564	11,200
	Low Income	52	14.0	54.3	158	330	1,080	2,780
	Mid/High Income	64	4.38	31.9	88.2	289	6,400	11,600
	Home Children	66	4.38	33.6	102	282	2,780	11,600
	Day Care Children	54	9.27	44.2	143	344	1,540	11,200
Potential Exposure – Aggregated (pmoles/day)	Overall	109	55.5	227	629	1,680	17,500	238,000
	Urban	89	55.5	265	693	1,740	17,900	238,000
	Rural	20	93.3	189	479	1,160	10,700	11,700
	Low Income	45	110	248	629	1,070	229,000	238,000
	Mid/High Income	60	55.5	214	672	2,090	13,800	18,600
	Home Children	62	55.5	162	422	1,400	11,800	17,900
	Day Care Children	47	108	324	930	2,200	229,000	238,000

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-22c. *cis*-Permethrin (61949-76-6): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	75.8	0.400	0.907	0.124	1.45
	Urban	103	72.8	0.407	0.957	0.117	1.49
	Rural	21	90.5	0.364	0.623	0.165	1.21
	Low Income	55	92.7	0.676	1.28	0.232	1.44
	Mid/High Income	65	61.5	0.184	0.296	0.076	1.28
	Home Children	65	61.5	0.313	0.671	0.099	1.43
	Day Care Children	59	91.5	0.495	1.11	0.159	1.44
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	122	60.7	80.9	391	3.92	1.96
	Urban	102	63.7	94.7	427	4.29	2.02
	Rural	20	45.0	--	--	--	--
	Low Income	56	64.3	148	570	4.31	2.09
	Mid/High Income	62	56.5	23.5	58.0	3.55	1.85
	Home Children	63	50.8	20.1	51.9	2.81	1.85
	Day Care Children	59	71.2	146	555	5.60	2.02
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	100.0	6.90	20.9	1.44	1.62
	Urban	99	100.0	6.76	19.8	1.43	1.67
	Rural	21	100.0	7.56	26.1	1.50	1.37
	Low Income	52	100.0	3.47	5.25	1.64	1.22
	Mid/High Income	64	100.0	10.1	27.9	1.37	1.90
	Home Children	66	100.0	7.70	23.7	1.40	1.65
	Day Care Children	54	100.0	5.92	16.9	1.50	1.59
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	109	100.0	92.5	412	9.08	1.71
	Urban	89	100.0	109	454	9.91	1.77
	Rural	20	100.0	18.6	34.8	6.17	1.41
	Low Income	45	100.0	175	631	9.06	1.80
	Mid/High Income	60	100.0	34.8	63.3	9.31	1.66
	Home Children	62	100.0	28.3	56.6	7.11	1.60
	Day Care Children	47	100.0	177	617	12.5	1.82
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	75.8	1.02	2.32	0.318	1.45
	Urban	103	72.8	1.04	2.45	0.300	1.49
	Rural	21	90.5	0.930	1.59	0.421	1.21
	Low Income	55	92.7	1.73	3.26	0.593	1.44
	Mid/High Income	65	61.5	0.470	0.755	0.193	1.28
	Home Children	65	61.5	0.799	1.71	0.254	1.43
	Day Care Children	59	91.5	1.27	2.84	0.406	1.44
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	122	60.7	207	1,000	10.0	1.96
	Urban	102	63.7	242	1,090	11.0	2.02
	Rural	20	45.0	--	--	--	--
	Low Income	56	64.3	379	1,460	11.0	2.09
	Mid/High Income	62	56.5	60.0	148	9.08	1.85
	Home Children	63	50.8	51.3	133	7.18	1.85
	Day Care Children	59	71.2	372	1,420	14.3	2.02
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	100.0	17.6	53.3	3.69	1.62
	Urban	99	100.0	17.3	50.5	3.66	1.67
	Rural	21	100.0	19.3	66.6	3.82	1.37
	Low Income	52	100.0	8.87	13.4	4.19	1.22
	Mid/High Income	64	100.0	25.7	71.3	3.50	1.90
	Home Children	66	100.0	19.7	60.6	3.57	1.65
	Day Care Children	54	100.0	15.1	43.3	3.84	1.59
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	109	100.0	236	1,050	23.2	1.71
	Urban	89	100.0	279	1,160	25.3	1.77
	Rural	20	100.0	47.5	88.8	15.8	1.41
	Low Income	45	100.0	448	1,610	23.1	1.80
	Mid/High Income	60	100.0	88.9	162	23.8	1.66
	Home Children	62	100.0	72.4	145	18.2	1.60
	Day Care Children	47	100.0	453	1,580	32.0	1.82

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-22d. *cis*-Permethrin (61949-76-6): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	0.033	0.137	0.303	1.72	6.84
	Urban	103	<MDL	<MDL	0.134	0.304	1.72	6.84
	Rural	21	<MDL	0.066	0.170	0.284	1.04	2.78
	Low Income	55	<MDL	0.080	0.227	0.574	4.21	6.84
	Mid/High Income	65	<MDL	<MDL	0.042	0.217	0.768	1.72
	Home Children	65	<MDL	<MDL	0.066	0.265	1.04	4.29
	Day Care Children	59	<MDL	0.036	0.170	0.316	2.86	6.84
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	122	<MDL	<MDL	2.63	10.3	243	2,850
	Urban	102	<MDL	<MDL	2.77	11.5	243	2,850
	Rural	20	<MDL	<MDL	<MDL	9.78	72.2	105
	Low Income	56	<MDL	<MDL	2.85	10.0	2,000	2,850
	Mid/High Income	62	<MDL	<MDL	2.19	11.1	169	269
	Home Children	63	<MDL	<MDL	1.95	10.0	105	269
	Day Care Children	59	<MDL	<MDL	3.34	11.5	2,000	2,850
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	0.061	0.472	1.39	3.51	26.6	143
	Urban	99	0.061	0.423	1.45	3.57	27.7	143
	Rural	21	0.179	0.614	1.33	1.64	7.99	121
	Low Income	52	0.163	0.570	1.63	3.50	14.7	29.2
	Mid/High Income	64	0.061	0.353	1.11	4.17	69.0	143
	Home Children	66	0.073	0.464	1.16	3.55	29.2	143
	Day Care Children	54	0.061	0.495	1.52	2.76	17.8	121
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	109	0.646	2.71	6.72	21.5	243	2,850
	Urban	89	0.646	3.17	7.86	22.7	243	2,850
	Rural	20	1.18	2.00	5.24	12.9	116	126
	Low Income	45	1.18	2.78	6.70	14.0	2,000	2,850
	Mid/High Income	60	0.646	2.64	8.33	28.6	206	272
	Home Children	62	0.646	2.05	4.91	19.0	150	272
	Day Care Children	47	0.716	4.01	10.1	21.9	2,000	2,850
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	0.084	0.349	0.774	4.40	17.5
	Urban	103	<MDL	<MDL	0.342	0.777	4.40	17.5
	Rural	21	<MDL	0.167	0.434	0.725	2.67	7.12
	Low Income	55	<MDL	0.203	0.580	1.47	10.7	17.5
	Mid/High Income	65	<MDL	<MDL	0.108	0.554	1.96	4.40
	Home Children	65	<MDL	<MDL	0.167	0.676	2.67	11.0
	Day Care Children	59	<MDL	0.092	0.434	0.809	7.31	17.5
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	122	<MDL	<MDL	6.72	26.3	620	7,290
	Urban	102	<MDL	<MDL	7.08	29.4	620	7,290
	Rural	20	<MDL	<MDL	<MDL	25.0	185	269
	Low Income	56	<MDL	<MDL	7.30	25.6	5,110	7,290
	Mid/High Income	62	<MDL	<MDL	5.60	28.3	432	687
	Home Children	63	<MDL	<MDL	4.99	25.6	269	687
	Day Care Children	59	<MDL	<MDL	8.53	29.4	5,110	7,290
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	0.157	1.21	3.55	8.98	68.0	365
	Urban	99	0.157	1.08	3.70	9.12	70.9	365
	Rural	21	0.459	1.57	3.39	4.19	20.4	309
	Low Income	52	0.418	1.46	4.17	8.93	37.6	74.7
	Mid/High Income	64	0.157	0.902	2.83	10.6	176	365
	Home Children	66	0.185	1.19	2.97	9.06	74.7	365
	Day Care Children	54	0.157	1.27	3.90	7.05	45.6	309
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	109	1.65	6.92	17.2	54.9	621	7,300
	Urban	89	1.65	8.09	20.1	58.0	622	7,300
	Rural	20	3.01	5.11	13.4	32.9	297	321
	Low Income	45	3.01	7.11	17.1	35.9	5,120	7,300
	Mid/High Income	60	1.65	6.73	21.3	73.0	528	695
	Home Children	62	1.65	5.24	12.5	48.5	383	695
	Day Care Children	47	1.83	10.2	25.9	55.9	5,120	7,300

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-23a. *trans*-Permethrin (61949-77-7): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	75.0	11.8	29.4	3.31	1.46
	Urban	103	71.8	11.7	30.5	3.09	1.49
	Rural	21	90.5	12.2	24.1	4.58	1.34
	Low Income	55	92.7	20.4	41.8	6.32	1.47
	Mid/High Income	65	61.5	5.03	8.81	1.98	1.26
	Home Children	65	60.0	8.35	17.1	2.47	1.47
	Day Care Children	59	91.5	15.6	38.6	4.56	1.40
Potential Exposure via Dietary Ingestion (ng/day)	Overall	119	59.7	1,580	8,310	111	1.80
	Urban	100	63.0	1,830	9,050	120	1.85
	Rural	19	42.1	--	--	--	--
	Low Income	53	62.3	2,930	12,300	125	1.93
	Mid/High Income	62	56.5	493	1,120	98.7	1.69
	Home Children	63	50.8	491	1,240	81.7	1.73
	Day Care Children	56	69.6	2,810	12,000	157	1.83
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	100.0	222	698	42.7	1.67
	Urban	99	100.0	211	627	42.2	1.72
	Rural	21	100.0	272	983	45.0	1.42
	Low Income	52	100.0	112	176	47.0	1.32
	Mid/High Income	64	100.0	323	934	41.2	1.93
	Home Children	66	100.0	236	755	38.6	1.70
	Day Care Children	54	100.0	204	627	48.3	1.63
Potential Exposure – Aggregated (ng/day)	Overall	106	100.0	1,870	8,720	252	1.60
	Urban	87	100.0	2,160	9,600	274	1.63
	Rural	19	100.0	562	1,150	172	1.44
	Low Income	42	100.0	3,440	13,700	243	1.70
	Mid/High Income	60	100.0	848	1,430	262	1.55
	Home Children	62	100.0	739	1,440	200	1.54
	Day Care Children	44	100.0	3,460	13,400	349	1.65
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	75.0	30.1	75.2	8.45	1.46
	Urban	103	71.8	29.9	78.0	7.91	1.49
	Rural	21	90.5	31.3	61.5	11.7	1.34
	Low Income	55	92.7	52.1	107	16.2	1.47
	Mid/High Income	65	61.5	12.9	22.5	5.05	1.26
	Home Children	65	60.0	21.3	43.7	6.31	1.47
	Day Care Children	59	91.5	39.7	98.6	11.7	1.40
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	119	59.7	4,050	21,200	284	1.80
	Urban	100	63.0	4,690	23,100	306	1.85
	Rural	19	42.1	--	--	--	--
	Low Income	53	62.3	7,480	31,500	318	1.93
	Mid/High Income	62	56.5	1,260	2,860	252	1.69
	Home Children	63	50.8	1,250	3,160	209	1.73
	Day Care Children	56	69.6	7,190	30,600	401	1.83
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	100.0	566	1,780	109	1.67
	Urban	99	100.0	539	1,600	108	1.72
	Rural	21	100.0	695	2,510	115	1.42
	Low Income	52	100.0	286	450	120	1.32
	Mid/High Income	64	100.0	825	2,390	105	1.93
	Home Children	66	100.0	603	1,930	98.7	1.70
	Day Care Children	54	100.0	522	1,600	123	1.63
Potential Exposure – Aggregated (pmoles/day)	Overall	106	100.0	4,780	22,300	644	1.60
	Urban	87	100.0	5,510	24,500	700	1.63
	Rural	19	100.0	1,440	2,930	440	1.44
	Low Income	42	100.0	8,800	35,000	620	1.70
	Mid/High Income	60	100.0	2,170	3,650	669	1.55
	Home Children	62	100.0	1,890	3,680	511	1.54
	Day Care Children	44	100.0	8,850	34,100	892	1.65

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-23b. *trans*-Permethrin (61949-77-7): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	2.73	8.48	47.2	236
	Urban	103	<MDL	<MDL	2.69	8.23	47.2	236
	Rural	21	<MDL	1.49	3.64	9.32	32.5	110
	Low Income	55	<MDL	2.59	5.20	13.1	112	236
	Mid/High Income	65	<MDL	<MDL	1.17	4.66	25.5	46.6
	Home Children	65	<MDL	<MDL	1.49	7.69	32.5	110
	Day Care Children	59	<MDL	1.54	4.79	9.32	112	236
Potential Exposure via Dietary Ingestion (ng/day)	Overall	119	<MDL	<MDL	74.5	298	4,880	65,300
	Urban	100	<MDL	<MDL	82.6	317	4,910	65,300
	Rural	19	<MDL	<MDL	<MDL	273	2,450	2,450
	Low Income	53	<MDL	<MDL	83.1	214	12,900	65,300
	Mid/High Income	62	<MDL	<MDL	55.9	337	2,670	4,930
	Home Children	63	<MDL	<MDL	54.1	211	2,670	6,320
	Day Care Children	56	<MDL	<MDL	90.4	380	12,900	65,300
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	1.10	11.9	35.4	119	680	4,800
	Urban	99	1.10	10.6	37.4	137	734	4,800
	Rural	21	6.23	21.0	34.4	64.8	263	4,550
	Low Income	52	4.76	20.7	44.5	110	531	932
	Mid/High Income	64	1.10	10.0	30.9	139	2,500	4,800
	Home Children	66	1.10	12.6	32.7	110	932	4,800
	Day Care Children	54	3.42	10.7	41.8	153	582	4,550
Potential Exposure – Aggregated (ng/day)	Overall	106	16.5	77.9	193	555	4,870	65,300
	Urban	87	16.5	88.1	209	573	4,940	65,300
	Rural	19	38.7	46.2	130	454	4,670	4,670
	Low Income	42	27.9	85.0	182	430	6,370	65,300
	Mid/High Income	60	16.5	71.6	238	615	4,770	4,940
	Home Children	62	16.5	59.3	164	420	4,870	6,370
	Day Care Children	44	38.6	107	357	668	4,670	65,300
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	6.98	21.7	121	603
	Urban	103	<MDL	<MDL	6.87	21.0	121	603
	Rural	21	<MDL	3.82	9.30	23.8	82.9	281
	Low Income	55	<MDL	6.61	13.3	33.5	286	603
	Mid/High Income	65	<MDL	<MDL	2.99	11.9	65.3	119
	Home Children	65	<MDL	<MDL	3.82	19.7	82.9	281
	Day Care Children	59	<MDL	3.94	12.2	23.8	286	603
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	119	<MDL	<MDL	190	762	12,500	167,000
	Urban	100	<MDL	<MDL	211	811	12,500	167,000
	Rural	19	<MDL	<MDL	<MDL	696	6,250	6,250
	Low Income	53	<MDL	<MDL	212	546	33,000	167,000
	Mid/High Income	62	<MDL	<MDL	143	860	6,820	12,600
	Home Children	63	<MDL	<MDL	138	539	6,820	16,100
	Day Care Children	56	<MDL	<MDL	231	972	33,000	167,000
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	2.82	30.5	90.4	305	1,740	12,300
	Urban	99	2.82	27.2	95.7	349	1,880	12,300
	Rural	21	15.9	53.6	87.8	166	671	11,600
	Low Income	52	12.2	52.9	114	282	1,360	2,380
	Mid/High Income	64	2.82	25.6	79.0	354	6,390	12,300
	Home Children	66	2.82	32.3	83.5	281	2,380	12,300
	Day Care Children	54	8.73	27.4	107	392	1,490	11,600
Potential Exposure – Aggregated (pmoles/day)	Overall	106	42.2	199	492	1,420	12,500	167,000
	Urban	87	42.2	225	535	1,460	12,600	167,000
	Rural	19	98.9	118	332	1,160	11,900	11,900
	Low Income	42	71.2	217	466	1,100	16,300	167,000
	Mid/High Income	60	42.2	183	609	1,570	12,200	12,600
	Home Children	62	42.2	152	420	1,070	12,500	16,300
	Day Care Children	44	98.6	274	913	1,710	11,900	167,000

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-23c. *trans*-Permethrin (61949-77-7): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	75.0	0.366	0.978	0.099	1.46
	Urban	103	71.8	0.374	1.04	0.094	1.49
	Rural	21	90.5	0.322	0.614	0.129	1.29
	Low Income	55	92.7	0.633	1.40	0.181	1.49
	Mid/High Income	65	61.5	0.157	0.276	0.062	1.26
	Home Children	65	60.0	0.285	0.670	0.078	1.46
	Day Care Children	59	91.5	0.455	1.23	0.127	1.42
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	119	59.7	44.4	225	3.32	1.79
	Urban	100	63.0	51.5	245	3.61	1.84
	Rural	19	42.1	--	--	--	--
	Low Income	53	62.3	78.1	333	3.56	1.89
	Mid/High Income	62	56.5	17.3	42.3	3.09	1.72
	Home Children	63	50.8	15.7	39.4	2.59	1.75
	Day Care Children	56	69.6	76.8	324	4.40	1.81
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	100.0	7.02	21.9	1.27	1.72
	Urban	99	100.0	6.90	20.7	1.27	1.78
	Rural	21	100.0	7.58	27.1	1.26	1.46
	Low Income	52	100.0	3.38	5.24	1.33	1.38
	Mid/High Income	64	100.0	10.4	29.2	1.29	1.98
	Home Children	66	100.0	7.88	25.0	1.22	1.74
	Day Care Children	54	100.0	5.96	17.4	1.34	1.70
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	106	100.0	52.4	235	7.52	1.61
	Urban	87	100.0	60.4	259	8.27	1.64
	Rural	19	100.0	15.8	31.8	4.85	1.45
	Low Income	42	100.0	89.4	368	6.85	1.65
	Mid/High Income	60	100.0	28.7	51.0	8.19	1.60
	Home Children	62	100.0	24.1	46.9	6.35	1.57
	Day Care Children	44	100.0	92.3	359	9.54	1.66
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	75.0	0.934	2.50	0.252	1.46
	Urban	103	71.8	0.957	2.65	0.239	1.49
	Rural	21	90.5	0.823	1.57	0.328	1.29
	Low Income	55	92.7	1.62	3.57	0.462	1.49
	Mid/High Income	65	61.5	0.402	0.704	0.158	1.26
	Home Children	65	60.0	0.727	1.71	0.200	1.46
	Day Care Children	59	91.5	1.16	3.15	0.325	1.42
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	119	59.7	114	576	8.49	1.79
	Urban	100	63.0	131	627	9.24	1.84
	Rural	19	42.1	--	--	--	--
	Low Income	53	62.3	200	851	9.11	1.89
	Mid/High Income	62	56.5	44.2	108	7.89	1.72
	Home Children	63	50.8	40.1	101	6.61	1.75
	Day Care Children	56	69.6	196	828	11.2	1.81
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	100.0	17.9	55.8	3.25	1.72
	Urban	99	100.0	17.6	53.0	3.26	1.78
	Rural	21	100.0	19.4	69.2	3.23	1.46
	Low Income	52	100.0	8.63	13.4	3.39	1.38
	Mid/High Income	64	100.0	26.5	74.7	3.31	1.98
	Home Children	66	100.0	20.2	63.9	3.13	1.74
	Day Care Children	54	100.0	15.2	44.6	3.41	1.70
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	106	100.0	134	601	19.2	1.61
	Urban	87	100.0	154	661	21.1	1.64
	Rural	19	100.0	40.5	81.3	12.4	1.45
	Low Income	42	100.0	228	940	17.5	1.65
	Mid/High Income	60	100.0	73.4	130	20.9	1.60
	Home Children	62	100.0	61.5	120	16.2	1.57
	Day Care Children	44	100.0	236	918	24.4	1.66

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-23d. *trans*-Permethrin (61949-77-7): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	0.088	0.237	1.56	8.38
	Urban	103	<MDL	<MDL	0.083	0.230	1.56	8.38
	Rural	21	<MDL	0.043	0.103	0.257	0.843	2.81
	Low Income	55	<MDL	0.064	0.159	0.379	3.43	8.38
	Mid/High Income	65	<MDL	<MDL	0.034	0.136	0.804	1.56
	Home Children	65	<MDL	<MDL	0.042	0.173	0.909	4.33
	Day Care Children	59	<MDL	0.039	0.132	0.239	2.87	8.38
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	119	<MDL	<MDL	2.21	8.98	153	2,000
	Urban	100	<MDL	<MDL	2.33	9.07	164	2,000
	Rural	19	<MDL	<MDL	<MDL	7.32	69.1	69.1
	Low Income	53	<MDL	<MDL	2.28	7.32	459	2,000
	Mid/High Income	62	<MDL	<MDL	2.12	9.16	101	215
	Home Children	63	<MDL	<MDL	1.87	7.28	100	215
	Day Care Children	56	<MDL	<MDL	2.89	9.40	459	2,000
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	0.030	0.401	1.00	4.07	24.8	151
	Urban	99	0.030	0.331	1.07	4.18	25.0	151
	Rural	21	0.163	0.560	0.971	1.88	8.03	125
	Low Income	52	0.128	0.532	1.15	3.01	16.8	25.0
	Mid/High Income	64	0.030	0.333	1.00	4.43	68.8	151
	Home Children	66	0.030	0.402	0.969	3.32	30.0	151
	Day Care Children	54	0.070	0.326	1.18	4.37	16.9	125
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	106	0.606	2.37	5.82	19.5	154	2,000
	Urban	87	0.606	2.79	6.96	20.3	164	2,000
	Rural	19	0.710	1.44	4.17	12.5	129	129
	Low Income	42	0.710	2.37	5.21	13.7	71.6	2,000
	Mid/High Income	60	0.606	2.52	7.79	23.6	159	218
	Home Children	62	0.606	1.56	5.12	15.4	153	218
	Day Care Children	44	0.710	3.13	9.38	19.9	154	2,000
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	0.226	0.606	3.98	21.4
	Urban	103	<MDL	<MDL	0.212	0.587	3.98	21.4
	Rural	21	<MDL	0.110	0.263	0.656	2.15	7.19
	Low Income	55	<MDL	0.164	0.405	0.970	8.77	21.4
	Mid/High Income	65	<MDL	<MDL	0.087	0.347	2.05	3.98
	Home Children	65	<MDL	<MDL	0.107	0.441	2.32	11.1
	Day Care Children	59	<MDL	0.099	0.337	0.610	7.33	21.4
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	119	<MDL	<MDL	5.64	23.0	392	5,100
	Urban	100	<MDL	<MDL	5.94	23.2	420	5,100
	Rural	19	<MDL	<MDL	<MDL	18.7	177	177
	Low Income	53	<MDL	<MDL	5.82	18.7	1,170	5,100
	Mid/High Income	62	<MDL	<MDL	5.43	23.4	259	550
	Home Children	63	<MDL	<MDL	4.78	18.6	257	550
	Day Care Children	56	<MDL	<MDL	7.39	24.0	1,170	5,100
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	0.076	1.03	2.56	10.4	63.3	386
	Urban	99	0.076	0.847	2.74	10.7	64.0	386
	Rural	21	0.418	1.43	2.48	4.80	20.5	320
	Low Income	52	0.327	1.36	2.94	7.70	42.9	64.0
	Mid/High Income	64	0.076	0.850	2.56	11.3	176	386
	Home Children	66	0.076	1.03	2.48	8.49	76.7	386
	Day Care Children	54	0.178	0.832	3.02	11.2	43.1	320
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	106	1.55	6.05	14.9	49.8	395	5,100
	Urban	87	1.55	7.12	17.8	51.9	418	5,100
	Rural	19	1.81	3.69	10.7	31.9	329	329
	Low Income	42	1.81	6.05	13.3	34.9	183	5,100
	Mid/High Income	60	1.55	6.44	19.9	60.3	406	556
	Home Children	62	1.55	3.98	13.1	39.4	392	556
	Day Care Children	44	1.81	8.01	24.0	50.8	395	5,100

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-24a. PCB 52 (35693-99-3): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	97.6	6.28	9.18	4.33	0.795
	Urban	103	97.1	6.28	9.60	4.27	0.816
	Rural	21	100.0	6.27	6.95	4.63	0.699
	Low Income	55	100.0	7.67	13.0	4.56	0.929
	Mid/High Income	65	98.5	5.36	3.82	4.40	0.627
	Home Children	65	95.4	4.66	4.30	3.76	0.636
	Day Care Children	59	100.0	8.06	12.3	5.05	0.921
Potential Exposure via Dietary Ingestion (ng/day)	Overall	120	10.8	--	--	--	--
	Urban	99	10.1	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	52	17.3	--	--	--	--
	Mid/High Income	64	4.7	--	--	--	--
	Home Children	65	4.6	--	--	--	--
	Day Care Children	55	18.2	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	45.8	--	--	--	--
	Urban	99	47.5	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	52	46.2	--	--	--	--
	Mid/High Income	64	46.9	--	--	--	--
	Home Children	66	27.3	--	--	--	--
	Day Care Children	54	68.5	0.491	0.691	0.249	1.19
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	97.6	21.5	31.4	14.8	0.795
	Urban	103	97.1	21.5	32.9	14.6	0.816
	Rural	21	100.0	21.5	23.8	15.8	0.699
	Low Income	55	100.0	26.3	44.7	15.6	0.929
	Mid/High Income	65	98.5	18.4	13.1	15.1	0.627
	Home Children	65	95.4	16.0	14.7	12.9	0.636
	Day Care Children	59	100.0	27.6	42.3	17.3	0.921
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	120	10.8	--	--	--	--
	Urban	99	10.1	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	52	17.3	--	--	--	--
	Mid/High Income	64	4.7	--	--	--	--
	Home Children	65	4.6	--	--	--	--
	Day Care Children	55	18.2	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	45.8	--	--	--	--
	Urban	99	47.5	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	52	46.2	--	--	--	--
	Mid/High Income	64	46.9	--	--	--	--
	Home Children	66	27.3	--	--	--	--
	Day Care Children	54	68.5	1.68	2.37	0.854	1.19

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-24b. PCB 52 (35693-99-3): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	2.98	4.21	5.75	16.1	92.1
	Urban	103	<MDL	2.95	4.25	5.77	15.6	92.1
	Rural	21	1.38	3.04	4.07	5.16	16.7	32.3
	Low Income	55	0.649	3.04	4.32	6.15	25.2	92.1
	Mid/High Income	65	<MDL	3.03	4.24	5.74	15.4	18.0
	Home Children	65	<MDL	2.90	3.88	5.06	11.5	32.3
	Day Care Children	59	0.649	3.23	4.67	10.4	18.2	92.1
Potential Exposure via Dietary Ingestion (ng/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	59.0	144
	Urban	99	<MDL	<MDL	<MDL	<MDL	66.9	144
	Rural	21	<MDL	<MDL	<MDL	<MDL	44.1	91.5
	Low Income	52	<MDL	<MDL	<MDL	<MDL	66.9	144
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	85.6
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	91.5
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	66.9	144
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	<MDL	<MDL	<MDL	0.462	2.13	7.00
	Urban	99	<MDL	<MDL	<MDL	0.462	1.82	4.31
	Rural	21	<MDL	<MDL	<MDL	0.463	4.10	7.00
	Low Income	52	<MDL	<MDL	<MDL	0.466	3.95	4.31
	Mid/High Income	64	<MDL	<MDL	<MDL	0.446	1.67	7.00
	Home Children	66	<MDL	<MDL	<MDL	0.340	2.44	7.00
	Day Care Children	54	<MDL	<MDL	0.244	0.482	1.67	3.95
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	10.2	14.4	19.7	55.2	316
	Urban	103	<MDL	10.1	14.6	19.8	53.3	316
	Rural	21	4.71	10.4	13.9	17.7	57.2	111
	Low Income	55	2.22	10.4	14.8	21.1	86.2	316
	Mid/High Income	65	<MDL	10.4	14.5	19.7	52.9	61.7
	Home Children	65	<MDL	9.95	13.3	17.3	39.4	111
	Day Care Children	59	2.22	11.1	16.0	35.8	62.2	316
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	202	493
	Urban	99	<MDL	<MDL	<MDL	<MDL	229	493
	Rural	21	<MDL	<MDL	<MDL	<MDL	151	313
	Low Income	52	<MDL	<MDL	<MDL	<MDL	229	493
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	293
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	313
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	229	493
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	<MDL	<MDL	<MDL	1.58	7.31	24.0
	Urban	99	<MDL	<MDL	<MDL	1.58	6.25	14.8
	Rural	21	<MDL	<MDL	<MDL	1.59	14.0	24.0
	Low Income	52	<MDL	<MDL	<MDL	1.60	13.5	14.8
	Mid/High Income	64	<MDL	<MDL	<MDL	1.53	5.73	24.0
	Home Children	66	<MDL	<MDL	<MDL	1.17	8.36	24.0
	Day Care Children	54	<MDL	<MDL	0.836	1.65	5.73	13.5

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-24c. PCB 52 (35693-99-3): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	97.6	0.195	0.340	0.129	0.827
	Urban	103	97.1	0.200	0.366	0.129	0.855
	Rural	21	100.0	0.171	0.163	0.130	0.693
	Low Income	55	100.0	0.240	0.493	0.130	0.986
	Mid/High Income	65	98.5	0.166	0.115	0.137	0.622
	Home Children	65	95.4	0.147	0.108	0.119	0.676
	Day Care Children	59	100.0	0.247	0.476	0.141	0.965
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	120	10.8	--	--	--	--
	Urban	99	10.1	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	52	17.3	--	--	--	--
	Mid/High Income	64	4.7	--	--	--	--
	Home Children	65	4.6	--	--	--	--
	Day Care Children	55	18.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	45.8	--	--	--	--
	Urban	99	47.5	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	52	46.2	--	--	--	--
	Mid/High Income	64	46.9	--	--	--	--
	Home Children	66	27.3	--	--	--	--
	Day Care Children	54	68.5	0.015	0.025	0.007	1.24
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	97.6	0.668	1.16	0.442	0.827
	Urban	103	97.1	0.685	1.25	0.442	0.855
	Rural	21	100.0	0.586	0.557	0.445	0.693
	Low Income	55	100.0	0.821	1.69	0.447	0.986
	Mid/High Income	65	98.5	0.570	0.394	0.470	0.622
	Home Children	65	95.4	0.505	0.369	0.409	0.676
	Day Care Children	59	100.0	0.847	1.63	0.482	0.965
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	120	10.8	--	--	--	--
	Urban	99	10.1	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	52	17.3	--	--	--	--
	Mid/High Income	64	4.7	--	--	--	--
	Home Children	65	4.6	--	--	--	--
	Day Care Children	55	18.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	45.8	--	--	--	--
	Urban	99	47.5	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	52	46.2	--	--	--	--
	Mid/High Income	64	46.9	--	--	--	--
	Home Children	66	27.3	--	--	--	--
	Day Care Children	54	68.5	0.051	0.085	0.024	1.24

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-24d. PCB 52 (35693-99-3): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	0.086	0.127	0.183	0.480	3.62
	Urban	103	<MDL	0.092	0.128	0.187	0.463	3.62
	Rural	21	0.036	0.085	0.106	0.150	0.541	0.659
	Low Income	55	0.016	0.083	0.125	0.191	0.659	3.62
	Mid/High Income	65	<MDL	0.100	0.132	0.182	0.425	0.541
	Home Children	65	<MDL	0.086	0.127	0.172	0.387	0.659
	Day Care Children	59	0.016	0.085	0.127	0.281	0.589	3.62
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	1.66	4.40
	Urban	99	<MDL	<MDL	<MDL	<MDL	1.79	4.40
	Rural	21	<MDL	<MDL	<MDL	<MDL	1.26	2.58
	Low Income	52	<MDL	<MDL	<MDL	<MDL	1.79	4.40
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	3.29
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	3.29
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	1.79	4.40
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	<MDL	<MDL	<MDL	0.014	0.066	0.286
	Urban	99	<MDL	<MDL	<MDL	0.014	0.065	0.170
	Rural	21	<MDL	<MDL	<MDL	0.015	0.084	0.286
	Low Income	52	<MDL	<MDL	<MDL	0.013	0.084	0.170
	Mid/High Income	64	<MDL	<MDL	<MDL	0.015	0.057	0.286
	Home Children	66	<MDL	<MDL	<MDL	0.013	0.067	0.286
	Day Care Children	54	<MDL	<MDL	0.007	0.016	0.051	0.155
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	0.295	0.436	0.628	1.64	12.4
	Urban	103	<MDL	0.316	0.438	0.640	1.59	12.4
	Rural	21	0.124	0.292	0.364	0.512	1.85	2.26
	Low Income	55	0.056	0.283	0.428	0.653	2.26	12.4
	Mid/High Income	65	<MDL	0.341	0.451	0.623	1.46	1.85
	Home Children	65	<MDL	0.296	0.436	0.590	1.33	2.26
	Day Care Children	59	0.056	0.292	0.436	0.964	2.02	12.4
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	5.70	15.1
	Urban	99	<MDL	<MDL	<MDL	<MDL	6.15	15.1
	Rural	21	<MDL	<MDL	<MDL	<MDL	4.31	8.85
	Low Income	52	<MDL	<MDL	<MDL	<MDL	6.15	15.1
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	11.3
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	11.3
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	6.15	15.1
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	<MDL	<MDL	<MDL	0.046	0.226	0.978
	Urban	99	<MDL	<MDL	<MDL	0.046	0.222	0.581
	Rural	21	<MDL	<MDL	<MDL	0.051	0.287	0.978
	Low Income	52	<MDL	<MDL	<MDL	0.044	0.287	0.581
	Mid/High Income	64	<MDL	<MDL	<MDL	0.050	0.194	0.978
	Home Children	66	<MDL	<MDL	<MDL	0.046	0.230	0.978
	Day Care Children	54	<MDL	<MDL	0.023	0.055	0.175	0.532

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-25a. PCB 95 (38379-99-6): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	87.1	1.30	2.89	0.778	0.811
	Urban	103	88.3	1.22	2.73	0.777	0.759
	Rural	21	81.0	1.74	3.63	0.784	1.05
	Low Income	55	90.9	1.76	4.16	0.878	0.934
	Mid/High Income	65	89.2	0.981	1.06	0.742	0.678
	Home Children	65	76.9	1.06	2.07	0.698	0.740
	Day Care Children	59	98.3	1.58	3.58	0.877	0.873
Potential Exposure via Dietary Ingestion (ng/day)	Overall	120	3.3	--	--	--	--
	Urban	99	2.0	--	--	--	--
	Rural	21	9.5	--	--	--	--
	Low Income	52	3.8	--	--	--	--
	Mid/High Income	64	3.1	--	--	--	--
	Home Children	65	4.6	--	--	--	--
	Day Care Children	55	1.8	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	48.3	--	--	--	--
	Urban	99	47.5	--	--	--	--
	Rural	21	52.4	0.573	1.51	0.178	1.26
	Low Income	52	51.9	0.269	0.402	0.138	1.08
	Mid/High Income	64	45.3	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	54	63.0	0.325	0.594	0.158	1.08
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	87.1	3.99	8.85	2.38	0.811
	Urban	103	88.3	3.72	8.35	2.38	0.759
	Rural	21	81.0	5.32	11.1	2.40	1.05
	Low Income	55	90.9	5.38	12.7	2.69	0.934
	Mid/High Income	65	89.2	3.00	3.25	2.27	0.678
	Home Children	65	76.9	3.23	6.35	2.14	0.740
	Day Care Children	59	98.3	4.83	11.0	2.69	0.873
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	120	3.3	--	--	--	--
	Urban	99	2.0	--	--	--	--
	Rural	21	9.5	--	--	--	--
	Low Income	52	3.8	--	--	--	--
	Mid/High Income	64	3.1	--	--	--	--
	Home Children	65	4.6	--	--	--	--
	Day Care Children	55	1.8	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	48.3	--	--	--	--
	Urban	99	47.5	--	--	--	--
	Rural	21	52.4	1.76	4.62	0.544	1.26
	Low Income	52	51.9	0.824	1.23	0.423	1.08
	Mid/High Income	64	45.3	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	54	63.0	0.995	1.82	0.483	1.08

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-25b. PCB 95 (38379-99-6): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	0.458	0.687	1.13	2.78	27.1
	Urban	103	<MDL	0.495	0.737	1.15	2.34	27.1
	Rural	21	<MDL	0.433	0.517	1.10	4.04	16.9
	Low Income	55	<MDL	0.493	0.793	1.50	3.01	27.1
	Mid/High Income	65	<MDL	0.495	0.683	1.05	2.34	7.52
	Home Children	65	<MDL	0.441	0.683	1.04	2.01	16.9
	Day Care Children	59	<MDL	0.499	0.691	1.45	4.04	27.1
Potential Exposure via Dietary Ingestion (ng/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	<MDL	75.3
	Urban	99	<MDL	<MDL	<MDL	<MDL	<MDL	54.9
	Rural	21	<MDL	<MDL	<MDL	<MDL	44.1	75.3
	Low Income	52	<MDL	<MDL	<MDL	<MDL	<MDL	75.3
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	51.1
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	75.3
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	54.9
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	<MDL	<MDL	<MDL	0.318	1.27	7.00
	Urban	99	<MDL	<MDL	<MDL	0.326	1.22	3.73
	Rural	21	<MDL	<MDL	0.133	0.214	1.32	7.00
	Low Income	52	<MDL	<MDL	0.130	0.285	1.32	1.78
	Mid/High Income	64	<MDL	<MDL	<MDL	0.333	1.22	7.00
	Home Children	66	<MDL	<MDL	<MDL	0.326	1.18	7.00
	Day Care Children	54	<MDL	<MDL	0.131	0.317	1.62	3.73
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	1.40	2.10	3.46	8.53	83.1
	Urban	103	<MDL	1.52	2.26	3.52	7.17	83.1
	Rural	21	<MDL	1.33	1.58	3.37	12.4	51.9
	Low Income	55	<MDL	1.51	2.43	4.60	9.22	83.1
	Mid/High Income	65	<MDL	1.52	2.09	3.20	7.17	23.0
	Home Children	65	<MDL	1.35	2.09	3.20	6.17	51.9
	Day Care Children	59	<MDL	1.53	2.12	4.44	12.4	83.1
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	<MDL	231
	Urban	99	<MDL	<MDL	<MDL	<MDL	<MDL	168
	Rural	21	<MDL	<MDL	<MDL	<MDL	135	231
	Low Income	52	<MDL	<MDL	<MDL	<MDL	<MDL	231
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	157
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	231
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	168
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	<MDL	<MDL	<MDL	0.973	3.89	21.4
	Urban	99	<MDL	<MDL	<MDL	0.999	3.74	11.4
	Rural	21	<MDL	<MDL	0.408	0.656	4.04	21.4
	Low Income	52	<MDL	<MDL	0.398	0.874	4.04	5.44
	Mid/High Income	64	<MDL	<MDL	<MDL	1.02	3.74	21.4
	Home Children	66	<MDL	<MDL	<MDL	0.999	3.60	21.4
	Day Care Children	54	<MDL	<MDL	0.400	0.970	4.98	11.4

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-25c. PCB 95 (38379-99-6): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	87.1	0.040	0.101	0.023	0.852
	Urban	103	88.3	0.040	0.106	0.023	0.812
	Rural	21	81.0	0.044	0.076	0.022	1.05
	Low Income	55	90.9	0.054	0.147	0.025	0.977
	Mid/High Income	65	89.2	0.031	0.033	0.023	0.714
	Home Children	65	76.9	0.032	0.044	0.022	0.770
	Day Care Children	59	98.3	0.050	0.139	0.024	0.938
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	120	3.3	--	--	--	--
	Urban	99	2.0	--	--	--	--
	Rural	21	9.5	--	--	--	--
	Low Income	52	3.8	--	--	--	--
	Mid/High Income	64	3.1	--	--	--	--
	Home Children	65	4.6	--	--	--	--
	Day Care Children	55	1.8	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	48.3	--	--	--	--
	Urban	99	47.5	--	--	--	--
	Rural	21	52.4	0.020	0.061	0.005	1.33
	Low Income	52	51.9	0.008	0.013	0.004	1.16
	Mid/High Income	64	45.3	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	54	63.0	0.010	0.018	0.004	1.12
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	87.1	0.124	0.310	0.071	0.852
	Urban	103	88.3	0.122	0.324	0.072	0.812
	Rural	21	81.0	0.135	0.234	0.067	1.05
	Low Income	55	90.9	0.165	0.451	0.077	0.977
	Mid/High Income	65	89.2	0.095	0.100	0.071	0.714
	Home Children	65	76.9	0.097	0.134	0.068	0.770
	Day Care Children	59	98.3	0.154	0.427	0.075	0.938
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	120	3.3	--	--	--	--
	Urban	99	2.0	--	--	--	--
	Rural	21	9.5	--	--	--	--
	Low Income	52	3.8	--	--	--	--
	Mid/High Income	64	3.1	--	--	--	--
	Home Children	65	4.6	--	--	--	--
	Day Care Children	55	1.8	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	48.3	--	--	--	--
	Urban	99	47.5	--	--	--	--
	Rural	21	52.4	0.061	0.188	0.015	1.33
	Low Income	52	51.9	0.025	0.041	0.012	1.16
	Mid/High Income	64	45.3	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	54	63.0	0.029	0.056	0.013	1.12

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-25d. PCB 95 (38379-99-6): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	0.013	0.021	0.035	0.081	1.07
	Urban	103	<MDL	0.014	0.023	0.037	0.075	1.07
	Rural	21	<MDL	0.012	0.015	0.028	0.131	0.346
	Low Income	55	<MDL	0.014	0.024	0.042	0.082	1.07
	Mid/High Income	65	<MDL	0.015	0.022	0.033	0.074	0.224
	Home Children	65	<MDL	0.014	0.023	0.037	0.074	0.346
	Day Care Children	59	<MDL	0.013	0.020	0.034	0.131	1.07
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	<MDL	1.93
	Urban	99	<MDL	<MDL	<MDL	<MDL	<MDL	1.83
	Rural	21	<MDL	<MDL	<MDL	<MDL	1.26	1.93
	Low Income	52	<MDL	<MDL	<MDL	<MDL	<MDL	1.93
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	1.28
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	1.93
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	1.83
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	<MDL	<MDL	<MDL	0.009	0.046	0.286
	Urban	99	<MDL	<MDL	<MDL	0.010	0.047	0.111
	Rural	21	<MDL	<MDL	0.004	0.006	0.030	0.286
	Low Income	52	<MDL	<MDL	0.004	0.007	0.046	0.064
	Mid/High Income	64	<MDL	<MDL	<MDL	0.010	0.047	0.286
	Home Children	66	<MDL	<MDL	<MDL	0.012	0.046	0.286
	Day Care Children	54	<MDL	<MDL	0.004	0.008	0.054	0.111
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	0.041	0.065	0.108	0.248	3.27
	Urban	103	<MDL	0.044	0.070	0.113	0.230	3.27
	Rural	21	<MDL	0.036	0.046	0.084	0.400	1.06
	Low Income	55	<MDL	0.043	0.072	0.130	0.252	3.27
	Mid/High Income	65	<MDL	0.045	0.067	0.102	0.226	0.685
	Home Children	65	<MDL	0.043	0.070	0.113	0.226	1.06
	Day Care Children	59	<MDL	0.040	0.061	0.104	0.400	3.27
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	<MDL	5.91
	Urban	99	<MDL	<MDL	<MDL	<MDL	<MDL	5.61
	Rural	21	<MDL	<MDL	<MDL	<MDL	3.86	5.91
	Low Income	52	<MDL	<MDL	<MDL	<MDL	<MDL	5.91
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	3.91
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	5.91
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	5.61
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	<MDL	<MDL	<MDL	0.027	0.142	0.875
	Urban	99	<MDL	<MDL	<MDL	0.030	0.143	0.340
	Rural	21	<MDL	<MDL	0.011	0.020	0.092	0.875
	Low Income	52	<MDL	<MDL	0.011	0.022	0.140	0.196
	Mid/High Income	64	<MDL	<MDL	<MDL	0.031	0.143	0.875
	Home Children	66	<MDL	<MDL	<MDL	0.038	0.140	0.875
	Day Care Children	54	<MDL	<MDL	0.011	0.024	0.166	0.340

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table L-26a. PCB 101 (37680-73-2): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	73.4	1.12	2.53	0.617	0.886
	Urban	103	73.8	1.00	2.16	0.605	0.832
	Rural	21	71.4	1.71	3.89	0.684	1.13
	Low Income	55	80.0	1.50	3.60	0.684	1.01
	Mid/High Income	65	72.3	0.851	1.06	0.593	0.774
	Home Children	65	61.5	0.972	2.24	0.570	0.832
	Day Care Children	59	86.4	1.29	2.82	0.674	0.941
Potential Exposure via Dietary Ingestion (ng/day)	Overall	120	0.0	--	--	--	--
	Urban	99	0.0	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	52	0.0	--	--	--	--
	Mid/High Income	64	0.0	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	55	0.0	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	49.2	--	--	--	--
	Urban	99	48.5	--	--	--	--
	Rural	21	52.4	0.614	1.51	0.199	1.30
	Low Income	52	50.0	0.306	0.468	0.150	1.14
	Mid/High Income	64	48.4	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	54	64.8	0.407	0.813	0.174	1.18
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	73.4	3.43	7.75	1.89	0.886
	Urban	103	73.8	3.07	6.61	1.85	0.832
	Rural	21	71.4	5.24	11.9	2.09	1.13
	Low Income	55	80.0	4.60	11.0	2.10	1.01
	Mid/High Income	65	72.3	2.61	3.26	1.82	0.774
	Home Children	65	61.5	2.98	6.86	1.75	0.832
	Day Care Children	59	86.4	3.94	8.65	2.07	0.941
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	120	0.0	--	--	--	--
	Urban	99	0.0	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	52	0.0	--	--	--	--
	Mid/High Income	64	0.0	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	55	0.0	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	49.2	--	--	--	--
	Urban	99	48.5	--	--	--	--
	Rural	21	52.4	1.88	4.63	0.610	1.30
	Low Income	52	50.0	0.938	1.43	0.459	1.14
	Mid/High Income	64	48.4	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	54	64.8	1.25	2.49	0.534	1.18

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-26b. PCB 101 (37680-73-2): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	0.547	0.974	2.90	20.8
	Urban	103	<MDL	<MDL	0.574	0.994	2.31	20.8
	Rural	21	<MDL	<MDL	0.427	0.924	3.30	18.1
	Low Income	55	<MDL	0.277	0.583	1.11	3.22	20.8
	Mid/High Income	65	<MDL	<MDL	0.559	0.867	2.40	7.61
	Home Children	65	<MDL	<MDL	0.526	0.870	2.38	18.1
	Day Care Children	59	<MDL	0.298	0.574	1.08	3.30	20.8
Potential Exposure via Dietary Ingestion (ng/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	99	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	52	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	<MDL	<MDL	<MDL	0.340	1.36	7.00
	Urban	99	<MDL	<MDL	<MDL	0.339	1.18	5.06
	Rural	21	<MDL	<MDL	0.141	0.344	1.54	7.00
	Low Income	52	<MDL	<MDL	<MDL	0.291	1.54	2.30
	Mid/High Income	64	<MDL	<MDL	<MDL	0.344	1.17	7.00
	Home Children	66	<MDL	<MDL	<MDL	0.340	1.17	7.00
	Day Care Children	54	<MDL	<MDL	0.148	0.306	2.30	5.06
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	1.68	2.98	8.87	63.6
	Urban	103	<MDL	<MDL	1.76	3.05	7.07	63.6
	Rural	21	<MDL	<MDL	1.31	2.83	10.1	55.6
	Low Income	55	<MDL	0.848	1.78	3.42	9.86	63.6
	Mid/High Income	65	<MDL	<MDL	1.71	2.66	7.36	23.3
	Home Children	65	<MDL	<MDL	1.61	2.66	7.28	55.6
	Day Care Children	59	<MDL	0.913	1.76	3.30	10.1	63.6
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	99	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	52	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	<MDL	<MDL	<MDL	1.04	4.17	21.4
	Urban	99	<MDL	<MDL	<MDL	1.04	3.60	15.5
	Rural	21	<MDL	<MDL	0.433	1.05	4.73	21.4
	Low Income	52	<MDL	<MDL	<MDL	0.892	4.73	7.03
	Mid/High Income	64	<MDL	<MDL	<MDL	1.05	3.58	21.4
	Home Children	66	<MDL	<MDL	<MDL	1.04	3.58	21.4
	Day Care Children	54	<MDL	<MDL	0.452	0.938	7.03	15.5

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-26c. PCB 101 (37680-73-2): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	73.4	0.034	0.082	0.018	0.911
	Urban	103	73.8	0.032	0.083	0.018	0.865
	Rural	21	71.4	0.043	0.081	0.019	1.13
	Low Income	55	80.0	0.045	0.118	0.020	1.05
	Mid/High Income	65	72.3	0.027	0.033	0.018	0.783
	Home Children	65	61.5	0.028	0.047	0.018	0.829
	Day Care Children	59	86.4	0.041	0.109	0.019	1.000
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	120	0.0	--	--	--	--
	Urban	99	0.0	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	52	0.0	--	--	--	--
	Mid/High Income	64	0.0	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	55	0.0	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	49.2	--	--	--	--
	Urban	99	48.5	--	--	--	--
	Rural	21	52.4	0.021	0.061	0.006	1.37
	Low Income	52	50.0	0.009	0.015	0.004	1.22
	Mid/High Income	64	48.4	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	54	64.8	0.012	0.024	0.005	1.21
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	73.4	0.105	0.252	0.056	0.911
	Urban	103	73.8	0.100	0.254	0.056	0.865
	Rural	21	71.4	0.131	0.247	0.059	1.13
	Low Income	55	80.0	0.138	0.361	0.060	1.05
	Mid/High Income	65	72.3	0.082	0.100	0.057	0.783
	Home Children	65	61.5	0.087	0.145	0.055	0.829
	Day Care Children	59	86.4	0.125	0.332	0.058	1.000
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	120	0.0	--	--	--	--
	Urban	99	0.0	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	52	0.0	--	--	--	--
	Mid/High Income	64	0.0	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	55	0.0	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	49.2	--	--	--	--
	Urban	99	48.5	--	--	--	--
	Rural	21	52.4	0.065	0.188	0.017	1.37
	Low Income	52	50.0	0.029	0.047	0.013	1.22
	Mid/High Income	64	48.4	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	54	64.8	0.036	0.075	0.015	1.21

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-26d. PCB 101 (37680-73-2): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	0.017	0.029	0.091	0.817
	Urban	103	<MDL	<MDL	0.017	0.029	0.069	0.817
	Rural	21	<MDL	<MDL	0.012	0.033	0.107	0.370
	Low Income	55	<MDL	0.009	0.016	0.035	0.098	0.817
	Mid/High Income	65	<MDL	<MDL	0.018	0.028	0.091	0.226
	Home Children	65	<MDL	<MDL	0.018	0.029	0.080	0.370
	Day Care Children	59	<MDL	0.009	0.015	0.030	0.107	0.817
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	99	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	52	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	<MDL	<MDL	<MDL	0.012	0.051	0.286
	Urban	99	<MDL	<MDL	<MDL	0.012	0.056	0.151
	Rural	21	<MDL	<MDL	0.004	0.009	0.032	0.286
	Low Income	52	<MDL	<MDL	<MDL	0.007	0.046	0.070
	Mid/High Income	64	<MDL	<MDL	<MDL	0.014	0.056	0.286
	Home Children	66	<MDL	<MDL	<MDL	0.014	0.037	0.286
	Day Care Children	54	<MDL	<MDL	0.004	0.009	0.070	0.151
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	0.052	0.090	0.279	2.50
	Urban	103	<MDL	<MDL	0.053	0.090	0.211	2.50
	Rural	21	<MDL	<MDL	0.038	0.102	0.328	1.13
	Low Income	55	<MDL	0.027	0.048	0.108	0.302	2.50
	Mid/High Income	65	<MDL	<MDL	0.054	0.085	0.279	0.694
	Home Children	65	<MDL	<MDL	0.054	0.088	0.245	1.13
	Day Care Children	59	<MDL	0.028	0.046	0.091	0.328	2.50
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	120	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	99	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	52	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	<MDL	<MDL	<MDL	0.036	0.156	0.875
	Urban	99	<MDL	<MDL	<MDL	0.038	0.172	0.462
	Rural	21	<MDL	<MDL	0.012	0.029	0.097	0.875
	Low Income	52	<MDL	<MDL	<MDL	0.022	0.140	0.215
	Mid/High Income	64	<MDL	<MDL	<MDL	0.042	0.172	0.875
	Home Children	66	<MDL	<MDL	<MDL	0.043	0.113	0.875
	Day Care Children	54	<MDL	<MDL	0.013	0.029	0.213	0.462

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-27a. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimates of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	123	100.0	32.1	67.6	15.3	1.11
	Urban	102	100.0	33.1	72.4	15.2	1.11
	Rural	21	100.0	27.5	37.0	15.5	1.12
	Low Income	55	100.0	36.1	80.7	16.6	1.11
	Mid/High Income	64	100.0	29.6	56.9	14.2	1.14
	Home Children	65	100.0	27.6	56.9	13.0	1.13
	Day Care Children	58	100.0	37.2	78.1	18.3	1.06
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	99.2	1,440	994	1,060	0.935
	Urban	107	99.1	1,480	1,050	1,050	0.994
	Rural	21	100.0	1,240	580	1,090	0.559
	Low Income	58	100.0	1,110	648	832	0.935
	Mid/High Income	66	98.5	1,710	1,160	1,280	0.904
	Home Children	66	98.5	1,290	1,120	857	1.05
	Day Care Children	62	100.0	1,600	814	1,320	0.736
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	100.0	13.1	28.4	4.46	1.43
	Urban	99	100.0	10.6	23.6	4.07	1.35
	Rural	21	100.0	25.1	43.4	6.92	1.71
	Low Income	52	100.0	14.1	28.8	4.93	1.44
	Mid/High Income	64	100.0	11.5	27.5	3.86	1.41
	Home Children	66	100.0	14.8	33.9	4.73	1.47
	Day Care Children	54	100.0	11.1	19.7	4.15	1.39
Potential Exposure – Aggregated (ng/day)	Overall	113	100.0	1,480	1,010	1,110	0.887
	Urban	92	100.0	1,530	1,090	1,100	0.955
	Rural	21	100.0	1,300	562	1,160	0.506
	Low Income	47	100.0	1,160	680	869	0.921
	Mid/High Income	62	100.0	1,720	1,160	1,310	0.836
	Home Children	65	100.0	1,340	1,130	933	0.970
	Day Care Children	48	100.0	1,670	803	1,400	0.705
Potential Exposure in NC Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	123	100.0	162	341	77.0	1.11
	Urban	102	100.0	167	365	76.7	1.11
	Rural	21	100.0	139	186	78.2	1.12
	Low Income	55	100.0	182	406	83.5	1.11
	Mid/High Income	64	100.0	149	287	71.4	1.14
	Home Children	65	100.0	139	287	65.4	1.13
	Day Care Children	58	100.0	187	394	92.4	1.06
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	99.2	7,260	5,010	5,330	0.935
	Urban	107	99.1	7,450	5,310	5,290	0.994
	Rural	21	100.0	6,260	2,920	5,510	0.559
	Low Income	58	100.0	5,600	3,270	4,190	0.935
	Mid/High Income	66	98.5	8,630	5,840	6,450	0.904
	Home Children	66	98.5	6,490	5,660	4,320	1.05
	Day Care Children	62	100.0	8,070	4,100	6,660	0.736
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	100.0	66.2	143	22.5	1.43
	Urban	99	100.0	53.4	119	20.5	1.35
	Rural	21	100.0	127	219	34.9	1.71
	Low Income	52	100.0	71.0	145	24.9	1.44
	Mid/High Income	64	100.0	58.2	139	19.5	1.41
	Home Children	66	100.0	74.8	171	23.8	1.47
	Day Care Children	54	100.0	55.8	99.2	20.9	1.39
Potential Exposure – Aggregated (pmoles/day)	Overall	113	100.0	7,480	5,110	5,600	0.887
	Urban	92	100.0	7,700	5,480	5,540	0.955
	Rural	21	100.0	6,530	2,830	5,860	0.506
	Low Income	47	100.0	5,830	3,420	4,380	0.921
	Mid/High Income	62	100.0	8,640	5,870	6,600	0.836
	Home Children	65	100.0	6,780	5,700	4,700	0.970
	Day Care Children	48	100.0	8,440	4,050	7,080	0.705

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table L-27b. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Potential Exposure in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	123	1.29	7.35	14.4	27.0	103	572
	Urban	102	1.29	7.38	13.5	27.9	103	572
	Rural	21	2.00	6.89	18.6	23.5	93.8	164
	Low Income	55	2.16	7.47	14.5	33.0	144	572
	Mid/High Income	64	1.29	7.18	11.9	23.0	97.6	420
	Home Children	65	1.29	6.89	12.2	22.9	93.8	420
	Day Care Children	58	2.00	8.48	15.1	33.0	132	572
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	<MDL	797	1,220	1,900	3,640	5,480
	Urban	107	<MDL	768	1,360	1,950	3,760	5,480
	Rural	21	255	881	1,100	1,690	2,220	2,290
	Low Income	58	43.0	613	1,030	1,690	2,230	2,630
	Mid/High Income	66	<MDL	958	1,420	2,290	3,980	5,480
	Home Children	66	<MDL	555	1,070	1,540	3,980	5,480
	Day Care Children	62	116	1,020	1,640	2,070	2,890	3,760
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	0.124	1.83	4.47	10.1	55.6	202
	Urban	99	0.124	1.90	3.96	8.15	41.2	202
	Rural	21	0.499	1.58	9.95	17.2	105	167
	Low Income	52	0.141	1.83	4.73	11.5	86.3	167
	Mid/High Income	64	0.124	1.59	3.86	7.07	48.4	202
	Home Children	66	0.124	1.95	5.22	8.55	58.5	202
	Day Care Children	54	0.266	1.77	3.48	12.3	48.4	105
Potential Exposure – Aggregated (ng/day)	Overall	113	59.2	804	1,230	1,960	3,780	5,600
	Urban	92	59.2	784	1,390	2,100	3,970	5,600
	Rural	21	318	1,020	1,130	1,750	2,240	2,310
	Low Income	47	59.2	622	1,090	1,750	2,250	2,640
	Mid/High Income	62	61.4	947	1,460	2,270	3,990	5,600
	Home Children	65	59.2	585	1,090	1,580	3,990	5,600
	Day Care Children	48	164	1,090	1,700	2,200	2,960	3,780
Potential Exposure in NC Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	123	6.51	37.0	72.7	136	520	2,880
	Urban	102	6.51	37.2	68.3	140	520	2,880
	Rural	21	10.1	34.7	93.7	118	473	828
	Low Income	55	10.9	37.6	72.9	166	724	2,880
	Mid/High Income	64	6.51	36.2	60.1	116	492	2,120
	Home Children	65	6.51	34.7	61.3	115	473	2,120
	Day Care Children	58	10.1	42.7	76.3	166	663	2,880
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	<MDL	4,020	6,130	9,550	18,300	27,600
	Urban	107	<MDL	3,870	6,840	9,810	18,900	27,600
	Rural	21	1,290	4,440	5,540	8,530	11,200	11,500
	Low Income	58	217	3,090	5,190	8,520	11,300	13,300
	Mid/High Income	66	<MDL	4,830	7,160	11,500	20,100	27,600
	Home Children	66	<MDL	2,790	5,380	7,770	20,100	27,600
	Day Care Children	62	583	5,150	8,270	10,400	14,600	18,900
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	0.626	9.22	22.5	50.9	280	1,020
	Urban	99	0.626	9.56	19.9	41.1	208	1,020
	Rural	21	2.52	7.98	50.1	86.7	529	840
	Low Income	52	0.709	9.22	23.8	57.9	435	840
	Mid/High Income	64	0.626	8.01	19.4	35.6	244	1,020
	Home Children	66	0.626	9.84	26.3	43.1	295	1,020
	Day Care Children	54	1.34	8.90	17.5	62.1	244	529
Potential Exposure – Aggregated (pmoles/day)	Overall	113	298	4,050	6,200	9,850	19,000	28,200
	Urban	92	298	3,950	7,030	10,600	20,000	28,200
	Rural	21	1,600	5,160	5,710	8,790	11,300	11,700
	Low Income	47	298	3,130	5,490	8,800	11,300	13,300
	Mid/High Income	62	309	4,770	7,350	11,500	20,100	28,200
	Home Children	65	298	2,950	5,480	7,970	20,100	28,200
	Day Care Children	48	828	5,510	8,570	11,100	14,900	19,000

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table L-27c. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimates of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	123	100.0	0.971	2.10	0.457	1.11
	Urban	102	100.0	1.02	2.26	0.461	1.12
	Rural	21	100.0	0.730	0.943	0.436	1.06
	Low Income	55	100.0	1.08	2.57	0.474	1.13
	Mid/High Income	64	100.0	0.911	1.68	0.444	1.13
	Home Children	65	100.0	0.837	1.64	0.412	1.10
	Day Care Children	58	100.0	1.12	2.52	0.513	1.12
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	99.2	42.4	29.9	31.7	0.900
	Urban	107	99.1	43.9	31.6	31.8	0.957
	Rural	21	100.0	34.8	16.9	30.7	0.529
	Low Income	58	100.0	31.7	18.9	23.9	0.902
	Mid/High Income	66	98.5	51.8	34.9	40.1	0.845
	Home Children	66	98.5	40.5	36.5	27.2	1.03
	Day Care Children	62	100.0	44.4	20.8	37.3	0.704
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	100.0	0.398	0.865	0.133	1.44
	Urban	99	100.0	0.325	0.729	0.123	1.37
	Rural	21	100.0	0.742	1.30	0.194	1.73
	Low Income	52	100.0	0.399	0.840	0.139	1.44
	Mid/High Income	64	100.0	0.376	0.879	0.122	1.46
	Home Children	66	100.0	0.466	1.06	0.150	1.46
	Day Care Children	54	100.0	0.314	0.542	0.115	1.43
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	113	100.0	43.8	30.9	33.3	0.851
	Urban	92	100.0	45.6	33.2	33.4	0.916
	Rural	21	100.0	36.2	16.3	32.7	0.479
	Low Income	47	100.0	32.5	19.5	24.7	0.881
	Mid/High Income	62	100.0	52.4	35.7	41.2	0.778
	Home Children	65	100.0	42.3	36.7	29.7	0.945
	Day Care Children	48	100.0	45.9	21.0	38.9	0.681
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	123	100.0	4.89	10.6	2.30	1.11
	Urban	102	100.0	5.14	11.4	2.32	1.12
	Rural	21	100.0	3.68	4.75	2.20	1.06
	Low Income	55	100.0	5.42	13.0	2.39	1.13
	Mid/High Income	64	100.0	4.59	8.48	2.24	1.13
	Home Children	65	100.0	4.22	8.27	2.08	1.10
	Day Care Children	58	100.0	5.65	12.7	2.58	1.12
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	99.2	214	151	160	0.900
	Urban	107	99.1	221	159	160	0.957
	Rural	21	100.0	175	85.2	155	0.529
	Low Income	58	100.0	160	95.2	121	0.902
	Mid/High Income	66	98.5	261	176	202	0.845
	Home Children	66	98.5	204	184	137	1.03
	Day Care Children	62	100.0	224	105	188	0.704
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	100.0	2.00	4.36	0.670	1.44
	Urban	99	100.0	1.64	3.67	0.619	1.37
	Rural	21	100.0	3.74	6.57	0.979	1.73
	Low Income	52	100.0	2.01	4.23	0.701	1.44
	Mid/High Income	64	100.0	1.89	4.43	0.612	1.46
	Home Children	66	100.0	2.35	5.33	0.756	1.46
	Day Care Children	54	100.0	1.58	2.73	0.579	1.43
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	113	100.0	221	156	168	0.851
	Urban	92	100.0	230	167	168	0.916
	Rural	21	100.0	183	82.1	165	0.479
	Low Income	47	100.0	164	98.5	125	0.881
	Mid/High Income	62	100.0	264	180	208	0.778
	Home Children	65	100.0	213	185	149	0.945
	Day Care Children	48	100.0	231	106	196	0.681

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table L-27d. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Potential Absorbed Dose in NC Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	123	0.040	0.211	0.426	0.880	3.41	18.5
	Urban	102	0.040	0.211	0.401	0.902	3.41	18.5
	Rural	21	0.054	0.253	0.539	0.695	1.91	4.42
	Low Income	55	0.054	0.211	0.413	1.01	4.40	18.5
	Mid/High Income	64	0.040	0.191	0.448	0.784	2.90	12.2
	Home Children	65	0.040	0.189	0.398	0.695	2.34	12.2
	Day Care Children	58	0.062	0.260	0.452	1.01	4.39	18.5
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	<MDL	22.0	37.7	55.0	93.3	195
	Urban	107	<MDL	22.0	40.2	57.8	96.5	195
	Rural	21	10.4	22.1	31.9	42.6	63.0	68.3
	Low Income	58	1.16	17.7	29.6	50.0	61.6	70.4
	Mid/High Income	66	<MDL	32.3	44.8	68.3	119	195
	Home Children	66	<MDL	18.1	33.7	47.7	119	195
	Day Care Children	62	3.54	28.9	47.4	58.0	74.2	88.1
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	0.004	0.053	0.116	0.291	1.96	6.37
	Urban	99	0.004	0.054	0.113	0.248	1.30	6.37
	Rural	21	0.013	0.046	0.232	0.438	2.63	5.10
	Low Income	52	0.004	0.054	0.150	0.299	2.50	5.10
	Mid/High Income	64	0.006	0.046	0.109	0.242	1.44	6.37
	Home Children	66	0.004	0.055	0.160	0.260	2.39	6.37
	Day Care Children	54	0.007	0.047	0.098	0.379	1.44	2.63
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	113	1.88	22.6	37.7	57.8	100	199
	Urban	92	1.88	22.5	41.0	58.6	104	199
	Rural	21	13.0	25.6	33.2	43.6	63.7	69.0
	Low Income	47	1.92	18.4	30.3	50.8	63.3	70.5
	Mid/High Income	62	1.88	31.5	45.3	63.7	119	199
	Home Children	65	1.88	19.6	34.7	49.2	119	199
	Day Care Children	48	5.03	29.4	48.5	61.8	74.3	88.5
Potential Absorbed Dose in NC Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	123	0.199	1.06	2.15	4.43	17.2	93.3
	Urban	102	0.199	1.06	2.02	4.54	17.2	93.3
	Rural	21	0.272	1.28	2.71	3.50	9.64	22.3
	Low Income	55	0.272	1.06	2.08	5.08	22.2	93.3
	Mid/High Income	64	0.199	0.960	2.26	3.95	14.6	61.4
	Home Children	65	0.199	0.954	2.00	3.50	11.8	61.4
	Day Care Children	58	0.313	1.31	2.28	5.08	22.1	93.3
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	<MDL	111	190	277	470	980
	Urban	107	<MDL	111	203	291	487	980
	Rural	21	52.4	111	161	215	317	344
	Low Income	58	5.82	89.2	149	252	311	355
	Mid/High Income	66	<MDL	163	226	344	597	980
	Home Children	66	<MDL	91.2	170	240	597	980
	Day Care Children	62	17.8	146	239	292	374	444
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	0.022	0.267	0.585	1.47	9.87	32.1
	Urban	99	0.022	0.274	0.569	1.25	6.53	32.1
	Rural	21	0.064	0.231	1.17	2.21	13.2	25.7
	Low Income	52	0.022	0.272	0.756	1.51	12.6	25.7
	Mid/High Income	64	0.030	0.233	0.549	1.22	7.26	32.1
	Home Children	66	0.022	0.278	0.804	1.31	12.0	32.1
	Day Care Children	54	0.037	0.235	0.495	1.91	7.26	13.2
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	113	9.47	114	190	291	505	1,000
	Urban	92	9.47	113	207	295	525	1,000
	Rural	21	65.4	129	167	220	321	348
	Low Income	47	9.66	92.8	153	256	319	355
	Mid/High Income	62	9.47	159	228	321	598	1,000
	Home Children	65	9.47	98.6	175	248	598	1,000
	Day Care Children	48	25.3	148	245	312	374	446

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Appendix M

Descriptive Statistics of Potential Exposure Level and Potential Absorbed Dose Estimates for Target Pollutants in Participating OH Children

This appendix contains tables of descriptive statistics of potential exposure and potential absorbed dose estimates (expressed in both ng and pmole units) in OH children for the following pollutants and metabolites:

Pollutant/Metabolite	Table Numbers for Potential Exposure Summaries	Table Numbers for Potential Absorbed Dose Summaries
Benz[<i>a</i>]anthracene	Tables M-1a, M-1b	Tables M-1c, M-1d
Benzo[<i>b</i>]fluoranthene	Tables M-2a, M-2b	Tables M-2c, M-2d
Benzo[<i>k</i>]fluoranthene	Tables M-3a, M-3b	Tables M-3c, M-3d
Benzo[<i>ghi</i>]perylene	Tables M-4a, M-4b	Tables M-4c, M-4d
Benzo[<i>a</i>]pyrene	Tables M-5a, M-5b	Tables M-5c, M-5d
Benzo[<i>e</i>]pyrene	Tables M-6a, M-6b	Tables M-6c, M-6d
Benzylbutylphthalate	Tables M-7a, M-7b	Tables M-7c, M-7d
Bisphenol-A	Tables M-8a, M-8b	Tables M-8c, M-8d
<i>alpha</i> -Chlordane	Tables M-9a, M-9b	Tables M-9c, M-9d
<i>gamma</i> -Chlordane	Tables M-10a, M-10b	Tables M-10c, M-10d
Chlorpyrifos	Tables M-11a, M-11b	Tables M-11c, M-11d
Chrysene	Tables M-12a, M-12b	Tables M-12c, M-12d
Cyfluthrin	Tables M-13a, M-13b	Tables M-13c, M-13d
Diazinon	Tables M-14a, M-14b	Tables M-14c, M-14d
Dibenzo[<i>a,h</i>]anthracene	Tables M-15a, M-15b	Tables M-15c, M-15d
Di- <i>n</i> -butylphthalate	Tables M-16a, M-16b	Tables M-16c, M-16d
<i>p,p'</i> -DDE	Tables M-17a, M-17b	Tables M-17c, M-17d
2,4-D (2,4-dichlorophenoxyacetic acid)	Tables M-18a, M-18b	Tables M-18c, M-18d
Indeno[1,2,3- <i>cd</i>]pyrene	Tables M-19a, M-19b	Tables M-19c, M-19d
Pentachlorophenol	Tables M-20a, M-20b	Tables M-20c, M-20d
<i>cis</i> -Permethrin	Tables M-21a, M-21b	Tables M-21c, M-21d
<i>trans</i> -Permethrin	Tables M-22a, M-22b	Tables M-22c, M-22d
PCB 52	Tables M-23a, M-23b	Tables M-23c, M-23d
PCB 95	Tables M-24a, M-24b	Tables M-24c, M-24d
PCB 101	Tables M-25a, M-25b	Tables M-25c, M-25d
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)	Tables M-26a, M-26b	Tables M-26c, M-26d

Descriptive statistics are presented separately for the following groups of OH child participants:

- All participants
- Participants from urban areas
- Participants from rural areas
- Participants from low-income areas
- Participants from middle/upper-income areas
- Stay-at-home children
- Day care children

Table M-1a. Benz[a]anthracene (56-55-3): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	106	41.5	--	--	--	--
	Urban	90	47.8	--	--	--	--
	Rural	16	6.3	--	--	--	--
	Low Income	33	54.5	1.26	1.60	0.839	0.787
	Mid/High Income	63	38.1	--	--	--	--
	Home Children	60	36.7	--	--	--	--
	Day Care Children	46	47.8	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	37.0	--	--	--	--
	Urban	110	36.4	--	--	--	--
	Rural	17	41.2	--	--	--	--
	Low Income	41	51.2	46.8	74.6	33.4	0.640
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	33.3	--	--	--	--
	Day Care Children	58	41.4	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	100.0	59.8	138	24.2	1.24
	Urban	98	100.0	66.3	149	28.2	1.18
	Rural	17	100.0	22.2	29.9	10.0	1.30
	Low Income	35	100.0	30.2	32.1	19.4	0.981
	Mid/High Income	67	100.0	82.3	177	29.2	1.40
	Home Children	62	100.0	41.2	93.7	16.0	1.24
	Day Care Children	53	100.0	81.5	176	39.1	1.07
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	106	41.5	--	--	--	--
	Urban	90	47.8	--	--	--	--
	Rural	16	6.3	--	--	--	--
	Low Income	33	54.5	5.51	6.99	3.68	0.787
	Mid/High Income	63	38.1	--	--	--	--
	Home Children	60	36.7	--	--	--	--
	Day Care Children	46	47.8	--	--	--	--
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	37.0	--	--	--	--
	Urban	110	36.4	--	--	--	--
	Rural	17	41.2	--	--	--	--
	Low Income	41	51.2	205	327	146	0.640
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	33.3	--	--	--	--
	Day Care Children	58	41.4	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	100.0	262	607	106	1.24
	Urban	98	100.0	290	651	123	1.18
	Rural	17	100.0	97.1	131	43.9	1.30
	Low Income	35	100.0	132	140	85.1	0.981
	Mid/High Income	67	100.0	360	775	128	1.40
	Home Children	62	100.0	180	411	70.3	1.24
	Day Care Children	53	100.0	357	769	171	1.07

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-1b. Benz[a]anthracene (56-55-3): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	106	<MDL	<MDL	<MDL	0.734	2.74	8.32
	Urban	90	<MDL	<MDL	<MDL	0.897	3.31	8.32
	Rural	16	<MDL	<MDL	<MDL	<MDL	0.688	0.688
	Low Income	33	<MDL	<MDL	0.528	1.16	3.64	8.32
	Mid/High Income	63	<MDL	<MDL	<MDL	0.733	1.88	3.31
	Home Children	60	<MDL	<MDL	<MDL	0.697	2.13	3.64
	Day Care Children	46	<MDL	<MDL	<MDL	1.26	3.59	8.32
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	<MDL	34.7	69.4	1,030
	Urban	110	<MDL	<MDL	<MDL	34.0	78.6	1,030
	Rural	17	<MDL	<MDL	<MDL	37.3	63.6	63.6
	Low Income	41	<MDL	<MDL	30.2	40.3	78.6	484
	Mid/High Income	73	<MDL	<MDL	<MDL	30.9	69.4	1,030
	Home Children	69	<MDL	<MDL	<MDL	32.6	63.6	1,030
	Day Care Children	58	<MDL	<MDL	<MDL	37.3	359	484
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	1.31	10.6	21.8	56.8	243	1,220
	Urban	98	3.08	12.3	24.6	58.4	255	1,220
	Rural	17	1.31	4.33	5.22	17.2	106	106
	Low Income	35	1.31	10.0	17.0	40.6	88.8	160
	Mid/High Income	67	1.86	11.7	25.7	71.3	259	1,220
	Home Children	62	1.31	5.45	14.0	29.1	152	668
	Day Care Children	53	4.33	17.2	35.0	69.2	259	1,220
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	106	<MDL	<MDL	<MDL	3.21	12.0	36.4
	Urban	90	<MDL	<MDL	<MDL	3.93	14.5	36.4
	Rural	16	<MDL	<MDL	<MDL	<MDL	3.01	3.01
	Low Income	33	<MDL	<MDL	2.31	5.08	16.0	36.4
	Mid/High Income	63	<MDL	<MDL	<MDL	3.21	8.24	14.5
	Home Children	60	<MDL	<MDL	<MDL	3.05	9.32	16.0
	Day Care Children	46	<MDL	<MDL	<MDL	5.53	15.7	36.4
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	<MDL	152	304	4,510
	Urban	110	<MDL	<MDL	<MDL	149	344	4,510
	Rural	17	<MDL	<MDL	<MDL	163	279	279
	Low Income	41	<MDL	<MDL	132	176	344	2,120
	Mid/High Income	73	<MDL	<MDL	<MDL	135	304	4,510
	Home Children	69	<MDL	<MDL	<MDL	143	279	4,510
	Day Care Children	58	<MDL	<MDL	<MDL	163	1,570	2,120
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	5.73	46.4	95.6	249	1,060	5,340
	Urban	98	13.5	54.0	108	256	1,120	5,340
	Rural	17	5.73	19.0	22.9	75.4	463	463
	Low Income	35	5.73	43.9	74.3	178	389	701
	Mid/High Income	67	8.14	51.5	113	312	1,140	5,340
	Home Children	62	5.73	23.9	61.2	127	665	2,930
	Day Care Children	53	19.0	75.4	153	303	1,140	5,340

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-1c. Benz[a]anthracene (56-55-3): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	106	41.5	--	--	--	--
	Urban	90	47.8	--	--	--	--
	Rural	16	6.3	--	--	--	--
	Low Income	33	54.5	0.035	0.043	0.023	0.808
	Mid/High Income	63	38.1	--	--	--	--
	Home Children	60	36.7	--	--	--	--
	Day Care Children	46	47.8	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	37.0	--	--	--	--
	Urban	110	36.4	--	--	--	--
	Rural	17	41.2	--	--	--	--
	Low Income	41	51.2	1.42	2.57	0.942	0.710
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	33.3	--	--	--	--
	Day Care Children	58	41.4	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	100.0	1.76	3.88	0.697	1.26
	Urban	98	100.0	1.96	4.16	0.813	1.19
	Rural	17	100.0	0.616	0.806	0.289	1.27
	Low Income	35	100.0	0.921	1.13	0.556	1.02
	Mid/High Income	67	100.0	2.41	4.92	0.842	1.40
	Home Children	62	100.0	1.38	3.78	0.480	1.27
	Day Care Children	53	100.0	2.21	3.98	1.08	1.10
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	106	41.5	--	--	--	--
	Urban	90	47.8	--	--	--	--
	Rural	16	6.3	--	--	--	--
	Low Income	33	54.5	0.153	0.190	0.102	0.808
	Mid/High Income	63	38.1	--	--	--	--
	Home Children	60	36.7	--	--	--	--
	Day Care Children	46	47.8	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	37.0	--	--	--	--
	Urban	110	36.4	--	--	--	--
	Rural	17	41.2	--	--	--	--
	Low Income	41	51.2	6.24	11.2	4.13	0.710
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	33.3	--	--	--	--
	Day Care Children	58	41.4	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	100.0	7.71	17.0	3.05	1.26
	Urban	98	100.0	8.58	18.2	3.56	1.19
	Rural	17	100.0	2.70	3.53	1.27	1.27
	Low Income	35	100.0	4.04	4.93	2.43	1.02
	Mid/High Income	67	100.0	10.6	21.6	3.69	1.40
	Home Children	62	100.0	6.04	16.6	2.10	1.27
	Day Care Children	53	100.0	9.67	17.4	4.73	1.10

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-1d. Benz[a]anthracene (56-55-3): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	106	<MDL	<MDL	<MDL	0.024	0.071	0.223
	Urban	90	<MDL	<MDL	<MDL	0.027	0.075	0.223
	Rural	16	<MDL	<MDL	<MDL	<MDL	0.019	0.019
	Low Income	33	<MDL	<MDL	0.019	0.037	0.134	0.223
	Mid/High Income	63	<MDL	<MDL	<MDL	0.022	0.051	0.096
	Home Children	60	<MDL	<MDL	<MDL	0.020	0.059	0.134
	Day Care Children	46	<MDL	<MDL	<MDL	0.036	0.075	0.223
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	<MDL	1.06	2.19	25.2
	Urban	110	<MDL	<MDL	<MDL	1.06	2.70	25.2
	Rural	17	<MDL	<MDL	<MDL	1.04	2.19	2.19
	Low Income	41	<MDL	<MDL	0.872	1.22	2.70	16.7
	Mid/High Income	73	<MDL	<MDL	<MDL	1.04	2.19	25.2
	Home Children	69	<MDL	<MDL	<MDL	1.06	1.75	25.2
	Day Care Children	58	<MDL	<MDL	<MDL	1.05	9.26	16.7
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	0.031	0.281	0.621	1.61	7.29	28.3
	Urban	98	0.083	0.348	0.686	1.77	8.01	28.3
	Rural	17	0.031	0.134	0.165	0.506	2.54	2.54
	Low Income	35	0.031	0.325	0.455	0.968	3.62	5.51
	Mid/High Income	67	0.064	0.281	0.711	2.03	10.3	28.3
	Home Children	62	0.031	0.203	0.418	1.08	4.40	28.3
	Day Care Children	53	0.165	0.465	1.04	1.93	10.3	24.4
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	106	<MDL	<MDL	<MDL	0.106	0.310	0.979
	Urban	90	<MDL	<MDL	<MDL	0.119	0.326	0.979
	Rural	16	<MDL	<MDL	<MDL	<MDL	0.082	0.082
	Low Income	33	<MDL	<MDL	0.085	0.160	0.586	0.979
	Mid/High Income	63	<MDL	<MDL	<MDL	0.098	0.224	0.420
	Home Children	60	<MDL	<MDL	<MDL	0.088	0.260	0.586
	Day Care Children	46	<MDL	<MDL	<MDL	0.156	0.326	0.979
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	<MDL	4.63	9.59	110
	Urban	110	<MDL	<MDL	<MDL	4.63	11.8	110
	Rural	17	<MDL	<MDL	<MDL	4.55	9.59	9.59
	Low Income	41	<MDL	<MDL	3.82	5.33	11.8	72.9
	Mid/High Income	73	<MDL	<MDL	<MDL	4.55	9.59	110
	Home Children	69	<MDL	<MDL	<MDL	4.63	7.65	110
	Day Care Children	58	<MDL	<MDL	<MDL	4.58	40.6	72.9
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	0.134	1.23	2.72	7.03	31.9	124
	Urban	98	0.364	1.52	3.00	7.77	35.1	124
	Rural	17	0.134	0.586	0.721	2.22	11.1	11.1
	Low Income	35	0.134	1.42	1.99	4.24	15.9	24.1
	Mid/High Income	67	0.280	1.23	3.11	8.88	45.0	124
	Home Children	62	0.134	0.889	1.83	4.75	19.3	124
	Day Care Children	53	0.721	2.04	4.57	8.46	45.0	107

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-2a. Benzo[b]fluoranthene (205-99-2): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	48.8	--	--	--	--
	Urban	108	51.9	1.14	1.91	0.778	0.695
	Rural	17	29.4	--	--	--	--
	Low Income	39	59.0	1.67	2.99	0.919	0.904
	Mid/High Income	73	46.6	--	--	--	--
	Home Children	69	37.7	--	--	--	--
	Day Care Children	56	62.5	1.34	2.37	0.853	0.772
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	52.8	60.8	146	36.4	0.747
	Urban	110	51.8	63.5	156	36.1	0.780
	Rural	17	58.8	43.2	25.4	38.0	0.503
	Low Income	41	65.9	59.6	94.5	41.2	0.717
	Mid/High Income	73	47.9	--	--	--	--
	Home Children	69	40.6	--	--	--	--
	Day Care Children	58	67.2	66.2	110	41.5	0.780
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	100.0	140	306	61.6	1.19
	Urban	98	100.0	155	328	71.4	1.13
	Rural	17	100.0	53.8	66.6	26.3	1.24
	Low Income	35	100.0	74.9	82.8	48.0	0.971
	Mid/High Income	67	100.0	190	389	74.2	1.33
	Home Children	62	100.0	92.3	177	41.9	1.17
	Day Care Children	53	100.0	197	403	96.7	1.07
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	48.8	--	--	--	--
	Urban	108	51.9	4.54	7.58	3.09	0.695
	Rural	17	29.4	--	--	--	--
	Low Income	39	59.0	6.61	11.9	3.64	0.904
	Mid/High Income	73	46.6	--	--	--	--
	Home Children	69	37.7	--	--	--	--
	Day Care Children	56	62.5	5.31	9.39	3.38	0.772
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	52.8	241	578	144	0.747
	Urban	110	51.8	252	619	143	0.780
	Rural	17	58.8	171	101	150	0.503
	Low Income	41	65.9	236	375	163	0.717
	Mid/High Income	73	47.9	--	--	--	--
	Home Children	69	40.6	--	--	--	--
	Day Care Children	58	67.2	262	437	164	0.780
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	100.0	556	1,210	244	1.19
	Urban	98	100.0	616	1,300	283	1.13
	Rural	17	100.0	213	264	104	1.24
	Low Income	35	100.0	297	328	190	0.971
	Mid/High Income	67	100.0	751	1,540	294	1.33
	Home Children	62	100.0	366	700	166	1.17
	Day Care Children	53	100.0	779	1,600	383	1.07

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-2b. Benzo[b]fluoranthene (205-99-2): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	0.931	3.77	17.3
	Urban	108	<MDL	<MDL	0.536	1.10	3.77	17.3
	Rural	17	<MDL	<MDL	<MDL	0.528	3.86	3.86
	Low Income	39	<MDL	<MDL	0.574	1.39	8.12	17.3
	Mid/High Income	73	<MDL	<MDL	<MDL	0.930	2.91	4.21
	Home Children	69	<MDL	<MDL	<MDL	0.660	3.77	8.12
	Day Care Children	56	<MDL	<MDL	0.580	1.28	4.76	17.3
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	31.4	52.6	94.9	1,440
	Urban	110	<MDL	<MDL	30.9	52.6	94.9	1,440
	Rural	17	<MDL	<MDL	34.8	50.6	114	114
	Low Income	41	<MDL	<MDL	40.7	55.6	85.9	618
	Mid/High Income	73	<MDL	<MDL	<MDL	46.9	114	1,440
	Home Children	69	<MDL	<MDL	<MDL	50.6	84.0	1,440
	Day Care Children	58	<MDL	<MDL	37.3	53.0	405	618
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	4.13	28.8	52.8	134	572	2,750
	Urban	98	7.70	31.9	67.9	149	576	2,750
	Rural	17	4.13	11.4	15.5	45.9	215	215
	Low Income	35	4.13	26.4	43.0	96.1	244	432
	Mid/High Income	67	5.45	28.8	75.6	173	644	2,750
	Home Children	62	4.13	17.5	40.7	92.4	317	1,180
	Day Care Children	53	12.7	43.5	95.8	173	644	2,750
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	3.69	14.9	68.4
	Urban	108	<MDL	<MDL	2.13	4.36	14.9	68.4
	Rural	17	<MDL	<MDL	<MDL	2.09	15.3	15.3
	Low Income	39	<MDL	<MDL	2.28	5.52	32.2	68.4
	Mid/High Income	73	<MDL	<MDL	<MDL	3.69	11.5	16.7
	Home Children	69	<MDL	<MDL	<MDL	2.62	14.9	32.2
	Day Care Children	56	<MDL	<MDL	2.30	5.09	18.9	68.4
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	124	209	376	5,720
	Urban	110	<MDL	<MDL	122	209	376	5,720
	Rural	17	<MDL	<MDL	138	200	450	450
	Low Income	41	<MDL	<MDL	161	220	341	2,450
	Mid/High Income	73	<MDL	<MDL	<MDL	186	450	5,720
	Home Children	69	<MDL	<MDL	<MDL	200	333	5,720
	Day Care Children	58	<MDL	<MDL	148	210	1,600	2,450
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	16.4	114	209	532	2,270	10,900
	Urban	98	30.5	126	269	591	2,280	10,900
	Rural	17	16.4	45.0	61.3	182	854	854
	Low Income	35	16.4	105	170	381	969	1,710
	Mid/High Income	67	21.6	114	300	685	2,550	10,900
	Home Children	62	16.4	69.2	161	366	1,260	4,690
	Day Care Children	53	50.3	173	380	685	2,550	10,900

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-2c. Benzo[b]fluoranthene (205-99-2): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	48.8	--	--	--	--
	Urban	108	51.9	0.033	0.055	0.022	0.724
	Rural	17	29.4	--	--	--	--
	Low Income	39	59.0	0.048	0.086	0.026	0.935
	Mid/High Income	73	46.6	--	--	--	--
	Home Children	69	37.7	--	--	--	--
	Day Care Children	56	62.5	0.037	0.064	0.023	0.819
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	52.8	1.74	3.87	1.04	0.765
	Urban	110	51.8	1.80	4.14	1.03	0.791
	Rural	17	58.8	1.30	0.910	1.09	0.581
	Low Income	41	65.9	1.81	3.26	1.16	0.777
	Mid/High Income	73	47.9	--	--	--	--
	Home Children	69	40.6	--	--	--	--
	Day Care Children	58	67.2	1.91	3.48	1.14	0.807
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	100.0	4.12	8.18	1.78	1.21
	Urban	98	100.0	4.57	8.76	2.06	1.15
	Rural	17	100.0	1.52	1.90	0.758	1.22
	Low Income	35	100.0	2.31	2.95	1.37	1.02
	Mid/High Income	67	100.0	5.52	10.3	2.14	1.34
	Home Children	62	100.0	3.04	6.98	1.25	1.20
	Day Care Children	53	100.0	5.39	9.31	2.67	1.10
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	48.8	--	--	--	--
	Urban	108	51.9	0.132	0.218	0.088	0.724
	Rural	17	29.4	--	--	--	--
	Low Income	39	59.0	0.191	0.341	0.102	0.935
	Mid/High Income	73	46.6	--	--	--	--
	Home Children	69	37.7	--	--	--	--
	Day Care Children	56	62.5	0.148	0.255	0.093	0.819
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	52.8	6.88	15.3	4.13	0.765
	Urban	110	51.8	7.14	16.4	4.10	0.791
	Rural	17	58.8	5.17	3.61	4.33	0.581
	Low Income	41	65.9	7.17	12.9	4.61	0.777
	Mid/High Income	73	47.9	--	--	--	--
	Home Children	69	40.6	--	--	--	--
	Day Care Children	58	67.2	7.59	13.8	4.53	0.807
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	100.0	16.3	32.4	7.04	1.21
	Urban	98	100.0	18.1	34.7	8.16	1.15
	Rural	17	100.0	6.01	7.51	3.00	1.22
	Low Income	35	100.0	9.17	11.7	5.44	1.02
	Mid/High Income	67	100.0	21.9	40.8	8.49	1.34
	Home Children	62	100.0	12.1	27.7	4.96	1.20
	Day Care Children	53	100.0	21.3	36.9	10.6	1.10

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-2d. Benzo[b]fluoranthene (205-99-2): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.027	0.100	0.464
	Urban	108	<MDL	<MDL	0.017	0.030	0.100	0.464
	Rural	17	<MDL	<MDL	<MDL	0.018	0.109	0.109
	Low Income	39	<MDL	<MDL	0.019	0.043	0.298	0.464
	Mid/High Income	73	<MDL	<MDL	<MDL	0.027	0.087	0.122
	Home Children	69	<MDL	<MDL	<MDL	0.020	0.109	0.298
	Day Care Children	56	<MDL	<MDL	0.019	0.037	0.100	0.464
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	0.933	1.54	3.15	35.3
	Urban	110	<MDL	<MDL	0.915	1.54	3.15	35.3
	Rural	17	<MDL	<MDL	1.04	1.42	3.91	3.91
	Low Income	41	<MDL	<MDL	1.08	1.69	3.15	21.3
	Mid/High Income	73	<MDL	<MDL	<MDL	1.45	3.91	35.3
	Home Children	69	<MDL	<MDL	<MDL	1.57	2.80	35.3
	Day Care Children	58	<MDL	<MDL	1.01	1.47	13.1	21.3
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	0.097	0.700	1.48	3.83	18.0	55.2
	Urban	98	0.223	0.887	1.71	3.97	18.6	55.2
	Rural	17	0.097	0.307	0.482	1.45	6.54	6.54
	Low Income	35	0.097	0.672	1.30	2.62	9.97	14.9
	Mid/High Income	67	0.187	0.777	2.06	4.74	24.4	55.2
	Home Children	62	0.097	0.488	1.14	3.00	9.18	50.2
	Day Care Children	53	0.363	1.26	2.88	4.74	24.4	55.2
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.106	0.396	1.84
	Urban	108	<MDL	<MDL	0.068	0.120	0.396	1.84
	Rural	17	<MDL	<MDL	<MDL	0.072	0.433	0.433
	Low Income	39	<MDL	<MDL	0.075	0.170	1.18	1.84
	Mid/High Income	73	<MDL	<MDL	<MDL	0.106	0.343	0.484
	Home Children	69	<MDL	<MDL	<MDL	0.079	0.433	1.18
	Day Care Children	56	<MDL	<MDL	0.075	0.146	0.396	1.84
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	3.70	6.09	12.5	140
	Urban	110	<MDL	<MDL	3.63	6.09	12.5	140
	Rural	17	<MDL	<MDL	4.12	5.61	15.5	15.5
	Low Income	41	<MDL	<MDL	4.30	6.70	12.5	84.3
	Mid/High Income	73	<MDL	<MDL	<MDL	5.76	15.5	140
	Home Children	69	<MDL	<MDL	<MDL	6.21	11.1	140
	Day Care Children	58	<MDL	<MDL	4.02	5.82	51.9	84.3
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	0.383	2.78	5.86	15.2	71.3	219
	Urban	98	0.884	3.52	6.78	15.7	73.9	219
	Rural	17	0.383	1.22	1.91	5.75	25.9	25.9
	Low Income	35	0.383	2.66	5.15	10.4	39.5	58.9
	Mid/High Income	67	0.743	3.08	8.18	18.8	96.7	219
	Home Children	62	0.383	1.93	4.53	11.9	36.4	199
	Day Care Children	53	1.44	5.00	11.4	18.8	96.7	219

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-3a. Benzo[k]fluoranthene (207-08-9): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	40.8	--	--	--	--
	Urban	108	42.6	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	38.4	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	53.6	0.646	0.409	0.591	0.363
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	25.2	--	--	--	--
	Urban	110	24.5	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	41	31.7	--	--	--	--
	Mid/High Income	73	24.7	--	--	--	--
	Home Children	69	17.4	--	--	--	--
	Day Care Children	58	34.5	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	100.0	50.1	109	22.1	1.19
	Urban	98	100.0	55.2	117	25.2	1.13
	Rural	17	100.0	20.7	23.2	10.4	1.27
	Low Income	35	100.0	26.4	28.3	17.1	0.984
	Mid/High Income	67	100.0	67.8	139	26.5	1.32
	Home Children	62	100.0	34.6	73.1	15.1	1.18
	Day Care Children	53	100.0	68.3	138	34.6	1.04
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	40.8	--	--	--	--
	Urban	108	42.6	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	38.4	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	53.6	2.56	1.62	2.34	0.363
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	25.2	--	--	--	--
	Urban	110	24.5	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	41	31.7	--	--	--	--
	Mid/High Income	73	24.7	--	--	--	--
	Home Children	69	17.4	--	--	--	--
	Day Care Children	58	34.5	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	100.0	199	432	87.8	1.19
	Urban	98	100.0	219	464	100	1.13
	Rural	17	100.0	82.1	92.1	41.4	1.27
	Low Income	35	100.0	105	112	67.7	0.984
	Mid/High Income	67	100.0	269	550	105	1.32
	Home Children	62	100.0	137	290	59.9	1.18
	Day Care Children	53	100.0	271	548	137	1.04

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-3b. Benzo[k]fluoranthene (207-08-9): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	0.605	1.32	3.27
	Urban	108	<MDL	<MDL	<MDL	0.647	1.32	3.27
	Rural	17	<MDL	<MDL	<MDL	0.528	1.72	1.72
	Low Income	39	<MDL	<MDL	<MDL	0.723	1.70	3.27
	Mid/High Income	73	<MDL	<MDL	<MDL	0.547	1.32	1.94
	Home Children	69	<MDL	<MDL	<MDL	0.538	1.40	1.94
	Day Care Children	56	<MDL	<MDL	0.522	0.672	1.22	3.27
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	<MDL	33.6	61.2	495
	Urban	110	<MDL	<MDL	<MDL	<MDL	74.1	495
	Rural	17	<MDL	<MDL	<MDL	37.0	57.4	57.4
	Low Income	41	<MDL	<MDL	<MDL	36.2	50.2	207
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	74.1	495
	Home Children	69	<MDL	<MDL	<MDL	<MDL	46.7	495
	Day Care Children	58	<MDL	<MDL	<MDL	37.3	96.2	225
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	1.20	9.55	22.0	48.0	199	955
	Urban	98	2.70	11.0	24.6	48.9	208	955
	Rural	17	1.20	3.86	6.48	31.9	78.5	78.5
	Low Income	35	1.20	9.55	14.6	33.1	82.1	148
	Mid/High Income	67	2.70	8.50	29.1	58.7	225	955
	Home Children	62	1.20	6.48	14.8	32.3	115	515
	Day Care Children	53	5.98	16.3	32.9	57.5	225	955
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	2.40	5.24	12.9
	Urban	108	<MDL	<MDL	<MDL	2.56	5.24	12.9
	Rural	17	<MDL	<MDL	<MDL	2.09	6.82	6.82
	Low Income	39	<MDL	<MDL	<MDL	2.87	6.72	12.9
	Mid/High Income	73	<MDL	<MDL	<MDL	2.17	5.24	7.69
	Home Children	69	<MDL	<MDL	<MDL	2.13	5.54	7.69
	Day Care Children	56	<MDL	<MDL	2.07	2.66	4.84	12.9
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	<MDL	133	243	1,960
	Urban	110	<MDL	<MDL	<MDL	<MDL	294	1,960
	Rural	17	<MDL	<MDL	<MDL	147	228	228
	Low Income	41	<MDL	<MDL	<MDL	144	199	820
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	294	1,960
	Home Children	69	<MDL	<MDL	<MDL	<MDL	185	1,960
	Day Care Children	58	<MDL	<MDL	<MDL	148	381	891
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	4.74	37.8	87.4	190	790	3,780
	Urban	98	10.7	43.6	97.6	194	824	3,780
	Rural	17	4.74	15.3	25.7	127	311	311
	Low Income	35	4.74	37.8	57.7	131	325	587
	Mid/High Income	67	10.7	33.7	115	233	890	3,780
	Home Children	62	4.74	25.7	58.7	128	455	2,040
	Day Care Children	53	23.7	64.5	130	228	890	3,780

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-3c. Benzo[k]fluoranthene (207-08-9): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	40.8	--	--	--	--
	Urban	108	42.6	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	38.4	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	53.6	0.018	0.011	0.016	0.428
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	25.2	--	--	--	--
	Urban	110	24.5	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	41	31.7	--	--	--	--
	Mid/High Income	73	24.7	--	--	--	--
	Home Children	69	17.4	--	--	--	--
	Day Care Children	58	34.5	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	100.0	1.48	3.05	0.638	1.21
	Urban	98	100.0	1.64	3.27	0.728	1.16
	Rural	17	100.0	0.574	0.641	0.301	1.24
	Low Income	35	100.0	0.820	1.01	0.488	1.05
	Mid/High Income	67	100.0	1.99	3.86	0.766	1.33
	Home Children	62	100.0	1.16	2.94	0.452	1.22
	Day Care Children	53	100.0	1.86	3.16	0.957	1.07
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	40.8	--	--	--	--
	Urban	108	42.6	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	38.4	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	53.6	0.071	0.045	0.064	0.428
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	25.2	--	--	--	--
	Urban	110	24.5	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	41	31.7	--	--	--	--
	Mid/High Income	73	24.7	--	--	--	--
	Home Children	69	17.4	--	--	--	--
	Day Care Children	58	34.5	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	100.0	5.88	12.1	2.53	1.21
	Urban	98	100.0	6.50	13.0	2.88	1.16
	Rural	17	100.0	2.28	2.54	1.19	1.24
	Low Income	35	100.0	3.25	4.00	1.93	1.05
	Mid/High Income	67	100.0	7.90	15.3	3.04	1.33
	Home Children	62	100.0	4.59	11.7	1.79	1.22
	Day Care Children	53	100.0	7.39	12.5	3.79	1.07

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-3d. Benzo[k]fluoranthene (207-08-9): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.019	0.035	0.088
	Urban	108	<MDL	<MDL	<MDL	0.020	0.035	0.088
	Rural	17	<MDL	<MDL	<MDL	0.018	0.044	0.044
	Low Income	39	<MDL	<MDL	<MDL	0.022	0.062	0.088
	Mid/High Income	73	<MDL	<MDL	<MDL	0.019	0.042	0.056
	Home Children	69	<MDL	<MDL	<MDL	0.019	0.043	0.062
	Day Care Children	56	<MDL	<MDL	0.016	0.020	0.035	0.088
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	<MDL	0.997	1.98	12.1
	Urban	110	<MDL	<MDL	<MDL	<MDL	2.15	12.1
	Rural	17	<MDL	<MDL	<MDL	1.04	1.98	1.98
	Low Income	41	<MDL	<MDL	<MDL	0.997	1.73	7.12
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	2.15	12.1
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1.43	12.1
	Day Care Children	58	<MDL	<MDL	<MDL	1.05	3.00	7.12
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	0.028	0.262	0.598	1.36	6.54	21.8
	Urban	98	0.078	0.308	0.643	1.44	6.86	21.8
	Rural	17	0.028	0.132	0.227	0.818	2.16	2.16
	Low Income	35	0.028	0.283	0.449	1.01	3.35	5.10
	Mid/High Income	67	0.078	0.240	0.818	1.67	7.88	21.8
	Home Children	62	0.028	0.192	0.396	1.10	3.33	21.8
	Day Care Children	53	0.127	0.440	0.937	1.67	7.88	19.1
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.077	0.140	0.348
	Urban	108	<MDL	<MDL	<MDL	0.078	0.140	0.348
	Rural	17	<MDL	<MDL	<MDL	0.072	0.175	0.175
	Low Income	39	<MDL	<MDL	<MDL	0.087	0.247	0.348
	Mid/High Income	73	<MDL	<MDL	<MDL	0.075	0.165	0.223
	Home Children	69	<MDL	<MDL	<MDL	0.075	0.170	0.247
	Day Care Children	56	<MDL	<MDL	0.063	0.080	0.140	0.348
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	<MDL	3.95	7.83	48.0
	Urban	110	<MDL	<MDL	<MDL	<MDL	8.51	48.0
	Rural	17	<MDL	<MDL	<MDL	4.12	7.83	7.83
	Low Income	41	<MDL	<MDL	<MDL	3.95	6.85	28.2
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	8.51	48.0
	Home Children	69	<MDL	<MDL	<MDL	<MDL	5.68	48.0
	Day Care Children	58	<MDL	<MDL	<MDL	4.14	11.9	28.2
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	0.111	1.04	2.37	5.39	25.9	86.4
	Urban	98	0.311	1.22	2.55	5.71	27.2	86.4
	Rural	17	0.111	0.524	0.899	3.24	8.55	8.55
	Low Income	35	0.111	1.12	1.78	4.01	13.3	20.2
	Mid/High Income	67	0.310	0.952	3.24	6.62	31.2	86.4
	Home Children	62	0.111	0.762	1.57	4.35	13.2	86.4
	Day Care Children	53	0.502	1.74	3.71	6.62	31.2	75.8

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-4a. Benzo[ghi]perylene (191-24-2): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	44.0	--	--	--	--
	Urban	108	50.0	1.04	1.74	0.765	0.580
	Rural	17	5.9	--	--	--	--
	Low Income	39	69.2	1.60	2.81	0.962	0.808
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	60.7	1.29	2.35	0.841	0.704
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	4.7	--	--	--	--
	Urban	110	4.5	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	4.9	--	--	--	--
	Mid/High Income	73	5.5	--	--	--	--
	Home Children	69	2.9	--	--	--	--
	Day Care Children	58	6.9	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	100.0	72.8	152	32.9	1.18
	Urban	98	100.0	80.1	163	37.6	1.12
	Rural	17	100.0	31.0	37.8	15.4	1.24
	Low Income	35	100.0	39.5	41.2	25.6	0.968
	Mid/High Income	67	100.0	98.0	193	39.5	1.31
	Home Children	62	100.0	50.5	111	22.4	1.16
	Day Care Children	53	100.0	98.9	186	51.7	1.03
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	44.0	--	--	--	--
	Urban	108	50.0	3.75	6.31	2.77	0.580
	Rural	17	5.9	--	--	--	--
	Low Income	39	69.2	5.79	10.2	3.48	0.808
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	60.7	4.65	8.49	3.04	0.704
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	4.7	--	--	--	--
	Urban	110	4.5	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	4.9	--	--	--	--
	Mid/High Income	73	5.5	--	--	--	--
	Home Children	69	2.9	--	--	--	--
	Day Care Children	58	6.9	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	100.0	264	550	119	1.18
	Urban	98	100.0	290	589	136	1.12
	Rural	17	100.0	112	137	55.6	1.24
	Low Income	35	100.0	143	149	92.8	0.968
	Mid/High Income	67	100.0	354	699	143	1.31
	Home Children	62	100.0	183	403	81.0	1.16
	Day Care Children	53	100.0	358	674	187	1.03

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-4b. Benzo[gh]perylene (191-24-2): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	0.887	1.78	15.9
	Urban	108	<MDL	<MDL	<MDL	0.900	1.78	15.9
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.973	0.973
	Low Income	39	<MDL	<MDL	0.775	1.31	9.30	15.9
	Mid/High Income	73	<MDL	<MDL	<MDL	0.794	1.40	1.78
	Home Children	69	<MDL	<MDL	<MDL	0.775	1.40	4.08
	Day Care Children	56	<MDL	<MDL	0.773	1.04	3.14	15.9
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	<MDL	1,140
	Urban	110	<MDL	<MDL	<MDL	<MDL	<MDL	1,140
	Rural	17	<MDL	<MDL	<MDL	<MDL	63.6	63.6
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	631
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	63.6	1,140
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	1,140
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	179	776
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	2.12	14.1	27.9	73.7	283	1,260
	Urban	98	4.01	18.2	35.4	78.2	309	1,260
	Rural	17	2.12	6.78	9.45	26.5	126	126
	Low Income	35	2.12	14.1	25.1	53.8	139	200
	Mid/High Income	67	3.22	13.9	38.0	86.0	311	1,260
	Home Children	62	2.12	9.45	21.6	45.7	148	820
	Day Care Children	53	7.46	25.1	50.4	91.6	311	1,260
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	3.21	6.44	57.7
	Urban	108	<MDL	<MDL	<MDL	3.26	6.44	57.7
	Rural	17	<MDL	<MDL	<MDL	<MDL	3.52	3.52
	Low Income	39	<MDL	<MDL	2.80	4.74	33.7	57.7
	Mid/High Income	73	<MDL	<MDL	<MDL	2.87	5.07	6.44
	Home Children	69	<MDL	<MDL	<MDL	2.80	5.07	14.8
	Day Care Children	56	<MDL	<MDL	2.80	3.77	11.4	57.7
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	<MDL	4,130
	Urban	110	<MDL	<MDL	<MDL	<MDL	<MDL	4,130
	Rural	17	<MDL	<MDL	<MDL	<MDL	230	230
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	2,280
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	230	4,130
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	4,130
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	648	2,810
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	7.68	51.0	101	267	1,020	4,570
	Urban	98	14.5	65.9	128	283	1,120	4,570
	Rural	17	7.68	24.5	34.2	96.0	455	455
	Low Income	35	7.68	51.0	90.7	195	505	725
	Mid/High Income	67	11.7	50.2	138	311	1,130	4,570
	Home Children	62	7.68	34.2	78.0	165	536	2,970
	Day Care Children	53	27.0	90.7	182	332	1,130	4,570

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-4c. Benzo[ghi]perylene (191-24-2): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	44.0	--	--	--	--
	Urban	108	50.0	0.030	0.052	0.022	0.619
	Rural	17	5.9	--	--	--	--
	Low Income	39	69.2	0.047	0.084	0.027	0.852
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	60.7	0.037	0.070	0.023	0.755
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	4.7	--	--	--	--
	Urban	110	4.5	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	4.9	--	--	--	--
	Mid/High Income	73	5.5	--	--	--	--
	Home Children	69	2.9	--	--	--	--
	Day Care Children	58	6.9	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	100.0	2.18	4.50	0.949	1.20
	Urban	98	100.0	2.40	4.82	1.08	1.15
	Rural	17	100.0	0.869	1.05	0.442	1.22
	Low Income	35	100.0	1.22	1.49	0.733	1.03
	Mid/High Income	67	100.0	2.91	5.69	1.14	1.32
	Home Children	62	100.0	1.70	4.56	0.669	1.19
	Day Care Children	53	100.0	2.74	4.40	1.43	1.07
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	44.0	--	--	--	--
	Urban	108	50.0	0.110	0.190	0.079	0.619
	Rural	17	5.9	--	--	--	--
	Low Income	39	69.2	0.169	0.305	0.098	0.852
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	60.7	0.133	0.253	0.083	0.755
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	4.7	--	--	--	--
	Urban	110	4.5	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	4.9	--	--	--	--
	Mid/High Income	73	5.5	--	--	--	--
	Home Children	69	2.9	--	--	--	--
	Day Care Children	58	6.9	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	100.0	7.87	16.3	3.43	1.20
	Urban	98	100.0	8.70	17.4	3.92	1.15
	Rural	17	100.0	3.15	3.79	1.60	1.22
	Low Income	35	100.0	4.43	5.39	2.65	1.03
	Mid/High Income	67	100.0	10.5	20.6	4.13	1.32
	Home Children	62	100.0	6.14	16.5	2.42	1.19
	Day Care Children	53	100.0	9.90	15.9	5.17	1.07

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-4d. Benzo[gh]perylene (191-24-2): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.027	0.055	0.488
	Urban	108	<MDL	<MDL	<MDL	0.027	0.058	0.488
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.033	0.033
	Low Income	39	<MDL	<MDL	0.021	0.038	0.250	0.488
	Mid/High Income	73	<MDL	<MDL	<MDL	0.026	0.042	0.058
	Home Children	69	<MDL	<MDL	<MDL	0.026	0.042	0.150
	Day Care Children	56	<MDL	<MDL	0.020	0.033	0.078	0.488
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	<MDL	27.9
	Urban	110	<MDL	<MDL	<MDL	<MDL	<MDL	27.9
	Rural	17	<MDL	<MDL	<MDL	<MDL	2.19	2.19
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	21.7
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	2.19	27.9
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	27.9
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	5.80	21.7
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	0.050	0.379	0.816	2.07	8.57	34.7
	Urban	98	0.116	0.476	0.935	2.15	8.89	34.7
	Rural	17	0.050	0.195	0.311	0.891	3.46	3.46
	Low Income	35	0.050	0.379	0.755	1.47	5.69	6.90
	Mid/High Income	67	0.111	0.382	1.17	2.47	13.1	34.7
	Home Children	62	0.050	0.287	0.611	1.56	4.29	34.7
	Day Care Children	53	0.155	0.692	1.47	2.64	13.1	25.3
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.096	0.199	1.77
	Urban	108	<MDL	<MDL	<MDL	0.097	0.208	1.77
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.121	0.121
	Low Income	39	<MDL	<MDL	0.078	0.139	0.904	1.77
	Mid/High Income	73	<MDL	<MDL	<MDL	0.093	0.151	0.208
	Home Children	69	<MDL	<MDL	<MDL	0.093	0.151	0.542
	Day Care Children	56	<MDL	<MDL	0.072	0.118	0.282	1.77
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	<MDL	101
	Urban	110	<MDL	<MDL	<MDL	<MDL	<MDL	101
	Rural	17	<MDL	<MDL	<MDL	<MDL	7.93	7.93
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	78.5
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	7.93	101
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	101
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	21.0	78.5
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	0.180	1.37	2.95	7.50	31.0	126
	Urban	98	0.420	1.72	3.38	7.79	32.2	126
	Rural	17	0.180	0.707	1.13	3.22	12.5	12.5
	Low Income	35	0.180	1.37	2.73	5.32	20.6	25.0
	Mid/High Income	67	0.401	1.38	4.24	8.93	47.4	126
	Home Children	62	0.180	1.04	2.21	5.65	15.5	126
	Day Care Children	53	0.561	2.50	5.32	9.55	47.4	91.5

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-5a. Benzo[a]pyrene (50-32-8): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	32.8	--	--	--	--
	Urban	108	37.0	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	23.2	--	--	--	--
	Day Care Children	56	44.6	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	22.8	--	--	--	--
	Urban	110	20.0	--	--	--	--
	Rural	17	41.2	--	--	--	--
	Low Income	41	24.4	--	--	--	--
	Mid/High Income	73	24.7	--	--	--	--
	Home Children	69	18.8	--	--	--	--
	Day Care Children	58	27.6	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	100.0	79.1	183	33.0	1.21
	Urban	98	100.0	87.2	196	37.7	1.15
	Rural	17	100.0	32.2	41.1	15.3	1.28
	Low Income	35	100.0	39.3	42.9	25.0	0.986
	Mid/High Income	67	100.0	109	233	40.4	1.35
	Home Children	62	100.0	55.2	123	22.7	1.21
	Day Care Children	53	100.0	107	232	51.2	1.07
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	32.8	--	--	--	--
	Urban	108	37.0	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	23.2	--	--	--	--
	Day Care Children	56	44.6	--	--	--	--
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	22.8	--	--	--	--
	Urban	110	20.0	--	--	--	--
	Rural	17	41.2	--	--	--	--
	Low Income	41	24.4	--	--	--	--
	Mid/High Income	73	24.7	--	--	--	--
	Home Children	69	18.8	--	--	--	--
	Day Care Children	58	27.6	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	100.0	313	724	131	1.21
	Urban	98	100.0	346	777	149	1.15
	Rural	17	100.0	128	163	60.7	1.28
	Low Income	35	100.0	156	170	99.2	0.986
	Mid/High Income	67	100.0	433	924	160	1.35
	Home Children	62	100.0	219	488	89.8	1.21
	Day Care Children	53	100.0	424	920	203	1.07

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-5b. Benzo[a]pyrene (50-32-8): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	0.556	2.95	11.1
	Urban	108	<MDL	<MDL	<MDL	0.596	3.01	11.1
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.810	0.810
	Low Income	39	<MDL	<MDL	<MDL	0.797	5.93	11.1
	Mid/High Income	73	<MDL	<MDL	<MDL	0.528	1.38	3.23
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1.02	5.93
	Day Care Children	56	<MDL	<MDL	<MDL	0.891	4.01	11.1
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	75.2	1,870
	Urban	110	<MDL	<MDL	<MDL	<MDL	70.6	1,870
	Rural	17	<MDL	<MDL	<MDL	37.3	82.4	82.4
	Low Income	41	<MDL	<MDL	<MDL	<MDL	75.2	1,070
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	82.4	1,870
	Home Children	69	<MDL	<MDL	<MDL	<MDL	70.6	1,870
	Day Care Children	58	<MDL	<MDL	<MDL	37.3	213	1,070
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	1.93	13.7	28.7	70.3	319	1,590
	Urban	98	4.32	17.3	31.7	73.9	325	1,590
	Rural	17	1.93	7.67	8.40	26.9	143	143
	Low Income	35	1.93	12.4	22.3	52.5	102	226
	Mid/High Income	67	2.76	14.4	32.4	96.3	340	1,590
	Home Children	62	1.93	8.61	21.8	44.3	182	870
	Day Care Children	53	7.87	25.6	50.2	91.0	319	1,590
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	2.20	11.7	43.9
	Urban	108	<MDL	<MDL	<MDL	2.36	11.9	43.9
	Rural	17	<MDL	<MDL	<MDL	<MDL	3.21	3.21
	Low Income	39	<MDL	<MDL	<MDL	3.16	23.5	43.9
	Mid/High Income	73	<MDL	<MDL	<MDL	2.09	5.45	12.8
	Home Children	69	<MDL	<MDL	<MDL	<MDL	4.03	23.5
	Day Care Children	56	<MDL	<MDL	<MDL	3.53	15.9	43.9
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	298	7,400
	Urban	110	<MDL	<MDL	<MDL	<MDL	280	7,400
	Rural	17	<MDL	<MDL	<MDL	148	326	326
	Low Income	41	<MDL	<MDL	<MDL	<MDL	298	4,240
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	326	7,400
	Home Children	69	<MDL	<MDL	<MDL	<MDL	280	7,400
	Day Care Children	58	<MDL	<MDL	<MDL	148	843	4,240
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	7.65	54.4	114	279	1,270	6,320
	Urban	98	17.1	68.5	125	293	1,290	6,320
	Rural	17	7.65	30.4	33.3	107	567	567
	Low Income	35	7.65	49.0	88.2	208	406	895
	Mid/High Income	67	10.9	57.0	128	382	1,350	6,320
	Home Children	62	7.65	34.1	86.5	176	721	3,450
	Day Care Children	53	31.2	102	199	360	1,270	6,320

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-5c. Benzo[a]pyrene (50-32-8): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	32.8	--	--	--	--
	Urban	108	37.0	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	23.2	--	--	--	--
	Day Care Children	56	44.6	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	22.8	--	--	--	--
	Urban	110	20.0	--	--	--	--
	Rural	17	41.2	--	--	--	--
	Low Income	41	24.4	--	--	--	--
	Mid/High Income	73	24.7	--	--	--	--
	Home Children	69	18.8	--	--	--	--
	Day Care Children	58	27.6	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	100.0	2.34	5.14	0.952	1.23
	Urban	98	100.0	2.59	5.51	1.09	1.18
	Rural	17	100.0	0.900	1.13	0.441	1.26
	Low Income	35	100.0	1.20	1.49	0.715	1.04
	Mid/High Income	67	100.0	3.21	6.52	1.17	1.36
	Home Children	62	100.0	1.85	4.96	0.677	1.24
	Day Care Children	53	100.0	2.91	5.32	1.42	1.10
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	32.8	--	--	--	--
	Urban	108	37.0	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	23.2	--	--	--	--
	Day Care Children	56	44.6	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	22.8	--	--	--	--
	Urban	110	20.0	--	--	--	--
	Rural	17	41.2	--	--	--	--
	Low Income	41	24.4	--	--	--	--
	Mid/High Income	73	24.7	--	--	--	--
	Home Children	69	18.8	--	--	--	--
	Day Care Children	58	27.6	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	100.0	9.27	20.4	3.77	1.23
	Urban	98	100.0	10.3	21.8	4.31	1.18
	Rural	17	100.0	3.57	4.46	1.75	1.26
	Low Income	35	100.0	4.76	5.89	2.84	1.04
	Mid/High Income	67	100.0	12.7	25.8	4.62	1.36
	Home Children	62	100.0	7.34	19.7	2.69	1.24
	Day Care Children	53	100.0	11.5	21.1	5.61	1.10

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-5d. Benzo[a]pyrene (50-32-8): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.019	0.088	0.297
	Urban	108	<MDL	<MDL	<MDL	0.020	0.088	0.297
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.021	0.021
	Low Income	39	<MDL	<MDL	<MDL	0.026	0.218	0.297
	Mid/High Income	73	<MDL	<MDL	<MDL	0.018	0.041	0.094
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.027	0.218
	Day Care Children	56	<MDL	<MDL	<MDL	0.025	0.092	0.297
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	2.59	45.7
	Urban	110	<MDL	<MDL	<MDL	<MDL	1.84	45.7
	Rural	17	<MDL	<MDL	<MDL	1.04	2.83	2.83
	Low Income	41	<MDL	<MDL	<MDL	<MDL	2.59	36.8
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	2.83	45.7
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1.81	45.7
	Day Care Children	58	<MDL	<MDL	<MDL	1.05	6.89	36.8
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	0.045	0.377	0.811	2.12	10.7	36.9
	Urban	98	0.125	0.473	0.878	2.19	11.2	36.9
	Rural	17	0.045	0.197	0.299	0.853	3.68	3.68
	Low Income	35	0.045	0.382	0.713	1.52	3.71	7.77
	Mid/High Income	67	0.095	0.370	1.03	2.53	13.2	36.9
	Home Children	62	0.045	0.272	0.689	1.67	5.27	36.9
	Day Care Children	53	0.224	0.688	1.43	2.53	13.2	31.9
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.077	0.347	1.18
	Urban	108	<MDL	<MDL	<MDL	0.079	0.348	1.18
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.082	0.082
	Low Income	39	<MDL	<MDL	<MDL	0.104	0.862	1.18
	Mid/High Income	73	<MDL	<MDL	<MDL	0.073	0.162	0.371
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.109	0.862
	Day Care Children	56	<MDL	<MDL	<MDL	0.098	0.365	1.18
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	10.3	181
	Urban	110	<MDL	<MDL	<MDL	<MDL	7.28	181
	Rural	17	<MDL	<MDL	<MDL	4.12	11.2	11.2
	Low Income	41	<MDL	<MDL	<MDL	<MDL	10.3	146
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	11.2	181
	Home Children	69	<MDL	<MDL	<MDL	<MDL	7.17	181
	Day Care Children	58	<MDL	<MDL	<MDL	4.14	27.3	146
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	0.179	1.49	3.21	8.39	42.5	146
	Urban	98	0.496	1.87	3.48	8.69	44.3	146
	Rural	17	0.179	0.782	1.18	3.38	14.6	14.6
	Low Income	35	0.179	1.51	2.83	6.03	14.7	30.8
	Mid/High Income	67	0.376	1.47	4.07	10.0	52.3	146
	Home Children	62	0.179	1.08	2.73	6.63	20.9	146
	Day Care Children	53	0.887	2.73	5.66	10.0	52.3	127

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-6a. Benzo[e]pyrene (192-97-2): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	40.0	--	--	--	--
	Urban	108	45.4	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	53.8	0.973	1.02	0.745	0.635
	Mid/High Income	73	35.6	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	51.8	0.828	0.803	0.679	0.537
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	28.3	--	--	--	--
	Urban	110	25.5	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	41	36.6	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	18.8	--	--	--	--
	Day Care Children	58	39.7	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	100.0	74.8	159	33.4	1.18
	Urban	98	100.0	82.6	171	38.3	1.12
	Rural	17	100.0	29.7	36.0	15.3	1.20
	Low Income	35	100.0	39.7	43.1	25.9	0.950
	Mid/High Income	67	100.0	101	203	40.2	1.31
	Home Children	62	100.0	51.7	108	23.1	1.16
	Day Care Children	53	100.0	102	201	51.5	1.05
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	40.0	--	--	--	--
	Urban	108	45.4	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	53.8	3.86	4.02	2.95	0.635
	Mid/High Income	73	35.6	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	51.8	3.28	3.18	2.69	0.537
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	28.3	--	--	--	--
	Urban	110	25.5	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	41	36.6	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	18.8	--	--	--	--
	Day Care Children	58	39.7	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	100.0	296	631	133	1.18
	Urban	98	100.0	327	677	152	1.12
	Rural	17	100.0	118	143	60.6	1.20
	Low Income	35	100.0	157	171	103	0.950
	Mid/High Income	67	100.0	400	803	159	1.31
	Home Children	62	100.0	205	428	91.6	1.16
	Day Care Children	53	100.0	403	798	204	1.05

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-6b. Benzo[e]pyrene (192-97-2): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	0.605	1.87	5.65
	Urban	108	<MDL	<MDL	<MDL	0.692	2.14	5.65
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.870	0.870
	Low Income	39	<MDL	<MDL	0.533	0.964	3.44	5.65
	Mid/High Income	73	<MDL	<MDL	<MDL	0.551	1.02	2.24
	Home Children	69	<MDL	<MDL	<MDL	0.545	1.02	3.44
	Day Care Children	56	<MDL	<MDL	0.531	0.839	2.27	5.65
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	<MDL	33.6	62.9	525
	Urban	110	<MDL	<MDL	<MDL	33.3	69.1	525
	Rural	17	<MDL	<MDL	<MDL	37.3	62.9	62.9
	Low Income	41	<MDL	<MDL	<MDL	34.5	69.1	272
	Mid/High Income	73	<MDL	<MDL	<MDL	31.6	57.4	525
	Home Children	69	<MDL	<MDL	<MDL	<MDL	46.6	525
	Day Care Children	58	<MDL	<MDL	<MDL	37.3	191	461
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	1.98	14.8	29.7	70.5	287	1,370
	Urban	98	4.17	17.2	37.3	77.1	309	1,370
	Rural	17	1.98	7.27	9.09	25.4	121	121
	Low Income	35	1.98	13.6	23.9	51.9	134	223
	Mid/High Income	67	3.60	14.8	43.7	91.7	326	1,370
	Home Children	62	1.98	10.0	22.0	47.6	175	766
	Day Care Children	53	7.27	24.0	50.6	91.7	326	1,370
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	2.40	7.42	22.4
	Urban	108	<MDL	<MDL	<MDL	2.74	8.47	22.4
	Rural	17	<MDL	<MDL	<MDL	<MDL	3.45	3.45
	Low Income	39	<MDL	<MDL	2.11	3.82	13.6	22.4
	Mid/High Income	73	<MDL	<MDL	<MDL	2.18	4.03	8.89
	Home Children	69	<MDL	<MDL	<MDL	2.16	4.03	13.6
	Day Care Children	56	<MDL	<MDL	2.10	3.32	9.01	22.4
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	<MDL	133	249	2,080
	Urban	110	<MDL	<MDL	<MDL	132	274	2,080
	Rural	17	<MDL	<MDL	<MDL	148	249	249
	Low Income	41	<MDL	<MDL	<MDL	137	274	1,080
	Mid/High Income	73	<MDL	<MDL	<MDL	125	228	2,080
	Home Children	69	<MDL	<MDL	<MDL	<MDL	185	2,080
	Day Care Children	58	<MDL	<MDL	<MDL	148	757	1,830
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	7.83	58.6	118	280	1,140	5,430
	Urban	98	16.5	68.2	148	306	1,220	5,430
	Rural	17	7.83	28.8	36.0	101	481	481
	Low Income	35	7.83	54.0	94.6	206	532	884
	Mid/High Income	67	14.3	58.6	173	363	1,290	5,430
	Home Children	62	7.83	39.7	87.3	189	692	3,040
	Day Care Children	53	28.8	95.0	201	363	1,290	5,430

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-6c. Benzo[e]pyrene (192-97-2): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	40.0	--	--	--	--
	Urban	108	45.4	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	53.8	0.028	0.030	0.021	0.690
	Mid/High Income	73	35.6	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	51.8	0.023	0.022	0.019	0.593
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	28.3	--	--	--	--
	Urban	110	25.5	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	41	36.6	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	18.8	--	--	--	--
	Day Care Children	58	39.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	100.0	2.22	4.52	0.964	1.20
	Urban	98	100.0	2.46	4.85	1.10	1.15
	Rural	17	100.0	0.837	1.00	0.440	1.19
	Low Income	35	100.0	1.23	1.55	0.741	1.01
	Mid/High Income	67	100.0	2.97	5.71	1.16	1.32
	Home Children	62	100.0	1.73	4.36	0.691	1.20
	Day Care Children	53	100.0	2.80	4.68	1.42	1.08
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	40.0	--	--	--	--
	Urban	108	45.4	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	53.8	0.112	0.119	0.083	0.690
	Mid/High Income	73	35.6	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	51.8	0.092	0.088	0.074	0.593
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	28.3	--	--	--	--
	Urban	110	25.5	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	41	36.6	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	18.8	--	--	--	--
	Day Care Children	58	39.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	100.0	8.79	17.9	3.82	1.20
	Urban	98	100.0	9.74	19.2	4.38	1.15
	Rural	17	100.0	3.32	3.97	1.75	1.19
	Low Income	35	100.0	4.88	6.14	2.94	1.01
	Mid/High Income	67	100.0	11.8	22.6	4.59	1.32
	Home Children	62	100.0	6.84	17.3	2.74	1.20
	Day Care Children	53	100.0	11.1	18.6	5.64	1.08

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-6d. Benzo[e]pyrene (192-97-2): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.020	0.055	0.152
	Urban	108	<MDL	<MDL	<MDL	0.022	0.057	0.152
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.022	0.022
	Low Income	39	<MDL	<MDL	0.018	0.030	0.126	0.152
	Mid/High Income	73	<MDL	<MDL	<MDL	0.019	0.029	0.065
	Home Children	69	<MDL	<MDL	<MDL	0.018	0.030	0.126
	Day Care Children	56	<MDL	<MDL	0.016	0.023	0.057	0.152
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	<MDL	0.956	2.16	12.8
	Urban	110	<MDL	<MDL	<MDL	0.940	2.38	12.8
	Rural	17	<MDL	<MDL	<MDL	1.04	2.16	2.16
	Low Income	41	<MDL	<MDL	<MDL	0.933	2.38	9.36
	Mid/High Income	73	<MDL	<MDL	<MDL	0.953	1.98	12.8
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1.68	12.8
	Day Care Children	58	<MDL	<MDL	<MDL	1.05	6.19	11.8
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	0.046	0.360	0.794	1.99	9.56	32.4
	Urban	98	0.121	0.469	0.964	2.14	9.72	32.4
	Rural	17	0.046	0.239	0.309	0.802	3.39	3.39
	Low Income	35	0.046	0.363	0.702	1.44	5.47	7.67
	Mid/High Income	67	0.121	0.360	1.37	2.40	12.2	32.4
	Home Children	62	0.046	0.291	0.640	1.74	5.06	32.4
	Day Care Children	53	0.181	0.695	1.50	2.59	12.2	27.4
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.080	0.219	0.602
	Urban	108	<MDL	<MDL	<MDL	0.086	0.227	0.602
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.088	0.088
	Low Income	39	<MDL	<MDL	0.072	0.119	0.500	0.602
	Mid/High Income	73	<MDL	<MDL	<MDL	0.077	0.113	0.258
	Home Children	69	<MDL	<MDL	<MDL	0.072	0.119	0.500
	Day Care Children	56	<MDL	<MDL	0.065	0.091	0.227	0.602
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	<MDL	3.79	8.58	50.9
	Urban	110	<MDL	<MDL	<MDL	3.72	9.43	50.9
	Rural	17	<MDL	<MDL	<MDL	4.12	8.58	8.58
	Low Income	41	<MDL	<MDL	<MDL	3.70	9.43	37.1
	Mid/High Income	73	<MDL	<MDL	<MDL	3.78	7.83	50.9
	Home Children	69	<MDL	<MDL	<MDL	<MDL	6.68	50.9
	Day Care Children	58	<MDL	<MDL	<MDL	4.14	24.5	46.8
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	0.184	1.43	3.15	7.90	37.9	129
	Urban	98	0.479	1.86	3.82	8.48	38.5	129
	Rural	17	0.184	0.947	1.23	3.18	13.5	13.5
	Low Income	35	0.184	1.44	2.78	5.69	21.7	30.4
	Mid/High Income	67	0.479	1.43	5.43	9.53	48.2	129
	Home Children	62	0.184	1.15	2.54	6.91	20.1	129
	Day Care Children	53	0.718	2.75	5.95	10.3	48.2	109

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-7a. Benzylbutylphthalate (85-68-7): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	45.2	--	--	--	--
	Urban	107	44.9	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	38	65.8	422	310	344	0.617
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	29.0	--	--	--	--
	Day Care Children	55	65.5	389	306	321	0.575
Potential Exposure via Dietary Ingestion (ng/day)	Overall	48	64.6	17,500	22,000	9,040	1.18
	Urban	42	66.7	17,500	22,200	9,250	1.17
	Rural	6	50.0	17,100	22,800	7,710	1.37
	Low Income	14	71.4	22,300	30,800	11,400	1.18
	Mid/High Income	30	63.3	15,300	16,300	8,590	1.15
	Home Children	34	52.9	14,000	21,300	6,670	1.17
	Day Care Children	14	92.9	25,900	22,300	18,900	0.856
Potential Exposure via Indirect Ingestion (ng/day)	Overall	114	100.0	1,350	2,740	664	1.12
	Urban	98	100.0	1,390	2,930	646	1.16
	Rural	16	100.0	1,090	1,010	786	0.821
	Low Income	35	100.0	1,140	1,040	794	0.887
	Mid/High Income	67	100.0	1,570	3,480	620	1.26
	Home Children	62	100.0	736	880	440	1.03
	Day Care Children	52	100.0	2,090	3,830	1,080	1.02
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	45.2	--	--	--	--
	Urban	107	44.9	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	38	65.8	1,350	991	1,100	0.617
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	29.0	--	--	--	--
	Day Care Children	55	65.5	1,250	979	1,030	0.575
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	48	64.6	55,900	70,600	28,900	1.18
	Urban	42	66.7	56,000	71,100	29,600	1.17
	Rural	6	50.0	54,800	73,000	24,700	1.37
	Low Income	14	71.4	71,500	98,700	36,600	1.18
	Mid/High Income	30	63.3	48,900	52,200	27,500	1.15
	Home Children	34	52.9	44,700	68,200	21,400	1.17
	Day Care Children	14	92.9	83,000	71,300	60,500	0.856
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	114	100.0	4,330	8,770	2,120	1.12
	Urban	98	100.0	4,460	9,370	2,070	1.16
	Rural	16	100.0	3,500	3,230	2,520	0.821
	Low Income	35	100.0	3,640	3,310	2,540	0.887
	Mid/High Income	67	100.0	5,040	11,100	1,980	1.26
	Home Children	62	100.0	2,360	2,820	1,410	1.03
	Day Care Children	52	100.0	6,680	12,300	3,470	1.02

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-7b. Benzylbutylphthalate (85-68-7): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	<MDL	408	920	1,680
	Urban	107	<MDL	<MDL	<MDL	410	949	1,680
	Rural	17	<MDL	<MDL	<MDL	405	819	819
	Low Income	38	<MDL	<MDL	325	561	1,020	1,600
	Mid/High Income	73	<MDL	<MDL	<MDL	276	629	1,020
	Home Children	69	<MDL	<MDL	<MDL	269	920	1,020
	Day Care Children	55	<MDL	<MDL	275	459	951	1,680
Potential Exposure via Dietary Ingestion (ng/day)	Overall	48	<MDL	<MDL	9,370	18,000	60,100	103,000
	Urban	42	<MDL	<MDL	11,000	16,700	60,100	103,000
	Rural	6	<MDL	<MDL	<MDL	30,200	58,200	58,200
	Low Income	14	<MDL	<MDL	13,900	19,300	103,000	103,000
	Mid/High Income	30	<MDL	<MDL	9,370	16,700	56,400	60,100
	Home Children	34	<MDL	<MDL	5,440	15,000	58,200	103,000
	Day Care Children	14	<MDL	13,300	18,000	30,200	83,300	83,300
Potential Exposure via Indirect Ingestion (ng/day)	Overall	114	33.6	342	629	1,320	3,960	24,100
	Urban	98	33.6	328	614	1,320	4,950	24,100
	Rural	16	186	527	668	1,410	3,810	3,810
	Low Income	35	84.6	426	762	1,570	3,890	3,960
	Mid/High Income	67	33.6	270	565	1,380	6,510	24,100
	Home Children	62	33.6	233	439	729	2,110	4,950
	Day Care Children	52	84.6	625	818	1,860	7,530	24,100
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	<MDL	1,310	2,940	5,390
	Urban	107	<MDL	<MDL	<MDL	1,310	3,040	5,390
	Rural	17	<MDL	<MDL	<MDL	1,300	2,620	2,620
	Low Income	38	<MDL	<MDL	1,040	1,800	3,270	5,110
	Mid/High Income	73	<MDL	<MDL	<MDL	883	2,010	3,250
	Home Children	69	<MDL	<MDL	<MDL	863	2,940	3,270
	Day Care Children	55	<MDL	<MDL	879	1,470	3,050	5,390
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	48	<MDL	<MDL	30,000	57,700	192,000	329,000
	Urban	42	<MDL	<MDL	35,100	53,600	192,000	329,000
	Rural	6	<MDL	<MDL	<MDL	96,500	186,000	186,000
	Low Income	14	<MDL	<MDL	44,400	61,800	329,000	329,000
	Mid/High Income	30	<MDL	<MDL	30,000	53,600	180,000	192,000
	Home Children	34	<MDL	<MDL	17,400	48,100	186,000	329,000
	Day Care Children	14	<MDL	42,500	57,700	96,500	267,000	267,000
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	114	108	1,090	2,010	4,220	12,700	77,200
	Urban	98	108	1,050	1,960	4,220	15,800	77,200
	Rural	16	596	1,690	2,140	4,520	12,200	12,200
	Low Income	35	271	1,360	2,440	5,030	12,500	12,700
	Mid/High Income	67	108	864	1,810	4,410	20,800	77,200
	Home Children	62	108	746	1,400	2,330	6,740	15,800
	Day Care Children	52	271	2,000	2,620	5,970	24,100	77,200

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-7c. Benzylbutylphthalate (85-68-7): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	45.2	--	--	--	--
	Urban	107	44.9	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	38	65.8	12.0	8.31	9.65	0.660
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	29.0	--	--	--	--
	Day Care Children	55	65.5	10.9	9.09	8.80	0.624
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	48	64.6	480	573	258	1.16
	Urban	42	66.7	479	563	264	1.15
	Rural	6	50.0	492	695	224	1.35
	Low Income	14	71.4	557	695	328	1.05
	Mid/High Income	30	63.3	437	483	239	1.19
	Home Children	34	52.9	419	616	198	1.20
	Day Care Children	14	92.9	628	438	491	0.774
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	114	100.0	38.7	70.2	19.1	1.13
	Urban	98	100.0	39.5	74.4	18.6	1.17
	Rural	16	100.0	33.8	36.4	22.2	0.900
	Low Income	35	100.0	36.0	40.3	22.7	0.970
	Mid/High Income	67	100.0	43.2	86.4	17.9	1.26
	Home Children	62	100.0	22.8	28.4	13.1	1.06
	Day Care Children	52	100.0	57.7	96.3	29.8	1.06
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	45.2	--	--	--	--
	Urban	107	44.9	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	38	65.8	38.3	26.6	30.9	0.660
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	29.0	--	--	--	--
	Day Care Children	55	65.5	35.0	29.1	28.2	0.624
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	48	64.6	1,540	1,830	827	1.16
	Urban	42	66.7	1,530	1,800	844	1.15
	Rural	6	50.0	1,570	2,220	716	1.35
	Low Income	14	71.4	1,780	2,220	1,050	1.05
	Mid/High Income	30	63.3	1,400	1,550	766	1.19
	Home Children	34	52.9	1,340	1,970	635	1.20
	Day Care Children	14	92.9	2,010	1,400	1,570	0.774
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	114	100.0	124	225	61.1	1.13
	Urban	98	100.0	126	238	59.6	1.17
	Rural	16	100.0	108	116	71.2	0.900
	Low Income	35	100.0	115	129	72.7	0.970
	Mid/High Income	67	100.0	138	277	57.3	1.26
	Home Children	62	100.0	72.9	90.9	42.1	1.06
	Day Care Children	52	100.0	185	308	95.2	1.06

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-7d. Benzylbutylphthalate (85-68-7): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	<MDL	11.1	26.2	59.8
	Urban	107	<MDL	<MDL	<MDL	10.9	26.2	59.8
	Rural	17	<MDL	<MDL	<MDL	11.5	28.2	28.2
	Low Income	38	<MDL	<MDL	8.84	13.9	28.5	35.1
	Mid/High Income	73	<MDL	<MDL	<MDL	8.83	16.1	26.8
	Home Children	69	<MDL	<MDL	<MDL	8.62	26.8	35.1
	Day Care Children	55	<MDL	<MDL	8.17	13.6	26.2	59.8
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	48	<MDL	<MDL	273	560	1,830	2,630
	Urban	42	<MDL	<MDL	292	559	1,460	2,630
	Rural	6	<MDL	<MDL	<MDL	664	1,830	1,830
	Low Income	14	<MDL	<MDL	347	560	2,630	2,630
	Mid/High Income	30	<MDL	<MDL	257	512	1,450	1,940
	Home Children	34	<MDL	<MDL	171	445	1,940	2,630
	Day Care Children	14	<MDL	276	510	833	1,460	1,460
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	114	0.975	10.8	17.6	42.5	159	565
	Urban	98	0.975	10.6	17.6	42.5	161	565
	Rural	16	5.86	13.0	18.0	36.7	131	131
	Low Income	35	1.94	12.5	20.9	53.1	159	161
	Mid/High Income	67	0.975	8.52	16.4	44.6	177	565
	Home Children	62	0.975	5.86	13.1	21.0	64.8	151
	Day Care Children	52	1.94	15.1	23.0	54.3	199	565
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	<MDL	35.6	83.9	191
	Urban	107	<MDL	<MDL	<MDL	35.0	83.9	191
	Rural	17	<MDL	<MDL	<MDL	36.9	90.2	90.2
	Low Income	38	<MDL	<MDL	28.3	44.4	91.1	112
	Mid/High Income	73	<MDL	<MDL	<MDL	28.3	51.6	85.8
	Home Children	69	<MDL	<MDL	<MDL	27.6	85.8	112
	Day Care Children	55	<MDL	<MDL	26.2	43.5	83.9	191
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	48	<MDL	<MDL	874	1,790	5,870	8,430
	Urban	42	<MDL	<MDL	935	1,790	4,660	8,430
	Rural	6	<MDL	<MDL	<MDL	2,130	5,870	5,870
	Low Income	14	<MDL	<MDL	1,110	1,790	8,430	8,430
	Mid/High Income	30	<MDL	<MDL	822	1,640	4,640	6,210
	Home Children	34	<MDL	<MDL	548	1,430	6,210	8,430
	Day Care Children	14	<MDL	883	1,630	2,670	4,660	4,660
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	114	3.12	34.7	56.3	136	508	1,810
	Urban	98	3.12	34.0	56.3	136	517	1,810
	Rural	16	18.8	41.7	57.8	118	419	419
	Low Income	35	6.21	39.9	67.0	170	508	517
	Mid/High Income	67	3.12	27.3	52.6	143	565	1,810
	Home Children	62	3.12	18.8	41.8	67.2	207	485
	Day Care Children	52	6.21	48.3	73.6	174	637	1,810

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-8a. Bisphenol-A (80-05-7): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	101	79.2	13.0	16.2	9.36	0.690
	Urban	85	77.6	13.2	15.9	9.55	0.698
	Rural	16	87.5	12.0	18.1	8.41	0.657
	Low Income	32	84.4	20.4	25.7	12.2	0.925
	Mid/High Income	59	72.9	9.92	7.29	8.38	0.540
	Home Children	59	71.2	10.1	11.2	8.00	0.569
	Day Care Children	42	90.5	17.2	20.7	11.7	0.787
Potential Exposure via Dietary Ingestion (ng/day)	Overall	107	100.0	3,080	5,180	1,910	0.871
	Urban	93	100.0	2,740	2,810	1,880	0.842
	Rural	14	100.0	5,320	12,500	2,150	1.07
	Low Income	35	100.0	3,120	3,060	2,240	0.803
	Mid/High Income	60	100.0	2,400	2,470	1,650	0.838
	Home Children	58	100.0	2,310	2,370	1,620	0.820
	Day Care Children	49	100.0	3,980	7,140	2,340	0.894
Potential Exposure via Indirect Ingestion (ng/day)	Overall	104	67.3	1.74	2.08	1.16	0.827
	Urban	88	65.9	1.78	2.18	1.17	0.837
	Rural	16	75.0	1.55	1.43	1.14	0.795
	Low Income	28	82.1	1.14	1.17	0.852	0.702
	Mid/High Income	64	62.5	1.90	2.15	1.27	0.841
	Home Children	60	55.0	1.95	2.43	1.22	0.901
	Day Care Children	44	84.1	1.46	1.44	1.09	0.719
Potential Exposure – Aggregated (ng/day)	Overall	67	100.0	3,620	6,310	2,150	0.907
	Urban	55	100.0	3,170	3,190	2,170	0.863
	Rural	12	100.0	5,670	13,500	2,070	1.13
	Low Income	19	100.0	3,850	3,770	2,740	0.817
	Mid/High Income	40	100.0	2,570	2,520	1,810	0.830
	Home Children	41	100.0	2,500	2,410	1,810	0.796
	Day Care Children	26	100.0	5,390	9,520	2,820	1.02
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	101	79.2	57.1	70.8	41.0	0.690
	Urban	85	77.6	57.9	69.6	41.8	0.698
	Rural	16	87.5	52.6	79.1	36.9	0.657
	Low Income	32	84.4	89.2	112	53.6	0.925
	Mid/High Income	59	72.9	43.4	31.9	36.7	0.540
	Home Children	59	71.2	44.2	49.3	35.1	0.569
	Day Care Children	42	90.5	75.3	90.6	51.1	0.787
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	107	100.0	13,500	22,700	8,380	0.871
	Urban	93	100.0	12,000	12,300	8,240	0.842
	Rural	14	100.0	23,300	54,800	9,410	1.07
	Low Income	35	100.0	13,700	13,400	9,830	0.803
	Mid/High Income	60	100.0	10,500	10,800	7,220	0.838
	Home Children	58	100.0	10,100	10,400	7,080	0.820
	Day Care Children	49	100.0	17,400	31,300	10,200	0.894
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	104	67.3	7.64	9.10	5.09	0.827
	Urban	88	65.9	7.80	9.54	5.11	0.837
	Rural	16	75.0	6.78	6.26	4.99	0.795
	Low Income	28	82.1	5.00	5.13	3.73	0.702
	Mid/High Income	64	62.5	8.32	9.43	5.55	0.841
	Home Children	60	55.0	8.56	10.7	5.34	0.901
	Day Care Children	44	84.1	6.40	6.30	4.77	0.719
Potential Exposure – Aggregated (pmoles/day)	Overall	67	100.0	15,900	27,600	9,410	0.907
	Urban	55	100.0	13,900	14,000	9,500	0.863
	Rural	12	100.0	24,800	59,300	9,050	1.13
	Low Income	19	100.0	16,900	16,500	12,000	0.817
	Mid/High Income	40	100.0	11,200	11,000	7,930	0.830
	Home Children	41	100.0	10,900	10,600	7,920	0.796
	Day Care Children	26	100.0	23,600	41,700	12,400	1.02

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-8b. Bisphenol-A (80-05-7): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	101	<MDL	5.63	7.84	12.1	42.6	109
	Urban	85	<MDL	5.55	7.97	12.4	42.6	109
	Rural	16	<MDL	6.35	7.13	8.56	79.2	79.2
	Low Income	32	<MDL	6.01	10.3	12.8	79.2	109
	Mid/High Income	59	<MDL	<MDL	7.61	12.1	25.3	46.8
	Home Children	59	<MDL	<MDL	7.35	10.9	27.3	79.2
	Day Care Children	42	<MDL	6.53	9.89	16.0	58.6	109
Potential Exposure via Dietary Ingestion (ng/day)	Overall	107	390	1,080	1,740	3,190	9,120	48,600
	Urban	93	390	1,080	1,740	3,190	9,120	14,200
	Rural	14	578	1,420	1,740	2,550	48,600	48,600
	Low Income	35	527	1,390	2,340	3,530	12,800	14,200
	Mid/High Income	60	390	872	1,560	2,510	8,400	13,000
	Home Children	58	390	865	1,600	2,550	9,120	12,800
	Day Care Children	49	527	1,380	1,930	3,610	13,000	48,600
Potential Exposure via Indirect Ingestion (ng/day)	Overall	104	<MDL	<MDL	1.02	1.84	6.20	11.5
	Urban	88	<MDL	<MDL	1.01	1.84	6.64	11.5
	Rural	16	<MDL	<MDL	1.39	1.89	6.20	6.20
	Low Income	28	<MDL	0.501	0.706	1.32	3.54	5.89
	Mid/High Income	64	<MDL	<MDL	1.08	2.23	6.64	11.3
	Home Children	60	<MDL	<MDL	1.04	2.33	7.51	11.5
	Day Care Children	44	<MDL	0.661	0.986	1.73	3.54	7.37
Potential Exposure – Aggregated (ng/day)	Overall	67	396	1,270	1,880	3,540	12,800	48,600
	Urban	55	396	1,270	1,930	3,620	12,800	14,200
	Rural	12	585	1,180	1,730	2,550	48,600	48,600
	Low Income	19	565	1,550	2,560	3,620	14,200	14,200
	Mid/High Income	40	396	993	1,760	3,070	7,800	13,000
	Home Children	41	396	1,120	1,680	3,240	6,630	12,800
	Day Care Children	26	585	1,430	2,180	6,160	14,200	48,600
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	101	<MDL	24.6	34.4	53.0	187	477
	Urban	85	<MDL	24.3	34.9	54.2	187	477
	Rural	16	<MDL	27.8	31.2	37.5	347	347
	Low Income	32	<MDL	26.3	45.3	56.2	347	477
	Mid/High Income	59	<MDL	<MDL	33.3	53.0	111	205
	Home Children	59	<MDL	<MDL	32.2	47.9	120	347
	Day Care Children	42	<MDL	28.6	43.3	70.2	257	477
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	107	1,710	4,740	7,630	14,000	39,900	213,000
	Urban	93	1,710	4,740	7,630	14,000	39,900	62,100
	Rural	14	2,530	6,230	7,630	11,200	213,000	213,000
	Low Income	35	2,310	6,070	10,200	15,500	56,100	62,100
	Mid/High Income	60	1,710	3,820	6,850	11,000	36,800	57,000
	Home Children	58	1,710	3,790	7,000	11,200	39,900	56,100
	Day Care Children	49	2,310	6,060	8,460	15,800	57,000	213,000
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	104	<MDL	<MDL	4.48	8.08	27.2	50.3
	Urban	88	<MDL	<MDL	4.44	8.08	29.1	50.3
	Rural	16	<MDL	<MDL	6.09	8.30	27.2	27.2
	Low Income	28	<MDL	2.19	3.09	5.79	15.5	25.8
	Mid/High Income	64	<MDL	<MDL	4.71	9.79	29.1	49.7
	Home Children	60	<MDL	<MDL	4.56	10.2	32.9	50.3
	Day Care Children	44	<MDL	2.90	4.32	7.58	15.5	32.3
Potential Exposure – Aggregated (pmoles/day)	Overall	67	1,740	5,560	8,220	15,500	56,100	213,000
	Urban	55	1,740	5,560	8,440	15,900	56,100	62,100
	Rural	12	2,560	5,150	7,580	11,200	213,000	213,000
	Low Income	19	2,470	6,810	11,200	15,900	62,100	62,100
	Mid/High Income	40	1,740	4,350	7,720	13,400	34,200	57,100
	Home Children	41	1,740	4,910	7,360	14,200	29,100	56,100
	Day Care Children	26	2,560	6,270	9,540	27,000	62,100	213,000

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-8c. Bisphenol-A (80-05-7): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	101	79.2	0.367	0.426	0.270	0.688
	Urban	85	77.6	0.375	0.430	0.276	0.700
	Rural	16	87.5	0.323	0.416	0.241	0.627
	Low Income	32	84.4	0.545	0.670	0.340	0.910
	Mid/High Income	59	72.9	0.291	0.213	0.245	0.557
	Home Children	59	71.2	0.294	0.280	0.240	0.566
	Day Care Children	42	90.5	0.469	0.560	0.319	0.808
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	107	100.0	85.1	109	55.1	0.877
	Urban	93	100.0	81.1	90.2	54.2	0.868
	Rural	14	100.0	111	194	61.1	0.962
	Low Income	35	100.0	90.2	89.2	63.4	0.845
	Mid/High Income	60	100.0	72.6	87.3	48.1	0.864
	Home Children	58	100.0	68.5	66.0	48.1	0.836
	Day Care Children	49	100.0	105	142	64.6	0.906
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	104	67.3	0.054	0.073	0.034	0.898
	Urban	88	65.9	0.055	0.077	0.034	0.899
	Rural	16	75.0	0.047	0.042	0.032	0.918
	Low Income	28	82.1	0.036	0.043	0.025	0.802
	Mid/High Income	64	62.5	0.059	0.078	0.037	0.899
	Home Children	60	55.0	0.064	0.090	0.036	0.978
	Day Care Children	44	84.1	0.041	0.037	0.030	0.773
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	67	100.0	101	130	63.8	0.906
	Urban	55	100.0	98.7	107	65.4	0.892
	Rural	12	100.0	112	210	56.8	1.00
	Low Income	19	100.0	115	110	81.1	0.861
	Mid/High Income	40	100.0	82.1	99.0	54.4	0.871
	Home Children	41	100.0	76.7	70.6	55.6	0.811
	Day Care Children	26	100.0	140	184	79.1	1.02
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	101	79.2	1.61	1.87	1.18	0.688
	Urban	85	77.6	1.64	1.88	1.21	0.700
	Rural	16	87.5	1.42	1.82	1.06	0.627
	Low Income	32	84.4	2.39	2.94	1.49	0.910
	Mid/High Income	59	72.9	1.28	0.935	1.07	0.557
	Home Children	59	71.2	1.29	1.23	1.05	0.566
	Day Care Children	42	90.5	2.05	2.45	1.40	0.808
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	107	100.0	373	476	241	0.877
	Urban	93	100.0	355	395	238	0.868
	Rural	14	100.0	488	852	267	0.962
	Low Income	35	100.0	395	391	278	0.845
	Mid/High Income	60	100.0	318	382	211	0.864
	Home Children	58	100.0	300	289	211	0.836
	Day Care Children	49	100.0	459	622	283	0.906
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	104	67.3	0.237	0.319	0.148	0.898
	Urban	88	65.9	0.243	0.338	0.149	0.899
	Rural	16	75.0	0.204	0.185	0.141	0.918
	Low Income	28	82.1	0.160	0.188	0.109	0.802
	Mid/High Income	64	62.5	0.256	0.342	0.160	0.899
	Home Children	60	55.0	0.279	0.392	0.160	0.978
	Day Care Children	44	84.1	0.180	0.162	0.132	0.773
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	67	100.0	443	569	279	0.906
	Urban	55	100.0	432	471	286	0.892
	Rural	12	100.0	492	922	249	1.00
	Low Income	19	100.0	506	483	355	0.861
	Mid/High Income	40	100.0	359	434	238	0.871
	Home Children	41	100.0	336	309	244	0.811
	Day Care Children	26	100.0	612	808	347	1.02

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-8d. Bisphenol-A (80-05-7): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	101	<MDL	0.168	0.238	0.358	1.12	2.87
	Urban	85	<MDL	0.168	0.243	0.368	1.12	2.87
	Rural	16	<MDL	0.174	0.222	0.239	1.86	1.86
	Low Income	32	<MDL	0.174	0.294	0.497	2.35	2.87
	Mid/High Income	59	<MDL	<MDL	0.223	0.356	0.755	1.36
	Home Children	59	<MDL	<MDL	0.223	0.325	0.791	1.86
	Day Care Children	42	<MDL	0.176	0.278	0.513	1.34	2.87
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	107	10.2	30.5	52.1	92.5	290	775
	Urban	93	10.2	30.5	50.8	92.5	290	551
	Rural	14	15.9	38.1	57.2	87.7	775	775
	Low Income	35	13.8	33.5	67.7	98.8	328	434
	Mid/High Income	60	10.2	24.6	45.2	82.6	253	551
	Home Children	58	10.2	25.7	47.5	87.7	240	328
	Day Care Children	49	14.2	35.6	62.3	93.0	434	775
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	104	<MDL	<MDL	0.028	0.058	0.173	0.521
	Urban	88	<MDL	<MDL	0.027	0.058	0.185	0.521
	Rural	16	<MDL	<MDL	0.041	0.061	0.171	0.171
	Low Income	28	<MDL	0.015	0.025	0.035	0.145	0.203
	Mid/High Income	64	<MDL	<MDL	0.033	0.070	0.173	0.521
	Home Children	60	<MDL	<MDL	0.030	0.070	0.240	0.521
	Day Care Children	44	<MDL	0.018	0.027	0.052	0.133	0.173
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	67	10.4	34.1	60.8	93.9	328	775
	Urban	55	10.4	34.1	61.1	111	328	552
	Rural	12	16.1	32.1	50.1	86.1	775	775
	Low Income	19	14.8	37.9	86.0	130	434	434
	Mid/High Income	40	10.4	31.6	55.4	93.7	297	552
	Home Children	41	10.4	32.4	56.6	89.4	241	328
	Day Care Children	26	16.1	37.9	74.7	136	552	775
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	101	<MDL	0.735	1.04	1.57	4.91	12.6
	Urban	85	<MDL	0.735	1.07	1.61	4.91	12.6
	Rural	16	<MDL	0.763	0.975	1.05	8.13	8.13
	Low Income	32	<MDL	0.761	1.29	2.18	10.3	12.6
	Mid/High Income	59	<MDL	<MDL	0.976	1.56	3.31	5.94
	Home Children	59	<MDL	<MDL	0.978	1.42	3.47	8.13
	Day Care Children	42	<MDL	0.770	1.22	2.25	5.87	12.6
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	107	44.8	134	228	405	1,270	3,400
	Urban	93	44.8	134	223	405	1,270	2,410
	Rural	14	69.7	167	250	384	3,400	3,400
	Low Income	35	60.4	147	297	433	1,440	1,900
	Mid/High Income	60	44.8	108	198	362	1,110	2,410
	Home Children	58	44.8	113	208	384	1,050	1,440
	Day Care Children	49	62.4	156	273	407	1,900	3,400
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	104	<MDL	<MDL	0.122	0.255	0.756	2.28
	Urban	88	<MDL	<MDL	0.120	0.255	0.810	2.28
	Rural	16	<MDL	<MDL	0.179	0.267	0.748	0.748
	Low Income	28	<MDL	0.064	0.108	0.152	0.633	0.888
	Mid/High Income	64	<MDL	<MDL	0.143	0.309	0.756	2.28
	Home Children	60	<MDL	<MDL	0.133	0.306	1.05	2.28
	Day Care Children	44	<MDL	0.079	0.120	0.227	0.582	0.756
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	67	45.5	149	266	411	1,440	3,400
	Urban	55	45.5	149	267	485	1,440	2,420
	Rural	12	70.6	141	220	377	3,400	3,400
	Low Income	19	64.9	166	377	570	1,900	1,900
	Mid/High Income	40	45.5	138	243	410	1,300	2,420
	Home Children	41	45.5	142	248	392	1,050	1,440
	Day Care Children	26	70.6	166	327	594	2,420	3,400

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-9a. alpha-Chlordane (5103-71-9) : Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	97.6	7.40	17.7	2.80	1.14
	Urban	108	97.2	7.72	18.8	2.85	1.14
	Rural	17	100.0	5.36	8.20	2.48	1.17
	Low Income	39	100.0	7.80	17.4	3.12	1.13
	Mid/High Income	73	95.9	6.36	16.9	2.55	1.09
	Home Children	69	95.7	9.93	22.7	3.09	1.29
	Day Care Children	56	100.0	4.27	7.29	2.48	0.922
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	9.6	--	--	--	--
	Urban	108	10.2	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	15.0	--	--	--	--
	Mid/High Income	72	4.2	--	--	--	--
	Home Children	69	11.6	--	--	--	--
	Day Care Children	56	7.1	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	94.0	1.59	4.37	0.506	1.34
	Urban	99	93.9	1.73	4.70	0.541	1.33
	Rural	17	94.1	0.778	1.07	0.346	1.37
	Low Income	35	100.0	1.41	3.34	0.525	1.26
	Mid/High Income	68	89.7	1.66	4.88	0.521	1.35
	Home Children	63	88.9	2.17	5.80	0.538	1.51
	Day Care Children	53	100.0	0.896	1.14	0.472	1.13
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	97.6	18.1	43.2	6.83	1.14
	Urban	108	97.2	18.8	45.8	6.96	1.14
	Rural	17	100.0	13.1	20.0	6.05	1.17
	Low Income	39	100.0	19.0	42.5	7.62	1.13
	Mid/High Income	73	95.9	15.5	41.2	6.22	1.09
	Home Children	69	95.7	24.2	55.3	7.54	1.29
	Day Care Children	56	100.0	10.4	17.8	6.04	0.922
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	9.6	--	--	--	--
	Urban	108	10.2	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	15.0	--	--	--	--
	Mid/High Income	72	4.2	--	--	--	--
	Home Children	69	11.6	--	--	--	--
	Day Care Children	56	7.1	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	94.0	3.87	10.7	1.24	1.34
	Urban	99	93.9	4.21	11.5	1.32	1.33
	Rural	17	94.1	1.90	2.60	0.845	1.37
	Low Income	35	100.0	3.43	8.16	1.28	1.26
	Mid/High Income	68	89.7	4.04	11.9	1.27	1.35
	Home Children	63	88.9	5.29	14.2	1.31	1.51
	Day Care Children	53	100.0	2.19	2.77	1.15	1.13

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-9b. alpha-Chlordane (5103-71-9) : Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	1.27	2.12	4.86	36.7	132
	Urban	108	<MDL	1.35	2.18	4.92	49.2	132
	Rural	17	0.720	1.03	1.41	4.68	30.5	30.5
	Low Income	39	0.692	1.49	2.48	5.73	65.0	89.9
	Mid/High Income	73	<MDL	1.23	2.02	3.61	26.5	132
	Home Children	69	<MDL	1.33	2.17	4.98	65.0	132
	Day Care Children	56	0.615	1.25	1.97	4.07	12.7	50.9
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	38.4	56.5
	Urban	108	<MDL	<MDL	<MDL	<MDL	38.9	56.5
	Rural	17	<MDL	<MDL	<MDL	<MDL	37.3	37.3
	Low Income	40	<MDL	<MDL	<MDL	<MDL	42.1	56.5
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	55.9
	Home Children	69	<MDL	<MDL	<MDL	<MDL	36.6	56.5
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	38.9	47.6
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	<MDL	0.198	0.402	1.27	4.48	36.3
	Urban	99	<MDL	0.225	0.461	1.40	4.61	36.3
	Rural	17	<MDL	0.089	0.253	0.992	4.31	4.31
	Low Income	35	0.083	0.194	0.461	1.61	4.61	19.6
	Mid/High Income	68	<MDL	0.239	0.402	1.37	4.31	36.3
	Home Children	63	<MDL	0.238	0.478	1.49	15.9	36.3
	Day Care Children	53	0.083	0.186	0.368	0.992	4.31	4.61
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	3.09	5.16	11.9	89.5	322
	Urban	108	<MDL	3.28	5.31	12.0	120	322
	Rural	17	1.76	2.51	3.45	11.4	74.4	74.4
	Low Income	39	1.69	3.64	6.06	14.0	159	220
	Mid/High Income	73	<MDL	3.00	4.92	8.81	64.7	322
	Home Children	69	<MDL	3.25	5.29	12.2	159	322
	Day Care Children	56	1.50	3.06	4.81	9.94	30.9	124
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	93.7	138
	Urban	108	<MDL	<MDL	<MDL	<MDL	95.0	138
	Rural	17	<MDL	<MDL	<MDL	<MDL	91.1	91.1
	Low Income	40	<MDL	<MDL	<MDL	<MDL	103	138
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	136
	Home Children	69	<MDL	<MDL	<MDL	<MDL	89.2	138
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	95.0	116
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	<MDL	0.484	0.981	3.10	10.9	88.5
	Urban	99	<MDL	0.549	1.13	3.41	11.2	88.5
	Rural	17	<MDL	0.218	0.617	2.42	10.5	10.5
	Low Income	35	0.204	0.473	1.13	3.94	11.2	47.9
	Mid/High Income	68	<MDL	0.583	0.981	3.34	10.5	88.5
	Home Children	63	<MDL	0.580	1.17	3.63	38.8	88.5
	Day Care Children	53	0.202	0.455	0.899	2.42	10.5	11.2

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-9c. alpha-Chlordane (5103-71-9) : Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	97.6	0.225	0.572	0.080	1.17
	Urban	108	97.2	0.235	0.608	0.082	1.16
	Rural	17	100.0	0.156	0.230	0.071	1.21
	Low Income	39	100.0	0.235	0.577	0.088	1.18
	Mid/High Income	73	95.9	0.187	0.521	0.073	1.08
	Home Children	69	95.7	0.303	0.727	0.092	1.30
	Day Care Children	56	100.0	0.128	0.258	0.068	0.972
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	9.6	--	--	--	--
	Urban	108	10.2	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	15.0	--	--	--	--
	Mid/High Income	72	4.2	--	--	--	--
	Home Children	69	11.6	--	--	--	--
	Day Care Children	56	7.1	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	94.0	0.047	0.132	0.015	1.37
	Urban	99	93.9	0.051	0.142	0.016	1.36
	Rural	17	94.1	0.024	0.038	0.010	1.42
	Low Income	35	100.0	0.040	0.087	0.015	1.30
	Mid/High Income	68	89.7	0.048	0.148	0.015	1.36
	Home Children	63	88.9	0.064	0.175	0.016	1.52
	Day Care Children	53	100.0	0.026	0.035	0.013	1.18
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	97.6	0.548	1.40	0.195	1.17
	Urban	108	97.2	0.575	1.48	0.199	1.16
	Rural	17	100.0	0.380	0.562	0.174	1.21
	Low Income	39	100.0	0.575	1.41	0.214	1.18
	Mid/High Income	73	95.9	0.455	1.27	0.179	1.08
	Home Children	69	95.7	0.740	1.77	0.224	1.30
	Day Care Children	56	100.0	0.312	0.629	0.166	0.972
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	9.6	--	--	--	--
	Urban	108	10.2	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	15.0	--	--	--	--
	Mid/High Income	72	4.2	--	--	--	--
	Home Children	69	11.6	--	--	--	--
	Day Care Children	56	7.1	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	94.0	0.114	0.321	0.036	1.37
	Urban	99	93.9	0.124	0.345	0.038	1.36
	Rural	17	94.1	0.059	0.093	0.024	1.42
	Low Income	35	100.0	0.098	0.213	0.037	1.30
	Mid/High Income	68	89.7	0.117	0.362	0.037	1.36
	Home Children	63	88.9	0.157	0.426	0.039	1.52
	Day Care Children	53	100.0	0.064	0.085	0.032	1.18

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-9d. alpha-Chlordane (5103-71-9) : Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	0.037	0.063	0.122	0.939	4.15
	Urban	108	<MDL	0.038	0.068	0.118	1.29	4.15
	Rural	17	0.011	0.034	0.045	0.161	0.741	0.741
	Low Income	39	0.012	0.040	0.079	0.161	1.66	3.30
	Mid/High Income	73	<MDL	0.036	0.058	0.106	0.835	4.15
	Home Children	69	<MDL	0.039	0.064	0.154	1.66	4.15
	Day Care Children	56	0.011	0.035	0.061	0.111	0.446	1.81
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	1.26	1.92
	Urban	108	<MDL	<MDL	<MDL	<MDL	1.22	1.92
	Rural	17	<MDL	<MDL	<MDL	<MDL	1.42	1.42
	Low Income	40	<MDL	<MDL	<MDL	<MDL	1.26	1.45
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	1.92
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1.26	1.92
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	1.26	1.42
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	<MDL	0.006	0.011	0.039	0.137	1.14
	Urban	99	<MDL	0.006	0.011	0.039	0.137	1.14
	Rural	17	<MDL	0.003	0.008	0.025	0.158	0.158
	Low Income	35	0.002	0.005	0.011	0.040	0.137	0.503
	Mid/High Income	68	<MDL	0.007	0.011	0.039	0.105	1.14
	Home Children	63	<MDL	0.007	0.012	0.042	0.476	1.14
	Day Care Children	53	0.001	0.005	0.011	0.029	0.113	0.158
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	0.090	0.153	0.298	2.29	10.1
	Urban	108	<MDL	0.094	0.166	0.288	3.15	10.1
	Rural	17	0.028	0.084	0.111	0.393	1.81	1.81
	Low Income	39	0.030	0.097	0.192	0.393	4.06	8.06
	Mid/High Income	73	<MDL	0.088	0.143	0.259	2.04	10.1
	Home Children	69	<MDL	0.096	0.155	0.376	4.06	10.1
	Day Care Children	56	0.028	0.086	0.148	0.271	1.09	4.41
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	3.06	4.70
	Urban	108	<MDL	<MDL	<MDL	<MDL	2.97	4.70
	Rural	17	<MDL	<MDL	<MDL	<MDL	3.46	3.46
	Low Income	40	<MDL	<MDL	<MDL	<MDL	3.08	3.53
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	4.70
	Home Children	69	<MDL	<MDL	<MDL	<MDL	3.07	4.70
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	3.06	3.46
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	<MDL	0.014	0.027	0.095	0.335	2.78
	Urban	99	<MDL	0.015	0.028	0.096	0.335	2.78
	Rural	17	<MDL	0.008	0.021	0.062	0.386	0.386
	Low Income	35	0.004	0.013	0.028	0.097	0.335	1.23
	Mid/High Income	68	<MDL	0.016	0.027	0.095	0.256	2.78
	Home Children	63	<MDL	0.018	0.029	0.103	1.16	2.78
	Day Care Children	53	0.003	0.013	0.027	0.071	0.277	0.386

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-10a. gamma-Chlordane (5103-74-2): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	99.2	11.8	37.9	3.84	1.18
	Urban	108	99.1	12.5	40.5	3.92	1.18
	Rural	17	100.0	7.05	10.1	3.38	1.16
	Low Income	39	100.0	11.4	27.6	4.28	1.15
	Mid/High Income	73	98.6	11.3	43.7	3.49	1.15
	Home Children	69	98.6	16.5	49.9	4.22	1.35
	Day Care Children	56	100.0	5.95	9.93	3.42	0.929
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	8.0	--	--	--	--
	Urban	108	8.3	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	10.0	--	--	--	--
	Mid/High Income	72	4.2	--	--	--	--
	Home Children	69	10.1	--	--	--	--
	Day Care Children	56	5.4	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	93.1	2.02	7.83	0.544	1.38
	Urban	99	92.9	2.21	8.45	0.576	1.36
	Rural	17	94.1	0.947	1.33	0.392	1.44
	Low Income	35	100.0	1.51	3.37	0.583	1.25
	Mid/High Income	68	88.2	2.35	9.81	0.551	1.41
	Home Children	63	87.3	2.88	10.5	0.564	1.56
	Day Care Children	53	100.0	0.998	1.29	0.522	1.13
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	99.2	28.8	92.4	9.38	1.18
	Urban	108	99.1	30.6	98.9	9.57	1.18
	Rural	17	100.0	17.2	24.6	8.26	1.16
	Low Income	39	100.0	27.8	67.3	10.4	1.15
	Mid/High Income	73	98.6	27.6	107	8.52	1.15
	Home Children	69	98.6	40.4	122	10.3	1.35
	Day Care Children	56	100.0	14.5	24.2	8.36	0.929
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	8.0	--	--	--	--
	Urban	108	8.3	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	10.0	--	--	--	--
	Mid/High Income	72	4.2	--	--	--	--
	Home Children	69	10.1	--	--	--	--
	Day Care Children	56	5.4	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	93.1	4.93	19.1	1.33	1.38
	Urban	99	92.9	5.38	20.6	1.41	1.36
	Rural	17	94.1	2.31	3.26	0.956	1.44
	Low Income	35	100.0	3.68	8.23	1.42	1.25
	Mid/High Income	68	88.2	5.73	23.9	1.35	1.41
	Home Children	63	87.3	7.03	25.7	1.38	1.56
	Day Care Children	53	100.0	2.44	3.14	1.27	1.13

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-10b. gamma-Chlordane (5103-74-2): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	1.79	2.69	6.81	46.0	368
	Urban	108	<MDL	1.87	2.94	6.90	68.2	368
	Rural	17	0.934	1.49	2.02	6.72	35.6	35.6
	Low Income	39	0.863	1.92	3.17	7.38	89.1	153
	Mid/High Income	73	<MDL	1.70	2.48	5.63	32.3	368
	Home Children	69	<MDL	1.84	2.69	7.38	89.1	368
	Day Care Children	56	0.882	1.76	2.73	6.13	18.6	68.2
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	37.3	49.9
	Urban	108	<MDL	<MDL	<MDL	<MDL	38.0	49.9
	Rural	17	<MDL	<MDL	<MDL	<MDL	37.3	37.3
	Low Income	40	<MDL	<MDL	<MDL	<MDL	37.3	47.3
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	49.9
	Home Children	69	<MDL	<MDL	<MDL	<MDL	36.2	49.9
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	38.4	47.6
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	<MDL	0.225	0.450	1.35	5.36	79.8
	Urban	99	<MDL	0.243	0.457	1.40	5.37	79.8
	Rural	17	<MDL	0.099	0.292	1.20	5.36	5.36
	Low Income	35	0.088	0.209	0.481	1.73	5.37	19.7
	Mid/High Income	68	<MDL	0.246	0.450	1.34	4.66	79.8
	Home Children	63	<MDL	0.234	0.457	1.60	15.0	79.8
	Day Care Children	53	0.088	0.216	0.408	1.20	4.66	5.37
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	4.36	6.57	16.6	112	899
	Urban	108	<MDL	4.56	7.17	16.8	166	899
	Rural	17	2.28	3.63	4.92	16.4	86.8	86.8
	Low Income	39	2.11	4.69	7.74	18.0	217	373
	Mid/High Income	73	<MDL	4.15	6.04	13.7	78.9	899
	Home Children	69	<MDL	4.50	6.57	18.0	217	899
	Day Care Children	56	2.15	4.29	6.67	15.0	45.3	166
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	91.1	122
	Urban	108	<MDL	<MDL	<MDL	<MDL	92.8	122
	Rural	17	<MDL	<MDL	<MDL	<MDL	91.1	91.1
	Low Income	40	<MDL	<MDL	<MDL	<MDL	90.9	116
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	122
	Home Children	69	<MDL	<MDL	<MDL	<MDL	88.4	122
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	93.7	116
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	<MDL	0.550	1.10	3.30	13.1	195
	Urban	99	<MDL	0.594	1.12	3.43	13.1	195
	Rural	17	<MDL	0.241	0.713	2.94	13.1	13.1
	Low Income	35	0.215	0.509	1.17	4.22	13.1	48.0
	Mid/High Income	68	<MDL	0.601	1.10	3.26	11.4	195
	Home Children	63	<MDL	0.572	1.12	3.90	36.6	195
	Day Care Children	53	0.215	0.527	0.995	2.94	11.4	13.1

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-10c. gamma-Chlordane (5103-74-2): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	99.2	0.362	1.21	0.110	1.20
	Urban	108	99.1	0.386	1.30	0.112	1.21
	Rural	17	100.0	0.206	0.292	0.097	1.19
	Low Income	39	100.0	0.352	0.946	0.120	1.22
	Mid/High Income	73	98.6	0.336	1.37	0.101	1.14
	Home Children	69	98.6	0.511	1.59	0.125	1.35
	Day Care Children	56	100.0	0.178	0.351	0.094	0.981
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	8.0	--	--	--	--
	Urban	108	8.3	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	10.0	--	--	--	--
	Mid/High Income	72	4.2	--	--	--	--
	Home Children	69	10.1	--	--	--	--
	Day Care Children	56	5.4	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	93.1	0.060	0.243	0.016	1.40
	Urban	99	92.9	0.066	0.263	0.017	1.39
	Rural	17	94.1	0.030	0.048	0.011	1.49
	Low Income	35	100.0	0.043	0.088	0.017	1.30
	Mid/High Income	68	88.2	0.070	0.307	0.016	1.42
	Home Children	63	87.3	0.087	0.327	0.017	1.57
	Day Care Children	53	100.0	0.029	0.040	0.014	1.18
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	99.2	0.883	2.96	0.268	1.20
	Urban	108	99.1	0.943	3.17	0.274	1.21
	Rural	17	100.0	0.502	0.713	0.238	1.19
	Low Income	39	100.0	0.858	2.31	0.293	1.22
	Mid/High Income	73	98.6	0.820	3.34	0.246	1.14
	Home Children	69	98.6	1.25	3.89	0.305	1.35
	Day Care Children	56	100.0	0.435	0.856	0.229	0.981
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	8.0	--	--	--	--
	Urban	108	8.3	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	10.0	--	--	--	--
	Mid/High Income	72	4.2	--	--	--	--
	Home Children	69	10.1	--	--	--	--
	Day Care Children	56	5.4	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	93.1	0.147	0.594	0.038	1.40
	Urban	99	92.9	0.160	0.641	0.041	1.39
	Rural	17	94.1	0.072	0.117	0.028	1.49
	Low Income	35	100.0	0.106	0.216	0.041	1.30
	Mid/High Income	68	88.2	0.171	0.748	0.039	1.42
	Home Children	63	87.3	0.211	0.798	0.041	1.57
	Day Care Children	53	100.0	0.071	0.098	0.035	1.18

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-10d. gamma-Chlordane (5103-74-2): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	0.052	0.088	0.180	1.18	11.6
	Urban	108	<MDL	0.052	0.090	0.176	1.85	11.6
	Rural	17	0.019	0.045	0.066	0.231	0.998	0.998
	Low Income	39	0.015	0.051	0.106	0.232	2.28	5.61
	Mid/High Income	73	<MDL	0.050	0.078	0.149	1.02	11.6
	Home Children	69	<MDL	0.053	0.086	0.232	2.28	11.6
	Day Care Children	56	0.015	0.049	0.089	0.149	0.757	2.42
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	1.22	1.42
	Urban	108	<MDL	<MDL	<MDL	<MDL	1.19	1.28
	Rural	17	<MDL	<MDL	<MDL	<MDL	1.42	1.42
	Low Income	40	<MDL	<MDL	<MDL	<MDL	1.25	1.27
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	1.28
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1.21	1.28
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	1.26	1.42
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	<MDL	0.006	0.012	0.039	0.160	2.51
	Urban	99	<MDL	0.007	0.012	0.039	0.160	2.51
	Rural	17	<MDL	0.004	0.009	0.032	0.197	0.197
	Low Income	35	0.002	0.006	0.012	0.045	0.160	0.503
	Mid/High Income	68	<MDL	0.007	0.012	0.039	0.109	2.51
	Home Children	63	<MDL	0.007	0.013	0.048	0.453	2.51
	Day Care Children	53	0.002	0.006	0.012	0.034	0.121	0.197
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	0.126	0.216	0.439	2.88	28.3
	Urban	108	<MDL	0.127	0.220	0.430	4.51	28.3
	Rural	17	0.046	0.109	0.160	0.565	2.44	2.44
	Low Income	39	0.038	0.126	0.258	0.567	5.57	13.7
	Mid/High Income	73	<MDL	0.122	0.191	0.364	2.48	28.3
	Home Children	69	<MDL	0.130	0.211	0.567	5.57	28.3
	Day Care Children	56	0.038	0.120	0.217	0.363	1.85	5.91
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	2.97	3.46
	Urban	108	<MDL	<MDL	<MDL	<MDL	2.89	3.12
	Rural	17	<MDL	<MDL	<MDL	<MDL	3.46	3.46
	Low Income	40	<MDL	<MDL	<MDL	<MDL	3.05	3.10
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	3.12
	Home Children	69	<MDL	<MDL	<MDL	<MDL	2.96	3.12
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	3.06	3.46
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	<MDL	0.016	0.030	0.095	0.390	6.13
	Urban	99	<MDL	0.016	0.030	0.096	0.390	6.13
	Rural	17	<MDL	0.009	0.022	0.078	0.480	0.480
	Low Income	35	0.004	0.016	0.030	0.110	0.390	1.23
	Mid/High Income	68	<MDL	0.016	0.030	0.095	0.266	6.13
	Home Children	63	<MDL	0.017	0.031	0.117	1.11	6.13
	Day Care Children	53	0.004	0.016	0.029	0.082	0.295	0.480

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-11a. Chlorpyrifos (2921-88-2): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	107	100.0	33.4	60.5	17.1	1.08
	Urban	90	100.0	37.1	65.2	18.8	1.11
	Rural	17	100.0	13.5	11.9	10.3	0.719
	Low Income	33	100.0	42.3	55.8	23.8	1.10
	Mid/High Income	64	100.0	22.6	27.0	13.7	0.978
	Home Children	60	100.0	34.1	75.8	14.4	1.14
	Day Care Children	47	100.0	32.5	32.8	21.3	0.957
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	79.2	131	180	78.9	0.970
	Urban	108	78.7	137	191	80.3	0.996
	Rural	17	82.4	96.0	83.1	70.8	0.802
	Low Income	40	95.0	178	180	125	0.831
	Mid/High Income	72	73.6	110	188	62.1	0.970
	Home Children	69	71.0	121	157	72.0	1.01
	Day Care Children	56	89.3	144	206	88.3	0.916
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	27.8	164	2.97	1.54
	Urban	99	100.0	32.1	177	3.26	1.60
	Rural	17	100.0	2.94	4.22	1.74	1.00
	Low Income	35	100.0	58.4	264	5.07	1.79
	Mid/High Income	68	100.0	5.03	7.46	2.40	1.24
	Home Children	63	100.0	17.1	103	2.02	1.51
	Day Care Children	53	100.0	40.6	215	4.69	1.46
Potential Exposure – Aggregated (ng/day)	Overall	96	100.0	178	234	117	0.851
	Urban	79	100.0	192	254	123	0.879
	Rural	17	100.0	112	80.6	90.7	0.674
	Low Income	28	100.0	211	168	169	0.661
	Mid/High Income	58	100.0	143	209	92.8	0.839
	Home Children	55	100.0	164	234	102	0.904
	Day Care Children	41	100.0	196	236	139	0.749
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	107	100.0	95.2	173	48.7	1.08
	Urban	90	100.0	106	186	53.6	1.11
	Rural	17	100.0	38.5	34.0	29.5	0.719
	Low Income	33	100.0	121	159	67.9	1.10
	Mid/High Income	64	100.0	64.4	77.1	39.1	0.978
	Home Children	60	100.0	97.2	216	41.0	1.14
	Day Care Children	47	100.0	92.7	93.5	60.8	0.957
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	79.2	375	514	225	0.970
	Urban	108	78.7	391	544	229	0.996
	Rural	17	82.4	274	237	202	0.802
	Low Income	40	95.0	509	514	358	0.831
	Mid/High Income	72	73.6	314	538	177	0.970
	Home Children	69	71.0	346	449	205	1.01
	Day Care Children	56	89.3	411	587	252	0.916
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	79.3	467	8.47	1.54
	Urban	99	100.0	91.5	505	9.29	1.60
	Rural	17	100.0	8.38	12.0	4.96	1.00
	Low Income	35	100.0	167	753	14.4	1.79
	Mid/High Income	68	100.0	14.4	21.3	6.84	1.24
	Home Children	63	100.0	48.7	294	5.77	1.51
	Day Care Children	53	100.0	116	614	13.4	1.46
Potential Exposure – Aggregated (pmoles/day)	Overall	96	100.0	507	668	333	0.851
	Urban	79	100.0	547	723	352	0.879
	Rural	17	100.0	321	230	259	0.674
	Low Income	28	100.0	602	478	481	0.661
	Mid/High Income	58	100.0	409	595	265	0.839
	Home Children	55	100.0	467	667	292	0.904
	Day Care Children	41	100.0	560	674	398	0.749

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-11b. Chlorpyrifos (2921-88-2): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	107	1.14	7.73	14.6	34.4	108	506
	Urban	90	1.14	7.88	17.3	37.2	129	506
	Rural	17	3.03	6.34	10.3	12.0	51.2	51.2
	Low Income	33	2.16	8.73	28.5	51.4	176	285
	Mid/High Income	64	1.14	6.90	11.5	28.2	69.1	136
	Home Children	60	1.14	6.96	11.1	27.8	133	506
	Day Care Children	47	2.16	9.62	25.2	39.3	100	176
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	38.9	77.9	158	356	1,320
	Urban	108	<MDL	38.0	78.2	158	405	1,320
	Rural	17	<MDL	41.9	73.9	101	336	336
	Low Income	40	<MDL	73.0	126	205	650	876
	Mid/High Income	72	<MDL	<MDL	57.2	104	324	1,320
	Home Children	69	<MDL	<MDL	76.6	145	336	876
	Day Care Children	56	<MDL	44.9	79.9	158	649	1,320
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	0.175	1.05	2.67	6.24	33.5	1,570
	Urban	99	0.175	1.07	3.39	7.78	43.1	1,570
	Rural	17	0.217	0.862	2.12	3.05	18.4	18.4
	Low Income	35	0.217	1.47	4.33	11.4	162	1,570
	Mid/High Income	68	0.179	1.02	2.33	5.07	18.4	43.1
	Home Children	63	0.175	0.732	1.92	4.56	18.4	820
	Day Care Children	53	0.714	1.56	4.17	9.79	113	1,570
Potential Exposure – Aggregated (ng/day)	Overall	96	19.4	77.7	109	172	491	1,520
	Urban	79	19.4	79.0	119	180	843	1,520
	Rural	17	33.3	56.1	89.2	129	340	340
	Low Income	28	35.2	105	159	268	491	843
	Mid/High Income	58	19.4	49.3	85.3	157	412	1,360
	Home Children	55	19.4	55.9	89.9	171	465	1,520
	Day Care Children	41	35.7	90.2	127	184	491	1,360
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	107	3.27	22.0	41.6	98.1	309	1,440
	Urban	90	3.27	22.5	49.5	106	368	1,440
	Rural	17	8.64	18.1	29.5	34.3	146	146
	Low Income	33	6.16	24.9	81.4	147	503	812
	Mid/High Income	64	3.27	19.7	32.7	80.5	197	389
	Home Children	60	3.27	19.9	31.8	79.3	378	1,440
	Day Care Children	47	6.16	27.4	72.0	112	286	503
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	111	222	450	1,020	3,770
	Urban	108	<MDL	108	223	451	1,160	3,770
	Rural	17	<MDL	120	211	289	957	957
	Low Income	40	<MDL	208	359	584	1,850	2,500
	Mid/High Income	72	<MDL	<MDL	163	296	925	3,770
	Home Children	69	<MDL	<MDL	218	413	957	2,500
	Day Care Children	56	<MDL	128	228	451	1,850	3,770
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	0.498	2.99	7.61	17.8	95.6	4,460
	Urban	99	0.498	3.06	9.68	22.2	123	4,460
	Rural	17	0.620	2.46	6.04	8.70	52.4	52.4
	Low Income	35	0.620	4.21	12.4	32.4	461	4,460
	Mid/High Income	68	0.511	2.91	6.65	14.5	52.4	123
	Home Children	63	0.498	2.09	5.48	13.0	52.4	2,340
	Day Care Children	53	2.04	4.44	11.9	27.9	322	4,460
Potential Exposure – Aggregated (pmoles/day)	Overall	96	55.3	222	310	491	1,400	4,320
	Urban	79	55.3	225	338	514	2,400	4,320
	Rural	17	95.0	160	255	369	970	970
	Low Income	28	101	300	453	765	1,400	2,400
	Mid/High Income	58	55.3	141	243	447	1,180	3,890
	Home Children	55	55.3	159	256	488	1,330	4,320
	Day Care Children	41	102	257	361	524	1,400	3,890

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-11c. Chlorpyrifos (2921-88-2): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	107	100.0	1.06	2.33	0.490	1.11
	Urban	90	100.0	1.18	2.51	0.539	1.14
	Rural	17	100.0	0.408	0.409	0.298	0.772
	Low Income	33	100.0	1.31	1.99	0.654	1.18
	Mid/High Income	64	100.0	0.654	0.788	0.399	0.969
	Home Children	60	100.0	1.14	2.97	0.423	1.18
	Day Care Children	47	100.0	0.958	1.07	0.593	0.996
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	79.2	3.89	5.60	2.26	0.985
	Urban	108	78.7	4.09	5.95	2.30	1.02
	Rural	17	82.4	2.64	2.06	2.04	0.735
	Low Income	40	95.0	5.47	6.53	3.56	0.882
	Mid/High Income	72	73.6	3.17	5.28	1.78	0.974
	Home Children	69	71.0	3.71	5.19	2.13	1.02
	Day Care Children	56	89.3	4.11	6.10	2.43	0.937
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	0.962	5.74	0.086	1.58
	Urban	99	100.0	1.11	6.21	0.094	1.64
	Rural	17	100.0	0.087	0.119	0.050	1.08
	Low Income	35	100.0	1.94	8.82	0.145	1.86
	Mid/High Income	68	100.0	0.140	0.195	0.069	1.24
	Home Children	63	100.0	0.654	4.20	0.060	1.56
	Day Care Children	53	100.0	1.33	7.18	0.130	1.51
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	96	100.0	5.39	8.25	3.37	0.861
	Urban	79	100.0	5.87	8.99	3.56	0.897
	Rural	17	100.0	3.13	2.00	2.61	0.624
	Low Income	28	100.0	6.38	6.62	4.73	0.728
	Mid/High Income	58	100.0	4.12	5.81	2.70	0.823
	Home Children	55	100.0	5.21	9.02	3.05	0.920
	Day Care Children	41	100.0	5.63	7.21	3.87	0.764
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	107	100.0	3.02	6.63	1.40	1.11
	Urban	90	100.0	3.37	7.17	1.54	1.14
	Rural	17	100.0	1.16	1.17	0.850	0.772
	Low Income	33	100.0	3.73	5.67	1.87	1.18
	Mid/High Income	64	100.0	1.87	2.25	1.14	0.969
	Home Children	60	100.0	3.24	8.47	1.21	1.18
	Day Care Children	47	100.0	2.73	3.05	1.69	0.996
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	79.2	11.1	16.0	6.45	0.985
	Urban	108	78.7	11.7	17.0	6.56	1.02
	Rural	17	82.4	7.52	5.88	5.81	0.735
	Low Income	40	95.0	15.6	18.6	10.2	0.882
	Mid/High Income	72	73.6	9.04	15.1	5.08	0.974
	Home Children	69	71.0	10.6	14.8	6.09	1.02
	Day Care Children	56	89.3	11.7	17.4	6.93	0.937
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	2.74	16.4	0.244	1.58
	Urban	99	100.0	3.17	17.7	0.268	1.64
	Rural	17	100.0	0.248	0.339	0.143	1.08
	Low Income	35	100.0	5.54	25.2	0.413	1.86
	Mid/High Income	68	100.0	0.401	0.557	0.198	1.24
	Home Children	63	100.0	1.87	12.0	0.172	1.56
	Day Care Children	53	100.0	3.79	20.5	0.370	1.51
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	96	100.0	15.4	23.5	9.62	0.861
	Urban	79	100.0	16.7	25.6	10.2	0.897
	Rural	17	100.0	8.93	5.71	7.45	0.624
	Low Income	28	100.0	18.2	18.9	13.5	0.728
	Mid/High Income	58	100.0	11.7	16.6	7.70	0.823
	Home Children	55	100.0	14.9	25.7	8.69	0.920
	Day Care Children	41	100.0	16.0	20.6	11.0	0.764

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-11d. Chlorpyrifos (2921-88-2): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	107	0.039	0.218	0.383	0.993	3.38	20.7
	Urban	90	0.039	0.238	0.466	1.13	3.85	20.7
	Rural	17	0.099	0.210	0.284	0.401	1.76	1.76
	Low Income	33	0.055	0.258	0.572	1.45	5.25	10.5
	Mid/High Income	64	0.039	0.214	0.316	0.831	2.06	4.29
	Home Children	60	0.039	0.198	0.288	0.831	3.83	20.7
	Day Care Children	47	0.055	0.258	0.572	1.13	3.23	5.25
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	1.07	2.06	4.32	11.4	33.9
	Urban	108	<MDL	1.10	2.05	4.39	11.6	33.9
	Rural	17	<MDL	1.04	2.28	2.83	7.86	7.86
	Low Income	40	<MDL	2.02	3.18	6.09	24.1	30.2
	Mid/High Income	72	<MDL	<MDL	1.71	2.90	9.40	33.9
	Home Children	69	<MDL	<MDL	1.99	4.19	11.4	30.2
	Day Care Children	56	<MDL	1.23	2.10	4.33	21.7	33.9
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.003	0.031	0.083	0.181	1.10	52.2
	Urban	99	0.003	0.031	0.093	0.212	1.19	52.2
	Rural	17	0.005	0.020	0.059	0.106	0.518	0.518
	Low Income	35	0.005	0.033	0.116	0.348	4.81	52.2
	Mid/High Income	68	0.003	0.030	0.062	0.165	0.517	1.19
	Home Children	63	0.003	0.020	0.056	0.141	0.602	33.4
	Day Care Children	53	0.015	0.050	0.112	0.212	4.61	52.2
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	96	0.562	2.04	3.10	5.11	17.1	61.8
	Urban	79	0.562	2.09	3.18	5.19	28.7	61.8
	Rural	17	1.05	1.47	2.73	3.65	7.97	7.97
	Low Income	28	1.14	3.02	4.45	7.34	17.1	34.4
	Mid/High Income	58	0.562	1.61	2.54	3.80	11.6	34.9
	Home Children	55	0.562	1.81	2.74	5.08	17.1	61.8
	Day Care Children	41	1.05	2.35	3.32	5.15	14.6	34.9
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	107	0.112	0.623	1.09	2.83	9.64	58.9
	Urban	90	0.112	0.679	1.33	3.22	11.0	58.9
	Rural	17	0.282	0.599	0.811	1.14	5.03	5.03
	Low Income	33	0.158	0.735	1.63	4.13	15.0	29.8
	Mid/High Income	64	0.112	0.610	0.900	2.37	5.86	12.2
	Home Children	60	0.112	0.564	0.820	2.37	10.9	58.9
	Day Care Children	47	0.158	0.735	1.63	3.21	9.22	15.0
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	3.05	5.87	12.3	32.6	96.7
	Urban	108	<MDL	3.13	5.86	12.5	33.2	96.7
	Rural	17	<MDL	2.96	6.50	8.09	22.4	22.4
	Low Income	40	<MDL	5.77	9.07	17.4	68.8	86.0
	Mid/High Income	72	<MDL	<MDL	4.88	8.28	26.8	96.7
	Home Children	69	<MDL	<MDL	5.69	11.9	32.6	86.0
	Day Care Children	56	<MDL	3.50	6.00	12.4	61.8	96.7
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.010	0.087	0.237	0.517	3.12	149
	Urban	99	0.010	0.089	0.267	0.603	3.38	149
	Rural	17	0.015	0.057	0.169	0.303	1.48	1.48
	Low Income	35	0.015	0.095	0.332	0.992	13.7	149
	Mid/High Income	68	0.010	0.085	0.176	0.470	1.48	3.38
	Home Children	63	0.010	0.057	0.159	0.401	1.72	95.3
	Day Care Children	53	0.042	0.143	0.319	0.604	13.2	149
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	96	1.60	5.82	8.85	14.6	48.7	176
	Urban	79	1.60	5.96	9.08	14.8	81.8	176
	Rural	17	2.99	4.20	7.80	10.4	22.7	22.7
	Low Income	28	3.26	8.60	12.7	20.9	48.7	98.1
	Mid/High Income	58	1.60	4.59	7.24	10.9	33.2	99.7
	Home Children	55	1.60	5.16	7.82	14.5	48.7	176
	Day Care Children	41	2.99	6.71	9.47	14.7	41.7	99.7

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-12a. Chrysene (218-01-9): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	105	64.8	1.06	1.49	0.757	0.663
	Urban	89	70.8	1.15	1.60	0.804	0.699
	Rural	16	31.3	--	--	--	--
	Low Income	34	82.4	1.64	2.38	0.979	0.892
	Mid/High Income	61	54.1	0.816	0.655	0.690	0.504
	Home Children	58	53.4	0.772	0.703	0.651	0.480
	Day Care Children	47	78.7	1.41	2.04	0.912	0.802
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	48.8	--	--	--	--
	Urban	110	48.2	--	--	--	--
	Rural	17	52.9	41.5	28.0	35.6	0.538
	Low Income	41	58.5	44.2	46.7	34.3	0.616
	Mid/High Income	73	45.2	--	--	--	--
	Home Children	69	42.0	--	--	--	--
	Day Care Children	58	56.9	47.2	63.1	33.8	0.667
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	100.0	82.3	202	34.0	1.21
	Urban	98	100.0	91.5	217	39.5	1.15
	Rural	17	100.0	29.3	36.2	14.3	1.25
	Low Income	35	100.0	42.0	47.7	26.6	0.984
	Mid/High Income	67	100.0	113	259	41.1	1.35
	Home Children	62	100.0	54.5	115	23.0	1.20
	Day Care Children	53	100.0	115	269	53.7	1.07
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	105	64.8	4.64	6.52	3.32	0.663
	Urban	89	70.8	5.03	7.01	3.52	0.699
	Rural	16	31.3	--	--	--	--
	Low Income	34	82.4	7.17	10.4	4.29	0.892
	Mid/High Income	61	54.1	3.58	2.87	3.02	0.504
	Home Children	58	53.4	3.38	3.08	2.85	0.480
	Day Care Children	47	78.7	6.18	8.95	4.00	0.802
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	48.8	--	--	--	--
	Urban	110	48.2	--	--	--	--
	Rural	17	52.9	182	123	156	0.538
	Low Income	41	58.5	193	205	150	0.616
	Mid/High Income	73	45.2	--	--	--	--
	Home Children	69	42.0	--	--	--	--
	Day Care Children	58	56.9	207	276	148	0.667
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	100.0	361	886	149	1.21
	Urban	98	100.0	401	952	173	1.15
	Rural	17	100.0	128	159	62.7	1.25
	Low Income	35	100.0	184	209	117	0.984
	Mid/High Income	67	100.0	493	1,130	180	1.35
	Home Children	62	100.0	239	504	101	1.20
	Day Care Children	53	100.0	503	1,180	235	1.07

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-12b. Chrysene (218-01-9): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	105	<MDL	<MDL	0.561	0.824	3.49	12.7
	Urban	89	<MDL	<MDL	0.579	0.951	3.89	12.7
	Rural	16	<MDL	<MDL	<MDL	0.562	1.05	1.05
	Low Income	34	<MDL	0.524	0.671	1.64	5.89	12.7
	Mid/High Income	61	<MDL	<MDL	0.538	0.734	1.92	3.99
	Home Children	58	<MDL	<MDL	0.528	0.704	2.87	3.99
	Day Care Children	47	<MDL	0.511	0.621	1.64	4.59	12.7
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	<MDL	38.0	143	605
	Urban	110	<MDL	<MDL	<MDL	37.1	146	605
	Rural	17	<MDL	<MDL	30.6	39.1	130	130
	Low Income	41	<MDL	<MDL	30.6	38.8	143	274
	Mid/High Income	73	<MDL	<MDL	<MDL	33.6	146	605
	Home Children	69	<MDL	<MDL	<MDL	37.1	130	605
	Day Care Children	58	<MDL	<MDL	30.6	38.0	274	339
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	1.76	15.7	29.0	71.1	311	1,900
	Urban	98	4.29	17.7	35.5	71.4	332	1,900
	Rural	17	1.76	6.04	8.43	27.5	114	114
	Low Income	35	1.76	15.0	24.5	50.6	144	247
	Mid/High Income	67	3.37	15.7	42.7	99.2	346	1,900
	Home Children	62	1.76	9.52	21.3	45.7	211	796
	Day Care Children	53	6.23	24.8	50.6	101	332	1,900
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	105	<MDL	<MDL	2.46	3.61	15.3	55.8
	Urban	89	<MDL	<MDL	2.54	4.16	17.1	55.8
	Rural	16	<MDL	<MDL	<MDL	2.46	4.61	4.61
	Low Income	34	<MDL	2.29	2.94	7.20	25.8	55.8
	Mid/High Income	61	<MDL	<MDL	2.36	3.21	8.43	17.5
	Home Children	58	<MDL	<MDL	2.31	3.08	12.6	17.5
	Day Care Children	47	<MDL	2.24	2.72	7.20	20.1	55.8
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	<MDL	167	625	2,650
	Urban	110	<MDL	<MDL	<MDL	162	639	2,650
	Rural	17	<MDL	<MDL	134	171	569	569
	Low Income	41	<MDL	<MDL	134	170	625	1,200
	Mid/High Income	73	<MDL	<MDL	<MDL	147	639	2,650
	Home Children	69	<MDL	<MDL	<MDL	162	569	2,650
	Day Care Children	58	<MDL	<MDL	134	167	1,200	1,480
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	7.71	68.7	127	311	1,360	8,310
	Urban	98	18.8	77.6	156	313	1,460	8,310
	Rural	17	7.71	26.5	36.9	121	499	499
	Low Income	35	7.71	65.5	107	222	631	1,080
	Mid/High Income	67	14.8	68.7	187	434	1,520	8,310
	Home Children	62	7.71	41.7	93.3	200	926	3,490
	Day Care Children	53	27.3	109	222	441	1,460	8,310

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-12c. Chrysene (218-01-9): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	105	64.8	0.030	0.041	0.022	0.677
	Urban	89	70.8	0.033	0.044	0.023	0.712
	Rural	16	31.3	--	--	--	--
	Low Income	34	82.4	0.045	0.065	0.027	0.920
	Mid/High Income	61	54.1	0.024	0.019	0.020	0.519
	Home Children	58	53.4	0.023	0.023	0.019	0.497
	Day Care Children	47	78.7	0.039	0.055	0.025	0.828
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	48.8	--	--	--	--
	Urban	110	48.2	--	--	--	--
	Rural	17	52.9	1.27	1.03	1.02	0.623
	Low Income	41	58.5	1.31	1.55	0.969	0.680
	Mid/High Income	73	45.2	--	--	--	--
	Home Children	69	42.0	--	--	--	--
	Day Care Children	58	56.9	1.36	1.93	0.930	0.707
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	100.0	2.40	5.25	0.981	1.23
	Urban	98	100.0	2.67	5.63	1.14	1.17
	Rural	17	100.0	0.829	1.05	0.412	1.23
	Low Income	35	100.0	1.30	1.71	0.761	1.04
	Mid/High Income	67	100.0	3.25	6.65	1.19	1.36
	Home Children	62	100.0	1.82	4.60	0.688	1.23
	Day Care Children	53	100.0	3.08	5.89	1.48	1.10
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	105	64.8	0.132	0.178	0.095	0.677
	Urban	89	70.8	0.144	0.192	0.101	0.712
	Rural	16	31.3	--	--	--	--
	Low Income	34	82.4	0.199	0.284	0.118	0.920
	Mid/High Income	61	54.1	0.105	0.083	0.088	0.519
	Home Children	58	53.4	0.101	0.099	0.084	0.497
	Day Care Children	47	78.7	0.171	0.239	0.111	0.828
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	48.8	--	--	--	--
	Urban	110	48.2	--	--	--	--
	Rural	17	52.9	5.55	4.51	4.49	0.623
	Low Income	41	58.5	5.75	6.80	4.24	0.680
	Mid/High Income	73	45.2	--	--	--	--
	Home Children	69	42.0	--	--	--	--
	Day Care Children	58	56.9	5.95	8.47	4.08	0.707
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	100.0	10.5	23.0	4.30	1.23
	Urban	98	100.0	11.7	24.7	4.99	1.17
	Rural	17	100.0	3.63	4.59	1.80	1.23
	Low Income	35	100.0	5.70	7.49	3.33	1.04
	Mid/High Income	67	100.0	14.2	29.1	5.20	1.36
	Home Children	62	100.0	7.96	20.1	3.01	1.23
	Day Care Children	53	100.0	13.5	25.8	6.50	1.10

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-12d. Chrysene (218-01-9): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	105	<MDL	<MDL	0.018	0.027	0.101	0.342
	Urban	89	<MDL	<MDL	0.019	0.028	0.116	0.342
	Rural	16	<MDL	<MDL	<MDL	0.018	0.027	0.027
	Low Income	34	<MDL	0.014	0.019	0.047	0.153	0.342
	Mid/High Income	61	<MDL	<MDL	0.017	0.023	0.057	0.116
	Home Children	58	<MDL	<MDL	0.017	0.021	0.074	0.143
	Day Care Children	47	<MDL	0.014	0.021	0.046	0.122	0.342
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	<MDL	1.08	3.87	14.8
	Urban	110	<MDL	<MDL	<MDL	1.07	3.87	14.8
	Rural	17	<MDL	<MDL	0.918	1.42	4.47	4.47
	Low Income	41	<MDL	<MDL	0.878	1.05	3.87	9.43
	Mid/High Income	73	<MDL	<MDL	<MDL	1.07	4.47	14.8
	Home Children	69	<MDL	<MDL	<MDL	1.17	3.21	14.8
	Day Care Children	58	<MDL	<MDL	0.814	1.07	8.68	9.45
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	0.041	0.393	0.821	2.15	10.7	38.0
	Urban	98	0.131	0.477	0.965	2.19	10.9	38.0
	Rural	17	0.041	0.212	0.237	0.735	3.70	3.70
	Low Income	35	0.041	0.393	0.659	1.47	5.88	8.50
	Mid/High Income	67	0.116	0.394	1.23	2.60	11.1	38.0
	Home Children	62	0.041	0.276	0.634	1.46	6.13	33.7
	Day Care Children	53	0.212	0.695	1.53	2.51	11.1	38.0
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	105	<MDL	<MDL	0.080	0.118	0.443	1.50
	Urban	89	<MDL	<MDL	0.082	0.125	0.506	1.50
	Rural	16	<MDL	<MDL	<MDL	0.080	0.118	0.118
	Low Income	34	<MDL	0.062	0.085	0.207	0.670	1.50
	Mid/High Income	61	<MDL	<MDL	0.075	0.100	0.248	0.506
	Home Children	58	<MDL	<MDL	0.074	0.092	0.322	0.626
	Day Care Children	47	<MDL	0.061	0.091	0.201	0.536	1.50
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	<MDL	4.74	16.9	64.9
	Urban	110	<MDL	<MDL	<MDL	4.68	16.9	64.9
	Rural	17	<MDL	<MDL	4.02	6.20	19.6	19.6
	Low Income	41	<MDL	<MDL	3.85	4.58	16.9	41.3
	Mid/High Income	73	<MDL	<MDL	<MDL	4.69	19.6	64.9
	Home Children	69	<MDL	<MDL	<MDL	5.13	14.1	64.9
	Day Care Children	58	<MDL	<MDL	3.57	4.69	38.0	41.4
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	0.181	1.72	3.59	9.40	46.9	166
	Urban	98	0.575	2.09	4.23	9.57	47.7	166
	Rural	17	0.181	0.928	1.04	3.22	16.2	16.2
	Low Income	35	0.181	1.72	2.88	6.43	25.7	37.3
	Mid/High Income	67	0.508	1.73	5.37	11.4	48.6	166
	Home Children	62	0.181	1.21	2.78	6.37	26.8	148
	Day Care Children	53	0.928	3.05	6.70	11.0	48.6	166

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-13a. Cyfluthrin (68359-37-5): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	123	6.5	--	--	--	--
	Urban	106	7.5	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	12.8	--	--	--	--
	Mid/High Income	71	4.2	--	--	--	--
	Home Children	67	0.0	--	--	--	--
	Day Care Children	56	14.3	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	4.0	--	--	--	--
	Urban	108	4.6	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	5.0	--	--	--	--
	Mid/High Income	72	2.8	--	--	--	--
	Home Children	69	2.9	--	--	--	--
	Day Care Children	56	5.4	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	87.0	13.0	23.7	5.90	1.29
	Urban	99	88.9	14.1	25.2	6.51	1.28
	Rural	16	75.0	6.24	7.20	3.22	1.24
	Low Income	35	97.1	9.47	9.14	6.58	0.911
	Mid/High Income	68	83.8	15.4	29.6	5.78	1.44
	Home Children	63	82.5	10.7	19.3	4.90	1.31
	Day Care Children	52	92.3	15.8	28.0	7.40	1.25
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	123	6.5	--	--	--	--
	Urban	106	7.5	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	12.8	--	--	--	--
	Mid/High Income	71	4.2	--	--	--	--
	Home Children	67	0.0	--	--	--	--
	Day Care Children	56	14.3	--	--	--	--
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	4.0	--	--	--	--
	Urban	108	4.6	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	5.0	--	--	--	--
	Mid/High Income	72	2.8	--	--	--	--
	Home Children	69	2.9	--	--	--	--
	Day Care Children	56	5.4	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	87.0	30.0	54.6	13.6	1.29
	Urban	99	88.9	32.5	58.1	15.0	1.28
	Rural	16	75.0	14.4	16.6	7.42	1.24
	Low Income	35	97.1	21.8	21.0	15.2	0.911
	Mid/High Income	68	83.8	35.4	68.2	13.3	1.44
	Home Children	63	82.5	24.7	44.5	11.3	1.31
	Day Care Children	52	92.3	36.4	64.6	17.0	1.25

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-13b. Cyfluthrin (68359-37-5): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	123	<MDL	<MDL	<MDL	<MDL	12.7	32.2
	Urban	106	<MDL	<MDL	<MDL	<MDL	13.0	32.2
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	16.3	18.3
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	32.2
	Home Children	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	16.3	32.2
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	7,990
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	7,990
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	397
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	7,990
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	7,990
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	400	559
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	<MDL	2.51	7.10	13.8	40.4	189
	Urban	99	<MDL	3.20	7.58	13.9	46.7	189
	Rural	16	<MDL	<MDL	2.93	9.65	22.9	22.9
	Low Income	35	<MDL	3.95	7.54	11.5	28.8	48.8
	Mid/High Income	68	<MDL	1.85	6.87	16.3	46.7	189
	Home Children	63	<MDL	1.63	4.55	13.2	30.8	146
	Day Care Children	52	<MDL	3.44	8.10	15.5	48.8	189
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	123	<MDL	<MDL	<MDL	<MDL	29.2	74.1
	Urban	106	<MDL	<MDL	<MDL	<MDL	29.9	74.1
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	37.5	42.2
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	74.1
	Home Children	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	37.5	74.1
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	18,400
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	18,400
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	914
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	18,400
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	18,400
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	922	1,290
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	<MDL	5.78	16.3	31.7	93.0	434
	Urban	99	<MDL	7.38	17.4	32.1	108	434
	Rural	16	<MDL	<MDL	6.74	22.2	52.7	52.7
	Low Income	35	<MDL	9.09	17.4	26.5	66.3	112
	Mid/High Income	68	<MDL	4.25	15.8	37.5	108	434
	Home Children	63	<MDL	3.75	10.5	30.4	70.9	336
	Day Care Children	52	<MDL	7.93	18.7	35.8	112	434

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-13c. Cyfluthrin (68359-37-5): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	123	6.5	--	--	--	--
	Urban	106	7.5	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	12.8	--	--	--	--
	Mid/High Income	71	4.2	--	--	--	--
	Home Children	67	0.0	--	--	--	--
	Day Care Children	56	14.3	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	4.0	--	--	--	--
	Urban	108	4.6	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	5.0	--	--	--	--
	Mid/High Income	72	2.8	--	--	--	--
	Home Children	69	2.9	--	--	--	--
	Day Care Children	56	5.4	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	87.0	0.388	0.742	0.170	1.32
	Urban	99	88.9	0.422	0.791	0.188	1.30
	Rural	16	75.0	0.184	0.230	0.091	1.28
	Low Income	35	97.1	0.280	0.334	0.188	0.910
	Mid/High Income	68	83.8	0.463	0.924	0.167	1.47
	Home Children	63	82.5	0.350	0.789	0.146	1.35
	Day Care Children	52	92.3	0.435	0.687	0.203	1.27
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	123	6.5	--	--	--	--
	Urban	106	7.5	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	12.8	--	--	--	--
	Mid/High Income	71	4.2	--	--	--	--
	Home Children	67	0.0	--	--	--	--
	Day Care Children	56	14.3	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	4.0	--	--	--	--
	Urban	108	4.6	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	5.0	--	--	--	--
	Mid/High Income	72	2.8	--	--	--	--
	Home Children	69	2.9	--	--	--	--
	Day Care Children	56	5.4	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	87.0	0.894	1.71	0.391	1.32
	Urban	99	88.9	0.971	1.82	0.432	1.30
	Rural	16	75.0	0.423	0.529	0.210	1.28
	Low Income	35	97.1	0.644	0.770	0.433	0.910
	Mid/High Income	68	83.8	1.07	2.13	0.384	1.47
	Home Children	63	82.5	0.807	1.82	0.337	1.35
	Day Care Children	52	92.3	1.00	1.58	0.468	1.27

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-13d. Cyfluthrin (68359-37-5): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	123	<MDL	<MDL	<MDL	<MDL	0.290	1.36
	Urban	106	<MDL	<MDL	<MDL	<MDL	0.350	1.36
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	0.425	0.472
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	1.36
	Home Children	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	0.472	1.36
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	238
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	238
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	16.2
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	238
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	238
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	14.7	17.1
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	<MDL	0.067	0.203	0.417	1.09	6.18
	Urban	99	<MDL	0.091	0.214	0.428	1.20	6.18
	Rural	16	<MDL	<MDL	0.096	0.228	0.841	0.841
	Low Income	35	<MDL	0.114	0.208	0.309	0.591	1.99
	Mid/High Income	68	<MDL	0.055	0.197	0.478	1.20	6.18
	Home Children	63	<MDL	0.052	0.143	0.369	0.896	6.18
	Day Care Children	52	<MDL	0.102	0.218	0.422	1.99	3.78
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	123	<MDL	<MDL	<MDL	<MDL	0.667	3.14
	Urban	106	<MDL	<MDL	<MDL	<MDL	0.805	3.14
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	0.978	1.09
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	3.14
	Home Children	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	1.09	3.14
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	547
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	547
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	37.3
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	547
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	547
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	34.0	39.4
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	<MDL	0.155	0.467	0.961	2.52	14.2
	Urban	99	<MDL	0.209	0.493	0.985	2.77	14.2
	Rural	16	<MDL	<MDL	0.220	0.524	1.94	1.94
	Low Income	35	<MDL	0.264	0.478	0.713	1.36	4.58
	Mid/High Income	68	<MDL	0.126	0.454	1.10	2.77	14.2
	Home Children	63	<MDL	0.119	0.329	0.851	2.06	14.2
	Day Care Children	52	<MDL	0.236	0.502	0.971	4.58	8.70

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-14a. Diazinon (333-41-5): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	99.2	59.0	183	12.0	1.46
	Urban	108	99.1	63.2	195	11.7	1.49
	Rural	17	100.0	32.0	43.8	14.4	1.26
	Low Income	39	100.0	75.9	169	16.9	1.58
	Mid/High Income	73	98.6	32.8	110	9.12	1.27
	Home Children	69	98.6	53.4	209	9.36	1.36
	Day Care Children	56	100.0	65.8	145	16.5	1.53
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	25.6	--	--	--	--
	Urban	108	26.9	--	--	--	--
	Rural	17	17.6	--	--	--	--
	Low Income	40	42.5	--	--	--	--
	Mid/High Income	72	19.4	--	--	--	--
	Home Children	69	11.6	--	--	--	--
	Day Care Children	56	42.9	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	99.1	49.1	367	1.50	1.93
	Urban	99	99.0	56.1	397	1.55	1.93
	Rural	17	100.0	8.46	16.1	1.24	1.95
	Low Income	35	100.0	9.05	30.0	1.81	1.63
	Mid/High Income	68	98.5	21.9	134	1.31	1.90
	Home Children	63	98.4	82.1	496	1.03	2.11
	Day Care Children	53	100.0	9.94	26.0	2.36	1.59
Potential Exposure – Aggregated (ng/day)	Overall	112	100.0	142	534	54.1	0.980
	Urban	95	100.0	153	579	53.9	1.02
	Rural	17	100.0	79.4	88.0	55.1	0.784
	Low Income	32	100.0	116	190	66.2	0.906
	Mid/High Income	67	100.0	86.5	183	46.3	0.868
	Home Children	63	100.0	167	699	46.0	1.02
	Day Care Children	49	100.0	110	162	66.6	0.900
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	99.2	194	600	39.6	1.46
	Urban	108	99.1	208	642	38.5	1.49
	Rural	17	100.0	105	144	47.2	1.26
	Low Income	39	100.0	249	554	55.7	1.58
	Mid/High Income	73	98.6	108	362	30.0	1.27
	Home Children	69	98.6	176	688	30.8	1.36
	Day Care Children	56	100.0	216	475	54.1	1.53
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	25.6	--	--	--	--
	Urban	108	26.9	--	--	--	--
	Rural	17	17.6	--	--	--	--
	Low Income	40	42.5	--	--	--	--
	Mid/High Income	72	19.4	--	--	--	--
	Home Children	69	11.6	--	--	--	--
	Day Care Children	56	42.9	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	99.1	161	1,210	4.93	1.93
	Urban	99	99.0	184	1,300	5.10	1.93
	Rural	17	100.0	27.8	52.8	4.06	1.95
	Low Income	35	100.0	29.7	98.6	5.96	1.63
	Mid/High Income	68	98.5	72.0	440	4.30	1.90
	Home Children	63	98.4	270	1,630	3.37	2.11
	Day Care Children	53	100.0	32.7	85.4	7.75	1.59
Potential Exposure – Aggregated (pmoles/day)	Overall	112	100.0	466	1,760	178	0.980
	Urban	95	100.0	503	1,900	177	1.02
	Rural	17	100.0	261	289	181	0.784
	Low Income	32	100.0	382	625	217	0.906
	Mid/High Income	67	100.0	284	601	152	0.868
	Home Children	63	100.0	547	2,300	151	1.02
	Day Care Children	49	100.0	362	533	219	0.900

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-14b. Diazinon (333-41-5): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	4.84	8.03	18.7	211	1,490
	Urban	108	<MDL	4.29	7.62	19.5	271	1,490
	Rural	17	1.39	7.20	8.93	16.8	131	131
	Low Income	39	1.65	6.21	11.5	29.1	640	719
	Mid/High Income	73	<MDL	3.85	6.60	14.3	131	897
	Home Children	69	<MDL	4.80	6.60	13.8	211	1,490
	Day Care Children	56	1.65	5.86	9.76	33.6	491	719
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	<MDL	<MDL	33.6	74.0	216
	Urban	108	<MDL	<MDL	<MDL	33.5	74.0	138
	Rural	17	<MDL	<MDL	<MDL	<MDL	216	216
	Low Income	40	<MDL	<MDL	<MDL	42.9	87.4	106
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	64.9	216
	Home Children	69	<MDL	<MDL	<MDL	<MDL	48.5	138
	Day Care Children	56	<MDL	<MDL	<MDL	38.7	106	216
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	<MDL	0.392	1.02	3.42	45.3	3,800
	Urban	99	<MDL	0.376	1.15	3.50	48.4	3,800
	Rural	17	0.099	0.455	0.610	1.01	45.3	45.3
	Low Income	35	0.101	0.600	1.76	4.38	28.7	178
	Mid/High Income	68	<MDL	0.358	0.834	3.10	44.0	1,110
	Home Children	63	<MDL	0.270	0.604	1.84	48.4	3,800
	Day Care Children	53	0.153	0.675	1.89	5.91	44.0	178
Potential Exposure – Aggregated (ng/day)	Overall	112	15.7	29.9	38.6	67.0	378	5,430
	Urban	95	15.7	29.3	38.4	67.6	534	5,430
	Rural	17	24.5	33.4	43.7	53.1	358	358
	Low Income	32	24.0	36.1	49.1	93.7	534	993
	Mid/High Income	67	15.7	27.3	34.0	61.4	252	1,200
	Home Children	63	15.8	27.7	32.4	48.6	378	5,430
	Day Care Children	49	15.7	38.1	50.0	125	358	993
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	15.9	26.4	61.4	694	4,880
	Urban	108	<MDL	14.1	25.0	63.9	889	4,880
	Rural	17	4.58	23.7	29.3	55.1	431	431
	Low Income	39	5.41	20.4	37.7	95.5	2,100	2,360
	Mid/High Income	73	<MDL	12.6	21.7	46.9	431	2,950
	Home Children	69	<MDL	15.8	21.7	45.5	694	4,880
	Day Care Children	56	5.41	19.3	32.1	111	1,610	2,360
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	110	243	710
	Urban	108	<MDL	<MDL	<MDL	110	243	453
	Rural	17	<MDL	<MDL	<MDL	<MDL	710	710
	Low Income	40	<MDL	<MDL	<MDL	141	287	349
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	213	710
	Home Children	69	<MDL	<MDL	<MDL	<MDL	159	453
	Day Care Children	56	<MDL	<MDL	<MDL	127	349	710
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	<MDL	1.29	3.36	11.2	149	12,500
	Urban	99	<MDL	1.23	3.79	11.5	159	12,500
	Rural	17	0.327	1.49	2.00	3.32	149	149
	Low Income	35	0.331	1.97	5.79	14.4	94.4	584
	Mid/High Income	68	<MDL	1.18	2.74	10.2	145	3,630
	Home Children	63	<MDL	0.886	1.98	6.04	159	12,500
	Day Care Children	53	0.504	2.22	6.22	19.4	145	584
Potential Exposure – Aggregated (pmoles/day)	Overall	112	51.7	98.2	127	220	1,240	17,800
	Urban	95	51.7	96.2	126	222	1,750	17,800
	Rural	17	80.6	110	144	175	1,180	1,180
	Low Income	32	79.0	119	161	308	1,750	3,260
	Mid/High Income	67	51.7	89.8	112	202	829	3,930
	Home Children	63	51.9	90.9	106	160	1,240	17,800
	Day Care Children	49	51.7	125	164	409	1,180	3,260

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-14c. Diazinon (333-41-5): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	99.2	1.82	6.43	0.345	1.48
	Urban	108	99.1	1.96	6.89	0.335	1.51
	Rural	17	100.0	0.926	1.34	0.414	1.25
	Low Income	39	100.0	2.26	5.13	0.476	1.63
	Mid/High Income	73	98.6	0.859	2.71	0.263	1.24
	Home Children	69	98.6	1.75	7.75	0.277	1.38
	Day Care Children	56	100.0	1.90	4.37	0.451	1.56
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	25.6	--	--	--	--
	Urban	108	26.9	--	--	--	--
	Rural	17	17.6	--	--	--	--
	Low Income	40	42.5	--	--	--	--
	Mid/High Income	72	19.4	--	--	--	--
	Home Children	69	11.6	--	--	--	--
	Day Care Children	56	42.9	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	99.1	1.81	14.7	0.043	1.94
	Urban	99	99.0	2.08	15.9	0.045	1.95
	Rural	17	100.0	0.250	0.497	0.036	1.96
	Low Income	35	100.0	0.272	0.895	0.052	1.66
	Mid/High Income	68	98.5	0.630	3.88	0.038	1.90
	Home Children	63	98.4	3.09	19.9	0.031	2.14
	Day Care Children	53	100.0	0.291	0.777	0.065	1.61
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	112	100.0	4.62	21.3	1.56	0.988
	Urban	95	100.0	5.04	23.1	1.55	1.02
	Rural	17	100.0	2.30	2.53	1.59	0.796
	Low Income	32	100.0	3.39	5.56	1.89	0.932
	Mid/High Income	67	100.0	2.38	4.99	1.33	0.832
	Home Children	63	100.0	5.81	28.1	1.37	1.03
	Day Care Children	49	100.0	3.08	4.71	1.83	0.910
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	99.2	5.97	21.1	1.13	1.48
	Urban	108	99.1	6.44	22.7	1.10	1.51
	Rural	17	100.0	3.04	4.42	1.36	1.25
	Low Income	39	100.0	7.42	16.8	1.56	1.63
	Mid/High Income	73	98.6	2.82	8.89	0.864	1.24
	Home Children	69	98.6	5.76	25.5	0.912	1.38
	Day Care Children	56	100.0	6.24	14.4	1.48	1.56
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	25.6	--	--	--	--
	Urban	108	26.9	--	--	--	--
	Rural	17	17.6	--	--	--	--
	Low Income	40	42.5	--	--	--	--
	Mid/High Income	72	19.4	--	--	--	--
	Home Children	69	11.6	--	--	--	--
	Day Care Children	56	42.9	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	99.1	5.95	48.2	0.142	1.94
	Urban	99	99.0	6.83	52.2	0.147	1.95
	Rural	17	100.0	0.822	1.63	0.117	1.96
	Low Income	35	100.0	0.894	2.94	0.170	1.66
	Mid/High Income	68	98.5	2.07	12.7	0.124	1.90
	Home Children	63	98.4	10.2	65.3	0.101	2.14
	Day Care Children	53	100.0	0.957	2.55	0.214	1.61
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	112	100.0	15.2	69.8	5.12	0.988
	Urban	95	100.0	16.5	75.7	5.10	1.02
	Rural	17	100.0	7.54	8.33	5.22	0.796
	Low Income	32	100.0	11.1	18.3	6.22	0.932
	Mid/High Income	67	100.0	7.83	16.4	4.37	0.832
	Home Children	63	100.0	19.1	92.3	4.52	1.03
	Day Care Children	49	100.0	10.1	15.5	6.01	0.910

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-14d. Diazinon (333-41-5): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	0.130	0.245	0.547	5.82	60.6
	Urban	108	<MDL	0.123	0.238	0.541	7.84	60.6
	Rural	17	0.050	0.204	0.268	0.547	4.82	4.82
	Low Income	39	0.039	0.171	0.277	1.11	21.4	21.4
	Mid/High Income	73	<MDL	0.107	0.204	0.430	4.58	21.9
	Home Children	69	<MDL	0.127	0.214	0.430	5.82	60.6
	Day Care Children	56	0.039	0.138	0.264	1.10	12.9	21.4
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	1.05	2.33	5.95
	Urban	108	<MDL	<MDL	<MDL	1.05	2.33	5.62
	Rural	17	<MDL	<MDL	<MDL	<MDL	5.95	5.95
	Low Income	40	<MDL	<MDL	<MDL	1.25	3.03	3.65
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	1.74	5.95
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1.66	5.62
	Day Care Children	56	<MDL	<MDL	<MDL	1.23	3.19	5.95
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	<MDL	0.011	0.031	0.089	1.19	155
	Urban	99	<MDL	0.011	0.037	0.097	1.07	155
	Rural	17	0.003	0.013	0.021	0.035	1.62	1.62
	Low Income	35	0.003	0.018	0.045	0.151	0.822	5.29
	Mid/High Income	68	<MDL	0.010	0.025	0.080	1.07	32.0
	Home Children	63	<MDL	0.008	0.019	0.054	1.07	155
	Day Care Children	53	0.004	0.019	0.049	0.148	1.19	5.29
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	112	0.458	0.872	1.13	1.89	11.0	221
	Urban	95	0.458	0.845	1.14	1.92	14.0	221
	Rural	17	0.628	0.882	1.12	1.86	9.85	9.85
	Low Income	32	0.683	1.02	1.30	2.98	14.0	29.6
	Mid/High Income	67	0.458	0.789	1.05	1.76	6.94	34.7
	Home Children	63	0.458	0.802	1.05	1.41	11.0	221
	Day Care Children	49	0.481	0.963	1.31	2.84	9.85	29.6
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	0.428	0.804	1.80	19.1	199
	Urban	108	<MDL	0.403	0.784	1.78	25.8	199
	Rural	17	0.163	0.669	0.880	1.80	15.8	15.8
	Low Income	39	0.129	0.561	0.912	3.65	70.2	70.3
	Mid/High Income	73	<MDL	0.352	0.669	1.41	15.1	72.1
	Home Children	69	<MDL	0.417	0.703	1.41	19.1	199
	Day Care Children	56	0.129	0.453	0.866	3.62	42.3	70.3
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	3.43	7.67	19.6
	Urban	108	<MDL	<MDL	<MDL	3.43	7.67	18.5
	Rural	17	<MDL	<MDL	<MDL	<MDL	19.6	19.6
	Low Income	40	<MDL	<MDL	<MDL	4.10	9.97	12.0
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	5.73	19.6
	Home Children	69	<MDL	<MDL	<MDL	<MDL	5.46	18.5
	Day Care Children	56	<MDL	<MDL	<MDL	4.05	10.5	19.6
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	<MDL	0.037	0.102	0.293	3.91	510
	Urban	99	<MDL	0.036	0.121	0.319	3.50	510
	Rural	17	0.008	0.044	0.069	0.114	5.31	5.31
	Low Income	35	0.010	0.060	0.148	0.495	2.70	17.4
	Mid/High Income	68	<MDL	0.032	0.083	0.264	3.50	105
	Home Children	63	<MDL	0.027	0.062	0.177	3.50	510
	Day Care Children	53	0.015	0.063	0.162	0.487	3.91	17.4
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	112	1.50	2.87	3.73	6.21	36.0	728
	Urban	95	1.50	2.78	3.76	6.30	46.0	728
	Rural	17	2.06	2.90	3.67	6.10	32.4	32.4
	Low Income	32	2.24	3.35	4.28	9.79	46.0	97.1
	Mid/High Income	67	1.50	2.59	3.45	5.80	22.8	114
	Home Children	63	1.50	2.63	3.45	4.63	36.0	728
	Day Care Children	49	1.58	3.16	4.31	9.34	32.4	97.1

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-15a. Dibenzo[a,h]anthracene (53-70-3): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	56	1.8	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	1.6	--	--	--	--
	Urban	110	1.8	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	2.4	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	58	1.7	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	100.0	15.4	32.0	6.99	1.19
	Urban	98	100.0	16.9	34.3	8.05	1.11
	Rural	17	100.0	6.69	8.41	3.11	1.36
	Low Income	35	100.0	8.55	8.33	5.62	0.965
	Mid/High Income	67	100.0	20.7	40.8	8.26	1.34
	Home Children	62	100.0	10.6	22.3	4.69	1.20
	Day Care Children	53	100.0	21.1	40.1	11.2	1.02
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	56	1.8	--	--	--	--
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	1.6	--	--	--	--
	Urban	110	1.8	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	2.4	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	58	1.7	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	100.0	55.4	115	25.1	1.19
	Urban	98	100.0	60.8	123	28.9	1.11
	Rural	17	100.0	24.0	30.2	11.2	1.36
	Low Income	35	100.0	30.7	29.9	20.2	0.965
	Mid/High Income	67	100.0	74.2	147	29.7	1.34
	Home Children	62	100.0	38.0	80.0	16.8	1.20
	Day Care Children	53	100.0	75.7	144	40.1	1.02

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-15b. Dibenzo[a,h]anthracene (53-70-3): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	1.91
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	1.91
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	1.91
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	1.91
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	<MDL	102
	Urban	110	<MDL	<MDL	<MDL	<MDL	<MDL	102
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	47.4
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	102
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	102
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	47.6
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	0.212	2.98	6.18	15.3	59.2	275
	Urban	98	0.870	3.98	7.68	15.5	61.9	275
	Rural	17	0.212	1.45	1.99	6.01	29.7	29.7
	Low Income	35	0.517	2.92	5.05	11.8	29.7	36.8
	Mid/High Income	67	0.212	2.98	8.29	19.3	71.8	275
	Home Children	62	0.212	2.01	4.47	9.66	29.7	161
	Day Care Children	53	1.45	5.55	10.2	19.5	71.8	275
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	6.87
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	6.87
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	6.87
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	6.87
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	<MDL	365
	Urban	110	<MDL	<MDL	<MDL	<MDL	<MDL	365
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	170
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	365
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	365
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	171
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	0.760	10.7	22.2	55.0	213	989
	Urban	98	3.12	14.3	27.6	55.6	222	989
	Rural	17	0.760	5.21	7.14	21.6	107	107
	Low Income	35	1.86	10.5	18.2	42.5	107	132
	Mid/High Income	67	0.760	10.7	29.8	69.2	258	989
	Home Children	62	0.760	7.23	16.0	34.7	107	580
	Day Care Children	53	5.21	19.9	36.6	70.1	258	989

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-15c. Dibenzo[a,h]anthracene (53-70-3): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	56	1.8	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	1.6	--	--	--	--
	Urban	110	1.8	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	2.4	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	58	1.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	100.0	0.458	0.924	0.201	1.21
	Urban	98	100.0	0.506	0.990	0.232	1.14
	Rural	17	100.0	0.186	0.225	0.089	1.32
	Low Income	35	100.0	0.263	0.301	0.161	1.01
	Mid/High Income	67	100.0	0.611	1.17	0.239	1.35
	Home Children	62	100.0	0.354	0.905	0.140	1.23
	Day Care Children	53	100.0	0.581	0.941	0.308	1.05
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	56	1.8	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	1.6	--	--	--	--
	Urban	110	1.8	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	2.4	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	58	1.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	100.0	1.65	3.32	0.724	1.21
	Urban	98	100.0	1.82	3.56	0.833	1.14
	Rural	17	100.0	0.667	0.810	0.321	1.32
	Low Income	35	100.0	0.943	1.08	0.577	1.01
	Mid/High Income	67	100.0	2.20	4.20	0.857	1.35
	Home Children	62	100.0	1.27	3.25	0.503	1.23
	Day Care Children	53	100.0	2.09	3.38	1.11	1.05

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-15d. Dibenzo[a,h]anthracene (53-70-3): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.051
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	0.051
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	0.051
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.051
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	<MDL	2.49
	Urban	110	<MDL	<MDL	<MDL	<MDL	<MDL	2.49
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	1.63
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	2.49
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	2.49
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	1.63
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	0.007	0.082	0.183	0.421	1.75	6.83
	Urban	98	0.025	0.104	0.198	0.474	1.86	6.83
	Rural	17	0.007	0.039	0.069	0.183	0.707	0.707
	Low Income	35	0.012	0.082	0.151	0.310	1.21	1.27
	Mid/High Income	67	0.007	0.082	0.271	0.581	3.04	6.83
	Home Children	62	0.007	0.062	0.126	0.367	0.861	6.83
	Day Care Children	53	0.039	0.149	0.299	0.581	3.04	5.51
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.184
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	0.184
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	0.184
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.184
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	<MDL	8.94
	Urban	110	<MDL	<MDL	<MDL	<MDL	<MDL	8.94
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	5.86
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	8.94
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	8.94
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	5.86
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	0.026	0.295	0.656	1.51	6.30	24.5
	Urban	98	0.091	0.372	0.710	1.70	6.69	24.5
	Rural	17	0.026	0.142	0.246	0.656	2.54	2.54
	Low Income	35	0.044	0.295	0.541	1.11	4.35	4.55
	Mid/High Income	67	0.026	0.295	0.973	2.09	10.9	24.5
	Home Children	62	0.026	0.221	0.454	1.32	3.09	24.5
	Day Care Children	53	0.140	0.535	1.07	2.09	10.9	19.8

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-16a. Di-n-butylphthalate (84-74-2): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	100.0	2,160	1,160	1,870	0.568
	Urban	107	100.0	2,070	1,180	1,770	0.581
	Rural	17	100.0	2,740	844	2,620	0.319
	Low Income	38	100.0	2,420	1,530	2,010	0.638
	Mid/High Income	73	100.0	2,020	955	1,780	0.544
	Home Children	69	100.0	1,860	847	1,630	0.556
	Day Care Children	55	100.0	2,530	1,380	2,200	0.542
Potential Exposure via Dietary Ingestion (ng/day)	Overall	48	31.3	--	--	--	--
	Urban	42	28.6	--	--	--	--
	Rural	6	50.0	22,400	30,200	12,500	1.11
	Low Income	14	42.9	--	--	--	--
	Mid/High Income	30	26.7	--	--	--	--
	Home Children	34	20.6	--	--	--	--
	Day Care Children	14	57.1	27,200	38,000	15,900	0.970
Potential Exposure via Indirect Ingestion (ng/day)	Overall	112	100.0	347	432	224	0.899
	Urban	96	100.0	363	456	236	0.885
	Rural	16	100.0	247	227	164	0.948
	Low Income	35	100.0	286	242	215	0.780
	Mid/High Income	65	100.0	380	523	224	0.976
	Home Children	61	100.0	270	323	175	0.913
	Day Care Children	51	100.0	438	523	301	0.792
Potential Exposure – Aggregated (ng/day)	Overall	43	100.0	19,500	27,600	12,200	0.826
	Urban	37	100.0	18,500	27,500	11,700	0.806
	Rural	6	100.0	25,400	30,200	16,200	0.970
	Low Income	12	100.0	24,600	24,000	16,600	0.895
	Mid/High Income	27	100.0	16,100	27,900	10,600	0.717
	Home Children	30	100.0	14,200	19,400	9,780	0.708
	Day Care Children	13	100.0	31,500	39,100	20,600	0.869
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	100.0	7,760	4,160	6,700	0.568
	Urban	107	100.0	7,420	4,230	6,350	0.581
	Rural	17	100.0	9,850	3,030	9,400	0.319
	Low Income	38	100.0	8,710	5,480	7,220	0.638
	Mid/High Income	73	100.0	7,260	3,430	6,390	0.544
	Home Children	69	100.0	6,680	3,040	5,870	0.556
	Day Care Children	55	100.0	9,100	4,940	7,920	0.542
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	48	31.3	--	--	--	--
	Urban	42	28.6	--	--	--	--
	Rural	6	50.0	80,500	109,000	44,700	1.11
	Low Income	14	42.9	--	--	--	--
	Mid/High Income	30	26.7	--	--	--	--
	Home Children	34	20.6	--	--	--	--
	Day Care Children	14	57.1	97,800	136,000	57,200	0.970
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	112	100.0	1,250	1,550	804	0.899
	Urban	96	100.0	1,310	1,640	847	0.885
	Rural	16	100.0	886	814	590	0.948
	Low Income	35	100.0	1,030	869	772	0.780
	Mid/High Income	65	100.0	1,360	1,880	805	0.976
	Home Children	61	100.0	971	1,160	628	0.913
	Day Care Children	51	100.0	1,570	1,880	1,080	0.792
Potential Exposure – Aggregated (pmoles/day)	Overall	43	100.0	69,900	99,200	44,000	0.826
	Urban	37	100.0	66,400	98,800	42,100	0.806
	Rural	6	100.0	91,200	109,000	58,200	0.970
	Low Income	12	100.0	88,400	86,300	59,800	0.895
	Mid/High Income	27	100.0	57,900	100,000	38,100	0.717
	Home Children	30	100.0	51,100	69,700	35,100	0.708
	Day Care Children	13	100.0	113,000	141,000	73,900	0.869

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-16b. Di-*n*-butylphthalate (84-74-2): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	286	1,300	2,050	2,750	4,030	7,100
	Urban	107	286	1,200	1,970	2,640	3,970	7,100
	Rural	17	1,540	2,200	2,670	3,140	4,330	4,330
	Low Income	38	475	1,360	2,150	2,900	6,100	7,100
	Mid/High Income	73	286	1,230	1,870	2,620	3,890	4,330
	Home Children	69	286	1,200	1,810	2,450	3,090	3,970
	Day Care Children	55	636	1,540	2,160	3,140	5,620	7,100
Potential Exposure via Dietary Ingestion (ng/day)	Overall	48	<MDL	<MDL	<MDL	11,300	78,700	149,000
	Urban	42	<MDL	<MDL	<MDL	10,800	47,200	149,000
	Rural	6	<MDL	<MDL	<MDL	24,100	82,400	82,400
	Low Income	14	<MDL	<MDL	<MDL	38,600	78,700	78,700
	Mid/High Income	30	<MDL	<MDL	<MDL	10,500	24,100	149,000
	Home Children	34	<MDL	<MDL	<MDL	78,700	82,400	82,400
	Day Care Children	14	<MDL	<MDL	10,600	38,600	149,000	149,000
Potential Exposure via Indirect Ingestion (ng/day)	Overall	112	24.0	125	208	419	1,010	3,120
	Urban	96	24.0	136	216	419	1,070	3,120
	Rural	16	30.3	90.8	126	418	726	726
	Low Income	35	30.3	138	207	365	952	1,160
	Mid/High Income	65	24.0	123	188	424	1,010	3,120
	Home Children	61	24.0	98.2	160	322	769	2,090
	Day Care Children	51	74.3	174	236	514	1,160	3,120
Potential Exposure – Aggregated (ng/day)	Overall	43	4,270	7,330	8,310	16,900	81,000	152,000
	Urban	37	4,270	7,330	8,290	13,200	81,000	152,000
	Rural	6	5,900	7,730	13,100	27,300	85,100	85,100
	Low Income	12	6,410	7,870	12,400	42,700	81,000	81,000
	Mid/High Income	27	4,270	7,540	8,290	14,500	27,300	152,000
	Home Children	30	4,270	6,430	7,700	11,400	81,000	85,100
	Day Care Children	13	8,020	11,800	14,500	39,600	152,000	152,000
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	1,030	4,670	7,350	9,880	14,500	25,500
	Urban	107	1,030	4,330	7,090	9,500	14,300	25,500
	Rural	17	5,530	7,890	9,580	11,300	15,500	15,500
	Low Income	38	1,710	4,880	7,730	10,400	21,900	25,500
	Mid/High Income	73	1,030	4,410	6,730	9,420	14,000	15,500
	Home Children	69	1,030	4,330	6,520	8,800	11,100	14,300
	Day Care Children	55	2,280	5,530	7,780	11,300	20,200	25,500
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	48	<MDL	<MDL	<MDL	40,600	283,000	536,000
	Urban	42	<MDL	<MDL	<MDL	38,800	170,000	536,000
	Rural	6	<MDL	<MDL	<MDL	86,400	296,000	296,000
	Low Income	14	<MDL	<MDL	<MDL	139,000	283,000	283,000
	Mid/High Income	30	<MDL	<MDL	<MDL	37,600	86,400	536,000
	Home Children	34	<MDL	<MDL	<MDL	<MDL	283,000	296,000
	Day Care Children	14	<MDL	<MDL	37,900	139,000	536,000	536,000
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	112	86.3	450	748	1,510	3,620	11,200
	Urban	96	86.3	487	776	1,510	3,830	11,200
	Rural	16	109	326	451	1,500	2,610	2,610
	Low Income	35	109	495	745	1,310	3,420	4,180
	Mid/High Income	65	86.3	440	677	1,520	3,620	11,200
	Home Children	61	86.3	353	576	1,160	2,760	7,490
	Day Care Children	51	267	625	848	1,850	4,180	11,200
Potential Exposure – Aggregated (pmoles/day)	Overall	43	15,400	26,300	29,900	60,900	291,000	547,000
	Urban	37	15,400	26,300	29,800	47,400	291,000	547,000
	Rural	6	21,200	27,800	47,200	97,900	306,000	306,000
	Low Income	12	23,000	28,300	44,500	154,000	291,000	291,000
	Mid/High Income	27	15,400	27,100	29,800	52,100	97,900	547,000
	Home Children	30	15,400	23,100	27,700	41,000	291,000	306,000
	Day Care Children	13	28,800	42,500	52,100	142,000	547,000	547,000

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-16c. Di-*n*-butylphthalate (84-74-2): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	100.0	63.1	39.3	53.4	0.593
	Urban	107	100.0	60.3	40.1	50.5	0.601
	Rural	17	100.0	80.8	29.2	75.4	0.407
	Low Income	38	100.0	72.0	55.4	56.4	0.723
	Mid/High Income	73	100.0	58.0	28.4	51.2	0.526
	Home Children	69	100.0	55.1	25.7	48.4	0.544
	Day Care Children	55	100.0	73.2	50.0	60.3	0.634
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	48	31.3	--	--	--	--
	Urban	42	28.6	--	--	--	--
	Rural	6	50.0	679	958	361	1.14
	Low Income	14	42.9	--	--	--	--
	Mid/High Income	30	26.7	--	--	--	--
	Home Children	34	20.6	--	--	--	--
	Day Care Children	14	57.1	687	903	414	0.950
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	112	100.0	10.2	12.2	6.43	0.939
	Urban	96	100.0	10.6	12.8	6.78	0.915
	Rural	16	100.0	7.43	7.18	4.65	1.04
	Low Income	35	100.0	8.81	8.97	6.14	0.861
	Mid/High Income	65	100.0	10.9	14.2	6.45	1.000
	Home Children	61	100.0	8.40	10.4	5.22	0.963
	Day Care Children	51	100.0	12.2	13.8	8.24	0.855
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	43	100.0	539	703	353	0.803
	Urban	37	100.0	502	662	337	0.772
	Rural	6	100.0	765	961	470	1.01
	Low Income	12	100.0	657	625	467	0.813
	Mid/High Income	27	100.0	440	656	301	0.724
	Home Children	30	100.0	428	561	296	0.724
	Day Care Children	13	100.0	796	931	530	0.856
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	100.0	227	141	192	0.593
	Urban	107	100.0	217	144	182	0.601
	Rural	17	100.0	290	105	271	0.407
	Low Income	38	100.0	259	199	202	0.723
	Mid/High Income	73	100.0	208	102	184	0.526
	Home Children	69	100.0	198	92.4	174	0.544
	Day Care Children	55	100.0	263	180	217	0.634
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	48	31.3	--	--	--	--
	Urban	42	28.6	--	--	--	--
	Rural	6	50.0	2,440	3,440	1,300	1.14
	Low Income	14	42.9	--	--	--	--
	Mid/High Income	30	26.7	--	--	--	--
	Home Children	34	20.6	--	--	--	--
	Day Care Children	14	57.1	2,470	3,240	1,490	0.950
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	112	100.0	36.5	43.7	23.1	0.939
	Urban	96	100.0	38.1	45.9	24.4	0.915
	Rural	16	100.0	26.7	25.8	16.7	1.04
	Low Income	35	100.0	31.7	32.2	22.1	0.861
	Mid/High Income	65	100.0	39.3	51.2	23.2	1.000
	Home Children	61	100.0	30.2	37.4	18.8	0.963
	Day Care Children	51	100.0	44.0	49.6	29.6	0.855
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	43	100.0	1,940	2,530	1,270	0.803
	Urban	37	100.0	1,800	2,380	1,210	0.772
	Rural	6	100.0	2,750	3,450	1,690	1.01
	Low Income	12	100.0	2,360	2,240	1,680	0.813
	Mid/High Income	27	100.0	1,580	2,360	1,080	0.724
	Home Children	30	100.0	1,540	2,020	1,060	0.724
	Day Care Children	13	100.0	2,860	3,350	1,900	0.856

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-16d. Di-*n*-butylphthalate (84-74-2): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	9.83	36.1	57.3	80.5	134	290
	Urban	107	9.83	34.4	54.2	75.5	134	290
	Rural	17	24.6	64.7	83.9	90.9	159	159
	Low Income	38	11.1	38.1	58.9	92.7	204	290
	Mid/High Income	73	9.83	35.6	55.5	76.9	101	159
	Home Children	69	9.83	33.8	55.5	73.7	102	114
	Day Care Children	55	11.1	39.5	62.1	88.8	172	290
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	48	<MDL	<MDL	<MDL	333	2,020	3,500
	Urban	42	<MDL	<MDL	<MDL	303	1,370	3,500
	Rural	6	<MDL	<MDL	<MDL	679	2,590	2,590
	Low Income	14	<MDL	<MDL	<MDL	674	2,020	2,020
	Mid/High Income	30	<MDL	<MDL	<MDL	303	724	3,500
	Home Children	34	<MDL	<MDL	<MDL	<MDL	2,020	2,590
	Day Care Children	14	<MDL	<MDL	272	724	3,500	3,500
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	112	0.588	3.59	5.65	12.2	28.4	73.2
	Urban	96	0.588	3.90	6.35	12.3	34.7	73.2
	Rural	16	0.710	2.59	4.05	11.1	21.5	21.5
	Low Income	35	0.710	3.97	5.52	9.01	26.2	47.4
	Mid/High Income	65	0.588	3.59	5.52	11.7	34.7	73.2
	Home Children	61	0.588	2.87	4.22	10.7	24.2	67.6
	Day Care Children	51	1.19	4.81	7.28	15.9	47.4	73.2
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	43	124	205	262	467	2,080	3,570
	Urban	37	124	205	253	398	2,080	3,570
	Rural	6	151	266	362	770	2,680	2,680
	Low Income	12	221	251	337	1,030	2,080	2,080
	Mid/High Income	27	124	189	241	398	788	3,570
	Home Children	30	124	198	236	393	2,080	2,680
	Day Care Children	13	205	282	363	788	3,570	3,570
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	35.3	130	206	289	483	1,040
	Urban	107	35.3	124	195	271	483	1,040
	Rural	17	88.3	233	301	327	571	571
	Low Income	38	39.9	137	212	333	731	1,040
	Mid/High Income	73	35.3	128	199	276	361	571
	Home Children	69	35.3	121	199	265	367	408
	Day Care Children	55	39.9	142	223	319	618	1,040
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	48	<MDL	<MDL	<MDL	1,200	7,240	12,600
	Urban	42	<MDL	<MDL	<MDL	1,090	4,920	12,600
	Rural	6	<MDL	<MDL	<MDL	2,440	9,310	9,310
	Low Income	14	<MDL	<MDL	<MDL	2,420	7,240	7,240
	Mid/High Income	30	<MDL	<MDL	<MDL	1,090	2,600	12,600
	Home Children	34	<MDL	<MDL	<MDL	<MDL	7,240	9,310
	Day Care Children	14	<MDL	<MDL	976	2,600	12,600	12,600
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	112	2.11	12.9	20.3	44.0	102	263
	Urban	96	2.11	14.0	22.8	44.2	125	263
	Rural	16	2.55	9.30	14.5	40.0	77.3	77.3
	Low Income	35	2.55	14.3	19.8	32.4	94.1	170
	Mid/High Income	65	2.11	12.9	19.8	42.2	125	263
	Home Children	61	2.11	10.3	15.2	38.5	86.9	243
	Day Care Children	51	4.26	17.3	26.2	57.0	170	263
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	43	445	738	940	1,680	7,460	12,800
	Urban	37	445	738	908	1,430	7,460	12,800
	Rural	6	543	956	1,300	2,760	9,620	9,620
	Low Income	12	792	903	1,210	3,700	7,460	7,460
	Mid/High Income	27	445	680	865	1,430	2,830	12,800
	Home Children	30	445	710	847	1,410	7,460	9,620
	Day Care Children	13	738	1,010	1,300	2,830	12,800	12,800

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-17a. *p,p'*-DDE (72-55-9): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	40.0	--	--	--	--
	Urban	108	38.9	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	46.2	--	--	--	--
	Mid/High Income	73	41.1	--	--	--	--
	Home Children	69	36.2	--	--	--	--
	Day Care Children	56	44.6	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	82.4	107	138	71.5	0.869
	Urban	108	83.3	111	146	72.3	0.894
	Rural	17	76.5	82.3	51.1	66.5	0.703
	Low Income	40	85.0	107	177	69.8	0.843
	Mid/High Income	72	79.2	109	125	70.3	0.932
	Home Children	69	76.8	104	155	65.7	0.903
	Day Care Children	56	89.3	111	114	79.4	0.820
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	67.2	0.559	0.908	0.253	1.25
	Urban	99	64.6	0.599	0.972	0.257	1.30
	Rural	17	82.4	0.322	0.262	0.229	0.888
	Low Income	35	74.3	0.535	0.949	0.250	1.26
	Mid/High Income	68	66.2	0.530	0.731	0.261	1.21
	Home Children	63	63.5	0.561	0.911	0.250	1.27
	Day Care Children	53	71.7	0.556	0.912	0.256	1.24
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	40.0	--	--	--	--
	Urban	108	38.9	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	46.2	--	--	--	--
	Mid/High Income	73	41.1	--	--	--	--
	Home Children	69	36.2	--	--	--	--
	Day Care Children	56	44.6	--	--	--	--
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	82.4	337	432	225	0.869
	Urban	108	83.3	349	460	227	0.894
	Rural	17	76.5	259	161	209	0.703
	Low Income	40	85.0	337	555	220	0.843
	Mid/High Income	72	79.2	343	392	221	0.932
	Home Children	69	76.8	327	486	207	0.903
	Day Care Children	56	89.3	350	359	250	0.820
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	67.2	1.76	2.85	0.796	1.25
	Urban	99	64.6	1.88	3.05	0.809	1.30
	Rural	17	82.4	1.01	0.825	0.721	0.888
	Low Income	35	74.3	1.68	2.99	0.787	1.26
	Mid/High Income	68	66.2	1.67	2.30	0.821	1.21
	Home Children	63	63.5	1.76	2.86	0.787	1.27
	Day Care Children	53	71.7	1.75	2.87	0.806	1.24

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-17b. *p,p'*-DDE (72-55-9): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	1.09	3.47	13.3
	Urban	108	<MDL	<MDL	<MDL	1.16	3.83	13.3
	Rural	17	<MDL	<MDL	<MDL	0.743	3.43	3.43
	Low Income	39	<MDL	<MDL	<MDL	1.45	3.01	13.3
	Mid/High Income	73	<MDL	<MDL	<MDL	1.02	3.91	5.22
	Home Children	69	<MDL	<MDL	<MDL	1.11	3.43	13.3
	Day Care Children	56	<MDL	<MDL	<MDL	1.08	3.91	5.22
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	43.8	77.8	118	256	1,150
	Urban	108	<MDL	44.1	78.5	118	394	1,150
	Rural	17	<MDL	37.3	71.5	120	168	168
	Low Income	40	<MDL	51.5	75.9	113	226	1,150
	Mid/High Income	72	<MDL	40.1	72.3	120	406	744
	Home Children	69	<MDL	43.8	68.3	114	394	1,150
	Day Care Children	56	<MDL	43.8	78.5	136	256	744
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	<MDL	<MDL	0.269	0.601	2.53	5.64
	Urban	99	<MDL	<MDL	0.272	0.642	2.68	5.64
	Rural	17	<MDL	0.131	0.214	0.502	0.869	0.869
	Low Income	35	<MDL	<MDL	0.319	0.642	1.27	5.64
	Mid/High Income	68	<MDL	<MDL	0.265	0.586	2.53	3.69
	Home Children	63	<MDL	<MDL	0.261	0.510	2.21	5.38
	Day Care Children	53	<MDL	<MDL	0.272	0.642	2.53	5.64
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	3.43	10.9	41.9
	Urban	108	<MDL	<MDL	<MDL	3.65	12.0	41.9
	Rural	17	<MDL	<MDL	<MDL	2.34	10.8	10.8
	Low Income	39	<MDL	<MDL	<MDL	4.55	9.47	41.9
	Mid/High Income	73	<MDL	<MDL	<MDL	3.20	12.3	16.4
	Home Children	69	<MDL	<MDL	<MDL	3.50	10.8	41.9
	Day Care Children	56	<MDL	<MDL	<MDL	3.40	12.3	16.4
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	138	245	372	805	3,620
	Urban	108	<MDL	139	247	372	1,240	3,620
	Rural	17	<MDL	117	225	379	528	528
	Low Income	40	<MDL	162	239	354	709	3,620
	Mid/High Income	72	<MDL	126	227	378	1,280	2,340
	Home Children	69	<MDL	138	215	360	1,240	3,620
	Day Care Children	56	<MDL	138	247	429	805	2,340
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	<MDL	<MDL	0.845	1.89	7.96	17.7
	Urban	99	<MDL	<MDL	0.854	2.02	8.43	17.7
	Rural	17	<MDL	0.411	0.674	1.58	2.73	2.73
	Low Income	35	<MDL	<MDL	1.00	2.02	4.00	17.7
	Mid/High Income	68	<MDL	<MDL	0.834	1.84	7.96	11.6
	Home Children	63	<MDL	<MDL	0.820	1.60	6.96	16.9
	Day Care Children	53	<MDL	<MDL	0.854	2.02	7.96	17.7

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-17c. *p,p'*-DDE (72-55-9): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	40.0	--	--	--	--
	Urban	108	38.9	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	46.2	--	--	--	--
	Mid/High Income	73	41.1	--	--	--	--
	Home Children	69	36.2	--	--	--	--
	Day Care Children	56	44.6	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	82.4	3.10	3.97	2.05	0.888
	Urban	108	83.3	3.22	4.22	2.07	0.920
	Rural	17	76.5	2.31	1.36	1.91	0.664
	Low Income	40	85.0	2.97	4.52	1.98	0.832
	Mid/High Income	72	79.2	3.22	3.98	2.02	0.966
	Home Children	69	76.8	3.03	4.06	1.95	0.927
	Day Care Children	56	89.3	3.18	3.88	2.18	0.841
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	67.2	0.017	0.031	0.007	1.27
	Urban	99	64.6	0.018	0.034	0.007	1.32
	Rural	17	82.4	0.010	0.009	0.007	0.963
	Low Income	35	74.3	0.017	0.038	0.007	1.28
	Mid/High Income	68	66.2	0.015	0.021	0.008	1.23
	Home Children	63	63.5	0.017	0.030	0.007	1.30
	Day Care Children	53	71.7	0.017	0.034	0.007	1.25
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	40.0	--	--	--	--
	Urban	108	38.9	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	46.2	--	--	--	--
	Mid/High Income	73	41.1	--	--	--	--
	Home Children	69	36.2	--	--	--	--
	Day Care Children	56	44.6	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	82.4	9.75	12.5	6.44	0.888
	Urban	108	83.3	10.1	13.3	6.51	0.920
	Rural	17	76.5	7.26	4.29	6.02	0.664
	Low Income	40	85.0	9.34	14.2	6.23	0.832
	Mid/High Income	72	79.2	10.1	12.5	6.35	0.966
	Home Children	69	76.8	9.53	12.8	6.12	0.927
	Day Care Children	56	89.3	10.0	12.2	6.86	0.841
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	67.2	0.054	0.099	0.023	1.27
	Urban	99	64.6	0.057	0.106	0.023	1.32
	Rural	17	82.4	0.032	0.030	0.021	0.963
	Low Income	35	74.3	0.054	0.121	0.022	1.28
	Mid/High Income	68	66.2	0.049	0.067	0.024	1.23
	Home Children	63	63.5	0.055	0.093	0.024	1.30
	Day Care Children	53	71.7	0.052	0.106	0.022	1.25

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-17d. *p,p'*-DDE (72-55-9): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.029	0.117	0.459
	Urban	108	<MDL	<MDL	<MDL	0.030	0.117	0.459
	Rural	17	<MDL	<MDL	<MDL	0.026	0.122	0.122
	Low Income	39	<MDL	<MDL	<MDL	0.040	0.123	0.459
	Mid/High Income	73	<MDL	<MDL	<MDL	0.026	0.117	0.161
	Home Children	69	<MDL	<MDL	<MDL	0.037	0.119	0.459
	Day Care Children	56	<MDL	<MDL	<MDL	0.027	0.117	0.123
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	1.28	2.09	3.59	7.32	29.5
	Urban	108	<MDL	1.20	2.12	3.69	8.13	29.5
	Rural	17	<MDL	1.42	1.83	3.32	4.65	4.65
	Low Income	40	<MDL	1.42	2.02	3.19	5.77	29.5
	Mid/High Income	72	<MDL	1.02	2.13	3.94	10.6	27.3
	Home Children	69	<MDL	1.29	2.09	3.32	8.13	29.5
	Day Care Children	56	<MDL	1.28	2.21	4.21	7.32	27.3
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	<MDL	<MDL	0.008	0.017	0.059	0.230
	Urban	99	<MDL	<MDL	0.008	0.018	0.077	0.230
	Rural	17	<MDL	0.004	0.005	0.016	0.031	0.031
	Low Income	35	<MDL	<MDL	0.008	0.019	0.044	0.230
	Mid/High Income	68	<MDL	<MDL	0.008	0.017	0.059	0.107
	Home Children	63	<MDL	<MDL	0.008	0.018	0.058	0.185
	Day Care Children	53	<MDL	<MDL	0.007	0.017	0.059	0.230
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.090	0.369	1.44
	Urban	108	<MDL	<MDL	<MDL	0.096	0.369	1.44
	Rural	17	<MDL	<MDL	<MDL	0.081	0.383	0.383
	Low Income	39	<MDL	<MDL	<MDL	0.127	0.386	1.44
	Mid/High Income	73	<MDL	<MDL	<MDL	0.083	0.369	0.507
	Home Children	69	<MDL	<MDL	<MDL	0.116	0.376	1.44
	Day Care Children	56	<MDL	<MDL	<MDL	0.085	0.369	0.386
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	4.02	6.58	11.3	23.0	92.7
	Urban	108	<MDL	3.78	6.68	11.6	25.6	92.7
	Rural	17	<MDL	4.45	5.76	10.4	14.6	14.6
	Low Income	40	<MDL	4.47	6.35	10.0	18.2	92.7
	Mid/High Income	72	<MDL	3.22	6.69	12.4	33.2	85.9
	Home Children	69	<MDL	4.04	6.58	10.4	25.6	92.7
	Day Care Children	56	<MDL	4.01	6.94	13.2	23.0	85.9
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	<MDL	<MDL	0.024	0.055	0.187	0.723
	Urban	99	<MDL	<MDL	0.026	0.056	0.244	0.723
	Rural	17	<MDL	0.012	0.017	0.050	0.097	0.097
	Low Income	35	<MDL	<MDL	0.026	0.060	0.138	0.723
	Mid/High Income	68	<MDL	<MDL	0.025	0.055	0.187	0.336
	Home Children	63	<MDL	<MDL	0.024	0.056	0.183	0.582
	Day Care Children	53	<MDL	<MDL	0.023	0.052	0.187	0.723

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-18a. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	105	74.3	3.63	4.54	2.29	0.888
	Urban	96	74.0	3.23	3.55	2.15	0.837
	Rural	9	77.8	7.90	9.78	4.29	1.19
	Low Income	34	70.6	3.39	4.30	2.14	0.866
	Mid/High Income	62	72.6	3.43	3.32	2.32	0.864
	Home Children	63	66.7	3.54	3.34	2.38	0.883
	Day Care Children	42	85.7	3.78	5.95	2.15	0.902
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	54.3	319	759	150	0.968
	Urban	110	59.1	348	811	155	1.02
	Rural	17	23.5	--	--	--	--
	Low Income	41	63.4	463	924	182	1.15
	Mid/High Income	73	54.8	274	715	142	0.908
	Home Children	69	44.9	--	--	--	--
	Day Care Children	58	65.5	391	786	180	1.03
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	99.1	18.1	52.1	5.42	1.52
	Urban	99	99.0	20.0	55.9	5.89	1.54
	Rural	16	100.0	5.92	6.67	3.22	1.25
	Low Income	35	97.1	5.77	9.66	2.53	1.35
	Mid/High Income	67	100.0	24.8	66.7	7.53	1.50
	Home Children	62	98.4	21.0	67.4	5.13	1.64
	Day Care Children	53	100.0	14.7	24.5	5.77	1.38
Potential Exposure – Aggregated (ng/day)	Overall	95	98.9	350	736	175	0.975
	Urban	87	98.9	373	766	184	1.00
	Rural	8	100.0	106	25.1	103	0.250
	Low Income	29	96.6	444	699	205	1.11
	Mid/High Income	57	100.0	335	808	169	0.957
	Home Children	58	98.3	311	802	154	0.929
	Day Care Children	37	100.0	413	625	214	1.03
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	105	74.3	16.4	20.5	10.3	0.888
	Urban	96	74.0	14.6	16.1	9.75	0.837
	Rural	9	77.8	35.7	44.3	19.4	1.19
	Low Income	34	70.6	15.3	19.4	9.69	0.866
	Mid/High Income	62	72.6	15.5	15.0	10.5	0.864
	Home Children	63	66.7	16.0	15.1	10.8	0.883
	Day Care Children	42	85.7	17.1	26.9	9.74	0.902
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	54.3	1,440	3,430	677	0.968
	Urban	110	59.1	1,570	3,670	702	1.02
	Rural	17	23.5	--	--	--	--
	Low Income	41	63.4	2,090	4,180	825	1.15
	Mid/High Income	73	54.8	1,240	3,230	643	0.908
	Home Children	69	44.9	--	--	--	--
	Day Care Children	58	65.5	1,770	3,560	814	1.03
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	99.1	81.8	236	24.5	1.52
	Urban	99	99.0	90.6	253	26.7	1.54
	Rural	16	100.0	26.8	30.2	14.6	1.25
	Low Income	35	97.1	26.1	43.7	11.4	1.35
	Mid/High Income	67	100.0	112	302	34.1	1.50
	Home Children	62	98.4	94.9	305	23.2	1.64
	Day Care Children	53	100.0	66.4	111	26.1	1.38
Potential Exposure – Aggregated (pmoles/day)	Overall	95	98.9	1,590	3,330	793	0.975
	Urban	87	98.9	1,690	3,460	833	1.00
	Rural	8	100.0	478	114	465	0.250
	Low Income	29	96.6	2,010	3,160	927	1.11
	Mid/High Income	57	100.0	1,510	3,660	766	0.957
	Home Children	58	98.3	1,410	3,630	698	0.929
	Day Care Children	37	100.0	1,870	2,830	968	1.03

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-18b. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	105	<MDL	<MDL	1.86	3.78	12.8	31.3
	Urban	96	<MDL	<MDL	1.79	3.54	11.5	18.6
	Rural	9	<MDL	1.91	4.85	7.55	31.3	31.3
	Low Income	34	<MDL	<MDL	1.84	3.29	15.0	18.6
	Mid/High Income	62	<MDL	<MDL	1.94	5.08	9.97	15.0
	Home Children	63	<MDL	<MDL	1.86	5.10	9.97	15.0
	Day Care Children	42	<MDL	1.04	1.84	2.80	15.0	31.3
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	117	216	954	6,070
	Urban	110	<MDL	<MDL	118	253	2,070	6,070
	Rural	17	<MDL	<MDL	<MDL	<MDL	397	397
	Low Income	41	<MDL	<MDL	125	253	2,080	4,840
	Mid/High Income	73	<MDL	<MDL	110	216	707	6,070
	Home Children	69	<MDL	<MDL	<MDL	174	707	6,070
	Day Care Children	58	<MDL	<MDL	142	253	2,080	4,840
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	<MDL	2.09	4.81	16.2	79.6	515
	Urban	99	<MDL	2.17	5.13	18.6	82.6	515
	Rural	16	0.154	1.69	2.97	7.11	23.6	23.6
	Low Income	35	<MDL	1.29	2.30	4.47	25.7	47.9
	Mid/High Income	67	0.154	2.37	6.99	18.6	84.3	515
	Home Children	62	<MDL	1.76	5.37	13.8	55.9	515
	Day Care Children	53	0.210	2.30	4.47	16.2	79.6	135
Potential Exposure – Aggregated (ng/day)	Overall	95	<MDL	81.0	141	245	2,070	6,090
	Urban	87	<MDL	81.0	156	303	2,070	6,090
	Rural	8	70.5	82.6	108	127	140	140
	Low Income	29	<MDL	104	161	245	2,080	2,230
	Mid/High Income	57	35.3	78.1	141	303	781	6,090
	Home Children	58	<MDL	78.8	113	220	781	6,090
	Day Care Children	37	47.1	119	166	261	2,080	2,230
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	105	<MDL	<MDL	8.40	17.1	58.0	141
	Urban	96	<MDL	<MDL	8.09	16.0	51.9	84.2
	Rural	9	<MDL	8.66	21.9	34.2	141	141
	Low Income	34	<MDL	<MDL	8.33	14.9	67.7	84.2
	Mid/High Income	62	<MDL	<MDL	8.80	23.0	45.1	68.0
	Home Children	63	<MDL	<MDL	8.40	23.1	45.1	68.0
	Day Care Children	42	<MDL	4.69	8.33	12.6	67.7	141
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	529	977	4,320	27,500
	Urban	110	<MDL	<MDL	533	1,150	9,380	27,500
	Rural	17	<MDL	<MDL	<MDL	<MDL	1,790	1,790
	Low Income	41	<MDL	<MDL	565	1,150	9,410	21,900
	Mid/High Income	73	<MDL	<MDL	498	976	3,200	27,500
	Home Children	69	<MDL	<MDL	<MDL	789	3,200	27,500
	Day Care Children	58	<MDL	<MDL	642	1,150	9,410	21,900
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	<MDL	9.46	21.8	73.5	360	2,330
	Urban	99	<MDL	9.80	23.2	84.1	373	2,330
	Rural	16	0.698	7.65	13.4	32.2	107	107
	Low Income	35	<MDL	5.82	10.4	20.2	116	217
	Mid/High Income	67	0.698	10.7	31.6	84.1	382	2,330
	Home Children	62	<MDL	7.97	24.3	62.3	253	2,330
	Day Care Children	53	0.951	10.4	20.2	73.5	360	609
Potential Exposure – Aggregated (pmoles/day)	Overall	95	<MDL	367	638	1,110	9,390	27,500
	Urban	87	<MDL	367	706	1,370	9,390	27,500
	Rural	8	319	374	490	573	632	632
	Low Income	29	<MDL	470	729	1,110	9,430	10,100
	Mid/High Income	57	160	353	638	1,370	3,530	27,500
	Home Children	58	<MDL	357	513	994	3,530	27,500
	Day Care Children	37	213	540	751	1,180	9,430	10,100

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-18c. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	105	74.3	0.109	0.146	0.066	0.912
	Urban	96	74.0	0.095	0.111	0.062	0.857
	Rural	9	77.8	0.251	0.323	0.133	1.22
	Low Income	34	70.6	0.102	0.136	0.060	0.951
	Mid/High Income	62	72.6	0.100	0.100	0.068	0.841
	Home Children	63	66.7	0.106	0.104	0.071	0.879
	Day Care Children	42	85.7	0.112	0.194	0.059	0.960
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	54.3	9.19	23.7	4.29	0.961
	Urban	110	59.1	10.0	25.4	4.45	1.01
	Rural	17	23.5	--	--	--	--
	Low Income	41	63.4	12.5	26.0	5.15	1.10
	Mid/High Income	73	54.8	8.35	24.4	4.09	0.930
	Home Children	69	44.9	--	--	--	--
	Day Care Children	58	65.5	10.5	22.1	4.95	1.01
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	99.1	0.528	1.49	0.156	1.53
	Urban	99	99.0	0.585	1.60	0.170	1.55
	Rural	16	100.0	0.172	0.204	0.092	1.27
	Low Income	35	97.1	0.179	0.315	0.072	1.38
	Mid/High Income	67	100.0	0.712	1.91	0.217	1.49
	Home Children	62	98.4	0.633	1.95	0.153	1.64
	Day Care Children	53	100.0	0.405	0.648	0.159	1.40
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	95	98.9	10.1	23.5	5.05	0.963
	Urban	87	98.9	10.7	24.5	5.28	0.990
	Rural	8	100.0	3.31	1.13	3.14	0.360
	Low Income	29	96.6	11.5	17.7	5.76	1.06
	Mid/High Income	57	100.0	10.3	27.6	4.93	0.967
	Home Children	58	98.3	9.70	27.4	4.59	0.939
	Day Care Children	37	100.0	10.7	15.8	5.87	0.994
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	105	74.3	0.491	0.660	0.298	0.912
	Urban	96	74.0	0.430	0.504	0.279	0.857
	Rural	9	77.8	1.14	1.46	0.601	1.22
	Low Income	34	70.6	0.460	0.617	0.270	0.951
	Mid/High Income	62	72.6	0.451	0.452	0.308	0.841
	Home Children	63	66.7	0.481	0.470	0.322	0.879
	Day Care Children	42	85.7	0.506	0.878	0.266	0.960
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	54.3	41.6	107	19.4	0.961
	Urban	110	59.1	45.4	115	20.1	1.01
	Rural	17	23.5	--	--	--	--
	Low Income	41	63.4	56.5	118	23.3	1.10
	Mid/High Income	73	54.8	37.8	111	18.5	0.930
	Home Children	69	44.9	--	--	--	--
	Day Care Children	58	65.5	47.7	00.0	22.4	1.01
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	99.1	2.39	6.76	0.705	1.53
	Urban	99	99.0	2.65	7.25	0.769	1.55
	Rural	16	100.0	0.779	0.924	0.415	1.27
	Low Income	35	97.1	0.809	1.43	0.327	1.38
	Mid/High Income	67	100.0	3.22	8.63	0.981	1.49
	Home Children	62	98.4	2.86	8.80	0.692	1.64
	Day Care Children	53	100.0	1.83	2.93	0.721	1.40
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	95	98.9	45.7	106	22.8	0.963
	Urban	87	98.9	48.5	111	23.9	0.990
	Rural	8	100.0	15.0	5.09	14.2	0.360
	Low Income	29	96.6	52.2	79.9	26.0	1.06
	Mid/High Income	57	100.0	46.5	125	22.3	0.967
	Home Children	58	98.3	43.9	124	20.7	0.939
	Day Care Children	37	100.0	48.6	71.5	26.6	0.994

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-18d. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	105	<MDL	<MDL	0.049	0.119	0.395	1.04
	Urban	96	<MDL	<MDL	0.048	0.104	0.357	0.621
	Rural	9	<MDL	0.060	0.130	0.260	1.04	1.04
	Low Income	34	<MDL	<MDL	0.048	0.098	0.469	0.621
	Mid/High Income	62	<MDL	<MDL	0.050	0.130	0.323	0.424
	Home Children	63	<MDL	<MDL	0.050	0.148	0.353	0.424
	Day Care Children	42	<MDL	0.030	0.046	0.086	0.469	1.04
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	3.57	6.27	24.2	209
	Urban	110	<MDL	<MDL	3.61	6.60	38.9	209
	Rural	17	<MDL	<MDL	<MDL	<MDL	8.74	8.74
	Low Income	41	<MDL	<MDL	3.88	6.27	57.3	144
	Mid/High Income	73	<MDL	<MDL	3.16	6.53	20.7	209
	Home Children	69	<MDL	<MDL	<MDL	5.43	20.7	209
	Day Care Children	58	<MDL	<MDL	4.06	7.23	57.3	144
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	<MDL	0.059	0.149	0.443	1.82	14.2
	Urban	99	<MDL	0.060	0.163	0.477	1.87	14.2
	Rural	16	0.004	0.047	0.077	0.240	0.789	0.789
	Low Income	35	<MDL	0.037	0.065	0.149	0.884	1.51
	Mid/High Income	67	0.004	0.067	0.197	0.477	2.58	14.2
	Home Children	62	<MDL	0.056	0.167	0.397	1.63	14.2
	Day Care Children	53	0.007	0.060	0.104	0.443	1.82	3.71
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	95	<MDL	2.35	4.13	7.48	39.1	210
	Urban	87	<MDL	2.34	4.50	8.21	39.1	210
	Rural	8	1.81	2.44	3.23	4.36	4.66	4.66
	Low Income	29	<MDL	2.79	4.87	6.73	57.4	69.3
	Mid/High Income	57	1.30	2.34	3.96	8.35	24.6	210
	Home Children	58	<MDL	2.34	3.34	6.24	24.6	210
	Day Care Children	37	1.24	2.85	5.08	7.48	57.4	69.3
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	105	<MDL	<MDL	0.224	0.539	1.78	4.72
	Urban	96	<MDL	<MDL	0.216	0.471	1.62	2.81
	Rural	9	<MDL	0.272	0.589	1.18	4.72	4.72
	Low Income	34	<MDL	<MDL	0.219	0.443	2.12	2.81
	Mid/High Income	62	<MDL	<MDL	0.224	0.589	1.46	1.92
	Home Children	63	<MDL	<MDL	0.225	0.669	1.60	1.92
	Day Care Children	42	<MDL	0.136	0.210	0.387	2.12	4.72
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	16.1	28.4	109	945
	Urban	110	<MDL	<MDL	16.3	29.9	176	945
	Rural	17	<MDL	<MDL	<MDL	<MDL	39.5	39.5
	Low Income	41	<MDL	<MDL	17.6	28.4	259	652
	Mid/High Income	73	<MDL	<MDL	14.3	29.5	93.5	945
	Home Children	69	<MDL	<MDL	<MDL	24.6	93.5	945
	Day Care Children	58	<MDL	<MDL	18.4	32.7	259	652
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	<MDL	0.268	0.676	2.00	8.23	64.1
	Urban	99	<MDL	0.274	0.739	2.16	8.44	64.1
	Rural	16	0.018	0.214	0.348	1.09	3.57	3.57
	Low Income	35	<MDL	0.167	0.294	0.676	4.00	6.82
	Mid/High Income	67	0.018	0.301	0.893	2.16	11.7	64.1
	Home Children	62	<MDL	0.255	0.757	1.79	7.38	64.1
	Day Care Children	53	0.032	0.274	0.471	2.00	8.23	16.8
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	95	<MDL	10.6	18.7	33.8	177	948
	Urban	87	<MDL	10.6	20.4	37.1	177	948
	Rural	8	8.17	11.1	14.6	19.7	21.1	21.1
	Low Income	29	<MDL	12.6	22.0	30.5	260	313
	Mid/High Income	57	5.86	10.6	17.9	37.8	111	948
	Home Children	58	<MDL	10.6	15.1	28.2	111	948
	Day Care Children	37	5.59	12.9	23.0	33.8	260	313

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-19a. Indeno[1,2,3-cd]pyrene (193-39-5): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	36.8	--	--	--	--
	Urban	108	41.7	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	64.1	1.11	1.45	0.778	0.692
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	20.3	--	--	--	--
	Day Care Children	56	57.1	0.914	1.14	0.706	0.570
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	7.1	--	--	--	--
	Urban	110	8.2	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	12.2	--	--	--	--
	Mid/High Income	73	5.5	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	58	13.8	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	100.0	75.7	164	32.8	1.20
	Urban	98	100.0	83.5	176	37.7	1.14
	Rural	17	100.0	30.9	38.3	14.8	1.28
	Low Income	35	100.0	40.2	43.7	25.5	0.991
	Mid/High Income	67	100.0	102	209	39.4	1.34
	Home Children	62	100.0	51.8	115	22.1	1.19
	Day Care Children	53	100.0	104	205	52.2	1.06
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	36.8	--	--	--	--
	Urban	108	41.7	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	64.1	4.02	5.26	2.81	0.692
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	20.3	--	--	--	--
	Day Care Children	56	57.1	3.31	4.11	2.56	0.570
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	7.1	--	--	--	--
	Urban	110	8.2	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	12.2	--	--	--	--
	Mid/High Income	73	5.5	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	58	13.8	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	100.0	274	593	119	1.20
	Urban	98	100.0	302	636	136	1.14
	Rural	17	100.0	112	139	53.6	1.28
	Low Income	35	100.0	146	158	92.5	0.991
	Mid/High Income	67	100.0	371	755	143	1.34
	Home Children	62	100.0	187	417	79.8	1.19
	Day Care Children	53	100.0	375	741	189	1.06

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-19b. Indeno[1,2,3-cd]pyrene (193-39-5): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	0.790	1.56	7.27
	Urban	108	<MDL	<MDL	<MDL	0.790	1.62	7.27
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.973	0.973
	Low Income	39	<MDL	<MDL	0.597	0.797	5.41	7.27
	Mid/High Income	73	<MDL	<MDL	<MDL	0.787	1.13	2.24
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1.05	4.58
	Day Care Children	56	<MDL	<MDL	0.599	0.801	2.79	7.27
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	42.7	1,170
	Urban	110	<MDL	<MDL	<MDL	<MDL	47.6	1,170
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	42.7	538
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	47.6	1,170
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	1,170
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	141	571
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	1.96	14.4	28.3	75.8	313	1,390
	Urban	98	3.91	17.8	33.8	77.0	323	1,390
	Rural	17	1.96	6.66	9.00	26.3	127	127
	Low Income	35	1.96	13.8	22.1	54.9	135	218
	Mid/High Income	67	2.82	14.4	37.0	93.2	329	1,390
	Home Children	62	1.96	9.35	21.3	47.2	148	831
	Day Care Children	53	7.34	25.6	50.8	93.7	329	1,390
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	2.86	5.64	26.3
	Urban	108	<MDL	<MDL	<MDL	2.86	5.87	26.3
	Rural	17	<MDL	<MDL	<MDL	<MDL	3.52	3.52
	Low Income	39	<MDL	<MDL	2.16	2.88	19.6	26.3
	Mid/High Income	73	<MDL	<MDL	<MDL	2.85	4.07	8.12
	Home Children	69	<MDL	<MDL	<MDL	<MDL	3.78	16.6
	Day Care Children	56	<MDL	<MDL	2.17	2.90	10.1	26.3
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	155	4,240
	Urban	110	<MDL	<MDL	<MDL	<MDL	172	4,240
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	155	1,950
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	172	4,240
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	4,240
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	509	2,070
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	7.10	52.0	102	274	1,130	5,050
	Urban	98	14.1	64.4	122	279	1,170	5,050
	Rural	17	7.10	24.1	32.6	95.2	460	460
	Low Income	35	7.10	49.9	80.0	199	490	790
	Mid/High Income	67	10.2	52.0	134	337	1,190	5,050
	Home Children	62	7.10	33.8	76.9	171	534	3,010
	Day Care Children	53	26.6	92.6	184	339	1,190	5,050

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-19c. Indeno[1,2,3-cd]pyrene (193-39-5): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	36.8	--	--	--	--
	Urban	108	41.7	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	64.1	0.033	0.044	0.022	0.760
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	20.3	--	--	--	--
	Day Care Children	56	57.1	0.026	0.033	0.019	0.632
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	7.1	--	--	--	--
	Urban	110	8.2	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	12.2	--	--	--	--
	Mid/High Income	73	5.5	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	58	13.8	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	100.0	2.25	4.74	0.946	1.22
	Urban	98	100.0	2.50	5.08	1.09	1.17
	Rural	17	100.0	0.865	1.06	0.427	1.25
	Low Income	35	100.0	1.25	1.56	0.730	1.05
	Mid/High Income	67	100.0	3.04	6.00	1.14	1.35
	Home Children	62	100.0	1.74	4.68	0.659	1.22
	Day Care Children	53	100.0	2.86	4.79	1.44	1.09
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	36.8	--	--	--	--
	Urban	108	41.7	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	64.1	0.119	0.160	0.079	0.760
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	20.3	--	--	--	--
	Day Care Children	56	57.1	0.094	0.119	0.070	0.632
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	7.1	--	--	--	--
	Urban	110	8.2	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	12.2	--	--	--	--
	Mid/High Income	73	5.5	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	58	13.8	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	100.0	8.16	17.2	3.42	1.22
	Urban	98	100.0	9.03	18.4	3.93	1.17
	Rural	17	100.0	3.13	3.85	1.54	1.25
	Low Income	35	100.0	4.51	5.66	2.64	1.05
	Mid/High Income	67	100.0	11.0	21.7	4.12	1.35
	Home Children	62	100.0	6.30	16.9	2.39	1.22
	Day Care Children	53	100.0	10.3	17.3	5.22	1.09

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-19d. Indeno[1,2,3-cd]pyrene (193-39-5): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.024	0.046	0.195
	Urban	108	<MDL	<MDL	<MDL	0.024	0.053	0.195
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.033	0.033
	Low Income	39	<MDL	<MDL	0.019	0.027	0.168	0.195
	Mid/High Income	73	<MDL	<MDL	<MDL	0.022	0.033	0.065
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.033	0.168
	Day Care Children	56	<MDL	<MDL	0.018	0.024	0.093	0.195
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	1.42	28.7
	Urban	110	<MDL	<MDL	<MDL	<MDL	1.74	28.7
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	1.74	18.5
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	1.26	28.7
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	28.7
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	4.55	18.5
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	0.046	0.368	0.801	2.02	9.53	35.2
	Urban	98	0.113	0.467	0.899	2.20	9.84	35.2
	Rural	17	0.046	0.184	0.288	0.868	3.52	3.52
	Low Income	35	0.046	0.363	0.747	1.47	5.52	7.51
	Mid/High Income	67	0.097	0.368	1.10	2.69	13.7	35.2
	Home Children	62	0.046	0.280	0.605	1.61	4.28	35.2
	Day Care Children	53	0.164	0.692	1.47	2.69	13.7	27.9
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.087	0.168	0.706
	Urban	108	<MDL	<MDL	<MDL	0.087	0.190	0.706
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.121	0.121
	Low Income	39	<MDL	<MDL	0.070	0.099	0.609	0.706
	Mid/High Income	73	<MDL	<MDL	<MDL	0.081	0.121	0.235
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.121	0.609
	Day Care Children	56	<MDL	<MDL	0.066	0.087	0.337	0.706
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	<MDL	<MDL	5.13	104
	Urban	110	<MDL	<MDL	<MDL	<MDL	6.30	104
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	6.30	67.0
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	4.55	104
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	104
	Day Care Children	58	<MDL	<MDL	<MDL	<MDL	16.5	67.0
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	0.166	1.33	2.90	7.31	34.5	127
	Urban	98	0.410	1.69	3.25	7.95	35.6	127
	Rural	17	0.166	0.667	1.04	3.14	12.7	12.7
	Low Income	35	0.166	1.31	2.70	5.33	20.0	27.2
	Mid/High Income	67	0.351	1.33	3.98	9.72	49.5	127
	Home Children	62	0.166	1.01	2.19	5.82	15.5	127
	Day Care Children	53	0.593	2.51	5.33	9.72	49.5	101

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-20a. Pentachlorophenol (87-86-5): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	95	94.7	37.2	62.5	18.4	1.19
	Urban	84	94.0	36.4	63.8	17.3	1.23
	Rural	11	100.0	42.7	53.8	29.7	0.773
	Low Income	29	96.6	21.9	21.5	13.8	1.04
	Mid/High Income	58	93.1	43.8	76.2	19.7	1.28
	Home Children	54	96.3	47.0	79.1	22.7	1.17
	Day Care Children	41	92.7	24.2	24.4	13.9	1.18
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	29.9	--	--	--	--
	Urban	110	33.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	31.7	--	--	--	--
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	21.7	--	--	--	--
	Day Care Children	58	39.7	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	98.3	4.61	11.9	1.99	1.17
	Urban	99	98.0	4.85	12.7	1.96	1.22
	Rural	16	100.0	3.09	2.74	2.20	0.846
	Low Income	35	100.0	4.50	11.3	1.89	1.14
	Mid/High Income	67	97.0	3.33	3.42	1.99	1.08
	Home Children	62	96.8	4.90	13.7	2.02	1.19
	Day Care Children	53	100.0	4.27	9.46	1.96	1.16
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	95	94.7	139	235	69.0	1.19
	Urban	84	94.0	137	240	64.8	1.23
	Rural	11	100.0	160	202	111	0.773
	Low Income	29	96.6	82.4	80.6	51.7	1.04
	Mid/High Income	58	93.1	164	286	74.1	1.28
	Home Children	54	96.3	177	297	85.1	1.17
	Day Care Children	41	92.7	90.7	91.5	52.3	1.18
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	29.9	--	--	--	--
	Urban	110	33.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	31.7	--	--	--	--
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	21.7	--	--	--	--
	Day Care Children	58	39.7	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	98.3	17.3	44.6	7.48	1.17
	Urban	99	98.0	18.2	47.8	7.36	1.22
	Rural	16	100.0	11.6	10.3	8.27	0.846
	Low Income	35	100.0	16.9	42.6	7.11	1.14
	Mid/High Income	67	97.0	12.5	12.8	7.48	1.08
	Home Children	62	96.8	18.4	51.3	7.57	1.19
	Day Care Children	53	100.0	16.0	35.5	7.37	1.16

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-20b. Pentachlorophenol (87-86-5): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	95	<MDL	8.05	18.3	34.7	151	493
	Urban	84	<MDL	7.62	18.0	34.7	125	493
	Rural	11	9.78	17.3	26.3	43.8	202	202
	Low Income	29	<MDL	6.54	17.3	33.3	73.5	81.5
	Mid/High Income	58	<MDL	9.21	21.2	39.2	201	493
	Home Children	54	<MDL	10.7	21.4	39.2	201	493
	Day Care Children	41	<MDL	6.54	17.6	33.3	81.5	94.6
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	<MDL	119	269	476
	Urban	110	<MDL	<MDL	<MDL	120	274	476
	Rural	17	<MDL	<MDL	<MDL	<MDL	133	133
	Low Income	41	<MDL	<MDL	<MDL	121	153	286
	Mid/High Income	73	<MDL	<MDL	<MDL	110	269	476
	Home Children	69	<MDL	<MDL	<MDL	<MDL	353	476
	Day Care Children	58	<MDL	<MDL	<MDL	124	214	274
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	<MDL	0.936	1.80	4.42	11.9	107
	Urban	99	<MDL	0.802	1.80	4.42	15.8	107
	Rural	16	0.599	1.06	1.90	4.20	10.0	10.0
	Low Income	35	0.190	1.09	1.52	3.88	11.9	67.9
	Mid/High Income	67	<MDL	0.809	1.99	4.69	8.95	16.4
	Home Children	62	<MDL	0.984	1.84	4.40	11.9	107
	Day Care Children	53	0.190	0.827	1.65	4.42	10.0	67.9
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	95	<MDL	30.2	68.7	130	568	1,850
	Urban	84	<MDL	28.6	67.5	130	468	1,850
	Rural	11	36.7	64.8	98.9	164	757	757
	Low Income	29	<MDL	24.6	64.9	125	276	306
	Mid/High Income	58	<MDL	34.6	79.7	147	756	1,850
	Home Children	54	<MDL	40.1	80.5	147	756	1,850
	Day Care Children	41	<MDL	24.6	66.0	125	306	355
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	<MDL	446	1,010	1,790
	Urban	110	<MDL	<MDL	<MDL	450	1,030	1,790
	Rural	17	<MDL	<MDL	<MDL	<MDL	500	500
	Low Income	41	<MDL	<MDL	<MDL	453	576	1,070
	Mid/High Income	73	<MDL	<MDL	<MDL	413	1,010	1,790
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1,330	1,790
	Day Care Children	58	<MDL	<MDL	<MDL	467	805	1,030
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	<MDL	3.51	6.74	16.6	44.5	402
	Urban	99	<MDL	3.01	6.74	16.6	59.2	402
	Rural	16	2.25	3.97	7.15	15.8	37.7	37.7
	Low Income	35	0.715	4.07	5.72	14.6	44.5	255
	Mid/High Income	67	<MDL	3.04	7.46	17.6	33.6	61.6
	Home Children	62	<MDL	3.69	6.91	16.5	44.5	402
	Day Care Children	53	0.715	3.11	6.18	16.6	37.7	255

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-20c. Pentachlorophenol (87-86-5): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	95	94.7	1.12	1.99	0.526	1.22
	Urban	84	94.0	1.10	2.02	0.494	1.25
	Rural	11	100.0	1.31	1.89	0.849	0.813
	Low Income	29	96.6	0.695	0.823	0.388	1.13
	Mid/High Income	58	93.1	1.31	2.41	0.569	1.27
	Home Children	54	96.3	1.46	2.52	0.667	1.20
	Day Care Children	41	92.7	0.687	0.764	0.384	1.19
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	29.9	--	--	--	--
	Urban	110	33.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	31.7	--	--	--	--
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	21.7	--	--	--	--
	Day Care Children	58	39.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	98.3	0.152	0.479	0.057	1.23
	Urban	99	98.0	0.162	0.515	0.056	1.27
	Rural	16	100.0	0.095	0.093	0.063	0.955
	Low Income	35	100.0	0.155	0.463	0.054	1.21
	Mid/High Income	67	97.0	0.097	0.099	0.057	1.11
	Home Children	62	96.8	0.167	0.553	0.060	1.26
	Day Care Children	53	100.0	0.136	0.380	0.054	1.20
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	95	94.7	4.22	7.48	1.97	1.22
	Urban	84	94.0	4.13	7.57	1.85	1.25
	Rural	11	100.0	4.92	7.09	3.19	0.813
	Low Income	29	96.6	2.61	3.09	1.46	1.13
	Mid/High Income	58	93.1	4.90	9.05	2.14	1.27
	Home Children	54	96.3	5.47	9.45	2.50	1.20
	Day Care Children	41	92.7	2.58	2.87	1.44	1.19
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	29.9	--	--	--	--
	Urban	110	33.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	31.7	--	--	--	--
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	21.7	--	--	--	--
	Day Care Children	58	39.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	98.3	0.572	1.80	0.215	1.23
	Urban	99	98.0	0.607	1.93	0.212	1.27
	Rural	16	100.0	0.355	0.349	0.236	0.955
	Low Income	35	100.0	0.581	1.74	0.203	1.21
	Mid/High Income	67	97.0	0.364	0.373	0.215	1.11
	Home Children	62	96.8	0.626	2.08	0.226	1.26
	Day Care Children	53	100.0	0.509	1.43	0.204	1.20

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-20d. Pentachlorophenol (87-86-5): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	95	<MDL	0.278	0.576	1.02	4.63	15.5
	Urban	84	<MDL	0.228	0.490	0.993	4.29	15.5
	Rural	11	0.347	0.576	0.755	1.16	6.94	6.94
	Low Income	29	<MDL	0.174	0.468	0.850	2.70	3.33
	Mid/High Income	58	<MDL	0.294	0.604	1.12	6.25	15.5
	Home Children	54	<MDL	0.312	0.616	1.16	6.25	15.5
	Day Care Children	41	<MDL	0.178	0.474	0.850	2.42	3.33
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	<MDL	3.50	6.58	12.2
	Urban	110	<MDL	<MDL	<MDL	3.48	6.83	12.2
	Rural	17	<MDL	<MDL	<MDL	<MDL	4.89	4.89
	Low Income	41	<MDL	<MDL	<MDL	3.48	4.16	9.27
	Mid/High Income	73	<MDL	<MDL	<MDL	3.50	6.58	12.2
	Home Children	69	<MDL	<MDL	<MDL	<MDL	9.27	12.2
	Day Care Children	58	<MDL	<MDL	<MDL	3.55	5.22	7.94
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	<MDL	0.023	0.051	0.128	0.435	4.37
	Urban	99	<MDL	0.021	0.051	0.127	0.452	4.37
	Rural	16	0.013	0.033	0.061	0.140	0.369	0.369
	Low Income	35	0.007	0.026	0.048	0.119	0.435	2.77
	Mid/High Income	67	<MDL	0.027	0.061	0.143	0.259	0.457
	Home Children	62	<MDL	0.028	0.058	0.127	0.435	4.37
	Day Care Children	53	0.006	0.021	0.050	0.131	0.369	2.77
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	95	<MDL	1.04	2.16	3.82	17.4	58.2
	Urban	84	<MDL	0.857	1.84	3.73	16.1	58.2
	Rural	11	1.30	2.16	2.84	4.36	26.0	26.0
	Low Income	29	<MDL	0.655	1.76	3.19	10.1	12.5
	Mid/High Income	58	<MDL	1.10	2.27	4.22	23.5	58.2
	Home Children	54	<MDL	1.17	2.31	4.36	23.5	58.2
	Day Care Children	41	<MDL	0.667	1.78	3.19	9.09	12.5
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	<MDL	13.2	24.7	45.8
	Urban	110	<MDL	<MDL	<MDL	13.1	25.6	45.8
	Rural	17	<MDL	<MDL	<MDL	<MDL	18.4	18.4
	Low Income	41	<MDL	<MDL	<MDL	13.1	15.6	34.8
	Mid/High Income	73	<MDL	<MDL	<MDL	13.2	24.7	45.8
	Home Children	69	<MDL	<MDL	<MDL	<MDL	34.8	45.8
	Day Care Children	58	<MDL	<MDL	<MDL	13.3	19.6	29.8
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	<MDL	0.085	0.190	0.480	1.63	16.4
	Urban	99	<MDL	0.079	0.190	0.476	1.70	16.4
	Rural	16	0.050	0.125	0.230	0.527	1.38	1.38
	Low Income	35	0.025	0.096	0.181	0.448	1.63	10.4
	Mid/High Income	67	<MDL	0.102	0.228	0.537	0.974	1.72
	Home Children	62	<MDL	0.106	0.217	0.476	1.63	16.4
	Day Care Children	53	0.021	0.079	0.189	0.490	1.38	10.4

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-21a. *cis*-Permethrin (61949-76-6): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	39.2	--	--	--	--
	Urban	108	35.2	--	--	--	--
	Rural	17	64.7	3.12	1.84	2.79	0.444
	Low Income	39	46.2	--	--	--	--
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	31.9	--	--	--	--
	Day Care Children	56	48.2	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	Overall	124	38.7	--	--	--	--
	Urban	107	40.2	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	40	52.5	1,160	2,860	97.6	2.02
	Mid/High Income	72	31.9	--	--	--	--
	Home Children	68	23.5	--	--	--	--
	Day Care Children	56	57.1	2,940	15,100	109	2.08
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	61.5	139	21.3	1.38
	Urban	99	100.0	51.4	94.3	18.5	1.37
	Rural	17	100.0	120	283	47.9	1.14
	Low Income	35	100.0	64.8	105	22.8	1.46
	Mid/High Income	68	100.0	46.5	85.7	18.8	1.30
	Home Children	63	100.0	41.7	80.5	16.1	1.32
	Day Care Children	53	100.0	85.1	184	29.7	1.38
Potential Exposure – Aggregated (ng/day)	Overall	111	100.0	665	1,960	118	1.46
	Urban	94	100.0	724	2,110	118	1.52
	Rural	17	100.0	338	760	123	1.16
	Low Income	32	100.0	1,460	3,150	195	1.86
	Mid/High Income	67	100.0	252	624	90.7	1.15
	Home Children	62	100.0	312	1,130	80.4	1.17
	Day Care Children	49	100.0	1,110	2,620	193	1.65
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	39.2	--	--	--	--
	Urban	108	35.2	--	--	--	--
	Rural	17	64.7	7.97	4.70	7.12	0.444
	Low Income	39	46.2	--	--	--	--
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	31.9	--	--	--	--
	Day Care Children	56	48.2	--	--	--	--
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	124	38.7	--	--	--	--
	Urban	107	40.2	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	40	52.5	2,970	7,310	249	2.02
	Mid/High Income	72	31.9	--	--	--	--
	Home Children	68	23.5	--	--	--	--
	Day Care Children	56	57.1	7,500	38,700	279	2.08
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	157	355	54.4	1.38
	Urban	99	100.0	131	241	47.4	1.37
	Rural	17	100.0	307	723	122	1.14
	Low Income	35	100.0	166	270	58.3	1.46
	Mid/High Income	68	100.0	119	219	48.0	1.30
	Home Children	63	100.0	107	206	41.2	1.32
	Day Care Children	53	100.0	218	471	75.8	1.38
Potential Exposure – Aggregated (pmoles/day)	Overall	111	100.0	1,700	5,020	303	1.46
	Urban	94	100.0	1,850	5,380	301	1.52
	Rural	17	100.0	865	1,940	313	1.16
	Low Income	32	100.0	3,730	8,050	499	1.86
	Mid/High Income	67	100.0	645	1,600	232	1.15
	Home Children	62	100.0	797	2,880	205	1.17
	Day Care Children	49	100.0	2,840	6,690	494	1.65

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-21b. *cis*-Permethrin (61949-76-6): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	3.09	17.8	32.5
	Urban	108	<MDL	<MDL	<MDL	3.25	19.0	32.5
	Rural	17	<MDL	<MDL	2.26	2.83	8.58	8.58
	Low Income	39	<MDL	<MDL	<MDL	5.48	23.2	32.5
	Mid/High Income	73	<MDL	<MDL	<MDL	2.49	11.1	30.3
	Home Children	69	<MDL	<MDL	<MDL	2.52	6.89	14.3
	Day Care Children	56	<MDL	<MDL	<MDL	5.67	23.2	32.5
Potential Exposure via Dietary Ingestion (ng/day)	Overall	124	<MDL	<MDL	<MDL	92.3	4,830	113,000
	Urban	107	<MDL	<MDL	<MDL	102	8,030	113,000
	Rural	17	<MDL	<MDL	<MDL	43.8	2,960	2,960
	Low Income	40	<MDL	<MDL	36.6	248	9,320	9,350
	Mid/High Income	72	<MDL	<MDL	<MDL	88.6	2,960	113,000
	Home Children	68	<MDL	<MDL	<MDL	<MDL	2,900	8,030
	Day Care Children	56	<MDL	<MDL	40.3	276	9,320	113,000
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	1.85	7.84	17.9	52.7	327	1,210
	Urban	99	1.85	6.54	13.6	44.7	327	563
	Rural	17	11.8	29.6	40.5	71.6	1,210	1,210
	Low Income	35	2.19	8.40	21.2	75.6	343	428
	Mid/High Income	68	1.85	7.05	13.9	47.9	181	563
	Home Children	63	1.85	6.07	12.3	44.7	140	563
	Day Care Children	53	2.88	11.6	26.2	59.5	348	1,210
Potential Exposure – Aggregated (ng/day)	Overall	111	18.1	38.8	90.1	167	4,790	9,430
	Urban	94	18.1	37.2	91.4	172	8,080	9,430
	Rural	17	38.6	60.6	84.9	154	3,080	3,080
	Low Income	32	26.7	51.6	109	295	9,390	9,430
	Mid/High Income	67	18.1	35.8	71.8	154	1,380	3,080
	Home Children	62	18.1	34.1	63.8	130	593	8,080
	Day Care Children	49	31.8	55.8	122	316	9,340	9,430
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	7.90	45.4	83.0
	Urban	108	<MDL	<MDL	<MDL	8.31	48.5	83.0
	Rural	17	<MDL	<MDL	5.78	7.22	21.9	21.9
	Low Income	39	<MDL	<MDL	<MDL	14.0	59.4	83.0
	Mid/High Income	73	<MDL	<MDL	<MDL	6.36	28.3	77.4
	Home Children	69	<MDL	<MDL	<MDL	6.44	17.6	36.5
	Day Care Children	56	<MDL	<MDL	<MDL	14.5	59.4	83.0
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	124	<MDL	<MDL	<MDL	236	12,400	288,000
	Urban	107	<MDL	<MDL	<MDL	262	20,500	288,000
	Rural	17	<MDL	<MDL	<MDL	112	7,570	7,570
	Low Income	40	<MDL	<MDL	93.5	633	23,800	23,900
	Mid/High Income	72	<MDL	<MDL	<MDL	226	7,570	288,000
	Home Children	68	<MDL	<MDL	<MDL	<MDL	7,400	20,500
	Day Care Children	56	<MDL	<MDL	103	705	23,800	288,000
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	4.72	20.0	45.7	135	837	3,080
	Urban	99	4.72	16.7	34.9	114	837	1,440
	Rural	17	30.0	75.7	103	183	3,080	3,080
	Low Income	35	5.60	21.5	54.1	193	877	1,090
	Mid/High Income	68	4.72	18.0	35.5	123	463	1,440
	Home Children	63	4.72	15.5	31.3	114	358	1,440
	Day Care Children	53	7.36	29.7	67.0	152	890	3,080
Potential Exposure – Aggregated (pmoles/day)	Overall	111	46.3	99.1	230	426	12,200	24,100
	Urban	94	46.3	95.0	234	439	20,600	24,100
	Rural	17	98.8	155	217	394	7,870	7,870
	Low Income	32	68.2	132	278	754	24,000	24,100
	Mid/High Income	67	46.3	91.4	183	394	3,520	7,870
	Home Children	62	46.3	87.1	163	333	1,510	20,600
	Day Care Children	49	81.3	143	311	809	23,900	24,100

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-21c. *cis*-Permethrin (61949-76-6): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	39.2	--	--	--	--
	Urban	108	35.2	--	--	--	--
	Rural	17	64.7	0.086	0.039	0.080	0.371
	Low Income	39	46.2	--	--	--	--
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	31.9	--	--	--	--
	Day Care Children	56	48.2	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	124	38.7	--	--	--	--
	Urban	107	40.2	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	40	52.5	30.0	74.4	2.77	1.98
	Mid/High Income	72	31.9	--	--	--	--
	Home Children	68	23.5	--	--	--	--
	Day Care Children	56	57.1	98.4	553	3.00	2.09
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	1.92	4.92	0.614	1.41
	Urban	99	100.0	1.54	2.86	0.534	1.39
	Rural	17	100.0	4.18	10.8	1.38	1.24
	Low Income	35	100.0	2.01	3.44	0.652	1.50
	Mid/High Income	68	100.0	1.36	2.45	0.543	1.33
	Home Children	63	100.0	1.23	2.30	0.481	1.34
	Day Care Children	53	100.0	2.75	6.77	0.819	1.45
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	111	100.0	18.3	54.1	3.40	1.45
	Urban	94	100.0	19.5	57.5	3.37	1.48
	Rural	17	100.0	11.8	28.3	3.53	1.27
	Low Income	32	100.0	37.8	82.0	5.59	1.81
	Mid/High Income	67	100.0	7.11	18.0	2.61	1.13
	Home Children	62	100.0	9.19	36.7	2.39	1.14
	Day Care Children	49	100.0	29.9	68.9	5.30	1.67
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	39.2	--	--	--	--
	Urban	108	35.2	--	--	--	--
	Rural	17	64.7	0.221	0.100	0.205	0.371
	Low Income	39	46.2	--	--	--	--
	Mid/High Income	73	34.2	--	--	--	--
	Home Children	69	31.9	--	--	--	--
	Day Care Children	56	48.2	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	124	38.7	--	--	--	--
	Urban	107	40.2	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	40	52.5	76.7	190	7.08	1.98
	Mid/High Income	72	31.9	--	--	--	--
	Home Children	68	23.5	--	--	--	--
	Day Care Children	56	57.1	251	1,410	7.66	2.09
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	4.92	12.6	1.57	1.41
	Urban	99	100.0	3.92	7.32	1.37	1.39
	Rural	17	100.0	10.7	27.7	3.52	1.24
	Low Income	35	100.0	5.14	8.80	1.67	1.50
	Mid/High Income	68	100.0	3.48	6.27	1.39	1.33
	Home Children	63	100.0	3.13	5.87	1.23	1.34
	Day Care Children	53	100.0	7.03	17.3	2.09	1.45
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	111	100.0	46.8	138	8.68	1.45
	Urban	94	100.0	49.8	147	8.62	1.48
	Rural	17	100.0	30.3	72.2	9.02	1.27
	Low Income	32	100.0	96.5	210	14.3	1.81
	Mid/High Income	67	100.0	18.2	46.1	6.67	1.13
	Home Children	62	100.0	23.5	93.8	6.11	1.14
	Day Care Children	49	100.0	76.3	176	13.5	1.67

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-21d. *cis*-Permethrin (61949-76-6): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.099	0.489	1.28
	Urban	108	<MDL	<MDL	<MDL	0.100	0.491	1.28
	Rural	17	<MDL	<MDL	0.072	0.097	0.206	0.206
	Low Income	39	<MDL	<MDL	<MDL	0.128	0.560	1.08
	Mid/High Income	73	<MDL	<MDL	<MDL	0.084	0.348	1.28
	Home Children	69	<MDL	<MDL	<MDL	0.082	0.219	0.491
	Day Care Children	56	<MDL	<MDL	<MDL	0.137	0.565	1.28
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	124	<MDL	<MDL	<MDL	2.65	150	4,130
	Urban	107	<MDL	<MDL	<MDL	2.89	163	4,130
	Rural	17	<MDL	<MDL	<MDL	1.46	109	109
	Low Income	40	<MDL	<MDL	1.25	7.27	226	311
	Mid/High Income	72	<MDL	<MDL	<MDL	2.22	77.8	4,130
	Home Children	68	<MDL	<MDL	<MDL	<MDL	56.0	276
	Day Care Children	56	<MDL	<MDL	1.35	7.21	258	4,130
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.036	0.238	0.489	1.49	9.58	45.8
	Urban	99	0.036	0.189	0.406	1.40	9.58	15.9
	Rural	17	0.259	0.473	1.17	2.47	45.8	45.8
	Low Income	35	0.060	0.239	0.573	2.21	11.5	13.4
	Mid/High Income	68	0.036	0.205	0.436	1.37	5.25	15.9
	Home Children	63	0.036	0.183	0.386	1.44	3.96	15.9
	Day Care Children	53	0.066	0.340	0.617	2.11	11.5	45.8
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	111	0.531	1.29	2.22	4.71	151	315
	Urban	94	0.531	1.12	2.23	4.67	163	315
	Rural	17	0.877	1.91	2.16	4.71	113	113
	Low Income	32	0.735	1.47	3.16	11.6	259	315
	Mid/High Income	67	0.531	1.02	2.12	4.22	42.2	113
	Home Children	62	0.531	1.06	1.92	3.58	16.7	278
	Day Care Children	49	0.792	1.54	2.84	8.72	194	315
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.252	1.25	3.28
	Urban	108	<MDL	<MDL	<MDL	0.257	1.26	3.28
	Rural	17	<MDL	<MDL	0.185	0.249	0.526	0.526
	Low Income	39	<MDL	<MDL	<MDL	0.326	1.43	2.77
	Mid/High Income	73	<MDL	<MDL	<MDL	0.215	0.890	3.28
	Home Children	69	<MDL	<MDL	<MDL	0.210	0.559	1.26
	Day Care Children	56	<MDL	<MDL	<MDL	0.349	1.44	3.28
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	124	<MDL	<MDL	<MDL	6.76	383	10,600
	Urban	107	<MDL	<MDL	<MDL	7.40	417	10,600
	Rural	17	<MDL	<MDL	<MDL	3.74	278	278
	Low Income	40	<MDL	<MDL	3.20	18.6	577	795
	Mid/High Income	72	<MDL	<MDL	<MDL	5.67	199	10,600
	Home Children	68	<MDL	<MDL	<MDL	<MDL	143	706
	Day Care Children	56	<MDL	<MDL	3.44	18.4	658	10,600
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.091	0.608	1.25	3.80	24.5	117
	Urban	99	0.091	0.483	1.04	3.57	24.5	40.7
	Rural	17	0.662	1.21	3.00	6.30	117	117
	Low Income	35	0.154	0.612	1.46	5.65	29.3	34.1
	Mid/High Income	68	0.091	0.524	1.11	3.51	13.4	40.7
	Home Children	63	0.091	0.468	0.986	3.68	10.1	40.7
	Day Care Children	53	0.169	0.869	1.58	5.40	29.3	117
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	111	1.36	3.30	5.67	12.0	385	804
	Urban	94	1.36	2.86	5.70	11.9	417	804
	Rural	17	2.24	4.87	5.51	12.0	289	289
	Low Income	32	1.88	3.76	8.07	29.5	661	804
	Mid/High Income	67	1.36	2.61	5.41	10.8	108	289
	Home Children	62	1.36	2.70	4.92	9.15	42.8	711
	Day Care Children	49	2.03	3.93	7.26	22.3	495	804

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-22a. *trans*-Permethrin (61949-77-7): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	34.4	--	--	--	--
	Urban	108	32.4	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	43.6	--	--	--	--
	Mid/High Income	73	30.1	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	56	46.4	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	Overall	124	38.7	--	--	--	--
	Urban	107	40.2	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	40	52.5	974	2,440	89.2	1.94
	Mid/High Income	72	31.9	--	--	--	--
	Home Children	68	23.5	--	--	--	--
	Day Care Children	56	57.1	2,370	12,100	98.6	2.00
Potential Exposure via Indirect Ingestion (ng/day)	Overall	102	100.0	61.2	153	16.6	1.51
	Urban	85	100.0	50.9	112	14.2	1.50
	Rural	17	100.0	113	282	36.6	1.31
	Low Income	28	100.0	66.9	116	18.6	1.62
	Mid/High Income	61	100.0	44.0	106	14.1	1.42
	Home Children	60	100.0	43.3	108	12.7	1.45
	Day Care Children	42	100.0	86.7	200	24.3	1.53
Potential Exposure – Aggregated (ng/day)	Overall	97	100.0	280	784	87.5	1.20
	Urban	80	100.0	284	832	83.9	1.22
	Rural	17	100.0	263	519	106	1.13
	Low Income	25	100.0	250	644	92.7	1.14
	Mid/High Income	60	100.0	218	538	79.4	1.15
	Home Children	59	100.0	277	880	75.4	1.21
	Day Care Children	38	100.0	285	616	110	1.17
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	34.4	--	--	--	--
	Urban	108	32.4	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	43.6	--	--	--	--
	Mid/High Income	73	30.1	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	56	46.4	--	--	--	--
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	124	38.7	--	--	--	--
	Urban	107	40.2	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	40	52.5	2,490	6,230	228	1.94
	Mid/High Income	72	31.9	--	--	--	--
	Home Children	68	23.5	--	--	--	--
	Day Care Children	56	57.1	6,060	31,000	252	2.00
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	102	100.0	156	392	42.5	1.51
	Urban	85	100.0	130	286	36.2	1.50
	Rural	17	100.0	288	719	93.6	1.31
	Low Income	28	100.0	171	296	47.7	1.62
	Mid/High Income	61	100.0	113	272	35.9	1.42
	Home Children	60	100.0	111	275	32.5	1.45
	Day Care Children	42	100.0	222	511	62.1	1.53
Potential Exposure – Aggregated (pmoles/day)	Overall	97	100.0	716	2,000	224	1.20
	Urban	80	100.0	725	2,130	215	1.22
	Rural	17	100.0	673	1,330	272	1.13
	Low Income	25	100.0	639	1,650	237	1.14
	Mid/High Income	60	100.0	557	1,380	203	1.15
	Home Children	59	100.0	708	2,250	193	1.21
	Day Care Children	38	100.0	727	1,570	282	1.17

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-22b. *trans*-Permethrin (61949-77-7): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	2.21	14.6	40.3
	Urban	108	<MDL	<MDL	<MDL	2.22	16.7	40.3
	Rural	17	<MDL	<MDL	<MDL	2.05	5.71	5.71
	Low Income	39	<MDL	<MDL	<MDL	3.28	23.7	40.3
	Mid/High Income	73	<MDL	<MDL	<MDL	2.05	5.62	31.8
	Home Children	69	<MDL	<MDL	<MDL	<MDL	4.85	14.5
	Day Care Children	56	<MDL	<MDL	<MDL	3.44	23.7	40.3
Potential Exposure via Dietary Ingestion (ng/day)	Overall	124	<MDL	<MDL	<MDL	74.8	4,210	90,100
	Urban	107	<MDL	<MDL	<MDL	93.5	5,750	90,100
	Rural	17	<MDL	<MDL	<MDL	40.1	1,880	1,880
	Low Income	40	<MDL	<MDL	34.8	193	8,020	8,050
	Mid/High Income	72	<MDL	<MDL	<MDL	65.6	2,670	90,100
	Home Children	68	<MDL	<MDL	<MDL	<MDL	2,670	5,750
	Day Care Children	56	<MDL	<MDL	38.6	228	8,020	90,100
Potential Exposure via Indirect Ingestion (ng/day)	Overall	102	1.15	5.29	11.7	45.9	210	1,190
	Urban	85	1.15	4.75	9.81	38.9	210	774
	Rural	17	5.35	18.4	30.1	54.3	1,190	1,190
	Low Income	28	1.79	6.97	9.50	67.1	332	451
	Mid/High Income	61	1.15	4.83	11.4	40.0	160	774
	Home Children	60	1.15	4.61	9.08	31.6	182	774
	Day Care Children	42	2.41	7.40	19.0	61.3	332	1,190
Potential Exposure – Aggregated (ng/day)	Overall	97	17.4	36.6	72.0	146	1,960	5,790
	Urban	80	17.4	31.6	70.4	152	1,760	5,790
	Rural	17	33.1	53.1	80.7	134	1,960	1,960
	Low Income	25	26.0	39.2	82.2	158	833	3,240
	Mid/High Income	60	17.4	31.1	65.1	135	1,380	2,750
	Home Children	59	17.4	29.7	53.1	118	2,680	5,790
	Day Care Children	38	24.3	43.4	83.4	175	1,960	3,240
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	5.65	37.3	103
	Urban	108	<MDL	<MDL	<MDL	5.67	42.6	103
	Rural	17	<MDL	<MDL	<MDL	5.24	14.6	14.6
	Low Income	39	<MDL	<MDL	<MDL	8.39	60.5	103
	Mid/High Income	73	<MDL	<MDL	<MDL	5.24	14.4	81.2
	Home Children	69	<MDL	<MDL	<MDL	<MDL	12.4	37.1
	Day Care Children	56	<MDL	<MDL	<MDL	8.80	60.5	103
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	124	<MDL	<MDL	<MDL	191	10,700	230,000
	Urban	107	<MDL	<MDL	<MDL	239	14,700	230,000
	Rural	17	<MDL	<MDL	<MDL	102	4,800	4,800
	Low Income	40	<MDL	<MDL	89.0	494	20,500	20,600
	Mid/High Income	72	<MDL	<MDL	<MDL	168	6,830	230,000
	Home Children	68	<MDL	<MDL	<MDL	<MDL	6,830	14,700
	Day Care Children	56	<MDL	<MDL	98.8	582	20,500	230,000
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	102	2.95	13.5	29.8	117	538	3,050
	Urban	85	2.95	12.1	25.1	99.4	538	1,980
	Rural	17	13.7	47.0	76.9	139	3,050	3,050
	Low Income	28	4.58	17.8	24.3	172	849	1,150
	Mid/High Income	61	2.95	12.4	29.1	102	410	1,980
	Home Children	60	2.95	11.8	23.2	80.7	464	1,980
	Day Care Children	42	6.15	18.9	48.6	157	849	3,050
Potential Exposure – Aggregated (pmoles/day)	Overall	97	44.5	93.4	184	373	5,010	14,800
	Urban	80	44.5	80.9	180	388	4,490	14,800
	Rural	17	84.6	136	206	341	5,010	5,010
	Low Income	25	66.4	100	210	403	2,130	8,280
	Mid/High Income	60	44.5	79.6	166	345	3,530	7,020
	Home Children	59	44.5	75.9	136	300	6,850	14,800
	Day Care Children	38	62.0	111	213	448	5,010	8,280

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-22c. *trans*-Permethrin (61949-77-7): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	34.4	--	--	--	--
	Urban	108	32.4	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	43.6	--	--	--	--
	Mid/High Income	73	30.1	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	56	46.4	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	124	38.7	--	--	--	--
	Urban	107	40.2	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	40	52.5	25.0	63.0	2.53	1.91
	Mid/High Income	72	31.9	--	--	--	--
	Home Children	68	23.5	--	--	--	--
	Day Care Children	56	57.1	79.1	442	2.71	2.02
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	102	100.0	1.91	5.31	0.481	1.53
	Urban	85	100.0	1.51	3.31	0.411	1.51
	Rural	17	100.0	3.93	10.7	1.05	1.40
	Low Income	28	100.0	2.06	3.66	0.547	1.62
	Mid/High Income	61	100.0	1.29	3.04	0.404	1.45
	Home Children	60	100.0	1.26	3.06	0.380	1.46
	Day Care Children	42	100.0	2.84	7.38	0.672	1.58
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	97	100.0	8.39	25.1	2.52	1.20
	Urban	80	100.0	8.23	26.2	2.42	1.20
	Rural	17	100.0	9.15	19.5	3.06	1.25
	Low Income	25	100.0	7.59	20.1	2.73	1.14
	Mid/High Income	60	100.0	5.95	14.2	2.27	1.13
	Home Children	59	100.0	8.00	27.7	2.24	1.17
	Day Care Children	38	100.0	9.01	20.5	3.02	1.25
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	34.4	--	--	--	--
	Urban	108	32.4	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	43.6	--	--	--	--
	Mid/High Income	73	30.1	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	56	46.4	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	124	38.7	--	--	--	--
	Urban	107	40.2	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	40	52.5	64.0	161	6.47	1.91
	Mid/High Income	72	31.9	--	--	--	--
	Home Children	68	23.5	--	--	--	--
	Day Care Children	56	57.1	202	1,130	6.93	2.02
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	102	100.0	4.88	13.6	1.23	1.53
	Urban	85	100.0	3.85	8.46	1.05	1.51
	Rural	17	100.0	10.1	27.4	2.69	1.40
	Low Income	28	100.0	5.28	9.36	1.40	1.62
	Mid/High Income	61	100.0	3.29	7.78	1.03	1.45
	Home Children	60	100.0	3.22	7.83	0.972	1.46
	Day Care Children	42	100.0	7.26	18.9	1.72	1.58
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	97	100.0	21.5	64.0	6.44	1.20
	Urban	80	100.0	21.0	67.0	6.18	1.20
	Rural	17	100.0	23.4	49.7	7.83	1.25
	Low Income	25	100.0	19.4	51.5	6.99	1.14
	Mid/High Income	60	100.0	15.2	36.3	5.80	1.13
	Home Children	59	100.0	20.4	70.9	5.73	1.17
	Day Care Children	38	100.0	23.0	52.5	7.72	1.25

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-22d. *trans*-Permethrin (61949-77-7): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.073	0.402	1.35
	Urban	108	<MDL	<MDL	<MDL	0.073	0.447	1.35
	Rural	17	<MDL	<MDL	<MDL	0.070	0.137	0.137
	Low Income	39	<MDL	<MDL	<MDL	0.097	0.579	1.34
	Mid/High Income	73	<MDL	<MDL	<MDL	0.070	0.167	1.35
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.136	0.499
	Day Care Children	56	<MDL	<MDL	<MDL	0.094	0.587	1.35
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	124	<MDL	<MDL	<MDL	2.14	108	3,310
	Urban	107	<MDL	<MDL	<MDL	2.45	140	3,310
	Rural	17	<MDL	<MDL	<MDL	1.34	68.9	68.9
	Low Income	40	<MDL	<MDL	1.23	4.80	194	268
	Mid/High Income	72	<MDL	<MDL	<MDL	1.77	68.9	3,310
	Home Children	68	<MDL	<MDL	<MDL	<MDL	53.0	198
	Day Care Children	56	<MDL	<MDL	1.24	5.02	222	3,310
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	102	0.022	0.164	0.341	1.08	6.62	45.3
	Urban	85	0.022	0.132	0.301	0.965	6.62	21.9
	Rural	17	0.118	0.452	0.900	1.87	45.3	45.3
	Low Income	28	0.049	0.225	0.320	1.70	11.1	12.5
	Mid/High Income	61	0.022	0.130	0.322	0.937	4.52	21.9
	Home Children	60	0.022	0.129	0.293	1.01	5.55	21.9
	Day Care Children	42	0.064	0.230	0.496	2.40	11.1	45.3
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	97	0.437	1.07	1.78	4.00	53.1	199
	Urban	80	0.437	1.01	1.64	4.00	37.9	199
	Rural	17	0.729	1.58	2.00	4.00	71.9	71.9
	Low Income	25	0.716	1.23	1.93	4.39	20.4	102
	Mid/High Income	60	0.437	0.927	1.75	3.88	37.9	71.9
	Home Children	59	0.437	0.962	1.67	3.68	53.1	199
	Day Care Children	38	0.668	1.32	1.92	5.74	71.9	102
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.185	1.03	3.44
	Urban	108	<MDL	<MDL	<MDL	0.186	1.14	3.44
	Rural	17	<MDL	<MDL	<MDL	0.179	0.350	0.350
	Low Income	39	<MDL	<MDL	<MDL	0.248	1.48	3.44
	Mid/High Income	73	<MDL	<MDL	<MDL	0.179	0.427	3.44
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.347	1.28
	Day Care Children	56	<MDL	<MDL	<MDL	0.240	1.50	3.44
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	124	<MDL	<MDL	<MDL	5.48	275	8,450
	Urban	107	<MDL	<MDL	<MDL	6.27	358	8,450
	Rural	17	<MDL	<MDL	<MDL	3.42	176	176
	Low Income	40	<MDL	<MDL	3.15	12.3	496	684
	Mid/High Income	72	<MDL	<MDL	<MDL	4.53	176	8,450
	Home Children	68	<MDL	<MDL	<MDL	<MDL	136	506
	Day Care Children	56	<MDL	<MDL	3.16	12.8	566	8,450
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	102	0.057	0.420	0.871	2.75	16.9	116
	Urban	85	0.057	0.337	0.770	2.47	16.9	55.9
	Rural	17	0.301	1.15	2.30	4.78	116	116
	Low Income	28	0.126	0.576	0.818	4.33	28.4	31.9
	Mid/High Income	61	0.057	0.331	0.822	2.39	11.6	55.9
	Home Children	60	0.057	0.328	0.748	2.58	14.2	55.9
	Day Care Children	42	0.164	0.587	1.27	6.14	28.4	116
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	97	1.12	2.74	4.54	10.2	136	509
	Urban	80	1.12	2.57	4.20	10.2	96.8	509
	Rural	17	1.86	4.04	5.10	10.2	184	184
	Low Income	25	1.83	3.14	4.92	11.2	52.1	260
	Mid/High Income	60	1.12	2.37	4.48	9.92	96.8	184
	Home Children	59	1.12	2.46	4.27	9.40	136	509
	Day Care Children	38	1.71	3.37	4.91	14.7	184	260

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-23a. PCB 52 (35693-99-3): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	122	96.7	4.54	4.61	3.21	0.840
	Urban	105	96.2	4.28	4.21	3.08	0.832
	Rural	17	100.0	6.13	6.54	4.13	0.871
	Low Income	36	100.0	4.43	4.55	3.16	0.822
	Mid/High Income	73	94.5	4.62	4.91	3.16	0.883
	Home Children	69	94.2	4.63	5.53	2.91	0.964
	Day Care Children	53	100.0	4.43	3.08	3.64	0.632
Potential Exposure via Dietary Ingestion (ng/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	71.3	0.469	1.18	0.217	1.08
	Urban	98	67.3	0.495	1.27	0.211	1.13
	Rural	17	94.1	0.324	0.230	0.252	0.755
	Low Income	35	94.3	0.332	0.452	0.205	0.926
	Mid/High Income	67	62.7	0.542	1.45	0.229	1.14
	Home Children	63	55.6	0.499	1.49	0.196	1.15
	Day Care Children	52	90.4	0.433	0.629	0.244	1.00
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	122	96.7	15.6	15.8	11.0	0.840
	Urban	105	96.2	14.7	14.4	10.5	0.832
	Rural	17	100.0	21.0	22.4	14.2	0.871
	Low Income	36	100.0	15.2	15.6	10.8	0.822
	Mid/High Income	73	94.5	15.8	16.8	10.8	0.883
	Home Children	69	94.2	15.9	19.0	9.96	0.964
	Day Care Children	53	100.0	15.2	10.5	12.5	0.632
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	71.3	1.61	4.03	0.742	1.08
	Urban	98	67.3	1.69	4.35	0.723	1.13
	Rural	17	94.1	1.11	0.787	0.862	0.755
	Low Income	35	94.3	1.14	1.55	0.702	0.926
	Mid/High Income	67	62.7	1.86	4.98	0.786	1.14
	Home Children	63	55.6	1.71	5.10	0.672	1.15
	Day Care Children	52	90.4	1.48	2.15	0.837	1.00

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-23b. PCB 52 (35693-99-3): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	122	<MDL	2.02	3.58	5.25	12.2	28.1
	Urban	105	<MDL	1.99	3.65	5.05	9.62	28.1
	Rural	17	1.10	2.43	3.12	6.61	27.1	27.1
	Low Income	36	0.494	1.95	3.62	4.58	18.6	23.1
	Mid/High Income	73	<MDL	1.99	3.46	5.27	12.2	28.1
	Home Children	69	<MDL	1.59	3.18	4.92	18.6	28.1
	Day Care Children	53	0.814	2.50	3.72	5.29	9.82	17.7
Potential Exposure via Dietary Ingestion (ng/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	<MDL	<MDL	0.228	0.396	1.33	11.5
	Urban	98	<MDL	<MDL	0.204	0.380	1.54	11.5
	Rural	17	<MDL	0.131	0.267	0.399	0.786	0.786
	Low Income	35	<MDL	0.099	0.196	0.347	1.11	2.49
	Mid/High Income	67	<MDL	<MDL	0.251	0.399	1.33	11.5
	Home Children	63	<MDL	<MDL	0.228	0.355	1.11	11.5
	Day Care Children	52	<MDL	0.108	0.219	0.448	1.54	3.57
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	122	<MDL	6.90	12.3	18.0	41.9	96.4
	Urban	105	<MDL	6.83	12.5	17.3	32.9	96.4
	Rural	17	3.76	8.32	10.7	22.6	92.7	92.7
	Low Income	36	1.69	6.69	12.4	15.7	63.9	79.2
	Mid/High Income	73	<MDL	6.83	11.9	18.0	41.9	96.4
	Home Children	69	<MDL	5.45	10.9	16.9	63.9	96.4
	Day Care Children	53	2.79	8.56	12.7	18.1	33.6	60.5
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	<MDL	<MDL	0.782	1.36	4.56	39.4
	Urban	98	<MDL	<MDL	0.698	1.30	5.27	39.4
	Rural	17	<MDL	0.448	0.913	1.37	2.69	2.69
	Low Income	35	<MDL	0.339	0.670	1.19	3.81	8.53
	Mid/High Income	67	<MDL	<MDL	0.860	1.37	4.56	39.4
	Home Children	63	<MDL	<MDL	0.782	1.21	3.81	39.4
	Day Care Children	52	<MDL	0.370	0.751	1.53	5.27	12.2

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-23c. PCB 52 (35693-99-3): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	122	96.7	0.133	0.138	0.092	0.863
	Urban	105	96.2	0.124	0.126	0.088	0.839
	Rural	17	100.0	0.188	0.191	0.119	0.990
	Low Income	36	100.0	0.128	0.127	0.089	0.865
	Mid/High Income	73	94.5	0.134	0.147	0.091	0.876
	Home Children	69	94.2	0.137	0.165	0.086	0.955
	Day Care Children	53	100.0	0.127	0.093	0.100	0.727
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	71.3	0.014	0.039	0.006	1.12
	Urban	98	67.3	0.015	0.042	0.006	1.16
	Rural	17	94.1	0.010	0.008	0.007	0.890
	Low Income	35	94.3	0.010	0.017	0.006	0.994
	Mid/High Income	67	62.7	0.016	0.049	0.007	1.16
	Home Children	63	55.6	0.016	0.050	0.006	1.18
	Day Care Children	52	90.4	0.012	0.018	0.007	1.05
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	122	96.7	0.455	0.472	0.314	0.863
	Urban	105	96.2	0.424	0.432	0.301	0.839
	Rural	17	100.0	0.645	0.654	0.408	0.990
	Low Income	36	100.0	0.437	0.436	0.304	0.865
	Mid/High Income	73	94.5	0.458	0.503	0.312	0.876
	Home Children	69	94.2	0.470	0.565	0.295	0.955
	Day Care Children	53	100.0	0.435	0.318	0.341	0.727
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	71.3	0.049	0.134	0.021	1.12
	Urban	98	67.3	0.051	0.145	0.021	1.16
	Rural	17	94.1	0.035	0.027	0.025	0.890
	Low Income	35	94.3	0.036	0.060	0.020	0.994
	Mid/High Income	67	62.7	0.056	0.167	0.023	1.16
	Home Children	63	55.6	0.054	0.173	0.020	1.18
	Day Care Children	52	90.4	0.042	0.062	0.023	1.05

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-23d. PCB 52 (35693-99-3): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	122	<MDL	0.054	0.101	0.157	0.373	0.968
	Urban	105	<MDL	0.052	0.101	0.146	0.301	0.968
	Rural	17	0.026	0.063	0.086	0.243	0.693	0.693
	Low Income	36	0.014	0.046	0.100	0.150	0.513	0.592
	Mid/High Income	73	<MDL	0.057	0.098	0.161	0.373	0.968
	Home Children	69	<MDL	0.043	0.100	0.143	0.513	0.968
	Day Care Children	53	0.014	0.062	0.105	0.161	0.339	0.464
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	<MDL	<MDL	0.006	0.012	0.037	0.396
	Urban	98	<MDL	<MDL	0.006	0.012	0.042	0.396
	Rural	17	<MDL	0.004	0.009	0.012	0.029	0.029
	Low Income	35	<MDL	0.003	0.005	0.010	0.031	0.102
	Mid/High Income	67	<MDL	<MDL	0.007	0.012	0.037	0.396
	Home Children	63	<MDL	<MDL	0.007	0.011	0.031	0.396
	Day Care Children	52	<MDL	0.003	0.006	0.012	0.042	0.102
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	122	<MDL	0.185	0.345	0.539	1.28	3.32
	Urban	105	<MDL	0.179	0.346	0.501	1.03	3.32
	Rural	17	0.091	0.215	0.295	0.831	2.37	2.37
	Low Income	36	0.049	0.159	0.343	0.512	1.76	2.03
	Mid/High Income	73	<MDL	0.196	0.334	0.552	1.28	3.32
	Home Children	69	<MDL	0.148	0.344	0.488	1.76	3.32
	Day Care Children	53	0.049	0.214	0.359	0.552	1.16	1.59
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	<MDL	<MDL	0.020	0.040	0.125	1.36
	Urban	98	<MDL	<MDL	0.019	0.040	0.145	1.36
	Rural	17	<MDL	0.014	0.029	0.040	0.099	0.099
	Low Income	35	<MDL	0.011	0.018	0.034	0.105	0.348
	Mid/High Income	67	<MDL	<MDL	0.025	0.041	0.125	1.36
	Home Children	63	<MDL	<MDL	0.023	0.038	0.105	1.36
	Day Care Children	52	<MDL	0.010	0.019	0.043	0.145	0.348

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-24a. PCB 95 (38379-99-6): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	81.6	1.59	2.66	0.890	0.966
	Urban	108	79.6	1.56	2.75	0.864	0.965
	Rural	17	94.1	1.79	2.12	1.08	0.980
	Low Income	39	87.2	1.93	3.81	0.895	1.07
	Mid/High Income	73	78.1	1.46	2.03	0.883	0.941
	Home Children	69	71.0	1.45	2.44	0.787	0.982
	Day Care Children	56	94.6	1.77	2.93	1.04	0.932
Potential Exposure via Dietary Ingestion (ng/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	66.1	0.424	1.53	0.170	1.06
	Urban	98	63.3	0.447	1.65	0.164	1.09
	Rural	17	82.4	0.296	0.256	0.208	0.904
	Low Income	35	80.0	0.230	0.277	0.139	0.957
	Mid/High Income	67	61.2	0.531	1.97	0.190	1.08
	Home Children	63	49.2	--	--	--	--
	Day Care Children	52	86.5	0.336	0.640	0.182	0.983
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	81.6	4.88	8.16	2.73	0.966
	Urban	108	79.6	4.78	8.42	2.65	0.965
	Rural	17	94.1	5.50	6.49	3.30	0.980
	Low Income	39	87.2	5.90	11.7	2.74	1.07
	Mid/High Income	73	78.1	4.48	6.22	2.71	0.941
	Home Children	69	71.0	4.44	7.47	2.41	0.982
	Day Care Children	56	94.6	5.42	8.98	3.18	0.932
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	66.1	1.30	4.69	0.521	1.06
	Urban	98	63.3	1.37	5.07	0.503	1.09
	Rural	17	82.4	0.908	0.785	0.636	0.904
	Low Income	35	80.0	0.705	0.848	0.426	0.957
	Mid/High Income	67	61.2	1.63	6.03	0.583	1.08
	Home Children	63	49.2	--	--	--	--
	Day Care Children	52	86.5	1.03	1.96	0.558	0.983

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-24b. PCB 95 (38379-99-6): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	0.393	0.805	1.62	5.75	20.5
	Urban	108	<MDL	0.376	0.811	1.61	4.71	20.5
	Rural	17	<MDL	0.578	0.740	2.07	7.32	7.32
	Low Income	39	<MDL	0.380	0.771	1.61	13.4	20.5
	Mid/High Income	73	<MDL	0.393	0.817	1.73	4.84	13.4
	Home Children	69	<MDL	<MDL	0.767	1.24	5.77	13.4
	Day Care Children	56	<MDL	0.451	0.878	1.94	5.75	20.5
Potential Exposure via Dietary Ingestion (ng/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	<MDL	<MDL	0.153	0.305	0.899	15.7
	Urban	98	<MDL	<MDL	0.138	0.302	0.899	15.7
	Rural	17	<MDL	0.131	0.171	0.512	0.955	0.955
	Low Income	35	<MDL	0.072	0.104	0.209	0.899	1.17
	Mid/High Income	67	<MDL	<MDL	0.170	0.337	0.665	15.7
	Home Children	63	<MDL	<MDL	<MDL	0.289	0.866	15.7
	Day Care Children	52	<MDL	0.083	0.157	0.491	0.899	4.54
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	1.20	2.47	4.95	17.6	62.9
	Urban	108	<MDL	1.15	2.48	4.94	14.4	62.9
	Rural	17	<MDL	1.77	2.27	6.34	22.4	22.4
	Low Income	39	<MDL	1.16	2.36	4.93	41.0	62.9
	Mid/High Income	73	<MDL	1.20	2.50	5.29	14.8	41.2
	Home Children	69	<MDL	<MDL	2.35	3.78	17.7	41.2
	Day Care Children	56	<MDL	1.38	2.69	5.94	17.6	62.9
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	<MDL	<MDL	0.469	0.935	2.75	48.2
	Urban	98	<MDL	<MDL	0.424	0.925	2.75	48.2
	Rural	17	<MDL	0.400	0.523	1.57	2.92	2.92
	Low Income	35	<MDL	0.220	0.318	0.641	2.75	3.59
	Mid/High Income	67	<MDL	<MDL	0.522	1.03	2.04	48.2
	Home Children	63	<MDL	<MDL	<MDL	0.885	2.65	48.2
	Day Care Children	52	<MDL	0.253	0.480	1.50	2.75	13.9

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-24c. PCB 95 (38379-99-6): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	81.6	0.047	0.084	0.025	0.984
	Urban	108	79.6	0.046	0.086	0.025	0.970
	Rural	17	94.1	0.056	0.068	0.031	1.08
	Low Income	39	87.2	0.057	0.119	0.025	1.11
	Mid/High Income	73	78.1	0.042	0.063	0.025	0.928
	Home Children	69	71.0	0.043	0.073	0.023	0.975
	Day Care Children	56	94.6	0.052	0.096	0.028	0.994
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	66.1	0.013	0.051	0.005	1.10
	Urban	98	63.3	0.013	0.055	0.005	1.11
	Rural	17	82.4	0.009	0.009	0.006	1.03
	Low Income	35	80.0	0.007	0.009	0.004	0.997
	Mid/High Income	67	61.2	0.016	0.066	0.005	1.11
	Home Children	63	49.2	--	--	--	--
	Day Care Children	52	86.5	0.009	0.014	0.005	1.03
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	81.6	0.144	0.257	0.078	0.984
	Urban	108	79.6	0.140	0.264	0.076	0.970
	Rural	17	94.1	0.172	0.209	0.095	1.08
	Low Income	39	87.2	0.174	0.366	0.077	1.11
	Mid/High Income	73	78.1	0.130	0.193	0.078	0.928
	Home Children	69	71.0	0.131	0.224	0.071	0.975
	Day Care Children	56	94.6	0.160	0.294	0.087	0.994
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	66.1	0.039	0.157	0.015	1.10
	Urban	98	63.3	0.041	0.170	0.014	1.11
	Rural	17	82.4	0.029	0.029	0.018	1.03
	Low Income	35	80.0	0.021	0.027	0.012	0.997
	Mid/High Income	67	61.2	0.050	0.203	0.017	1.11
	Home Children	63	49.2	--	--	--	--
	Day Care Children	52	86.5	0.028	0.044	0.015	1.03

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-24d. PCB 95 (38379-99-6): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	0.012	0.025	0.045	0.159	0.685
	Urban	108	<MDL	0.011	0.026	0.044	0.144	0.685
	Rural	17	<MDL	0.014	0.022	0.071	0.219	0.219
	Low Income	39	<MDL	0.010	0.024	0.042	0.343	0.685
	Mid/High Income	73	<MDL	0.012	0.026	0.045	0.158	0.462
	Home Children	69	<MDL	<MDL	0.024	0.037	0.167	0.462
	Day Care Children	56	<MDL	0.013	0.029	0.056	0.158	0.685
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	<MDL	<MDL	0.004	0.010	0.030	0.542
	Urban	98	<MDL	<MDL	0.004	0.010	0.030	0.542
	Rural	17	<MDL	0.003	0.006	0.013	0.036	0.036
	Low Income	35	<MDL	0.002	0.003	0.006	0.030	0.037
	Mid/High Income	67	<MDL	<MDL	0.005	0.010	0.021	0.542
	Home Children	63	<MDL	<MDL	<MDL	0.009	0.024	0.542
	Day Care Children	52	<MDL	0.002	0.004	0.014	0.036	0.091
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	0.035	0.078	0.137	0.487	2.10
	Urban	108	<MDL	0.033	0.079	0.133	0.441	2.10
	Rural	17	<MDL	0.044	0.068	0.218	0.669	0.669
	Low Income	39	<MDL	0.032	0.074	0.129	1.05	2.10
	Mid/High Income	73	<MDL	0.038	0.079	0.139	0.485	1.42
	Home Children	69	<MDL	<MDL	0.073	0.114	0.510	1.42
	Day Care Children	56	<MDL	0.038	0.088	0.173	0.485	2.10
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	<MDL	<MDL	0.013	0.030	0.092	1.66
	Urban	98	<MDL	<MDL	0.012	0.029	0.092	1.66
	Rural	17	<MDL	0.010	0.017	0.040	0.111	0.111
	Low Income	35	<MDL	0.006	0.009	0.019	0.092	0.112
	Mid/High Income	67	<MDL	<MDL	0.015	0.031	0.063	1.66
	Home Children	63	<MDL	<MDL	<MDL	0.028	0.073	1.66
	Day Care Children	52	<MDL	0.007	0.012	0.042	0.111	0.278

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-25a. PCB 101 (37680-73-2): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	71.2	1.58	3.27	0.784	1.05
	Urban	108	67.6	1.57	3.43	0.754	1.06
	Rural	17	94.1	1.68	1.96	1.00	1.01
	Low Income	39	69.2	2.08	5.18	0.779	1.19
	Mid/High Income	73	71.2	1.41	1.94	0.814	1.00
	Home Children	69	58.0	1.30	2.34	0.650	1.03
	Day Care Children	56	87.5	1.93	4.13	0.988	1.04
Potential Exposure via Dietary Ingestion (ng/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	68.7	0.579	2.34	0.199	1.16
	Urban	98	65.3	0.620	2.53	0.192	1.20
	Rural	17	88.2	0.347	0.321	0.240	0.896
	Low Income	35	85.7	0.299	0.372	0.166	1.07
	Mid/High Income	67	62.7	0.734	3.02	0.221	1.18
	Home Children	63	54.0	0.704	3.09	0.190	1.21
	Day Care Children	52	86.5	0.429	0.790	0.210	1.11
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	71.2	4.84	10.0	2.40	1.05
	Urban	108	67.6	4.80	10.5	2.31	1.06
	Rural	17	94.1	5.15	6.00	3.07	1.01
	Low Income	39	69.2	6.36	15.9	2.39	1.19
	Mid/High Income	73	71.2	4.32	5.93	2.49	1.00
	Home Children	69	58.0	3.99	7.18	1.99	1.03
	Day Care Children	56	87.5	5.90	12.6	3.03	1.04
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	68.7	1.78	7.17	0.608	1.16
	Urban	98	65.3	1.90	7.76	0.589	1.20
	Rural	17	88.2	1.06	0.983	0.735	0.896
	Low Income	35	85.7	0.917	1.14	0.508	1.07
	Mid/High Income	67	62.7	2.25	9.25	0.677	1.18
	Home Children	63	54.0	2.16	9.46	0.581	1.21
	Day Care Children	52	86.5	1.31	2.42	0.643	1.11

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-25b. PCB 101 (37680-73-2): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	0.719	1.45	5.19	30.7
	Urban	108	<MDL	<MDL	0.706	1.45	4.41	30.7
	Rural	17	<MDL	0.509	0.746	2.15	6.81	6.81
	Low Income	39	<MDL	<MDL	0.705	1.96	13.0	30.7
	Mid/High Income	73	<MDL	<MDL	0.746	1.45	5.67	12.7
	Home Children	69	<MDL	<MDL	0.516	1.16	5.19	13.0
	Day Care Children	56	<MDL	0.385	0.975	2.13	5.67	30.7
Potential Exposure via Dietary Ingestion (ng/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	<MDL	<MDL	0.178	0.355	1.22	24.4
	Urban	98	<MDL	<MDL	0.166	0.355	1.34	24.4
	Rural	17	<MDL	0.138	0.179	0.328	1.13	1.13
	Low Income	35	<MDL	0.073	0.143	0.306	1.34	1.38
	Mid/High Income	67	<MDL	<MDL	0.211	0.423	1.12	24.4
	Home Children	63	<MDL	<MDL	0.179	0.355	1.14	24.4
	Day Care Children	52	<MDL	0.087	0.175	0.480	1.22	5.43
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	2.20	4.45	15.9	94.0
	Urban	108	<MDL	<MDL	2.16	4.43	13.5	94.0
	Rural	17	<MDL	1.56	2.29	6.58	20.9	20.9
	Low Income	39	<MDL	<MDL	2.16	5.99	39.9	94.0
	Mid/High Income	73	<MDL	<MDL	2.29	4.45	17.4	38.8
	Home Children	69	<MDL	<MDL	1.58	3.56	15.9	39.9
	Day Care Children	56	<MDL	1.18	2.99	6.54	17.4	94.0
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	<MDL	<MDL	0.544	1.09	3.74	74.9
	Urban	98	<MDL	<MDL	0.510	1.09	4.10	74.9
	Rural	17	<MDL	0.424	0.549	1.00	3.47	3.47
	Low Income	35	<MDL	0.222	0.440	0.936	4.10	4.23
	Mid/High Income	67	<MDL	<MDL	0.648	1.29	3.42	74.9
	Home Children	63	<MDL	<MDL	0.549	1.09	3.48	74.9
	Day Care Children	52	<MDL	0.265	0.537	1.47	3.74	16.6

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-25c. PCB 101 (37680-73-2): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	71.2	0.047	0.106	0.022	1.07
	Urban	108	67.6	0.046	0.111	0.022	1.06
	Rural	17	94.1	0.053	0.062	0.029	1.14
	Low Income	39	69.2	0.062	0.168	0.022	1.20
	Mid/High Income	73	71.2	0.041	0.061	0.023	1.01
	Home Children	69	58.0	0.039	0.071	0.019	1.03
	Day Care Children	56	87.5	0.057	0.137	0.027	1.09
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	68.7	0.018	0.079	0.006	1.20
	Urban	98	65.3	0.019	0.086	0.006	1.23
	Rural	17	88.2	0.011	0.011	0.007	1.01
	Low Income	35	85.7	0.009	0.012	0.005	1.13
	Mid/High Income	67	62.7	0.023	0.103	0.006	1.19
	Home Children	63	54.0	0.023	0.106	0.006	1.24
	Day Care Children	52	86.5	0.012	0.018	0.006	1.15
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	71.2	0.144	0.324	0.069	1.07
	Urban	108	67.6	0.141	0.340	0.066	1.06
	Rural	17	94.1	0.162	0.190	0.088	1.14
	Low Income	39	69.2	0.190	0.515	0.067	1.20
	Mid/High Income	73	71.2	0.126	0.188	0.072	1.01
	Home Children	69	58.0	0.119	0.216	0.059	1.03
	Day Care Children	56	87.5	0.176	0.420	0.083	1.09
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall						
	Urban						
	Rural						
	Low Income						
	Mid/High Income						
	Home Children						
	Day Care Children						
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	68.7	0.054	0.242	0.017	1.20
	Urban	98	65.3	0.058	0.262	0.017	1.23
	Rural	17	88.2	0.033	0.035	0.021	1.01
	Low Income	35	85.7	0.028	0.036	0.015	1.13
	Mid/High Income	67	62.7	0.069	0.314	0.019	1.19
	Home Children	63	54.0	0.069	0.324	0.017	1.24
	Day Care Children	52	86.5	0.036	0.055	0.018	1.15

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-25d. PCB 101 (37680-73-2): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	0.021	0.044	0.174	1.02
	Urban	108	<MDL	<MDL	0.018	0.041	0.121	1.02
	Rural	17	<MDL	0.014	0.024	0.077	0.179	0.179
	Low Income	39	<MDL	<MDL	0.014	0.039	0.333	1.02
	Mid/High Income	73	<MDL	<MDL	0.021	0.044	0.174	0.436
	Home Children	69	<MDL	<MDL	0.014	0.034	0.174	0.436
	Day Care Children	56	<MDL	0.012	0.028	0.066	0.174	1.02
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	<MDL	<MDL	0.006	0.011	0.037	0.841
	Urban	98	<MDL	<MDL	0.005	0.011	0.037	0.841
	Rural	17	<MDL	0.004	0.006	0.011	0.043	0.043
	Low Income	35	<MDL	0.002	0.003	0.009	0.035	0.055
	Mid/High Income	67	<MDL	<MDL	0.006	0.011	0.036	0.841
	Home Children	63	<MDL	<MDL	0.006	0.011	0.035	0.841
	Day Care Children	52	<MDL	0.002	0.005	0.014	0.043	0.109
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	0.064	0.134	0.532	3.14
	Urban	108	<MDL	<MDL	0.056	0.127	0.372	3.14
	Rural	17	<MDL	0.044	0.073	0.237	0.547	0.547
	Low Income	39	<MDL	<MDL	0.043	0.119	1.02	3.14
	Mid/High Income	73	<MDL	<MDL	0.066	0.135	0.532	1.34
	Home Children	69	<MDL	<MDL	0.044	0.105	0.534	1.34
	Day Care Children	56	<MDL	0.036	0.087	0.203	0.532	3.14
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall							
	Urban							
	Rural							
	Low Income							
	Mid/High Income							
	Home Children							
	Day Care Children							
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	<MDL	<MDL	0.018	0.035	0.114	2.58
	Urban	98	<MDL	<MDL	0.016	0.035	0.114	2.58
	Rural	17	<MDL	0.013	0.018	0.033	0.132	0.132
	Low Income	35	<MDL	0.007	0.010	0.028	0.108	0.167
	Mid/High Income	67	<MDL	<MDL	0.019	0.035	0.111	2.58
	Home Children	63	<MDL	<MDL	0.018	0.033	0.108	2.58
	Day Care Children	52	<MDL	0.007	0.015	0.042	0.132	0.333

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table M-26a. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimates of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Preschool Children (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	110	100.0	13.4	29.9	6.55	0.997
	Urban	98	100.0	14.4	31.5	6.93	1.03
	Rural	12	100.0	4.74	2.66	4.18	0.531
	Low Income	35	100.0	19.4	30.8	9.36	1.13
	Mid/High Income	62	100.0	7.46	7.15	5.26	0.815
	Home Children	64	100.0	15.9	38.3	6.18	1.12
	Day Care Children	46	100.0	9.86	9.49	7.11	0.795
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	100.0	1,130	1,030	824	0.823
	Urban	110	100.0	1,090	1,000	803	0.816
	Rural	17	100.0	1,360	1,200	981	0.872
	Low Income	41	100.0	978	691	761	0.744
	Mid/High Income	73	100.0	1,210	1,230	839	0.893
	Home Children	69	100.0	1,160	1,230	802	0.890
	Day Care Children	58	100.0	1,080	732	853	0.741
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	4.38	9.42	1.78	1.24
	Urban	99	100.0	4.82	10.1	1.90	1.26
	Rural	17	100.0	1.77	1.16	1.24	1.08
	Low Income	35	100.0	6.33	14.4	2.10	1.38
	Mid/High Income	68	100.0	3.42	5.34	1.66	1.19
	Home Children	63	100.0	3.66	6.73	1.42	1.34
	Day Care Children	53	100.0	5.22	11.9	2.34	1.07
Potential Exposure – Aggregated (ng/day)	Overall	103	100.0	1,180	1,110	852	0.848
	Urban	91	100.0	1,130	1,070	819	0.835
	Rural	12	100.0	1,590	1,330	1,150	0.931
	Low Income	32	100.0	1,070	742	832	0.760
	Mid/High Income	58	100.0	1,250	1,340	836	0.937
	Home Children	58	100.0	1,190	1,310	806	0.898
	Day Care Children	45	100.0	1,180	785	916	0.784
Potential Exposure in OH Preschool Children (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	110	100.0	67.3	151	33.0	0.997
	Urban	98	100.0	72.6	159	34.9	1.03
	Rural	12	100.0	23.9	13.4	21.1	0.531
	Low Income	35	100.0	97.6	155	47.2	1.13
	Mid/High Income	62	100.0	37.6	36.0	26.5	0.815
	Home Children	64	100.0	79.9	193	31.2	1.12
	Day Care Children	46	100.0	49.7	47.8	35.8	0.795
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	100.0	5,680	5,200	4,150	0.823
	Urban	110	100.0	5,500	5,060	4,040	0.816
	Rural	17	100.0	6,840	6,050	4,940	0.872
	Low Income	41	100.0	4,930	3,480	3,840	0.744
	Mid/High Income	73	100.0	6,090	6,200	4,230	0.893
	Home Children	69	100.0	5,870	6,210	4,040	0.890
	Day Care Children	58	100.0	5,460	3,690	4,300	0.741
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	22.1	47.5	8.99	1.24
	Urban	99	100.0	24.3	51.0	9.57	1.26
	Rural	17	100.0	8.92	5.85	6.24	1.08
	Low Income	35	100.0	31.9	72.8	10.6	1.38
	Mid/High Income	68	100.0	17.2	26.9	8.36	1.19
	Home Children	63	100.0	18.5	33.9	7.15	1.34
	Day Care Children	53	100.0	26.3	59.8	11.8	1.07
Potential Exposure – Aggregated (pmoles/day)	Overall	103	100.0	5,970	5,570	4,290	0.848
	Urban	91	100.0	5,690	5,390	4,130	0.835
	Rural	12	100.0	8,030	6,730	5,790	0.931
	Low Income	32	100.0	5,400	3,740	4,190	0.760
	Mid/High Income	58	100.0	6,300	6,750	4,210	0.937
	Home Children	58	100.0	5,980	6,600	4,060	0.898
	Day Care Children	45	100.0	5,950	3,960	4,610	0.784

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table M-26b. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Potential Exposure in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Preschool Children (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	110	1.07	3.31	5.10	12.3	49.7	253
	Urban	98	1.07	3.31	5.62	12.8	51.6	253
	Rural	12	1.35	3.30	4.55	5.30	12.1	12.1
	Low Income	35	1.37	3.95	7.08	14.1	113	143
	Mid/High Income	62	1.07	2.74	4.36	10.9	20.4	37.6
	Home Children	64	1.07	2.83	4.31	11.0	55.3	253
	Day Care Children	46	1.37	4.01	6.06	12.5	29.7	49.7
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	100	474	858	1,470	2,610	8,680
	Urban	110	100	474	841	1,470	2,610	8,680
	Rural	17	127	525	1,210	1,700	5,250	5,250
	Low Income	41	132	431	782	1,340	2,550	2,920
	Mid/High Income	73	100	485	860	1,500	2,900	8,680
	Home Children	69	100	443	860	1,570	2,610	8,680
	Day Care Children	58	118	527	846	1,460	2,900	2,990
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	0.102	0.830	1.64	3.62	16.6	64.2
	Urban	99	0.147	0.825	1.59	4.65	27.0	64.2
	Rural	17	0.102	0.966	1.70	2.73	4.37	4.37
	Low Income	35	0.108	0.825	2.11	4.95	61.9	64.2
	Mid/High Income	68	0.102	0.733	1.58	3.14	13.4	28.3
	Home Children	63	0.102	0.569	1.28	3.19	16.6	34.5
	Day Care Children	53	0.463	1.04	2.20	4.37	12.6	64.2
Potential Exposure – Aggregated (ng/day)	Overall	103	103	488	930	1,500	2,610	8,700
	Urban	91	103	487	865	1,490	2,610	8,700
	Rural	12	141	768	1,370	1,930	5,250	5,250
	Low Income	32	146	485	880	1,450	2,610	2,920
	Mid/High Income	58	103	451	940	1,500	3,000	8,700
	Home Children	58	103	451	873	1,580	2,610	8,700
	Day Care Children	45	124	579	1,050	1,490	2,910	3,000
Potential Exposure in OH Preschool Children (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	110	5.38	16.7	25.7	62.1	251	1,280
	Urban	98	5.38	16.7	28.3	64.3	260	1,280
	Rural	12	6.81	16.6	22.9	26.7	60.9	60.9
	Low Income	35	6.89	19.9	35.7	71.2	570	721
	Mid/High Income	62	5.38	13.8	21.9	55.0	103	190
	Home Children	64	5.38	14.3	21.7	55.5	278	1,280
	Day Care Children	46	6.89	20.2	30.6	62.9	150	251
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	506	2,390	4,320	7,430	13,100	43,700
	Urban	110	506	2,390	4,240	7,390	13,100	43,700
	Rural	17	639	2,650	6,120	8,570	26,400	26,400
	Low Income	41	667	2,170	3,940	6,770	12,800	14,700
	Mid/High Income	73	506	2,440	4,330	7,550	14,600	43,700
	Home Children	69	506	2,230	4,330	7,930	13,100	43,700
	Day Care Children	58	593	2,650	4,260	7,350	14,600	15,100
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	0.514	4.18	8.24	18.2	83.7	323
	Urban	99	0.740	4.16	8.02	23.4	136	323
	Rural	17	0.514	4.87	8.59	13.8	22.0	22.0
	Low Income	35	0.543	4.16	10.6	25.0	312	323
	Mid/High Income	68	0.514	3.70	7.98	15.8	67.3	143
	Home Children	63	0.514	2.87	6.43	16.1	83.7	174
	Day Care Children	53	2.33	5.26	11.1	22.0	63.3	323
Potential Exposure – Aggregated (pmoles/day)	Overall	103	517	2,460	4,690	7,570	13,200	43,800
	Urban	91	517	2,450	4,360	7,510	13,200	43,800
	Rural	12	708	3,870	6,920	9,710	26,500	26,500
	Low Income	32	733	2,450	4,440	7,310	13,200	14,700
	Mid/High Income	58	517	2,270	4,740	7,570	15,100	43,800
	Home Children	58	517	2,270	4,400	7,950	13,200	43,800
	Day Care Children	45	625	2,920	5,310	7,510	14,700	15,100

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table M-26c. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimates of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	110	100.0	0.433	1.16	0.188	1.03
	Urban	98	100.0	0.468	1.22	0.198	1.07
	Rural	12	100.0	0.145	0.098	0.122	0.609
	Low Income	35	100.0	0.625	1.09	0.266	1.21
	Mid/High Income	62	100.0	0.211	0.202	0.151	0.793
	Home Children	64	100.0	0.547	1.50	0.183	1.18
	Day Care Children	46	100.0	0.274	0.274	0.194	0.806
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	100.0	32.5	30.7	23.6	0.816
	Urban	110	100.0	31.5	28.9	23.0	0.813
	Rural	17	100.0	39.4	41.1	28.2	0.834
	Low Income	41	100.0	27.4	19.8	21.5	0.723
	Mid/High Income	73	100.0	35.2	36.7	24.2	0.886
	Home Children	69	100.0	34.4	36.2	23.8	0.873
	Day Care Children	58	100.0	30.3	22.7	23.5	0.749
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	0.141	0.346	0.051	1.29
	Urban	99	100.0	0.156	0.372	0.055	1.31
	Rural	17	100.0	0.053	0.039	0.036	1.13
	Low Income	35	100.0	0.216	0.540	0.060	1.47
	Mid/High Income	68	100.0	0.101	0.165	0.048	1.20
	Home Children	63	100.0	0.119	0.239	0.042	1.38
	Day Care Children	53	100.0	0.167	0.441	0.065	1.13
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	103	100.0	34.1	32.9	24.4	0.838
	Urban	91	100.0	32.4	30.6	23.4	0.828
	Rural	12	100.0	47.1	46.9	33.6	0.883
	Low Income	32	100.0	30.0	21.6	23.4	0.740
	Mid/High Income	58	100.0	36.2	39.7	24.1	0.922
	Home Children	58	100.0	35.3	38.2	24.1	0.881
	Day Care Children	45	100.0	32.7	24.8	24.9	0.789
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	110	100.0	2.18	5.84	0.946	1.03
	Urban	98	100.0	2.36	6.17	0.997	1.07
	Rural	12	100.0	0.732	0.494	0.616	0.609
	Low Income	35	100.0	3.15	5.50	1.34	1.21
	Mid/High Income	62	100.0	1.06	1.02	0.760	0.793
	Home Children	64	100.0	2.75	7.54	0.924	1.18
	Day Care Children	46	100.0	1.38	1.38	0.977	0.806
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	100.0	164	155	119	0.816
	Urban	110	100.0	159	146	116	0.813
	Rural	17	100.0	199	207	142	0.834
	Low Income	41	100.0	138	99.6	108	0.723
	Mid/High Income	73	100.0	177	185	122	0.886
	Home Children	69	100.0	173	183	120	0.873
	Day Care Children	58	100.0	153	114	118	0.749
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	0.712	1.74	0.259	1.29
	Urban	99	100.0	0.788	1.87	0.276	1.31
	Rural	17	100.0	0.267	0.195	0.180	1.13
	Low Income	35	100.0	1.09	2.72	0.303	1.47
	Mid/High Income	68	100.0	0.507	0.830	0.241	1.20
	Home Children	63	100.0	0.602	1.21	0.213	1.38
	Day Care Children	53	100.0	0.842	2.22	0.326	1.13
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	103	100.0	172	166	123	0.838
	Urban	91	100.0	163	154	118	0.828
	Rural	12	100.0	237	236	169	0.883
	Low Income	32	100.0	151	109	118	0.740
	Mid/High Income	58	100.0	183	200	122	0.922
	Home Children	58	100.0	178	193	121	0.881
	Day Care Children	45	100.0	165	125	125	0.789

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table M-26d. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Potential Absorbed Dose in OH Preschool Children, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Preschool Children (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	110	0.037	0.095	0.139	0.335	1.30	10.3
	Urban	98	0.037	0.095	0.147	0.359	1.78	10.3
	Rural	12	0.048	0.081	0.129	0.163	0.416	0.416
	Low Income	35	0.047	0.108	0.220	0.441	4.15	4.92
	Mid/High Income	62	0.037	0.083	0.125	0.304	0.561	1.18
	Home Children	64	0.037	0.085	0.125	0.373	2.03	10.3
	Day Care Children	46	0.047	0.110	0.159	0.325	0.880	1.30
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	3.25	13.9	25.3	40.9	75.7	228
	Urban	110	3.25	13.8	25.0	41.2	75.7	228
	Rural	17	4.36	14.8	34.2	40.5	186	186
	Low Income	41	3.47	13.8	21.1	36.2	70.2	84.6
	Mid/High Income	73	3.25	14.3	26.7	41.2	91.0	228
	Home Children	69	3.25	12.5	26.3	41.2	75.7	228
	Day Care Children	58	3.47	14.6	25.3	40.5	84.6	123
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.003	0.021	0.049	0.104	0.725	2.52
	Urban	99	0.005	0.021	0.048	0.116	0.762	2.52
	Rural	17	0.003	0.031	0.057	0.072	0.160	0.160
	Low Income	35	0.003	0.020	0.061	0.155	2.14	2.52
	Mid/High Income	68	0.004	0.021	0.049	0.096	0.398	0.848
	Home Children	63	0.003	0.017	0.037	0.098	0.725	1.41
	Day Care Children	53	0.010	0.029	0.061	0.107	0.346	2.52
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	103	3.32	15.2	25.4	42.3	80.3	228
	Urban	91	3.32	14.8	24.2	42.3	80.3	228
	Rural	12	4.84	24.6	37.2	48.6	186	186
	Low Income	32	3.82	15.1	22.2	41.2	80.3	84.8
	Mid/High Income	58	3.32	14.7	27.5	41.4	123	228
	Home Children	58	3.32	14.8	26.0	41.4	80.3	228
	Day Care Children	45	3.79	15.3	25.4	42.3	84.8	123
Potential Absorbed Dose in OH Preschool Children (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	110	0.184	0.476	0.701	1.69	6.57	52.1
	Urban	98	0.184	0.476	0.742	1.81	8.96	52.1
	Rural	12	0.242	0.410	0.652	0.823	2.10	2.10
	Low Income	35	0.237	0.546	1.11	2.22	20.9	24.8
	Mid/High Income	62	0.184	0.421	0.627	1.53	2.83	5.96
	Home Children	64	0.184	0.427	0.627	1.88	10.2	52.1
	Day Care Children	46	0.237	0.556	0.802	1.64	4.43	6.57
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	16.4	70.0	127	206	381	1,150
	Urban	110	16.4	69.6	126	208	381	1,150
	Rural	17	22.0	74.7	173	204	939	939
	Low Income	41	17.5	69.3	107	182	354	427
	Mid/High Income	73	16.4	72.0	135	208	459	1,150
	Home Children	69	16.4	63.0	133	208	381	1,150
	Day Care Children	58	17.5	73.6	127	204	427	619
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.013	0.107	0.245	0.525	3.65	12.7
	Urban	99	0.024	0.107	0.241	0.584	3.84	12.7
	Rural	17	0.013	0.155	0.288	0.361	0.809	0.809
	Low Income	35	0.013	0.101	0.308	0.779	10.8	12.7
	Mid/High Income	68	0.018	0.105	0.245	0.484	2.00	4.27
	Home Children	63	0.013	0.085	0.186	0.492	3.65	7.08
	Day Care Children	53	0.051	0.147	0.309	0.539	1.74	12.7
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	103	16.7	76.5	128	213	405	1,150
	Urban	91	16.7	74.4	122	213	405	1,150
	Rural	12	24.4	124	188	245	940	940
	Low Income	32	19.2	76.3	112	207	405	427
	Mid/High Income	58	16.7	73.9	139	208	621	1,150
	Home Children	58	16.7	74.4	131	208	405	1,150
	Day Care Children	45	19.1	77.3	128	213	427	621

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Appendix N

Descriptive Statistics of Potential Exposure Level and Potential Absorbed Dose Estimates for Target Pollutants in Participating NC Adults

This appendix contains tables of descriptive statistics of potential exposure and potential absorbed dose estimates (expressed in both ng and pmole units) in NC adults for the following pollutants and metabolites:

Pollutant/Metabolite	Table Numbers for Potential Exposure Summaries	Table Numbers for Potential Absorbed Dose Summaries
Benz[<i>a</i>]anthracene	Tables N-1a, N-1b	Tables N-1a, N-1b
Benzo[<i>b</i>]fluoranthene	Tables N-2a, N-2b	Tables N-2a, N-2b
Benzo[<i>k</i>]fluoranthene	Tables N-3a, N-3b	Tables N-3a, N-3b
Benzo[<i>ghi</i>]perylene	Tables N-4a, N-4b	Tables N-4a, N-4b
Benzo[<i>a</i>]pyrene	Tables N-5a, N-5b	Tables N-5a, N-5b
Benzo[<i>e</i>]pyrene	Tables N-6a, N-6b	Tables N-6a, N-6b
Benzylbutylphthalate	Tables N-7a, N-7b	Tables N-7a, N-7b
Bisphenol-A	Tables N-8a, N-8b	Tables N-8a, N-8b
<i>alpha</i> -Chlordane	Tables N-9a, N-9b	Tables N-9a, N-9b
<i>gamma</i> -Chlordane	Tables N-10a, N-10b	Tables N-10a, N-10b
Chlorpyrifos	Tables N-11a, N-11b	Tables N-11a, N-11b
Chrysene	Tables N-12a, N-12b	Tables N-12a, N-12b
Cyfluthrin	Tables N-13a, N-13b	Tables N-13a, N-13b
Diazinon	Tables N-14a, N-14b	Tables N-14a, N-14b
Dibenzo[<i>a,h</i>]anthracene	Tables N-15a, N-15b	Tables N-15a, N-15b
Di- <i>n</i> -butylphthalate	Tables N-16a, N-16b	Tables N-16a, N-16b
<i>p,p'</i> -DDE	Tables N-17a, N-17b	Tables N-17a, N-17b
2,4-D (2,4-dichlorophenoxyacetic acid)	Tables N-18a, N-18b	Tables N-18c, N-18d
Heptachlor	Tables N-19a, N-19b	Tables N-19a, N-19b
Indeno[1,2,3- <i>cd</i>]pyrene	Tables N-20a, N-20b	Tables N-20a, N-20b
Pentachlorophenol	Tables N-21a, N-21b	Tables N-21c, N-21d
<i>cis</i> -Permethrin	Tables N-22a, N-22b	Tables N-22a, N-22b
<i>trans</i> -Permethrin	Tables N-23a, N-23b	Tables N-23a, N-23b
PCB 52	Tables N-24a, N-24b	Tables N-24a, N-24b
PCB 95	Tables N-25a, N-25b	Tables N-25a, N-25b
PCB 101	Tables N-26a, N-26b	Tables N-26a, N-26b
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)	Tables N-27a, N-27b	Tables N-27c, N-27d

Descriptive statistics are presented separately for the following groups of NC adult participants:

- All participants
- Participants from urban areas
- Participants from rural areas
- Participants from low-income areas
- Participants from middle/upper-income areas
- Caregivers of stay-at-home children
- Caregivers of day care children

Table N-1a. Benz[a]anthracene (56-55-3): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	64.3	2.06	3.50	1.30	0.796
	Urban	105	67.6	2.18	3.70	1.36	0.815
	Rural	21	47.6	--	--	--	--
	Low Income	57	66.7	2.20	2.69	1.49	0.791
	Mid/High Income	65	61.5	1.88	4.07	1.15	0.762
	Home Children	65	69.2	2.68	4.67	1.48	0.924
	Day Care Children	61	59.0	1.41	1.17	1.13	0.608
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	100.0	8.37	22.0	3.24	1.14
	Urban	96	100.0	6.40	11.4	3.19	1.05
	Rural	21	100.0	17.4	45.5	3.48	1.50
	Low Income	52	100.0	5.37	11.7	2.43	1.05
	Mid/High Income	61	100.0	11.4	28.2	4.32	1.17
	Home Children	62	100.0	5.96	11.3	3.13	0.993
	Day Care Children	55	100.0	11.1	29.6	3.37	1.29
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	64.3	9.04	15.3	5.70	0.796
	Urban	105	67.6	9.53	16.2	5.94	0.815
	Rural	21	47.6	--	--	--	--
	Low Income	57	66.7	9.66	11.8	6.51	0.791
	Mid/High Income	65	61.5	8.22	17.8	5.03	0.762
	Home Children	65	69.2	11.7	20.5	6.50	0.924
	Day Care Children	61	59.0	6.17	5.12	4.96	0.608
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	100.0	36.7	96.2	14.2	1.14
	Urban	96	100.0	28.1	50.2	14.0	1.05
	Rural	21	100.0	76.0	199	15.2	1.50
	Low Income	52	100.0	23.5	51.1	10.7	1.05
	Mid/High Income	61	100.0	49.7	124	18.9	1.17
	Home Children	62	100.0	26.1	49.7	13.7	0.993
	Day Care Children	55	100.0	48.5	130	14.8	1.29
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	64.3	0.015	0.028	0.009	0.850
	Urban	105	67.6	0.016	0.029	0.009	0.866
	Rural	21	47.6	--	--	--	--
	Low Income	57	66.7	0.015	0.022	0.009	0.876
	Mid/High Income	65	61.5	0.014	0.033	0.008	0.813
	Home Children	65	69.2	0.020	0.038	0.011	0.976
	Day Care Children	61	59.0	0.009	0.008	0.007	0.635
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	100.0	0.055	0.132	0.022	1.14
	Urban	96	100.0	0.043	0.080	0.022	1.04
	Rural	21	100.0	0.108	0.259	0.023	1.54
	Low Income	52	100.0	0.034	0.077	0.015	1.04
	Mid/High Income	61	100.0	0.075	0.166	0.031	1.15
	Home Children	62	100.0	0.045	0.090	0.022	1.02
	Day Care Children	55	100.0	0.066	0.167	0.021	1.27
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	64.3	0.065	0.123	0.038	0.850
	Urban	105	67.6	0.069	0.129	0.040	0.866
	Rural	21	47.6	--	--	--	--
	Low Income	57	66.7	0.066	0.094	0.040	0.876
	Mid/High Income	65	61.5	0.063	0.145	0.036	0.813
	Home Children	65	69.2	0.090	0.165	0.047	0.976
	Day Care Children	61	59.0	0.039	0.036	0.031	0.635
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	100.0	0.240	0.578	0.096	1.14
	Urban	96	100.0	0.189	0.349	0.095	1.04
	Rural	21	100.0	0.474	1.14	0.099	1.54
	Low Income	52	100.0	0.149	0.339	0.067	1.04
	Mid/High Income	61	100.0	0.330	0.729	0.135	1.15
	Home Children	62	100.0	0.196	0.393	0.098	1.02
	Day Care Children	55	100.0	0.290	0.734	0.094	1.27

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-1b. Benz[a]anthracene (56-55-3): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	0.967	2.08	6.04	32.6
	Urban	105	<MDL	<MDL	1.00	2.24	6.04	32.6
	Rural	21	<MDL	<MDL	<MDL	1.20	2.48	10.9
	Low Income	57	<MDL	<MDL	1.16	2.28	10.9	13.0
	Mid/High Income	65	<MDL	<MDL	0.748	1.69	5.40	32.6
	Home Children	65	<MDL	<MDL	1.00	2.46	10.9	32.6
	Day Care Children	61	<MDL	<MDL	0.967	1.64	4.08	6.09
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	0.480	1.48	2.80	5.12	43.7	195
	Urban	96	0.480	1.54	2.95	5.34	25.1	65.2
	Rural	21	0.694	1.46	2.36	4.79	94.4	195
	Low Income	52	0.480	1.25	2.10	3.71	18.6	65.2
	Mid/High Income	61	0.616	1.83	3.61	7.81	43.7	195
	Home Children	62	0.541	1.70	2.95	4.88	15.7	65.2
	Day Care Children	55	0.480	1.42	2.32	6.20	54.8	195
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	4.24	9.12	26.5	143
	Urban	105	<MDL	<MDL	4.39	9.83	26.5	143
	Rural	21	<MDL	<MDL	<MDL	5.25	10.8	47.8
	Low Income	57	<MDL	<MDL	5.09	9.98	47.8	56.8
	Mid/High Income	65	<MDL	<MDL	3.28	7.42	23.7	143
	Home Children	65	<MDL	<MDL	4.39	10.8	47.8	143
	Day Care Children	61	<MDL	<MDL	4.24	7.17	17.9	26.7
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	2.10	6.49	12.2	22.4	191	852
	Urban	96	2.10	6.73	12.9	23.4	110	286
	Rural	21	3.04	6.40	10.4	21.0	414	852
	Low Income	52	2.10	5.48	9.22	16.3	81.3	286
	Mid/High Income	61	2.70	8.02	15.8	34.2	191	852
	Home Children	62	2.37	7.44	12.9	21.4	68.7	286
	Day Care Children	55	2.10	6.22	10.2	27.2	240	852
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	0.007	0.013	0.052	0.262
	Urban	105	<MDL	<MDL	0.007	0.014	0.052	0.262
	Rural	21	<MDL	<MDL	<MDL	0.008	0.018	0.098
	Low Income	57	<MDL	<MDL	0.007	0.014	0.091	0.102
	Mid/High Income	65	<MDL	<MDL	0.006	0.013	0.046	0.262
	Home Children	65	<MDL	<MDL	0.007	0.018	0.091	0.262
	Day Care Children	61	<MDL	<MDL	0.006	0.010	0.022	0.043
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	0.002	0.010	0.018	0.036	0.255	1.05
	Urban	96	0.002	0.011	0.018	0.038	0.176	0.513
	Rural	21	0.005	0.008	0.014	0.034	0.650	1.05
	Low Income	52	0.002	0.008	0.013	0.021	0.116	0.469
	Mid/High Income	61	0.004	0.013	0.022	0.058	0.255	1.05
	Home Children	62	0.002	0.012	0.019	0.034	0.096	0.513
	Day Care Children	55	0.003	0.010	0.014	0.045	0.319	1.05
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	0.029	0.059	0.230	1.15
	Urban	105	<MDL	<MDL	0.030	0.060	0.230	1.15
	Rural	21	<MDL	<MDL	<MDL	0.034	0.080	0.428
	Low Income	57	<MDL	<MDL	0.031	0.063	0.398	0.449
	Mid/High Income	65	<MDL	<MDL	0.027	0.056	0.200	1.15
	Home Children	65	<MDL	<MDL	0.031	0.080	0.398	1.15
	Day Care Children	61	<MDL	<MDL	0.027	0.043	0.098	0.187
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	0.011	0.045	0.080	0.158	1.12	4.58
	Urban	96	0.011	0.047	0.080	0.168	0.772	2.25
	Rural	21	0.021	0.036	0.060	0.148	2.85	4.58
	Low Income	52	0.011	0.033	0.057	0.093	0.509	2.06
	Mid/High Income	61	0.016	0.058	0.098	0.256	1.12	4.58
	Home Children	62	0.011	0.052	0.083	0.151	0.421	2.25
	Day Care Children	55	0.012	0.042	0.060	0.199	1.40	4.58

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-2a. Benzo[b]fluoranthene (205-99-2): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	78.6	2.81	2.97	1.95	0.808
	Urban	105	78.1	2.93	3.12	2.00	0.828
	Rural	21	81.0	2.21	1.94	1.69	0.704
	Low Income	57	89.5	3.44	3.01	2.52	0.782
	Mid/High Income	65	67.7	2.30	2.93	1.54	0.788
	Home Children	65	75.4	2.91	3.48	1.86	0.880
	Day Care Children	61	82.0	2.71	2.32	2.04	0.729
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	100.0	23.0	66.0	8.44	1.15
	Urban	96	100.0	16.2	29.4	8.27	1.06
	Rural	21	100.0	54.2	141	9.27	1.55
	Low Income	52	100.0	15.4	34.5	6.59	1.11
	Mid/High Income	61	100.0	30.8	85.4	11.0	1.16
	Home Children	62	100.0	13.1	23.1	7.66	0.950
	Day Care Children	55	100.0	34.2	92.3	9.42	1.35
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	78.6	11.1	11.8	7.72	0.808
	Urban	105	78.1	11.6	12.4	7.93	0.828
	Rural	21	81.0	8.74	7.70	6.71	0.704
	Low Income	57	89.5	13.6	11.9	9.97	0.782
	Mid/High Income	65	67.7	9.10	11.6	6.12	0.788
	Home Children	65	75.4	11.5	13.8	7.39	0.880
	Day Care Children	61	82.0	10.7	9.18	8.08	0.729
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	100.0	91.3	262	33.5	1.15
	Urban	96	100.0	64.3	116	32.8	1.06
	Rural	21	100.0	215	560	36.7	1.55
	Low Income	52	100.0	61.1	137	26.1	1.11
	Mid/High Income	61	100.0	122	338	43.5	1.16
	Home Children	62	100.0	52.1	91.5	30.4	0.950
	Day Care Children	55	100.0	136	366	37.3	1.35
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	78.6	0.019	0.021	0.013	0.834
	Urban	105	78.1	0.020	0.022	0.013	0.858
	Rural	21	81.0	0.015	0.016	0.011	0.691
	Low Income	57	89.5	0.022	0.022	0.016	0.832
	Mid/High Income	65	67.7	0.017	0.021	0.011	0.827
	Home Children	65	75.4	0.021	0.026	0.013	0.911
	Day Care Children	61	82.0	0.017	0.015	0.013	0.749
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	100.0	0.149	0.404	0.057	1.15
	Urban	96	100.0	0.107	0.186	0.056	1.03
	Rural	21	100.0	0.345	0.858	0.060	1.63
	Low Income	52	100.0	0.098	0.222	0.041	1.11
	Mid/High Income	61	100.0	0.201	0.518	0.078	1.13
	Home Children	62	100.0	0.097	0.174	0.055	0.961
	Day Care Children	55	100.0	0.209	0.557	0.060	1.34
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	78.6	0.076	0.084	0.052	0.834
	Urban	105	78.1	0.080	0.087	0.053	0.858
	Rural	21	81.0	0.059	0.065	0.044	0.691
	Low Income	57	89.5	0.088	0.086	0.062	0.832
	Mid/High Income	65	67.7	0.066	0.084	0.044	0.827
	Home Children	65	75.4	0.084	0.102	0.053	0.911
	Day Care Children	61	82.0	0.068	0.059	0.050	0.749
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	100.0	0.592	1.60	0.226	1.15
	Urban	96	100.0	0.422	0.736	0.223	1.03
	Rural	21	100.0	1.37	3.40	0.240	1.63
	Low Income	52	100.0	0.387	0.878	0.164	1.11
	Mid/High Income	61	100.0	0.797	2.05	0.309	1.13
	Home Children	62	100.0	0.384	0.690	0.217	0.961
	Day Care Children	55	100.0	0.826	2.21	0.237	1.34

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-2b. Benzo[*b*]fluoranthene (205-99-2): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	0.998	1.63	3.39	8.14	19.8
	Urban	105	<MDL	1.00	1.70	3.49	8.14	19.8
	Rural	21	<MDL	0.952	1.27	3.02	4.27	9.06
	Low Income	57	<MDL	1.24	2.39	4.21	10.8	14.8
	Mid/High Income	65	<MDL	<MDL	1.06	2.54	7.46	19.8
	Home Children	65	<MDL	0.863	1.47	3.36	9.06	19.8
	Day Care Children	61	<MDL	1.04	1.70	3.42	7.15	12.1
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	0.714	3.74	7.00	14.4	79.0	507
	Urban	96	0.714	3.89	8.67	15.6	73.2	189
	Rural	21	2.37	3.21	6.36	14.2	446	507
	Low Income	52	0.714	2.85	5.54	12.0	52.8	189
	Mid/High Income	61	1.30	5.99	9.66	17.7	79.0	507
	Home Children	62	0.714	4.30	6.91	13.2	27.0	167
	Day Care Children	55	1.44	3.40	7.86	16.8	189	507
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	3.96	6.48	13.4	32.3	78.4
	Urban	105	<MDL	3.97	6.73	13.8	32.3	78.4
	Rural	21	<MDL	3.77	5.04	12.0	16.9	35.9
	Low Income	57	<MDL	4.93	9.48	16.7	42.6	58.6
	Mid/High Income	65	<MDL	<MDL	4.19	10.1	29.6	78.4
	Home Children	65	<MDL	3.42	5.84	13.3	35.9	78.4
	Day Care Children	61	<MDL	4.11	6.73	13.5	28.3	48.0
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	2.83	14.8	27.7	57.1	313	2,010
	Urban	96	2.83	15.4	34.4	61.8	290	749
	Rural	21	9.39	12.7	25.2	56.2	1,770	2,010
	Low Income	52	2.83	11.3	21.9	47.7	209	749
	Mid/High Income	61	5.16	23.7	38.3	70.1	313	2,010
	Home Children	62	2.83	17.0	27.4	52.2	107	663
	Day Care Children	55	5.70	13.5	31.1	66.6	749	2,010
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	0.006	0.011	0.023	0.070	0.130
	Urban	105	<MDL	0.006	0.012	0.025	0.070	0.130
	Rural	21	<MDL	0.006	0.009	0.018	0.025	0.081
	Low Income	57	<MDL	0.009	0.015	0.026	0.081	0.104
	Mid/High Income	65	<MDL	<MDL	0.009	0.020	0.049	0.130
	Home Children	65	<MDL	0.006	0.012	0.024	0.082	0.130
	Day Care Children	61	<MDL	0.007	0.011	0.023	0.049	0.070
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	0.008	0.026	0.051	0.111	0.580	3.07
	Urban	96	0.008	0.029	0.054	0.108	0.473	1.20
	Rural	21	0.011	0.021	0.041	0.111	2.72	3.07
	Low Income	52	0.008	0.019	0.034	0.079	0.330	1.20
	Mid/High Income	61	0.012	0.037	0.067	0.138	0.580	3.07
	Home Children	62	0.008	0.028	0.053	0.099	0.152	1.20
	Day Care Children	55	0.009	0.022	0.046	0.141	1.10	3.07
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	0.025	0.045	0.092	0.278	0.514
	Urban	105	<MDL	0.026	0.048	0.098	0.278	0.514
	Rural	21	<MDL	0.025	0.038	0.071	0.098	0.322
	Low Income	57	<MDL	0.036	0.060	0.102	0.322	0.411
	Mid/High Income	65	<MDL	<MDL	0.034	0.079	0.193	0.514
	Home Children	65	<MDL	0.025	0.049	0.094	0.326	0.514
	Day Care Children	61	<MDL	0.026	0.043	0.092	0.193	0.278
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	0.030	0.103	0.204	0.442	2.30	12.2
	Urban	96	0.030	0.115	0.214	0.427	1.87	4.77
	Rural	21	0.043	0.083	0.163	0.442	10.8	12.2
	Low Income	52	0.030	0.077	0.136	0.315	1.31	4.77
	Mid/High Income	61	0.048	0.145	0.265	0.549	2.30	12.2
	Home Children	62	0.030	0.112	0.211	0.393	0.604	4.77
	Day Care Children	55	0.036	0.086	0.181	0.560	4.37	12.2

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-3a. Benzo[k]fluoranthene (207-08-9): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	60.3	1.16	0.953	0.984	0.490
	Urban	105	60.0	1.18	1.01	0.992	0.506
	Rural	21	61.9	1.04	0.637	0.943	0.408
	Low Income	57	66.7	1.38	1.23	1.13	0.549
	Mid/High Income	65	52.3	0.953	0.596	0.858	0.403
	Home Children	65	60.0	1.22	1.16	1.00	0.535
	Day Care Children	61	60.7	1.09	0.668	0.967	0.439
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	100.0	7.96	22.6	2.94	1.14
	Urban	96	100.0	5.72	10.5	2.85	1.06
	Rural	21	100.0	18.2	48.0	3.39	1.49
	Low Income	52	100.0	5.27	12.0	2.23	1.10
	Mid/High Income	61	100.0	10.7	29.2	3.85	1.15
	Home Children	62	100.0	4.98	9.08	2.78	0.965
	Day Care Children	55	100.0	11.3	31.4	3.12	1.32
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	60.3	4.58	3.78	3.90	0.490
	Urban	105	60.0	4.67	3.98	3.93	0.506
	Rural	21	61.9	4.13	2.52	3.74	0.408
	Low Income	57	66.7	5.46	4.88	4.49	0.549
	Mid/High Income	65	52.3	3.78	2.36	3.40	0.403
	Home Children	65	60.0	4.84	4.60	3.96	0.535
	Day Care Children	61	60.7	4.30	2.65	3.83	0.439
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	100.0	31.6	89.6	11.6	1.14
	Urban	96	100.0	22.7	41.8	11.3	1.06
	Rural	21	100.0	72.3	190	13.4	1.49
	Low Income	52	100.0	20.9	47.6	8.85	1.10
	Mid/High Income	61	100.0	42.3	116	15.3	1.15
	Home Children	62	100.0	19.7	36.0	11.0	0.965
	Day Care Children	55	100.0	44.9	124	12.4	1.32
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	60.3	0.008	0.006	0.007	0.509
	Urban	105	60.0	0.008	0.006	0.007	0.520
	Rural	21	61.9	0.007	0.006	0.006	0.458
	Low Income	57	66.7	0.009	0.008	0.007	0.581
	Mid/High Income	65	52.3	0.007	0.004	0.006	0.438
	Home Children	65	60.0	0.009	0.008	0.007	0.553
	Day Care Children	61	60.7	0.007	0.004	0.006	0.446
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	100.0	0.052	0.135	0.020	1.14
	Urban	96	100.0	0.038	0.069	0.019	1.04
	Rural	21	100.0	0.114	0.280	0.022	1.54
	Low Income	52	100.0	0.033	0.077	0.014	1.09
	Mid/High Income	61	100.0	0.070	0.172	0.027	1.13
	Home Children	62	100.0	0.037	0.071	0.020	0.979
	Day Care Children	55	100.0	0.068	0.182	0.020	1.31
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	60.3	0.031	0.024	0.026	0.509
	Urban	105	60.0	0.031	0.025	0.026	0.520
	Rural	21	61.9	0.028	0.023	0.024	0.458
	Low Income	57	66.7	0.034	0.031	0.028	0.581
	Mid/High Income	65	52.3	0.027	0.016	0.024	0.438
	Home Children	65	60.0	0.035	0.030	0.028	0.553
	Day Care Children	61	60.7	0.027	0.015	0.024	0.446
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	100.0	0.205	0.537	0.078	1.14
	Urban	96	100.0	0.151	0.275	0.077	1.04
	Rural	21	100.0	0.452	1.11	0.088	1.54
	Low Income	52	100.0	0.131	0.307	0.055	1.09
	Mid/High Income	61	100.0	0.277	0.682	0.109	1.13
	Home Children	62	100.0	0.147	0.280	0.078	0.979
	Day Care Children	55	100.0	0.270	0.722	0.078	1.31

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-3b. Benzo[k]fluoranthene (207-08-9): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	0.767	1.14	3.05	8.05
	Urban	105	<MDL	<MDL	0.772	1.14	3.05	8.05
	Rural	21	<MDL	<MDL	0.726	1.17	1.58	3.57
	Low Income	57	<MDL	<MDL	0.983	1.26	3.95	8.05
	Mid/High Income	65	<MDL	<MDL	0.722	0.967	2.12	4.02
	Home Children	65	<MDL	<MDL	0.754	1.16	3.57	8.05
	Day Care Children	61	<MDL	<MDL	0.908	1.14	2.28	3.95
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	0.171	1.27	2.54	4.97	38.0	194
	Urban	96	0.171	1.34	2.57	5.25	25.4	65.1
	Rural	21	0.877	1.27	2.15	4.23	122	194
	Low Income	52	0.171	1.09	2.03	3.75	21.1	65.1
	Mid/High Income	61	0.583	1.80	3.33	6.75	38.0	194
	Home Children	62	0.171	1.35	2.79	4.76	11.1	58.5
	Day Care Children	55	0.483	1.13	2.25	5.92	65.1	194
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	3.04	4.52	12.1	31.9
	Urban	105	<MDL	<MDL	3.06	4.51	12.1	31.9
	Rural	21	<MDL	<MDL	2.88	4.65	6.28	14.1
	Low Income	57	<MDL	<MDL	3.90	5.01	15.7	31.9
	Mid/High Income	65	<MDL	<MDL	2.86	3.83	8.40	15.9
	Home Children	65	<MDL	<MDL	2.99	4.61	14.1	31.9
	Day Care Children	61	<MDL	<MDL	3.60	4.51	9.02	15.7
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	0.678	5.03	10.1	19.7	151	767
	Urban	96	0.678	5.31	10.2	20.8	101	258
	Rural	21	3.48	5.03	8.52	16.8	483	767
	Low Income	52	0.678	4.34	8.05	14.9	83.4	258
	Mid/High Income	61	2.31	7.14	13.2	26.8	151	767
	Home Children	62	0.678	5.36	11.1	18.8	43.9	232
	Day Care Children	55	1.92	4.47	8.91	23.5	258	767
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	0.006	0.008	0.022	0.048
	Urban	105	<MDL	<MDL	0.006	0.008	0.022	0.048
	Rural	21	<MDL	<MDL	0.006	0.007	0.010	0.032
	Low Income	57	<MDL	<MDL	0.006	0.008	0.030	0.048
	Mid/High Income	65	<MDL	<MDL	0.006	0.008	0.018	0.024
	Home Children	65	<MDL	<MDL	0.006	0.009	0.024	0.048
	Day Care Children	61	<MDL	<MDL	0.006	0.008	0.014	0.023
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	0.002	0.010	0.017	0.033	0.216	1.04
	Urban	96	0.002	0.010	0.017	0.034	0.153	0.421
	Rural	21	0.005	0.007	0.015	0.033	0.839	1.04
	Low Income	52	0.002	0.007	0.012	0.023	0.132	0.421
	Mid/High Income	61	0.004	0.012	0.022	0.044	0.216	1.04
	Home Children	62	0.002	0.011	0.020	0.033	0.068	0.421
	Day Care Children	55	0.003	0.008	0.015	0.043	0.379	1.04
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	0.024	0.031	0.085	0.192
	Urban	105	<MDL	<MDL	0.024	0.034	0.085	0.192
	Rural	21	<MDL	<MDL	0.023	0.026	0.040	0.127
	Low Income	57	<MDL	<MDL	0.025	0.033	0.119	0.192
	Mid/High Income	65	<MDL	<MDL	0.023	0.030	0.070	0.094
	Home Children	65	<MDL	<MDL	0.025	0.034	0.094	0.192
	Day Care Children	61	<MDL	<MDL	0.022	0.031	0.056	0.091
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	0.007	0.039	0.068	0.132	0.857	4.12
	Urban	96	0.007	0.041	0.068	0.136	0.607	1.67
	Rural	21	0.019	0.029	0.061	0.132	3.33	4.12
	Low Income	52	0.007	0.027	0.049	0.090	0.522	1.67
	Mid/High Income	61	0.015	0.047	0.086	0.175	0.857	4.12
	Home Children	62	0.007	0.044	0.079	0.132	0.268	1.67
	Day Care Children	55	0.012	0.031	0.058	0.169	1.50	4.12

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-4a. Benzo[ghi]perylene (191-24-2): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	73.0	2.48	2.68	1.74	0.768
	Urban	105	74.3	2.57	2.82	1.79	0.782
	Rural	21	66.7	1.99	1.80	1.52	0.692
	Low Income	57	87.7	2.80	2.37	2.13	0.728
	Mid/High Income	65	58.5	2.21	2.98	1.45	0.777
	Home Children	65	73.8	2.71	3.33	1.71	0.879
	Day Care Children	61	72.1	2.22	1.74	1.78	0.635
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	100.0	11.7	32.5	4.73	1.08
	Urban	96	100.0	8.42	14.2	4.71	0.970
	Rural	21	100.0	26.7	70.0	4.79	1.50
	Low Income	52	100.0	7.75	17.0	3.55	1.04
	Mid/High Income	61	100.0	15.6	42.0	6.21	1.07
	Home Children	62	100.0	7.39	11.5	4.63	0.883
	Day Care Children	55	100.0	16.6	45.6	4.83	1.27
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	73.0	8.96	9.71	6.31	0.768
	Urban	105	74.3	9.31	10.2	6.48	0.782
	Rural	21	66.7	7.19	6.53	5.51	0.692
	Low Income	57	87.7	10.1	8.56	7.70	0.728
	Mid/High Income	65	58.5	7.98	10.8	5.26	0.777
	Home Children	65	73.8	9.81	12.1	6.17	0.879
	Day Care Children	61	72.1	8.05	6.28	6.45	0.635
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	100.0	42.4	118	17.1	1.08
	Urban	96	100.0	30.5	51.3	17.0	0.970
	Rural	21	100.0	96.6	253	17.3	1.50
	Low Income	52	100.0	28.1	61.3	12.8	1.04
	Mid/High Income	61	100.0	56.5	152	22.5	1.07
	Home Children	62	100.0	26.7	41.8	16.8	0.883
	Day Care Children	55	100.0	60.0	165	17.5	1.27
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	73.0	0.017	0.020	0.012	0.773
	Urban	105	74.3	0.018	0.021	0.012	0.790
	Rural	21	66.7	0.013	0.015	0.010	0.675
	Low Income	57	87.7	0.017	0.015	0.013	0.730
	Mid/High Income	65	58.5	0.016	0.024	0.010	0.811
	Home Children	65	73.8	0.020	0.026	0.012	0.899
	Day Care Children	61	72.1	0.014	0.009	0.011	0.614
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	100.0	0.077	0.203	0.032	1.08
	Urban	96	100.0	0.056	0.092	0.032	0.960
	Rural	21	100.0	0.170	0.433	0.031	1.55
	Low Income	52	100.0	0.049	0.109	0.022	1.04
	Mid/High Income	61	100.0	0.103	0.261	0.044	1.05
	Home Children	62	100.0	0.054	0.088	0.033	0.906
	Day Care Children	55	100.0	0.101	0.280	0.031	1.26
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	73.0	0.061	0.073	0.042	0.773
	Urban	105	74.3	0.063	0.076	0.044	0.790
	Rural	21	66.7	0.048	0.053	0.036	0.675
	Low Income	57	87.7	0.063	0.056	0.048	0.730
	Mid/High Income	65	58.5	0.059	0.087	0.037	0.811
	Home Children	65	73.8	0.072	0.094	0.044	0.899
	Day Care Children	61	72.1	0.049	0.034	0.040	0.614
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	100.0	0.277	0.734	0.115	1.08
	Urban	96	100.0	0.203	0.332	0.116	0.960
	Rural	21	100.0	0.614	1.57	0.113	1.55
	Low Income	52	100.0	0.178	0.395	0.080	1.04
	Mid/High Income	61	100.0	0.374	0.943	0.160	1.05
	Home Children	62	100.0	0.197	0.317	0.120	0.906
	Day Care Children	55	100.0	0.367	1.01	0.111	1.26

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-4b. Benzo[gh]perylene (191-24-2): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	1.48	2.87	8.11	18.2
	Urban	105	<MDL	<MDL	1.51	2.91	8.87	18.2
	Rural	21	<MDL	<MDL	1.06	2.12	5.81	7.89
	Low Income	57	<MDL	1.30	2.07	3.54	8.87	11.4
	Mid/High Income	65	<MDL	<MDL	1.01	1.98	8.04	18.2
	Home Children	65	<MDL	<MDL	1.37	2.63	9.28	18.2
	Day Care Children	61	<MDL	<MDL	1.54	2.95	5.26	9.23
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	0.600	2.25	4.25	7.76	43.6	239
	Urban	96	0.600	2.33	4.39	7.86	34.3	93.9
	Rural	21	1.24	1.91	2.83	7.22	234	239
	Low Income	52	0.600	1.76	2.75	5.89	30.6	93.9
	Mid/High Income	61	1.06	2.83	5.71	9.38	43.6	239
	Home Children	62	0.600	2.47	5.03	7.59	16.0	81.6
	Day Care Children	55	0.879	1.93	3.70	8.33	93.9	239
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	5.37	10.4	29.3	65.7
	Urban	105	<MDL	<MDL	5.45	10.5	32.1	65.7
	Rural	21	<MDL	<MDL	3.84	7.69	21.0	28.5
	Low Income	57	<MDL	4.72	7.48	12.8	32.1	41.2
	Mid/High Income	65	<MDL	<MDL	3.65	7.17	29.1	65.7
	Home Children	65	<MDL	<MDL	4.96	9.50	33.6	65.7
	Day Care Children	61	<MDL	<MDL	5.58	10.7	19.0	33.4
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	2.17	8.14	15.4	28.1	158	866
	Urban	96	2.17	8.43	15.9	28.4	124	340
	Rural	21	4.49	6.92	10.2	26.1	845	866
	Low Income	52	2.17	6.35	9.97	21.3	111	340
	Mid/High Income	61	3.83	10.2	20.7	33.9	158	866
	Home Children	62	2.17	8.95	18.2	27.5	58.0	295
	Day Care Children	55	3.18	6.99	13.4	30.2	340	866
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	0.010	0.017	0.057	0.161
	Urban	105	<MDL	<MDL	0.011	0.019	0.057	0.161
	Rural	21	<MDL	<MDL	0.009	0.014	0.033	0.071
	Low Income	57	<MDL	0.007	0.013	0.019	0.062	0.071
	Mid/High Income	65	<MDL	<MDL	0.008	0.015	0.057	0.161
	Home Children	65	<MDL	<MDL	0.010	0.019	0.071	0.161
	Day Care Children	61	<MDL	<MDL	0.011	0.017	0.035	0.047
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	0.005	0.016	0.029	0.057	0.252	1.65
	Urban	96	0.005	0.017	0.030	0.059	0.205	0.587
	Rural	21	0.007	0.010	0.020	0.051	1.26	1.65
	Low Income	52	0.005	0.010	0.020	0.035	0.192	0.587
	Mid/High Income	61	0.006	0.020	0.042	0.075	0.252	1.65
	Home Children	62	0.005	0.018	0.035	0.055	0.109	0.587
	Day Care Children	55	0.006	0.012	0.022	0.064	0.547	1.65
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	0.036	0.062	0.205	0.584
	Urban	105	<MDL	<MDL	0.039	0.070	0.205	0.584
	Rural	21	<MDL	<MDL	0.033	0.050	0.119	0.256
	Low Income	57	<MDL	0.026	0.046	0.070	0.225	0.256
	Mid/High Income	65	<MDL	<MDL	0.029	0.053	0.205	0.584
	Home Children	65	<MDL	<MDL	0.035	0.070	0.256	0.584
	Day Care Children	61	<MDL	<MDL	0.039	0.060	0.125	0.170
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	0.018	0.059	0.103	0.206	0.912	5.96
	Urban	96	0.018	0.063	0.108	0.215	0.743	2.12
	Rural	21	0.025	0.034	0.071	0.184	4.54	5.96
	Low Income	52	0.018	0.038	0.074	0.126	0.693	2.12
	Mid/High Income	61	0.022	0.073	0.152	0.273	0.912	5.96
	Home Children	62	0.018	0.066	0.128	0.201	0.394	2.12
	Day Care Children	55	0.020	0.044	0.080	0.231	1.98	5.96

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-5a. Benzo[a]pyrene (50-32-8): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	65.9	2.08	2.34	1.44	0.777
	Urban	105	66.7	2.04	2.19	1.44	0.764
	Rural	21	61.9	2.26	3.03	1.43	0.859
	Low Income	57	77.2	2.65	2.61	1.88	0.797
	Mid/High Income	65	53.8	1.55	2.01	1.11	0.676
	Home Children	65	63.1	2.15	2.68	1.40	0.827
	Day Care Children	61	68.9	2.00	1.92	1.47	0.727
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	100.0	12.4	35.5	4.72	1.12
	Urban	96	100.0	8.78	14.8	4.77	0.993
	Rural	21	100.0	28.9	77.0	4.49	1.60
	Low Income	52	100.0	7.63	16.4	3.50	1.04
	Mid/High Income	61	100.0	17.1	46.5	6.32	1.15
	Home Children	62	100.0	7.61	12.1	4.56	0.929
	Day Care Children	55	100.0	17.8	49.8	4.90	1.31
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	65.9	8.23	9.27	5.69	0.777
	Urban	105	66.7	8.09	8.69	5.70	0.764
	Rural	21	61.9	8.94	12.0	5.69	0.859
	Low Income	57	77.2	10.5	10.3	7.45	0.797
	Mid/High Income	65	53.8	6.14	7.95	4.40	0.676
	Home Children	65	63.1	8.53	10.6	5.56	0.827
	Day Care Children	61	68.9	7.91	7.62	5.84	0.727
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	100.0	49.1	141	18.7	1.12
	Urban	96	100.0	34.8	58.5	18.9	0.993
	Rural	21	100.0	114	305	17.8	1.60
	Low Income	52	100.0	30.2	65.0	13.9	1.04
	Mid/High Income	61	100.0	67.7	184	25.0	1.15
	Home Children	62	100.0	30.1	48.0	18.1	0.929
	Day Care Children	55	100.0	70.5	198	19.4	1.31
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	65.9	0.014	0.016	0.010	0.772
	Urban	105	66.7	0.013	0.013	0.010	0.755
	Rural	21	61.9	0.016	0.026	0.009	0.869
	Low Income	57	77.2	0.017	0.019	0.012	0.810
	Mid/High Income	65	53.8	0.011	0.012	0.008	0.692
	Home Children	65	63.1	0.015	0.020	0.010	0.829
	Day Care Children	61	68.9	0.012	0.011	0.009	0.709
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	100.0	0.081	0.216	0.032	1.14
	Urban	96	100.0	0.059	0.097	0.032	1.00
	Rural	21	100.0	0.181	0.463	0.029	1.65
	Low Income	52	100.0	0.049	0.105	0.022	1.06
	Mid/High Income	61	100.0	0.113	0.281	0.045	1.13
	Home Children	62	100.0	0.057	0.094	0.033	0.977
	Day Care Children	55	100.0	0.108	0.299	0.031	1.30
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	65.9	0.055	0.064	0.038	0.772
	Urban	105	66.7	0.053	0.053	0.038	0.755
	Rural	21	61.9	0.063	0.105	0.037	0.869
	Low Income	57	77.2	0.067	0.077	0.046	0.810
	Mid/High Income	65	53.8	0.043	0.049	0.031	0.692
	Home Children	65	63.1	0.061	0.077	0.040	0.829
	Day Care Children	61	68.9	0.048	0.045	0.036	0.709
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	100.0	0.321	0.858	0.126	1.14
	Urban	96	100.0	0.234	0.384	0.129	1.00
	Rural	21	100.0	0.718	1.83	0.116	1.65
	Low Income	52	100.0	0.193	0.417	0.087	1.06
	Mid/High Income	61	100.0	0.446	1.11	0.178	1.13
	Home Children	62	100.0	0.226	0.374	0.129	0.977
	Day Care Children	55	100.0	0.428	1.18	0.123	1.30

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-5b. Benzo[a]pyrene (50-32-8): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	1.04	2.49	6.93	14.0
	Urban	105	<MDL	<MDL	1.05	2.44	6.93	12.2
	Rural	21	<MDL	<MDL	0.805	2.64	5.80	14.0
	Low Income	57	<MDL	0.891	1.80	3.42	8.55	14.0
	Mid/High Income	65	<MDL	<MDL	0.795	1.39	4.61	12.2
	Home Children	65	<MDL	<MDL	0.957	2.17	7.44	14.0
	Day Care Children	61	<MDL	<MDL	1.14	2.54	5.80	10.2
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	0.439	2.07	4.22	7.86	58.8	284
	Urban	96	0.439	2.20	4.32	7.88	40.9	92.0
	Rural	21	0.864	1.50	2.80	7.30	233	284
	Low Income	52	0.864	1.65	2.85	6.03	29.5	92.0
	Mid/High Income	61	0.439	3.09	5.77	10.1	58.8	284
	Home Children	62	0.439	2.50	4.67	7.30	16.2	76.9
	Day Care Children	55	0.864	1.77	3.47	9.68	92.0	284
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	4.11	9.85	27.5	55.6
	Urban	105	<MDL	<MDL	4.15	9.69	27.5	48.2
	Rural	21	<MDL	<MDL	3.19	10.5	23.0	55.6
	Low Income	57	<MDL	3.53	7.15	13.6	33.9	55.6
	Mid/High Income	65	<MDL	<MDL	3.15	5.52	18.3	48.2
	Home Children	65	<MDL	<MDL	3.79	8.62	29.5	55.6
	Day Care Children	61	<MDL	<MDL	4.51	10.1	23.0	40.4
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	1.74	8.20	16.7	31.2	233	1,130
	Urban	96	1.74	8.74	17.1	31.2	162	365
	Rural	21	3.42	5.96	11.1	28.9	923	1,130
	Low Income	52	3.42	6.53	11.3	23.9	117	365
	Mid/High Income	61	1.74	12.2	22.9	40.2	233	1,130
	Home Children	62	1.74	9.92	18.5	28.9	64.1	305
	Day Care Children	55	3.42	7.00	13.7	38.4	365	1,130
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	0.008	0.017	0.043	0.126
	Urban	105	<MDL	<MDL	0.008	0.016	0.043	0.072
	Rural	21	<MDL	<MDL	0.006	0.017	0.034	0.126
	Low Income	57	<MDL	0.006	0.010	0.020	0.059	0.126
	Mid/High Income	65	<MDL	<MDL	0.006	0.009	0.031	0.072
	Home Children	65	<MDL	<MDL	0.007	0.016	0.045	0.126
	Day Care Children	61	<MDL	<MDL	0.008	0.017	0.030	0.060
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	0.004	0.015	0.028	0.057	0.300	1.60
	Urban	96	0.004	0.016	0.029	0.059	0.237	0.553
	Rural	21	0.005	0.009	0.017	0.055	1.53	1.60
	Low Income	52	0.004	0.010	0.019	0.035	0.184	0.553
	Mid/High Income	61	0.004	0.021	0.041	0.076	0.300	1.60
	Home Children	62	0.004	0.017	0.035	0.055	0.128	0.553
	Day Care Children	55	0.005	0.013	0.023	0.070	0.536	1.60
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	0.031	0.066	0.172	0.497
	Urban	105	<MDL	<MDL	0.032	0.063	0.172	0.285
	Rural	21	<MDL	<MDL	0.026	0.066	0.133	0.497
	Low Income	57	<MDL	0.023	0.041	0.079	0.234	0.497
	Mid/High Income	65	<MDL	<MDL	0.025	0.038	0.123	0.285
	Home Children	65	<MDL	<MDL	0.030	0.063	0.177	0.497
	Day Care Children	61	<MDL	<MDL	0.031	0.066	0.117	0.239
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	0.016	0.058	0.111	0.228	1.19	6.35
	Urban	96	0.016	0.062	0.116	0.233	0.941	2.19
	Rural	21	0.018	0.035	0.066	0.220	6.05	6.35
	Low Income	52	0.016	0.041	0.077	0.140	0.731	2.19
	Mid/High Income	61	0.016	0.082	0.161	0.302	1.19	6.35
	Home Children	62	0.016	0.066	0.139	0.220	0.507	2.19
	Day Care Children	55	0.018	0.051	0.091	0.277	2.13	6.35

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-6a. Benzo[e]pyrene (192-97-2): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	66.7	1.43	1.14	1.16	0.593
	Urban	105	66.7	1.44	1.12	1.17	0.596
	Rural	21	66.7	1.39	1.26	1.12	0.591
	Low Income	57	78.9	1.77	1.33	1.43	0.624
	Mid/High Income	65	53.8	1.13	0.868	0.962	0.506
	Home Children	65	66.2	1.45	1.22	1.16	0.612
	Day Care Children	61	67.2	1.41	1.05	1.17	0.576
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	100.0	12.2	35.3	4.69	1.10
	Urban	96	100.0	8.54	14.7	4.61	0.999
	Rural	21	100.0	29.1	76.5	5.09	1.50
	Low Income	52	100.0	7.89	17.0	3.65	1.04
	Mid/High Income	61	100.0	16.5	46.1	6.03	1.12
	Home Children	62	100.0	7.43	12.3	4.47	0.905
	Day Care Children	55	100.0	17.7	49.5	4.95	1.29
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	66.7	5.67	4.51	4.61	0.593
	Urban	105	66.7	5.71	4.43	4.65	0.596
	Rural	21	66.7	5.50	4.99	4.45	0.591
	Low Income	57	78.9	7.00	5.28	5.66	0.624
	Mid/High Income	65	53.8	4.49	3.44	3.81	0.506
	Home Children	65	66.2	5.75	4.84	4.60	0.612
	Day Care Children	61	67.2	5.59	4.16	4.63	0.576
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	100.0	48.5	140	18.6	1.10
	Urban	96	100.0	33.9	58.1	18.3	0.999
	Rural	21	100.0	115	303	20.2	1.50
	Low Income	52	100.0	31.3	67.4	14.5	1.04
	Mid/High Income	61	100.0	65.6	183	23.9	1.12
	Home Children	62	100.0	29.4	48.9	17.7	0.905
	Day Care Children	55	100.0	70.0	196	19.6	1.29
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	66.7	0.010	0.008	0.008	0.594
	Urban	105	66.7	0.010	0.007	0.008	0.594
	Rural	21	66.7	0.010	0.011	0.007	0.607
	Low Income	57	78.9	0.011	0.010	0.009	0.635
	Mid/High Income	65	53.8	0.008	0.006	0.007	0.537
	Home Children	65	66.2	0.010	0.009	0.008	0.615
	Day Care Children	61	67.2	0.009	0.006	0.007	0.569
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	100.0	0.080	0.219	0.032	1.10
	Urban	96	100.0	0.057	0.096	0.031	0.982
	Rural	21	100.0	0.185	0.470	0.033	1.55
	Low Income	52	100.0	0.050	0.110	0.023	1.03
	Mid/High Income	61	100.0	0.109	0.284	0.043	1.10
	Home Children	62	100.0	0.055	0.095	0.032	0.922
	Day Care Children	55	100.0	0.108	0.303	0.031	1.28
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	66.7	0.038	0.031	0.031	0.594
	Urban	105	66.7	0.038	0.028	0.031	0.594
	Rural	21	66.7	0.038	0.045	0.029	0.607
	Low Income	57	78.9	0.044	0.038	0.035	0.635
	Mid/High Income	65	53.8	0.032	0.023	0.027	0.537
	Home Children	65	66.2	0.041	0.035	0.033	0.615
	Day Care Children	61	67.2	0.035	0.025	0.029	0.569
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	100.0	0.316	0.869	0.125	1.10
	Urban	96	100.0	0.225	0.379	0.124	0.982
	Rural	21	100.0	0.733	1.86	0.132	1.55
	Low Income	52	100.0	0.197	0.435	0.091	1.03
	Mid/High Income	61	100.0	0.432	1.13	0.170	1.10
	Home Children	62	100.0	0.218	0.376	0.126	0.922
	Day Care Children	55	100.0	0.427	1.20	0.124	1.28

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-6b. Benzo[e]pyrene (192-97-2): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	0.968	1.67	3.91	6.35
	Urban	105	<MDL	<MDL	0.970	1.58	3.91	5.99
	Rural	21	<MDL	<MDL	0.766	1.76	2.39	6.35
	Low Income	57	<MDL	0.750	1.29	2.39	5.06	6.35
	Mid/High Income	65	<MDL	<MDL	0.734	1.31	3.01	5.47
	Home Children	65	<MDL	<MDL	0.904	1.67	3.95	6.35
	Day Care Children	61	<MDL	<MDL	0.985	1.67	3.10	5.99
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	0.438	2.17	4.29	7.95	50.7	263
	Urban	96	0.438	2.20	4.48	8.52	36.8	92.3
	Rural	21	1.30	2.15	2.92	6.22	254	263
	Low Income	52	0.438	1.84	2.96	5.76	29.9	92.3
	Mid/High Income	61	1.10	2.90	5.40	9.52	50.7	263
	Home Children	62	0.438	2.18	4.48	7.57	17.3	84.0
	Day Care Children	55	0.882	2.01	3.58	9.31	92.3	263
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	3.84	6.62	15.5	25.2
	Urban	105	<MDL	<MDL	3.84	6.26	15.5	23.7
	Rural	21	<MDL	<MDL	3.04	6.99	9.48	25.2
	Low Income	57	<MDL	2.97	5.13	9.48	20.1	25.2
	Mid/High Income	65	<MDL	<MDL	2.91	5.19	11.9	21.7
	Home Children	65	<MDL	<MDL	3.58	6.61	15.7	25.2
	Day Care Children	61	<MDL	<MDL	3.91	6.62	12.3	23.7
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	1.74	8.62	17.0	31.5	201	1,040
	Urban	96	1.74	8.71	17.8	33.7	146	366
	Rural	21	5.14	8.51	11.6	24.6	1,010	1,040
	Low Income	52	1.74	7.30	11.7	22.8	119	366
	Mid/High Income	61	4.36	11.5	21.4	37.7	201	1,040
	Home Children	62	1.74	8.64	17.8	30.0	68.7	333
	Day Care Children	55	3.50	7.96	14.2	36.9	366	1,040
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	0.007	0.011	0.027	0.057
	Urban	105	<MDL	<MDL	0.007	0.011	0.027	0.035
	Rural	21	<MDL	<MDL	0.006	0.009	0.014	0.057
	Low Income	57	<MDL	0.005	0.008	0.013	0.035	0.057
	Mid/High Income	65	<MDL	<MDL	0.006	0.010	0.018	0.032
	Home Children	65	<MDL	<MDL	0.007	0.012	0.027	0.057
	Day Care Children	61	<MDL	<MDL	0.007	0.010	0.018	0.035
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	0.005	0.015	0.026	0.049	0.280	1.75
	Urban	96	0.005	0.016	0.030	0.054	0.220	0.604
	Rural	21	0.007	0.012	0.020	0.048	1.41	1.75
	Low Income	52	0.005	0.011	0.021	0.038	0.187	0.604
	Mid/High Income	61	0.007	0.020	0.037	0.077	0.280	1.75
	Home Children	62	0.005	0.018	0.033	0.049	0.098	0.604
	Day Care Children	55	0.005	0.012	0.023	0.065	0.538	1.75
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	0.027	0.045	0.108	0.225
	Urban	105	<MDL	<MDL	0.028	0.045	0.108	0.139
	Rural	21	<MDL	<MDL	0.025	0.035	0.056	0.225
	Low Income	57	<MDL	0.022	0.032	0.053	0.138	0.225
	Mid/High Income	65	<MDL	<MDL	0.023	0.038	0.071	0.128
	Home Children	65	<MDL	<MDL	0.026	0.048	0.109	0.225
	Day Care Children	61	<MDL	<MDL	0.028	0.041	0.071	0.139
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	0.019	0.060	0.105	0.194	1.11	6.92
	Urban	96	0.019	0.064	0.119	0.216	0.873	2.40
	Rural	21	0.027	0.048	0.081	0.189	5.60	6.92
	Low Income	52	0.019	0.044	0.083	0.149	0.742	2.40
	Mid/High Income	61	0.026	0.078	0.147	0.304	1.11	6.92
	Home Children	62	0.019	0.070	0.132	0.192	0.387	2.40
	Day Care Children	55	0.021	0.048	0.091	0.259	2.13	6.92

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-7a. Benzylbutylphthalate (85-68-7): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	38.9	--	--	--	--
	Urban	105	41.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	57	50.9	2,580	11,200	879	0.931
	Mid/High Income	65	29.2	--	--	--	--
	Home Children	65	36.9	--	--	--	--
	Day Care Children	61	41.0	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	100.0	922	1,200	498	1.09
	Urban	96	100.0	880	1,180	467	1.11
	Rural	21	100.0	1,120	1,330	669	0.970
	Low Income	50	100.0	1,300	1,580	651	1.25
	Mid/High Income	63	100.0	661	720	424	0.922
	Home Children	63	100.0	861	1,080	465	1.10
	Day Care Children	54	100.0	993	1,330	539	1.09
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	38.9	--	--	--	--
	Urban	105	41.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	57	50.9	8,250	35,800	2,820	0.931
	Mid/High Income	65	29.2	--	--	--	--
	Home Children	65	36.9	--	--	--	--
	Day Care Children	61	41.0	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	100.0	2,950	3,850	1,590	1.09
	Urban	96	100.0	2,820	3,770	1,490	1.11
	Rural	21	100.0	3,570	4,250	2,140	0.970
	Low Income	50	100.0	4,180	5,050	2,080	1.25
	Mid/High Income	63	100.0	2,120	2,300	1,360	0.922
	Home Children	63	100.0	2,760	3,470	1,490	1.10
	Day Care Children	54	100.0	3,180	4,270	1,730	1.09
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	38.9	--	--	--	--
	Urban	105	41.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	57	50.9	16.7	67.6	5.45	1.04
	Mid/High Income	65	29.2	--	--	--	--
	Home Children	65	36.9	--	--	--	--
	Day Care Children	61	41.0	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	100.0	6.08	8.05	3.36	1.07
	Urban	96	100.0	5.85	7.96	3.17	1.09
	Rural	21	100.0	7.11	8.57	4.36	0.935
	Low Income	50	100.0	7.84	9.87	4.03	1.22
	Mid/High Income	63	100.0	4.93	6.26	3.04	0.936
	Home Children	63	100.0	6.03	7.46	3.31	1.09
	Day Care Children	54	100.0	6.14	8.75	3.42	1.04
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	38.9	--	--	--	--
	Urban	105	41.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	57	50.9	53.5	216	17.4	1.04
	Mid/High Income	65	29.2	--	--	--	--
	Home Children	65	36.9	--	--	--	--
	Day Care Children	61	41.0	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	100.0	19.5	25.8	10.8	1.07
	Urban	96	100.0	18.7	25.5	10.2	1.09
	Rural	21	100.0	22.7	27.4	14.0	0.935
	Low Income	50	100.0	25.1	31.6	12.9	1.22
	Mid/High Income	63	100.0	15.8	20.0	9.73	0.936
	Home Children	63	100.0	19.3	23.9	10.6	1.09
	Day Care Children	54	100.0	19.6	28.0	10.9	1.04

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-7b. Benzylbutylphthalate (85-68-7): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	<MDL	1,060	3,250	85,100
	Urban	105	<MDL	<MDL	<MDL	1,100	3,560	85,100
	Rural	21	<MDL	<MDL	<MDL	679	1,370	3,250
	Low Income	57	<MDL	<MDL	614	1,370	4,290	85,100
	Mid/High Income	65	<MDL	<MDL	<MDL	566	2,280	4,910
	Home Children	65	<MDL	<MDL	<MDL	1,190	3,560	85,100
	Day Care Children	61	<MDL	<MDL	<MDL	874	2,210	7,560
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	28.7	208	418	1,050	3,500	6,740
	Urban	96	28.7	187	386	1,060	3,040	6,740
	Rural	21	208	321	469	981	3,570	4,880
	Low Income	50	28.7	311	542	2,140	4,880	6,740
	Mid/High Income	63	74.7	194	342	901	2,290	3,570
	Home Children	63	28.7	204	410	954	3,500	4,880
	Day Care Children	54	55.4	241	441	1,110	3,380	6,740
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	<MDL	3,400	10,400	273,000
	Urban	105	<MDL	<MDL	<MDL	3,530	11,400	273,000
	Rural	21	<MDL	<MDL	<MDL	2,170	4,390	10,400
	Low Income	57	<MDL	<MDL	1,960	4,390	13,700	273,000
	Mid/High Income	65	<MDL	<MDL	<MDL	1,810	7,310	15,700
	Home Children	65	<MDL	<MDL	<MDL	3,820	11,400	273,000
	Day Care Children	61	<MDL	<MDL	<MDL	2,800	7,070	24,200
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	91.8	666	1,340	3,360	11,200	21,600
	Urban	96	91.8	598	1,230	3,390	9,730	21,600
	Rural	21	666	1,030	1,500	3,140	11,400	15,600
	Low Income	50	91.8	997	1,740	6,850	15,600	21,600
	Mid/High Income	63	239	620	1,090	2,890	7,320	11,400
	Home Children	63	91.8	654	1,310	3,050	11,200	15,600
	Day Care Children	54	177	772	1,410	3,550	10,800	21,600
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	<MDL	6.37	27.7	512
	Urban	105	<MDL	<MDL	<MDL	7.10	27.7	512
	Rural	21	<MDL	<MDL	<MDL	4.52	9.97	29.1
	Low Income	57	<MDL	<MDL	3.63	7.95	30.9	512
	Mid/High Income	65	<MDL	<MDL	<MDL	4.31	15.9	39.5
	Home Children	65	<MDL	<MDL	<MDL	8.37	30.9	512
	Day Care Children	61	<MDL	<MDL	<MDL	5.54	16.7	62.6
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	0.146	1.52	3.09	6.70	22.2	50.8
	Urban	96	0.146	1.41	2.57	6.83	20.3	50.8
	Rural	21	1.23	2.04	3.49	5.69	24.7	31.7
	Low Income	50	0.146	1.61	3.18	11.4	24.7	50.8
	Mid/High Income	63	0.442	1.45	2.63	6.31	20.2	31.7
	Home Children	63	0.146	1.45	2.95	6.34	22.2	31.7
	Day Care Children	54	0.469	1.52	3.14	7.18	21.2	50.8
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	<MDL	20.4	88.7	1,640
	Urban	105	<MDL	<MDL	<MDL	22.7	88.7	1,640
	Rural	21	<MDL	<MDL	<MDL	14.5	31.9	93.3
	Low Income	57	<MDL	<MDL	11.6	25.5	98.9	1,640
	Mid/High Income	65	<MDL	<MDL	<MDL	13.8	51.0	126
	Home Children	65	<MDL	<MDL	<MDL	26.8	98.9	1,640
	Day Care Children	61	<MDL	<MDL	<MDL	17.7	53.3	201
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	0.468	4.87	9.89	21.4	71.1	163
	Urban	96	0.468	4.50	8.22	21.9	65.0	163
	Rural	21	3.94	6.53	11.2	18.2	79.0	102
	Low Income	50	0.468	5.17	10.2	36.4	79.0	163
	Mid/High Income	63	1.42	4.64	8.43	20.2	64.7	102
	Home Children	63	0.468	4.65	9.43	20.3	71.1	102
	Day Care Children	54	1.50	4.87	10.1	23.0	67.7	163

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-8a. Bisphenol-A (80-05-7): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	76.2	48.9	192	22.6	0.881
	Urban	105	75.2	51.7	210	22.3	0.890
	Rural	21	81.0	35.1	37.2	23.7	0.851
	Low Income	57	82.5	37.8	56.0	25.2	0.780
	Mid/High Income	65	72.3	58.2	263	20.2	0.925
	Home Children	65	81.5	68.7	265	24.1	1.05
	Day Care Children	61	70.5	27.8	30.9	21.0	0.661
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	28.4	--	--	--	--
	Urban	96	27.1	--	--	--	--
	Rural	20	35.0	--	--	--	--
	Low Income	50	34.0	--	--	--	--
	Mid/High Income	62	25.8	--	--	--	--
	Home Children	63	22.2	--	--	--	--
	Day Care Children	53	35.8	--	--	--	--
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	76.2	214	842	98.9	0.881
	Urban	105	75.2	226	919	97.9	0.890
	Rural	21	81.0	154	163	104	0.851
	Low Income	57	82.5	166	245	110	0.780
	Mid/High Income	65	72.3	255	1,150	88.5	0.925
	Home Children	65	81.5	301	1,160	106	1.05
	Day Care Children	61	70.5	122	135	92.1	0.661
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	28.4	--	--	--	--
	Urban	96	27.1	--	--	--	--
	Rural	20	35.0	--	--	--	--
	Low Income	50	34.0	--	--	--	--
	Mid/High Income	62	25.8	--	--	--	--
	Home Children	63	22.2	--	--	--	--
	Day Care Children	53	35.8	--	--	--	--
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	76.2	0.358	1.52	0.151	0.926
	Urban	105	75.2	0.380	1.66	0.151	0.925
	Rural	21	81.0	0.252	0.292	0.155	0.951
	Low Income	57	82.5	0.254	0.403	0.156	0.862
	Mid/High Income	65	72.3	0.445	2.08	0.144	0.957
	Home Children	65	81.5	0.524	2.09	0.173	1.10
	Day Care Children	61	70.5	0.182	0.276	0.131	0.668
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	28.4	--	--	--	--
	Urban	96	27.1	--	--	--	--
	Rural	20	35.0	--	--	--	--
	Low Income	50	34.0	--	--	--	--
	Mid/High Income	62	25.8	--	--	--	--
	Home Children	63	22.2	--	--	--	--
	Day Care Children	53	35.8	--	--	--	--
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	76.2	1.57	6.66	0.663	0.926
	Urban	105	75.2	1.66	7.27	0.660	0.925
	Rural	21	81.0	1.10	1.28	0.677	0.951
	Low Income	57	82.5	1.11	1.77	0.683	0.862
	Mid/High Income	65	72.3	1.95	9.12	0.630	0.957
	Home Children	65	81.5	2.29	9.17	0.757	1.10
	Day Care Children	61	70.5	0.798	1.21	0.575	0.668
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	28.4	--	--	--	--
	Urban	96	27.1	--	--	--	--
	Rural	20	35.0	--	--	--	--
	Low Income	50	34.0	--	--	--	--
	Mid/High Income	62	25.8	--	--	--	--
	Home Children	63	22.2	--	--	--	--
	Day Care Children	53	35.8	--	--	--	--

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-8b. Bisphenol-A (80-05-7): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	11.8	20.3	30.8	100	2,130
	Urban	105	<MDL	11.7	20.3	30.3	93.2	2,130
	Rural	21	<MDL	12.0	20.0	42.4	132	134
	Low Income	57	<MDL	14.1	22.4	31.7	93.2	379
	Mid/High Income	65	<MDL	<MDL	15.3	28.2	100	2,130
	Home Children	65	<MDL	10.8	18.0	40.4	132	2,130
	Day Care Children	61	<MDL	<MDL	21.1	27.8	81.8	214
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	<MDL	<MDL	<MDL	0.891	5.43	17.5
	Urban	96	<MDL	<MDL	<MDL	0.886	5.43	5.91
	Rural	20	<MDL	<MDL	<MDL	1.07	9.64	17.5
	Low Income	50	<MDL	<MDL	<MDL	0.857	5.43	5.91
	Mid/High Income	62	<MDL	<MDL	<MDL	1.69	4.30	17.5
	Home Children	63	<MDL	<MDL	<MDL	<MDL	5.85	17.5
	Day Care Children	53	<MDL	<MDL	<MDL	0.993	4.30	5.86
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	51.5	88.9	135	440	9,340
	Urban	105	<MDL	51.4	89.1	133	408	9,340
	Rural	21	<MDL	52.4	87.5	186	577	585
	Low Income	57	<MDL	61.6	98.0	139	408	1,660
	Mid/High Income	65	<MDL	<MDL	66.9	124	440	9,340
	Home Children	65	<MDL	47.1	78.9	177	577	9,340
	Day Care Children	61	<MDL	<MDL	92.3	122	359	937
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	<MDL	<MDL	<MDL	3.90	23.8	76.7
	Urban	96	<MDL	<MDL	<MDL	3.88	23.8	25.9
	Rural	20	<MDL	<MDL	<MDL	4.68	42.2	76.7
	Low Income	50	<MDL	<MDL	<MDL	3.76	23.8	25.9
	Mid/High Income	62	<MDL	<MDL	<MDL	7.39	18.8	76.7
	Home Children	63	<MDL	<MDL	<MDL	<MDL	25.6	76.7
	Day Care Children	53	<MDL	<MDL	<MDL	4.35	18.8	25.7
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	0.076	0.129	0.209	0.725	16.9
	Urban	105	<MDL	0.079	0.129	0.209	0.656	16.9
	Rural	21	<MDL	0.068	0.142	0.200	0.919	1.07
	Low Income	57	<MDL	0.082	0.142	0.225	0.654	2.28
	Mid/High Income	65	<MDL	<MDL	0.113	0.200	0.725	16.9
	Home Children	65	<MDL	0.073	0.142	0.337	1.07	16.9
	Day Care Children	61	<MDL	<MDL	0.113	0.176	0.465	2.14
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	<MDL	<MDL	<MDL	0.008	0.036	0.155
	Urban	96	<MDL	<MDL	<MDL	0.008	0.036	0.048
	Rural	20	<MDL	<MDL	<MDL	0.007	0.087	0.155
	Low Income	50	<MDL	<MDL	<MDL	0.006	0.032	0.048
	Mid/High Income	62	<MDL	<MDL	<MDL	0.010	0.036	0.155
	Home Children	63	<MDL	<MDL	<MDL	<MDL	0.042	0.155
	Day Care Children	53	<MDL	<MDL	<MDL	0.007	0.032	0.040
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	0.334	0.565	0.917	3.17	74.0
	Urban	105	<MDL	0.346	0.563	0.917	2.87	74.0
	Rural	21	<MDL	0.298	0.621	0.877	4.03	4.67
	Low Income	57	<MDL	0.360	0.624	0.986	2.86	9.99
	Mid/High Income	65	<MDL	<MDL	0.494	0.875	3.17	74.0
	Home Children	65	<MDL	0.321	0.624	1.48	4.67	74.0
	Day Care Children	61	<MDL	<MDL	0.494	0.772	2.04	9.38
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	<MDL	<MDL	<MDL	0.033	0.159	0.681
	Urban	96	<MDL	<MDL	<MDL	0.033	0.159	0.211
	Rural	20	<MDL	<MDL	<MDL	0.032	0.379	0.681
	Low Income	50	<MDL	<MDL	<MDL	0.026	0.139	0.211
	Mid/High Income	62	<MDL	<MDL	<MDL	0.042	0.159	0.681
	Home Children	63	<MDL	<MDL	<MDL	<MDL	0.185	0.681
	Day Care Children	53	<MDL	<MDL	<MDL	0.031	0.139	0.177

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-9a. *alpha*-Chlordane (5103-71-9) : Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	98.4	37.2	77.5	13.7	1.27
	Urban	105	98.1	35.5	77.4	13.3	1.25
	Rural	21	100.0	45.8	79.0	15.8	1.40
	Low Income	57	100.0	36.3	65.1	15.9	1.14
	Mid/High Income	65	98.5	31.4	60.5	12.1	1.30
	Home Children	65	96.9	41.1	89.4	12.7	1.45
	Day Care Children	61	100.0	33.0	62.8	14.9	1.06
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	96.7	2.33	6.41	0.661	1.43
	Urban	100	97.0	2.50	6.95	0.669	1.47
	Rural	21	95.2	1.48	2.53	0.623	1.26
	Low Income	52	100.0	2.02	6.19	0.516	1.46
	Mid/High Income	65	93.8	2.48	6.65	0.781	1.38
	Home Children	66	93.9	2.07	3.33	0.773	1.43
	Day Care Children	55	100.0	2.64	8.82	0.548	1.42
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	98.4	90.8	189	33.4	1.27
	Urban	105	98.1	86.6	189	32.5	1.25
	Rural	21	100.0	112	193	38.6	1.40
	Low Income	57	100.0	88.6	159	38.8	1.14
	Mid/High Income	65	98.5	76.7	148	29.5	1.30
	Home Children	65	96.9	100	218	31.0	1.45
	Day Care Children	61	100.0	80.6	153	36.3	1.06
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	96.7	5.68	15.6	1.61	1.43
	Urban	100	97.0	6.11	17.0	1.63	1.47
	Rural	21	95.2	3.61	6.17	1.52	1.26
	Low Income	52	100.0	4.93	15.1	1.26	1.46
	Mid/High Income	65	93.8	6.06	16.2	1.91	1.38
	Home Children	66	93.9	5.04	8.13	1.89	1.43
	Day Care Children	55	100.0	6.44	21.5	1.34	1.42
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	98.4	0.238	0.493	0.092	1.23
	Urban	105	98.1	0.232	0.506	0.090	1.22
	Rural	21	100.0	0.267	0.433	0.103	1.31
	Low Income	57	100.0	0.218	0.380	0.098	1.12
	Mid/High Income	65	98.5	0.208	0.363	0.086	1.26
	Home Children	65	96.9	0.278	0.593	0.091	1.41
	Day Care Children	61	100.0	0.195	0.358	0.093	1.03
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	96.7	0.015	0.039	0.004	1.42
	Urban	100	97.0	0.016	0.043	0.005	1.46
	Rural	21	95.2	0.009	0.014	0.004	1.22
	Low Income	52	100.0	0.011	0.029	0.003	1.42
	Mid/High Income	65	93.8	0.017	0.046	0.006	1.38
	Home Children	66	93.9	0.015	0.026	0.006	1.41
	Day Care Children	55	100.0	0.015	0.051	0.003	1.40
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	98.4	0.580	1.20	0.224	1.23
	Urban	105	98.1	0.566	1.23	0.219	1.22
	Rural	21	100.0	0.650	1.06	0.252	1.31
	Low Income	57	100.0	0.531	0.928	0.240	1.12
	Mid/High Income	65	98.5	0.507	0.886	0.210	1.26
	Home Children	65	96.9	0.679	1.45	0.222	1.41
	Day Care Children	61	100.0	0.475	0.873	0.226	1.03
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	96.7	0.037	0.096	0.011	1.42
	Urban	100	97.0	0.040	0.104	0.011	1.46
	Rural	21	95.2	0.022	0.034	0.010	1.22
	Low Income	52	100.0	0.027	0.071	0.008	1.42
	Mid/High Income	65	93.8	0.043	0.112	0.014	1.38
	Home Children	66	93.9	0.036	0.063	0.013	1.41
	Day Care Children	55	100.0	0.038	0.125	0.008	1.40

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-9b. *alpha*-Chlordane (5103-71-9) : Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	5.83	9.53	29.6	208	560
	Urban	105	<MDL	5.83	9.49	27.9	132	560
	Rural	21	2.85	5.54	9.98	29.6	261	262
	Low Income	57	2.59	7.96	10.9	24.9	218	315
	Mid/High Income	65	<MDL	4.93	7.72	29.6	116	375
	Home Children	65	<MDL	4.38	7.96	36.9	132	560
	Day Care Children	61	4.37	7.70	10.2	21.9	208	315
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	<MDL	0.219	0.546	1.68	9.75	50.0
	Urban	100	<MDL	0.202	0.553	1.69	9.89	50.0
	Rural	21	<MDL	0.274	0.540	1.28	7.12	10.2
	Low Income	52	0.069	0.174	0.381	1.19	7.12	43.5
	Mid/High Income	65	<MDL	0.315	0.619	2.07	9.75	50.0
	Home Children	66	<MDL	0.268	0.605	2.25	9.75	17.4
	Day Care Children	55	0.069	0.200	0.411	0.946	10.2	50.0
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	14.2	23.3	72.2	509	1,370
	Urban	105	<MDL	14.2	23.2	68.2	321	1,370
	Rural	21	6.96	13.5	24.4	72.2	638	640
	Low Income	57	6.32	19.4	26.7	60.7	531	768
	Mid/High Income	65	<MDL	12.0	18.8	72.2	282	914
	Home Children	65	<MDL	10.7	19.4	90.0	321	1,370
	Day Care Children	61	10.7	18.8	24.8	53.5	509	768
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	<MDL	0.536	1.33	4.10	23.8	122
	Urban	100	<MDL	0.494	1.35	4.11	24.1	122
	Rural	21	<MDL	0.669	1.32	3.12	17.4	24.8
	Low Income	52	0.168	0.426	0.930	2.91	17.4	106
	Mid/High Income	65	<MDL	0.769	1.51	5.05	23.8	122
	Home Children	66	<MDL	0.655	1.48	5.49	23.8	42.5
	Day Care Children	55	0.168	0.487	1.00	2.31	24.8	122
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	0.041	0.064	0.175	0.960	3.93
	Urban	105	<MDL	0.040	0.067	0.168	0.890	3.93
	Rural	21	0.022	0.043	0.056	0.206	1.40	1.48
	Low Income	57	0.012	0.052	0.071	0.135	1.43	1.90
	Mid/High Income	65	<MDL	0.033	0.057	0.206	0.836	2.22
	Home Children	65	<MDL	0.031	0.056	0.259	0.960	3.93
	Day Care Children	61	0.024	0.046	0.069	0.135	0.890	1.90
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	<MDL	0.001	0.004	0.011	0.054	0.332
	Urban	100	<MDL	0.001	0.004	0.011	0.066	0.332
	Rural	21	<MDL	0.002	0.003	0.009	0.040	0.054
	Low Income	52	0.000	0.001	0.002	0.007	0.040	0.197
	Mid/High Income	65	<MDL	0.002	0.005	0.014	0.058	0.332
	Home Children	66	<MDL	0.002	0.004	0.016	0.058	0.160
	Day Care Children	55	0.000	0.001	0.002	0.007	0.054	0.332
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	0.101	0.157	0.427	2.34	9.59
	Urban	105	<MDL	0.097	0.163	0.409	2.17	9.59
	Rural	21	0.054	0.106	0.137	0.503	3.43	3.62
	Low Income	57	0.029	0.126	0.173	0.329	3.48	4.64
	Mid/High Income	65	<MDL	0.082	0.140	0.503	2.04	5.41
	Home Children	65	<MDL	0.076	0.137	0.631	2.34	9.59
	Day Care Children	61	0.057	0.113	0.167	0.329	2.17	4.64
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	<MDL	0.004	0.009	0.026	0.133	0.809
	Urban	100	<MDL	0.003	0.009	0.028	0.160	0.809
	Rural	21	<MDL	0.005	0.008	0.022	0.098	0.133
	Low Income	52	0.001	0.003	0.005	0.018	0.098	0.481
	Mid/High Income	65	<MDL	0.006	0.011	0.035	0.141	0.809
	Home Children	66	<MDL	0.005	0.010	0.038	0.141	0.390
	Day Care Children	55	0.001	0.003	0.006	0.018	0.133	0.809

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-10a. *gamma*-Chlordane (5103-74-2): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	100.0	66.1	128	24.2	1.32
	Urban	105	100.0	62.3	123	23.6	1.30
	Rural	21	100.0	85.3	150	27.4	1.44
	Low Income	57	100.0	69.8	118	28.5	1.23
	Mid/High Income	65	100.0	52.1	84.6	21.0	1.32
	Home Children	65	100.0	74.5	151	22.4	1.51
	Day Care Children	61	100.0	57.2	96.7	26.2	1.09
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	98.3	3.16	6.91	0.958	1.46
	Urban	99	99.0	3.28	7.24	0.969	1.49
	Rural	21	95.2	2.61	5.19	0.909	1.34
	Low Income	51	100.0	2.94	6.94	0.750	1.52
	Mid/High Income	65	96.9	3.18	6.79	1.13	1.39
	Home Children	65	96.9	3.08	4.53	1.12	1.47
	Day Care Children	55	100.0	3.25	8.99	0.793	1.44
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	100.0	161	311	59.0	1.32
	Urban	105	100.0	152	300	57.5	1.30
	Rural	21	100.0	208	367	66.8	1.44
	Low Income	57	100.0	170	288	69.7	1.23
	Mid/High Income	65	100.0	127	206	51.2	1.32
	Home Children	65	100.0	182	369	54.6	1.51
	Day Care Children	61	100.0	140	236	64.0	1.09
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	98.3	7.71	16.9	2.34	1.46
	Urban	99	99.0	7.99	17.7	2.36	1.49
	Rural	21	95.2	6.37	12.7	2.22	1.34
	Low Income	51	100.0	7.17	16.9	1.83	1.52
	Mid/High Income	65	96.9	7.76	16.6	2.75	1.39
	Home Children	65	96.9	7.51	11.1	2.74	1.47
	Day Care Children	55	100.0	7.94	21.9	1.93	1.44
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	100.0	0.426	0.837	0.162	1.28
	Urban	105	100.0	0.411	0.840	0.159	1.27
	Rural	21	100.0	0.498	0.837	0.179	1.36
	Low Income	57	100.0	0.425	0.746	0.177	1.21
	Mid/High Income	65	100.0	0.349	0.519	0.149	1.28
	Home Children	65	100.0	0.498	0.998	0.160	1.46
	Day Care Children	61	100.0	0.349	0.622	0.164	1.07
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	98.3	0.020	0.042	0.006	1.44
	Urban	99	99.0	0.021	0.045	0.007	1.48
	Rural	21	95.2	0.015	0.028	0.006	1.28
	Low Income	51	100.0	0.016	0.034	0.005	1.46
	Mid/High Income	65	96.9	0.022	0.046	0.008	1.38
	Home Children	65	96.9	0.021	0.032	0.008	1.43
	Day Care Children	55	100.0	0.019	0.052	0.005	1.42
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	100.0	1.04	2.04	0.395	1.28
	Urban	105	100.0	1.00	2.05	0.388	1.27
	Rural	21	100.0	1.22	2.04	0.436	1.36
	Low Income	57	100.0	1.04	1.82	0.432	1.21
	Mid/High Income	65	100.0	0.852	1.27	0.364	1.28
	Home Children	65	100.0	1.21	2.43	0.391	1.46
	Day Care Children	61	100.0	0.853	1.52	0.399	1.07
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	98.3	0.049	0.103	0.016	1.44
	Urban	99	99.0	0.052	0.109	0.016	1.48
	Rural	21	95.2	0.037	0.069	0.014	1.28
	Low Income	51	100.0	0.039	0.083	0.011	1.46
	Mid/High Income	65	96.9	0.054	0.113	0.020	1.38
	Home Children	65	96.9	0.051	0.078	0.020	1.43
	Day Care Children	55	100.0	0.047	0.127	0.012	1.42

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-10b. *gamma*-Chlordane (5103-74-2): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	1.64	9.71	16.7	61.1	300	944
	Urban	105	1.64	9.71	16.9	61.1	240	944
	Rural	21	5.47	10.1	16.5	43.8	340	588
	Low Income	57	4.22	13.5	17.1	52.7	392	588
	Mid/High Income	65	1.64	8.53	13.6	74.3	169	484
	Home Children	65	1.64	6.97	14.9	99.8	266	944
	Day Care Children	61	7.74	12.1	17.3	39.3	300	437
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	<MDL	0.295	0.742	2.24	14.1	49.2
	Urban	99	<MDL	0.292	0.733	2.86	13.8	49.2
	Rural	21	<MDL	0.393	0.910	1.66	14.5	20.7
	Low Income	51	0.084	0.238	0.501	1.57	14.5	42.7
	Mid/High Income	65	<MDL	0.389	0.922	2.63	11.1	49.2
	Home Children	65	<MDL	0.368	0.910	4.02	13.8	20.4
	Day Care Children	55	0.084	0.269	0.522	1.69	20.7	49.2
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	4.00	23.7	40.6	149	733	2,300
	Urban	105	4.00	23.7	41.1	149	586	2,300
	Rural	21	13.3	24.8	40.4	107	830	1,440
	Low Income	57	10.3	32.9	41.7	129	957	1,440
	Mid/High Income	65	4.00	20.8	33.3	181	414	1,180
	Home Children	65	4.00	17.0	36.4	244	649	2,300
	Day Care Children	61	18.9	29.5	42.3	96.0	733	1,070
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	<MDL	0.721	1.81	5.48	34.5	120
	Urban	99	<MDL	0.712	1.79	6.99	33.6	120
	Rural	21	<MDL	0.959	2.22	4.04	35.4	50.5
	Low Income	51	0.204	0.581	1.22	3.84	35.4	104
	Mid/High Income	65	<MDL	0.950	2.25	6.43	27.2	120
	Home Children	65	<MDL	0.898	2.22	9.80	33.6	49.7
	Day Care Children	55	0.204	0.658	1.28	4.12	50.5	120
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	0.015	0.070	0.114	0.395	1.66	6.62
	Urban	105	0.015	0.065	0.119	0.395	1.38	6.62
	Rural	21	0.031	0.078	0.100	0.305	1.83	3.32
	Low Income	57	0.021	0.080	0.126	0.276	1.78	3.82
	Mid/High Income	65	0.015	0.054	0.103	0.422	1.37	2.87
	Home Children	65	0.015	0.052	0.103	0.645	1.66	6.62
	Day Care Children	61	0.039	0.079	0.119	0.245	1.61	3.82
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	<MDL	0.002	0.005	0.016	0.085	0.326
	Urban	99	<MDL	0.002	0.005	0.016	0.088	0.326
	Rural	21	<MDL	0.003	0.005	0.011	0.082	0.111
	Low Income	51	0.001	0.002	0.003	0.011	0.082	0.194
	Mid/High Income	65	<MDL	0.003	0.007	0.018	0.076	0.326
	Home Children	65	<MDL	0.003	0.006	0.022	0.082	0.152
	Day Care Children	55	0.001	0.002	0.003	0.011	0.111	0.326
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	0.036	0.170	0.278	0.964	4.04	16.2
	Urban	105	0.036	0.159	0.290	0.964	3.37	16.2
	Rural	21	0.075	0.191	0.245	0.745	4.46	8.11
	Low Income	57	0.052	0.195	0.306	0.673	4.34	9.32
	Mid/High Income	65	0.036	0.131	0.250	1.03	3.34	7.00
	Home Children	65	0.036	0.128	0.250	1.57	4.04	16.2
	Day Care Children	61	0.096	0.194	0.290	0.597	3.92	9.32
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	<MDL	0.006	0.013	0.039	0.207	0.797
	Urban	99	<MDL	0.005	0.013	0.040	0.215	0.797
	Rural	21	<MDL	0.007	0.012	0.028	0.200	0.270
	Low Income	51	0.002	0.004	0.007	0.027	0.200	0.473
	Mid/High Income	65	<MDL	0.007	0.016	0.045	0.186	0.797
	Home Children	65	<MDL	0.006	0.014	0.054	0.200	0.372
	Day Care Children	55	0.002	0.005	0.008	0.028	0.270	0.797

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-11a. Chlorpyrifos (2921-88-2): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	100.0	165	286	82.6	1.11
	Urban	105	100.0	166	301	82.0	1.09
	Rural	21	100.0	162	202	85.2	1.23
	Low Income	57	100.0	184	314	94.8	1.13
	Mid/High Income	65	100.0	152	270	72.6	1.10
	Home Children	65	100.0	152	257	68.6	1.23
	Day Care Children	61	100.0	179	316	101	0.933
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	100.0	9.51	32.2	3.25	1.29
	Urban	100	100.0	6.81	11.1	3.15	1.20
	Rural	20	100.0	23.0	74.9	3.82	1.70
	Low Income	51	100.0	13.1	48.2	2.95	1.44
	Mid/High Income	65	100.0	6.78	9.35	3.39	1.19
	Home Children	65	100.0	6.93	11.7	3.04	1.25
	Day Care Children	55	100.0	12.6	45.8	3.52	1.35
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	100.0	472	816	235	1.11
	Urban	105	100.0	474	858	234	1.09
	Rural	21	100.0	461	577	243	1.23
	Low Income	57	100.0	524	894	270	1.13
	Mid/High Income	65	100.0	434	770	207	1.10
	Home Children	65	100.0	434	732	196	1.23
	Day Care Children	61	100.0	512	901	287	0.933
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	100.0	27.1	91.8	9.28	1.29
	Urban	100	100.0	19.4	31.7	8.99	1.20
	Rural	20	100.0	65.7	214	10.9	1.70
	Low Income	51	100.0	37.4	138	8.41	1.44
	Mid/High Income	65	100.0	19.3	26.7	9.68	1.19
	Home Children	65	100.0	19.8	33.5	8.68	1.25
	Day Care Children	55	100.0	35.8	131	10.0	1.35
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	100.0	1.13	2.13	0.553	1.10
	Urban	105	100.0	1.16	2.29	0.553	1.09
	Rural	21	100.0	0.961	1.03	0.556	1.19
	Low Income	57	100.0	1.23	2.61	0.587	1.13
	Mid/High Income	65	100.0	1.05	1.69	0.517	1.10
	Home Children	65	100.0	1.02	1.53	0.491	1.21
	Day Care Children	61	100.0	1.24	2.63	0.628	0.971
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	100.0	0.060	0.174	0.022	1.31
	Urban	100	100.0	0.047	0.069	0.021	1.24
	Rural	20	100.0	0.129	0.400	0.025	1.66
	Low Income	51	100.0	0.077	0.259	0.018	1.44
	Mid/High Income	65	100.0	0.048	0.060	0.024	1.21
	Home Children	65	100.0	0.047	0.067	0.022	1.25
	Day Care Children	55	100.0	0.076	0.247	0.022	1.39
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	100.0	3.21	6.08	1.58	1.10
	Urban	105	100.0	3.31	6.53	1.58	1.09
	Rural	21	100.0	2.74	2.93	1.59	1.19
	Low Income	57	100.0	3.50	7.46	1.67	1.13
	Mid/High Income	65	100.0	3.00	4.81	1.47	1.10
	Home Children	65	100.0	2.92	4.37	1.40	1.21
	Day Care Children	61	100.0	3.53	7.51	1.79	0.971
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	100.0	0.172	0.498	0.063	1.31
	Urban	100	100.0	0.133	0.198	0.061	1.24
	Rural	20	100.0	0.368	1.14	0.071	1.66
	Low Income	51	100.0	0.218	0.739	0.053	1.44
	Mid/High Income	65	100.0	0.136	0.170	0.069	1.21
	Home Children	65	100.0	0.134	0.192	0.062	1.25
	Day Care Children	55	100.0	0.218	0.706	0.064	1.39

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-11b. Chlorpyrifos (2921-88-2): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	3.50	35.9	69.1	164	572	2,180
	Urban	105	5.62	38.7	66.8	159	541	2,180
	Rural	21	3.50	35.7	89.5	166	674	711
	Low Income	57	3.50	49.8	91.9	167	674	2,180
	Mid/High Income	65	5.62	35.7	57.5	139	572	1,690
	Home Children	65	3.50	29.8	57.8	154	572	1,690
	Day Care Children	61	28.4	52.7	78.7	166	487	2,180
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	0.279	1.16	3.19	6.51	29.5	340
	Urban	100	0.279	1.25	3.19	6.21	29.5	75.6
	Rural	20	0.307	0.937	3.59	10.4	182	340
	Low Income	51	0.307	0.920	2.74	6.47	34.8	340
	Mid/High Income	65	0.279	1.45	3.65	6.55	28.8	43.2
	Home Children	65	0.307	1.07	2.57	6.43	24.2	75.6
	Day Care Children	55	0.279	1.37	3.47	7.58	34.8	340
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	9.99	102	197	467	1,630	6,220
	Urban	105	16.0	110	191	453	1,540	6,220
	Rural	21	9.99	102	255	473	1,920	2,030
	Low Income	57	9.99	142	262	476	1,920	6,220
	Mid/High Income	65	16.0	102	164	397	1,630	4,830
	Home Children	65	9.99	85.0	165	440	1,630	4,830
	Day Care Children	61	80.9	150	224	473	1,390	6,220
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	0.795	3.30	9.10	18.6	84.2	969
	Urban	100	0.795	3.55	9.10	17.7	84.2	216
	Rural	20	0.877	2.67	10.2	29.6	520	969
	Low Income	51	0.877	2.62	7.81	18.5	99.2	969
	Mid/High Income	65	0.795	4.13	10.4	18.7	82.1	123
	Home Children	65	0.877	3.06	7.32	18.3	69.0	216
	Day Care Children	55	0.795	3.91	9.88	21.6	99.2	969
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	0.019	0.270	0.453	1.08	3.80	19.1
	Urban	105	0.050	0.283	0.436	1.03	4.70	19.1
	Rural	21	0.019	0.263	0.624	1.14	3.24	3.80
	Low Income	57	0.019	0.323	0.495	1.01	3.80	19.1
	Mid/High Income	65	0.050	0.260	0.387	1.08	4.70	9.10
	Home Children	65	0.019	0.247	0.429	1.01	3.80	9.10
	Day Care Children	61	0.179	0.327	0.478	1.13	3.33	19.1
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	0.002	0.009	0.021	0.051	0.199	1.82
	Urban	100	0.002	0.009	0.019	0.047	0.199	0.385
	Rural	20	0.002	0.007	0.027	0.071	0.992	1.82
	Low Income	51	0.002	0.007	0.016	0.038	0.304	1.82
	Mid/High Income	65	0.002	0.011	0.027	0.054	0.188	0.262
	Home Children	65	0.002	0.009	0.019	0.054	0.176	0.385
	Day Care Children	55	0.002	0.010	0.021	0.049	0.262	1.82
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	0.056	0.770	1.29	3.08	10.9	54.3
	Urban	105	0.142	0.807	1.24	2.94	13.4	54.3
	Rural	21	0.056	0.750	1.78	3.25	9.23	10.9
	Low Income	57	0.056	0.922	1.41	2.88	10.9	54.3
	Mid/High Income	65	0.142	0.743	1.10	3.08	13.4	25.9
	Home Children	65	0.056	0.703	1.22	2.88	10.9	25.9
	Day Care Children	61	0.510	0.931	1.36	3.21	9.49	54.3
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	0.005	0.025	0.059	0.146	0.567	5.18
	Urban	100	0.005	0.026	0.054	0.135	0.567	1.10
	Rural	20	0.007	0.020	0.078	0.204	2.83	5.18
	Low Income	51	0.005	0.021	0.047	0.108	0.867	5.18
	Mid/High Income	65	0.006	0.032	0.078	0.155	0.537	0.747
	Home Children	65	0.007	0.025	0.055	0.155	0.503	1.10
	Day Care Children	55	0.005	0.029	0.060	0.139	0.747	5.18

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-12a. Chrysene (218-01-9): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	81.0	2.26	2.82	1.57	0.750
	Urban	105	82.9	2.28	2.71	1.60	0.749
	Rural	21	71.4	2.16	3.39	1.41	0.762
	Low Income	57	89.5	2.82	3.00	1.98	0.784
	Mid/High Income	65	72.3	1.75	2.61	1.27	0.650
	Home Children	65	80.0	2.65	3.62	1.64	0.875
	Day Care Children	61	82.0	1.84	1.50	1.49	0.591
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	100.0	13.3	40.4	4.56	1.18
	Urban	96	100.0	8.99	16.5	4.47	1.07
	Rural	21	100.0	32.9	87.6	4.99	1.62
	Low Income	52	100.0	8.40	19.1	3.61	1.09
	Mid/High Income	61	100.0	18.1	52.8	5.79	1.23
	Home Children	62	100.0	7.94	14.6	4.20	1.03
	Day Care Children	55	100.0	19.3	56.5	5.01	1.33
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	81.0	9.89	12.4	6.88	0.750
	Urban	105	82.9	9.98	11.9	7.02	0.749
	Rural	21	71.4	9.46	14.9	6.19	0.762
	Low Income	57	89.5	12.4	13.1	8.68	0.784
	Mid/High Income	65	72.3	7.67	11.4	5.58	0.650
	Home Children	65	80.0	11.6	15.9	7.20	0.875
	Day Care Children	61	82.0	8.05	6.55	6.55	0.591
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	100.0	58.2	177	20.0	1.18
	Urban	96	100.0	39.4	72.3	19.6	1.07
	Rural	21	100.0	144	384	21.9	1.62
	Low Income	52	100.0	36.8	83.8	15.8	1.09
	Mid/High Income	61	100.0	79.5	231	25.4	1.23
	Home Children	62	100.0	34.8	64.1	18.4	1.03
	Day Care Children	55	100.0	84.6	247	21.9	1.33
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	81.0	0.016	0.023	0.011	0.795
	Urban	105	82.9	0.016	0.021	0.011	0.793
	Rural	21	71.4	0.016	0.031	0.009	0.810
	Low Income	57	89.5	0.019	0.024	0.012	0.867
	Mid/High Income	65	72.3	0.013	0.021	0.009	0.699
	Home Children	65	80.0	0.020	0.030	0.012	0.926
	Day Care Children	61	82.0	0.012	0.009	0.009	0.611
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	100.0	0.086	0.246	0.031	1.18
	Urban	96	100.0	0.060	0.109	0.030	1.05
	Rural	21	100.0	0.208	0.526	0.033	1.68
	Low Income	52	100.0	0.053	0.123	0.023	1.09
	Mid/High Income	61	100.0	0.119	0.319	0.041	1.21
	Home Children	62	100.0	0.059	0.113	0.030	1.05
	Day Care Children	55	100.0	0.117	0.338	0.032	1.32
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	81.0	0.070	0.099	0.046	0.795
	Urban	105	82.9	0.070	0.092	0.047	0.793
	Rural	21	71.4	0.069	0.134	0.040	0.810
	Low Income	57	89.5	0.084	0.107	0.054	0.867
	Mid/High Income	65	72.3	0.057	0.093	0.040	0.699
	Home Children	65	80.0	0.088	0.130	0.052	0.926
	Day Care Children	61	82.0	0.051	0.041	0.041	0.611
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	100.0	0.377	1.08	0.135	1.18
	Urban	96	100.0	0.261	0.477	0.133	1.05
	Rural	21	100.0	0.910	2.30	0.143	1.68
	Low Income	52	100.0	0.231	0.540	0.099	1.09
	Mid/High Income	61	100.0	0.520	1.40	0.181	1.21
	Home Children	62	100.0	0.258	0.496	0.131	1.05
	Day Care Children	55	100.0	0.512	1.48	0.139	1.32

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-12b. Chrysene (218-01-9): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	0.871	1.21	2.51	6.41	20.8
	Urban	105	<MDL	0.884	1.21	2.61	6.41	20.8
	Rural	21	<MDL	<MDL	1.18	2.01	3.74	16.5
	Low Income	57	<MDL	1.05	1.56	3.09	10.5	16.5
	Mid/High Income	65	<MDL	<MDL	0.907	1.78	4.29	20.8
	Home Children	65	<MDL	0.773	1.20	3.00	10.5	20.8
	Day Care Children	61	<MDL	0.905	1.21	2.16	5.31	8.36
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	0.498	2.13	4.15	7.98	55.1	326
	Urban	96	0.498	2.25	4.16	8.12	33.1	104
	Rural	21	0.752	1.94	3.45	6.52	261	326
	Low Income	52	0.534	1.73	3.34	6.32	27.1	104
	Mid/High Income	61	0.498	2.54	4.97	9.44	55.1	326
	Home Children	62	0.498	2.13	4.28	6.78	19.3	95.0
	Day Care Children	55	0.786	2.04	3.81	9.42	104	326
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	3.81	5.30	11.0	28.1	91.1
	Urban	105	<MDL	3.87	5.32	11.4	28.1	91.1
	Rural	21	<MDL	<MDL	5.19	8.80	16.4	72.2
	Low Income	57	<MDL	4.62	6.83	13.5	45.9	72.2
	Mid/High Income	65	<MDL	<MDL	3.97	7.81	18.8	91.1
	Home Children	65	<MDL	3.38	5.28	13.1	45.9	91.1
	Day Care Children	61	<MDL	3.96	5.32	9.47	23.3	36.6
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	2.18	9.34	18.2	34.9	242	1,430
	Urban	96	2.18	9.84	18.2	35.5	145	453
	Rural	21	3.29	8.48	15.1	28.6	1,140	1,430
	Low Income	52	2.34	7.56	14.6	27.7	119	453
	Mid/High Income	61	2.18	11.1	21.8	41.3	242	1,430
	Home Children	62	2.18	9.34	18.7	29.7	84.4	416
	Day Care Children	55	3.44	8.93	16.7	41.3	453	1,430
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	0.006	0.008	0.016	0.045	0.167
	Urban	105	<MDL	0.006	0.009	0.016	0.045	0.167
	Rural	21	<MDL	<MDL	0.007	0.015	0.019	0.148
	Low Income	57	<MDL	0.007	0.011	0.024	0.084	0.148
	Mid/High Income	65	<MDL	<MDL	0.007	0.012	0.039	0.167
	Home Children	65	<MDL	0.006	0.009	0.023	0.084	0.167
	Day Care Children	61	<MDL	0.006	0.008	0.014	0.029	0.048
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	0.004	0.014	0.027	0.053	0.354	1.80
	Urban	96	0.004	0.015	0.027	0.058	0.220	0.684
	Rural	21	0.006	0.010	0.020	0.043	1.75	1.80
	Low Income	52	0.004	0.011	0.020	0.039	0.170	0.684
	Mid/High Income	61	0.004	0.018	0.034	0.074	0.354	1.80
	Home Children	62	0.004	0.015	0.031	0.051	0.108	0.684
	Day Care Children	55	0.005	0.014	0.023	0.063	0.603	1.80
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	0.025	0.036	0.069	0.198	0.733
	Urban	105	<MDL	0.026	0.039	0.069	0.198	0.733
	Rural	21	<MDL	<MDL	0.029	0.064	0.082	0.647
	Low Income	57	<MDL	0.029	0.047	0.106	0.367	0.647
	Mid/High Income	65	<MDL	<MDL	0.032	0.051	0.170	0.733
	Home Children	65	<MDL	0.026	0.039	0.101	0.367	0.733
	Day Care Children	61	<MDL	0.025	0.035	0.063	0.127	0.212
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	0.016	0.062	0.117	0.234	1.55	7.87
	Urban	96	0.016	0.065	0.117	0.252	0.964	3.00
	Rural	21	0.025	0.042	0.089	0.190	7.67	7.87
	Low Income	52	0.016	0.047	0.088	0.171	0.743	3.00
	Mid/High Income	61	0.019	0.079	0.148	0.324	1.55	7.87
	Home Children	62	0.016	0.067	0.136	0.225	0.472	3.00
	Day Care Children	55	0.020	0.060	0.102	0.275	2.64	7.87

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-13a. Cyfluthrin (68359-37-5): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	4.0	--	--	--	--
	Urban	105	3.8	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	57	7.0	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	61	8.2	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	52.9	7.40	14.8	1.89	1.63
	Urban	100	52.0	6.87	14.4	1.85	1.57
	Rural	21	57.1	9.92	17.1	2.12	1.94
	Low Income	52	53.8	4.72	10.1	1.21	1.56
	Mid/High Income	65	52.3	9.80	17.8	2.67	1.65
	Home Children	66	56.1	6.71	11.1	2.22	1.55
	Day Care Children	55	49.1	--	--	--	--
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	4.0	--	--	--	--
	Urban	105	3.8	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	57	7.0	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	61	8.2	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	52.9	17.0	34.2	4.35	1.63
	Urban	100	52.0	15.8	33.1	4.25	1.57
	Rural	21	57.1	22.8	39.3	4.87	1.94
	Low Income	52	53.8	10.9	23.3	2.78	1.56
	Mid/High Income	65	52.3	22.6	41.1	6.14	1.65
	Home Children	66	56.1	15.4	25.6	5.11	1.55
	Day Care Children	55	49.1	--	--	--	--
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	4.0	--	--	--	--
	Urban	105	3.8	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	57	7.0	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	61	8.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	52.9	0.049	0.098	0.013	1.62
	Urban	100	52.0	0.046	0.092	0.013	1.56
	Rural	21	57.1	0.067	0.123	0.014	1.95
	Low Income	52	53.8	0.031	0.074	0.008	1.55
	Mid/High Income	65	52.3	0.066	0.114	0.019	1.61
	Home Children	66	56.1	0.051	0.094	0.016	1.56
	Day Care Children	55	49.1	--	--	--	--
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	4.0	--	--	--	--
	Urban	105	3.8	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	57	7.0	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	61	8.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	52.9	0.114	0.225	0.029	1.62
	Urban	100	52.0	0.105	0.211	0.029	1.56
	Rural	21	57.1	0.154	0.283	0.032	1.95
	Low Income	52	53.8	0.072	0.170	0.017	1.55
	Mid/High Income	65	52.3	0.151	0.262	0.044	1.61
	Home Children	66	56.1	0.118	0.216	0.037	1.56
	Day Care Children	55	49.1	--	--	--	--

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-13b. Cyfluthrin (68359-37-5): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	1,500
	Urban	105	<MDL	<MDL	<MDL	<MDL	<MDL	1,500
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	12.3
	Low Income	57	<MDL	<MDL	<MDL	<MDL	12.3	1,500
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	10.5
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	61	<MDL	<MDL	<MDL	<MDL	10.5	1,500
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	<MDL	<MDL	1.16	6.12	38.8	101
	Urban	100	<MDL	<MDL	1.12	5.79	38.6	101
	Rural	21	<MDL	<MDL	1.75	11.3	40.7	67.7
	Low Income	52	<MDL	<MDL	0.857	4.22	23.6	56.8
	Mid/High Income	65	<MDL	<MDL	1.75	10.0	41.8	101
	Home Children	66	<MDL	<MDL	1.74	9.04	24.4	56.8
	Day Care Children	55	<MDL	<MDL	<MDL	4.35	41.8	101
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	3,440
	Urban	105	<MDL	<MDL	<MDL	<MDL	<MDL	3,440
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	28.3
	Low Income	57	<MDL	<MDL	<MDL	<MDL	28.3	3,440
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	24.2
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	61	<MDL	<MDL	<MDL	<MDL	24.2	3,440
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	<MDL	<MDL	2.68	14.1	89.4	233
	Urban	100	<MDL	<MDL	2.57	13.3	88.9	233
	Rural	21	<MDL	<MDL	4.02	25.9	93.7	156
	Low Income	52	<MDL	<MDL	1.97	9.72	54.3	131
	Mid/High Income	65	<MDL	<MDL	4.02	23.1	96.2	233
	Home Children	66	<MDL	<MDL	4.01	20.8	56.1	131
	Day Care Children	55	<MDL	<MDL	<MDL	10.0	96.2	233
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	12.9
	Urban	105	<MDL	<MDL	<MDL	<MDL	<MDL	12.9
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	0.069
	Low Income	57	<MDL	<MDL	<MDL	<MDL	0.073	12.9
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.077
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	61	<MDL	<MDL	<MDL	<MDL	0.069	12.9
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	<MDL	<MDL	0.008	0.043	0.243	0.491
	Urban	100	<MDL	<MDL	0.008	0.038	0.233	0.491
	Rural	21	<MDL	<MDL	0.015	0.070	0.361	0.466
	Low Income	52	<MDL	<MDL	0.005	0.017	0.119	0.464
	Mid/High Income	65	<MDL	<MDL	0.014	0.059	0.361	0.491
	Home Children	66	<MDL	<MDL	0.014	0.054	0.243	0.464
	Day Care Children	55	<MDL	<MDL	<MDL	0.034	0.285	0.491
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	29.6
	Urban	105	<MDL	<MDL	<MDL	<MDL	<MDL	29.6
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	0.159
	Low Income	57	<MDL	<MDL	<MDL	<MDL	0.168	29.6
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.176
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	61	<MDL	<MDL	<MDL	<MDL	0.159	29.6
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	<MDL	<MDL	0.018	0.100	0.560	1.13
	Urban	100	<MDL	<MDL	0.018	0.088	0.537	1.13
	Rural	21	<MDL	<MDL	0.034	0.161	0.832	1.07
	Low Income	52	<MDL	<MDL	0.012	0.039	0.274	1.07
	Mid/High Income	65	<MDL	<MDL	0.033	0.137	0.832	1.13
	Home Children	66	<MDL	<MDL	0.033	0.124	0.560	1.07
	Day Care Children	55	<MDL	<MDL	<MDL	0.077	0.656	1.13

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-14a. Diazinon (333-41-5): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	100.0	333	1,950	30.0	1.48
	Urban	105	100.0	384	2,130	29.3	1.53
	Rural	21	100.0	79.9	147	33.7	1.25
	Low Income	57	100.0	167	481	46.2	1.30
	Mid/High Income	65	100.0	495	2,680	20.8	1.54
	Home Children	65	100.0	411	2,300	26.5	1.68
	Day Care Children	61	100.0	250	1,510	34.3	1.23
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	95.9	7.19	34.5	0.592	1.64
	Urban	100	95.0	8.38	37.8	0.571	1.70
	Rural	21	100.0	1.49	1.81	0.699	1.31
	Low Income	52	100.0	5.66	23.0	0.776	1.59
	Mid/High Income	65	92.3	8.68	42.4	0.460	1.66
	Home Children	66	95.5	9.27	39.3	0.681	1.79
	Day Care Children	55	96.4	4.69	27.8	0.500	1.45
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	100.0	1,090	6,400	98.6	1.48
	Urban	105	100.0	1,260	7,010	96.4	1.53
	Rural	21	100.0	263	483	111	1.25
	Low Income	57	100.0	548	1,580	152	1.30
	Mid/High Income	65	100.0	1,630	8,790	68.4	1.54
	Home Children	65	100.0	1,350	7,550	86.9	1.68
	Day Care Children	61	100.0	821	4,950	113	1.23
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	95.9	23.6	113	1.94	1.64
	Urban	100	95.0	27.5	124	1.88	1.70
	Rural	21	100.0	4.89	5.94	2.30	1.31
	Low Income	52	100.0	18.6	75.6	2.55	1.59
	Mid/High Income	65	92.3	28.5	139	1.51	1.66
	Home Children	66	95.5	30.4	129	2.24	1.79
	Day Care Children	55	96.4	15.4	91.2	1.64	1.45
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	100.0	2.22	12.6	0.201	1.49
	Urban	105	100.0	2.54	13.8	0.198	1.53
	Rural	21	100.0	0.599	1.31	0.220	1.28
	Low Income	57	100.0	1.19	3.64	0.286	1.35
	Mid/High Income	65	100.0	3.23	17.3	0.148	1.55
	Home Children	65	100.0	2.83	15.1	0.190	1.70
	Day Care Children	61	100.0	1.56	9.37	0.214	1.22
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	95.9	0.048	0.224	0.004	1.66
	Urban	100	95.0	0.056	0.245	0.004	1.72
	Rural	21	100.0	0.010	0.014	0.005	1.32
	Low Income	52	100.0	0.038	0.152	0.005	1.59
	Mid/High Income	65	92.3	0.058	0.274	0.003	1.71
	Home Children	66	95.5	0.064	0.259	0.005	1.80
	Day Care Children	55	96.4	0.029	0.173	0.003	1.45
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	100.0	7.28	41.6	0.661	1.49
	Urban	105	100.0	8.35	45.5	0.649	1.53
	Rural	21	100.0	1.97	4.30	0.723	1.28
	Low Income	57	100.0	3.91	11.9	0.941	1.35
	Mid/High Income	65	100.0	10.6	56.8	0.487	1.55
	Home Children	65	100.0	9.31	49.8	0.623	1.70
	Day Care Children	61	100.0	5.12	30.8	0.704	1.22
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	95.9	0.158	0.735	0.013	1.66
	Urban	100	95.0	0.185	0.806	0.013	1.72
	Rural	21	100.0	0.033	0.046	0.015	1.32
	Low Income	52	100.0	0.125	0.500	0.016	1.59
	Mid/High Income	65	92.3	0.191	0.900	0.011	1.71
	Home Children	66	95.5	0.210	0.850	0.016	1.80
	Day Care Children	55	96.4	0.097	0.568	0.010	1.45

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-14b. Diazinon (333-41-5): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	4.13	11.7	22.8	47.0	438	18,300
	Urban	105	4.13	11.4	22.8	44.4	438	18,300
	Rural	21	5.22	13.9	21.1	99.3	166	680
	Low Income	57	6.57	21.3	30.1	82.5	680	3,170
	Mid/High Income	65	4.13	8.81	12.8	27.9	292	18,300
	Home Children	65	4.13	7.23	17.0	44.7	680	18,300
	Day Care Children	61	9.37	15.3	24.1	48.5	337	11,800
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	<MDL	0.193	0.426	1.30	9.48	275
	Urban	100	<MDL	0.176	0.388	1.10	29.1	275
	Rural	21	0.065	0.288	0.595	1.99	4.50	6.16
	Low Income	52	0.078	0.270	0.580	1.62	22.5	156
	Mid/High Income	65	<MDL	0.173	0.367	0.792	8.91	275
	Home Children	66	<MDL	0.193	0.462	1.13	35.8	275
	Day Care Children	55	<MDL	0.177	0.349	1.34	4.13	207
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	13.6	38.4	74.8	155	1,440	60,100
	Urban	105	13.6	37.3	74.9	146	1,440	60,100
	Rural	21	17.2	45.6	69.5	326	546	2,230
	Low Income	57	21.6	69.8	99.0	271	2,230	10,400
	Mid/High Income	65	13.6	28.9	42.0	91.8	959	60,100
	Home Children	65	13.6	23.8	55.9	147	2,230	60,100
	Day Care Children	61	30.8	50.4	79.2	160	1,110	38,700
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	<MDL	0.633	1.40	4.28	31.1	905
	Urban	100	<MDL	0.578	1.27	3.63	95.7	905
	Rural	21	0.215	0.946	1.95	6.53	14.8	20.3
	Low Income	52	0.255	0.888	1.91	5.31	73.9	512
	Mid/High Income	65	<MDL	0.569	1.21	2.60	29.3	905
	Home Children	66	<MDL	0.633	1.52	3.71	118	905
	Day Care Children	55	<MDL	0.580	1.15	4.40	13.6	679
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	0.031	0.081	0.144	0.338	3.10	120
	Urban	105	0.031	0.078	0.141	0.308	3.10	120
	Rural	21	0.036	0.092	0.150	0.434	1.18	6.09
	Low Income	57	0.033	0.112	0.198	0.434	6.09	22.8
	Mid/High Income	65	0.031	0.063	0.090	0.209	1.66	120
	Home Children	65	0.031	0.063	0.109	0.338	6.09	120
	Day Care Children	61	0.057	0.096	0.158	0.308	1.96	73.4
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	<MDL	0.001	0.003	0.008	0.075	1.81
	Urban	100	<MDL	0.001	0.003	0.008	0.256	1.81
	Rural	21	0.000	0.002	0.004	0.016	0.040	0.055
	Low Income	52	0.001	0.002	0.004	0.012	0.193	1.01
	Mid/High Income	65	<MDL	0.001	0.002	0.005	0.075	1.81
	Home Children	66	<MDL	0.001	0.004	0.008	0.318	1.81
	Day Care Children	55	<MDL	0.001	0.002	0.008	0.024	1.29
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	0.102	0.265	0.473	1.11	10.2	394
	Urban	105	0.102	0.256	0.463	1.01	10.2	394
	Rural	21	0.120	0.303	0.491	1.43	3.89	20.0
	Low Income	57	0.110	0.369	0.650	1.43	20.0	75.0
	Mid/High Income	65	0.102	0.207	0.297	0.687	5.44	394
	Home Children	65	0.102	0.206	0.358	1.11	20.0	394
	Day Care Children	61	0.186	0.315	0.520	1.01	6.45	241
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	<MDL	0.005	0.010	0.026	0.248	5.93
	Urban	100	<MDL	0.004	0.009	0.026	0.840	5.93
	Rural	21	0.001	0.006	0.012	0.051	0.132	0.180
	Low Income	52	0.002	0.005	0.013	0.041	0.636	3.32
	Mid/High Income	65	<MDL	0.004	0.008	0.017	0.248	5.93
	Home Children	66	<MDL	0.005	0.012	0.026	1.04	5.93
	Day Care Children	55	<MDL	0.004	0.008	0.028	0.078	4.22

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-15a. Dibenzo[a,h]anthracene (53-70-3): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	9.5	--	--	--	--
	Urban	105	11.4	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	57	12.3	--	--	--	--
	Mid/High Income	65	7.7	--	--	--	--
	Home Children	65	10.8	--	--	--	--
	Day Care Children	61	8.2	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	98.3	2.43	5.22	1.08	1.15
	Urban	97	97.9	2.01	3.50	1.03	1.12
	Rural	21	100.0	4.38	9.78	1.34	1.29
	Low Income	52	100.0	1.88	4.02	0.827	1.19
	Mid/High Income	62	98.4	3.01	6.15	1.41	1.07
	Home Children	63	96.8	1.80	2.90	1.05	0.999
	Day Care Children	55	100.0	3.16	6.95	1.10	1.31
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	9.5	--	--	--	--
	Urban	105	11.4	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	57	12.3	--	--	--	--
	Mid/High Income	65	7.7	--	--	--	--
	Home Children	65	10.8	--	--	--	--
	Day Care Children	61	8.2	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	98.3	8.74	18.7	3.87	1.15
	Urban	97	97.9	7.23	12.6	3.69	1.12
	Rural	21	100.0	15.7	35.1	4.81	1.29
	Low Income	52	100.0	6.77	14.4	2.97	1.19
	Mid/High Income	62	98.4	10.8	22.1	5.05	1.07
	Home Children	63	96.8	6.45	10.4	3.78	0.999
	Day Care Children	55	100.0	11.4	25.0	3.96	1.31
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	9.5	--	--	--	--
	Urban	105	11.4	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	57	12.3	--	--	--	--
	Mid/High Income	65	7.7	--	--	--	--
	Home Children	65	10.8	--	--	--	--
	Day Care Children	61	8.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	98.3	0.016	0.034	0.007	1.15
	Urban	97	97.9	0.013	0.023	0.007	1.10
	Rural	21	100.0	0.029	0.062	0.009	1.37
	Low Income	52	100.0	0.012	0.026	0.005	1.18
	Mid/High Income	62	98.4	0.020	0.039	0.010	1.06
	Home Children	63	96.8	0.013	0.022	0.008	1.01
	Day Care Children	55	100.0	0.020	0.043	0.007	1.30
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	9.5	--	--	--	--
	Urban	105	11.4	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	57	12.3	--	--	--	--
	Mid/High Income	65	7.7	--	--	--	--
	Home Children	65	10.8	--	--	--	--
	Day Care Children	61	8.2	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	98.3	0.058	0.121	0.026	1.15
	Urban	97	97.9	0.048	0.082	0.025	1.10
	Rural	21	100.0	0.104	0.224	0.031	1.37
	Low Income	52	100.0	0.043	0.094	0.019	1.18
	Mid/High Income	62	98.4	0.074	0.141	0.036	1.06
	Home Children	63	96.8	0.048	0.080	0.027	1.01
	Day Care Children	55	100.0	0.070	0.155	0.025	1.30

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-15b. Dibenzo[a,h]anthracene (53-70-3): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	<MDL	<MDL	0.967	2.86
	Urban	105	<MDL	<MDL	<MDL	<MDL	1.04	2.86
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	57	<MDL	<MDL	<MDL	<MDL	1.22	2.86
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	0.772	0.967
	Home Children	65	<MDL	<MDL	<MDL	<MDL	0.967	2.86
	Day Care Children	61	<MDL	<MDL	<MDL	<MDL	1.04	1.22
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	<MDL	0.558	0.962	1.96	12.3	37.1
	Urban	97	<MDL	0.558	0.963	1.96	8.97	22.1
	Rural	21	0.308	0.581	0.846	1.96	29.5	37.1
	Low Income	52	0.035	0.493	0.713	1.55	6.70	22.1
	Mid/High Income	62	<MDL	0.684	1.22	2.26	12.3	37.1
	Home Children	63	<MDL	0.588	1.14	1.93	4.54	19.7
	Day Care Children	55	0.035	0.495	0.838	2.24	22.1	37.1
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	<MDL	<MDL	3.48	10.3
	Urban	105	<MDL	<MDL	<MDL	<MDL	3.74	10.3
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	57	<MDL	<MDL	<MDL	<MDL	4.39	10.3
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	2.77	3.48
	Home Children	65	<MDL	<MDL	<MDL	<MDL	3.48	10.3
	Day Care Children	61	<MDL	<MDL	<MDL	<MDL	3.74	4.39
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	<MDL	2.00	3.46	7.05	44.3	133
	Urban	97	<MDL	2.00	3.46	7.04	32.2	79.5
	Rural	21	1.11	2.09	3.04	7.05	106	133
	Low Income	52	0.125	1.77	2.56	5.58	24.1	79.5
	Mid/High Income	62	<MDL	2.46	4.38	8.13	44.3	133
	Home Children	63	<MDL	2.11	4.08	6.94	16.3	70.9
	Day Care Children	55	0.127	1.78	3.01	8.06	79.5	133
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	<MDL	<MDL	0.007	0.020
	Urban	105	<MDL	<MDL	<MDL	<MDL	0.007	0.020
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	57	<MDL	<MDL	<MDL	<MDL	0.009	0.020
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	0.007	0.008
	Home Children	65	<MDL	<MDL	<MDL	<MDL	0.008	0.020
	Day Care Children	61	<MDL	<MDL	<MDL	<MDL	0.007	0.009
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	<MDL	0.004	0.006	0.014	0.066	0.255
	Urban	97	<MDL	0.004	0.006	0.014	0.055	0.142
	Rural	21	0.002	0.003	0.005	0.015	0.158	0.255
	Low Income	52	0.000	0.003	0.005	0.009	0.042	0.142
	Mid/High Income	62	<MDL	0.005	0.009	0.018	0.066	0.255
	Home Children	63	<MDL	0.004	0.008	0.013	0.029	0.142
	Day Care Children	55	0.000	0.003	0.005	0.016	0.129	0.255
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	<MDL	<MDL	0.026	0.072
	Urban	105	<MDL	<MDL	<MDL	<MDL	0.026	0.072
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	57	<MDL	<MDL	<MDL	<MDL	0.032	0.072
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	0.024	0.028
	Home Children	65	<MDL	<MDL	<MDL	<MDL	0.028	0.072
	Day Care Children	61	<MDL	<MDL	<MDL	<MDL	0.026	0.032
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	<MDL	0.013	0.023	0.050	0.237	0.917
	Urban	97	<MDL	0.014	0.023	0.049	0.197	0.510
	Rural	21	0.006	0.012	0.019	0.052	0.569	0.917
	Low Income	52	0.001	0.010	0.017	0.032	0.151	0.510
	Mid/High Income	62	<MDL	0.016	0.032	0.065	0.237	0.917
	Home Children	63	<MDL	0.015	0.027	0.047	0.105	0.510
	Day Care Children	55	0.001	0.011	0.019	0.058	0.463	0.917

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-16a. Di-*n*-butylphthalate (84-74-2): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	100.0	2,910	1,460	2,590	0.498
	Urban	105	100.0	2,970	1,540	2,620	0.514
	Rural	21	100.0	2,650	951	2,460	0.415
	Low Income	57	100.0	3,180	1,510	2,880	0.440
	Mid/High Income	65	100.0	2,610	1,140	2,340	0.508
	Home Children	65	100.0	2,580	1,500	2,230	0.551
	Day Care Children	61	100.0	3,270	1,350	3,040	0.376
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	100.0	215	216	153	0.791
	Urban	97	100.0	229	232	159	0.828
	Rural	21	100.0	154	104	129	0.579
	Low Income	51	100.0	197	210	131	0.866
	Mid/High Income	63	100.0	226	217	172	0.695
	Home Children	63	100.0	226	238	164	0.740
	Day Care Children	55	100.0	203	190	142	0.846
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	100.0	10,500	5,250	9,310	0.498
	Urban	105	100.0	10,700	5,540	9,410	0.514
	Rural	21	100.0	9,510	3,420	8,840	0.415
	Low Income	57	100.0	11,400	5,410	10,300	0.440
	Mid/High Income	65	100.0	9,390	4,080	8,410	0.508
	Home Children	65	100.0	9,260	5,370	8,010	0.551
	Day Care Children	61	100.0	11,700	4,830	10,900	0.376
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	100.0	774	778	551	0.791
	Urban	97	100.0	822	833	572	0.828
	Rural	21	100.0	553	374	465	0.579
	Low Income	51	100.0	707	754	472	0.866
	Mid/High Income	63	100.0	811	781	617	0.695
	Home Children	63	100.0	813	854	590	0.740
	Day Care Children	55	100.0	729	684	509	0.846
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	100.0	19.8	11.1	17.4	0.518
	Urban	105	100.0	20.3	11.6	17.6	0.532
	Rural	21	100.0	17.6	7.49	16.1	0.448
	Low Income	57	100.0	20.6	11.9	17.8	0.537
	Mid/High Income	65	100.0	18.5	8.34	16.7	0.483
	Home Children	65	100.0	18.6	11.3	16.0	0.559
	Day Care Children	61	100.0	21.2	10.7	19.0	0.459
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	100.0	1.47	1.54	1.03	0.814
	Urban	97	100.0	1.56	1.64	1.08	0.845
	Rural	21	100.0	1.05	0.835	0.844	0.629
	Low Income	51	100.0	1.19	1.22	0.815	0.852
	Mid/High Income	63	100.0	1.65	1.70	1.22	0.722
	Home Children	63	100.0	1.66	1.81	1.17	0.797
	Day Care Children	55	100.0	1.25	1.14	0.899	0.818
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	100.0	71.3	39.7	62.4	0.518
	Urban	105	100.0	72.9	41.7	63.4	0.532
	Rural	21	100.0	63.2	26.9	57.7	0.448
	Low Income	57	100.0	74.1	42.7	64.1	0.537
	Mid/High Income	65	100.0	66.5	29.9	59.9	0.483
	Home Children	65	100.0	66.9	40.8	57.4	0.559
	Day Care Children	61	100.0	76.0	38.4	68.2	0.459
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	100.0	5.28	5.54	3.71	0.814
	Urban	97	100.0	5.61	5.90	3.88	0.845
	Rural	21	100.0	3.76	3.00	3.03	0.629
	Low Income	51	100.0	4.28	4.39	2.93	0.852
	Mid/High Income	63	100.0	5.91	6.10	4.40	0.722
	Home Children	63	100.0	5.97	6.50	4.19	0.797
	Day Care Children	55	100.0	4.49	4.08	3.23	0.818

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-16b. Di-*n*-butylphthalate (84-74-2): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	426	1,910	2,610	3,490	5,850	9,580
	Urban	105	426	1,900	2,660	3,490	6,300	9,580
	Rural	21	743	2,120	2,560	3,450	4,050	4,640
	Low Income	57	1,130	2,070	2,870	3,780	6,370	7,580
	Mid/High Income	65	426	1,780	2,500	3,330	4,640	5,850
	Home Children	65	426	1,600	2,300	3,230	4,550	9,580
	Day Care Children	61	1,430	2,380	2,910	3,780	5,850	7,580
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	24.4	89.5	131	241	651	1,410
	Urban	97	24.4	89.5	147	244	758	1,410
	Rural	21	50.1	92.7	119	175	359	418
	Low Income	51	24.4	71.9	108	223	581	949
	Mid/High Income	63	35.6	102	152	285	548	1,410
	Home Children	63	50.1	94.2	145	244	758	1,410
	Day Care Children	55	24.4	76.6	128	223	581	949
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	1,530	6,880	9,370	12,600	21,000	34,400
	Urban	105	1,530	6,840	9,540	12,600	22,600	34,400
	Rural	21	2,670	7,630	9,190	12,400	14,600	16,700
	Low Income	57	4,050	7,440	10,300	13,600	22,900	27,200
	Mid/High Income	65	1,530	6,390	8,980	12,000	16,700	21,000
	Home Children	65	1,530	5,740	8,250	11,600	16,400	34,400
	Day Care Children	61	5,150	8,530	10,500	13,600	21,000	27,200
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	87.5	321	471	865	2,340	5,070
	Urban	97	87.5	321	528	877	2,720	5,070
	Rural	21	180	333	427	630	1,290	1,500
	Low Income	51	87.5	258	386	800	2,090	3,410
	Mid/High Income	63	128	368	546	1,020	1,970	5,070
	Home Children	63	180	338	520	877	2,720	5,070
	Day Care Children	55	87.5	275	459	800	2,090	3,410
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	3.75	12.3	17.7	23.3	44.0	71.8
	Urban	105	3.75	12.3	17.9	23.5	44.7	71.8
	Rural	21	5.84	12.6	15.9	22.8	28.8	36.3
	Low Income	57	5.04	11.9	17.9	23.3	48.7	55.2
	Mid/High Income	65	3.75	12.6	17.3	23.5	32.2	47.7
	Home Children	65	3.75	11.2	17.3	20.9	38.3	71.8
	Day Care Children	61	8.13	13.4	18.8	24.2	44.0	55.2
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	0.185	0.589	0.958	1.68	4.58	11.6
	Urban	97	0.185	0.648	1.05	1.79	5.31	11.6
	Rural	21	0.283	0.583	0.713	1.24	2.74	3.72
	Low Income	51	0.185	0.448	0.661	1.55	3.41	5.90
	Mid/High Income	63	0.278	0.774	1.13	1.79	4.43	11.6
	Home Children	63	0.283	0.661	1.13	1.76	4.58	11.6
	Day Care Children	55	0.185	0.542	0.796	1.61	3.21	5.53
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	13.5	44.1	63.6	83.8	158	258
	Urban	105	13.5	44.1	64.5	84.4	161	258
	Rural	21	21.0	45.4	57.0	81.8	103	130
	Low Income	57	18.1	42.8	64.5	83.6	175	198
	Mid/High Income	65	13.5	45.4	62.3	84.4	116	172
	Home Children	65	13.5	40.3	62.1	75.0	138	258
	Day Care Children	61	29.2	48.1	67.4	86.9	158	198
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	0.666	2.12	3.44	6.02	16.4	41.6
	Urban	97	0.666	2.33	3.77	6.42	19.1	41.6
	Rural	21	1.02	2.09	2.56	4.45	9.85	13.3
	Low Income	51	0.666	1.61	2.37	5.56	12.3	21.2
	Mid/High Income	63	1.00	2.78	4.07	6.42	15.9	41.6
	Home Children	63	1.02	2.37	4.07	6.32	16.4	41.6
	Day Care Children	55	0.666	1.95	2.86	5.78	11.5	19.9

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-17a. *p,p'*-DDE (72-55-9): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	34.1	--	--	--	--
	Urban	105	33.3	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	57	47.4	--	--	--	--
	Mid/High Income	65	23.1	--	--	--	--
	Home Children	65	30.8	--	--	--	--
	Day Care Children	61	37.7	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	43.8	--	--	--	--
	Urban	100	40.0	--	--	--	--
	Rural	21	61.9	0.314	0.472	0.133	1.31
	Low Income	52	57.7	0.311	0.704	0.112	1.31
	Mid/High Income	65	33.8	--	--	--	--
	Home Children	66	42.4	--	--	--	--
	Day Care Children	55	45.5	--	--	--	--
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	34.1	--	--	--	--
	Urban	105	33.3	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	57	47.4	--	--	--	--
	Mid/High Income	65	23.1	--	--	--	--
	Home Children	65	30.8	--	--	--	--
	Day Care Children	61	37.7	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	43.8	--	--	--	--
	Urban	100	40.0	--	--	--	--
	Rural	21	61.9	0.988	1.48	0.417	1.31
	Low Income	52	57.7	0.977	2.21	0.353	1.31
	Mid/High Income	65	33.8	--	--	--	--
	Home Children	66	42.4	--	--	--	--
	Day Care Children	55	45.5	--	--	--	--
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	34.1	--	--	--	--
	Urban	105	33.3	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	57	47.4	--	--	--	--
	Mid/High Income	65	23.1	--	--	--	--
	Home Children	65	30.8	--	--	--	--
	Day Care Children	61	37.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	43.8	--	--	--	--
	Urban	100	40.0	--	--	--	--
	Rural	21	61.9	0.002	0.004	0.001	1.33
	Low Income	52	57.7	0.002	0.003	0.001	1.24
	Mid/High Income	65	33.8	--	--	--	--
	Home Children	66	42.4	--	--	--	--
	Day Care Children	55	45.5	--	--	--	--
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	34.1	--	--	--	--
	Urban	105	33.3	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	57	47.4	--	--	--	--
	Mid/High Income	65	23.1	--	--	--	--
	Home Children	65	30.8	--	--	--	--
	Day Care Children	61	37.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	43.8	--	--	--	--
	Urban	100	40.0	--	--	--	--
	Rural	21	61.9	0.007	0.012	0.003	1.33
	Low Income	52	57.7	0.005	0.010	0.002	1.24
	Mid/High Income	65	33.8	--	--	--	--
	Home Children	66	42.4	--	--	--	--
	Day Care Children	55	45.5	--	--	--	--

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-17b. *p,p'*-DDE (72-55-9): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	<MDL	1.24	3.90	24.6
	Urban	105	<MDL	<MDL	<MDL	1.22	3.75	24.6
	Rural	21	<MDL	<MDL	<MDL	1.46	3.90	4.46
	Low Income	57	<MDL	<MDL	<MDL	1.93	4.68	24.6
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	2.39	9.89
	Home Children	65	<MDL	<MDL	<MDL	1.11	2.39	9.89
	Day Care Children	61	<MDL	<MDL	<MDL	1.57	4.46	24.6
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	<MDL	<MDL	<MDL	0.214	1.22	4.61
	Urban	100	<MDL	<MDL	<MDL	0.217	1.19	4.61
	Rural	21	<MDL	<MDL	0.144	0.194	1.40	1.75
	Low Income	52	<MDL	<MDL	0.093	0.258	0.834	4.61
	Mid/High Income	65	<MDL	<MDL	<MDL	0.177	1.40	1.75
	Home Children	66	<MDL	<MDL	<MDL	0.214	1.22	1.75
	Day Care Children	55	<MDL	<MDL	<MDL	0.236	1.71	4.61
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	<MDL	3.90	12.3	77.4
	Urban	105	<MDL	<MDL	<MDL	3.84	11.8	77.4
	Rural	21	<MDL	<MDL	<MDL	4.59	12.3	14.0
	Low Income	57	<MDL	<MDL	<MDL	6.06	14.7	77.4
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	7.51	31.1
	Home Children	65	<MDL	<MDL	<MDL	3.49	7.51	31.1
	Day Care Children	61	<MDL	<MDL	<MDL	4.93	14.0	77.4
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	<MDL	<MDL	<MDL	0.674	3.84	14.5
	Urban	100	<MDL	<MDL	<MDL	0.683	3.74	14.5
	Rural	21	<MDL	<MDL	0.454	0.611	4.41	5.50
	Low Income	52	<MDL	<MDL	0.292	0.810	2.62	14.5
	Mid/High Income	65	<MDL	<MDL	<MDL	0.556	4.41	5.50
	Home Children	66	<MDL	<MDL	<MDL	0.674	3.84	5.50
	Day Care Children	55	<MDL	<MDL	<MDL	0.742	5.39	14.5
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	<MDL	0.008	0.021	0.090
	Urban	105	<MDL	<MDL	<MDL	0.008	0.024	0.090
	Rural	21	<MDL	<MDL	<MDL	0.008	0.019	0.021
	Low Income	57	<MDL	<MDL	<MDL	0.013	0.027	0.090
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	0.018	0.058
	Home Children	65	<MDL	<MDL	<MDL	0.007	0.018	0.058
	Day Care Children	61	<MDL	<MDL	<MDL	0.011	0.024	0.090
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	<MDL	<MDL	<MDL	0.001	0.008	0.020
	Urban	100	<MDL	<MDL	<MDL	0.001	0.007	0.020
	Rural	21	<MDL	<MDL	0.001	0.001	0.010	0.016
	Low Income	52	<MDL	<MDL	0.001	0.002	0.008	0.020
	Mid/High Income	65	<MDL	<MDL	<MDL	0.001	0.010	0.016
	Home Children	66	<MDL	<MDL	<MDL	0.001	0.009	0.016
	Day Care Children	55	<MDL	<MDL	<MDL	0.002	0.008	0.020
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	<MDL	0.026	0.066	0.284
	Urban	105	<MDL	<MDL	<MDL	0.026	0.075	0.284
	Rural	21	<MDL	<MDL	<MDL	0.026	0.061	0.066
	Low Income	57	<MDL	<MDL	<MDL	0.040	0.086	0.284
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	0.057	0.181
	Home Children	65	<MDL	<MDL	<MDL	0.021	0.057	0.181
	Day Care Children	61	<MDL	<MDL	<MDL	0.036	0.075	0.284
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	<MDL	<MDL	<MDL	0.005	0.026	0.062
	Urban	100	<MDL	<MDL	<MDL	0.005	0.024	0.062
	Rural	21	<MDL	<MDL	0.003	0.005	0.031	0.049
	Low Income	52	<MDL	<MDL	0.002	0.006	0.026	0.062
	Mid/High Income	65	<MDL	<MDL	<MDL	0.004	0.031	0.049
	Home Children	66	<MDL	<MDL	<MDL	0.005	0.028	0.049
	Day Care Children	55	<MDL	<MDL	<MDL	0.006	0.026	0.062

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-18a. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	52.8	6.84	8.34	3.78	1.06
	Urban	104	52.9	7.09	8.83	3.79	1.08
	Rural	21	52.4	5.63	5.20	3.69	0.950
	Low Income	56	64.3	9.17	10.2	5.24	1.09
	Mid/High Income	65	44.6	--	--	--	--
	Home Children	65	46.2	--	--	--	--
	Day Care Children	60	60.0	8.21	9.09	4.67	1.08
Potential Exposure via Dietary Ingestion (ng/day)	Overall	126	54.0	305	430	162	1.15
	Urban	105	58.1	323	458	165	1.20
	Rural	21	33.3	--	--	--	--
	Low Income	57	52.6	286	421	129	1.35
	Mid/High Income	65	56.9	329	451	197	0.948
	Home Children	65	52.3	349	513	189	1.03
	Day Care Children	61	55.7	259	317	137	1.26
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	72.6	5.24	17.9	0.755	2.00
	Urban	97	74.2	6.16	19.6	0.963	2.02
	Rural	20	65.0	0.764	1.43	0.232	1.45
	Low Income	50	48.0	--	--	--	--
	Mid/High Income	63	90.5	7.96	23.4	1.68	1.86
	Home Children	65	87.7	6.76	22.3	1.38	1.75
	Day Care Children	52	53.8	3.34	10.0	0.356	2.06
Potential Exposure – Aggregated (ng/day)	Overall	110	96.4	318	441	183	0.993
	Urban	90	96.7	348	477	194	1.04
	Rural	20	95.0	183	150	141	0.721
	Low Income	45	91.1	315	444	158	1.14
	Mid/High Income	61	100.0	327	454	203	0.893
	Home Children	63	100.0	360	520	200	1.00
	Day Care Children	47	91.5	263	299	162	0.981
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	52.8	31.0	37.7	17.1	1.06
	Urban	104	52.9	32.1	40.0	17.2	1.08
	Rural	21	52.4	25.4	23.5	16.7	0.950
	Low Income	56	64.3	41.5	45.9	23.7	1.09
	Mid/High Income	65	44.6	--	--	--	--
	Home Children	65	46.2	--	--	--	--
	Day Care Children	60	60.0	37.1	41.1	21.1	1.08
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	126	54.0	1,380	1,950	731	1.15
	Urban	105	58.1	1,460	2,070	746	1.20
	Rural	21	33.3	--	--	--	--
	Low Income	57	52.6	1,290	1,910	582	1.35
	Mid/High Income	65	56.9	1,490	2,040	890	0.948
	Home Children	65	52.3	1,580	2,320	856	1.03
	Day Care Children	61	55.7	1,170	1,430	618	1.26
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	72.6	23.7	81.1	3.42	2.00
	Urban	97	74.2	27.9	88.5	4.36	2.02
	Rural	20	65.0	3.46	6.46	1.05	1.45
	Low Income	50	48.0	--	--	--	--
	Mid/High Income	63	90.5	36.0	106	7.60	1.86
	Home Children	65	87.7	30.6	101	6.23	1.75
	Day Care Children	52	53.8	15.1	45.5	1.61	2.06
Potential Exposure – Aggregated (pmoles/day)	Overall	110	96.4	1,440	1,990	828	0.993
	Urban	90	96.7	1,580	2,160	878	1.04
	Rural	20	95.0	828	678	636	0.721
	Low Income	45	91.1	1,420	2,010	716	1.14
	Mid/High Income	61	100.0	1,480	2,050	918	0.893
	Home Children	63	100.0	1,630	2,350	906	1.00
	Day Care Children	47	91.5	1,190	1,350	734	0.981

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table N-18b. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	2.11	9.88	26.6	41.7
	Urban	104	<MDL	<MDL	1.91	10.2	27.7	41.7
	Rural	21	<MDL	<MDL	3.90	7.76	16.0	16.5
	Low Income	56	<MDL	<MDL	6.77	10.4	34.9	41.7
	Mid/High Income	65	<MDL	<MDL	<MDL	7.16	16.9	28.0
	Home Children	65	<MDL	<MDL	<MDL	7.88	19.3	36.4
	Day Care Children	60	<MDL	<MDL	3.91	11.8	27.2	41.7
Potential Exposure via Dietary Ingestion (ng/day)	Overall	126	<MDL	<MDL	142	336	1,290	2,820
	Urban	105	<MDL	<MDL	143	351	1,300	2,820
	Rural	21	<MDL	<MDL	<MDL	271	559	1,030
	Low Income	57	<MDL	<MDL	110	318	1,300	2,120
	Mid/High Income	65	<MDL	<MDL	181	351	1,030	2,820
	Home Children	65	<MDL	<MDL	159	351	1,570	2,820
	Day Care Children	61	<MDL	<MDL	120	311	1,030	1,300
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	<MDL	<MDL	0.804	3.01	19.7	175
	Urban	97	<MDL	<MDL	1.18	3.60	32.1	175
	Rural	20	<MDL	<MDL	0.159	0.407	4.35	5.19
	Low Income	50	<MDL	<MDL	<MDL	0.722	1.69	2.68
	Mid/High Income	63	<MDL	0.576	1.94	5.56	19.7	175
	Home Children	65	<MDL	0.542	1.20	3.81	19.7	175
	Day Care Children	52	<MDL	<MDL	0.182	1.67	17.4	61.5
Potential Exposure – Aggregated (ng/day)	Overall	110	<MDL	92.9	164	338	1,310	2,840
	Urban	90	<MDL	93.5	172	353	1,460	2,840
	Rural	20	<MDL	87.1	119	232	544	561
	Low Income	45	<MDL	73.2	126	338	1,310	2,120
	Mid/High Income	61	49.4	108	195	338	920	2,840
	Home Children	63	40.1	105	167	353	1,570	2,840
	Day Care Children	47	<MDL	85.0	139	328	920	1,310
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	9.54	44.7	120	189
	Urban	104	<MDL	<MDL	8.64	46.1	125	189
	Rural	21	<MDL	<MDL	17.6	35.1	72.2	74.7
	Low Income	56	<MDL	<MDL	30.6	47.0	158	189
	Mid/High Income	65	<MDL	<MDL	<MDL	32.4	76.3	127
	Home Children	65	<MDL	<MDL	<MDL	35.6	87.4	165
	Day Care Children	60	<MDL	<MDL	17.7	53.4	123	189
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	126	<MDL	<MDL	642	1,520	5,810	12,700
	Urban	105	<MDL	<MDL	647	1,590	5,890	12,700
	Rural	21	<MDL	<MDL	<MDL	1,230	2,530	4,650
	Low Income	57	<MDL	<MDL	498	1,440	5,890	9,580
	Mid/High Income	65	<MDL	<MDL	818	1,590	4,650	12,700
	Home Children	65	<MDL	<MDL	719	1,590	7,090	12,700
	Day Care Children	61	<MDL	<MDL	544	1,410	4,650	5,890
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	<MDL	<MDL	3.64	13.6	89.3	791
	Urban	97	<MDL	<MDL	5.32	16.3	145	791
	Rural	20	<MDL	<MDL	0.720	1.84	19.7	23.5
	Low Income	50	<MDL	<MDL	<MDL	3.26	7.67	12.1
	Mid/High Income	63	<MDL	2.61	8.78	25.1	89.3	791
	Home Children	65	<MDL	2.45	5.41	17.2	89.3	791
	Day Care Children	52	<MDL	<MDL	0.823	7.53	78.8	278
Potential Exposure – Aggregated (pmoles/day)	Overall	110	<MDL	420	741	1,530	5,930	12,800
	Urban	90	<MDL	423	776	1,600	6,590	12,800
	Rural	20	<MDL	394	537	1,050	2,460	2,540
	Low Income	45	<MDL	331	568	1,530	5,930	9,590
	Mid/High Income	61	224	489	881	1,530	4,160	12,800
	Home Children	63	182	474	756	1,600	7,110	12,800
	Day Care Children	47	<MDL	384	628	1,480	4,160	5,930

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table N-18c. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	52.8	0.044	0.052	0.025	1.02
	Urban	104	52.9	0.046	0.055	0.026	1.04
	Rural	21	52.4	0.036	0.035	0.024	0.919
	Low Income	56	64.3	0.056	0.063	0.032	1.06
	Mid/High Income	65	44.6	--	--	--	--
	Home Children	65	46.2	--	--	--	--
	Day Care Children	60	60.0	0.049	0.053	0.029	1.03
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	126	54.0	2.03	2.84	1.09	1.16
	Urban	105	58.1	2.15	3.01	1.12	1.22
	Rural	21	33.3	--	--	--	--
	Low Income	57	52.6	1.79	2.82	0.806	1.36
	Mid/High Income	65	56.9	2.27	2.93	1.40	0.928
	Home Children	65	52.3	2.49	3.54	1.35	1.04
	Day Care Children	61	55.7	1.55	1.72	0.865	1.24
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	72.6	0.039	0.145	0.005	2.09
	Urban	97	74.2	0.046	0.158	0.007	2.10
	Rural	20	65.0	0.006	0.012	0.002	1.53
	Low Income	50	48.0	--	--	--	--
	Mid/High Income	63	90.5	0.060	0.190	0.012	1.93
	Home Children	65	87.7	0.054	0.188	0.010	1.84
	Day Care Children	52	53.8	0.020	0.054	0.002	2.10
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	110	96.4	2.11	2.90	1.24	0.981
	Urban	90	96.7	2.32	3.14	1.32	1.02
	Rural	20	95.0	1.19	0.980	0.915	0.712
	Low Income	45	91.1	1.96	2.99	0.989	1.12
	Mid/High Income	61	100.0	2.25	2.93	1.44	0.865
	Home Children	63	100.0	2.57	3.58	1.43	1.01
	Day Care Children	47	91.5	1.51	1.40	1.02	0.912
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	52.8	0.199	0.236	0.115	1.02
	Urban	104	52.9	0.206	0.249	0.116	1.04
	Rural	21	52.4	0.164	0.157	0.109	0.919
	Low Income	56	64.3	0.252	0.286	0.146	1.06
	Mid/High Income	65	44.6	--	--	--	--
	Home Children	65	46.2	--	--	--	--
	Day Care Children	60	60.0	0.222	0.238	0.132	1.03
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	126	54.0	9.19	12.8	4.92	1.16
	Urban	105	58.1	9.74	13.6	5.05	1.22
	Rural	21	33.3	--	--	--	--
	Low Income	57	52.6	8.12	12.8	3.64	1.36
	Mid/High Income	65	56.9	10.3	13.2	6.33	0.928
	Home Children	65	52.3	11.3	16.0	6.10	1.04
	Day Care Children	61	55.7	6.99	7.77	3.91	1.24
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	72.6	0.177	0.655	0.023	2.09
	Urban	97	74.2	0.208	0.716	0.030	2.10
	Rural	20	65.0	0.027	0.055	0.007	1.53
	Low Income	50	48.0	--	--	--	--
	Mid/High Income	63	90.5	0.270	0.862	0.054	1.93
	Home Children	65	87.7	0.245	0.848	0.045	1.84
	Day Care Children	52	53.8	0.093	0.245	0.010	2.10
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	110	96.4	9.56	13.1	5.60	0.981
	Urban	90	96.7	10.5	14.2	5.99	1.02
	Rural	20	95.0	5.37	4.43	4.14	0.712
	Low Income	45	91.1	8.87	13.5	4.47	1.12
	Mid/High Income	61	100.0	10.2	13.3	6.53	0.865
	Home Children	63	100.0	11.6	16.2	6.46	1.01
	Day Care Children	47	91.5	6.82	6.33	4.63	0.912

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-18d. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	0.016	0.061	0.148	0.279
	Urban	104	<MDL	<MDL	0.016	0.064	0.150	0.279
	Rural	21	<MDL	<MDL	0.022	0.045	0.095	0.131
	Low Income	56	<MDL	<MDL	0.036	0.075	0.219	0.279
	Mid/High Income	65	<MDL	<MDL	<MDL	0.056	0.115	0.175
	Home Children	65	<MDL	<MDL	<MDL	0.046	0.127	0.279
	Day Care Children	60	<MDL	<MDL	0.022	0.077	0.149	0.278
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	126	<MDL	<MDL	0.970	2.26	7.08	16.7
	Urban	105	<MDL	<MDL	1.09	2.27	7.47	16.7
	Rural	21	<MDL	<MDL	<MDL	1.64	3.95	7.08
	Low Income	57	<MDL	<MDL	0.709	1.89	7.47	15.2
	Mid/High Income	65	<MDL	<MDL	1.31	2.27	7.08	16.7
	Home Children	65	<MDL	<MDL	1.15	2.41	12.5	16.7
	Day Care Children	61	<MDL	<MDL	0.769	1.89	4.72	7.47
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	<MDL	<MDL	0.006	0.023	0.175	1.48
	Urban	97	<MDL	<MDL	0.008	0.025	0.225	1.48
	Rural	20	<MDL	<MDL	0.001	0.002	0.037	0.043
	Low Income	50	<MDL	<MDL	<MDL	0.005	0.014	0.018
	Mid/High Income	63	<MDL	0.004	0.015	0.047	0.175	1.48
	Home Children	65	<MDL	0.003	0.009	0.031	0.175	1.48
	Day Care Children	52	<MDL	<MDL	0.001	0.011	0.107	0.285
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	110	<MDL	0.557	1.12	2.28	6.86	16.8
	Urban	90	<MDL	0.617	1.33	2.34	11.0	16.8
	Rural	20	<MDL	0.511	0.856	1.51	3.51	3.96
	Low Income	45	<MDL	0.445	0.811	2.33	6.86	15.3
	Mid/High Income	61	0.342	0.789	1.34	2.17	6.64	16.8
	Home Children	63	0.223	0.648	1.17	2.99	12.5	16.8
	Day Care Children	47	<MDL	0.500	0.976	1.95	4.60	6.86
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	0.073	0.274	0.671	1.26
	Urban	104	<MDL	<MDL	0.072	0.290	0.677	1.26
	Rural	21	<MDL	<MDL	0.100	0.203	0.430	0.594
	Low Income	56	<MDL	<MDL	0.161	0.340	0.990	1.26
	Mid/High Income	65	<MDL	<MDL	<MDL	0.252	0.522	0.792
	Home Children	65	<MDL	<MDL	<MDL	0.208	0.573	1.26
	Day Care Children	60	<MDL	<MDL	0.098	0.349	0.674	1.26
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	126	<MDL	<MDL	4.39	10.2	32.0	75.4
	Urban	105	<MDL	<MDL	4.92	10.3	33.8	75.4
	Rural	21	<MDL	<MDL	<MDL	7.41	17.9	32.0
	Low Income	57	<MDL	<MDL	3.21	8.54	33.8	69.0
	Mid/High Income	65	<MDL	<MDL	5.91	10.3	32.0	75.4
	Home Children	65	<MDL	<MDL	5.19	10.9	56.5	75.4
	Day Care Children	61	<MDL	<MDL	3.48	8.54	21.3	33.8
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	<MDL	<MDL	0.026	0.103	0.793	6.70
	Urban	97	<MDL	<MDL	0.038	0.114	1.02	6.70
	Rural	20	<MDL	<MDL	0.005	0.010	0.168	0.196
	Low Income	50	<MDL	<MDL	<MDL	0.021	0.065	0.084
	Mid/High Income	63	<MDL	0.017	0.067	0.212	0.793	6.70
	Home Children	65	<MDL	0.015	0.043	0.141	0.793	6.70
	Day Care Children	52	<MDL	<MDL	0.005	0.051	0.482	1.29
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	110	<MDL	2.52	5.06	10.3	31.0	76.1
	Urban	90	<MDL	2.79	6.00	10.6	49.6	76.1
	Rural	20	<MDL	2.31	3.87	6.84	15.9	17.9
	Low Income	45	<MDL	2.01	3.67	10.5	31.0	69.0
	Mid/High Income	61	1.55	3.57	6.05	9.80	30.0	76.1
	Home Children	63	1.01	2.93	5.30	13.5	56.6	76.1
	Day Care Children	47	<MDL	2.26	4.41	8.82	20.8	31.0

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-19a. Heptachlor (76-44-8): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	94.4	259	563	98.6	1.30
	Urban	105	95.2	255	586	99.8	1.22
	Rural	21	90.5	278	443	92.7	1.70
	Low Income	57	94.7	242	416	106	1.32
	Mid/High Income	65	93.8	233	554	89.4	1.24
	Home Children	65	95.4	290	685	85.1	1.52
	Day Care Children	61	93.4	226	398	115	1.00
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	42.5	--	--	--	--
	Urban	99	43.4	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	51	39.2	--	--	--	--
	Mid/High Income	65	41.5	--	--	--	--
	Home Children	65	43.1	--	--	--	--
	Day Care Children	55	41.8	--	--	--	--
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	94.4	693	1,510	264	1.30
	Urban	105	95.2	682	1,570	267	1.22
	Rural	21	90.5	744	1,190	248	1.70
	Low Income	57	94.7	648	1,120	285	1.32
	Mid/High Income	65	93.8	624	1,490	240	1.24
	Home Children	65	95.4	776	1,830	228	1.52
	Day Care Children	61	93.4	604	1,070	309	1.00
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	42.5	--	--	--	--
	Urban	99	43.4	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	51	39.2	--	--	--	--
	Mid/High Income	65	41.5	--	--	--	--
	Home Children	65	43.1	--	--	--	--
	Day Care Children	55	41.8	--	--	--	--
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	94.4	1.76	4.05	0.661	1.30
	Urban	105	95.2	1.77	4.28	0.672	1.22
	Rural	21	90.5	1.71	2.65	0.605	1.69
	Low Income	57	94.7	1.50	2.48	0.658	1.34
	Mid/High Income	65	93.8	1.70	4.32	0.637	1.23
	Home Children	65	95.4	2.07	5.12	0.610	1.52
	Day Care Children	61	93.4	1.43	2.42	0.719	1.03
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	42.5	--	--	--	--
	Urban	99	43.4	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	51	39.2	--	--	--	--
	Mid/High Income	65	41.5	--	--	--	--
	Home Children	65	43.1	--	--	--	--
	Day Care Children	55	41.8	--	--	--	--
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	94.4	4.71	10.8	1.77	1.30
	Urban	105	95.2	4.74	11.5	1.80	1.22
	Rural	21	90.5	4.59	7.09	1.62	1.69
	Low Income	57	94.7	4.02	6.64	1.76	1.34
	Mid/High Income	65	93.8	4.55	11.6	1.71	1.23
	Home Children	65	95.4	5.55	13.7	1.63	1.52
	Day Care Children	61	93.4	3.82	6.49	1.93	1.03
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	42.5	--	--	--	--
	Urban	99	43.4	--	--	--	--
	Rural	21	38.1	--	--	--	--
	Low Income	51	39.2	--	--	--	--
	Mid/High Income	65	41.5	--	--	--	--
	Home Children	65	43.1	--	--	--	--
	Day Care Children	55	41.8	--	--	--	--

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-19b. Heptachlor (76-44-8): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	49.1	79.8	214	1,220	4,110
	Urban	105	<MDL	49.3	78.5	214	818	4,110
	Rural	21	<MDL	49.1	93.3	164	1,270	1,390
	Low Income	57	<MDL	51.4	83.6	223	1,220	2,530
	Mid/High Income	65	<MDL	40.3	68.1	157	897	4,110
	Home Children	65	<MDL	38.9	64.0	214	1,220	4,110
	Day Care Children	61	<MDL	58.8	84.8	169	897	2,530
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	<MDL	<MDL	<MDL	1.69	13.6	38.6
	Urban	99	<MDL	<MDL	<MDL	1.64	15.5	38.6
	Rural	21	<MDL	<MDL	<MDL	1.75	9.21	18.8
	Low Income	51	<MDL	<MDL	<MDL	1.46	8.08	38.6
	Mid/High Income	65	<MDL	<MDL	<MDL	1.64	11.7	32.3
	Home Children	65	<MDL	<MDL	<MDL	1.64	11.7	32.3
	Day Care Children	55	<MDL	<MDL	<MDL	1.77	15.5	38.6
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	132	214	573	3,260	11,000
	Urban	105	<MDL	132	210	573	2,190	11,000
	Rural	21	<MDL	132	250	439	3,410	3,720
	Low Income	57	<MDL	138	224	596	3,280	6,780
	Mid/High Income	65	<MDL	108	182	422	2,400	11,000
	Home Children	65	<MDL	104	171	573	3,260	11,000
	Day Care Children	61	<MDL	157	227	451	2,400	6,780
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	<MDL	<MDL	<MDL	4.54	36.4	103
	Urban	99	<MDL	<MDL	<MDL	4.38	41.5	103
	Rural	21	<MDL	<MDL	<MDL	4.69	24.7	50.4
	Low Income	51	<MDL	<MDL	<MDL	3.90	21.6	103
	Mid/High Income	65	<MDL	<MDL	<MDL	4.38	31.3	86.6
	Home Children	65	<MDL	<MDL	<MDL	4.38	31.3	86.6
	Day Care Children	55	<MDL	<MDL	<MDL	4.74	41.5	103
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	0.314	0.541	1.16	6.67	32.4
	Urban	105	<MDL	0.343	0.527	1.16	5.34	32.4
	Rural	21	<MDL	0.312	0.648	1.14	7.84	8.76
	Low Income	57	<MDL	0.390	0.557	1.18	6.54	14.7
	Mid/High Income	65	<MDL	0.283	0.527	1.14	6.67	32.4
	Home Children	65	<MDL	0.283	0.507	1.16	7.84	32.4
	Day Care Children	61	<MDL	0.404	0.562	1.05	5.09	14.7
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	<MDL	<MDL	<MDL	0.013	0.092	0.254
	Urban	99	<MDL	<MDL	<MDL	0.013	0.099	0.254
	Rural	21	<MDL	<MDL	<MDL	0.016	0.049	0.101
	Low Income	51	<MDL	<MDL	<MDL	0.013	0.057	0.225
	Mid/High Income	65	<MDL	<MDL	<MDL	0.010	0.086	0.254
	Home Children	65	<MDL	<MDL	<MDL	0.010	0.099	0.254
	Day Care Children	55	<MDL	<MDL	<MDL	0.014	0.075	0.225
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	0.840	1.45	3.10	17.9	86.7
	Urban	105	<MDL	0.918	1.41	3.10	14.3	86.7
	Rural	21	<MDL	0.837	1.74	3.06	21.0	23.5
	Low Income	57	<MDL	1.04	1.49	3.15	17.5	39.5
	Mid/High Income	65	<MDL	0.757	1.41	3.06	17.9	86.7
	Home Children	65	<MDL	0.757	1.36	3.10	21.0	86.7
	Day Care Children	61	<MDL	1.08	1.51	2.82	13.6	39.5
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	<MDL	<MDL	<MDL	0.036	0.248	0.681
	Urban	99	<MDL	<MDL	<MDL	0.035	0.265	0.681
	Rural	21	<MDL	<MDL	<MDL	0.042	0.133	0.270
	Low Income	51	<MDL	<MDL	<MDL	0.035	0.154	0.603
	Mid/High Income	65	<MDL	<MDL	<MDL	0.027	0.230	0.681
	Home Children	65	<MDL	<MDL	<MDL	0.027	0.265	0.681
	Day Care Children	55	<MDL	<MDL	<MDL	0.037	0.201	0.603

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-20a. Indeno[1,2,3-cd]pyrene (193-39-5): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	66.7	2.00	2.17	1.43	0.737
	Urban	105	66.7	2.04	2.22	1.45	0.747
	Rural	21	66.7	1.83	1.92	1.36	0.704
	Low Income	57	82.5	2.51	2.48	1.83	0.750
	Mid/High Income	65	52.3	1.57	1.82	1.15	0.669
	Home Children	65	64.6	2.13	2.61	1.40	0.807
	Day Care Children	61	68.9	1.87	1.59	1.46	0.661
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	100.0	9.96	26.0	4.38	1.07
	Urban	96	100.0	8.38	14.8	4.43	1.02
	Rural	21	100.0	17.2	53.2	4.14	1.33
	Low Income	52	100.0	7.68	17.4	3.32	1.07
	Mid/High Income	61	100.0	12.4	32.2	5.71	1.03
	Home Children	62	100.0	7.40	11.8	4.48	0.926
	Day Care Children	55	100.0	12.9	35.8	4.26	1.22
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	66.7	7.25	7.85	5.18	0.737
	Urban	105	66.7	7.38	8.04	5.23	0.747
	Rural	21	66.7	6.61	6.93	4.93	0.704
	Low Income	57	82.5	9.08	8.98	6.61	0.750
	Mid/High Income	65	52.3	5.67	6.59	4.15	0.669
	Home Children	65	64.6	7.70	9.43	5.08	0.807
	Day Care Children	61	68.9	6.76	5.74	5.29	0.661
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	100.0	36.1	94.2	15.8	1.07
	Urban	96	100.0	30.3	53.4	16.0	1.02
	Rural	21	100.0	62.3	193	15.0	1.33
	Low Income	52	100.0	27.8	63.1	12.0	1.07
	Mid/High Income	61	100.0	44.7	117	20.7	1.03
	Home Children	62	100.0	26.8	42.6	16.2	0.926
	Day Care Children	55	100.0	46.5	130	15.4	1.22
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	66.7	0.013	0.014	0.010	0.728
	Urban	105	66.7	0.013	0.014	0.010	0.735
	Rural	21	66.7	0.013	0.017	0.009	0.708
	Low Income	57	82.5	0.016	0.017	0.011	0.751
	Mid/High Income	65	52.3	0.011	0.012	0.008	0.686
	Home Children	65	64.6	0.015	0.018	0.010	0.806
	Day Care Children	61	68.9	0.011	0.009	0.009	0.638
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	100.0	0.067	0.177	0.030	1.08
	Urban	96	100.0	0.056	0.095	0.030	1.01
	Rural	21	100.0	0.120	0.367	0.027	1.40
	Low Income	52	100.0	0.049	0.112	0.021	1.07
	Mid/High Income	61	100.0	0.086	0.221	0.041	1.02
	Home Children	62	100.0	0.055	0.090	0.032	0.941
	Day Care Children	55	100.0	0.082	0.240	0.027	1.22
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	66.7	0.048	0.052	0.035	0.728
	Urban	105	66.7	0.049	0.051	0.035	0.735
	Rural	21	66.7	0.045	0.061	0.032	0.708
	Low Income	57	82.5	0.057	0.061	0.041	0.751
	Mid/High Income	65	52.3	0.040	0.044	0.030	0.686
	Home Children	65	64.6	0.055	0.065	0.036	0.806
	Day Care Children	61	68.9	0.041	0.033	0.033	0.638
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	100.0	0.243	0.640	0.107	1.08
	Urban	96	100.0	0.202	0.344	0.109	1.01
	Rural	21	100.0	0.433	1.33	0.098	1.40
	Low Income	52	100.0	0.176	0.404	0.075	1.07
	Mid/High Income	61	100.0	0.311	0.801	0.147	1.02
	Home Children	62	100.0	0.197	0.326	0.116	0.941
	Day Care Children	55	100.0	0.295	0.868	0.098	1.22

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-20b. Indeno[1,2,3-cd]pyrene (193-39-5): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	1.12	2.03	6.39	12.2
	Urban	105	<MDL	<MDL	1.12	2.23	6.39	12.2
	Rural	21	<MDL	<MDL	0.854	2.01	4.04	9.24
	Low Income	57	<MDL	0.885	1.61	2.98	9.24	12.2
	Mid/High Income	65	<MDL	<MDL	0.845	1.44	5.37	10.2
	Home Children	65	<MDL	<MDL	1.04	2.01	9.24	12.2
	Day Care Children	61	<MDL	<MDL	1.22	2.36	4.87	9.08
Potential Exposure via Indirect Ingestion (ng/day)	Overall	117	0.623	2.03	3.91	7.59	36.1	247
	Urban	96	0.623	2.10	4.04	8.01	36.1	97.8
	Rural	21	0.937	1.80	2.68	6.65	29.1	247
	Low Income	52	0.623	1.65	2.78	6.07	33.2	97.8
	Mid/High Income	61	0.753	2.81	5.31	8.46	36.1	247
	Home Children	62	0.623	2.21	5.03	7.59	15.1	81.3
	Day Care Children	55	0.663	1.82	3.08	8.04	54.8	247
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	4.05	7.35	23.1	44.1
	Urban	105	<MDL	<MDL	4.06	8.05	23.1	44.1
	Rural	21	<MDL	<MDL	3.09	7.27	14.6	33.5
	Low Income	57	<MDL	3.20	5.82	10.8	33.5	44.1
	Mid/High Income	65	<MDL	<MDL	3.06	5.21	19.4	37.0
	Home Children	65	<MDL	<MDL	3.75	7.27	33.5	44.1
	Day Care Children	61	<MDL	<MDL	4.41	8.52	17.6	32.9
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	117	2.26	7.34	14.1	27.4	131	894
	Urban	96	2.26	7.58	14.6	29.0	131	354
	Rural	21	3.39	6.50	9.71	24.1	105	894
	Low Income	52	2.26	5.98	10.1	22.0	120	354
	Mid/High Income	61	2.72	10.2	19.2	30.6	131	894
	Home Children	62	2.26	8.01	18.2	27.4	54.7	294
	Day Care Children	55	2.40	6.60	11.2	29.1	198	894
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	0.008	0.015	0.053	0.083
	Urban	105	<MDL	<MDL	0.008	0.015	0.053	0.073
	Rural	21	<MDL	<MDL	0.008	0.012	0.023	0.083
	Low Income	57	<MDL	0.007	0.010	0.016	0.073	0.083
	Mid/High Income	65	<MDL	<MDL	0.006	0.011	0.033	0.061
	Home Children	65	<MDL	<MDL	0.008	0.015	0.061	0.083
	Day Care Children	61	<MDL	<MDL	0.008	0.014	0.027	0.053
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	117	0.004	0.015	0.026	0.053	0.259	1.70
	Urban	96	0.004	0.016	0.027	0.055	0.221	0.585
	Rural	21	0.005	0.010	0.019	0.053	0.259	1.70
	Low Income	52	0.004	0.010	0.019	0.029	0.208	0.585
	Mid/High Income	61	0.005	0.018	0.040	0.067	0.259	1.70
	Home Children	62	0.005	0.016	0.034	0.053	0.112	0.585
	Day Care Children	55	0.004	0.012	0.021	0.055	0.265	1.70
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	0.029	0.054	0.191	0.300
	Urban	105	<MDL	<MDL	0.029	0.055	0.191	0.266
	Rural	21	<MDL	<MDL	0.029	0.044	0.083	0.300
	Low Income	57	<MDL	0.025	0.038	0.058	0.264	0.300
	Mid/High Income	65	<MDL	<MDL	0.023	0.039	0.121	0.219
	Home Children	65	<MDL	<MDL	0.029	0.054	0.219	0.300
	Day Care Children	61	<MDL	<MDL	0.029	0.052	0.099	0.191
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	117	0.014	0.055	0.094	0.193	0.936	6.16
	Urban	96	0.014	0.057	0.097	0.199	0.801	2.12
	Rural	21	0.018	0.036	0.068	0.191	0.936	6.16
	Low Income	52	0.014	0.036	0.068	0.106	0.753	2.12
	Mid/High Income	61	0.017	0.064	0.144	0.243	0.936	6.16
	Home Children	62	0.019	0.060	0.123	0.193	0.405	2.12
	Day Care Children	55	0.014	0.042	0.075	0.201	0.960	6.16

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-21a. Pentachlorophenol (87-86-5): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	99.2	30.0	44.2	18.2	0.920
	Urban	104	99.0	29.0	40.4	17.6	0.927
	Rural	21	100.0	35.0	60.4	21.0	0.893
	Low Income	56	100.0	36.9	49.0	24.1	0.851
	Mid/High Income	65	98.5	24.9	40.5	14.4	0.939
	Home Children	65	98.5	33.5	58.4	15.9	1.10
	Day Care Children	60	100.0	26.2	19.3	21.0	0.659
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	8.8	--	--	--	--
	Urban	104	9.6	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	57	7.0	--	--	--	--
	Mid/High Income	64	10.9	--	--	--	--
	Home Children	65	6.2	--	--	--	--
	Day Care Children	60	11.7	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	94.1	4.19	10.4	1.62	1.37
	Urban	97	93.8	4.39	11.3	1.61	1.42
	Rural	21	95.2	3.26	4.47	1.65	1.18
	Low Income	50	96.0	3.23	4.62	1.40	1.45
	Mid/High Income	64	92.2	5.11	13.6	1.85	1.34
	Home Children	65	93.8	4.05	5.67	1.95	1.24
	Day Care Children	53	94.3	4.37	14.3	1.29	1.51
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	99.2	113	166	68.2	0.920
	Urban	104	99.0	109	152	66.2	0.927
	Rural	21	100.0	131	227	78.9	0.893
	Low Income	56	100.0	139	184	90.5	0.851
	Mid/High Income	65	98.5	93.4	152	54.0	0.939
	Home Children	65	98.5	126	219	59.6	1.10
	Day Care Children	60	100.0	98.5	72.4	79.0	0.659
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	8.8	--	--	--	--
	Urban	104	9.6	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	57	7.0	--	--	--	--
	Mid/High Income	64	10.9	--	--	--	--
	Home Children	65	6.2	--	--	--	--
	Day Care Children	60	11.7	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	94.1	15.7	39.2	6.07	1.37
	Urban	97	93.8	16.5	42.6	6.05	1.42
	Rural	21	95.2	12.2	16.8	6.20	1.18
	Low Income	50	96.0	12.1	17.3	5.25	1.45
	Mid/High Income	64	92.2	19.2	50.9	6.95	1.34
	Home Children	65	93.8	15.2	21.3	7.30	1.24
	Day Care Children	53	94.3	16.4	53.9	4.84	1.51

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table N-21b. Pentachlorophenol (87-86-5): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	9.89	17.5	30.5	96.8	294
	Urban	104	<MDL	9.48	16.4	29.4	96.8	270
	Rural	21	3.69	13.4	22.3	32.9	40.1	294
	Low Income	56	5.45	14.4	23.6	34.5	115	294
	Mid/High Income	65	<MDL	7.82	12.3	20.8	70.8	270
	Home Children	65	<MDL	7.64	13.4	24.6	178	294
	Day Care Children	60	5.86	12.1	21.0	30.7	71.1	96.8
Potential Exposure via Dietary Ingestion (ng/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	183	449
	Urban	104	<MDL	<MDL	<MDL	<MDL	183	449
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	183
	Low Income	57	<MDL	<MDL	<MDL	<MDL	181	183
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	268	449
	Home Children	65	<MDL	<MDL	<MDL	<MDL	182	289
	Day Care Children	60	<MDL	<MDL	<MDL	<MDL	229	449
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	<MDL	0.732	1.46	4.07	11.6	105
	Urban	97	<MDL	0.783	1.46	4.07	11.6	105
	Rural	21	<MDL	0.601	1.77	3.99	10.3	19.2
	Low Income	50	<MDL	0.601	1.42	4.09	11.1	24.7
	Mid/High Income	64	<MDL	0.801	1.61	4.56	11.6	105
	Home Children	65	<MDL	0.861	1.75	4.48	18.2	28.5
	Day Care Children	53	<MDL	0.679	1.32	3.25	11.1	105
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	37.1	65.6	114	364	1,100
	Urban	104	<MDL	35.6	61.6	110	364	1,010
	Rural	21	13.9	50.5	83.9	124	151	1,100
	Low Income	56	20.4	54.2	88.7	129	433	1,100
	Mid/High Income	65	<MDL	29.4	46.0	78.2	266	1,010
	Home Children	65	<MDL	28.7	50.5	92.3	669	1,100
	Day Care Children	60	22.0	45.3	78.7	115	267	364
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	687	1,690
	Urban	104	<MDL	<MDL	<MDL	<MDL	687	1,690
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	688
	Low Income	57	<MDL	<MDL	<MDL	<MDL	678	688
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	1,010	1,690
	Home Children	65	<MDL	<MDL	<MDL	<MDL	682	1,080
	Day Care Children	60	<MDL	<MDL	<MDL	<MDL	860	1,690
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	<MDL	2.75	5.49	15.3	43.7	394
	Urban	97	<MDL	2.94	5.46	15.3	43.7	394
	Rural	21	<MDL	2.26	6.64	15.0	38.7	72.3
	Low Income	50	<MDL	2.26	5.33	15.4	41.8	92.6
	Mid/High Income	64	<MDL	3.01	6.05	17.1	43.7	394
	Home Children	65	<MDL	3.23	6.59	16.8	68.5	107
	Day Care Children	53	<MDL	2.55	4.95	12.2	41.8	394

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table N-21c. Pentachlorophenol (87-86-5): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	99.2	0.204	0.324	0.122	0.911
	Urban	104	99.0	0.192	0.259	0.119	0.911
	Rural	21	100.0	0.259	0.549	0.137	0.923
	Low Income	56	100.0	0.248	0.394	0.149	0.906
	Mid/High Income	65	98.5	0.171	0.258	0.103	0.910
	Home Children	65	98.5	0.242	0.432	0.114	1.11
	Day Care Children	60	100.0	0.162	0.120	0.131	0.635
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	8.8	--	--	--	--
	Urban	104	9.6	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	57	7.0	--	--	--	--
	Mid/High Income	64	10.9	--	--	--	--
	Home Children	65	6.2	--	--	--	--
	Day Care Children	60	11.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	94.1	0.029	0.071	0.011	1.37
	Urban	97	93.8	0.030	0.077	0.011	1.41
	Rural	21	95.2	0.022	0.031	0.011	1.21
	Low Income	50	96.0	0.020	0.029	0.009	1.45
	Mid/High Income	64	92.2	0.036	0.093	0.013	1.32
	Home Children	65	93.8	0.029	0.044	0.014	1.24
	Day Care Children	53	94.3	0.027	0.095	0.008	1.47
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	99.2	0.765	1.22	0.458	0.911
	Urban	104	99.0	0.723	0.973	0.447	0.911
	Rural	21	100.0	0.974	2.06	0.515	0.923
	Low Income	56	100.0	0.929	1.48	0.559	0.906
	Mid/High Income	65	98.5	0.641	0.970	0.386	0.910
	Home Children	65	98.5	0.910	1.62	0.427	1.11
	Day Care Children	60	100.0	0.608	0.450	0.494	0.635
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	8.8	--	--	--	--
	Urban	104	9.6	--	--	--	--
	Rural	21	4.8	--	--	--	--
	Low Income	57	7.0	--	--	--	--
	Mid/High Income	64	10.9	--	--	--	--
	Home Children	65	6.2	--	--	--	--
	Day Care Children	60	11.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	94.1	0.107	0.267	0.041	1.37
	Urban	97	93.8	0.113	0.289	0.041	1.41
	Rural	21	95.2	0.082	0.115	0.040	1.21
	Low Income	50	96.0	0.076	0.109	0.033	1.45
	Mid/High Income	64	92.2	0.136	0.348	0.050	1.32
	Home Children	65	93.8	0.111	0.164	0.052	1.24
	Day Care Children	53	94.3	0.103	0.356	0.031	1.47

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-21d. Pentachlorophenol (87-86-5): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	0.062	0.112	0.199	0.684	2.63
	Urban	104	<MDL	0.061	0.107	0.197	0.684	1.46
	Rural	21	0.033	0.075	0.129	0.212	0.271	2.63
	Low Income	56	0.024	0.089	0.142	0.215	0.830	2.63
	Mid/High Income	65	<MDL	0.059	0.093	0.174	0.478	1.46
	Home Children	65	<MDL	0.052	0.093	0.224	1.29	2.63
	Day Care Children	60	0.042	0.090	0.130	0.194	0.419	0.684
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	1.31	3.67
	Urban	104	<MDL	<MDL	<MDL	<MDL	1.40	3.67
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	1.26
	Low Income	57	<MDL	<MDL	<MDL	<MDL	1.26	1.31
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	1.52	3.67
	Home Children	65	<MDL	<MDL	<MDL	<MDL	1.31	1.68
	Day Care Children	60	<MDL	<MDL	<MDL	<MDL	1.35	3.67
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	<MDL	0.005	0.011	0.023	0.091	0.696
	Urban	97	<MDL	0.006	0.012	0.022	0.091	0.696
	Rural	21	<MDL	0.004	0.009	0.030	0.065	0.134
	Low Income	50	<MDL	0.004	0.010	0.023	0.079	0.148
	Mid/High Income	64	<MDL	0.006	0.013	0.031	0.091	0.696
	Home Children	65	<MDL	0.006	0.013	0.032	0.118	0.261
	Day Care Children	53	<MDL	0.004	0.009	0.016	0.056	0.696
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	0.232	0.421	0.749	2.57	9.89
	Urban	104	<MDL	0.227	0.403	0.741	2.57	5.50
	Rural	21	0.123	0.281	0.485	0.794	1.02	9.89
	Low Income	56	0.092	0.334	0.532	0.808	3.12	9.89
	Mid/High Income	65	<MDL	0.221	0.348	0.652	1.80	5.50
	Home Children	65	<MDL	0.195	0.348	0.839	4.83	9.89
	Day Care Children	60	0.158	0.336	0.489	0.728	1.57	2.57
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	4.91	13.8
	Urban	104	<MDL	<MDL	<MDL	<MDL	5.24	13.8
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	4.74
	Low Income	57	<MDL	<MDL	<MDL	<MDL	4.74	4.91
	Mid/High Income	64	<MDL	<MDL	<MDL	<MDL	5.71	13.8
	Home Children	65	<MDL	<MDL	<MDL	<MDL	4.91	6.31
	Day Care Children	60	<MDL	<MDL	<MDL	<MDL	5.07	13.8
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	<MDL	0.018	0.041	0.086	0.342	2.61
	Urban	97	<MDL	0.022	0.044	0.084	0.342	2.61
	Rural	21	<MDL	0.015	0.032	0.113	0.244	0.504
	Low Income	50	<MDL	0.015	0.037	0.085	0.298	0.557
	Mid/High Income	64	<MDL	0.024	0.048	0.117	0.342	2.61
	Home Children	65	<MDL	0.024	0.049	0.119	0.443	0.981
	Day Care Children	53	<MDL	0.014	0.034	0.061	0.211	2.61

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-22a. *cis*-Permethrin (61949-76-6): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	69.0	19.1	42.9	6.07	1.40
	Urban	105	65.7	19.2	44.4	5.88	1.43
	Rural	21	85.7	18.6	35.3	7.11	1.28
	Low Income	57	87.7	32.6	59.7	11.3	1.43
	Mid/High Income	65	52.3	8.00	12.8	3.59	1.17
	Home Children	65	61.5	13.8	25.4	4.62	1.45
	Day Care Children	61	77.0	24.7	55.5	8.11	1.31
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	100.0	144	689	23.9	1.53
	Urban	100	100.0	95.7	239	23.9	1.50
	Rural	21	100.0	374	1,580	23.9	1.68
	Low Income	52	100.0	61.8	120	24.6	1.26
	Mid/High Income	65	100.0	217	931	24.2	1.74
	Home Children	66	100.0	91.6	231	24.5	1.51
	Day Care Children	55	100.0	207	992	23.2	1.56
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	69.0	48.8	110	15.5	1.40
	Urban	105	65.7	49.1	113	15.0	1.43
	Rural	21	85.7	47.6	90.2	18.2	1.28
	Low Income	57	87.7	83.4	153	28.9	1.43
	Mid/High Income	65	52.3	20.4	32.7	9.18	1.17
	Home Children	65	61.5	35.3	64.9	11.8	1.45
	Day Care Children	61	77.0	63.2	142	20.7	1.31
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	100.0	368	1,760	61.0	1.53
	Urban	100	100.0	244	612	61.0	1.50
	Rural	21	100.0	955	4,040	61.1	1.68
	Low Income	52	100.0	158	306	62.9	1.26
	Mid/High Income	65	100.0	555	2,380	62.0	1.74
	Home Children	66	100.0	234	589	62.5	1.51
	Day Care Children	55	100.0	528	2,530	59.3	1.56
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	69.0	0.129	0.309	0.041	1.39
	Urban	105	65.7	0.129	0.313	0.040	1.42
	Rural	21	85.7	0.130	0.297	0.046	1.24
	Low Income	57	87.7	0.217	0.434	0.070	1.46
	Mid/High Income	65	52.3	0.058	0.097	0.026	1.17
	Home Children	65	61.5	0.100	0.203	0.033	1.44
	Day Care Children	61	77.0	0.160	0.391	0.051	1.31
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	100.0	1.00	4.30	0.162	1.57
	Urban	100	100.0	0.739	2.03	0.163	1.55
	Rural	21	100.0	2.26	9.40	0.156	1.69
	Low Income	52	100.0	0.404	0.817	0.154	1.30
	Mid/High Income	65	100.0	1.53	5.79	0.173	1.78
	Home Children	66	100.0	0.712	1.90	0.175	1.53
	Day Care Children	55	100.0	1.35	6.04	0.147	1.61
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	69.0	0.330	0.790	0.104	1.39
	Urban	105	65.7	0.330	0.800	0.101	1.42
	Rural	21	85.7	0.332	0.759	0.118	1.24
	Low Income	57	87.7	0.553	1.11	0.179	1.46
	Mid/High Income	65	52.3	0.147	0.248	0.065	1.17
	Home Children	65	61.5	0.255	0.519	0.085	1.44
	Day Care Children	61	77.0	0.410	1.00	0.129	1.31
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	100.0	2.56	11.0	0.413	1.57
	Urban	100	100.0	1.89	5.19	0.416	1.55
	Rural	21	100.0	5.76	24.0	0.399	1.69
	Low Income	52	100.0	1.03	2.09	0.394	1.30
	Mid/High Income	65	100.0	3.91	14.8	0.442	1.78
	Home Children	66	100.0	1.82	4.87	0.447	1.53
	Day Care Children	55	100.0	3.45	15.4	0.375	1.61

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-22b. *cis*-Permethrin (61949-76-6): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	5.55	14.9	68.5	273
	Urban	105	<MDL	<MDL	5.68	13.0	68.5	273
	Rural	21	<MDL	3.09	5.42	14.9	68.0	152
	Low Income	57	<MDL	4.23	9.99	26.4	239	273
	Mid/High Income	65	<MDL	<MDL	2.49	8.29	35.9	68.5
	Home Children	65	<MDL	<MDL	3.42	12.2	68.0	152
	Day Care Children	61	<MDL	2.55	6.27	15.1	122	273
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	1.62	8.18	19.8	43.5	472	7,270
	Urban	100	1.63	8.00	20.2	43.5	535	1,330
	Rural	21	1.62	10.2	18.6	49.0	99.0	7,270
	Low Income	52	1.62	12.0	20.2	42.8	435	597
	Mid/High Income	65	1.63	6.89	20.6	43.5	1,160	7,270
	Home Children	66	1.62	8.68	22.7	56.1	448	1,300
	Day Care Children	55	2.77	7.02	18.3	37.7	597	7,270
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	14.2	38.2	175	699
	Urban	105	<MDL	<MDL	14.5	33.3	175	699
	Rural	21	<MDL	7.89	13.9	38.2	174	388
	Low Income	57	<MDL	10.8	25.5	67.5	612	699
	Mid/High Income	65	<MDL	<MDL	6.37	21.2	91.6	175
	Home Children	65	<MDL	<MDL	8.74	31.2	174	388
	Day Care Children	61	<MDL	6.52	16.0	38.5	313	699
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	4.13	20.9	50.5	111	1,210	18,600
	Urban	100	4.17	20.4	51.6	111	1,370	3,400
	Rural	21	4.13	26.1	47.5	125	253	18,600
	Low Income	52	4.13	30.6	51.7	109	1,110	1,530
	Mid/High Income	65	4.17	17.6	52.7	111	2,960	18,600
	Home Children	66	4.13	22.2	58.1	143	1,140	3,330
	Day Care Children	55	7.08	17.9	46.7	96.5	1,530	18,600
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	0.036	0.092	0.552	2.35
	Urban	105	<MDL	<MDL	0.036	0.099	0.552	2.35
	Rural	21	<MDL	0.021	0.035	0.066	0.362	1.36
	Low Income	57	<MDL	0.029	0.054	0.174	1.42	2.35
	Mid/High Income	65	<MDL	<MDL	0.017	0.061	0.256	0.580
	Home Children	65	<MDL	<MDL	0.024	0.087	0.362	1.36
	Day Care Children	61	<MDL	0.017	0.043	0.092	0.552	2.35
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	0.010	0.059	0.139	0.353	3.65	43.3
	Urban	100	0.010	0.056	0.133	0.349	4.01	12.5
	Rural	21	0.012	0.060	0.140	0.353	0.983	43.3
	Low Income	52	0.012	0.074	0.151	0.320	1.97	4.37
	Mid/High Income	65	0.010	0.052	0.128	0.368	7.35	43.3
	Home Children	66	0.010	0.061	0.153	0.382	3.65	11.9
	Day Care Children	55	0.016	0.045	0.125	0.274	4.37	43.3
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	0.091	0.236	1.41	6.01
	Urban	105	<MDL	<MDL	0.092	0.253	1.41	6.01
	Rural	21	<MDL	0.053	0.090	0.168	0.925	3.48
	Low Income	57	<MDL	0.074	0.137	0.446	3.62	6.01
	Mid/High Income	65	<MDL	<MDL	0.043	0.156	0.654	1.48
	Home Children	65	<MDL	<MDL	0.061	0.222	0.925	3.48
	Day Care Children	61	<MDL	0.044	0.111	0.236	1.41	6.01
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	0.025	0.150	0.356	0.902	9.34	111
	Urban	100	0.025	0.143	0.341	0.892	10.3	32.0
	Rural	21	0.031	0.153	0.357	0.902	2.51	111
	Low Income	52	0.031	0.188	0.385	0.819	5.04	11.2
	Mid/High Income	65	0.025	0.132	0.326	0.942	18.8	111
	Home Children	66	0.025	0.155	0.392	0.976	9.34	30.5
	Day Care Children	55	0.040	0.114	0.319	0.699	11.2	111

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-23a. *trans*-Permethrin (61949-77-7): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	68.3	17.0	44.2	4.64	1.43
	Urban	105	64.8	17.2	46.0	4.51	1.45
	Rural	21	85.7	16.1	34.1	5.35	1.35
	Low Income	57	87.7	29.8	62.3	8.76	1.47
	Mid/High Income	65	52.3	6.65	12.0	2.74	1.17
	Home Children	65	60.0	12.3	25.0	3.64	1.47
	Day Care Children	61	77.0	22.1	57.9	6.01	1.35
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	100.0	145	713	20.0	1.63
	Urban	100	100.0	95.6	241	20.0	1.63
	Rural	21	100.0	380	1,640	20.0	1.67
	Low Income	52	100.0	59.9	136	19.3	1.39
	Mid/High Income	65	100.0	221	962	21.3	1.84
	Home Children	66	100.0	89.9	236	21.4	1.58
	Day Care Children	55	100.0	211	1,030	18.5	1.71
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	68.3	43.6	113	11.9	1.43
	Urban	105	64.8	44.0	118	11.5	1.45
	Rural	21	85.7	41.1	87.2	13.7	1.35
	Low Income	57	87.7	76.0	159	22.4	1.47
	Mid/High Income	65	52.3	17.0	30.6	7.01	1.17
	Home Children	65	60.0	31.5	63.8	9.31	1.47
	Day Care Children	61	77.0	56.4	148	15.3	1.35
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	100.0	371	1,820	51.2	1.63
	Urban	100	100.0	244	615	51.2	1.63
	Rural	21	100.0	972	4,190	51.1	1.67
	Low Income	52	100.0	153	347	49.4	1.39
	Mid/High Income	65	100.0	565	2,460	54.6	1.84
	Home Children	66	100.0	230	604	54.7	1.58
	Day Care Children	55	100.0	540	2,620	47.2	1.71
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	68.3	0.117	0.333	0.031	1.42
	Urban	105	64.8	0.117	0.341	0.030	1.44
	Rural	21	85.7	0.116	0.297	0.035	1.32
	Low Income	57	87.7	0.203	0.474	0.054	1.51
	Mid/High Income	65	52.3	0.047	0.088	0.020	1.17
	Home Children	65	60.0	0.090	0.202	0.026	1.46
	Day Care Children	61	77.0	0.146	0.430	0.037	1.36
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	100.0	1.00	4.42	0.136	1.67
	Urban	100	100.0	0.734	1.99	0.137	1.68
	Rural	21	100.0	2.27	9.76	0.130	1.63
	Low Income	52	100.0	0.388	0.893	0.121	1.42
	Mid/High Income	65	100.0	1.54	5.94	0.152	1.88
	Home Children	66	100.0	0.707	1.94	0.153	1.61
	Day Care Children	55	100.0	1.35	6.21	0.117	1.74
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	68.3	0.299	0.850	0.079	1.42
	Urban	105	64.8	0.300	0.870	0.078	1.44
	Rural	21	85.7	0.297	0.760	0.089	1.32
	Low Income	57	87.7	0.518	1.21	0.139	1.51
	Mid/High Income	65	52.3	0.121	0.224	0.050	1.17
	Home Children	65	60.0	0.230	0.517	0.067	1.46
	Day Care Children	61	77.0	0.373	1.10	0.096	1.36
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	100.0	2.56	11.3	0.346	1.67
	Urban	100	100.0	1.88	5.10	0.349	1.68
	Rural	21	100.0	5.81	25.0	0.333	1.63
	Low Income	52	100.0	0.992	2.28	0.310	1.42
	Mid/High Income	65	100.0	3.95	15.2	0.390	1.88
	Home Children	66	100.0	1.81	4.97	0.391	1.61
	Day Care Children	55	100.0	3.46	15.9	0.299	1.74

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-23b. *trans*-Permethrin (61949-77-7): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	3.89	11.4	64.5	335
	Urban	105	<MDL	<MDL	3.87	11.4	64.5	335
	Rural	21	<MDL	1.93	4.07	8.14	46.5	154
	Low Income	57	<MDL	3.81	7.19	16.0	196	335
	Mid/High Income	65	<MDL	<MDL	1.79	4.86	35.4	61.8
	Home Children	65	<MDL	<MDL	2.07	11.4	59.2	154
	Day Care Children	61	<MDL	1.84	4.44	11.3	111	335
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	1.22	6.17	16.2	45.1	463	7,540
	Urban	100	1.22	5.89	16.4	48.6	615	1,300
	Rural	21	1.49	7.62	14.4	36.6	66.7	7,540
	Low Income	52	1.49	7.83	17.0	45.0	457	766
	Mid/High Income	65	1.22	5.48	16.2	58.4	1,180	7,540
	Home Children	66	1.22	6.90	17.4	59.7	412	1,300
	Day Care Children	55	1.54	5.48	12.3	39.8	766	7,540
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	9.94	29.1	165	855
	Urban	105	<MDL	<MDL	9.88	29.1	165	855
	Rural	21	<MDL	4.94	10.4	20.8	119	392
	Low Income	57	<MDL	9.75	18.4	41.0	500	855
	Mid/High Income	65	<MDL	<MDL	4.57	12.4	90.5	158
	Home Children	65	<MDL	<MDL	5.30	29.1	151	392
	Day Care Children	61	<MDL	4.70	11.3	28.9	283	855
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	3.12	15.8	41.5	115	1,180	19,300
	Urban	100	3.12	15.1	41.8	124	1,570	3,320
	Rural	21	3.80	19.5	36.7	93.6	170	19,300
	Low Income	52	3.80	20.0	43.5	115	1,170	1,960
	Mid/High Income	65	3.12	14.0	41.5	149	3,000	19,300
	Home Children	66	3.12	17.6	44.5	153	1,050	3,320
	Day Care Children	55	3.94	14.0	31.4	102	1,960	19,300
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	0.020	0.075	0.499	2.88
	Urban	105	<MDL	<MDL	0.020	0.077	0.499	2.88
	Rural	21	<MDL	0.013	0.028	0.054	0.293	1.37
	Low Income	57	<MDL	0.020	0.042	0.120	1.37	2.88
	Mid/High Income	65	<MDL	<MDL	0.012	0.040	0.234	0.524
	Home Children	65	<MDL	<MDL	0.015	0.075	0.356	1.37
	Day Care Children	61	<MDL	0.013	0.029	0.068	0.499	2.88
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	0.008	0.042	0.108	0.292	4.29	44.9
	Urban	100	0.008	0.036	0.114	0.332	4.41	11.9
	Rural	21	0.011	0.060	0.083	0.244	0.420	44.9
	Low Income	52	0.010	0.057	0.111	0.266	2.07	4.54
	Mid/High Income	65	0.008	0.034	0.106	0.411	7.84	44.9
	Home Children	66	0.008	0.054	0.125	0.387	3.36	11.9
	Day Care Children	55	0.010	0.034	0.083	0.258	4.54	44.9
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	0.052	0.191	1.28	7.36
	Urban	105	<MDL	<MDL	0.051	0.197	1.28	7.36
	Rural	21	<MDL	0.034	0.073	0.137	0.748	3.51
	Low Income	57	<MDL	0.051	0.107	0.306	3.51	7.36
	Mid/High Income	65	<MDL	<MDL	0.031	0.102	0.597	1.34
	Home Children	65	<MDL	<MDL	0.039	0.191	0.910	3.51
	Day Care Children	61	<MDL	0.033	0.074	0.173	1.28	7.36
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	0.020	0.109	0.277	0.747	11.0	115
	Urban	100	0.020	0.093	0.293	0.850	11.3	30.4
	Rural	21	0.029	0.153	0.213	0.625	1.07	115
	Low Income	52	0.024	0.145	0.284	0.681	5.29	11.6
	Mid/High Income	65	0.020	0.087	0.270	1.05	20.0	115
	Home Children	66	0.020	0.138	0.319	0.988	8.59	30.4
	Day Care Children	55	0.024	0.086	0.213	0.660	11.6	115

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-24a. PCB 52 (35693-99-3): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	96.0	8.19	11.3	6.08	0.683
	Urban	105	95.2	8.09	11.7	5.94	0.699
	Rural	21	100.0	8.69	9.23	6.80	0.597
	Low Income	57	98.2	9.54	15.8	6.44	0.739
	Mid/High Income	65	96.9	7.33	5.20	6.14	0.587
	Home Children	65	95.4	6.78	5.80	5.56	0.612
	Day Care Children	61	96.7	9.69	15.0	6.68	0.745
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	33.9	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	52	30.8	--	--	--	--
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	66	27.3	--	--	--	--
	Day Care Children	55	41.8	--	--	--	--
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	96.0	28.0	38.6	20.8	0.683
	Urban	105	95.2	27.7	40.0	20.4	0.699
	Rural	21	100.0	29.8	31.6	23.3	0.597
	Low Income	57	98.2	32.7	54.0	22.0	0.739
	Mid/High Income	65	96.9	25.1	17.8	21.0	0.587
	Home Children	65	95.4	23.2	19.9	19.1	0.612
	Day Care Children	61	96.7	33.2	51.4	22.9	0.745
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	33.9	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	52	30.8	--	--	--	--
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	66	27.3	--	--	--	--
	Day Care Children	55	41.8	--	--	--	--
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	96.0	0.056	0.084	0.041	0.713
	Urban	105	95.2	0.057	0.090	0.040	0.740
	Rural	21	100.0	0.053	0.042	0.044	0.567
	Low Income	57	98.2	0.064	0.119	0.040	0.818
	Mid/High Income	65	96.9	0.052	0.035	0.044	0.580
	Home Children	65	95.4	0.048	0.035	0.040	0.619
	Day Care Children	61	96.7	0.065	0.115	0.042	0.805
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	33.9	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	52	30.8	--	--	--	--
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	66	27.3	--	--	--	--
	Day Care Children	55	41.8	--	--	--	--
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	96.0	0.193	0.287	0.140	0.713
	Urban	105	95.2	0.195	0.308	0.137	0.740
	Rural	21	100.0	0.182	0.143	0.152	0.567
	Low Income	57	98.2	0.219	0.407	0.137	0.818
	Mid/High Income	65	96.9	0.177	0.118	0.150	0.580
	Home Children	65	95.4	0.165	0.118	0.137	0.619
	Day Care Children	61	96.7	0.223	0.393	0.143	0.805
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	33.9	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	52	30.8	--	--	--	--
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	66	27.3	--	--	--	--
	Day Care Children	55	41.8	--	--	--	--

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-24b. PCB 52 (35693-99-3): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	4.33	5.99	8.08	22.6	114
	Urban	105	<MDL	4.30	6.00	8.17	21.8	114
	Rural	21	3.54	4.58	5.83	7.35	25.0	44.0
	Low Income	57	<MDL	4.58	6.24	7.91	33.9	114
	Mid/High Income	65	<MDL	4.49	5.83	8.17	21.8	27.4
	Home Children	65	<MDL	4.23	5.48	7.83	14.0	44.0
	Day Care Children	61	<MDL	5.43	6.29	8.40	25.0	114
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	<MDL	<MDL	<MDL	0.174	0.736	2.19
	Urban	100	<MDL	<MDL	<MDL	0.175	0.721	2.19
	Rural	21	<MDL	<MDL	<MDL	0.139	1.75	2.06
	Low Income	52	<MDL	<MDL	<MDL	0.092	1.30	2.19
	Mid/High Income	65	<MDL	<MDL	<MDL	0.177	0.672	1.75
	Home Children	66	<MDL	<MDL	<MDL	0.172	1.27	2.19
	Day Care Children	55	<MDL	<MDL	<MDL	0.177	0.736	1.30
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	14.8	20.5	27.7	77.3	392
	Urban	105	<MDL	14.7	20.6	28.0	74.6	392
	Rural	21	12.1	15.7	20.0	25.2	85.6	151
	Low Income	57	<MDL	15.7	21.4	27.1	116	392
	Mid/High Income	65	<MDL	15.4	20.0	28.0	74.6	93.8
	Home Children	65	<MDL	14.5	18.8	26.8	48.0	151
	Day Care Children	61	<MDL	18.6	21.5	28.8	85.6	392
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	<MDL	<MDL	<MDL	0.598	2.52	7.49
	Urban	100	<MDL	<MDL	<MDL	0.600	2.47	7.49
	Rural	21	<MDL	<MDL	<MDL	0.476	6.00	7.04
	Low Income	52	<MDL	<MDL	<MDL	0.317	4.44	7.49
	Mid/High Income	65	<MDL	<MDL	<MDL	0.605	2.30	6.00
	Home Children	66	<MDL	<MDL	<MDL	0.590	4.34	7.49
	Day Care Children	55	<MDL	<MDL	<MDL	0.605	2.52	4.44
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	0.029	0.040	0.057	0.144	0.863
	Urban	105	<MDL	0.028	0.040	0.057	0.144	0.863
	Rural	21	0.015	0.034	0.042	0.054	0.134	0.200
	Low Income	57	<MDL	0.028	0.040	0.056	0.200	0.863
	Mid/High Income	65	<MDL	0.030	0.042	0.061	0.134	0.200
	Home Children	65	<MDL	0.029	0.039	0.057	0.089	0.200
	Day Care Children	61	<MDL	0.029	0.043	0.057	0.145	0.863
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	<MDL	<MDL	<MDL	0.001	0.006	0.018
	Urban	100	<MDL	<MDL	<MDL	0.001	0.005	0.018
	Rural	21	<MDL	<MDL	<MDL	0.001	0.009	0.016
	Low Income	52	<MDL	<MDL	<MDL	0.001	0.008	0.018
	Mid/High Income	65	<MDL	<MDL	<MDL	0.001	0.005	0.016
	Home Children	66	<MDL	<MDL	<MDL	0.001	0.009	0.018
	Day Care Children	55	<MDL	<MDL	<MDL	0.001	0.006	0.008
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	0.098	0.137	0.197	0.494	2.95
	Urban	105	<MDL	0.098	0.136	0.197	0.494	2.95
	Rural	21	0.053	0.116	0.142	0.186	0.460	0.685
	Low Income	57	<MDL	0.096	0.138	0.190	0.685	2.95
	Mid/High Income	65	<MDL	0.104	0.145	0.210	0.460	0.684
	Home Children	65	<MDL	0.101	0.135	0.195	0.305	0.685
	Day Care Children	61	<MDL	0.098	0.147	0.197	0.497	2.95
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	<MDL	<MDL	<MDL	0.005	0.019	0.061
	Urban	100	<MDL	<MDL	<MDL	0.005	0.017	0.061
	Rural	21	<MDL	<MDL	<MDL	0.003	0.032	0.053
	Low Income	52	<MDL	<MDL	<MDL	0.002	0.026	0.061
	Mid/High Income	65	<MDL	<MDL	<MDL	0.005	0.016	0.053
	Home Children	66	<MDL	<MDL	<MDL	0.005	0.032	0.061
	Day Care Children	55	<MDL	<MDL	<MDL	0.005	0.019	0.026

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-25a. PCB 95 (38379-99-6): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	81.0	1.76	3.89	1.10	0.750
	Urban	105	81.0	1.65	3.67	1.09	0.706
	Rural	21	81.0	2.35	4.92	1.16	0.957
	Low Income	57	80.7	2.34	5.55	1.24	0.853
	Mid/High Income	65	86.2	1.34	1.45	1.04	0.627
	Home Children	65	76.9	1.52	2.81	1.03	0.731
	Day Care Children	61	85.2	2.02	4.80	1.17	0.770
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	36.4	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	52	34.6	--	--	--	--
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	55	36.4	--	--	--	--
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	81.0	5.40	11.9	3.36	0.750
	Urban	105	81.0	5.04	11.3	3.33	0.706
	Rural	21	81.0	7.19	15.1	3.54	0.957
	Low Income	57	80.7	7.16	17.0	3.79	0.853
	Mid/High Income	65	86.2	4.10	4.44	3.19	0.627
	Home Children	65	76.9	4.65	8.61	3.16	0.731
	Day Care Children	61	85.2	6.20	14.7	3.59	0.770
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	36.4	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	52	34.6	--	--	--	--
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	55	36.4	--	--	--	--
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	81.0	0.012	0.027	0.007	0.755
	Urban	105	81.0	0.012	0.028	0.007	0.732
	Rural	21	81.0	0.013	0.022	0.008	0.883
	Low Income	57	80.7	0.015	0.038	0.008	0.870
	Mid/High Income	65	86.2	0.010	0.009	0.007	0.643
	Home Children	65	76.9	0.010	0.013	0.007	0.736
	Day Care Children	61	85.2	0.013	0.036	0.007	0.781
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	36.4	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	52	34.6	--	--	--	--
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	55	36.4	--	--	--	--
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	81.0	0.036	0.082	0.023	0.755
	Urban	105	81.0	0.035	0.084	0.022	0.732
	Rural	21	81.0	0.040	0.068	0.023	0.883
	Low Income	57	80.7	0.046	0.117	0.023	0.870
	Mid/High Income	65	86.2	0.029	0.029	0.023	0.643
	Home Children	65	76.9	0.031	0.041	0.023	0.736
	Day Care Children	61	85.2	0.041	0.110	0.022	0.781
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	36.4	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	52	34.6	--	--	--	--
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	55	36.4	--	--	--	--

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-25b. PCB 95 (38379-99-6): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	0.708	1.00	1.56	3.39	36.9
	Urban	105	<MDL	0.707	1.01	1.54	3.11	36.9
	Rural	21	<MDL	0.759	0.825	1.59	6.15	23.1
	Low Income	57	<MDL	0.768	1.02	1.73	4.31	36.9
	Mid/High Income	65	<MDL	0.708	0.984	1.42	2.76	10.5
	Home Children	65	<MDL	0.671	1.01	1.56	2.76	23.1
	Day Care Children	61	<MDL	0.735	0.951	1.47	4.31	36.9
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	<MDL	<MDL	<MDL	0.123	0.586	1.82
	Urban	100	<MDL	<MDL	<MDL	0.126	0.586	1.82
	Rural	21	<MDL	<MDL	<MDL	0.088	0.661	1.75
	Low Income	52	<MDL	<MDL	<MDL	0.090	0.588	0.661
	Mid/High Income	65	<MDL	<MDL	<MDL	0.124	0.586	1.82
	Home Children	66	<MDL	<MDL	<MDL	0.108	0.588	1.75
	Day Care Children	55	<MDL	<MDL	<MDL	0.124	0.586	1.82
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	2.17	3.08	4.77	10.4	113
	Urban	105	<MDL	2.17	3.09	4.72	9.52	113
	Rural	21	<MDL	2.33	2.53	4.87	18.8	70.7
	Low Income	57	<MDL	2.35	3.12	5.31	13.2	113
	Mid/High Income	65	<MDL	2.17	3.02	4.36	8.46	32.2
	Home Children	65	<MDL	2.06	3.09	4.77	8.46	70.7
	Day Care Children	61	<MDL	2.25	2.91	4.51	13.2	113
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	<MDL	<MDL	<MDL	0.377	1.80	5.59
	Urban	100	<MDL	<MDL	<MDL	0.386	1.79	5.59
	Rural	21	<MDL	<MDL	<MDL	0.270	2.03	5.36
	Low Income	52	<MDL	<MDL	<MDL	0.277	1.80	2.03
	Mid/High Income	65	<MDL	<MDL	<MDL	0.379	1.80	5.59
	Home Children	66	<MDL	<MDL	<MDL	0.331	1.80	5.36
	Day Care Children	55	<MDL	<MDL	<MDL	0.379	1.80	5.59
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	0.004	0.006	0.009	0.024	0.278
	Urban	105	<MDL	0.004	0.006	0.009	0.024	0.278
	Rural	21	<MDL	0.005	0.006	0.010	0.033	0.105
	Low Income	57	<MDL	0.005	0.007	0.010	0.034	0.278
	Mid/High Income	65	<MDL	0.005	0.007	0.009	0.024	0.065
	Home Children	65	<MDL	0.005	0.007	0.010	0.024	0.105
	Day Care Children	61	<MDL	0.004	0.006	0.009	0.033	0.278
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	<MDL	<MDL	<MDL	0.001	0.004	0.016
	Urban	100	<MDL	<MDL	<MDL	0.001	0.004	0.012
	Rural	21	<MDL	<MDL	<MDL	0.001	0.003	0.016
	Low Income	52	<MDL	<MDL	<MDL	0.001	0.004	0.005
	Mid/High Income	65	<MDL	<MDL	<MDL	0.001	0.005	0.016
	Home Children	66	<MDL	<MDL	<MDL	0.001	0.004	0.016
	Day Care Children	55	<MDL	<MDL	<MDL	0.001	0.004	0.012
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	0.014	0.020	0.029	0.074	0.852
	Urban	105	<MDL	0.014	0.020	0.028	0.073	0.852
	Rural	21	<MDL	0.014	0.020	0.030	0.101	0.322
	Low Income	57	<MDL	0.014	0.021	0.031	0.103	0.852
	Mid/High Income	65	<MDL	0.015	0.020	0.028	0.072	0.200
	Home Children	65	<MDL	0.015	0.021	0.030	0.072	0.322
	Day Care Children	61	<MDL	0.013	0.018	0.028	0.101	0.852
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	<MDL	<MDL	<MDL	0.002	0.012	0.048
	Urban	100	<MDL	<MDL	<MDL	0.003	0.013	0.037
	Rural	21	<MDL	<MDL	<MDL	0.002	0.009	0.048
	Low Income	52	<MDL	<MDL	<MDL	0.002	0.011	0.015
	Mid/High Income	65	<MDL	<MDL	<MDL	0.002	0.014	0.048
	Home Children	66	<MDL	<MDL	<MDL	0.003	0.013	0.048
	Day Care Children	55	<MDL	<MDL	<MDL	0.002	0.012	0.037

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-26a. PCB 101 (37680-73-2): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	57.1	1.47	3.39	0.827	0.834
	Urban	105	54.3	1.31	2.88	0.799	0.785
	Rural	21	71.4	2.28	5.27	0.981	1.05
	Low Income	57	56.1	1.94	4.77	0.901	0.950
	Mid/High Income	65	61.5	1.12	1.44	0.800	0.727
	Home Children	65	61.5	1.39	3.04	0.845	0.818
	Day Care Children	61	52.5	1.55	3.74	0.807	0.857
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	36.4	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	52	36.5	--	--	--	--
	Mid/High Income	65	35.4	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	55	36.4	--	--	--	--
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	57.1	4.50	10.4	2.53	0.834
	Urban	105	54.3	4.00	8.81	2.45	0.785
	Rural	21	71.4	6.99	16.1	3.01	1.05
	Low Income	57	56.1	5.93	14.6	2.76	0.950
	Mid/High Income	65	61.5	3.44	4.41	2.45	0.727
	Home Children	65	61.5	4.27	9.30	2.59	0.818
	Day Care Children	61	52.5	4.75	11.5	2.47	0.857
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	36.4	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	52	36.5	--	--	--	--
	Mid/High Income	65	35.4	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	55	36.4	--	--	--	--
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	57.1	0.010	0.022	0.006	0.849
	Urban	105	54.3	0.009	0.021	0.005	0.823
	Rural	21	71.4	0.012	0.024	0.006	0.979
	Low Income	57	56.1	0.012	0.031	0.006	0.972
	Mid/High Income	65	61.5	0.008	0.010	0.006	0.747
	Home Children	65	61.5	0.009	0.014	0.006	0.826
	Day Care Children	61	52.5	0.010	0.028	0.005	0.870
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	36.4	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	52	36.5	--	--	--	--
	Mid/High Income	65	35.4	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	55	36.4	--	--	--	--
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	57.1	0.030	0.067	0.017	0.849
	Urban	105	54.3	0.028	0.066	0.016	0.823
	Rural	21	71.4	0.038	0.073	0.020	0.979
	Low Income	57	56.1	0.037	0.094	0.017	0.972
	Mid/High Income	65	61.5	0.025	0.029	0.017	0.747
	Home Children	65	61.5	0.028	0.044	0.019	0.826
	Day Care Children	61	52.5	0.031	0.085	0.015	0.870
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	36.4	--	--	--	--
	Urban	100	35.0	--	--	--	--
	Rural	21	42.9	--	--	--	--
	Low Income	52	36.5	--	--	--	--
	Mid/High Income	65	35.4	--	--	--	--
	Home Children	66	36.4	--	--	--	--
	Day Care Children	55	36.4	--	--	--	--

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-26b. PCB 101 (37680-73-2): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	<MDL	<MDL	0.679	1.20	3.27	27.8
	Urban	105	<MDL	<MDL	0.680	1.18	3.23	27.8
	Rural	21	<MDL	<MDL	0.678	1.38	4.96	24.7
	Low Income	57	<MDL	<MDL	0.645	1.45	3.95	27.8
	Mid/High Income	65	<MDL	<MDL	0.698	1.18	3.26	10.5
	Home Children	65	<MDL	<MDL	0.758	1.36	3.26	24.7
	Day Care Children	61	<MDL	<MDL	0.582	1.05	3.95	27.8
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	<MDL	<MDL	<MDL	0.172	0.588	3.65
	Urban	100	<MDL	<MDL	<MDL	0.173	0.588	3.65
	Rural	21	<MDL	<MDL	<MDL	0.134	0.775	1.75
	Low Income	52	<MDL	<MDL	<MDL	0.133	0.588	0.775
	Mid/High Income	65	<MDL	<MDL	<MDL	0.172	0.599	3.65
	Home Children	66	<MDL	<MDL	<MDL	0.169	0.588	1.75
	Day Care Children	55	<MDL	<MDL	<MDL	0.177	0.689	3.65
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	<MDL	<MDL	2.08	3.67	10.0	85.1
	Urban	105	<MDL	<MDL	2.08	3.61	9.90	85.1
	Rural	21	<MDL	<MDL	2.08	4.23	15.2	75.7
	Low Income	57	<MDL	<MDL	1.98	4.45	12.1	85.1
	Mid/High Income	65	<MDL	<MDL	2.14	3.61	9.98	32.2
	Home Children	65	<MDL	<MDL	2.32	4.17	9.98	75.7
	Day Care Children	61	<MDL	<MDL	1.78	3.23	12.1	85.1
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	<MDL	<MDL	<MDL	0.527	1.80	11.2
	Urban	100	<MDL	<MDL	<MDL	0.529	1.80	11.2
	Rural	21	<MDL	<MDL	<MDL	0.410	2.38	5.36
	Low Income	52	<MDL	<MDL	<MDL	0.409	1.80	2.38
	Mid/High Income	65	<MDL	<MDL	<MDL	0.527	1.83	11.2
	Home Children	66	<MDL	<MDL	<MDL	0.518	1.80	5.36
	Day Care Children	55	<MDL	<MDL	<MDL	0.542	2.11	11.2
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	<MDL	<MDL	0.005	0.008	0.026	0.210
	Urban	105	<MDL	<MDL	0.004	0.008	0.025	0.210
	Rural	21	<MDL	<MDL	0.005	0.010	0.027	0.112
	Low Income	57	<MDL	<MDL	0.004	0.008	0.032	0.210
	Mid/High Income	65	<MDL	<MDL	0.005	0.008	0.026	0.065
	Home Children	65	<MDL	<MDL	0.006	0.009	0.025	0.112
	Day Care Children	61	<MDL	<MDL	0.004	0.006	0.027	0.210
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	<MDL	<MDL	<MDL	0.001	0.004	0.024
	Urban	100	<MDL	<MDL	<MDL	0.001	0.004	0.024
	Rural	21	<MDL	<MDL	<MDL	0.001	0.004	0.016
	Low Income	52	<MDL	<MDL	<MDL	0.001	0.004	0.005
	Mid/High Income	65	<MDL	<MDL	<MDL	0.001	0.005	0.024
	Home Children	66	<MDL	<MDL	<MDL	0.001	0.005	0.016
	Day Care Children	55	<MDL	<MDL	<MDL	0.001	0.004	0.024
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	<MDL	<MDL	0.014	0.025	0.080	0.642
	Urban	105	<MDL	<MDL	0.014	0.023	0.076	0.642
	Rural	21	<MDL	<MDL	0.016	0.029	0.082	0.344
	Low Income	57	<MDL	<MDL	0.013	0.024	0.099	0.642
	Mid/High Income	65	<MDL	<MDL	0.016	0.025	0.080	0.200
	Home Children	65	<MDL	<MDL	0.018	0.029	0.076	0.344
	Day Care Children	61	<MDL	<MDL	0.012	0.019	0.082	0.642
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	<MDL	<MDL	<MDL	0.004	0.013	0.074
	Urban	100	<MDL	<MDL	<MDL	0.004	0.013	0.074
	Rural	21	<MDL	<MDL	<MDL	0.002	0.011	0.048
	Low Income	52	<MDL	<MDL	<MDL	0.003	0.012	0.015
	Mid/High Income	65	<MDL	<MDL	<MDL	0.004	0.017	0.074
	Home Children	66	<MDL	<MDL	<MDL	0.004	0.014	0.048
	Day Care Children	55	<MDL	<MDL	<MDL	0.004	0.012	0.074

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table N-27a. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in NC Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	126	100.0	43.5	87.5	23.1	1.00
	Urban	105	100.0	44.8	93.9	23.2	1.00
	Rural	21	100.0	37.1	44.9	22.8	1.01
	Low Income	57	100.0	48.6	102	25.2	1.01
	Mid/High Income	65	100.0	40.1	75.6	21.4	1.02
	Home Children	65	100.0	38.6	76.0	19.2	1.09
	Day Care Children	61	100.0	48.8	98.7	28.2	0.870
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	98.4	1,620	2,180	911	1.20
	Urban	107	98.1	1,680	2,360	890	1.26
	Rural	21	100.0	1,310	742	1,030	0.880
	Low Income	59	98.3	1,110	1,760	598	1.26
	Mid/High Income	65	98.5	2,060	2,470	1,300	1.04
	Home Children	65	98.5	1,880	2,400	1,110	1.14
	Day Care Children	63	98.4	1,340	1,920	746	1.24
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	100.0	7.33	18.3	2.52	1.36
	Urban	100	100.0	5.31	9.73	2.33	1.28
	Rural	21	100.0	16.9	37.7	3.65	1.70
	Low Income	52	100.0	8.32	23.3	2.59	1.35
	Mid/High Income	65	100.0	5.42	8.75	2.33	1.34
	Home Children	66	100.0	6.74	13.9	2.62	1.37
	Day Care Children	55	100.0	8.03	22.6	2.40	1.37
Potential Exposure – Aggregated (ng/day)	Overall	117	100.0	1,660	2,130	1,010	1.06
	Urban	96	100.0	1,720	2,330	993	1.11
	Rural	21	100.0	1,360	757	1,080	0.848
	Low Income	50	100.0	1,200	1,900	681	1.08
	Mid/High Income	63	100.0	2,010	2,300	1,340	0.967
	Home Children	64	100.0	1,950	2,410	1,180	1.08
	Day Care Children	53	100.0	1,310	1,700	831	1.01
Potential Exposure in NC Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	126	100.0	219	441	117	1.00
	Urban	105	100.0	226	473	117	1.00
	Rural	21	100.0	187	226	115	1.01
	Low Income	57	100.0	245	516	127	1.01
	Mid/High Income	65	100.0	202	381	108	1.02
	Home Children	65	100.0	194	383	96.9	1.09
	Day Care Children	61	100.0	246	497	142	0.870
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	98.4	8,150	11,000	4,590	1.20
	Urban	107	98.1	8,460	11,900	4,480	1.26
	Rural	21	100.0	6,610	3,740	5,170	0.880
	Low Income	59	98.3	5,610	8,890	3,010	1.26
	Mid/High Income	65	98.5	10,400	12,500	6,550	1.04
	Home Children	65	98.5	9,480	12,100	5,570	1.14
	Day Care Children	63	98.4	6,780	9,660	3,760	1.24
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	100.0	36.9	92.2	12.7	1.36
	Urban	100	100.0	26.8	49.0	11.7	1.28
	Rural	21	100.0	85.2	190	18.4	1.70
	Low Income	52	100.0	41.9	118	13.0	1.35
	Mid/High Income	65	100.0	27.3	44.1	11.7	1.34
	Home Children	66	100.0	34.0	70.0	13.2	1.37
	Day Care Children	55	100.0	40.5	114	12.1	1.37
Potential Exposure – Aggregated (pmoles/day)	Overall	117	100.0	8,350	10,800	5,080	1.06
	Urban	96	100.0	8,680	11,700	5,000	1.11
	Rural	21	100.0	6,880	3,810	5,440	0.848
	Low Income	50	100.0	6,050	9,550	3,430	1.08
	Mid/High Income	63	100.0	10,100	11,600	6,770	0.967
	Home Children	64	100.0	9,810	12,200	5,960	1.08
	Day Care Children	53	100.0	6,600	8,560	4,190	1.01

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table N-27b. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in NC Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	126	2.13	12.3	21.5	37.9	139	750
	Urban	105	2.13	12.9	20.6	35.5	139	750
	Rural	21	2.94	11.4	29.5	38.5	128	195
	Low Income	57	2.94	13.8	24.0	40.6	182	750
	Mid/High Income	65	2.13	11.8	18.6	33.1	137	569
	Home Children	65	2.13	10.1	17.8	33.1	128	569
	Day Care Children	61	7.00	15.4	23.5	40.6	139	750
Potential Exposure via Dietary Ingestion (ng/day)	Overall	128	<MDL	560	1,200	1,750	4,360	14,300
	Urban	107	<MDL	543	1,080	1,840	4,700	14,300
	Rural	21	56.6	722	1,310	1,560	2,630	2,770
	Low Income	59	<MDL	299	675	1,430	2,770	13,200
	Mid/High Income	65	<MDL	952	1,340	2,010	5,800	14,300
	Home Children	65	<MDL	642	1,310	2,460	4,360	14,300
	Day Care Children	63	<MDL	429	928	1,550	2,550	11,500
Potential Exposure via Indirect Ingestion (ng/day)	Overall	121	0.062	1.25	2.28	5.01	26.2	154
	Urban	100	0.062	1.24	2.25	4.63	24.5	67.1
	Rural	21	0.245	1.26	2.64	8.71	92.0	154
	Low Income	52	0.070	1.36	2.23	5.12	42.5	154
	Mid/High Income	65	0.062	1.09	2.48	4.70	24.6	51.6
	Home Children	66	0.062	1.15	2.65	5.69	26.2	92.0
	Day Care Children	55	0.099	1.26	2.12	4.24	30.1	154
Potential Exposure – Aggregated (ng/day)	Overall	117	55.1	596	1,310	1,770	4,390	14,400
	Urban	96	55.1	583	1,230	1,880	4,770	14,400
	Rural	21	71.4	765	1,370	1,640	2,770	2,780
	Low Income	50	55.1	358	726	1,440	2,780	13,200
	Mid/High Income	63	69.9	1,030	1,380	2,050	4,770	14,400
	Home Children	64	69.9	679	1,360	2,540	4,390	14,400
	Day Care Children	53	55.1	551	1,080	1,600	2,570	11,600
Potential Exposure in NC Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	126	10.7	62.0	108	191	701	3,780
	Urban	105	10.7	65.2	104	179	701	3,780
	Rural	21	14.8	57.4	149	194	643	985
	Low Income	57	14.8	69.7	121	205	918	3,780
	Mid/High Income	65	10.7	59.6	93.5	167	690	2,870
	Home Children	65	10.7	51.1	89.7	167	643	2,870
	Day Care Children	61	35.3	77.8	119	205	701	3,780
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	128	<MDL	2,820	6,050	8,820	22,000	72,100
	Urban	107	<MDL	2,730	5,460	9,260	23,700	72,100
	Rural	21	285	3,640	6,610	7,840	13,300	14,000
	Low Income	59	<MDL	1,510	3,400	7,220	14,000	66,400
	Mid/High Income	65	<MDL	4,800	6,750	10,100	29,200	72,100
	Home Children	65	<MDL	3,230	6,610	12,400	22,000	72,100
	Day Care Children	63	<MDL	2,160	4,680	7,830	12,800	57,800
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	121	0.313	6.28	11.5	25.3	132	775
	Urban	100	0.313	6.27	11.4	23.4	124	338
	Rural	21	1.24	6.35	13.3	43.9	464	775
	Low Income	52	0.355	6.87	11.2	25.8	214	775
	Mid/High Income	65	0.313	5.51	12.5	23.7	124	260
	Home Children	66	0.313	5.80	13.3	28.7	132	464
	Day Care Children	55	0.497	6.35	10.7	21.4	152	775
Potential Exposure – Aggregated (pmoles/day)	Overall	117	277	3,000	6,580	8,930	22,100	72,400
	Urban	96	277	2,940	6,210	9,500	24,000	72,400
	Rural	21	360	3,860	6,920	8,250	13,900	14,000
	Low Income	50	277	1,810	3,660	7,260	14,000	66,400
	Mid/High Income	63	352	5,170	6,970	10,300	24,000	72,400
	Home Children	64	352	3,420	6,840	12,800	22,100	72,400
	Day Care Children	53	277	2,780	5,450	8,060	12,900	58,500

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table N-27c. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimates of Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in NC Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	100.0	0.300	0.665	0.155	1.00
	Urban	105	100.0	0.316	0.721	0.157	1.02
	Rural	21	100.0	0.222	0.238	0.149	0.945
	Low Income	57	100.0	0.336	0.874	0.156	1.04
	Mid/High Income	65	100.0	0.274	0.439	0.153	1.00
	Home Children	65	100.0	0.258	0.432	0.138	1.06
	Day Care Children	61	100.0	0.345	0.848	0.176	0.925
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	98.4	11.2	15.7	6.10	1.24
	Urban	107	98.1	11.8	17.0	5.99	1.31
	Rural	21	100.0	8.38	4.70	6.70	0.808
	Low Income	59	98.3	7.59	14.9	3.71	1.32
	Mid/High Income	65	98.5	14.4	16.1	9.24	1.02
	Home Children	65	98.5	13.9	18.9	7.88	1.15
	Day Care Children	63	98.4	8.41	11.0	4.69	1.29
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	100.0	0.051	0.121	0.017	1.38
	Urban	100	100.0	0.038	0.078	0.016	1.31
	Rural	21	100.0	0.108	0.231	0.024	1.68
	Low Income	52	100.0	0.054	0.144	0.016	1.35
	Mid/High Income	65	100.0	0.039	0.059	0.017	1.37
	Home Children	66	100.0	0.048	0.105	0.019	1.35
	Day Care Children	55	100.0	0.053	0.139	0.015	1.41
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	117	100.0	11.6	15.5	6.81	1.10
	Urban	96	100.0	12.2	16.9	6.76	1.16
	Rural	21	100.0	8.71	4.74	7.05	0.776
	Low Income	50	100.0	8.27	16.1	4.26	1.15
	Mid/High Income	63	100.0	14.0	15.0	9.57	0.945
	Home Children	64	100.0	14.4	19.0	8.45	1.10
	Day Care Children	53	100.0	8.15	8.73	5.25	1.06
Potential Absorbed Dose in NC Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	100.0	1.51	3.35	0.783	1.00
	Urban	105	100.0	1.59	3.63	0.789	1.02
	Rural	21	100.0	1.12	1.20	0.751	0.945
	Low Income	57	100.0	1.69	4.41	0.788	1.04
	Mid/High Income	65	100.0	1.38	2.21	0.769	1.00
	Home Children	65	100.0	1.30	2.18	0.695	1.06
	Day Care Children	61	100.0	1.74	4.27	0.889	0.925
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	98.4	56.5	79.0	30.7	1.24
	Urban	107	98.1	59.3	85.6	30.2	1.31
	Rural	21	100.0	42.2	23.7	33.7	0.808
	Low Income	59	98.3	38.2	75.3	18.7	1.32
	Mid/High Income	65	98.5	72.4	81.1	46.6	1.02
	Home Children	65	98.5	70.2	95.0	39.7	1.15
	Day Care Children	63	98.4	42.4	55.5	23.6	1.29
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	100.0	0.255	0.611	0.086	1.38
	Urban	100	100.0	0.194	0.395	0.080	1.31
	Rural	21	100.0	0.546	1.17	0.120	1.68
	Low Income	52	100.0	0.271	0.725	0.082	1.35
	Mid/High Income	65	100.0	0.195	0.300	0.084	1.37
	Home Children	66	100.0	0.244	0.527	0.094	1.35
	Day Care Children	55	100.0	0.267	0.703	0.077	1.41
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	117	100.0	58.3	77.9	34.3	1.10
	Urban	96	100.0	61.4	85.1	34.1	1.16
	Rural	21	100.0	43.9	23.9	35.5	0.776
	Low Income	50	100.0	41.7	81.0	21.5	1.15
	Mid/High Income	63	100.0	70.7	75.4	48.2	0.945
	Home Children	64	100.0	72.5	95.6	42.6	1.10
	Day Care Children	53	100.0	41.1	44.0	26.5	1.06

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table N-27d. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Potential Exposure and Absorbed Dose in NC Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in NC Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	126	0.016	0.086	0.137	0.242	0.978	6.55
	Urban	105	0.017	0.088	0.130	0.235	0.978	6.55
	Rural	21	0.016	0.084	0.192	0.242	0.581	1.10
	Low Income	57	0.016	0.088	0.145	0.235	1.01	6.55
	Mid/High Income	65	0.017	0.080	0.124	0.250	0.877	3.06
	Home Children	65	0.016	0.071	0.130	0.235	0.978	3.06
	Day Care Children	61	0.046	0.096	0.157	0.261	0.945	6.55
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	128	<MDL	3.58	7.92	12.0	32.9	113
	Urban	107	<MDL	3.54	7.58	13.0	36.9	113
	Rural	21	0.562	3.70	8.31	11.0	14.0	19.6
	Low Income	59	<MDL	1.99	3.97	8.42	19.6	113
	Mid/High Income	65	<MDL	5.98	9.85	15.7	38.3	99.8
	Home Children	65	<MDL	4.45	8.84	15.7	36.9	113
	Day Care Children	63	<MDL	3.04	5.46	9.82	18.0	65.5
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	121	0.000	0.008	0.016	0.034	0.214	0.823
	Urban	100	0.000	0.008	0.015	0.033	0.170	0.621
	Rural	21	0.002	0.008	0.021	0.051	0.734	0.823
	Low Income	52	0.001	0.008	0.014	0.029	0.268	0.823
	Mid/High Income	65	0.000	0.008	0.016	0.036	0.146	0.304
	Home Children	66	0.000	0.008	0.017	0.041	0.268	0.734
	Day Care Children	55	0.001	0.007	0.013	0.026	0.214	0.823
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	117	0.234	3.95	8.37	12.6	33.1	113
	Urban	96	0.234	4.07	8.32	13.1	37.2	113
	Rural	21	0.709	3.89	9.40	11.3	14.0	19.6
	Low Income	50	0.234	2.50	4.49	9.24	19.6	113
	Mid/High Income	63	0.591	6.98	0.00	15.9	37.2	100
	Home Children	64	0.591	5.03	9.50	16.4	37.2	113
	Day Care Children	53	0.234	3.41	7.43	9.53	18.2	56.3
Potential Absorbed Dose in NC Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	126	0.082	0.432	0.690	1.22	4.93	33.0
	Urban	105	0.085	0.443	0.656	1.19	4.93	33.0
	Rural	21	0.082	0.422	0.966	1.22	2.93	5.56
	Low Income	57	0.082	0.443	0.733	1.19	5.10	33.0
	Mid/High Income	65	0.085	0.404	0.624	1.26	4.42	15.4
	Home Children	65	0.082	0.357	0.656	1.19	4.93	15.4
	Day Care Children	61	0.232	0.482	0.791	1.32	4.76	33.0
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	128	<MDL	18.0	39.9	60.4	166	571
	Urban	107	<MDL	17.8	38.2	65.3	186	571
	Rural	21	2.83	18.6	41.9	55.7	70.3	98.7
	Low Income	59	<MDL	10.1	20.0	42.4	98.7	571
	Mid/High Income	65	<MDL	30.1	49.6	79.2	193	503
	Home Children	65	<MDL	22.4	44.5	79.2	186	571
	Day Care Children	63	<MDL	15.3	27.5	49.5	90.8	330
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	121	0.002	0.040	0.079	0.169	1.08	4.15
	Urban	100	0.002	0.040	0.074	0.168	0.854	3.13
	Rural	21	0.009	0.040	0.105	0.255	3.70	4.15
	Low Income	52	0.003	0.040	0.070	0.144	1.35	4.15
	Mid/High Income	65	0.002	0.040	0.080	0.180	0.735	1.53
	Home Children	66	0.002	0.041	0.085	0.207	1.35	3.70
	Day Care Children	55	0.003	0.037	0.066	0.133	1.08	4.15
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	117	1.18	19.9	42.2	63.4	167	572
	Urban	96	1.18	20.5	41.9	66.1	187	572
	Rural	21	3.57	19.6	47.4	57.0	70.5	98.9
	Low Income	50	1.18	12.6	22.6	46.6	98.9	572
	Mid/High Income	63	2.98	35.2	50.4	80.3	187	505
	Home Children	64	2.98	25.3	47.9	82.5	187	572
	Day Care Children	53	1.18	17.2	37.5	48.0	91.5	284

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Appendix O

Descriptive Statistics of Potential Exposure Level and Potential Absorbed Dose Estimates for Target Pollutants in Participating OH Adults

This appendix contains tables of descriptive statistics of potential exposure and potential absorbed dose estimates (expressed in both ng and pmole units) in OH adults for the following pollutants and metabolites:

Pollutant/Metabolite	Table Numbers for Potential Exposure Summaries	Table Numbers for Potential Absorbed Dose Summaries
Benz[<i>a</i>]anthracene	Tables O-1a, O-1b	Tables O-1a, O-1b
Benzo[<i>b</i>]fluoranthene	Tables O-2a, O-2b	Tables O-2a, O-2b
Benzo[<i>k</i>]fluoranthene	Tables O-3a, O-3b	Tables O-3a, O-3b
Benzo[<i>ghi</i>]perylene	Tables O-4a, O-4b	Tables O-4a, O-4b
Benzo[<i>a</i>]pyrene	Tables O-5a, O-5b	Tables O-5a, O-5b
Benzo[<i>e</i>]pyrene	Tables O-6a, O-6b	Tables O-6a, O-6b
Benzylbutylphthalate	Tables O-7a, O-7b	Tables O-7a, O-7b
Bisphenol-A	Tables O-8a, O-8b	Tables O-8a, O-8b
<i>alpha</i> -Chlordane	Tables O-9a, O-9b	Tables O-9a, O-9b
<i>gamma</i> -Chlordane	Tables O-10a, O-10b	Tables O-10a, O-10b
Chlorpyrifos	Tables O-11a, O-11b	Tables O-11a, O-11b
Chrysene	Tables O-12a, O-12b	Tables O-12a, O-12b
Cyfluthrin	Tables O-13a, O-13b	Tables O-13a, O-13b
Diazinon	Tables O-14a, O-14b	Tables O-14a, O-14b
Dibenzo[<i>a,h</i>]anthracene	Tables O-15a, O-15b	Tables O-15a, O-15b
Di- <i>n</i> -butylphthalate	Tables O-16a, O-16b	Tables O-16a, O-16b
<i>p,p'</i> -DDE	Tables O-17a, O-17b	Tables O-17a, O-17b
2,4-D (2,4-dichlorophenoxyacetic acid)	Tables O-18a, O-18b	Tables O-18c, O-18d
Indeno[1,2,3- <i>cd</i>]pyrene	Tables O-19a, O-19b	Tables O-19a, O-19b
Pentachlorophenol	Tables O-20a, O-20b	Tables O-20c, O-20d
<i>cis</i> -Permethrin	Tables O-21a, O-21b	Tables O-21a, O-21b
<i>trans</i> -Permethrin	Tables O-22a, O-22b	Tables O-22a, O-22b
PCB 52	Tables O-23a, O-23b	Tables O-23a, O-23b
PCB 95	Tables O-24a, O-24b	Tables O-24a, O-24b
PCB 101	Tables O-25a, O-25b	Tables O-25a, O-25b
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)	Tables O-26a, O-26b	Tables O-26c, O-26d

Descriptive statistics are presented separately for the following groups of OH adult participants:

- All participants
- Participants from urban areas
- Participants from rural areas
- Participants from low-income areas
- Participants from middle/upper-income areas
- Caregivers of stay-at-home children
- Caregivers of day care children

Table O-1a. Benz[a]anthracene (56-55-3): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	109	39.4	--	--	--	--
	Urban	93	45.2	--	--	--	--
	Rural	16	6.3	--	--	--	--
	Low Income	33	51.5	1.88	2.62	1.20	0.815
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	60	36.7	--	--	--	--
	Day Care Children	49	42.9	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	100.0	39.1	91.9	13.9	1.28
	Urban	102	100.0	43.1	97.6	16.5	1.21
	Rural	17	100.0	15.0	38.1	4.95	1.23
	Low Income	38	100.0	25.7	41.5	12.9	1.13
	Mid/High Income	68	100.0	51.3	116	15.1	1.43
	Home Children	62	100.0	32.2	64.8	11.8	1.31
	Day Care Children	57	100.0	46.6	114	16.6	1.24
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	109	39.4	--	--	--	--
	Urban	93	45.2	--	--	--	--
	Rural	16	6.3	--	--	--	--
	Low Income	33	51.5	8.24	11.5	5.26	0.815
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	60	36.7	--	--	--	--
	Day Care Children	49	42.9	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	100.0	171	402	60.9	1.28
	Urban	102	100.0	189	427	72.3	1.21
	Rural	17	100.0	65.7	167	21.7	1.23
	Low Income	38	100.0	113	182	56.7	1.13
	Mid/High Income	68	100.0	225	510	66.1	1.43
	Home Children	62	100.0	141	284	51.7	1.31
	Day Care Children	57	100.0	204	501	72.7	1.24
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	109	39.4	--	--	--	--
	Urban	93	45.2	--	--	--	--
	Rural	16	6.3	--	--	--	--
	Low Income	33	51.5	0.014	0.020	0.008	0.903
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	60	36.7	--	--	--	--
	Day Care Children	49	42.9	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	100.0	0.274	0.667	0.095	1.30
	Urban	102	100.0	0.304	0.711	0.113	1.24
	Rural	17	100.0	0.094	0.232	0.033	1.20
	Low Income	38	100.0	0.169	0.273	0.086	1.12
	Mid/High Income	68	100.0	0.367	0.849	0.105	1.46
	Home Children	62	100.0	0.247	0.539	0.083	1.35
	Day Care Children	57	100.0	0.304	0.787	0.109	1.24
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	109	39.4	--	--	--	--
	Urban	93	45.2	--	--	--	--
	Rural	16	6.3	--	--	--	--
	Low Income	33	51.5	0.060	0.089	0.035	0.903
	Mid/High Income	65	36.9	--	--	--	--
	Home Children	60	36.7	--	--	--	--
	Day Care Children	49	42.9	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	100.0	1.20	2.92	0.415	1.30
	Urban	102	100.0	1.33	3.11	0.494	1.24
	Rural	17	100.0	0.410	1.02	0.145	1.20
	Low Income	38	100.0	0.741	1.19	0.376	1.12
	Mid/High Income	68	100.0	1.61	3.72	0.459	1.46
	Home Children	62	100.0	1.08	2.36	0.363	1.35
	Day Care Children	57	100.0	1.33	3.45	0.479	1.24

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-1b. Benz[a]anthracene (56-55-3): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	109	<MDL	<MDL	<MDL	1.08	4.29	13.8
	Urban	93	<MDL	<MDL	<MDL	1.26	4.72	13.8
	Rural	16	<MDL	<MDL	<MDL	<MDL	0.967	0.967
	Low Income	33	<MDL	<MDL	0.719	1.67	6.12	13.8
	Mid/High Income	65	<MDL	<MDL	<MDL	1.07	2.45	4.72
	Home Children	60	<MDL	<MDL	<MDL	0.980	2.84	6.12
	Day Care Children	49	<MDL	<MDL	<MDL	1.34	4.89	13.8
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	1.13	5.22	12.9	26.3	217	689
	Urban	102	1.13	6.97	14.0	29.1	217	689
	Rural	17	1.15	2.01	4.09	6.19	161	161
	Low Income	38	1.37	5.22	10.8	31.1	89.9	235
	Mid/High Income	68	1.13	5.07	12.9	26.5	322	689
	Home Children	62	1.13	5.03	11.4	20.8	136	324
	Day Care Children	57	2.19	6.19	17.7	29.9	235	689
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	109	<MDL	<MDL	<MDL	4.72	18.8	60.6
	Urban	93	<MDL	<MDL	<MDL	5.53	20.7	60.6
	Rural	16	<MDL	<MDL	<MDL	<MDL	4.24	4.24
	Low Income	33	<MDL	<MDL	3.15	7.34	26.8	60.6
	Mid/High Income	65	<MDL	<MDL	<MDL	4.70	10.7	20.7
	Home Children	60	<MDL	<MDL	<MDL	4.29	12.4	26.8
	Day Care Children	49	<MDL	<MDL	<MDL	5.86	21.4	60.6
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	4.96	22.9	56.3	115	951	3,020
	Urban	102	4.96	30.5	61.5	128	951	3,020
	Rural	17	5.04	8.82	17.9	27.1	705	705
	Low Income	38	6.00	22.9	47.1	136	394	1,030
	Mid/High Income	68	4.96	22.2	56.5	116	1,410	3,020
	Home Children	62	4.96	22.0	49.9	91.3	594	1,420
	Day Care Children	57	9.59	27.1	77.4	131	1,030	3,020
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	109	<MDL	<MDL	<MDL	0.008	0.030	0.106
	Urban	93	<MDL	<MDL	<MDL	0.009	0.032	0.106
	Rural	16	<MDL	<MDL	<MDL	<MDL	0.006	0.006
	Low Income	33	<MDL	<MDL	0.006	0.010	0.048	0.106
	Mid/High Income	65	<MDL	<MDL	<MDL	0.008	0.017	0.032
	Home Children	60	<MDL	<MDL	<MDL	0.007	0.019	0.048
	Day Care Children	49	<MDL	<MDL	<MDL	0.011	0.040	0.106
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	0.006	0.033	0.092	0.189	1.52	5.42
	Urban	102	0.006	0.050	0.097	0.199	1.52	5.42
	Rural	17	0.009	0.015	0.027	0.055	0.984	0.984
	Low Income	38	0.010	0.045	0.079	0.177	0.651	1.52
	Mid/High Income	68	0.006	0.032	0.092	0.206	2.33	5.42
	Home Children	62	0.006	0.032	0.086	0.147	1.03	2.90
	Day Care Children	57	0.012	0.050	0.095	0.202	1.52	5.42
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	109	<MDL	<MDL	<MDL	0.035	0.131	0.463
	Urban	93	<MDL	<MDL	<MDL	0.039	0.140	0.463
	Rural	16	<MDL	<MDL	<MDL	<MDL	0.028	0.028
	Low Income	33	<MDL	<MDL	0.028	0.046	0.211	0.463
	Mid/High Income	65	<MDL	<MDL	<MDL	0.033	0.074	0.140
	Home Children	60	<MDL	<MDL	<MDL	0.031	0.085	0.211
	Day Care Children	49	<MDL	<MDL	<MDL	0.048	0.175	0.463
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	0.028	0.143	0.401	0.829	6.66	23.7
	Urban	102	0.028	0.220	0.425	0.871	6.66	23.7
	Rural	17	0.038	0.064	0.118	0.239	4.31	4.31
	Low Income	38	0.042	0.196	0.346	0.777	2.85	6.66
	Mid/High Income	68	0.028	0.142	0.402	0.903	10.2	23.7
	Home Children	62	0.028	0.140	0.375	0.645	4.49	12.7
	Day Care Children	57	0.053	0.219	0.416	0.887	6.66	23.7

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-2a. Benzo[b]fluoranthene (205-99-2): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	45.6	--	--	--	--
	Urban	108	48.1	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	56.4	2.45	4.91	1.25	0.920
	Mid/High Income	73	42.5	--	--	--	--
	Home Children	69	37.7	--	--	--	--
	Day Care Children	56	55.4	1.84	3.83	1.12	0.753
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	100.0	91.4	216	34.9	1.23
	Urban	102	100.0	101	230	41.0	1.17
	Rural	17	100.0	34.2	75.3	13.5	1.18
	Low Income	38	100.0	62.9	108	31.2	1.11
	Mid/High Income	68	100.0	117	271	38.3	1.34
	Home Children	62	100.0	72.7	136	30.9	1.22
	Day Care Children	57	100.0	112	278	39.9	1.23
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	45.6	--	--	--	--
	Urban	108	48.1	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	56.4	9.71	19.4	4.97	0.920
	Mid/High Income	73	42.5	--	--	--	--
	Home Children	69	37.7	--	--	--	--
	Day Care Children	56	55.4	7.28	15.2	4.43	0.753
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	100.0	362	855	138	1.23
	Urban	102	100.0	400	911	162	1.17
	Rural	17	100.0	136	299	53.4	1.18
	Low Income	38	100.0	249	429	124	1.11
	Mid/High Income	68	100.0	465	1,080	152	1.34
	Home Children	62	100.0	288	538	123	1.22
	Day Care Children	57	100.0	443	1,100	158	1.23
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	45.6	--	--	--	--
	Urban	108	48.1	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	56.4	0.018	0.038	0.008	1.01
	Mid/High Income	73	42.5	--	--	--	--
	Home Children	69	37.7	--	--	--	--
	Day Care Children	56	55.4	0.013	0.030	0.007	0.839
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	100.0	0.641	1.57	0.238	1.25
	Urban	102	100.0	0.712	1.67	0.280	1.19
	Rural	17	100.0	0.215	0.459	0.090	1.16
	Low Income	38	100.0	0.418	0.717	0.207	1.11
	Mid/High Income	68	100.0	0.837	1.99	0.266	1.37
	Home Children	62	100.0	0.553	1.12	0.217	1.27
	Day Care Children	57	100.0	0.737	1.95	0.263	1.23
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	45.6	--	--	--	--
	Urban	108	48.1	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	56.4	0.073	0.152	0.033	1.01
	Mid/High Income	73	42.5	--	--	--	--
	Home Children	69	37.7	--	--	--	--
	Day Care Children	56	55.4	0.053	0.119	0.029	0.839
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	100.0	2.54	6.21	0.943	1.25
	Urban	102	100.0	2.82	6.64	1.11	1.19
	Rural	17	100.0	0.853	1.82	0.356	1.16
	Low Income	38	100.0	1.66	2.84	0.819	1.11
	Mid/High Income	68	100.0	3.32	7.87	1.05	1.37
	Home Children	62	100.0	2.19	4.44	0.861	1.27
	Day Care Children	57	100.0	2.92	7.72	1.04	1.23

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-2b. Benzo[b]fluoranthene (205-99-2): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	1.14	3.63	28.2
	Urban	108	<MDL	<MDL	<MDL	1.25	5.13	28.2
	Rural	17	<MDL	<MDL	<MDL	0.967	3.46	3.46
	Low Income	39	<MDL	<MDL	0.719	1.87	13.7	28.2
	Mid/High Income	73	<MDL	<MDL	<MDL	1.12	3.45	6.02
	Home Children	69	<MDL	<MDL	<MDL	0.977	3.46	13.7
	Day Care Children	56	<MDL	<MDL	0.734	1.40	6.55	28.2
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	3.05	15.4	34.4	57.2	555	1,730
	Urban	102	3.49	18.6	39.6	70.9	555	1,730
	Rural	17	3.05	6.15	9.64	19.1	320	320
	Low Income	38	4.29	15.9	26.3	57.2	252	626
	Mid/High Income	68	3.05	16.0	39.2	60.5	575	1,730
	Home Children	62	3.05	14.0	31.9	50.3	283	724
	Day Care Children	57	4.80	16.1	41.4	60.8	626	1,730
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	4.50	14.4	112
	Urban	108	<MDL	<MDL	<MDL	4.96	20.4	112
	Rural	17	<MDL	<MDL	<MDL	3.83	13.7	13.7
	Low Income	39	<MDL	<MDL	2.85	7.42	54.4	112
	Mid/High Income	73	<MDL	<MDL	<MDL	4.45	13.7	23.9
	Home Children	69	<MDL	<MDL	<MDL	3.87	13.7	54.4
	Day Care Children	56	<MDL	<MDL	2.91	5.56	26.0	112
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	12.1	61.2	136	227	2,200	6,840
	Urban	102	13.8	73.6	157	281	2,200	6,840
	Rural	17	12.1	24.4	38.2	75.7	1,270	1,270
	Low Income	38	17.0	63.1	104	227	998	2,480
	Mid/High Income	68	12.1	63.5	156	240	2,280	6,840
	Home Children	62	12.1	55.6	126	199	1,120	2,870
	Day Care Children	57	19.0	63.7	164	241	2,480	6,840
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.008	0.026	0.216
	Urban	108	<MDL	<MDL	<MDL	0.008	0.035	0.216
	Rural	17	<MDL	<MDL	<MDL	0.006	0.026	0.026
	Low Income	39	<MDL	<MDL	0.006	0.013	0.108	0.216
	Mid/High Income	73	<MDL	<MDL	<MDL	0.008	0.023	0.041
	Home Children	69	<MDL	<MDL	<MDL	0.008	0.026	0.108
	Day Care Children	56	<MDL	<MDL	0.006	0.008	0.057	0.216
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	0.020	0.093	0.232	0.433	4.05	13.6
	Urban	102	0.020	0.132	0.261	0.492	4.05	13.6
	Rural	17	0.021	0.045	0.072	0.168	1.96	1.96
	Low Income	38	0.021	0.103	0.154	0.427	1.82	4.05
	Mid/High Income	68	0.020	0.099	0.245	0.509	5.15	13.6
	Home Children	62	0.020	0.089	0.230	0.373	2.00	5.50
	Day Care Children	57	0.026	0.107	0.252	0.485	4.05	13.6
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.032	0.102	0.855
	Urban	108	<MDL	<MDL	<MDL	0.032	0.138	0.855
	Rural	17	<MDL	<MDL	<MDL	0.025	0.102	0.102
	Low Income	39	<MDL	<MDL	0.025	0.051	0.428	0.855
	Mid/High Income	73	<MDL	<MDL	<MDL	0.032	0.090	0.162
	Home Children	69	<MDL	<MDL	<MDL	0.032	0.102	0.428
	Day Care Children	56	<MDL	<MDL	0.024	0.032	0.225	0.855
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	0.078	0.367	0.921	1.72	16.1	53.8
	Urban	102	0.078	0.521	1.04	1.95	16.1	53.8
	Rural	17	0.084	0.179	0.287	0.667	7.76	7.76
	Low Income	38	0.084	0.408	0.609	1.69	7.23	16.1
	Mid/High Income	68	0.078	0.394	0.970	2.02	20.4	53.8
	Home Children	62	0.078	0.351	0.910	1.48	7.91	21.8
	Day Care Children	57	0.105	0.424	0.999	1.92	16.1	53.8

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-3a. Benzo[k]fluoranthene (207-08-9): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	35.2	--	--	--	--
	Urban	108	36.1	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	32.9	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	100.0	32.5	74.8	12.4	1.24
	Urban	102	100.0	35.7	79.6	14.5	1.17
	Rural	17	100.0	12.8	27.6	4.89	1.24
	Low Income	38	100.0	21.9	37.3	11.1	1.10
	Mid/High Income	68	100.0	41.8	94.1	13.5	1.37
	Home Children	62	100.0	26.8	51.9	11.1	1.24
	Day Care Children	57	100.0	38.6	93.6	14.0	1.24
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	35.2	--	--	--	--
	Urban	108	36.1	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	32.9	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	100.0	129	296	49.2	1.24
	Urban	102	100.0	142	315	57.5	1.17
	Rural	17	100.0	50.7	109	19.4	1.24
	Low Income	38	100.0	86.6	148	44.0	1.10
	Mid/High Income	68	100.0	166	373	53.6	1.37
	Home Children	62	100.0	106	206	44.2	1.24
	Day Care Children	57	100.0	153	371	55.3	1.24
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	35.2	--	--	--	--
	Urban	108	36.1	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	32.9	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	100.0	0.229	0.547	0.085	1.26
	Urban	102	100.0	0.254	0.584	0.099	1.21
	Rural	17	100.0	0.080	0.168	0.033	1.21
	Low Income	38	100.0	0.145	0.246	0.074	1.10
	Mid/High Income	68	100.0	0.301	0.693	0.094	1.40
	Home Children	62	100.0	0.205	0.434	0.078	1.28
	Day Care Children	57	100.0	0.254	0.651	0.092	1.25
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	35.2	--	--	--	--
	Urban	108	36.1	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	32.9	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	100.0	0.907	2.17	0.335	1.26
	Urban	102	100.0	1.01	2.31	0.393	1.21
	Rural	17	100.0	0.318	0.666	0.129	1.21
	Low Income	38	100.0	0.575	0.977	0.292	1.10
	Mid/High Income	68	100.0	1.19	2.75	0.372	1.40
	Home Children	62	100.0	0.814	1.72	0.310	1.28
	Day Care Children	57	100.0	1.01	2.58	0.364	1.25

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-3b. Benzo[k]fluoranthene (207-08-9): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	0.907	1.85	5.30
	Urban	108	<MDL	<MDL	<MDL	0.926	1.85	5.30
	Rural	17	<MDL	<MDL	<MDL	0.819	2.43	2.43
	Low Income	39	<MDL	<MDL	<MDL	0.961	2.85	5.30
	Mid/High Income	73	<MDL	<MDL	<MDL	0.852	1.85	2.75
	Home Children	69	<MDL	<MDL	<MDL	0.819	1.90	2.85
	Day Care Children	56	<MDL	<MDL	<MDL	0.965	1.60	5.30
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	1.000	5.59	12.6	21.6	204	571
	Urban	102	1.13	6.72	14.2	25.7	204	571
	Rural	17	1.000	2.27	4.21	6.47	117	117
	Low Income	38	1.25	6.52	9.58	20.4	83.3	217
	Mid/High Income	68	1.000	5.12	15.4	22.6	250	571
	Home Children	62	1.000	5.96	9.66	17.0	103	263
	Day Care Children	57	1.74	5.59	14.4	21.7	217	571
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	3.60	7.33	21.0
	Urban	108	<MDL	<MDL	<MDL	3.67	7.33	21.0
	Rural	17	<MDL	<MDL	<MDL	3.25	9.62	9.62
	Low Income	39	<MDL	<MDL	<MDL	3.81	11.3	21.0
	Mid/High Income	73	<MDL	<MDL	<MDL	3.38	7.33	10.9
	Home Children	69	<MDL	<MDL	<MDL	3.25	7.54	11.3
	Day Care Children	56	<MDL	<MDL	<MDL	3.82	6.36	21.0
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	3.96	22.2	50.0	85.8	809	2,260
	Urban	102	4.46	26.7	56.5	102	809	2,260
	Rural	17	3.96	9.00	16.7	25.6	464	464
	Low Income	38	4.97	25.8	38.0	80.8	330	861
	Mid/High Income	68	3.96	20.3	61.0	89.6	990	2,260
	Home Children	62	3.96	23.6	38.3	67.2	406	1,040
	Day Care Children	57	6.91	22.2	57.2	86.0	861	2,260
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.006	0.015	0.041
	Urban	108	<MDL	<MDL	<MDL	0.007	0.015	0.041
	Rural	17	<MDL	<MDL	<MDL	0.006	0.016	0.016
	Low Income	39	<MDL	<MDL	<MDL	0.007	0.022	0.041
	Mid/High Income	73	<MDL	<MDL	<MDL	0.006	0.013	0.019
	Home Children	69	<MDL	<MDL	<MDL	0.006	0.016	0.022
	Day Care Children	56	<MDL	<MDL	<MDL	0.007	0.015	0.041
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	0.006	0.035	0.075	0.160	1.41	4.50
	Urban	102	0.006	0.051	0.089	0.173	1.41	4.50
	Rural	17	0.006	0.015	0.030	0.054	0.716	0.716
	Low Income	38	0.006	0.040	0.059	0.136	0.603	1.41
	Mid/High Income	68	0.006	0.033	0.079	0.185	1.82	4.50
	Home Children	62	0.006	0.035	0.071	0.140	0.724	2.24
	Day Care Children	57	0.010	0.038	0.087	0.173	1.41	4.50
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.026	0.059	0.161
	Urban	108	<MDL	<MDL	<MDL	0.026	0.059	0.161
	Rural	17	<MDL	<MDL	<MDL	0.024	0.062	0.062
	Low Income	39	<MDL	<MDL	<MDL	0.029	0.089	0.161
	Mid/High Income	73	<MDL	<MDL	<MDL	0.026	0.051	0.074
	Home Children	69	<MDL	<MDL	<MDL	0.026	0.062	0.089
	Day Care Children	56	<MDL	<MDL	<MDL	0.026	0.059	0.161
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	0.025	0.139	0.299	0.635	5.58	17.8
	Urban	102	0.025	0.200	0.351	0.686	5.58	17.8
	Rural	17	0.025	0.061	0.120	0.216	2.84	2.84
	Low Income	38	0.025	0.160	0.234	0.538	2.39	5.58
	Mid/High Income	68	0.025	0.129	0.315	0.733	7.22	17.8
	Home Children	62	0.025	0.137	0.283	0.556	2.87	8.87
	Day Care Children	57	0.041	0.152	0.346	0.686	5.58	17.8

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-4a. Benzo[ghi]perylene (191-24-2): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	35.2	--	--	--	--
	Urban	108	39.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	53.8	1.51	1.55	1.15	0.647
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	100.0	46.7	105	18.5	1.21
	Urban	102	100.0	51.2	112	21.4	1.17
	Rural	17	100.0	19.7	43.1	7.83	1.18
	Low Income	38	100.0	31.7	50.1	16.1	1.11
	Mid/High Income	68	100.0	59.9	133	20.5	1.33
	Home Children	62	100.0	38.3	73.4	16.5	1.20
	Day Care Children	57	100.0	55.8	131	21.0	1.23
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	35.2	--	--	--	--
	Urban	108	39.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	53.8	5.46	5.62	4.15	0.647
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	100.0	169	380	67.0	1.21
	Urban	102	100.0	185	404	77.4	1.17
	Rural	17	100.0	71.2	156	28.3	1.18
	Low Income	38	100.0	115	181	58.4	1.11
	Mid/High Income	68	100.0	217	480	74.1	1.33
	Home Children	62	100.0	139	266	59.7	1.20
	Day Care Children	57	100.0	202	475	76.0	1.23
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	35.2	--	--	--	--
	Urban	108	39.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	53.8	0.011	0.013	0.008	0.741
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	100.0	0.330	0.781	0.126	1.24
	Urban	102	100.0	0.364	0.833	0.146	1.20
	Rural	17	100.0	0.124	0.262	0.052	1.15
	Low Income	38	100.0	0.212	0.335	0.107	1.11
	Mid/High Income	68	100.0	0.432	0.993	0.142	1.36
	Home Children	62	100.0	0.293	0.617	0.116	1.24
	Day Care Children	57	100.0	0.370	0.932	0.138	1.24
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	35.2	--	--	--	--
	Urban	108	39.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	53.8	0.040	0.046	0.028	0.741
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	100.0	1.19	2.83	0.457	1.24
	Urban	102	100.0	1.32	3.01	0.529	1.20
	Rural	17	100.0	0.448	0.950	0.189	1.15
	Low Income	38	100.0	0.767	1.21	0.387	1.11
	Mid/High Income	68	100.0	1.56	3.59	0.514	1.36
	Home Children	62	100.0	1.06	2.23	0.420	1.24
	Day Care Children	57	100.0	1.34	3.37	0.500	1.24

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-4b. Benzo[gh]perylene (191-24-2): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	1.30	2.42	7.44
	Urban	108	<MDL	<MDL	<MDL	1.30	2.51	7.44
	Rural	17	<MDL	<MDL	<MDL	<MDL	1.87	1.87
	Low Income	39	<MDL	<MDL	0.874	1.47	6.88	7.44
	Mid/High Income	73	<MDL	<MDL	<MDL	1.18	1.90	2.42
	Home Children	69	<MDL	<MDL	<MDL	1.19	1.91	6.88
	Day Care Children	56	<MDL	<MDL	<MDL	1.37	3.64	7.44
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	1.72	7.67	18.2	32.5	245	834
	Urban	102	1.72	9.57	19.9	36.4	245	834
	Rural	17	2.17	3.54	6.36	11.2	183	183
	Low Income	38	2.19	7.13	13.8	34.2	136	277
	Mid/High Income	68	1.72	8.60	20.3	35.4	358	834
	Home Children	62	1.87	7.40	16.0	25.5	132	398
	Day Care Children	57	1.72	8.21	20.9	36.4	277	834
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	4.70	8.77	26.9
	Urban	108	<MDL	<MDL	<MDL	4.69	9.09	26.9
	Rural	17	<MDL	<MDL	<MDL	<MDL	6.77	6.77
	Low Income	39	<MDL	<MDL	3.16	5.31	24.9	26.9
	Mid/High Income	73	<MDL	<MDL	<MDL	4.27	6.88	8.77
	Home Children	69	<MDL	<MDL	<MDL	4.30	6.91	24.9
	Day Care Children	56	<MDL	<MDL	<MDL	4.95	13.2	26.9
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	6.23	27.7	65.8	117	886	3,020
	Urban	102	6.23	34.6	72.1	132	886	3,020
	Rural	17	7.84	12.8	23.0	40.4	663	663
	Low Income	38	7.94	25.8	49.8	124	494	1,000
	Mid/High Income	68	6.23	31.1	73.4	128	1,300	3,020
	Home Children	62	6.77	26.8	57.7	92.1	478	1,440
	Day Care Children	57	6.23	29.7	75.5	132	1,000	3,020
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.008	0.016	0.057
	Urban	108	<MDL	<MDL	<MDL	0.008	0.017	0.057
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.012	0.012
	Low Income	39	<MDL	<MDL	0.007	0.009	0.054	0.057
	Mid/High Income	73	<MDL	<MDL	<MDL	0.008	0.012	0.019
	Home Children	69	<MDL	<MDL	<MDL	0.008	0.013	0.054
	Day Care Children	56	<MDL	<MDL	<MDL	0.009	0.034	0.057
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	0.009	0.054	0.112	0.229	1.79	6.56
	Urban	102	0.009	0.061	0.144	0.278	1.79	6.56
	Rural	17	0.014	0.024	0.044	0.098	1.12	1.12
	Low Income	38	0.014	0.049	0.082	0.203	0.988	1.79
	Mid/High Income	68	0.009	0.055	0.118	0.284	2.36	6.56
	Home Children	62	0.011	0.045	0.103	0.198	0.968	3.56
	Day Care Children	57	0.009	0.056	0.128	0.278	1.79	6.56
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.030	0.060	0.206
	Urban	108	<MDL	<MDL	<MDL	0.030	0.060	0.206
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.044	0.044
	Low Income	39	<MDL	<MDL	0.026	0.034	0.196	0.206
	Mid/High Income	73	<MDL	<MDL	<MDL	0.029	0.045	0.069
	Home Children	69	<MDL	<MDL	<MDL	0.029	0.047	0.196
	Day Care Children	56	<MDL	<MDL	<MDL	0.032	0.123	0.206
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	0.034	0.195	0.405	0.827	6.49	23.7
	Urban	102	0.034	0.221	0.520	1.00	6.49	23.7
	Rural	17	0.049	0.088	0.160	0.356	4.05	4.05
	Low Income	38	0.049	0.178	0.296	0.733	3.58	6.49
	Mid/High Income	68	0.034	0.199	0.425	1.03	8.54	23.7
	Home Children	62	0.038	0.164	0.372	0.717	3.50	12.9
	Day Care Children	57	0.034	0.204	0.462	1.00	6.49	23.7

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-5a. Benzo[a]pyrene (50-32-8): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	26.4	--	--	--	--
	Urban	108	29.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	20.5	--	--	--	--
	Home Children	69	23.2	--	--	--	--
	Day Care Children	56	30.4	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	100.0	53.2	128	19.0	1.27
	Urban	102	100.0	58.5	137	22.2	1.22
	Rural	17	100.0	21.7	51.2	7.65	1.24
	Low Income	38	100.0	34.4	56.9	16.6	1.16
	Mid/High Income	68	100.0	69.9	163	21.1	1.40
	Home Children	62	100.0	43.2	86.6	16.7	1.27
	Day Care Children	57	100.0	64.1	162	22.0	1.26
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	26.4	--	--	--	--
	Urban	108	29.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	20.5	--	--	--	--
	Home Children	69	23.2	--	--	--	--
	Day Care Children	56	30.4	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	100.0	211	509	75.5	1.27
	Urban	102	100.0	232	542	87.9	1.22
	Rural	17	100.0	86.1	203	30.3	1.24
	Low Income	38	100.0	136	226	65.9	1.16
	Mid/High Income	68	100.0	277	646	83.6	1.40
	Home Children	62	100.0	171	343	66.0	1.27
	Day Care Children	57	100.0	254	644	87.4	1.26
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	26.4	--	--	--	--
	Urban	108	29.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	20.5	--	--	--	--
	Home Children	69	23.2	--	--	--	--
	Day Care Children	56	30.4	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	100.0	0.376	0.945	0.130	1.29
	Urban	102	100.0	0.415	1.01	0.152	1.25
	Rural	17	100.0	0.136	0.312	0.051	1.20
	Low Income	38	100.0	0.228	0.376	0.110	1.15
	Mid/High Income	68	100.0	0.502	1.21	0.147	1.43
	Home Children	62	100.0	0.332	0.724	0.117	1.32
	Day Care Children	57	100.0	0.423	1.14	0.145	1.27
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	26.4	--	--	--	--
	Urban	108	29.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	20.5	--	--	--	--
	Home Children	69	23.2	--	--	--	--
	Day Care Children	56	30.4	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	100.0	1.49	3.74	0.514	1.29
	Urban	102	100.0	1.65	3.99	0.601	1.25
	Rural	17	100.0	0.538	1.24	0.202	1.20
	Low Income	38	100.0	0.903	1.49	0.437	1.15
	Mid/High Income	68	100.0	1.99	4.78	0.581	1.43
	Home Children	62	100.0	1.32	2.87	0.464	1.32
	Day Care Children	57	100.0	1.68	4.53	0.575	1.27

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-5b. Benzo[a]pyrene (50-32-8): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	0.907	2.80	17.4
	Urban	108	<MDL	<MDL	<MDL	0.926	4.01	17.4
	Rural	17	<MDL	<MDL	<MDL	<MDL	1.12	1.12
	Low Income	39	<MDL	<MDL	<MDL	1.07	10.0	17.4
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	1.91	4.61
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1.80	10.0
	Day Care Children	56	<MDL	<MDL	<MDL	0.967	5.75	17.4
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	1.80	7.44	17.1	35.5	323	1,020
	Urban	102	1.80	9.42	21.5	36.7	323	1,020
	Rural	17	2.02	2.97	6.20	10.5	217	217
	Low Income	38	2.02	6.91	13.8	36.7	126	323
	Mid/High Income	68	1.80	7.67	21.5	35.6	422	1,020
	Home Children	62	1.80	6.91	14.7	28.9	162	431
	Day Care Children	57	2.49	8.87	23.4	36.7	323	1,020
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	3.60	11.1	68.9
	Urban	108	<MDL	<MDL	<MDL	3.67	15.9	68.9
	Rural	17	<MDL	<MDL	<MDL	<MDL	4.45	4.45
	Low Income	39	<MDL	<MDL	<MDL	4.25	39.7	68.9
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	7.58	18.3
	Home Children	69	<MDL	<MDL	<MDL	<MDL	7.14	39.7
	Day Care Children	56	<MDL	<MDL	<MDL	3.83	22.8	68.9
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	7.14	29.5	67.7	141	1,280	4,040
	Urban	102	7.14	37.3	85.3	146	1,280	4,040
	Rural	17	8.00	11.8	24.6	41.6	859	859
	Low Income	38	8.00	27.4	54.7	146	500	1,280
	Mid/High Income	68	7.14	30.4	85.3	141	1,670	4,040
	Home Children	62	7.14	27.4	58.3	114	644	1,710
	Day Care Children	57	9.87	35.1	92.7	146	1,280	4,040
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.007	0.021	0.133
	Urban	108	<MDL	<MDL	<MDL	0.007	0.027	0.133
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.007	0.007
	Low Income	39	<MDL	<MDL	<MDL	0.007	0.079	0.133
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	0.012	0.031
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.011	0.079
	Day Care Children	56	<MDL	<MDL	<MDL	0.007	0.050	0.133
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	0.010	0.051	0.118	0.239	2.09	8.02
	Urban	102	0.010	0.066	0.140	0.270	2.09	8.02
	Rural	17	0.012	0.022	0.039	0.093	1.33	1.33
	Low Income	38	0.012	0.052	0.088	0.229	0.915	2.09
	Mid/High Income	68	0.010	0.048	0.121	0.288	3.04	8.02
	Home Children	62	0.010	0.042	0.111	0.210	1.16	3.78
	Day Care Children	57	0.014	0.057	0.143	0.270	2.09	8.02
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.026	0.081	0.527
	Urban	108	<MDL	<MDL	<MDL	0.026	0.107	0.527
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.028	0.028
	Low Income	39	<MDL	<MDL	<MDL	0.029	0.313	0.527
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	0.046	0.124
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.042	0.313
	Day Care Children	56	<MDL	<MDL	<MDL	0.027	0.197	0.527
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	0.040	0.202	0.467	0.949	8.30	31.8
	Urban	102	0.040	0.260	0.555	1.07	8.30	31.8
	Rural	17	0.049	0.087	0.156	0.367	5.26	5.26
	Low Income	38	0.049	0.205	0.347	0.908	3.63	8.30
	Mid/High Income	68	0.040	0.189	0.480	1.14	12.1	31.8
	Home Children	62	0.040	0.167	0.440	0.832	4.61	15.0
	Day Care Children	57	0.054	0.228	0.567	1.07	8.30	31.8

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-6a. Benzo[e]pyrene (192-97-2): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	35.2	--	--	--	--
	Urban	108	39.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	30.1	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	100.0	48.9	113	19.0	1.21
	Urban	102	100.0	53.8	120	22.1	1.16
	Rural	17	100.0	19.2	42.3	7.77	1.14
	Low Income	38	100.0	33.0	56.0	16.8	1.08
	Mid/High Income	68	100.0	62.9	143	20.9	1.33
	Home Children	62	100.0	39.9	76.3	17.0	1.20
	Day Care Children	57	100.0	58.7	143	21.5	1.22
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	35.2	--	--	--	--
	Urban	108	39.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	30.1	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	100.0	194	449	75.5	1.21
	Urban	102	100.0	213	477	87.6	1.16
	Rural	17	100.0	76.1	168	30.8	1.14
	Low Income	38	100.0	131	222	66.4	1.08
	Mid/High Income	68	100.0	249	565	83.0	1.33
	Home Children	62	100.0	158	303	67.5	1.20
	Day Care Children	57	100.0	233	567	85.2	1.22
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	35.2	--	--	--	--
	Urban	108	39.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	30.1	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	100.0	0.345	0.835	0.130	1.23
	Urban	102	100.0	0.382	0.891	0.151	1.19
	Rural	17	100.0	0.121	0.258	0.052	1.11
	Low Income	38	100.0	0.220	0.371	0.111	1.08
	Mid/High Income	68	100.0	0.453	1.06	0.145	1.37
	Home Children	62	100.0	0.305	0.636	0.120	1.24
	Day Care Children	57	100.0	0.389	1.01	0.142	1.23
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	35.2	--	--	--	--
	Urban	108	39.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	48.7	--	--	--	--
	Mid/High Income	73	30.1	--	--	--	--
	Home Children	69	30.4	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	100.0	1.37	3.31	0.514	1.23
	Urban	102	100.0	1.52	3.53	0.599	1.19
	Rural	17	100.0	0.478	1.02	0.205	1.11
	Low Income	38	100.0	0.870	1.47	0.440	1.08
	Mid/High Income	68	100.0	1.79	4.20	0.576	1.37
	Home Children	62	100.0	1.21	2.52	0.474	1.24
	Day Care Children	57	100.0	1.54	4.01	0.561	1.23

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-6b. Benzo[e]pyrene (192-97-2): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	0.966	2.41	8.66
	Urban	108	<MDL	<MDL	<MDL	0.966	2.91	8.66
	Rural	17	<MDL	<MDL	<MDL	<MDL	1.21	1.21
	Low Income	39	<MDL	<MDL	<MDL	1.22	5.79	8.66
	Mid/High Income	73	<MDL	<MDL	<MDL	0.817	1.80	3.19
	Home Children	69	<MDL	<MDL	<MDL	0.848	1.80	5.79
	Day Care Children	56	<MDL	<MDL	<MDL	1.05	3.49	8.66
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	1.72	8.02	19.3	32.7	284	902
	Urban	102	1.72	10.4	20.9	36.4	284	902
	Rural	17	2.05	3.89	5.44	10.6	180	180
	Low Income	38	2.05	7.95	13.2	32.7	131	323
	Mid/High Income	68	1.72	8.54	20.8	33.7	372	902
	Home Children	62	1.72	8.04	15.6	29.8	156	392
	Day Care Children	57	2.78	8.02	22.0	34.3	323	902
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	3.83	9.57	34.3
	Urban	108	<MDL	<MDL	<MDL	3.83	11.5	34.3
	Rural	17	<MDL	<MDL	<MDL	<MDL	4.79	4.79
	Low Income	39	<MDL	<MDL	<MDL	4.84	22.9	34.3
	Mid/High Income	73	<MDL	<MDL	<MDL	3.24	7.14	12.6
	Home Children	69	<MDL	<MDL	<MDL	3.36	7.14	22.9
	Day Care Children	56	<MDL	<MDL	<MDL	4.18	13.8	34.3
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	6.83	31.8	76.5	130	1,130	3,580
	Urban	102	6.83	41.3	83.0	144	1,130	3,580
	Rural	17	8.14	15.4	21.6	42.1	713	713
	Low Income	38	8.14	31.5	52.3	130	519	1,280
	Mid/High Income	68	6.83	33.9	82.3	134	1,470	3,580
	Home Children	62	6.83	31.9	62.0	118	618	1,550
	Day Care Children	57	11.0	31.8	87.4	136	1,280	3,580
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.007	0.019	0.066
	Urban	108	<MDL	<MDL	<MDL	0.007	0.020	0.066
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.008	0.008
	Low Income	39	<MDL	<MDL	<MDL	0.009	0.046	0.066
	Mid/High Income	73	<MDL	<MDL	<MDL	0.006	0.011	0.022
	Home Children	69	<MDL	<MDL	<MDL	0.007	0.011	0.046
	Day Care Children	56	<MDL	<MDL	<MDL	0.007	0.030	0.066
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	0.010	0.050	0.123	0.237	2.10	7.10
	Urban	102	0.010	0.070	0.138	0.268	2.10	7.10
	Rural	17	0.016	0.024	0.041	0.094	1.10	1.10
	Low Income	38	0.018	0.051	0.082	0.215	0.949	2.10
	Mid/High Income	68	0.010	0.053	0.132	0.282	2.59	7.10
	Home Children	62	0.010	0.049	0.118	0.209	1.10	3.33
	Day Care Children	57	0.015	0.062	0.135	0.268	2.10	7.10
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.026	0.075	0.262
	Urban	108	<MDL	<MDL	<MDL	0.029	0.078	0.262
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.031	0.031
	Low Income	39	<MDL	<MDL	<MDL	0.034	0.180	0.262
	Mid/High Income	73	<MDL	<MDL	<MDL	0.026	0.045	0.086
	Home Children	69	<MDL	<MDL	<MDL	0.026	0.042	0.180
	Day Care Children	56	<MDL	<MDL	<MDL	0.030	0.120	0.262
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	0.039	0.199	0.488	0.941	8.31	28.1
	Urban	102	0.039	0.276	0.548	1.06	8.31	28.1
	Rural	17	0.065	0.095	0.161	0.371	4.36	4.36
	Low Income	38	0.071	0.202	0.326	0.851	3.76	8.31
	Mid/High Income	68	0.039	0.209	0.525	1.12	10.3	28.1
	Home Children	62	0.039	0.195	0.468	0.828	4.36	13.2
	Day Care Children	57	0.061	0.244	0.535	1.06	8.31	28.1

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-7a. Benzylbutylphthalate (85-68-7): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	37.1	--	--	--	--
	Urban	107	35.5	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	38	50.0	552	469	441	0.616
	Mid/High Income	73	28.8	--	--	--	--
	Home Children	69	29.0	--	--	--	--
	Day Care Children	55	47.3	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	100.0	689	1,090	386	1.06
	Urban	102	100.0	690	1,150	377	1.07
	Rural	16	100.0	687	609	451	1.06
	Low Income	38	100.0	817	928	533	0.997
	Mid/High Income	68	100.0	655	1,250	332	1.10
	Home Children	62	100.0	531	582	330	0.992
	Day Care Children	56	100.0	865	1,450	460	1.12
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	37.1	--	--	--	--
	Urban	107	35.5	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	38	50.0	1,770	1,500	1,410	0.616
	Mid/High Income	73	28.8	--	--	--	--
	Home Children	69	29.0	--	--	--	--
	Day Care Children	55	47.3	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	100.0	2,210	3,490	1,240	1.06
	Urban	102	100.0	2,210	3,680	1,210	1.07
	Rural	16	100.0	2,200	1,950	1,440	1.06
	Low Income	38	100.0	2,620	2,970	1,710	0.997
	Mid/High Income	68	100.0	2,100	3,990	1,060	1.10
	Home Children	62	100.0	1,700	1,860	1,060	0.992
	Day Care Children	56	100.0	2,770	4,630	1,470	1.12
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	37.1	--	--	--	--
	Urban	107	35.5	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	38	50.0	3.73	2.93	2.97	0.653
	Mid/High Income	73	28.8	--	--	--	--
	Home Children	69	29.0	--	--	--	--
	Day Care Children	55	47.3	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	100.0	4.84	8.19	2.63	1.08
	Urban	102	100.0	4.91	8.71	2.58	1.09
	Rural	16	100.0	4.40	3.49	2.97	1.07
	Low Income	38	100.0	6.07	9.70	3.53	1.05
	Mid/High Income	68	100.0	4.47	7.90	2.30	1.11
	Home Children	62	100.0	3.67	3.99	2.32	0.982
	Day Care Children	56	100.0	6.13	11.0	3.01	1.18
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	37.1	--	--	--	--
	Urban	107	35.5	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	38	50.0	12.0	9.38	9.51	0.653
	Mid/High Income	73	28.8	--	--	--	--
	Home Children	69	29.0	--	--	--	--
	Day Care Children	55	47.3	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	100.0	15.5	26.2	8.41	1.08
	Urban	102	100.0	15.7	27.9	8.25	1.09
	Rural	16	100.0	14.1	11.2	9.50	1.07
	Low Income	38	100.0	19.4	31.1	11.3	1.05
	Mid/High Income	68	100.0	14.3	25.3	7.36	1.11
	Home Children	62	100.0	11.8	12.8	7.42	0.982
	Day Care Children	56	100.0	19.6	35.3	9.65	1.18

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-7b. Benzylbutylphthalate (85-68-7): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	<MDL	<MDL	501	1,290	2,550
	Urban	107	<MDL	<MDL	<MDL	434	1,300	2,550
	Rural	17	<MDL	<MDL	<MDL	605	1,120	1,120
	Low Income	38	<MDL	<MDL	<MDL	666	1,470	2,550
	Mid/High Income	73	<MDL	<MDL	<MDL	375	724	1,400
	Home Children	69	<MDL	<MDL	<MDL	389	1,150	1,470
	Day Care Children	55	<MDL	<MDL	<MDL	541	1,330	2,550
Potential Exposure via Indirect Ingestion (ng/day)	Overall	118	18.3	198	414	724	2,290	9,500
	Urban	102	18.3	192	390	677	2,290	9,500
	Rural	16	51.6	257	526	835	2,170	2,170
	Low Income	38	18.3	326	546	1,090	2,290	5,440
	Mid/High Income	68	27.7	167	339	567	2,310	9,500
	Home Children	62	34.6	164	361	553	1,920	2,540
	Day Care Children	56	18.3	257	436	900	2,890	9,500
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	<MDL	<MDL	1,600	4,130	8,150
	Urban	107	<MDL	<MDL	<MDL	1,390	4,170	8,150
	Rural	17	<MDL	<MDL	<MDL	1,940	3,570	3,570
	Low Income	38	<MDL	<MDL	<MDL	2,130	4,720	8,150
	Mid/High Income	73	<MDL	<MDL	<MDL	1,200	2,320	4,470
	Home Children	69	<MDL	<MDL	<MDL	1,240	3,670	4,720
	Day Care Children	55	<MDL	<MDL	<MDL	1,730	4,250	8,150
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	118	58.6	634	1,320	2,320	7,330	30,400
	Urban	102	58.6	615	1,250	2,170	7,330	30,400
	Rural	16	165	823	1,680	2,670	6,940	6,940
	Low Income	38	58.6	1,040	1,750	3,490	7,330	17,400
	Mid/High Income	68	88.7	536	1,090	1,810	7,390	30,400
	Home Children	62	111	524	1,160	1,770	6,150	8,120
	Day Care Children	56	58.6	824	1,400	2,880	9,250	30,400
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	<MDL	<MDL	3.45	8.15	14.6
	Urban	107	<MDL	<MDL	<MDL	3.11	8.62	14.6
	Rural	17	<MDL	<MDL	<MDL	4.60	6.88	6.88
	Low Income	38	<MDL	<MDL	<MDL	5.16	11.8	13.4
	Mid/High Income	73	<MDL	<MDL	<MDL	2.69	4.85	11.1
	Home Children	69	<MDL	<MDL	<MDL	2.80	7.90	11.8
	Day Care Children	55	<MDL	<MDL	<MDL	3.84	9.74	14.6
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	118	0.117	1.27	2.74	4.88	15.1	59.9
	Urban	102	0.117	1.24	2.66	4.57	15.1	59.9
	Rural	16	0.308	1.83	3.89	6.30	13.6	13.6
	Low Income	38	0.117	2.44	3.24	6.59	15.9	59.9
	Mid/High Income	68	0.153	1.20	2.26	3.95	15.1	59.1
	Home Children	62	0.219	1.22	2.60	3.69	13.6	18.3
	Day Care Children	56	0.117	1.78	3.10	5.76	16.8	59.9
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	<MDL	<MDL	11.0	26.1	46.7
	Urban	107	<MDL	<MDL	<MDL	9.95	27.6	46.7
	Rural	17	<MDL	<MDL	<MDL	14.7	22.0	22.0
	Low Income	38	<MDL	<MDL	<MDL	16.5	37.6	42.8
	Mid/High Income	73	<MDL	<MDL	<MDL	8.60	15.5	35.4
	Home Children	69	<MDL	<MDL	<MDL	8.96	25.3	37.6
	Day Care Children	55	<MDL	<MDL	<MDL	12.3	31.2	46.7
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	118	0.375	4.08	8.76	15.6	48.3	192
	Urban	102	0.375	3.97	8.50	14.6	48.3	192
	Rural	16	0.985	5.86	12.4	20.2	43.4	43.4
	Low Income	38	0.375	7.82	10.4	21.1	51.0	192
	Mid/High Income	68	0.488	3.85	7.25	12.6	48.3	189
	Home Children	62	0.702	3.91	8.31	11.8	43.4	58.6
	Day Care Children	56	0.375	5.70	9.93	18.4	53.6	192

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-8a. Bisphenol-A (80-05-7): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	101	72.3	17.6	19.7	13.3	0.635
	Urban	85	74.1	17.7	18.8	13.6	0.634
	Rural	16	62.5	16.8	24.5	11.9	0.649
	Low Income	32	81.3	26.0	30.9	16.8	0.841
	Mid/High Income	59	67.8	14.0	10.1	12.0	0.511
	Home Children	59	71.2	14.7	15.5	11.7	0.564
	Day Care Children	42	73.8	21.7	24.0	15.9	0.690
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	47.8	--	--	--	--
	Urban	99	46.5	--	--	--	--
	Rural	16	56.3	1.17	1.55	0.717	0.896
	Low Income	37	62.2	0.818	0.460	0.713	0.524
	Mid/High Income	66	40.9	--	--	--	--
	Home Children	60	55.0	1.30	1.75	0.897	0.758
	Day Care Children	55	40.0	--	--	--	--
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	101	72.3	77.0	86.3	58.3	0.635
	Urban	85	74.1	77.7	82.5	59.6	0.634
	Rural	16	62.5	73.5	107	52.2	0.649
	Low Income	32	81.3	114	135	73.8	0.841
	Mid/High Income	59	67.8	61.2	44.1	52.4	0.511
	Home Children	59	71.2	64.2	68.1	51.4	0.564
	Day Care Children	42	73.8	95.1	105	69.6	0.690
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	47.8	--	--	--	--
	Urban	99	46.5	--	--	--	--
	Rural	16	56.3	5.11	6.81	3.14	0.896
	Low Income	37	62.2	3.58	2.01	3.12	0.524
	Mid/High Income	66	40.9	--	--	--	--
	Home Children	60	55.0	5.71	7.68	3.93	0.758
	Day Care Children	55	40.0	--	--	--	--
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	101	72.3	0.122	0.140	0.090	0.671
	Urban	85	74.1	0.121	0.122	0.092	0.658
	Rural	16	62.5	0.126	0.218	0.080	0.748
	Low Income	32	81.3	0.184	0.220	0.114	0.923
	Mid/High Income	59	67.8	0.094	0.070	0.081	0.506
	Home Children	59	71.2	0.104	0.127	0.082	0.573
	Day Care Children	42	73.8	0.146	0.156	0.102	0.778
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	47.8	--	--	--	--
	Urban	99	46.5	--	--	--	--
	Rural	16	56.3	0.007	0.008	0.005	0.876
	Low Income	37	62.2	0.006	0.004	0.005	0.588
	Mid/High Income	66	40.9	--	--	--	--
	Home Children	60	55.0	0.009	0.011	0.006	0.758
	Day Care Children	55	40.0	--	--	--	--
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	101	72.3	0.533	0.615	0.394	0.671
	Urban	85	74.1	0.529	0.536	0.403	0.658
	Rural	16	62.5	0.552	0.953	0.349	0.748
	Low Income	32	81.3	0.806	0.962	0.499	0.923
	Mid/High Income	59	67.8	0.412	0.305	0.354	0.506
	Home Children	59	71.2	0.457	0.555	0.359	0.573
	Day Care Children	42	73.8	0.640	0.682	0.449	0.778
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	47.8	--	--	--	--
	Urban	99	46.5	--	--	--	--
	Rural	16	56.3	0.032	0.035	0.021	0.876
	Low Income	37	62.2	0.024	0.016	0.021	0.588
	Mid/High Income	66	40.9	--	--	--	--
	Home Children	60	55.0	0.040	0.050	0.028	0.758
	Day Care Children	55	40.0	--	--	--	--

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-8b. Bisphenol-A (80-05-7): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	101	<MDL	<MDL	11.2	16.6	63.6	125
	Urban	85	<MDL	<MDL	11.3	16.7	63.6	125
	Rural	16	<MDL	<MDL	10.8	12.4	108	108
	Low Income	32	<MDL	8.74	14.7	20.0	108	125
	Mid/High Income	59	<MDL	<MDL	11.0	16.5	35.9	67.0
	Home Children	59	<MDL	<MDL	10.6	15.9	36.8	108
	Day Care Children	42	<MDL	<MDL	12.7	18.0	69.5	125
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	<MDL	<MDL	<MDL	1.12	2.75	12.1
	Urban	99	<MDL	<MDL	<MDL	1.12	2.60	12.1
	Rural	16	<MDL	<MDL	0.493	0.960	6.19	6.19
	Low Income	37	<MDL	<MDL	0.666	0.895	1.79	2.00
	Mid/High Income	66	<MDL	<MDL	<MDL	1.13	2.87	6.19
	Home Children	60	<MDL	<MDL	0.783	1.21	3.90	12.1
	Day Care Children	55	<MDL	<MDL	<MDL	0.995	2.00	2.66
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	101	<MDL	<MDL	49.2	72.5	278	547
	Urban	85	<MDL	<MDL	49.6	73.2	278	547
	Rural	16	<MDL	<MDL	47.4	54.5	472	472
	Low Income	32	<MDL	38.3	64.4	87.6	472	547
	Mid/High Income	59	<MDL	<MDL	48.1	72.2	157	293
	Home Children	59	<MDL	<MDL	46.2	69.5	161	472
	Day Care Children	42	<MDL	<MDL	55.5	78.9	305	547
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	<MDL	<MDL	<MDL	4.88	12.0	52.8
	Urban	99	<MDL	<MDL	<MDL	4.88	11.4	52.8
	Rural	16	<MDL	<MDL	2.16	4.21	27.1	27.1
	Low Income	37	<MDL	<MDL	2.92	3.92	7.84	8.78
	Mid/High Income	66	<MDL	<MDL	<MDL	4.93	12.6	27.1
	Home Children	60	<MDL	<MDL	3.43	5.32	17.1	52.8
	Day Care Children	55	<MDL	<MDL	<MDL	4.36	8.78	11.7
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	101	<MDL	<MDL	0.076	0.115	0.455	0.935
	Urban	85	<MDL	<MDL	0.076	0.118	0.455	0.688
	Rural	16	<MDL	<MDL	0.074	0.088	0.935	0.935
	Low Income	32	<MDL	0.061	0.089	0.180	0.688	0.935
	Mid/High Income	59	<MDL	<MDL	0.074	0.104	0.270	0.455
	Home Children	59	<MDL	<MDL	0.074	0.104	0.270	0.935
	Day Care Children	42	<MDL	<MDL	0.079	0.144	0.532	0.688
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	<MDL	<MDL	<MDL	0.008	0.017	0.075
	Urban	99	<MDL	<MDL	<MDL	0.008	0.016	0.075
	Rural	16	<MDL	<MDL	0.004	0.008	0.029	0.029
	Low Income	37	<MDL	<MDL	0.004	0.007	0.016	0.016
	Mid/High Income	66	<MDL	<MDL	<MDL	0.009	0.021	0.047
	Home Children	60	<MDL	<MDL	0.006	0.010	0.027	0.075
	Day Care Children	55	<MDL	<MDL	<MDL	0.006	0.016	0.017
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	101	<MDL	<MDL	0.333	0.502	1.99	4.10
	Urban	85	<MDL	<MDL	0.333	0.517	1.99	3.01
	Rural	16	<MDL	<MDL	0.326	0.388	4.10	4.10
	Low Income	32	<MDL	0.266	0.388	0.789	3.01	4.10
	Mid/High Income	59	<MDL	<MDL	0.325	0.456	1.18	1.99
	Home Children	59	<MDL	<MDL	0.326	0.456	1.18	4.10
	Day Care Children	42	<MDL	<MDL	0.348	0.629	2.33	3.01
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	<MDL	<MDL	<MDL	0.036	0.073	0.330
	Urban	99	<MDL	<MDL	<MDL	0.036	0.070	0.330
	Rural	16	<MDL	<MDL	0.016	0.035	0.127	0.127
	Low Income	37	<MDL	<MDL	0.020	0.031	0.068	0.071
	Mid/High Income	66	<MDL	<MDL	<MDL	0.041	0.092	0.207
	Home Children	60	<MDL	<MDL	0.025	0.042	0.118	0.330
	Day Care Children	55	<MDL	<MDL	<MDL	0.027	0.069	0.073

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-9a. *alpha*-Chlordane (5103-71-9) : Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	95.2	11.1	27.3	4.16	1.12
	Urban	108	95.4	11.5	29.0	4.17	1.13
	Rural	17	94.1	8.27	11.6	4.11	1.13
	Low Income	39	94.9	11.7	27.9	4.54	1.12
	Mid/High Income	73	95.9	9.38	25.4	3.73	1.07
	Home Children	69	95.7	15.2	35.3	4.56	1.31
	Day Care Children	56	94.6	6.05	9.96	3.71	0.844
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	92.5	1.22	3.30	0.335	1.40
	Urban	103	92.2	1.34	3.54	0.363	1.41
	Rural	17	94.1	0.436	0.606	0.204	1.26
	Low Income	38	97.4	1.58	4.12	0.400	1.45
	Mid/High Income	69	89.9	0.965	2.58	0.327	1.31
	Home Children	63	88.9	1.52	3.83	0.394	1.47
	Day Care Children	57	96.5	0.875	2.58	0.280	1.31
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	95.2	27.1	66.7	10.1	1.12
	Urban	108	95.4	28.2	70.9	10.2	1.13
	Rural	17	94.1	20.2	28.4	10.0	1.13
	Low Income	39	94.9	28.6	68.1	11.1	1.12
	Mid/High Income	73	95.9	22.9	62.1	9.11	1.07
	Home Children	69	95.7	37.1	86.1	11.1	1.31
	Day Care Children	56	94.6	14.8	24.3	9.05	0.844
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	92.5	2.97	8.04	0.817	1.40
	Urban	103	92.2	3.28	8.63	0.887	1.41
	Rural	17	94.1	1.06	1.48	0.498	1.26
	Low Income	38	97.4	3.86	10.1	0.976	1.45
	Mid/High Income	69	89.9	2.36	6.30	0.798	1.31
	Home Children	63	88.9	3.72	9.34	0.961	1.47
	Day Care Children	57	96.5	2.13	6.30	0.684	1.31
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	95.2	0.076	0.179	0.028	1.16
	Urban	108	95.4	0.078	0.189	0.028	1.15
	Rural	17	94.1	0.062	0.098	0.027	1.21
	Low Income	39	94.9	0.086	0.214	0.031	1.18
	Mid/High Income	73	95.9	0.063	0.152	0.026	1.11
	Home Children	69	95.7	0.103	0.230	0.032	1.31
	Day Care Children	56	94.6	0.042	0.068	0.024	0.916
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	92.5	0.008	0.020	0.002	1.41
	Urban	103	92.2	0.009	0.022	0.002	1.42
	Rural	17	94.1	0.003	0.005	0.001	1.30
	Low Income	38	97.4	0.010	0.023	0.003	1.43
	Mid/High Income	69	89.9	0.007	0.018	0.002	1.34
	Home Children	63	88.9	0.010	0.025	0.003	1.45
	Day Care Children	57	96.5	0.006	0.013	0.002	1.36
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	95.2	0.185	0.437	0.069	1.16
	Urban	108	95.4	0.190	0.461	0.069	1.15
	Rural	17	94.1	0.152	0.239	0.067	1.21
	Low Income	39	94.9	0.210	0.521	0.074	1.18
	Mid/High Income	73	95.9	0.154	0.372	0.063	1.11
	Home Children	69	95.7	0.252	0.561	0.078	1.31
	Day Care Children	56	94.6	0.102	0.166	0.060	0.916
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	92.5	0.019	0.049	0.006	1.41
	Urban	103	92.2	0.021	0.053	0.006	1.42
	Rural	17	94.1	0.008	0.012	0.003	1.30
	Low Income	38	97.4	0.023	0.057	0.006	1.43
	Mid/High Income	69	89.9	0.017	0.044	0.006	1.34
	Home Children	63	88.9	0.025	0.061	0.007	1.45
	Day Care Children	57	96.5	0.014	0.031	0.005	1.36

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-9b. *alpha*-Chlordane (5103-71-9) : Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	1.97	2.96	6.52	51.5	198
	Urban	108	<MDL	1.99	3.05	6.63	69.0	198
	Rural	17	<MDL	1.91	2.93	6.47	41.5	41.5
	Low Income	39	<MDL	2.07	2.84	8.56	92.6	153
	Mid/High Income	73	<MDL	1.90	2.92	5.53	44.4	198
	Home Children	69	<MDL	1.97	3.24	7.20	92.6	198
	Day Care Children	56	<MDL	2.00	2.74	6.50	16.1	69.0
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	<MDL	0.134	0.262	0.724	3.51	19.2
	Urban	103	<MDL	0.147	0.273	0.750	3.63	19.2
	Rural	17	<MDL	0.068	0.185	0.357	2.12	2.12
	Low Income	38	<MDL	0.147	0.274	0.815	17.8	19.1
	Mid/High Income	69	<MDL	0.147	0.261	0.750	2.83	19.2
	Home Children	63	<MDL	0.147	0.331	0.815	9.67	19.2
	Day Care Children	57	<MDL	0.122	0.188	0.661	3.00	19.1
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	4.81	7.22	15.9	126	483
	Urban	108	<MDL	4.86	7.46	16.2	168	483
	Rural	17	<MDL	4.67	7.15	15.8	101	101
	Low Income	39	<MDL	5.06	6.93	20.9	226	372
	Mid/High Income	73	<MDL	4.63	7.11	13.5	108	483
	Home Children	69	<MDL	4.80	7.91	17.6	226	483
	Day Care Children	56	<MDL	4.88	6.68	15.9	39.3	168
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	<MDL	0.326	0.638	1.77	8.58	46.8
	Urban	103	<MDL	0.359	0.666	1.83	8.87	46.8
	Rural	17	<MDL	0.166	0.452	0.871	5.16	5.16
	Low Income	38	<MDL	0.359	0.668	1.99	43.4	46.7
	Mid/High Income	69	<MDL	0.360	0.636	1.83	6.91	46.8
	Home Children	63	<MDL	0.359	0.809	1.99	23.6	46.8
	Day Care Children	57	<MDL	0.297	0.458	1.61	7.32	46.7
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	0.013	0.021	0.049	0.364	1.20
	Urban	108	<MDL	0.014	0.022	0.049	0.440	1.20
	Rural	17	<MDL	0.013	0.019	0.035	0.360	0.360
	Low Income	39	<MDL	0.016	0.022	0.058	0.614	1.20
	Mid/High Income	73	<MDL	0.013	0.021	0.037	0.337	1.15
	Home Children	69	<MDL	0.013	0.024	0.055	0.614	1.20
	Day Care Children	56	<MDL	0.015	0.019	0.037	0.158	0.440
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	<MDL	0.001	0.002	0.005	0.032	0.136
	Urban	103	<MDL	0.001	0.002	0.005	0.033	0.136
	Rural	17	<MDL	0.001	0.001	0.002	0.018	0.018
	Low Income	38	<MDL	0.001	0.002	0.005	0.084	0.118
	Mid/High Income	69	<MDL	0.001	0.002	0.005	0.022	0.136
	Home Children	63	<MDL	0.001	0.002	0.006	0.056	0.136
	Day Care Children	57	<MDL	0.001	0.001	0.004	0.031	0.084
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	0.033	0.052	0.119	0.888	2.93
	Urban	108	<MDL	0.033	0.053	0.120	1.07	2.93
	Rural	17	<MDL	0.031	0.046	0.086	0.878	0.878
	Low Income	39	<MDL	0.038	0.053	0.142	1.50	2.93
	Mid/High Income	73	<MDL	0.031	0.051	0.091	0.823	2.80
	Home Children	69	<MDL	0.032	0.058	0.134	1.50	2.93
	Day Care Children	56	<MDL	0.036	0.047	0.092	0.386	1.07
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	<MDL	0.002	0.004	0.013	0.078	0.331
	Urban	103	<MDL	0.002	0.005	0.013	0.081	0.331
	Rural	17	<MDL	0.001	0.003	0.005	0.045	0.045
	Low Income	38	<MDL	0.002	0.005	0.013	0.206	0.288
	Mid/High Income	69	<MDL	0.002	0.004	0.013	0.053	0.331
	Home Children	63	<MDL	0.002	0.006	0.014	0.137	0.331
	Day Care Children	57	<MDL	0.002	0.003	0.009	0.075	0.206

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-10a. *gamma*-Chlordane (5103-74-2): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	98.4	17.8	57.9	5.78	1.16
	Urban	108	98.1	18.9	62.0	5.80	1.17
	Rural	17	100.0	10.9	14.4	5.62	1.13
	Low Income	39	97.4	17.3	45.0	6.32	1.13
	Mid/High Income	73	98.6	16.8	65.8	5.17	1.13
	Home Children	69	98.6	25.3	76.4	6.23	1.36
	Day Care Children	56	98.2	8.57	13.6	5.26	0.852
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	91.7	1.37	3.80	0.356	1.43
	Urban	103	91.3	1.51	4.08	0.383	1.44
	Rural	17	94.1	0.512	0.705	0.228	1.32
	Low Income	38	97.4	1.73	4.53	0.432	1.47
	Mid/High Income	69	88.4	1.16	3.37	0.345	1.36
	Home Children	63	87.3	1.73	4.40	0.415	1.52
	Day Care Children	57	96.5	0.973	2.99	0.300	1.33
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	98.4	43.5	141	14.1	1.16
	Urban	108	98.1	46.1	151	14.2	1.17
	Rural	17	100.0	26.7	35.2	13.7	1.13
	Low Income	39	97.4	42.2	110	15.4	1.13
	Mid/High Income	73	98.6	41.0	161	12.6	1.13
	Home Children	69	98.6	61.8	186	15.2	1.36
	Day Care Children	56	98.2	20.9	33.1	12.8	0.852
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	91.7	3.35	9.27	0.868	1.43
	Urban	103	91.3	3.69	9.95	0.935	1.44
	Rural	17	94.1	1.25	1.72	0.556	1.32
	Low Income	38	97.4	4.23	11.1	1.05	1.47
	Mid/High Income	69	88.4	2.83	8.22	0.842	1.36
	Home Children	63	87.3	4.23	10.7	1.01	1.52
	Day Care Children	57	96.5	2.37	7.30	0.732	1.33
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	98.4	0.120	0.361	0.039	1.19
	Urban	108	98.1	0.126	0.385	0.040	1.19
	Rural	17	100.0	0.082	0.121	0.037	1.20
	Low Income	39	97.4	0.127	0.347	0.043	1.19
	Mid/High Income	73	98.6	0.110	0.384	0.036	1.17
	Home Children	69	98.6	0.169	0.474	0.044	1.37
	Day Care Children	56	98.2	0.060	0.094	0.035	0.921
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	91.7	0.009	0.023	0.002	1.44
	Urban	103	91.3	0.010	0.024	0.003	1.44
	Rural	17	94.1	0.004	0.006	0.002	1.36
	Low Income	38	97.4	0.010	0.025	0.003	1.44
	Mid/High Income	69	88.4	0.008	0.022	0.002	1.39
	Home Children	63	87.3	0.011	0.028	0.003	1.49
	Day Care Children	57	96.5	0.006	0.014	0.002	1.36
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	98.4	0.292	0.880	0.096	1.19
	Urban	108	98.1	0.307	0.940	0.097	1.19
	Rural	17	100.0	0.201	0.296	0.091	1.20
	Low Income	39	97.4	0.311	0.847	0.104	1.19
	Mid/High Income	73	98.6	0.268	0.937	0.087	1.17
	Home Children	69	98.6	0.411	1.16	0.106	1.37
	Day Care Children	56	98.2	0.145	0.229	0.084	0.921
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	91.7	0.022	0.055	0.006	1.44
	Urban	103	91.3	0.024	0.059	0.006	1.44
	Rural	17	94.1	0.009	0.014	0.004	1.36
	Low Income	38	97.4	0.025	0.061	0.007	1.44
	Mid/High Income	69	88.4	0.020	0.053	0.006	1.39
	Home Children	63	87.3	0.028	0.068	0.007	1.49
	Day Care Children	57	96.5	0.015	0.035	0.005	1.36

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-10b. *gamma*-Chlordane (5103-74-2): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	2.81	4.13	9.62	64.7	554
	Urban	108	<MDL	2.82	4.14	9.74	92.6	554
	Rural	17	1.26	2.43	3.89	9.24	48.4	48.4
	Low Income	39	<MDL	2.83	4.38	9.98	127	259
	Mid/High Income	73	<MDL	2.69	3.89	8.28	54.4	554
	Home Children	69	<MDL	2.72	4.25	11.3	127	554
	Day Care Children	56	<MDL	2.84	3.90	8.85	24.5	92.6
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	<MDL	0.124	0.305	0.884	3.66	22.3
	Urban	103	<MDL	0.136	0.331	0.943	3.77	22.3
	Rural	17	<MDL	0.070	0.185	0.419	2.29	2.29
	Low Income	38	<MDL	0.147	0.350	1.09	18.2	22.3
	Mid/High Income	69	<MDL	0.137	0.305	0.943	3.55	21.6
	Home Children	63	<MDL	0.121	0.372	0.993	14.0	21.6
	Day Care Children	57	<MDL	0.128	0.208	0.604	3.45	22.3
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	6.87	10.1	23.5	158	1,350
	Urban	108	<MDL	6.88	10.1	23.8	226	1,350
	Rural	17	3.07	5.92	9.50	22.5	118	118
	Low Income	39	<MDL	6.90	10.7	24.4	311	633
	Mid/High Income	73	<MDL	6.57	9.50	20.2	133	1,350
	Home Children	69	<MDL	6.63	10.4	27.5	311	1,350
	Day Care Children	56	<MDL	6.92	9.52	21.6	59.8	226
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	<MDL	0.304	0.745	2.16	8.93	54.4
	Urban	103	<MDL	0.332	0.807	2.30	9.20	54.4
	Rural	17	<MDL	0.170	0.453	1.02	5.60	5.60
	Low Income	38	<MDL	0.359	0.854	2.65	44.3	54.4
	Mid/High Income	69	<MDL	0.333	0.745	2.30	8.66	52.8
	Home Children	63	<MDL	0.295	0.907	2.42	34.1	52.8
	Day Care Children	57	<MDL	0.312	0.508	1.47	8.41	54.4
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	0.018	0.030	0.072	0.456	3.21
	Urban	108	<MDL	0.019	0.030	0.073	0.589	3.21
	Rural	17	0.008	0.016	0.029	0.045	0.420	0.420
	Low Income	39	<MDL	0.021	0.030	0.075	0.845	2.04
	Mid/High Income	73	<MDL	0.017	0.027	0.070	0.413	3.21
	Home Children	69	<MDL	0.018	0.031	0.075	0.845	3.21
	Day Care Children	56	<MDL	0.020	0.028	0.057	0.270	0.589
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	<MDL	0.001	0.002	0.006	0.035	0.129
	Urban	103	<MDL	0.001	0.002	0.006	0.038	0.129
	Rural	17	<MDL	0.001	0.001	0.003	0.020	0.020
	Low Income	38	<MDL	0.001	0.002	0.005	0.098	0.120
	Mid/High Income	69	<MDL	0.001	0.002	0.006	0.021	0.129
	Home Children	63	<MDL	0.001	0.003	0.006	0.080	0.129
	Day Care Children	57	<MDL	0.001	0.001	0.004	0.032	0.098
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	0.044	0.072	0.175	1.11	7.83
	Urban	108	<MDL	0.046	0.074	0.177	1.44	7.83
	Rural	17	0.019	0.039	0.071	0.110	1.03	1.03
	Low Income	39	<MDL	0.052	0.072	0.183	2.06	4.98
	Mid/High Income	73	<MDL	0.042	0.065	0.170	1.01	7.83
	Home Children	69	<MDL	0.044	0.077	0.183	2.06	7.83
	Day Care Children	56	<MDL	0.048	0.068	0.140	0.658	1.44
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	<MDL	0.002	0.005	0.014	0.085	0.314
	Urban	103	<MDL	0.002	0.005	0.014	0.093	0.314
	Rural	17	<MDL	0.001	0.003	0.007	0.049	0.049
	Low Income	38	<MDL	0.002	0.005	0.013	0.240	0.294
	Mid/High Income	69	<MDL	0.002	0.004	0.014	0.050	0.314
	Home Children	63	<MDL	0.002	0.007	0.016	0.196	0.314
	Day Care Children	57	<MDL	0.002	0.004	0.009	0.078	0.240

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-11a. Chlorpyrifos (2921-88-2): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	110	100.0	44.3	86.1	23.7	0.991
	Urban	93	100.0	48.2	92.9	24.8	1.03
	Rural	17	100.0	23.0	16.7	18.3	0.701
	Low Income	33	100.0	48.7	72.6	27.3	1.02
	Mid/High Income	66	100.0	32.4	37.9	20.5	0.920
	Home Children	60	100.0	49.7	111	21.3	1.13
	Day Care Children	50	100.0	37.8	38.3	26.9	0.788
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	100.0	20.5	120	1.66	1.63
	Urban	103	100.0	23.5	129	1.84	1.68
	Rural	17	100.0	2.28	5.59	0.864	1.14
	Low Income	38	100.0	49.2	204	3.02	2.00
	Mid/High Income	69	100.0	3.08	5.57	1.32	1.22
	Home Children	63	100.0	9.20	46.7	1.49	1.46
	Day Care Children	57	100.0	33.0	167	1.86	1.81
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	110	100.0	126	246	67.5	0.991
	Urban	93	100.0	138	265	70.8	1.03
	Rural	17	100.0	65.5	47.7	52.2	0.701
	Low Income	33	100.0	139	207	77.8	1.02
	Mid/High Income	66	100.0	92.5	108	58.6	0.920
	Home Children	60	100.0	142	318	60.7	1.13
	Day Care Children	50	100.0	108	109	76.8	0.788
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	100.0	58.5	342	4.72	1.63
	Urban	103	100.0	67.1	369	5.26	1.68
	Rural	17	100.0	6.52	15.9	2.46	1.14
	Low Income	38	100.0	140	580	8.62	2.00
	Mid/High Income	69	100.0	8.77	15.9	3.77	1.22
	Home Children	63	100.0	26.3	133	4.25	1.46
	Day Care Children	57	100.0	94.2	476	5.30	1.81
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	110	100.0	0.318	0.656	0.159	1.05
	Urban	93	100.0	0.348	0.708	0.167	1.10
	Rural	17	100.0	0.157	0.120	0.122	0.724
	Low Income	33	100.0	0.339	0.488	0.180	1.10
	Mid/High Income	66	100.0	0.234	0.291	0.139	0.978
	Home Children	60	100.0	0.364	0.857	0.148	1.15
	Day Care Children	50	100.0	0.263	0.257	0.173	0.918
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	100.0	0.136	0.794	0.011	1.67
	Urban	103	100.0	0.156	0.856	0.013	1.72
	Rural	17	100.0	0.016	0.042	0.006	1.15
	Low Income	38	100.0	0.309	1.32	0.020	1.99
	Mid/High Income	69	100.0	0.023	0.041	0.009	1.29
	Home Children	63	100.0	0.070	0.367	0.010	1.48
	Day Care Children	57	100.0	0.209	1.09	0.012	1.87
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	110	100.0	0.908	1.87	0.454	1.05
	Urban	93	100.0	0.992	2.02	0.476	1.10
	Rural	17	100.0	0.448	0.343	0.348	0.724
	Low Income	33	100.0	0.966	1.39	0.514	1.10
	Mid/High Income	66	100.0	0.667	0.830	0.397	0.978
	Home Children	60	100.0	1.04	2.45	0.422	1.15
	Day Care Children	50	100.0	0.751	0.734	0.495	0.918
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	100.0	0.388	2.26	0.032	1.67
	Urban	103	100.0	0.444	2.44	0.036	1.72
	Rural	17	100.0	0.046	0.119	0.016	1.15
	Low Income	38	100.0	0.880	3.78	0.057	1.99
	Mid/High Income	69	100.0	0.066	0.118	0.026	1.29
	Home Children	63	100.0	0.200	1.05	0.030	1.48
	Day Care Children	57	100.0	0.596	3.10	0.035	1.87

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-11b. Chlorpyrifos (2921-88-2): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	110	1.86	12.2	19.8	42.4	131	768
	Urban	93	1.86	12.2	19.8	48.6	170	768
	Rural	17	5.03	12.4	16.5	31.4	67.5	67.5
	Low Income	33	5.74	12.3	24.3	55.8	212	383
	Mid/High Income	66	1.86	11.6	18.2	35.2	111	187
	Home Children	60	1.86	9.95	16.5	37.3	179	768
	Day Care Children	50	6.71	14.8	23.8	48.3	122	212
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	0.090	0.553	1.18	3.67	32.9	1,200
	Urban	103	0.090	0.562	1.22	4.02	32.9	1,200
	Rural	17	0.218	0.438	0.663	1.60	23.8	23.8
	Low Income	38	0.090	0.604	2.58	5.84	433	1,200
	Mid/High Income	69	0.159	0.562	1.10	3.23	14.5	33.7
	Home Children	63	0.169	0.528	1.18	3.55	20.2	371
	Day Care Children	57	0.090	0.554	1.22	3.70	39.5	1,200
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	110	5.32	34.7	56.4	121	373	2,190
	Urban	93	5.32	34.7	56.4	139	486	2,190
	Rural	17	14.4	35.3	47.1	89.6	193	193
	Low Income	33	16.4	35.1	69.4	159	605	1,090
	Mid/High Income	66	5.32	33.2	51.8	100	316	533
	Home Children	60	5.32	28.4	47.1	106	509	2,190
	Day Care Children	50	19.1	42.2	67.8	138	347	605
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	0.258	1.58	3.35	10.5	93.9	3,410
	Urban	103	0.258	1.60	3.48	11.5	94.0	3,410
	Rural	17	0.622	1.25	1.89	4.56	67.8	67.8
	Low Income	38	0.258	1.72	7.37	16.7	1,240	3,410
	Mid/High Income	69	0.452	1.60	3.14	9.22	41.3	96.1
	Home Children	63	0.482	1.51	3.35	10.1	57.5	1,060
	Day Care Children	57	0.258	1.58	3.48	10.5	113	3,410
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	110	0.018	0.077	0.128	0.300	0.965	6.04
	Urban	93	0.018	0.079	0.129	0.323	1.00	6.04
	Rural	17	0.038	0.069	0.107	0.198	0.422	0.422
	Low Income	33	0.025	0.080	0.138	0.430	0.965	2.60
	Mid/High Income	66	0.018	0.069	0.119	0.264	0.842	1.42
	Home Children	60	0.018	0.068	0.118	0.273	1.36	6.04
	Day Care Children	50	0.025	0.095	0.136	0.351	0.832	0.965
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	0.001	0.004	0.008	0.025	0.198	8.03
	Urban	103	0.001	0.004	0.009	0.027	0.218	8.03
	Rural	17	0.001	0.003	0.005	0.009	0.177	0.177
	Low Income	38	0.001	0.004	0.017	0.043	1.91	8.03
	Mid/High Income	69	0.001	0.004	0.007	0.023	0.127	0.218
	Home Children	63	0.001	0.004	0.008	0.024	0.137	2.92
	Day Care Children	57	0.001	0.004	0.007	0.026	0.435	8.03
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	110	0.051	0.219	0.365	0.855	2.75	17.2
	Urban	93	0.051	0.225	0.368	0.921	2.86	17.2
	Rural	17	0.109	0.198	0.304	0.564	1.20	1.20
	Low Income	33	0.070	0.227	0.393	1.23	2.75	7.42
	Mid/High Income	66	0.051	0.198	0.340	0.753	2.40	4.05
	Home Children	60	0.051	0.194	0.337	0.778	3.87	17.2
	Day Care Children	50	0.070	0.270	0.387	1.00	2.37	2.75
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	0.002	0.010	0.023	0.072	0.564	22.9
	Urban	103	0.002	0.011	0.025	0.078	0.623	22.9
	Rural	17	0.004	0.008	0.014	0.026	0.504	0.504
	Low Income	38	0.002	0.011	0.047	0.124	5.44	22.9
	Mid/High Income	69	0.002	0.012	0.020	0.065	0.364	0.623
	Home Children	63	0.003	0.011	0.024	0.069	0.391	8.32
	Day Care Children	57	0.002	0.010	0.021	0.075	1.24	22.9

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-12a. Chrysene (218-01-9): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	108	59.3	1.52	2.32	1.08	0.649
	Urban	92	65.2	1.63	2.49	1.13	0.685
	Rural	16	25.0	--	--	--	--
	Low Income	35	74.3	2.38	3.79	1.37	0.902
	Mid/High Income	62	51.6	1.12	0.880	0.964	0.464
	Home Children	58	53.4	1.15	1.10	0.955	0.493
	Day Care Children	50	66.0	1.95	3.16	1.25	0.774
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	100.0	53.7	132	19.1	1.26
	Urban	102	100.0	59.6	141	22.6	1.20
	Rural	17	100.0	18.0	40.1	7.02	1.18
	Low Income	38	100.0	35.2	63.6	17.0	1.12
	Mid/High Income	68	100.0	70.2	166	21.1	1.38
	Home Children	62	100.0	42.8	84.3	17.0	1.25
	Day Care Children	57	100.0	65.5	169	21.8	1.26
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	108	59.3	6.64	10.2	4.73	0.649
	Urban	92	65.2	7.16	10.9	4.97	0.685
	Rural	16	25.0	--	--	--	--
	Low Income	35	74.3	10.4	16.6	6.00	0.902
	Mid/High Income	62	51.6	4.89	3.86	4.22	0.464
	Home Children	58	53.4	5.02	4.81	4.18	0.493
	Day Care Children	50	66.0	8.52	13.8	5.46	0.774
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	100.0	235	577	83.8	1.26
	Urban	102	100.0	261	616	99.0	1.20
	Rural	17	100.0	78.8	176	30.8	1.18
	Low Income	38	100.0	154	279	74.5	1.12
	Mid/High Income	68	100.0	308	728	92.6	1.38
	Home Children	62	100.0	187	369	74.4	1.25
	Day Care Children	57	100.0	287	740	95.3	1.26
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	108	59.3	0.011	0.018	0.007	0.711
	Urban	92	65.2	0.012	0.020	0.008	0.754
	Rural	16	25.0	--	--	--	--
	Low Income	35	74.3	0.018	0.030	0.009	0.991
	Mid/High Income	62	51.6	0.008	0.006	0.007	0.526
	Home Children	58	53.4	0.008	0.008	0.007	0.522
	Day Care Children	50	66.0	0.014	0.025	0.008	0.875
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	100.0	0.374	0.934	0.130	1.28
	Urban	102	100.0	0.418	0.998	0.154	1.22
	Rural	17	100.0	0.113	0.245	0.047	1.14
	Low Income	38	100.0	0.232	0.418	0.113	1.10
	Mid/High Income	68	100.0	0.498	1.18	0.147	1.42
	Home Children	62	100.0	0.327	0.697	0.119	1.30
	Day Care Children	57	100.0	0.426	1.14	0.143	1.26
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	108	59.3	0.048	0.080	0.032	0.711
	Urban	92	65.2	0.051	0.086	0.033	0.754
	Rural	16	25.0	--	--	--	--
	Low Income	35	74.3	0.077	0.131	0.040	0.991
	Mid/High Income	62	51.6	0.034	0.028	0.029	0.526
	Home Children	58	53.4	0.035	0.035	0.029	0.522
	Day Care Children	50	66.0	0.062	0.109	0.036	0.875
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	100.0	1.64	4.09	0.571	1.28
	Urban	102	100.0	1.83	4.37	0.677	1.22
	Rural	17	100.0	0.494	1.07	0.205	1.14
	Low Income	38	100.0	1.02	1.83	0.494	1.10
	Mid/High Income	68	100.0	2.18	5.18	0.643	1.42
	Home Children	62	100.0	1.43	3.05	0.523	1.30
	Day Care Children	57	100.0	1.87	5.00	0.628	1.26

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-12b. Chrysene (218-01-9): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	108	<MDL	<MDL	0.769	1.25	4.73	20.9
	Urban	92	<MDL	<MDL	0.879	1.31	5.70	20.9
	Rural	16	<MDL	<MDL	<MDL	<MDL	1.47	1.47
	Low Income	35	<MDL	<MDL	0.907	2.11	8.02	20.9
	Mid/High Income	62	<MDL	<MDL	0.746	1.09	2.17	5.70
	Home Children	58	<MDL	<MDL	0.757	1.01	4.40	6.55
	Day Care Children	50	<MDL	<MDL	0.953	1.86	7.25	20.9
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	1.62	7.99	18.0	32.5	319	980
	Urban	102	2.02	9.84	21.7	41.2	319	980
	Rural	17	1.62	3.77	5.21	9.43	170	170
	Low Income	38	1.86	7.99	14.0	31.6	121	373
	Mid/High Income	68	1.62	8.22	20.7	33.2	386	980
	Home Children	62	1.62	7.07	16.6	26.8	189	439
	Day Care Children	57	2.99	9.31	22.0	33.2	373	980
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	108	<MDL	<MDL	3.37	5.46	20.7	91.8
	Urban	92	<MDL	<MDL	3.85	5.74	25.0	91.8
	Rural	16	<MDL	<MDL	<MDL	<MDL	6.44	6.44
	Low Income	35	<MDL	<MDL	3.97	9.24	35.1	91.8
	Mid/High Income	62	<MDL	<MDL	3.27	4.76	9.49	25.0
	Home Children	58	<MDL	<MDL	3.32	4.42	19.3	28.7
	Day Care Children	50	<MDL	<MDL	4.18	8.13	31.7	91.8
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	7.10	35.0	78.9	142	1,400	4,290
	Urban	102	8.85	43.1	94.9	180	1,400	4,290
	Rural	17	7.10	16.5	22.8	41.3	746	746
	Low Income	38	8.16	35.0	61.2	138	528	1,630
	Mid/High Income	68	7.10	36.0	90.8	145	1,690	4,290
	Home Children	62	7.10	31.0	72.9	117	827	1,920
	Day Care Children	57	13.1	40.8	96.4	145	1,630	4,290
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	108	<MDL	<MDL	0.006	0.009	0.030	0.160
	Urban	92	<MDL	<MDL	0.006	0.010	0.039	0.160
	Rural	16	<MDL	<MDL	<MDL	<MDL	0.009	0.009
	Low Income	35	<MDL	<MDL	0.007	0.014	0.070	0.160
	Mid/High Income	62	<MDL	<MDL	0.006	0.008	0.018	0.039
	Home Children	58	<MDL	<MDL	0.006	0.007	0.030	0.052
	Day Care Children	50	<MDL	<MDL	0.006	0.013	0.068	0.160
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	0.011	0.052	0.121	0.241	2.42	7.71
	Urban	102	0.011	0.069	0.141	0.256	2.42	7.71
	Rural	17	0.012	0.023	0.038	0.083	1.04	1.04
	Low Income	38	0.015	0.054	0.087	0.193	0.874	2.42
	Mid/High Income	68	0.011	0.051	0.124	0.277	3.33	7.71
	Home Children	62	0.011	0.049	0.120	0.211	1.33	3.46
	Day Care Children	57	0.016	0.060	0.121	0.256	2.42	7.71
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	108	<MDL	<MDL	0.027	0.041	0.133	0.702
	Urban	92	<MDL	<MDL	0.028	0.043	0.170	0.702
	Rural	16	<MDL	<MDL	<MDL	<MDL	0.041	0.041
	Low Income	35	<MDL	<MDL	0.029	0.059	0.304	0.702
	Mid/High Income	62	<MDL	<MDL	0.025	0.037	0.080	0.170
	Home Children	58	<MDL	<MDL	0.026	0.031	0.133	0.226
	Day Care Children	50	<MDL	<MDL	0.028	0.055	0.296	0.702
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	0.050	0.226	0.528	1.06	10.6	33.8
	Urban	102	0.050	0.301	0.617	1.12	10.6	33.8
	Rural	17	0.054	0.100	0.165	0.364	4.57	4.57
	Low Income	38	0.067	0.235	0.380	0.845	3.83	10.6
	Mid/High Income	68	0.050	0.223	0.544	1.21	14.6	33.8
	Home Children	62	0.050	0.213	0.526	0.926	5.84	15.2
	Day Care Children	57	0.072	0.262	0.528	1.12	10.6	33.8

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-13a. Cyfluthrin (68359-37-5): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	123	1.6	--	--	--	--
	Urban	106	1.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	71	1.4	--	--	--	--
	Home Children	67	0.0	--	--	--	--
	Day Care Children	56	3.6	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	79.8	7.63	11.3	3.47	1.34
	Urban	103	82.5	8.47	11.9	4.05	1.31
	Rural	16	62.5	2.26	2.96	1.28	1.06
	Low Income	38	86.8	7.53	7.59	4.27	1.23
	Mid/High Income	69	79.7	8.11	13.6	3.26	1.38
	Home Children	63	82.5	7.67	11.1	3.65	1.28
	Day Care Children	56	76.8	7.59	11.6	3.28	1.41
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	123	1.6	--	--	--	--
	Urban	106	1.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	71	1.4	--	--	--	--
	Home Children	67	0.0	--	--	--	--
	Day Care Children	56	3.6	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	79.8	17.6	26.0	7.99	1.34
	Urban	103	82.5	19.5	27.3	9.33	1.31
	Rural	16	62.5	5.20	6.81	2.96	1.06
	Low Income	38	86.8	17.3	17.5	9.82	1.23
	Mid/High Income	69	79.7	18.7	31.2	7.51	1.38
	Home Children	63	82.5	17.7	25.6	8.40	1.28
	Day Care Children	56	76.8	17.5	26.6	7.56	1.41
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	123	1.6	--	--	--	--
	Urban	106	1.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	71	1.4	--	--	--	--
	Home Children	67	0.0	--	--	--	--
	Day Care Children	56	3.6	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	79.8	0.051	0.078	0.024	1.32
	Urban	103	82.5	0.056	0.082	0.028	1.28
	Rural	16	62.5	0.016	0.020	0.008	1.14
	Low Income	38	86.8	0.049	0.052	0.028	1.22
	Mid/High Income	69	79.7	0.054	0.094	0.023	1.35
	Home Children	63	82.5	0.055	0.090	0.026	1.30
	Day Care Children	56	76.8	0.046	0.061	0.022	1.36
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	123	1.6	--	--	--	--
	Urban	106	1.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	71	1.4	--	--	--	--
	Home Children	67	0.0	--	--	--	--
	Day Care Children	56	3.6	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	79.8	0.117	0.179	0.054	1.32
	Urban	103	82.5	0.130	0.188	0.064	1.28
	Rural	16	62.5	0.036	0.045	0.019	1.14
	Low Income	38	86.8	0.113	0.119	0.065	1.22
	Mid/High Income	69	79.7	0.125	0.215	0.052	1.35
	Home Children	63	82.5	0.127	0.207	0.059	1.30
	Day Care Children	56	76.8	0.106	0.141	0.050	1.36

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-13b. Cyfluthrin (68359-37-5): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	123	<MDL	<MDL	<MDL	<MDL	<MDL	29.5
	Urban	106	<MDL	<MDL	<MDL	<MDL	<MDL	29.5
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	8.90
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	29.5
	Home Children	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	29.5
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	<MDL	1.13	4.41	9.44	30.7	75.0
	Urban	103	<MDL	1.46	5.06	10.1	30.7	75.0
	Rural	16	<MDL	<MDL	1.28	2.34	11.9	11.9
	Low Income	38	<MDL	1.90	5.55	10.8	22.2	37.6
	Mid/High Income	69	<MDL	1.13	3.53	8.32	31.3	75.0
	Home Children	63	<MDL	1.46	3.97	9.85	30.7	70.8
	Day Care Children	56	<MDL	0.798	5.11	8.91	23.3	75.0
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	123	<MDL	<MDL	<MDL	<MDL	<MDL	68.0
	Urban	106	<MDL	<MDL	<MDL	<MDL	<MDL	68.0
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	20.5
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	68.0
	Home Children	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	68.0
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	<MDL	2.60	10.2	21.7	70.7	173
	Urban	103	<MDL	3.37	11.7	23.3	70.7	173
	Rural	16	<MDL	<MDL	2.94	5.39	27.3	27.3
	Low Income	38	<MDL	4.37	12.8	24.9	51.0	86.5
	Mid/High Income	69	<MDL	2.60	8.12	19.2	72.0	173
	Home Children	63	<MDL	3.37	9.14	22.7	70.7	163
	Day Care Children	56	<MDL	1.84	11.8	20.5	53.6	173
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	123	<MDL	<MDL	<MDL	<MDL	<MDL	0.114
	Urban	106	<MDL	<MDL	<MDL	<MDL	<MDL	0.114
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	0.078
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	0.114
	Home Children	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.114
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	<MDL	0.007	0.028	0.060	0.180	0.634
	Urban	103	<MDL	0.012	0.033	0.065	0.180	0.634
	Rural	16	<MDL	<MDL	0.008	0.018	0.073	0.073
	Low Income	38	<MDL	0.014	0.035	0.065	0.144	0.272
	Mid/High Income	69	<MDL	0.007	0.023	0.056	0.183	0.634
	Home Children	63	<MDL	0.012	0.026	0.063	0.180	0.634
	Day Care Children	56	<MDL	0.006	0.033	0.058	0.141	0.344
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	123	<MDL	<MDL	<MDL	<MDL	<MDL	0.262
	Urban	106	<MDL	<MDL	<MDL	<MDL	<MDL	0.262
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	0.179
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	0.262
	Home Children	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.262
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	<MDL	0.017	0.063	0.139	0.415	1.46
	Urban	103	<MDL	0.028	0.077	0.150	0.415	1.46
	Rural	16	<MDL	<MDL	0.018	0.041	0.167	0.167
	Low Income	38	<MDL	0.033	0.081	0.150	0.331	0.627
	Mid/High Income	69	<MDL	0.016	0.053	0.129	0.422	1.46
	Home Children	63	<MDL	0.028	0.061	0.145	0.415	1.46
	Day Care Children	56	<MDL	0.013	0.076	0.133	0.324	0.793

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-14a. Diazinon (333-41-5): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	99.2	78.0	274	15.4	1.33
	Urban	108	99.1	88.2	294	16.1	1.41
	Rural	17	100.0	13.1	5.75	11.6	0.565
	Low Income	39	100.0	93.6	228	20.9	1.45
	Mid/High Income	73	98.6	42.0	183	11.3	1.09
	Home Children	69	98.6	82.3	326	13.8	1.36
	Day Care Children	56	100.0	72.7	195	17.7	1.30
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	97.5	31.5	192	0.806	1.97
	Urban	103	97.1	36.7	207	0.946	2.06
	Rural	17	100.0	0.437	0.412	0.307	0.859
	Low Income	38	97.4	17.0	80.8	1.14	1.90
	Mid/High Income	69	98.6	19.4	136	0.643	1.78
	Home Children	63	98.4	48.9	257	0.769	2.08
	Day Care Children	57	96.5	12.4	66.2	0.850	1.86
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	99.2	256	901	50.7	1.33
	Urban	108	99.1	290	965	53.0	1.41
	Rural	17	100.0	43.1	18.9	38.2	0.565
	Low Income	39	100.0	308	749	68.5	1.45
	Mid/High Income	73	98.6	138	601	37.2	1.09
	Home Children	69	98.6	271	1,070	45.4	1.36
	Day Care Children	56	100.0	239	642	58.1	1.30
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	97.5	104	631	2.65	1.97
	Urban	103	97.1	120	680	3.11	2.06
	Rural	17	100.0	1.44	1.35	1.01	0.859
	Low Income	38	97.4	55.8	266	3.75	1.90
	Mid/High Income	69	98.6	63.6	447	2.11	1.78
	Home Children	63	98.4	161	845	2.53	2.08
	Day Care Children	57	96.5	40.6	217	2.79	1.86
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	99.2	0.544	1.97	0.105	1.36
	Urban	108	99.1	0.616	2.11	0.110	1.44
	Rural	17	100.0	0.089	0.046	0.078	0.573
	Low Income	39	100.0	0.629	1.51	0.140	1.50
	Mid/High Income	73	98.6	0.278	1.12	0.078	1.10
	Home Children	69	98.6	0.577	2.38	0.097	1.35
	Day Care Children	56	100.0	0.503	1.32	0.116	1.37
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	97.5	0.224	1.44	0.005	1.98
	Urban	103	97.1	0.260	1.55	0.006	2.07
	Rural	17	100.0	0.003	0.003	0.002	0.822
	Low Income	38	97.4	0.087	0.360	0.008	1.88
	Mid/High Income	69	98.6	0.136	0.960	0.004	1.80
	Home Children	63	98.4	0.366	1.96	0.005	2.06
	Day Care Children	57	96.5	0.067	0.296	0.006	1.90
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	99.2	1.79	6.48	0.345	1.36
	Urban	108	99.1	2.02	6.95	0.362	1.44
	Rural	17	100.0	0.292	0.150	0.255	0.573
	Low Income	39	100.0	2.07	4.97	0.461	1.50
	Mid/High Income	73	98.6	0.914	3.67	0.256	1.10
	Home Children	69	98.6	1.90	7.83	0.318	1.35
	Day Care Children	56	100.0	1.65	4.34	0.382	1.37
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	97.5	0.735	4.73	0.018	1.98
	Urban	103	97.1	0.855	5.10	0.021	2.07
	Rural	17	100.0	0.009	0.008	0.007	0.822
	Low Income	38	97.4	0.284	1.18	0.025	1.88
	Mid/High Income	69	98.6	0.448	3.16	0.015	1.80
	Home Children	63	98.4	1.20	6.45	0.018	2.06
	Day Care Children	57	96.5	0.219	0.974	0.018	1.90

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-14b. Diazinon (333-41-5): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	7.37	11.1	20.7	308	2,240
	Urban	108	<MDL	7.34	10.6	21.9	390	2,240
	Rural	17	2.32	10.0	12.9	14.8	22.8	22.8
	Low Income	39	3.48	8.48	14.8	25.0	874	974
	Mid/High Income	73	<MDL	6.61	8.95	13.9	117	1,530
	Home Children	69	<MDL	6.69	10.2	19.7	297	2,240
	Day Care Children	56	3.48	7.65	12.8	20.8	658	974
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	<MDL	0.219	0.485	1.74	42.8	1,720
	Urban	103	<MDL	0.223	0.534	2.48	48.1	1,720
	Rural	17	0.087	0.141	0.344	0.517	1.64	1.64
	Low Income	38	<MDL	0.319	0.808	3.14	48.1	499
	Mid/High Income	69	<MDL	0.197	0.398	0.875	24.7	1,130
	Home Children	63	<MDL	0.192	0.433	1.87	48.7	1,720
	Day Care Children	57	<MDL	0.239	0.579	1.69	26.2	499
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	24.2	36.6	67.9	1,010	7,360
	Urban	108	<MDL	24.1	34.8	72.0	1,280	7,360
	Rural	17	7.61	32.9	42.2	48.5	75.0	75.0
	Low Income	39	11.4	27.9	48.5	82.3	2,870	3,200
	Mid/High Income	73	<MDL	21.7	29.4	45.7	384	5,020
	Home Children	69	<MDL	22.0	33.5	64.6	976	7,360
	Day Care Children	56	11.4	25.1	42.2	68.4	2,160	3,200
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	<MDL	0.719	1.59	5.73	141	5,660
	Urban	103	<MDL	0.733	1.76	8.13	158	5,660
	Rural	17	0.286	0.462	1.13	1.70	5.40	5.40
	Low Income	38	<MDL	1.05	2.65	10.3	158	1,640
	Mid/High Income	69	<MDL	0.646	1.31	2.88	81.0	3,720
	Home Children	63	<MDL	0.632	1.42	6.13	160	5,660
	Day Care Children	57	<MDL	0.785	1.90	5.55	86.2	1,640
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	0.050	0.076	0.153	2.61	17.6
	Urban	108	<MDL	0.050	0.073	0.161	2.96	17.6
	Rural	17	0.018	0.057	0.085	0.103	0.198	0.198
	Low Income	39	0.013	0.052	0.094	0.214	6.04	6.33
	Mid/High Income	73	<MDL	0.046	0.067	0.101	0.628	9.09
	Home Children	69	<MDL	0.047	0.073	0.133	1.92	17.6
	Day Care Children	56	0.013	0.052	0.077	0.162	4.29	6.33
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	<MDL	0.002	0.003	0.012	0.266	13.5
	Urban	103	<MDL	0.002	0.004	0.016	0.315	13.5
	Rural	17	0.001	0.001	0.002	0.003	0.009	0.009
	Low Income	38	<MDL	0.002	0.007	0.017	0.441	2.20
	Mid/High Income	69	<MDL	0.002	0.003	0.007	0.203	7.99
	Home Children	63	<MDL	0.001	0.003	0.013	0.315	13.5
	Day Care Children	57	<MDL	0.002	0.003	0.012	0.203	2.20
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	0.166	0.251	0.504	8.57	57.9
	Urban	108	<MDL	0.163	0.239	0.528	9.73	57.9
	Rural	17	0.058	0.188	0.280	0.339	0.651	0.651
	Low Income	39	0.042	0.170	0.310	0.705	19.8	20.8
	Mid/High Income	73	<MDL	0.152	0.220	0.332	2.06	29.9
	Home Children	69	<MDL	0.154	0.241	0.436	6.32	57.9
	Day Care Children	56	0.042	0.170	0.252	0.534	14.1	20.8
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	<MDL	0.005	0.010	0.039	0.875	44.5
	Urban	103	<MDL	0.005	0.012	0.054	1.04	44.5
	Rural	17	0.002	0.003	0.008	0.011	0.029	0.029
	Low Income	38	<MDL	0.006	0.023	0.055	1.45	7.22
	Mid/High Income	69	<MDL	0.005	0.009	0.024	0.668	26.2
	Home Children	63	<MDL	0.005	0.010	0.042	1.04	44.5
	Day Care Children	57	<MDL	0.006	0.010	0.039	0.668	7.22

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-15a. Dibenzo[a,h]anthracene (53-70-3): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	56	1.8	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	100.0	9.82	21.4	3.93	1.24
	Urban	102	100.0	10.7	22.6	4.60	1.16
	Rural	17	100.0	4.47	10.4	1.55	1.30
	Low Income	38	100.0	6.71	9.38	3.55	1.11
	Mid/High Income	68	100.0	12.6	27.1	4.27	1.37
	Home Children	62	100.0	8.09	15.1	3.44	1.24
	Day Care Children	57	100.0	11.7	26.6	4.56	1.22
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	56	1.8	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	100.0	35.3	76.8	14.1	1.24
	Urban	102	100.0	38.5	81.2	16.5	1.16
	Rural	17	100.0	16.1	37.4	5.57	1.30
	Low Income	38	100.0	24.1	33.7	12.8	1.11
	Mid/High Income	68	100.0	45.2	97.4	15.3	1.37
	Home Children	62	100.0	29.1	54.2	12.3	1.24
	Day Care Children	57	100.0	42.0	95.5	16.4	1.22
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	56	1.8	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	100.0	0.069	0.157	0.027	1.26
	Urban	102	100.0	0.076	0.167	0.031	1.19
	Rural	17	100.0	0.028	0.063	0.010	1.26
	Low Income	38	100.0	0.045	0.063	0.024	1.10
	Mid/High Income	68	100.0	0.090	0.200	0.030	1.40
	Home Children	62	100.0	0.062	0.126	0.024	1.28
	Day Care Children	57	100.0	0.077	0.186	0.030	1.23
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	39	2.6	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	56	1.8	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	100.0	0.248	0.564	0.096	1.26
	Urban	102	100.0	0.272	0.599	0.113	1.19
	Rural	17	100.0	0.101	0.228	0.037	1.26
	Low Income	38	100.0	0.161	0.227	0.085	1.10
	Mid/High Income	68	100.0	0.323	0.719	0.106	1.40
	Home Children	62	100.0	0.222	0.454	0.087	1.28
	Day Care Children	57	100.0	0.276	0.667	0.108	1.23

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-15b. Dibenzo[a,h]anthracene (53-70-3): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	3.18
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	3.18
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	3.18
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	3.18
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	0.176	1.72	3.87	6.96	48.6	165
	Urban	102	0.318	2.10	4.56	8.25	48.6	165
	Rural	17	0.176	0.534	1.24	2.42	44.0	44.0
	Low Income	38	0.534	1.66	2.75	8.25	27.6	48.6
	Mid/High Income	68	0.176	1.85	4.44	7.28	75.0	165
	Home Children	62	0.176	1.72	3.44	6.04	26.5	78.3
	Day Care Children	57	0.318	1.91	4.81	8.32	48.6	165
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	11.4
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	11.4
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	11.4
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	11.4
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	0.633	6.19	13.9	25.0	175	592
	Urban	102	1.14	7.55	16.4	29.6	175	592
	Rural	17	0.633	1.92	4.44	8.68	158	158
	Low Income	38	1.92	5.96	9.88	29.6	99.1	175
	Mid/High Income	68	0.633	6.66	16.0	26.1	269	592
	Home Children	62	0.633	6.19	12.4	21.7	95.3	281
	Day Care Children	57	1.14	6.85	17.3	29.9	175	592
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.024
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	0.024
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	0.024
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.024
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	0.001	0.012	0.027	0.050	0.315	1.30
	Urban	102	0.002	0.014	0.029	0.054	0.315	1.30
	Rural	17	0.001	0.005	0.009	0.021	0.270	0.270
	Low Income	38	0.003	0.012	0.020	0.048	0.200	0.315
	Mid/High Income	68	0.001	0.012	0.028	0.058	0.515	1.30
	Home Children	62	0.001	0.009	0.022	0.041	0.214	0.701
	Day Care Children	57	0.002	0.012	0.029	0.054	0.315	1.30
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.087
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	0.087
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	39	<MDL	<MDL	<MDL	<MDL	<MDL	0.087
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	56	<MDL	<MDL	<MDL	<MDL	<MDL	0.087
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	0.005	0.043	0.096	0.178	1.13	4.66
	Urban	102	0.006	0.052	0.104	0.194	1.13	4.66
	Rural	17	0.005	0.017	0.033	0.076	0.968	0.968
	Low Income	38	0.009	0.044	0.071	0.174	0.718	1.13
	Mid/High Income	68	0.005	0.043	0.100	0.209	1.85	4.66
	Home Children	62	0.005	0.033	0.079	0.146	0.770	2.52
	Day Care Children	57	0.006	0.044	0.104	0.194	1.13	4.66

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-16a. Di-*n*-butylphthalate (84-74-2): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	124	97.6	2,890	1,370	2,570	0.508
	Urban	107	97.2	2,800	1,350	2,480	0.517
	Rural	17	100.0	3,500	1,390	3,260	0.380
	Low Income	38	92.1	2,950	1,580	2,570	0.546
	Mid/High Income	73	100.0	2,750	1,170	2,480	0.484
	Home Children	69	100.0	2,750	1,310	2,420	0.550
	Day Care Children	55	94.5	3,070	1,440	2,790	0.442
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	100.0	165	136	127	0.716
	Urban	100	100.0	173	140	136	0.703
	Rural	16	100.0	109	85.4	86.4	0.698
	Low Income	38	100.0	176	126	137	0.751
	Mid/High Income	66	100.0	155	145	120	0.689
	Home Children	61	100.0	169	129	130	0.750
	Day Care Children	55	100.0	160	144	125	0.683
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	124	97.6	10,400	4,930	9,250	0.508
	Urban	107	97.2	10,000	4,850	8,900	0.517
	Rural	17	100.0	12,600	4,990	11,700	0.380
	Low Income	38	92.1	10,600	5,670	9,230	0.546
	Mid/High Income	73	100.0	9,890	4,220	8,920	0.484
	Home Children	69	100.0	9,890	4,690	8,680	0.550
	Day Care Children	55	94.5	11,000	5,190	10,000	0.442
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	100.0	591	488	458	0.716
	Urban	100	100.0	623	504	487	0.703
	Rural	16	100.0	393	307	310	0.698
	Low Income	38	100.0	633	454	493	0.751
	Mid/High Income	66	100.0	558	520	431	0.689
	Home Children	61	100.0	606	462	466	0.750
	Day Care Children	55	100.0	575	518	450	0.683
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	97.6	20.4	11.5	17.5	0.575
	Urban	107	97.2	19.8	11.6	16.9	0.588
	Rural	17	100.0	23.9	10.6	21.8	0.443
	Low Income	38	92.1	21.3	15.3	17.3	0.677
	Mid/High Income	73	100.0	19.4	9.20	17.1	0.534
	Home Children	69	100.0	19.5	9.50	16.9	0.578
	Day Care Children	55	94.5	21.5	13.6	18.3	0.573
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	100.0	1.17	1.03	0.872	0.764
	Urban	100	100.0	1.24	1.07	0.933	0.753
	Rural	16	100.0	0.734	0.641	0.569	0.711
	Low Income	38	100.0	1.24	1.06	0.910	0.805
	Mid/High Income	66	100.0	1.12	1.04	0.843	0.728
	Home Children	61	100.0	1.22	1.04	0.914	0.762
	Day Care Children	55	100.0	1.12	1.02	0.827	0.769
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	97.6	73.2	41.2	63.0	0.575
	Urban	107	97.2	71.2	41.5	60.9	0.588
	Rural	17	100.0	85.8	38.1	78.3	0.443
	Low Income	38	92.1	76.4	54.9	62.1	0.677
	Mid/High Income	73	100.0	69.7	33.1	61.4	0.534
	Home Children	69	100.0	70.1	34.1	60.8	0.578
	Day Care Children	55	94.5	77.1	48.8	65.9	0.573
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	100.0	4.20	3.71	3.13	0.764
	Urban	100	100.0	4.45	3.83	3.35	0.753
	Rural	16	100.0	2.64	2.30	2.04	0.711
	Low Income	38	100.0	4.45	3.82	3.27	0.805
	Mid/High Income	66	100.0	4.01	3.75	3.03	0.728
	Home Children	61	100.0	4.38	3.75	3.29	0.762
	Day Care Children	55	100.0	4.01	3.68	2.97	0.769

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-16b. Di-*n*-butylphthalate (84-74-2): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	124	<MDL	1,860	2,730	3,640	5,190	8,430
	Urban	107	<MDL	1,790	2,700	3,610	5,170	8,430
	Rural	17	1,670	2,640	3,190	4,280	7,080	7,080
	Low Income	38	<MDL	1,920	2,780	3,650	6,300	8,430
	Mid/High Income	73	459	1,830	2,660	3,540	4,930	6,220
	Home Children	69	459	1,750	2,700	3,540	5,170	6,220
	Day Care Children	55	<MDL	1,990	2,740	3,700	6,300	8,430
Potential Exposure via Indirect Ingestion (ng/day)	Overall	116	19.7	83.6	127	188	482	970
	Urban	100	19.7	90.8	134	206	489	970
	Rural	16	26.7	56.3	91.3	115	317	317
	Low Income	38	19.7	92.1	136	223	497	505
	Mid/High Income	66	23.6	77.2	124	174	452	970
	Home Children	61	23.6	85.1	132	186	482	543
	Day Care Children	55	19.7	82.2	113	190	360	970
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	124	<MDL	6,670	9,810	13,100	18,700	30,300
	Urban	107	<MDL	6,420	9,720	13,000	18,600	30,300
	Rural	17	5,990	9,500	11,500	15,400	25,400	25,400
	Low Income	38	<MDL	6,900	10,000	13,100	22,600	30,300
	Mid/High Income	73	1,650	6,560	9,550	12,700	17,700	22,400
	Home Children	69	1,650	6,300	9,680	12,700	18,600	22,400
	Day Care Children	55	<MDL	7,130	9,860	13,300	22,600	30,300
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	116	70.9	301	458	674	1,730	3,490
	Urban	100	70.9	326	481	741	1,760	3,490
	Rural	16	95.9	202	328	412	1,140	1,140
	Low Income	38	70.9	331	488	801	1,790	1,820
	Mid/High Income	66	84.8	277	445	624	1,620	3,490
	Home Children	61	84.8	306	473	668	1,730	1,950
	Day Care Children	55	70.9	295	407	681	1,290	3,490
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	124	<MDL	12.8	18.7	27.0	37.0	92.8
	Urban	107	<MDL	12.3	18.2	26.5	36.6	92.8
	Rural	17	10.2	15.0	20.1	31.4	44.5	44.5
	Low Income	38	<MDL	12.4	19.0	27.7	41.3	92.8
	Mid/High Income	73	4.39	12.4	17.9	26.5	36.1	42.0
	Home Children	69	2.93	12.3	18.9	26.5	36.1	41.3
	Day Care Children	55	<MDL	13.2	18.4	27.1	42.0	92.8
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	116	0.126	0.534	0.856	1.32	3.08	6.04
	Urban	100	0.126	0.606	0.945	1.33	3.15	6.04
	Rural	16	0.175	0.380	0.551	0.792	2.79	2.79
	Low Income	38	0.126	0.575	0.863	1.59	3.71	4.91
	Mid/High Income	66	0.173	0.495	0.811	1.22	2.92	6.04
	Home Children	61	0.173	0.629	0.940	1.33	3.07	5.34
	Day Care Children	55	0.126	0.495	0.807	1.32	3.08	6.04
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	124	<MDL	46.0	67.1	97.1	133	334
	Urban	107	<MDL	44.2	65.5	95.3	131	334
	Rural	17	36.7	53.8	72.1	113	160	160
	Low Income	38	<MDL	44.7	68.4	99.4	148	334
	Mid/High Income	73	15.8	44.5	64.2	95.3	130	151
	Home Children	69	10.5	44.2	68.1	95.3	130	148
	Day Care Children	55	<MDL	47.3	66.1	97.5	151	334
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	116	0.454	1.92	3.08	4.73	11.0	21.7
	Urban	100	0.454	2.18	3.39	4.78	11.3	21.7
	Rural	16	0.629	1.37	1.98	2.85	10.0	10.0
	Low Income	38	0.454	2.07	3.10	5.72	13.3	17.6
	Mid/High Income	66	0.623	1.78	2.91	4.39	10.5	21.7
	Home Children	61	0.623	2.26	3.38	4.78	11.0	19.2
	Day Care Children	55	0.454	1.78	2.90	4.73	11.0	21.7

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-17a. *p,p'*-DDE (72-55-9): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	36.0	--	--	--	--
	Urban	108	36.1	--	--	--	--
	Rural	17	35.3	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	37.0	--	--	--	--
	Home Children	69	36.2	--	--	--	--
	Day Care Children	56	35.7	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	63.3	0.340	0.542	0.165	1.19
	Urban	103	62.1	0.370	0.577	0.178	1.22
	Rural	17	70.6	0.153	0.141	0.104	0.918
	Low Income	38	68.4	0.378	0.412	0.198	1.25
	Mid/High Income	69	63.8	0.269	0.309	0.157	1.05
	Home Children	63	63.5	0.379	0.660	0.181	1.19
	Day Care Children	57	63.2	0.295	0.374	0.149	1.20
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	36.0	--	--	--	--
	Urban	108	36.1	--	--	--	--
	Rural	17	35.3	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	37.0	--	--	--	--
	Home Children	69	36.2	--	--	--	--
	Day Care Children	56	35.7	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	63.3	1.07	1.71	0.519	1.19
	Urban	103	62.1	1.16	1.82	0.560	1.22
	Rural	17	70.6	0.480	0.442	0.326	0.918
	Low Income	38	68.4	1.19	1.30	0.621	1.25
	Mid/High Income	69	63.8	0.846	0.971	0.494	1.05
	Home Children	63	63.5	1.19	2.07	0.570	1.19
	Day Care Children	57	63.2	0.929	1.18	0.467	1.20
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	36.0	--	--	--	--
	Urban	108	36.1	--	--	--	--
	Rural	17	35.3	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	37.0	--	--	--	--
	Home Children	69	36.2	--	--	--	--
	Day Care Children	56	35.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	63.3	0.002	0.003	0.001	1.19
	Urban	103	62.1	0.002	0.004	0.001	1.21
	Rural	17	70.6	0.001	0.001	0.001	0.980
	Low Income	38	68.4	0.002	0.002	0.001	1.19
	Mid/High Income	69	63.8	0.002	0.002	0.001	1.09
	Home Children	63	63.5	0.003	0.004	0.001	1.16
	Day Care Children	57	63.2	0.002	0.002	0.001	1.22
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	36.0	--	--	--	--
	Urban	108	36.1	--	--	--	--
	Rural	17	35.3	--	--	--	--
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	37.0	--	--	--	--
	Home Children	69	36.2	--	--	--	--
	Day Care Children	56	35.7	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	63.3	0.007	0.011	0.004	1.19
	Urban	103	62.1	0.008	0.011	0.004	1.21
	Rural	17	70.6	0.003	0.003	0.002	0.980
	Low Income	38	68.4	0.007	0.007	0.004	1.19
	Mid/High Income	69	63.8	0.006	0.008	0.003	1.09
	Home Children	63	63.5	0.008	0.013	0.004	1.16
	Day Care Children	57	63.2	0.006	0.007	0.003	1.22

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-17b. *p,p'*-DDE (72-55-9): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	1.43	4.27	22.2
	Urban	108	<MDL	<MDL	<MDL	1.45	4.27	22.2
	Rural	17	<MDL	<MDL	<MDL	0.967	5.70	5.70
	Low Income	39	<MDL	<MDL	<MDL	1.92	3.49	22.2
	Mid/High Income	73	<MDL	<MDL	<MDL	1.35	4.50	5.78
	Home Children	69	<MDL	<MDL	<MDL	1.80	5.70	22.2
	Day Care Children	56	<MDL	<MDL	<MDL	1.10	2.66	3.49
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	<MDL	<MDL	0.174	0.400	1.19	4.76
	Urban	103	<MDL	<MDL	0.177	0.440	1.19	4.76
	Rural	17	<MDL	<MDL	0.071	0.218	0.559	0.559
	Low Income	38	<MDL	<MDL	0.269	0.494	1.27	1.79
	Mid/High Income	69	<MDL	<MDL	0.175	0.336	1.01	1.54
	Home Children	63	<MDL	<MDL	0.211	0.380	1.18	4.76
	Day Care Children	57	<MDL	<MDL	0.156	0.404	1.19	1.79
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	4.48	13.4	69.7
	Urban	108	<MDL	<MDL	<MDL	4.57	13.4	69.7
	Rural	17	<MDL	<MDL	<MDL	3.04	17.9	17.9
	Low Income	39	<MDL	<MDL	<MDL	6.04	11.0	69.7
	Mid/High Income	73	<MDL	<MDL	<MDL	4.26	14.2	18.2
	Home Children	69	<MDL	<MDL	<MDL	5.66	17.9	69.7
	Day Care Children	56	<MDL	<MDL	<MDL	3.47	8.38	11.0
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	<MDL	<MDL	0.546	1.26	3.73	15.0
	Urban	103	<MDL	<MDL	0.556	1.38	3.75	15.0
	Rural	17	<MDL	<MDL	0.222	0.687	1.76	1.76
	Low Income	38	<MDL	<MDL	0.847	1.55	4.00	5.63
	Mid/High Income	69	<MDL	<MDL	0.551	1.06	3.18	4.86
	Home Children	63	<MDL	<MDL	0.664	1.19	3.72	15.0
	Day Care Children	57	<MDL	<MDL	0.491	1.27	3.75	5.63
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.010	0.032	0.136
	Urban	108	<MDL	<MDL	<MDL	0.010	0.032	0.136
	Rural	17	<MDL	<MDL	<MDL	0.007	0.043	0.043
	Low Income	39	<MDL	<MDL	<MDL	0.013	0.038	0.136
	Mid/High Income	73	<MDL	<MDL	<MDL	0.010	0.032	0.043
	Home Children	69	<MDL	<MDL	<MDL	0.011	0.033	0.136
	Day Care Children	56	<MDL	<MDL	<MDL	0.008	0.021	0.038
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	<MDL	<MDL	0.001	0.003	0.008	0.027
	Urban	103	<MDL	<MDL	0.001	0.003	0.008	0.027
	Rural	17	<MDL	<MDL	0.001	0.001	0.004	0.004
	Low Income	38	<MDL	<MDL	0.001	0.004	0.008	0.008
	Mid/High Income	69	<MDL	<MDL	0.001	0.002	0.007	0.014
	Home Children	63	<MDL	<MDL	0.001	0.002	0.008	0.027
	Day Care Children	57	<MDL	<MDL	0.001	0.003	0.008	0.010
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.031	0.102	0.426
	Urban	108	<MDL	<MDL	<MDL	0.031	0.102	0.426
	Rural	17	<MDL	<MDL	<MDL	0.022	0.136	0.136
	Low Income	39	<MDL	<MDL	<MDL	0.041	0.121	0.426
	Mid/High Income	73	<MDL	<MDL	<MDL	0.030	0.102	0.136
	Home Children	69	<MDL	<MDL	<MDL	0.034	0.105	0.426
	Day Care Children	56	<MDL	<MDL	<MDL	0.025	0.065	0.121
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	<MDL	<MDL	0.004	0.009	0.025	0.086
	Urban	103	<MDL	<MDL	0.004	0.010	0.025	0.086
	Rural	17	<MDL	<MDL	0.002	0.004	0.013	0.013
	Low Income	38	<MDL	<MDL	0.005	0.012	0.024	0.025
	Mid/High Income	69	<MDL	<MDL	0.004	0.007	0.023	0.044
	Home Children	63	<MDL	<MDL	0.004	0.008	0.024	0.086
	Day Care Children	57	<MDL	<MDL	0.002	0.009	0.025	0.032

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-18a. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimates of Potential Exposure in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	112	65.2	4.01	4.07	2.79	0.791
	Urban	99	64.6	3.82	3.94	2.69	0.766
	Rural	13	69.2	5.45	4.92	3.66	0.949
	Low Income	36	52.8	2.79	2.52	2.18	0.635
	Mid/High Income	67	68.7	4.55	4.38	3.13	0.831
	Home Children	63	66.7	5.08	4.65	3.49	0.862
	Day Care Children	49	63.3	2.63	2.65	2.09	0.580
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	48.0	--	--	--	--
	Urban	110	48.2	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	41	48.8	--	--	--	--
	Mid/High Income	73	45.2	--	--	--	--
	Home Children	69	49.3	--	--	--	--
	Day Care Children	58	46.6	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	95.8	13.7	50.4	3.16	1.65
	Urban	103	95.1	14.9	54.0	3.39	1.68
	Rural	16	100.0	5.69	10.3	2.03	1.42
	Low Income	38	89.5	2.67	4.16	1.26	1.41
	Mid/High Income	68	98.5	19.9	65.7	4.89	1.59
	Home Children	62	98.4	17.1	67.2	3.82	1.60
	Day Care Children	57	93.0	10.0	20.3	2.58	1.70
Potential Exposure – Aggregated (ng/day)	Overall	106	99.1	278	393	166	0.935
	Urban	94	98.9	288	413	167	0.958
	Rural	12	100.0	201	167	153	0.759
	Low Income	34	97.1	185	217	122	0.890
	Mid/High Income	63	100.0	331	476	189	0.951
	Home Children	58	98.3	370	487	225	0.908
	Day Care Children	48	100.0	167	187	115	0.835
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	112	65.2	18.1	18.4	12.6	0.791
	Urban	99	64.6	17.3	17.8	12.2	0.766
	Rural	13	69.2	24.6	22.2	16.6	0.949
	Low Income	36	52.8	12.6	11.4	9.87	0.635
	Mid/High Income	67	68.7	20.6	19.8	14.2	0.831
	Home Children	63	66.7	23.0	21.0	15.8	0.862
	Day Care Children	49	63.3	11.9	12.0	9.44	0.580
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	48.0	--	--	--	--
	Urban	110	48.2	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	41	48.8	--	--	--	--
	Mid/High Income	73	45.2	--	--	--	--
	Home Children	69	49.3	--	--	--	--
	Day Care Children	58	46.6	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	95.8	61.9	228	14.3	1.65
	Urban	103	95.1	67.5	244	15.3	1.68
	Rural	16	100.0	25.7	46.8	9.18	1.42
	Low Income	38	89.5	12.1	18.8	5.72	1.41
	Mid/High Income	68	98.5	90.1	297	22.1	1.59
	Home Children	62	98.4	77.1	304	17.3	1.60
	Day Care Children	57	93.0	45.3	91.9	11.7	1.70
Potential Exposure – Aggregated (pmoles/day)	Overall	106	99.1	1,260	1,780	750	0.935
	Urban	94	98.9	1,300	1,870	757	0.958
	Rural	12	100.0	910	757	693	0.759
	Low Income	34	97.1	838	981	550	0.890
	Mid/High Income	63	100.0	1,500	2,150	857	0.951
	Home Children	58	98.3	1,670	2,200	1,020	0.908
	Day Care Children	48	100.0	756	844	518	0.835

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table O-18b. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Potential Exposure in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	112	<MDL	<MDL	1.95	5.63	13.4	19.2
	Urban	99	<MDL	<MDL	1.93	4.51	13.4	19.2
	Rural	13	<MDL	<MDL	3.68	7.20	17.5	17.5
	Low Income	36	<MDL	<MDL	1.54	3.14	7.86	13.1
	Mid/High Income	67	<MDL	<MDL	2.18	7.08	14.3	19.2
	Home Children	63	<MDL	<MDL	2.81	7.47	14.3	19.2
	Day Care Children	49	<MDL	<MDL	1.60	2.35	7.86	16.1
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	<MDL	261	1,110	4,000
	Urban	110	<MDL	<MDL	<MDL	261	1,110	2,530
	Rural	17	<MDL	<MDL	<MDL	255	4,000	4,000
	Low Income	41	<MDL	<MDL	<MDL	223	513	1,160
	Mid/High Income	73	<MDL	<MDL	<MDL	261	1,740	4,000
	Home Children	69	<MDL	<MDL	<MDL	319	1,740	4,000
	Day Care Children	58	<MDL	<MDL	<MDL	172	392	1,160
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	<MDL	1.19	2.90	7.76	49.6	528
	Urban	103	<MDL	1.32	3.19	9.42	49.6	528
	Rural	16	0.162	0.854	1.63	4.42	38.5	38.5
	Low Income	38	<MDL	0.728	1.44	3.31	7.76	24.9
	Mid/High Income	68	<MDL	1.71	4.95	16.3	65.2	528
	Home Children	62	<MDL	1.54	3.89	11.2	43.2	528
	Day Care Children	57	<MDL	1.05	2.22	5.39	49.6	121
Potential Exposure – Aggregated (ng/day)	Overall	106	<MDL	92.5	147	269	1,140	2,540
	Urban	94	<MDL	92.5	147	274	1,160	2,540
	Rural	12	54.9	91.3	125	250	621	621
	Low Income	34	<MDL	58.5	113	230	598	1,160
	Mid/High Income	63	35.6	106	149	299	1,410	2,540
	Home Children	58	<MDL	121	169	332	1,820	2,540
	Day Care Children	48	29.7	57.2	106	206	401	1,160
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	112	<MDL	<MDL	8.82	25.5	60.7	86.6
	Urban	99	<MDL	<MDL	8.75	20.4	60.7	86.6
	Rural	13	<MDL	<MDL	16.6	32.6	79.1	79.1
	Low Income	36	<MDL	<MDL	6.98	14.2	35.6	59.1
	Mid/High Income	67	<MDL	<MDL	9.87	32.0	64.5	86.6
	Home Children	63	<MDL	<MDL	12.7	33.8	64.5	86.6
	Day Care Children	49	<MDL	<MDL	7.25	10.6	35.6	73.0
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	<MDL	1,180	5,010	18,100
	Urban	110	<MDL	<MDL	<MDL	1,180	5,010	11,400
	Rural	17	<MDL	<MDL	<MDL	1,150	18,100	18,100
	Low Income	41	<MDL	<MDL	<MDL	1,010	2,320	5,240
	Mid/High Income	73	<MDL	<MDL	<MDL	1,180	7,890	18,100
	Home Children	69	<MDL	<MDL	<MDL	1,440	7,890	18,100
	Day Care Children	58	<MDL	<MDL	<MDL	779	1,770	5,240
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	<MDL	5.36	13.1	35.1	225	2,390
	Urban	103	<MDL	5.98	14.4	42.6	225	2,390
	Rural	16	0.732	3.86	7.35	20.0	174	174
	Low Income	38	<MDL	3.29	6.52	15.0	35.1	113
	Mid/High Income	68	<MDL	7.75	22.4	73.7	295	2,390
	Home Children	62	<MDL	6.98	17.6	50.6	195	2,390
	Day Care Children	57	<MDL	4.73	10.0	24.4	225	548
Potential Exposure – Aggregated (pmoles/day)	Overall	106	<MDL	419	663	1,220	5,160	11,500
	Urban	94	<MDL	419	665	1,240	5,260	11,500
	Rural	12	248	413	564	1,130	2,810	2,810
	Low Income	34	<MDL	265	512	1,040	2,710	5,260
	Mid/High Income	63	161	479	675	1,350	6,390	11,500
	Home Children	58	<MDL	545	764	1,500	8,240	11,500
	Day Care Children	48	134	259	477	933	1,810	5,260

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table O-18c. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimates of Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	112	65.2	0.028	0.031	0.019	0.848
	Urban	99	64.6	0.027	0.030	0.018	0.838
	Rural	13	69.2	0.036	0.035	0.025	0.912
	Low Income	36	52.8	0.019	0.023	0.014	0.661
	Mid/High Income	67	68.7	0.033	0.034	0.021	0.905
	Home Children	63	66.7	0.036	0.035	0.024	0.887
	Day Care Children	49	63.3	0.018	0.021	0.013	0.661
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	48.0	--	--	--	--
	Urban	110	48.2	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	41	48.8	--	--	--	--
	Mid/High Income	73	45.2	--	--	--	--
	Home Children	69	49.3	--	--	--	--
	Day Care Children	58	46.6	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	95.8	0.098	0.368	0.022	1.68
	Urban	103	95.1	0.107	0.394	0.023	1.71
	Rural	16	100.0	0.037	0.065	0.014	1.42
	Low Income	38	89.5	0.018	0.028	0.008	1.42
	Mid/High Income	68	98.5	0.145	0.479	0.034	1.62
	Home Children	62	98.4	0.122	0.486	0.027	1.62
	Day Care Children	57	93.0	0.072	0.160	0.017	1.73
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	106	99.1	1.97	2.96	1.12	0.975
	Urban	94	98.9	2.04	3.11	1.13	0.997
	Rural	12	100.0	1.42	1.27	1.03	0.813
	Low Income	34	97.1	1.25	1.60	0.793	0.915
	Mid/High Income	63	100.0	2.41	3.58	1.31	1.00
	Home Children	58	98.3	2.69	3.65	1.59	0.942
	Day Care Children	48	100.0	1.10	1.40	0.732	0.844
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	112	65.2	0.128	0.140	0.085	0.848
	Urban	99	64.6	0.123	0.138	0.082	0.838
	Rural	13	69.2	0.164	0.158	0.111	0.912
	Low Income	36	52.8	0.087	0.102	0.064	0.661
	Mid/High Income	67	68.7	0.149	0.153	0.097	0.905
	Home Children	63	66.7	0.164	0.159	0.110	0.887
	Day Care Children	49	63.3	0.081	0.093	0.060	0.661
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	48.0	--	--	--	--
	Urban	110	48.2	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	41	48.8	--	--	--	--
	Mid/High Income	73	45.2	--	--	--	--
	Home Children	69	49.3	--	--	--	--
	Day Care Children	58	46.6	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	95.8	0.443	1.66	0.098	1.68
	Urban	103	95.1	0.486	1.78	0.105	1.71
	Rural	16	100.0	0.167	0.292	0.061	1.42
	Low Income	38	89.5	0.084	0.128	0.038	1.42
	Mid/High Income	68	98.5	0.656	2.17	0.154	1.62
	Home Children	62	98.4	0.551	2.20	0.122	1.62
	Day Care Children	57	93.0	0.325	0.723	0.077	1.73
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	106	99.1	8.93	13.4	5.06	0.975
	Urban	94	98.9	9.25	14.1	5.11	0.997
	Rural	12	100.0	6.40	5.73	4.68	0.813
	Low Income	34	97.1	5.67	7.25	3.59	0.915
	Mid/High Income	63	100.0	10.9	16.2	5.93	1.00
	Home Children	58	98.3	12.2	16.5	7.18	0.942
	Day Care Children	48	100.0	4.98	6.33	3.31	0.844

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-18d. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	112	<MDL	<MDL	0.015	0.035	0.108	0.145
	Urban	99	<MDL	<MDL	0.015	0.033	0.108	0.145
	Rural	13	<MDL	<MDL	0.024	0.052	0.130	0.130
	Low Income	36	<MDL	<MDL	0.011	0.018	0.057	0.133
	Mid/High Income	67	<MDL	<MDL	0.017	0.051	0.121	0.145
	Home Children	63	<MDL	<MDL	0.021	0.051	0.121	0.145
	Day Care Children	49	<MDL	<MDL	0.011	0.017	0.062	0.127
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	<MDL	1.75	8.14	19.2
	Urban	110	<MDL	<MDL	<MDL	1.63	8.14	19.2
	Rural	17	<MDL	<MDL	<MDL	1.97	18.8	18.8
	Low Income	41	<MDL	<MDL	<MDL	1.43	3.85	8.85
	Mid/High Income	73	<MDL	<MDL	<MDL	1.83	12.3	19.2
	Home Children	69	<MDL	<MDL	<MDL	2.34	12.3	19.2
	Day Care Children	58	<MDL	<MDL	<MDL	1.39	3.15	8.85
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	<MDL	0.008	0.021	0.054	0.351	3.83
	Urban	103	<MDL	0.008	0.022	0.064	0.351	3.83
	Rural	16	0.001	0.005	0.011	0.032	0.242	0.242
	Low Income	38	<MDL	0.004	0.009	0.024	0.053	0.165
	Mid/High Income	68	<MDL	0.011	0.032	0.114	0.502	3.83
	Home Children	62	<MDL	0.010	0.026	0.090	0.257	3.83
	Day Care Children	57	<MDL	0.006	0.017	0.038	0.434	0.967
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	106	<MDL	0.589	0.978	1.83	8.37	19.3
	Urban	94	<MDL	0.613	0.989	1.82	8.89	19.3
	Rural	12	0.388	0.501	0.917	1.98	4.72	4.72
	Low Income	34	<MDL	0.359	0.751	1.73	3.87	8.89
	Mid/High Income	63	0.246	0.644	1.01	1.98	11.0	19.3
	Home Children	58	<MDL	0.830	1.28	2.56	12.4	19.3
	Day Care Children	48	0.212	0.366	0.656	1.49	2.52	8.89
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	112	<MDL	<MDL	0.068	0.156	0.487	0.658
	Urban	99	<MDL	<MDL	0.067	0.150	0.487	0.658
	Rural	13	<MDL	<MDL	0.109	0.234	0.588	0.588
	Low Income	36	<MDL	<MDL	0.051	0.083	0.258	0.602
	Mid/High Income	67	<MDL	<MDL	0.079	0.229	0.548	0.658
	Home Children	63	<MDL	<MDL	0.096	0.233	0.548	0.658
	Day Care Children	49	<MDL	<MDL	0.050	0.079	0.282	0.574
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	<MDL	7.92	36.8	86.9
	Urban	110	<MDL	<MDL	<MDL	7.36	36.8	86.9
	Rural	17	<MDL	<MDL	<MDL	8.92	84.9	84.9
	Low Income	41	<MDL	<MDL	<MDL	6.45	17.4	40.1
	Mid/High Income	73	<MDL	<MDL	<MDL	8.30	55.8	86.9
	Home Children	69	<MDL	<MDL	<MDL	10.6	55.8	86.9
	Day Care Children	58	<MDL	<MDL	<MDL	6.27	14.3	40.1
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	<MDL	0.035	0.093	0.245	1.59	17.3
	Urban	103	<MDL	0.038	0.098	0.290	1.59	17.3
	Rural	16	0.005	0.023	0.051	0.144	1.09	1.09
	Low Income	38	<MDL	0.019	0.042	0.110	0.239	0.749
	Mid/High Income	68	<MDL	0.051	0.143	0.514	2.27	17.3
	Home Children	62	<MDL	0.045	0.120	0.406	1.16	17.3
	Day Care Children	57	<MDL	0.029	0.075	0.171	1.96	4.37
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	106	<MDL	2.67	4.42	8.28	37.9	87.4
	Urban	94	<MDL	2.77	4.47	8.25	40.2	87.4
	Rural	12	1.76	2.27	4.15	8.98	21.3	21.3
	Low Income	34	<MDL	1.62	3.40	7.84	17.5	40.2
	Mid/High Income	63	1.11	2.91	4.56	8.94	49.7	87.4
	Home Children	58	<MDL	3.76	5.78	11.6	56.3	87.4
	Day Care Children	48	0.957	1.66	2.97	6.76	11.4	40.2

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-19a. Indeno[1,2,3-cd]pyrene (193-39-5): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	26.4	--	--	--	--
	Urban	108	29.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	43.6	--	--	--	--
	Mid/High Income	73	20.5	--	--	--	--
	Home Children	69	20.3	--	--	--	--
	Day Care Children	56	33.9	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	100.0	48.8	114	18.2	1.25
	Urban	102	100.0	53.7	121	21.2	1.20
	Rural	17	100.0	19.6	43.8	7.47	1.20
	Low Income	38	100.0	33.0	54.5	16.0	1.15
	Mid/High Income	68	100.0	62.8	144	20.1	1.37
	Home Children	62	100.0	39.8	78.8	16.3	1.23
	Day Care Children	57	100.0	58.6	142	20.7	1.27
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	26.4	--	--	--	--
	Urban	108	29.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	43.6	--	--	--	--
	Mid/High Income	73	20.5	--	--	--	--
	Home Children	69	20.3	--	--	--	--
	Day Care Children	56	33.9	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	100.0	177	411	66.0	1.25
	Urban	102	100.0	194	438	76.6	1.20
	Rural	17	100.0	70.8	159	27.0	1.20
	Low Income	38	100.0	119	197	57.7	1.15
	Mid/High Income	68	100.0	227	520	72.6	1.37
	Home Children	62	100.0	144	285	58.9	1.23
	Day Care Children	57	100.0	212	516	74.8	1.27
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	26.4	--	--	--	--
	Urban	108	29.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	43.6	--	--	--	--
	Mid/High Income	73	20.5	--	--	--	--
	Home Children	69	20.3	--	--	--	--
	Day Care Children	56	33.9	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	100.0	0.344	0.840	0.124	1.28
	Urban	102	100.0	0.381	0.897	0.145	1.24
	Rural	17	100.0	0.123	0.267	0.050	1.17
	Low Income	38	100.0	0.220	0.363	0.106	1.14
	Mid/High Income	68	100.0	0.452	1.07	0.139	1.40
	Home Children	62	100.0	0.305	0.660	0.114	1.28
	Day Care Children	57	100.0	0.387	1.01	0.136	1.28
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	26.4	--	--	--	--
	Urban	108	29.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	39	43.6	--	--	--	--
	Mid/High Income	73	20.5	--	--	--	--
	Home Children	69	20.3	--	--	--	--
	Day Care Children	56	33.9	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	100.0	1.25	3.04	0.450	1.28
	Urban	102	100.0	1.38	3.24	0.524	1.24
	Rural	17	100.0	0.444	0.966	0.180	1.17
	Low Income	38	100.0	0.796	1.31	0.383	1.14
	Mid/High Income	68	100.0	1.64	3.87	0.504	1.40
	Home Children	62	100.0	1.10	2.39	0.414	1.28
	Day Care Children	57	100.0	1.40	3.64	0.492	1.28

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-19b. Indeno[1,2,3-cd]pyrene (193-39-5): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	1.11	2.02	10.1
	Urban	108	<MDL	<MDL	<MDL	1.11	2.12	10.1
	Rural	17	<MDL	<MDL	<MDL	<MDL	1.87	1.87
	Low Income	39	<MDL	<MDL	<MDL	1.12	7.75	10.1
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	1.90	3.19
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1.90	7.75
	Day Care Children	56	<MDL	<MDL	<MDL	1.04	2.28	10.1
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	1.28	7.58	18.4	31.7	284	895
	Urban	102	1.28	9.67	20.3	36.3	284	895
	Rural	17	2.04	3.23	5.93	10.8	186	186
	Low Income	38	2.04	7.03	13.5	33.6	141	305
	Mid/High Income	68	1.28	8.08	20.3	34.0	396	895
	Home Children	62	1.83	7.04	16.0	25.2	132	403
	Day Care Children	57	1.28	8.18	21.7	36.3	305	895
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	4.03	7.31	36.5
	Urban	108	<MDL	<MDL	<MDL	4.02	7.68	36.5
	Rural	17	<MDL	<MDL	<MDL	<MDL	6.77	6.77
	Low Income	39	<MDL	<MDL	<MDL	4.06	28.0	36.5
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	6.88	11.5
	Home Children	69	<MDL	<MDL	<MDL	<MDL	6.88	28.0
	Day Care Children	56	<MDL	<MDL	<MDL	3.76	8.26	36.5
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	4.63	27.4	66.6	115	1,030	3,240
	Urban	102	4.63	35.0	73.3	131	1,030	3,240
	Rural	17	7.38	11.7	21.4	39.1	673	673
	Low Income	38	7.38	25.4	48.8	122	509	1,100
	Mid/High Income	68	4.63	29.2	73.3	123	1,430	3,240
	Home Children	62	6.61	25.5	57.7	91.2	477	1,460
	Day Care Children	57	4.63	29.6	78.6	131	1,100	3,240
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.007	0.014	0.077
	Urban	108	<MDL	<MDL	<MDL	0.008	0.015	0.077
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.012	0.012
	Low Income	39	<MDL	<MDL	<MDL	0.008	0.061	0.077
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	0.012	0.022
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.012	0.061
	Day Care Children	56	<MDL	<MDL	<MDL	0.007	0.018	0.077
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	0.007	0.052	0.114	0.227	1.97	7.04
	Urban	102	0.007	0.061	0.139	0.277	1.97	7.04
	Rural	17	0.013	0.024	0.042	0.095	1.14	1.14
	Low Income	38	0.013	0.052	0.079	0.223	1.02	1.97
	Mid/High Income	68	0.007	0.051	0.119	0.277	2.62	7.04
	Home Children	62	0.010	0.042	0.105	0.191	0.977	3.61
	Day Care Children	57	0.007	0.053	0.134	0.277	1.97	7.04
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.027	0.052	0.279
	Urban	108	<MDL	<MDL	<MDL	0.027	0.054	0.279
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.044	0.044
	Low Income	39	<MDL	<MDL	<MDL	0.029	0.221	0.279
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	0.042	0.078
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.044	0.221
	Day Care Children	56	<MDL	<MDL	<MDL	0.026	0.065	0.279
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	0.026	0.189	0.414	0.823	7.14	25.5
	Urban	102	0.026	0.221	0.502	1.00	7.14	25.5
	Rural	17	0.046	0.086	0.152	0.345	4.12	4.12
	Low Income	38	0.046	0.190	0.285	0.808	3.69	7.14
	Mid/High Income	68	0.026	0.184	0.432	1.00	9.49	25.5
	Home Children	62	0.037	0.152	0.380	0.693	3.54	13.1
	Day Care Children	57	0.026	0.192	0.484	1.00	7.14	25.5

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-20a. Pentachlorophenol (87-86-5): Estimates of Potential Exposure in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	102	92.2	50.0	86.8	27.4	0.988
	Urban	87	92.0	48.5	85.0	26.3	1.01
	Rural	15	93.3	58.7	99.6	35.0	0.861
	Low Income	32	90.6	28.8	26.7	21.9	0.685
	Mid/High Income	62	91.9	59.0	106	29.1	1.11
	Home Children	54	96.3	69.3	114	33.4	1.18
	Day Care Children	48	87.5	28.3	25.2	22.0	0.660
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	29.1	--	--	--	--
	Urban	110	32.7	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	26.8	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	58	34.5	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	95.8	2.59	4.78	1.40	1.09
	Urban	103	95.1	2.69	5.10	1.40	1.13
	Rural	16	100.0	1.96	1.62	1.42	0.842
	Low Income	38	97.4	2.36	2.64	1.43	1.06
	Mid/High Income	68	95.6	2.12	1.93	1.37	0.991
	Home Children	62	96.8	2.98	6.33	1.49	1.07
	Day Care Children	57	94.7	2.16	2.03	1.31	1.12
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	102	92.2	188	326	103	0.988
	Urban	87	92.0	182	319	98.7	1.01
	Rural	15	93.3	220	374	131	0.861
	Low Income	32	90.6	108	100	82.3	0.685
	Mid/High Income	62	91.9	222	398	109	1.11
	Home Children	54	96.3	260	428	125	1.18
	Day Care Children	48	87.5	106	94.6	82.4	0.660
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	29.1	--	--	--	--
	Urban	110	32.7	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	26.8	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	58	34.5	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	95.8	9.72	18.0	5.26	1.09
	Urban	103	95.1	10.1	19.1	5.25	1.13
	Rural	16	100.0	7.35	6.07	5.35	0.842
	Low Income	38	97.4	8.85	9.91	5.36	1.06
	Mid/High Income	68	95.6	7.97	7.25	5.16	0.991
	Home Children	62	96.8	11.2	23.8	5.60	1.07
	Day Care Children	57	94.7	8.11	7.61	4.91	1.12

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table O-20b. Pentachlorophenol (87-86-5): Range of Potential Exposure in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	102	<MDL	14.1	22.7	46.4	209	671
	Urban	87	<MDL	12.9	21.3	45.1	209	671
	Rural	15	<MDL	21.3	35.6	50.2	414	414
	Low Income	32	<MDL	12.7	19.0	32.8	95.3	125
	Mid/High Income	62	<MDL	14.1	25.4	54.9	248	671
	Home Children	54	<MDL	15.3	32.8	62.2	274	671
	Day Care Children	48	<MDL	12.7	19.0	33.9	72.4	125
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	<MDL	<MDL	149	290	947
	Urban	110	<MDL	<MDL	<MDL	152	316	947
	Rural	17	<MDL	<MDL	<MDL	<MDL	224	224
	Low Income	41	<MDL	<MDL	<MDL	113	170	192
	Mid/High Income	73	<MDL	<MDL	<MDL	172	472	947
	Home Children	69	<MDL	<MDL	<MDL	<MDL	374	520
	Day Care Children	58	<MDL	<MDL	<MDL	113	238	947
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	<MDL	0.611	1.32	3.28	7.60	48.5
	Urban	103	<MDL	0.608	1.32	3.34	7.60	48.5
	Rural	16	0.318	0.852	1.35	2.60	5.70	5.70
	Low Income	38	<MDL	0.826	1.45	2.62	9.02	11.8
	Mid/High Income	68	<MDL	0.606	1.28	3.27	5.70	7.96
	Home Children	62	<MDL	0.683	1.32	2.86	7.96	48.5
	Day Care Children	57	<MDL	0.611	1.32	3.34	6.87	9.02
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	102	<MDL	52.8	85.1	174	783	2,520
	Urban	87	<MDL	48.6	80.1	169	783	2,520
	Rural	15	<MDL	80.0	134	188	1,550	1,550
	Low Income	32	<MDL	47.8	71.3	123	358	469
	Mid/High Income	62	<MDL	53.1	95.5	206	932	2,520
	Home Children	54	<MDL	57.5	123	234	1,030	2,520
	Day Care Children	48	<MDL	47.8	71.3	127	272	468
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	<MDL	<MDL	560	1,090	3,560
	Urban	110	<MDL	<MDL	<MDL	570	1,190	3,560
	Rural	17	<MDL	<MDL	<MDL	<MDL	842	842
	Low Income	41	<MDL	<MDL	<MDL	425	639	723
	Mid/High Income	73	<MDL	<MDL	<MDL	645	1,770	3,560
	Home Children	69	<MDL	<MDL	<MDL	<MDL	1,400	1,950
	Day Care Children	58	<MDL	<MDL	<MDL	424	895	3,560
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	<MDL	2.29	4.97	12.3	28.5	182
	Urban	103	<MDL	2.28	4.97	12.5	28.5	182
	Rural	16	1.20	3.20	5.07	9.78	21.4	21.4
	Low Income	38	<MDL	3.10	5.46	9.82	33.9	44.3
	Mid/High Income	68	<MDL	2.28	4.82	12.3	21.4	29.9
	Home Children	62	<MDL	2.56	4.96	10.7	29.9	182
	Day Care Children	57	<MDL	2.29	4.97	12.5	25.8	33.9

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table O-20c. Pentachlorophenol (87-86-5): Estimates of Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	102	92.2	0.374	0.807	0.184	1.06
	Urban	87	92.0	0.366	0.823	0.176	1.08
	Rural	15	93.3	0.419	0.736	0.235	0.929
	Low Income	32	90.6	0.209	0.240	0.140	0.843
	Mid/High Income	62	91.9	0.453	1.00	0.201	1.16
	Home Children	54	96.3	0.531	1.07	0.233	1.21
	Day Care Children	48	87.5	0.198	0.201	0.141	0.786
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	29.1	--	--	--	--
	Urban	110	32.7	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	26.8	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	58	34.5	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	95.8	0.019	0.038	0.010	1.15
	Urban	103	95.1	0.020	0.041	0.010	1.19
	Rural	16	100.0	0.014	0.013	0.010	0.917
	Low Income	38	97.4	0.018	0.025	0.009	1.13
	Mid/High Income	68	95.6	0.015	0.014	0.010	1.04
	Home Children	62	96.8	0.022	0.050	0.011	1.10
	Day Care Children	57	94.7	0.015	0.017	0.009	1.21
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	102	92.2	1.40	3.03	0.691	1.06
	Urban	87	92.0	1.38	3.09	0.663	1.08
	Rural	15	93.3	1.57	2.76	0.884	0.929
	Low Income	32	90.6	0.785	0.901	0.524	0.843
	Mid/High Income	62	91.9	1.70	3.77	0.753	1.16
	Home Children	54	96.3	1.99	4.03	0.876	1.21
	Day Care Children	48	87.5	0.744	0.753	0.530	0.786
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	29.1	--	--	--	--
	Urban	110	32.7	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	41	26.8	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	58	34.5	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	95.8	0.071	0.143	0.036	1.15
	Urban	103	95.1	0.074	0.153	0.036	1.19
	Rural	16	100.0	0.053	0.049	0.036	0.917
	Low Income	38	97.4	0.066	0.094	0.036	1.13
	Mid/High Income	68	95.6	0.057	0.054	0.036	1.04
	Home Children	62	96.8	0.084	0.189	0.039	1.10
	Day Care Children	57	94.7	0.058	0.063	0.032	1.21

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-20d. Pentachlorophenol (87-86-5): Range of Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	102	<MDL	0.086	0.165	0.338	1.20	7.17
	Urban	87	<MDL	0.084	0.164	0.338	1.20	7.17
	Rural	15	<MDL	0.123	0.219	0.341	3.04	3.04
	Low Income	32	<MDL	0.072	0.127	0.201	0.972	0.982
	Mid/High Income	62	<MDL	0.098	0.173	0.392	1.85	7.17
	Home Children	54	<MDL	0.114	0.184	0.399	1.89	7.17
	Day Care Children	48	<MDL	0.077	0.127	0.218	0.628	1.06
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	<MDL	<MDL	1.08	1.99	8.69
	Urban	110	<MDL	<MDL	<MDL	1.14	2.23	8.69
	Rural	17	<MDL	<MDL	<MDL	<MDL	1.48	1.48
	Low Income	41	<MDL	<MDL	<MDL	0.746	1.18	1.83
	Mid/High Income	73	<MDL	<MDL	<MDL	1.22	3.33	8.69
	Home Children	69	<MDL	<MDL	<MDL	<MDL	3.29	3.95
	Day Care Children	58	<MDL	<MDL	<MDL	0.685	1.62	8.69
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	<MDL	0.005	0.009	0.021	0.051	0.382
	Urban	103	<MDL	0.004	0.009	0.023	0.051	0.382
	Rural	16	0.002	0.005	0.009	0.017	0.042	0.042
	Low Income	38	<MDL	0.005	0.009	0.017	0.090	0.120
	Mid/High Income	68	<MDL	0.004	0.009	0.022	0.042	0.061
	Home Children	62	<MDL	0.005	0.009	0.020	0.051	0.382
	Day Care Children	57	<MDL	0.004	0.009	0.023	0.044	0.090
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	102	<MDL	0.323	0.619	1.27	4.49	26.9
	Urban	87	<MDL	0.314	0.615	1.27	4.49	26.9
	Rural	15	<MDL	0.463	0.823	1.28	11.4	11.4
	Low Income	32	<MDL	0.272	0.476	0.753	3.65	3.69
	Mid/High Income	62	<MDL	0.366	0.651	1.47	6.95	26.9
	Home Children	54	<MDL	0.426	0.690	1.50	7.08	26.9
	Day Care Children	48	<MDL	0.290	0.476	0.819	2.36	3.96
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	<MDL	<MDL	4.05	7.46	32.6
	Urban	110	<MDL	<MDL	<MDL	4.27	8.39	32.6
	Rural	17	<MDL	<MDL	<MDL	<MDL	5.56	5.56
	Low Income	41	<MDL	<MDL	<MDL	2.80	4.43	6.89
	Mid/High Income	73	<MDL	<MDL	<MDL	4.57	12.5	32.6
	Home Children	69	<MDL	<MDL	<MDL	<MDL	12.4	14.8
	Day Care Children	58	<MDL	<MDL	<MDL	2.57	6.09	32.6
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	<MDL	0.017	0.034	0.080	0.190	1.43
	Urban	103	<MDL	0.016	0.034	0.086	0.190	1.43
	Rural	16	0.006	0.019	0.035	0.062	0.157	0.157
	Low Income	38	<MDL	0.018	0.035	0.064	0.339	0.452
	Mid/High Income	68	<MDL	0.015	0.034	0.081	0.158	0.229
	Home Children	62	<MDL	0.018	0.034	0.076	0.190	1.43
	Day Care Children	57	<MDL	0.016	0.034	0.086	0.167	0.339

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-21a. *cis*-Permethrin (61949-76-6): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	36.0	--	--	--	--
	Urban	108	31.5	--	--	--	--
	Rural	17	64.7	4.83	3.39	4.19	0.481
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	31.9	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	100.0	54.4	190	13.4	1.47
	Urban	103	100.0	39.0	93.8	12.2	1.42
	Rural	17	100.0	148	450	23.9	1.66
	Low Income	38	100.0	59.3	126	15.8	1.64
	Mid/High Income	69	100.0	29.7	68.0	11.4	1.27
	Home Children	63	100.0	30.7	71.0	11.9	1.24
	Day Care Children	57	100.0	80.7	265	15.3	1.68
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	36.0	--	--	--	--
	Urban	108	31.5	--	--	--	--
	Rural	17	64.7	12.3	8.67	10.7	0.481
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	31.9	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	100.0	139	486	34.2	1.47
	Urban	103	100.0	99.7	240	31.1	1.42
	Rural	17	100.0	378	1,150	61.0	1.66
	Low Income	38	100.0	152	321	40.3	1.64
	Mid/High Income	69	100.0	75.8	174	29.1	1.27
	Home Children	63	100.0	78.5	182	30.3	1.24
	Day Care Children	57	100.0	206	676	39.1	1.68
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	36.0	--	--	--	--
	Urban	108	31.5	--	--	--	--
	Rural	17	64.7	0.032	0.021	0.028	0.491
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	31.9	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	100.0	0.426	1.62	0.091	1.49
	Urban	103	100.0	0.303	0.873	0.083	1.44
	Rural	17	100.0	1.17	3.73	0.159	1.72
	Low Income	38	100.0	0.466	1.19	0.104	1.68
	Mid/High Income	69	100.0	0.226	0.606	0.079	1.28
	Home Children	63	100.0	0.232	0.628	0.083	1.25
	Day Care Children	57	100.0	0.641	2.24	0.101	1.73
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	36.0	--	--	--	--
	Urban	108	31.5	--	--	--	--
	Rural	17	64.7	0.082	0.052	0.071	0.491
	Low Income	39	41.0	--	--	--	--
	Mid/High Income	73	31.5	--	--	--	--
	Home Children	69	31.9	--	--	--	--
	Day Care Children	56	41.1	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	100.0	1.09	4.13	0.233	1.49
	Urban	103	100.0	0.774	2.23	0.212	1.44
	Rural	17	100.0	3.00	9.54	0.407	1.72
	Low Income	38	100.0	1.19	3.05	0.267	1.68
	Mid/High Income	69	100.0	0.577	1.55	0.202	1.28
	Home Children	63	100.0	0.592	1.60	0.213	1.25
	Day Care Children	57	100.0	1.64	5.73	0.257	1.73

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-21b. *cis*-Permethrin (61949-76-6): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	4.16	14.1	50.7
	Urban	108	<MDL	<MDL	<MDL	4.15	14.1	50.7
	Rural	17	<MDL	<MDL	3.38	4.16	14.4	14.4
	Low Income	39	<MDL	<MDL	<MDL	4.98	34.1	50.7
	Mid/High Income	73	<MDL	<MDL	<MDL	3.79	9.89	21.4
	Home Children	69	<MDL	<MDL	<MDL	4.13	9.89	23.7
	Day Care Children	56	<MDL	<MDL	<MDL	4.54	21.4	50.7
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	0.416	4.72	10.1	36.1	174	1,880
	Urban	103	0.416	4.41	9.87	34.8	116	601
	Rural	17	2.87	6.51	16.5	49.2	1,880	1,880
	Low Income	38	0.416	4.32	15.0	46.9	488	601
	Mid/High Income	69	1.02	4.80	8.96	25.4	93.6	521
	Home Children	63	1.17	5.70	9.79	25.4	112	521
	Day Care Children	57	0.416	4.47	13.8	42.8	488	1,880
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	10.6	36.0	130
	Urban	108	<MDL	<MDL	<MDL	10.6	36.0	130
	Rural	17	<MDL	<MDL	8.64	10.6	36.7	36.7
	Low Income	39	<MDL	<MDL	<MDL	12.7	87.1	130
	Mid/High Income	73	<MDL	<MDL	<MDL	9.70	25.3	54.6
	Home Children	69	<MDL	<MDL	<MDL	10.6	25.3	60.6
	Day Care Children	56	<MDL	<MDL	<MDL	11.6	54.6	130
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	1.06	12.1	25.8	92.2	446	4,810
	Urban	103	1.06	11.3	25.2	88.8	296	1,540
	Rural	17	7.34	16.6	42.3	126	4,810	4,810
	Low Income	38	1.06	11.0	38.3	120	1,250	1,540
	Mid/High Income	69	2.60	12.3	22.9	64.8	239	1,330
	Home Children	63	3.00	14.6	25.0	64.8	287	1,330
	Day Care Children	57	1.06	11.4	35.3	109	1,250	4,810
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.030	0.091	0.473
	Urban	108	<MDL	<MDL	<MDL	0.031	0.107	0.473
	Rural	17	<MDL	<MDL	0.025	0.028	0.090	0.090
	Low Income	39	<MDL	<MDL	<MDL	0.040	0.261	0.473
	Mid/High Income	73	<MDL	<MDL	<MDL	0.028	0.078	0.187
	Home Children	69	<MDL	<MDL	<MDL	0.030	0.081	0.145
	Day Care Children	56	<MDL	<MDL	<MDL	0.032	0.187	0.473
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	0.003	0.034	0.074	0.204	1.20	15.6
	Urban	103	0.003	0.028	0.072	0.196	0.781	5.38
	Rural	17	0.025	0.035	0.120	0.427	15.6	15.6
	Low Income	38	0.003	0.028	0.101	0.348	5.26	5.38
	Mid/High Income	69	0.006	0.034	0.066	0.147	0.781	4.78
	Home Children	63	0.007	0.036	0.068	0.147	0.655	4.78
	Day Care Children	57	0.003	0.028	0.082	0.273	5.26	15.6
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.076	0.232	1.21
	Urban	108	<MDL	<MDL	<MDL	0.078	0.274	1.21
	Rural	17	<MDL	<MDL	0.063	0.071	0.231	0.231
	Low Income	39	<MDL	<MDL	<MDL	0.101	0.666	1.21
	Mid/High Income	73	<MDL	<MDL	<MDL	0.072	0.200	0.477
	Home Children	69	<MDL	<MDL	<MDL	0.076	0.206	0.371
	Day Care Children	56	<MDL	<MDL	<MDL	0.082	0.477	1.21
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	0.007	0.086	0.189	0.522	3.07	39.8
	Urban	103	0.007	0.073	0.184	0.502	2.00	13.7
	Rural	17	0.065	0.089	0.307	1.09	39.8	39.8
	Low Income	38	0.007	0.071	0.258	0.889	13.4	13.7
	Mid/High Income	69	0.014	0.086	0.170	0.376	2.00	12.2
	Home Children	63	0.017	0.092	0.173	0.376	1.67	12.2
	Day Care Children	57	0.007	0.073	0.210	0.697	13.4	39.8

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-22a. *trans*-Permethrin (61949-77-7): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	31.2	--	--	--	--
	Urban	108	28.7	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	38.5	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	56	39.3	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	100.0	55.8	199	10.6	1.61
	Urban	98	100.0	40.3	109	9.57	1.57
	Rural	17	100.0	145	447	18.5	1.80
	Low Income	37	100.0	58.2	130	12.7	1.73
	Mid/High Income	65	100.0	31.7	92.7	8.82	1.45
	Home Children	60	100.0	32.3	96.2	9.33	1.38
	Day Care Children	55	100.0	81.3	268	12.1	1.84
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	31.2	--	--	--	--
	Urban	108	28.7	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	38.5	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	56	39.3	--	--	--	--
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	100.0	143	508	27.0	1.61
	Urban	98	100.0	103	278	24.5	1.57
	Rural	17	100.0	371	1,140	47.4	1.80
	Low Income	37	100.0	149	333	32.4	1.73
	Mid/High Income	65	100.0	80.9	237	22.5	1.45
	Home Children	60	100.0	82.6	246	23.8	1.38
	Day Care Children	55	100.0	208	685	30.9	1.84
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	31.2	--	--	--	--
	Urban	108	28.7	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	38.5	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	56	39.3	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	100.0	0.437	1.69	0.072	1.63
	Urban	98	100.0	0.313	1.000	0.066	1.57
	Rural	17	100.0	1.15	3.70	0.124	1.87
	Low Income	37	100.0	0.454	1.21	0.083	1.76
	Mid/High Income	65	100.0	0.244	0.835	0.062	1.44
	Home Children	60	100.0	0.248	0.865	0.066	1.37
	Day Care Children	55	100.0	0.643	2.27	0.080	1.88
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	31.2	--	--	--	--
	Urban	108	28.7	--	--	--	--
	Rural	17	47.1	--	--	--	--
	Low Income	39	38.5	--	--	--	--
	Mid/High Income	73	27.4	--	--	--	--
	Home Children	69	24.6	--	--	--	--
	Day Care Children	56	39.3	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	100.0	1.12	4.32	0.184	1.63
	Urban	98	100.0	0.799	2.56	0.168	1.57
	Rural	17	100.0	2.95	9.46	0.316	1.87
	Low Income	37	100.0	1.16	3.10	0.213	1.76
	Mid/High Income	65	100.0	0.624	2.13	0.158	1.44
	Home Children	60	100.0	0.635	2.21	0.168	1.37
	Day Care Children	55	100.0	1.64	5.80	0.203	1.88

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-22b. *trans*-Permethrin (61949-77-7): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	<MDL	3.34	7.77	63.5
	Urban	108	<MDL	<MDL	<MDL	3.28	7.17	63.5
	Rural	17	<MDL	<MDL	<MDL	3.34	9.68	9.68
	Low Income	39	<MDL	<MDL	<MDL	3.70	27.7	63.5
	Mid/High Income	73	<MDL	<MDL	<MDL	2.82	7.01	13.6
	Home Children	69	<MDL	<MDL	<MDL	<MDL	7.01	24.1
	Day Care Children	56	<MDL	<MDL	<MDL	3.56	20.3	63.5
Potential Exposure via Indirect Ingestion (ng/day)	Overall	115	0.414	3.10	7.98	28.6	208	1,860
	Urban	98	0.414	2.94	7.79	26.8	154	716
	Rural	17	2.73	4.10	8.62	45.9	1,860	1,860
	Low Income	37	0.414	3.18	9.69	28.6	456	642
	Mid/High Income	65	0.782	2.94	6.39	25.3	89.2	716
	Home Children	60	1.10	3.35	7.36	21.8	97.8	716
	Day Care Children	55	0.414	2.87	10.3	39.4	456	1,860
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	<MDL	8.53	19.9	162
	Urban	108	<MDL	<MDL	<MDL	8.39	18.3	162
	Rural	17	<MDL	<MDL	<MDL	8.53	24.7	24.7
	Low Income	39	<MDL	<MDL	<MDL	9.47	70.7	162
	Mid/High Income	73	<MDL	<MDL	<MDL	7.21	17.9	34.8
	Home Children	69	<MDL	<MDL	<MDL	<MDL	17.9	61.6
	Day Care Children	56	<MDL	<MDL	<MDL	9.10	51.9	162
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	115	1.06	7.93	20.4	73.0	531	4,760
	Urban	98	1.06	7.52	19.9	68.6	392	1,830
	Rural	17	6.97	10.5	22.0	117	4,760	4,760
	Low Income	37	1.06	8.12	24.8	73.0	1,160	1,640
	Mid/High Income	65	2.00	7.52	16.3	64.6	228	1,830
	Home Children	60	2.81	8.56	18.8	55.8	250	1,830
	Day Care Children	55	1.06	7.34	26.2	101	1,160	4,760
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.025	0.064	0.593
	Urban	108	<MDL	<MDL	<MDL	0.026	0.064	0.593
	Rural	17	<MDL	<MDL	<MDL	0.024	0.067	0.067
	Low Income	39	<MDL	<MDL	<MDL	0.030	0.212	0.593
	Mid/High Income	73	<MDL	<MDL	<MDL	0.024	0.056	0.103
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.064	0.147
	Day Care Children	56	<MDL	<MDL	<MDL	0.026	0.149	0.593
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	115	0.003	0.022	0.060	0.177	1.49	15.4
	Urban	98	0.003	0.022	0.057	0.168	0.773	6.57
	Rural	17	0.017	0.024	0.063	0.328	15.4	15.4
	Low Income	37	0.003	0.022	0.067	0.286	5.02	5.61
	Mid/High Income	65	0.004	0.022	0.048	0.143	0.719	6.57
	Home Children	60	0.006	0.023	0.049	0.133	0.690	6.57
	Day Care Children	55	0.003	0.022	0.067	0.250	5.02	15.4
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	<MDL	0.063	0.163	1.52
	Urban	108	<MDL	<MDL	<MDL	0.066	0.163	1.52
	Rural	17	<MDL	<MDL	<MDL	0.061	0.172	0.172
	Low Income	39	<MDL	<MDL	<MDL	0.076	0.541	1.52
	Mid/High Income	73	<MDL	<MDL	<MDL	0.063	0.143	0.264
	Home Children	69	<MDL	<MDL	<MDL	<MDL	0.163	0.377
	Day Care Children	56	<MDL	<MDL	<MDL	0.066	0.381	1.52
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	115	0.007	0.056	0.152	0.452	3.81	39.4
	Urban	98	0.007	0.055	0.145	0.429	1.98	16.8
	Rural	17	0.043	0.061	0.162	0.838	39.4	39.4
	Low Income	37	0.007	0.055	0.172	0.731	12.8	14.3
	Mid/High Income	65	0.011	0.056	0.123	0.365	1.84	16.8
	Home Children	60	0.016	0.058	0.126	0.339	1.76	16.8
	Day Care Children	55	0.007	0.055	0.172	0.640	12.8	39.4

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-23a. PCB 52 (35693-99-3): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	123	95.9	6.33	6.48	4.54	0.801
	Urban	106	95.3	5.78	5.60	4.30	0.770
	Rural	17	100.0	9.71	10.0	6.39	0.929
	Low Income	37	97.3	5.85	6.31	4.28	0.749
	Mid/High Income	73	94.5	6.39	6.81	4.46	0.852
	Home Children	69	94.2	6.76	7.93	4.26	0.958
	Day Care Children	54	98.1	5.78	3.94	4.93	0.537
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	55.5	0.235	0.347	0.131	1.03
	Urban	102	52.0	0.233	0.358	0.129	1.02
	Rural	17	76.5	0.248	0.278	0.141	1.09
	Low Income	38	65.8	0.217	0.296	0.119	1.05
	Mid/High Income	68	51.5	0.246	0.385	0.141	0.995
	Home Children	63	55.6	0.257	0.402	0.141	1.04
	Day Care Children	56	55.4	0.210	0.274	0.120	1.02
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	123	95.9	21.7	22.2	15.6	0.801
	Urban	106	95.3	19.8	19.2	14.7	0.770
	Rural	17	100.0	33.2	34.3	21.9	0.929
	Low Income	37	97.3	20.0	21.6	14.7	0.749
	Mid/High Income	73	94.5	21.9	23.3	15.3	0.852
	Home Children	69	94.2	23.1	27.2	14.6	0.958
	Day Care Children	54	98.1	19.8	13.5	16.9	0.537
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	55.5	0.804	1.19	0.447	1.03
	Urban	102	52.0	0.797	1.23	0.442	1.02
	Rural	17	76.5	0.851	0.953	0.483	1.09
	Low Income	38	65.8	0.743	1.01	0.406	1.05
	Mid/High Income	68	51.5	0.843	1.32	0.482	0.995
	Home Children	63	55.6	0.881	1.38	0.483	1.04
	Day Care Children	56	55.4	0.718	0.940	0.410	1.02
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	123	95.9	0.044	0.043	0.031	0.834
	Urban	106	95.3	0.040	0.036	0.029	0.806
	Rural	17	100.0	0.066	0.069	0.043	0.955
	Low Income	37	97.3	0.042	0.044	0.029	0.848
	Mid/High Income	73	94.5	0.043	0.043	0.031	0.851
	Home Children	69	94.2	0.046	0.051	0.030	0.958
	Day Care Children	54	98.1	0.040	0.029	0.032	0.646
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	55.5	0.002	0.002	0.001	1.04
	Urban	102	52.0	0.002	0.002	0.001	1.03
	Rural	17	76.5	0.002	0.002	0.001	1.11
	Low Income	38	65.8	0.001	0.002	0.001	1.05
	Mid/High Income	68	51.5	0.002	0.002	0.001	0.997
	Home Children	63	55.6	0.002	0.002	0.001	1.02
	Day Care Children	56	55.4	0.001	0.002	0.001	1.06
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	123	95.9	0.149	0.146	0.106	0.834
	Urban	106	95.3	0.137	0.123	0.101	0.806
	Rural	17	100.0	0.227	0.238	0.146	0.955
	Low Income	37	97.3	0.142	0.150	0.099	0.848
	Mid/High Income	73	94.5	0.149	0.147	0.105	0.851
	Home Children	69	94.2	0.159	0.175	0.102	0.958
	Day Care Children	54	98.1	0.136	0.099	0.111	0.646
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	55.5	0.005	0.008	0.003	1.04
	Urban	102	52.0	0.005	0.008	0.003	1.03
	Rural	17	76.5	0.006	0.007	0.003	1.11
	Low Income	38	65.8	0.005	0.007	0.003	1.05
	Mid/High Income	68	51.5	0.006	0.008	0.003	0.997
	Home Children	63	55.6	0.006	0.008	0.003	1.02
	Day Care Children	56	55.4	0.005	0.007	0.003	1.06

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-23b. PCB 52 (35693-99-3): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	123	<MDL	3.19	4.80	6.68	20.2	38.6
	Urban	106	<MDL	2.76	4.82	6.34	12.7	37.1
	Rural	17	1.17	3.65	4.68	13.1	38.6	38.6
	Low Income	37	<MDL	2.76	4.32	5.67	26.2	33.3
	Mid/High Income	73	<MDL	2.82	4.80	6.89	22.5	38.6
	Home Children	69	<MDL	2.21	4.80	6.68	26.2	38.6
	Day Care Children	54	<MDL	3.42	4.76	6.27	13.1	22.5
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	<MDL	<MDL	0.112	0.284	0.852	2.78
	Urban	102	<MDL	<MDL	0.112	0.275	0.839	2.78
	Rural	17	<MDL	0.069	0.091	0.324	0.852	0.852
	Low Income	38	<MDL	<MDL	0.114	0.194	1.15	1.18
	Mid/High Income	68	<MDL	<MDL	0.113	0.306	0.754	2.78
	Home Children	63	<MDL	<MDL	0.114	0.317	0.839	2.78
	Day Care Children	56	<MDL	<MDL	0.102	0.246	0.852	1.41
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	123	<MDL	10.9	16.5	22.9	69.3	132
	Urban	106	<MDL	9.45	16.5	21.7	43.4	127
	Rural	17	4.02	12.5	16.0	45.0	132	132
	Low Income	37	<MDL	9.45	14.8	19.4	89.7	114
	Mid/High Income	73	<MDL	9.65	16.5	23.6	77.0	132
	Home Children	69	<MDL	7.58	16.5	22.9	89.7	132
	Day Care Children	54	<MDL	11.7	16.3	21.5	45.0	77.0
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	<MDL	<MDL	0.382	0.972	2.92	9.51
	Urban	102	<MDL	<MDL	0.384	0.942	2.87	9.51
	Rural	17	<MDL	0.236	0.311	1.11	2.92	2.92
	Low Income	38	<MDL	<MDL	0.389	0.664	3.94	4.04
	Mid/High Income	68	<MDL	<MDL	0.388	1.05	2.58	9.51
	Home Children	63	<MDL	<MDL	0.390	1.09	2.87	9.51
	Day Care Children	56	<MDL	<MDL	0.348	0.843	2.92	4.85
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	123	<MDL	0.019	0.033	0.053	0.117	0.247
	Urban	106	<MDL	0.019	0.033	0.051	0.098	0.221
	Rural	17	0.009	0.025	0.033	0.083	0.247	0.247
	Low Income	37	<MDL	0.018	0.026	0.048	0.170	0.221
	Mid/High Income	73	<MDL	0.019	0.032	0.054	0.103	0.247
	Home Children	69	<MDL	0.016	0.034	0.055	0.184	0.247
	Day Care Children	54	<MDL	0.022	0.032	0.051	0.103	0.168
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	<MDL	<MDL	0.001	0.002	0.007	0.016
	Urban	102	<MDL	<MDL	0.001	0.002	0.006	0.016
	Rural	17	<MDL	0.000	0.001	0.002	0.007	0.007
	Low Income	38	<MDL	<MDL	0.001	0.001	0.007	0.009
	Mid/High Income	68	<MDL	<MDL	0.001	0.002	0.005	0.016
	Home Children	63	<MDL	<MDL	0.001	0.002	0.006	0.016
	Day Care Children	56	<MDL	<MDL	0.001	0.002	0.007	0.009
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	123	<MDL	0.066	0.113	0.180	0.400	0.847
	Urban	106	<MDL	0.065	0.114	0.174	0.334	0.756
	Rural	17	0.030	0.087	0.111	0.283	0.847	0.847
	Low Income	37	<MDL	0.060	0.089	0.165	0.581	0.756
	Mid/High Income	73	<MDL	0.066	0.109	0.185	0.353	0.847
	Home Children	69	<MDL	0.054	0.117	0.187	0.631	0.847
	Day Care Children	54	<MDL	0.076	0.111	0.174	0.353	0.574
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	<MDL	<MDL	0.002	0.006	0.024	0.055
	Urban	102	<MDL	<MDL	0.003	0.006	0.022	0.055
	Rural	17	<MDL	0.001	0.002	0.006	0.024	0.024
	Low Income	38	<MDL	<MDL	0.003	0.005	0.025	0.029
	Mid/High Income	68	<MDL	<MDL	0.003	0.007	0.018	0.055
	Home Children	63	<MDL	<MDL	0.003	0.006	0.022	0.055
	Day Care Children	56	<MDL	<MDL	0.002	0.005	0.024	0.029

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-24a. PCB 95 (38379-99-6): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	69.6	2.13	3.69	1.23	0.897
	Urban	108	68.5	2.02	3.72	1.18	0.870
	Rural	17	76.5	2.87	3.48	1.64	1.04
	Low Income	39	66.7	2.54	5.32	1.20	0.987
	Mid/High Income	73	69.9	1.91	2.72	1.19	0.880
	Home Children	69	71.0	2.11	3.45	1.15	0.981
	Day Care Children	56	67.9	2.16	4.00	1.34	0.783
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	52.1	0.212	0.430	0.107	1.02
	Urban	102	49.0	--	--	--	--
	Rural	17	70.6	0.230	0.359	0.110	1.16
	Low Income	38	60.5	0.186	0.268	0.097	1.06
	Mid/High Income	68	50.0	0.222	0.507	0.114	0.955
	Home Children	63	49.2	--	--	--	--
	Day Care Children	56	55.4	0.188	0.328	0.098	0.997
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	69.6	6.53	11.3	3.77	0.897
	Urban	108	68.5	6.18	11.4	3.61	0.870
	Rural	17	76.5	8.78	10.7	5.01	1.04
	Low Income	39	66.7	7.77	16.3	3.68	0.987
	Mid/High Income	73	69.9	5.85	8.34	3.65	0.880
	Home Children	69	71.0	6.46	10.6	3.53	0.981
	Day Care Children	56	67.9	6.62	12.3	4.09	0.783
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	52.1	0.650	1.32	0.327	1.02
	Urban	102	49.0	--	--	--	--
	Rural	17	70.6	0.706	1.10	0.336	1.16
	Low Income	38	60.5	0.568	0.822	0.297	1.06
	Mid/High Income	68	50.0	0.680	1.55	0.348	0.955
	Home Children	63	49.2	--	--	--	--
	Day Care Children	56	55.4	0.575	1.01	0.302	0.997
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	69.6	0.015	0.025	0.008	0.912
	Urban	108	68.5	0.014	0.025	0.008	0.885
	Rural	17	76.5	0.020	0.026	0.011	1.06
	Low Income	39	66.7	0.018	0.038	0.008	1.04
	Mid/High Income	73	69.9	0.013	0.016	0.008	0.870
	Home Children	69	71.0	0.014	0.022	0.008	0.964
	Day Care Children	56	67.9	0.015	0.029	0.009	0.849
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	52.1	0.001	0.003	0.001	1.03
	Urban	102	49.0	--	--	--	--
	Rural	17	70.6	0.002	0.003	0.001	1.22
	Low Income	38	60.5	0.001	0.002	0.001	1.08
	Mid/High Income	68	50.0	0.001	0.003	0.001	0.945
	Home Children	63	49.2	--	--	--	--
	Day Care Children	56	55.4	0.001	0.002	0.001	1.04
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	69.6	0.045	0.077	0.026	0.912
	Urban	108	68.5	0.042	0.077	0.025	0.885
	Rural	17	76.5	0.062	0.080	0.033	1.06
	Low Income	39	66.7	0.054	0.115	0.025	1.04
	Mid/High Income	73	69.9	0.039	0.051	0.025	0.870
	Home Children	69	71.0	0.044	0.068	0.025	0.964
	Day Care Children	56	67.9	0.046	0.088	0.027	0.849
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	52.1	0.004	0.008	0.002	1.03
	Urban	102	49.0	--	--	--	--
	Rural	17	70.6	0.005	0.009	0.002	1.22
	Low Income	38	60.5	0.004	0.006	0.002	1.08
	Mid/High Income	68	50.0	0.004	0.009	0.002	0.945
	Home Children	63	49.2	--	--	--	--
	Day Care Children	56	55.4	0.004	0.006	0.002	1.04

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-24b. PCB 95 (38379-99-6): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	1.17	1.83	9.73	28.3
	Urban	108	<MDL	<MDL	1.17	1.67	5.59	28.3
	Rural	17	<MDL	0.728	1.44	2.73	10.4	10.4
	Low Income	39	<MDL	<MDL	1.12	1.50	19.3	28.3
	Mid/High Income	73	<MDL	<MDL	1.15	2.01	9.73	17.7
	Home Children	69	<MDL	<MDL	1.15	1.92	9.73	19.3
	Day Care Children	56	<MDL	<MDL	1.20	1.71	9.73	28.3
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	<MDL	<MDL	0.084	0.185	0.748	3.80
	Urban	102	<MDL	<MDL	<MDL	0.185	0.669	3.80
	Rural	17	<MDL	<MDL	0.071	0.214	1.45	1.45
	Low Income	38	<MDL	<MDL	0.082	0.185	0.893	1.24
	Mid/High Income	68	<MDL	<MDL	<MDL	0.183	0.554	3.80
	Home Children	63	<MDL	<MDL	<MDL	0.190	0.669	3.80
	Day Care Children	56	<MDL	<MDL	0.071	0.185	0.748	1.93
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	3.57	5.60	29.8	86.8
	Urban	108	<MDL	<MDL	3.57	5.11	17.1	86.8
	Rural	17	<MDL	2.23	4.40	8.37	32.0	32.0
	Low Income	39	<MDL	<MDL	3.44	4.61	59.0	86.8
	Mid/High Income	73	<MDL	<MDL	3.52	6.16	29.8	54.2
	Home Children	69	<MDL	<MDL	3.51	5.87	29.8	59.0
	Day Care Children	56	<MDL	<MDL	3.67	5.22	29.8	86.8
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	<MDL	<MDL	0.257	0.568	2.29	11.6
	Urban	102	<MDL	<MDL	<MDL	0.566	2.05	11.6
	Rural	17	<MDL	<MDL	0.217	0.656	4.43	4.43
	Low Income	38	<MDL	<MDL	0.250	0.566	2.74	3.79
	Mid/High Income	68	<MDL	<MDL	<MDL	0.560	1.70	11.6
	Home Children	63	<MDL	<MDL	<MDL	0.583	2.05	11.6
	Day Care Children	56	<MDL	<MDL	0.218	0.567	2.29	5.93
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	0.008	0.013	0.052	0.205
	Urban	108	<MDL	<MDL	0.008	0.013	0.041	0.205
	Rural	17	<MDL	0.005	0.008	0.017	0.081	0.081
	Low Income	39	<MDL	<MDL	0.006	0.012	0.128	0.205
	Mid/High Income	73	<MDL	<MDL	0.008	0.014	0.045	0.103
	Home Children	69	<MDL	<MDL	0.008	0.013	0.067	0.128
	Day Care Children	56	<MDL	<MDL	0.007	0.013	0.045	0.205
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	<MDL	<MDL	0.001	0.001	0.005	0.022
	Urban	102	<MDL	<MDL	<MDL	0.001	0.005	0.022
	Rural	17	<MDL	<MDL	0.001	0.001	0.012	0.012
	Low Income	38	<MDL	<MDL	0.001	0.001	0.006	0.008
	Mid/High Income	68	<MDL	<MDL	<MDL	0.001	0.004	0.022
	Home Children	63	<MDL	<MDL	<MDL	0.001	0.005	0.022
	Day Care Children	56	<MDL	<MDL	0.001	0.001	0.005	0.012
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	0.024	0.041	0.161	0.629
	Urban	108	<MDL	<MDL	0.023	0.040	0.126	0.629
	Rural	17	<MDL	0.015	0.024	0.052	0.247	0.247
	Low Income	39	<MDL	<MDL	0.020	0.038	0.392	0.629
	Mid/High Income	73	<MDL	<MDL	0.024	0.043	0.137	0.314
	Home Children	69	<MDL	<MDL	0.024	0.039	0.205	0.392
	Day Care Children	56	<MDL	<MDL	0.023	0.041	0.137	0.629
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	<MDL	<MDL	0.002	0.004	0.017	0.067
	Urban	102	<MDL	<MDL	<MDL	0.004	0.016	0.067
	Rural	17	<MDL	<MDL	0.002	0.004	0.037	0.037
	Low Income	38	<MDL	<MDL	0.002	0.003	0.018	0.025
	Mid/High Income	68	<MDL	<MDL	<MDL	0.004	0.011	0.067
	Home Children	63	<MDL	<MDL	<MDL	0.004	0.016	0.067
	Day Care Children	56	<MDL	<MDL	0.002	0.004	0.017	0.037

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-25a. PCB 101 (37680-73-2): Estimates of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	125	60.8	2.07	4.48	1.07	0.960
	Urban	108	58.3	1.97	4.65	1.01	0.940
	Rural	17	76.5	2.73	3.31	1.58	1.03
	Low Income	39	56.4	2.67	7.13	1.04	1.05
	Mid/High Income	73	63.0	1.81	2.61	1.08	0.935
	Home Children	69	58.0	1.91	3.36	0.950	1.04
	Day Care Children	56	64.3	2.27	5.60	1.25	0.837
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	54.6	0.281	0.627	0.128	1.10
	Urban	102	51.0	0.286	0.657	0.129	1.11
	Rural	17	76.5	0.250	0.417	0.121	1.13
	Low Income	38	63.2	0.245	0.351	0.120	1.14
	Mid/High Income	68	52.9	0.295	0.760	0.135	1.04
	Home Children	63	54.0	0.311	0.771	0.135	1.11
	Day Care Children	56	55.4	0.247	0.413	0.120	1.11
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	125	60.8	6.35	13.7	3.29	0.960
	Urban	108	58.3	6.03	14.2	3.09	0.940
	Rural	17	76.5	8.36	10.1	4.83	1.03
	Low Income	39	56.4	8.17	21.8	3.19	1.05
	Mid/High Income	73	63.0	5.55	7.99	3.31	0.935
	Home Children	69	58.0	5.85	10.3	2.91	1.04
	Day Care Children	56	64.3	6.96	17.1	3.82	0.837
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	54.6	0.861	1.92	0.391	1.10
	Urban	102	51.0	0.877	2.01	0.394	1.11
	Rural	17	76.5	0.765	1.28	0.372	1.13
	Low Income	38	63.2	0.751	1.08	0.368	1.14
	Mid/High Income	68	52.9	0.904	2.33	0.412	1.04
	Home Children	63	54.0	0.952	2.36	0.414	1.11
	Day Care Children	56	55.4	0.758	1.27	0.366	1.11
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	60.8	0.014	0.031	0.007	0.977
	Urban	108	58.3	0.013	0.032	0.007	0.953
	Rural	17	76.5	0.019	0.024	0.011	1.07
	Low Income	39	56.4	0.019	0.051	0.007	1.08
	Mid/High Income	73	63.0	0.012	0.016	0.007	0.940
	Home Children	69	58.0	0.013	0.022	0.007	1.02
	Day Care Children	56	64.3	0.016	0.041	0.008	0.920
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	54.6	0.002	0.004	0.001	1.12
	Urban	102	51.0	0.002	0.004	0.001	1.11
	Rural	17	76.5	0.002	0.003	0.001	1.18
	Low Income	38	63.2	0.002	0.002	0.001	1.15
	Mid/High Income	68	52.9	0.002	0.004	0.001	1.04
	Home Children	63	54.0	0.002	0.005	0.001	1.08
	Day Care Children	56	55.4	0.002	0.003	0.001	1.16
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	60.8	0.044	0.096	0.022	0.977
	Urban	108	58.3	0.041	0.099	0.021	0.953
	Rural	17	76.5	0.059	0.074	0.032	1.07
	Low Income	39	56.4	0.057	0.156	0.021	1.08
	Mid/High Income	73	63.0	0.037	0.050	0.023	0.940
	Home Children	69	58.0	0.039	0.066	0.020	1.02
	Day Care Children	56	64.3	0.049	0.124	0.025	0.920
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	54.6	0.006	0.012	0.003	1.12
	Urban	102	51.0	0.006	0.012	0.003	1.11
	Rural	17	76.5	0.006	0.010	0.002	1.18
	Low Income	38	63.2	0.005	0.007	0.002	1.15
	Mid/High Income	68	52.9	0.006	0.013	0.003	1.04
	Home Children	63	54.0	0.006	0.014	0.003	1.08
	Day Care Children	56	55.4	0.005	0.008	0.002	1.16

^a Estimates are labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. "Potential Absorbed Dose" was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-25b. PCB 101 (37680-73-2): Range of Potential Exposure and Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	125	<MDL	<MDL	1.03	1.69	7.15	41.9
	Urban	108	<MDL	<MDL	1.02	1.68	5.92	41.9
	Rural	17	<MDL	0.750	1.33	2.96	10.6	10.6
	Low Income	39	<MDL	<MDL	0.952	1.58	18.7	41.9
	Mid/High Income	73	<MDL	<MDL	1.11	1.82	7.15	16.7
	Home Children	69	<MDL	<MDL	0.740	1.68	9.73	18.7
	Day Care Children	56	<MDL	<MDL	1.09	1.74	7.15	41.9
Potential Exposure via Indirect Ingestion (ng/day)	Overall	119	<MDL	<MDL	0.109	0.235	1.15	5.89
	Urban	102	<MDL	<MDL	0.108	0.226	1.01	5.89
	Rural	17	<MDL	0.050	0.109	0.235	1.73	1.73
	Low Income	38	<MDL	<MDL	0.089	0.287	1.17	1.46
	Mid/High Income	68	<MDL	<MDL	0.123	0.225	0.734	5.89
	Home Children	63	<MDL	<MDL	0.116	0.226	1.15	5.89
	Day Care Children	56	<MDL	<MDL	0.088	0.235	1.01	2.33
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	125	<MDL	<MDL	3.16	5.19	21.9	128
	Urban	108	<MDL	<MDL	3.12	5.14	18.1	128
	Rural	17	<MDL	2.30	4.07	9.08	32.5	32.5
	Low Income	39	<MDL	<MDL	2.92	4.84	57.3	128
	Mid/High Income	73	<MDL	<MDL	3.41	5.58	21.9	51.0
	Home Children	69	<MDL	<MDL	2.27	5.14	29.8	57.3
	Day Care Children	56	<MDL	<MDL	3.34	5.33	21.9	128
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	119	<MDL	<MDL	0.335	0.719	3.51	18.0
	Urban	102	<MDL	<MDL	0.332	0.692	3.10	18.0
	Rural	17	<MDL	0.154	0.335	0.719	5.29	5.29
	Low Income	38	<MDL	<MDL	0.274	0.879	3.59	4.47
	Mid/High Income	68	<MDL	<MDL	0.378	0.690	2.25	18.0
	Home Children	63	<MDL	<MDL	0.354	0.692	3.51	18.0
	Day Care Children	56	<MDL	<MDL	0.271	0.721	3.10	7.13
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	125	<MDL	<MDL	0.006	0.012	0.042	0.304
	Urban	108	<MDL	<MDL	0.006	0.012	0.034	0.304
	Rural	17	<MDL	0.004	0.008	0.019	0.078	0.078
	Low Income	39	<MDL	<MDL	0.006	0.010	0.124	0.304
	Mid/High Income	73	<MDL	<MDL	0.008	0.012	0.042	0.097
	Home Children	69	<MDL	<MDL	0.005	0.011	0.062	0.124
	Day Care Children	56	<MDL	<MDL	0.008	0.012	0.042	0.304
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	119	<MDL	<MDL	0.001	0.002	0.007	0.034
	Urban	102	<MDL	<MDL	0.001	0.002	0.007	0.034
	Rural	17	<MDL	0.000	0.001	0.001	0.014	0.014
	Low Income	38	<MDL	<MDL	0.001	0.002	0.008	0.010
	Mid/High Income	68	<MDL	<MDL	0.001	0.002	0.005	0.034
	Home Children	63	<MDL	<MDL	0.001	0.002	0.007	0.034
	Day Care Children	56	<MDL	<MDL	0.001	0.002	0.007	0.014
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	125	<MDL	<MDL	0.020	0.036	0.128	0.930
	Urban	108	<MDL	<MDL	0.019	0.036	0.105	0.930
	Rural	17	<MDL	0.012	0.026	0.057	0.239	0.239
	Low Income	39	<MDL	<MDL	0.017	0.029	0.380	0.930
	Mid/High Income	73	<MDL	<MDL	0.024	0.036	0.128	0.296
	Home Children	69	<MDL	<MDL	0.016	0.035	0.191	0.380
	Day Care Children	56	<MDL	<MDL	0.024	0.038	0.128	0.930
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	119	<MDL	<MDL	0.002	0.005	0.023	0.105
	Urban	102	<MDL	<MDL	0.002	0.005	0.022	0.105
	Rural	17	<MDL	0.001	0.003	0.005	0.044	0.044
	Low Income	38	<MDL	<MDL	0.002	0.005	0.023	0.030
	Mid/High Income	68	<MDL	<MDL	0.003	0.005	0.016	0.105
	Home Children	63	<MDL	<MDL	0.003	0.005	0.023	0.105
	Day Care Children	56	<MDL	<MDL	0.002	0.005	0.022	0.044

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Table O-26a. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimates of Potential Exposure in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Exposure in OH Adults (ng/day)							
Potential Exposure via Inhalation (ng/day)	Overall	115	100.0	18.4	44.9	8.96	0.939
	Urban	99	100.0	20.2	48.2	9.38	0.989
	Rural	16	100.0	7.33	3.15	6.72	0.450
	Low Income	36	100.0	26.1	48.0	11.4	1.13
	Mid/High Income	66	100.0	10.2	9.76	7.55	0.737
	Home Children	64	100.0	23.9	58.9	9.05	1.13
	Day Care Children	51	100.0	11.5	11.4	8.84	0.642
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	99.2	1,900	3,020	983	1.16
	Urban	110	99.1	1,930	3,110	990	1.18
	Rural	17	100.0	1,720	2,440	938	1.12
	Low Income	41	100.0	1,250	1,510	734	1.03
	Mid/High Income	73	98.6	2,020	3,470	1,090	1.13
	Home Children	69	100.0	2,740	3,750	1,690	0.934
	Day Care Children	58	98.3	914	1,280	515	1.08
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	100.0	3.57	8.11	1.19	1.32
	Urban	103	100.0	4.02	8.68	1.34	1.33
	Rural	17	100.0	0.863	0.896	0.565	0.992
	Low Income	38	100.0	5.99	11.8	1.71	1.53
	Mid/High Income	69	100.0	2.53	5.58	1.04	1.18
	Home Children	63	100.0	2.92	6.12	1.05	1.30
	Day Care Children	57	100.0	4.30	9.87	1.35	1.33
Potential Exposure – Aggregated (ng/day)	Overall	108	100.0	2,010	3,210	1,050	1.14
	Urban	92	100.0	2,060	3,320	1,070	1.15
	Rural	16	100.0	1,770	2,520	942	1.15
	Low Income	33	100.0	1,140	1,190	761	0.922
	Mid/High Income	62	100.0	2,190	3,730	1,170	1.13
	Home Children	58	100.0	2,980	4,020	1,860	0.914
	Day Care Children	50	100.0	891	1,130	543	1.03
Potential Exposure in OH Adults (pmoles/day)							
Potential Exposure via Inhalation (pmoles/day)	Overall	115	100.0	92.6	226	45.1	0.939
	Urban	99	100.0	102	243	47.3	0.989
	Rural	16	100.0	36.9	15.9	33.8	0.450
	Low Income	36	100.0	132	242	57.3	1.13
	Mid/High Income	66	100.0	51.5	49.2	38.0	0.737
	Home Children	64	100.0	120	297	45.6	1.13
	Day Care Children	51	100.0	57.8	57.5	44.6	0.642
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	99.2	9,590	15,200	4,950	1.16
	Urban	110	99.1	9,740	15,700	4,990	1.18
	Rural	17	100.0	8,670	12,300	4,730	1.12
	Low Income	41	100.0	6,280	7,590	3,700	1.03
	Mid/High Income	73	98.6	10,200	17,500	5,490	1.13
	Home Children	69	100.0	13,800	18,900	8,540	0.934
	Day Care Children	58	98.3	4,600	6,450	2,590	1.08
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	100.0	18.0	40.9	5.98	1.32
	Urban	103	100.0	20.3	43.7	6.76	1.33
	Rural	17	100.0	4.35	4.52	2.85	0.992
	Low Income	38	100.0	30.2	59.6	8.60	1.53
	Mid/High Income	69	100.0	12.7	28.1	5.23	1.18
	Home Children	63	100.0	14.7	30.8	5.31	1.30
	Day Care Children	57	100.0	21.7	49.8	6.82	1.33
Potential Exposure – Aggregated (pmoles/day)	Overall	108	100.0	10,100	16,200	5,310	1.14
	Urban	92	100.0	10,400	16,700	5,410	1.15
	Rural	16	100.0	8,910	12,700	4,750	1.15
	Low Income	33	100.0	5,750	6,000	3,830	0.922
	Mid/High Income	62	100.0	11,100	18,800	5,920	1.13
	Home Children	58	100.0	15,000	20,300	9,390	0.914
	Day Care Children	50	100.0	4,490	5,710	2,740	1.03

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%.

Table O-26b. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Potential Exposure in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Exposure in OH Adults (ng/day)								
Potential Exposure via Inhalation (ng/day)	Overall	115	1.72	4.76	7.02	14.1	64.6	386
	Urban	99	1.72	4.74	7.07	15.6	85.8	386
	Rural	16	2.25	5.87	6.92	8.27	16.1	16.1
	Low Income	36	2.99	5.20	8.25	18.4	152	238
	Mid/High Income	66	1.72	4.63	6.28	12.3	27.9	47.1
	Home Children	64	1.72	4.42	6.04	14.9	93.8	386
	Day Care Children	51	3.77	5.82	7.40	11.3	43.8	64.6
Potential Exposure via Dietary Ingestion (ng/day)	Overall	127	<MDL	538	979	2,070	6,690	27,300
	Urban	110	<MDL	539	985	2,070	6,690	27,300
	Rural	17	102	537	894	1,740	10,400	10,400
	Low Income	41	86.4	402	692	1,330	5,420	6,190
	Mid/High Income	73	<MDL	626	1,090	2,050	6,360	27,300
	Home Children	69	173	822	1,440	3,270	7,910	27,300
	Day Care Children	58	<MDL	267	558	979	3,060	7,070
Potential Exposure via Indirect Ingestion (ng/day)	Overall	120	0.103	0.554	0.991	2.23	19.1	47.2
	Urban	103	0.103	0.586	1.06	2.80	22.1	47.2
	Rural	17	0.108	0.306	0.622	0.974	3.87	3.87
	Low Income	38	0.103	0.662	1.22	4.00	43.3	47.2
	Mid/High Income	69	0.114	0.534	0.879	1.64	10.1	34.2
	Home Children	63	0.108	0.444	0.857	2.10	13.4	34.2
	Day Care Children	57	0.103	0.598	1.10	2.37	38.8	47.2
Potential Exposure – Aggregated (ng/day)	Overall	108	25.8	554	1,000	2,170	7,080	27,300
	Urban	92	25.8	570	1,010	2,170	7,080	27,300
	Rural	16	108	482	790	2,150	10,500	10,500
	Low Income	33	95.5	460	761	1,380	3,340	5,910
	Mid/High Income	62	25.8	651	1,150	2,550	6,360	27,300
	Home Children	58	312	984	1,550	3,340	10,200	27,300
	Day Care Children	50	25.8	321	579	984	2,860	7,080
Potential Exposure in OH Adults (pmoles/day)								
Potential Exposure via Inhalation (pmoles/day)	Overall	115	8.69	24.0	35.4	70.9	326	1,950
	Urban	99	8.69	23.9	35.6	78.4	433	1,950
	Rural	16	11.3	29.6	34.9	41.7	81.0	81.0
	Low Income	36	15.1	26.2	41.6	92.6	766	1,200
	Mid/High Income	66	8.69	23.4	31.6	61.8	141	238
	Home Children	64	8.69	22.3	30.5	75.0	473	1,950
	Day Care Children	51	19.0	29.3	37.3	57.0	221	326
Potential Exposure via Dietary Ingestion (pmoles/day)	Overall	127	<MDL	2,710	4,930	10,400	33,700	137,000
	Urban	110	<MDL	2,720	4,960	10,400	33,700	137,000
	Rural	17	514	2,710	4,510	8,750	52,700	52,700
	Low Income	41	436	2,030	3,490	6,720	27,300	31,200
	Mid/High Income	73	<MDL	3,160	5,510	10,300	32,000	137,000
	Home Children	69	872	4,140	7,250	16,500	39,800	137,000
	Day Care Children	58	<MDL	1,340	2,810	4,930	15,400	35,600
Potential Exposure via Indirect Ingestion (pmoles/day)	Overall	120	0.522	2.79	5.00	11.3	96.2	238
	Urban	103	0.522	2.95	5.33	14.1	111	238
	Rural	17	0.544	1.54	3.13	4.91	19.5	19.5
	Low Income	38	0.522	3.33	6.13	20.1	218	238
	Mid/High Income	69	0.574	2.69	4.43	8.25	50.8	173
	Home Children	63	0.544	2.24	4.32	10.6	67.3	173
	Day Care Children	57	0.522	3.01	5.55	11.9	195	238
Potential Exposure – Aggregated (pmoles/day)	Overall	108	130	2,790	5,040	10,900	35,700	137,000
	Urban	92	130	2,870	5,090	10,900	35,700	137,000
	Rural	16	545	2,430	3,980	10,800	52,700	52,700
	Low Income	33	481	2,320	3,830	6,960	16,800	29,800
	Mid/High Income	62	130	3,280	5,790	12,900	32,100	137,000
	Home Children	58	1,570	4,960	7,810	16,800	51,400	137,000
	Day Care Children	50	130	1,620	2,920	4,960	14,400	35,700

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table O-26c. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimates of Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Potential Absorbed Dose in OH Adults (ng/kg/day)							
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	115	100.0	0.131	0.333	0.061	0.972
	Urban	99	100.0	0.144	0.357	0.064	1.02
	Rural	16	100.0	0.049	0.022	0.045	0.444
	Low Income	36	100.0	0.178	0.314	0.075	1.16
	Mid/High Income	66	100.0	0.075	0.077	0.053	0.781
	Home Children	64	100.0	0.171	0.437	0.063	1.13
	Day Care Children	51	100.0	0.081	0.090	0.059	0.731
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	99.2	13.7	22.3	6.68	1.23
	Urban	110	99.1	14.2	23.2	6.75	1.25
	Rural	17	100.0	11.1	15.1	6.26	1.12
	Low Income	41	100.0	9.23	12.2	4.91	1.11
	Mid/High Income	73	98.6	14.6	25.5	7.50	1.20
	Home Children	69	100.0	20.0	27.7	11.9	0.987
	Day Care Children	58	98.3	6.34	8.88	3.38	1.14
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	100.0	0.025	0.061	0.008	1.34
	Urban	103	100.0	0.029	0.065	0.009	1.36
	Rural	17	100.0	0.006	0.007	0.004	0.918
	Low Income	38	100.0	0.042	0.090	0.011	1.55
	Mid/High Income	69	100.0	0.018	0.041	0.007	1.21
	Home Children	63	100.0	0.021	0.045	0.007	1.29
	Day Care Children	57	100.0	0.031	0.075	0.009	1.39
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	108	100.0	14.5	23.4	7.22	1.19
	Urban	92	100.0	15.0	24.6	7.40	1.21
	Rural	16	100.0	11.4	15.6	6.24	1.14
	Low Income	33	100.0	8.06	8.70	4.99	1.00
	Mid/High Income	62	100.0	16.0	27.4	8.30	1.17
	Home Children	58	100.0	21.6	29.5	13.1	0.964
	Day Care Children	50	100.0	6.16	7.68	3.62	1.06
Potential Absorbed Dose in OH Adults (pmoles/kg/day)							
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	115	100.0	0.661	1.68	0.309	0.972
	Urban	99	100.0	0.728	1.80	0.325	1.02
	Rural	16	100.0	0.245	0.108	0.224	0.444
	Low Income	36	100.0	0.895	1.58	0.380	1.16
	Mid/High Income	66	100.0	0.377	0.389	0.266	0.781
	Home Children	64	100.0	0.861	2.20	0.319	1.13
	Day Care Children	51	100.0	0.410	0.454	0.296	0.731
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	99.2	69.3	112	33.7	1.23
	Urban	110	99.1	71.3	117	34.0	1.25
	Rural	17	100.0	56.0	76.1	31.5	1.12
	Low Income	41	100.0	46.5	61.5	24.8	1.11
	Mid/High Income	73	98.6	73.8	128	37.8	1.20
	Home Children	69	100.0	101	140	59.8	0.987
	Day Care Children	58	98.3	31.9	44.7	17.0	1.14
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	100.0	0.128	0.307	0.041	1.34
	Urban	103	100.0	0.144	0.328	0.046	1.36
	Rural	17	100.0	0.029	0.033	0.019	0.918
	Low Income	38	100.0	0.210	0.451	0.057	1.55
	Mid/High Income	69	100.0	0.092	0.208	0.036	1.21
	Home Children	63	100.0	0.104	0.226	0.037	1.29
	Day Care Children	57	100.0	0.154	0.377	0.045	1.39
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	108	100.0	72.9	118	36.4	1.19
	Urban	92	100.0	75.6	124	37.3	1.21
	Rural	16	100.0	57.2	78.6	31.4	1.14
	Low Income	33	100.0	40.6	43.9	25.1	1.00
	Mid/High Income	62	100.0	80.7	138	41.8	1.17
	Home Children	58	100.0	109	148	65.9	0.964
	Day Care Children	50	100.0	31.1	38.7	18.2	1.06

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected estimates is below 50%. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject's body weight.

Table O-26d. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Potential Absorbed Dose in OH Adults, Summarized by Exposure Pathway and Strata^a

Exposure/Dose Parameter and Pathway	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Potential Absorbed Dose in OH Adults (ng/kg/day)								
Potential Absorbed Dose via Inhalation (ng/kg/day)	Overall	115	0.015	0.031	0.046	0.099	0.512	3.04
	Urban	99	0.015	0.031	0.046	0.119	0.618	3.04
	Rural	16	0.017	0.033	0.044	0.061	0.101	0.101
	Low Income	36	0.018	0.037	0.046	0.150	1.03	1.45
	Mid/High Income	66	0.015	0.030	0.045	0.077	0.250	0.379
	Home Children	64	0.015	0.030	0.045	0.102	0.738	3.04
	Day Care Children	51	0.018	0.036	0.049	0.077	0.242	0.512
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	Overall	127	<MDL	3.14	6.07	16.1	47.1	200
	Urban	110	<MDL	3.14	6.19	16.8	47.1	200
	Rural	17	0.624	3.23	5.66	12.1	65.4	65.4
	Low Income	41	0.793	2.49	5.02	7.56	39.1	54.2
	Mid/High Income	73	<MDL	4.32	7.79	15.5	47.1	200
	Home Children	69	1.36	5.61	10.4	22.1	56.0	200
	Day Care Children	58	<MDL	1.34	3.40	6.07	28.1	44.9
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	Overall	120	0.001	0.004	0.007	0.014	0.112	0.433
	Urban	103	0.001	0.004	0.008	0.018	0.126	0.433
	Rural	17	0.001	0.002	0.004	0.007	0.029	0.029
	Low Income	38	0.001	0.004	0.009	0.030	0.317	0.433
	Mid/High Income	69	0.001	0.003	0.007	0.013	0.085	0.260
	Home Children	63	0.001	0.003	0.007	0.014	0.090	0.260
	Day Care Children	57	0.001	0.004	0.007	0.015	0.203	0.433
Potential Absorbed Dose – Aggregated (ng/kg/day)	Overall	108	0.203	3.27	6.39	16.5	47.1	200
	Urban	92	0.203	3.37	6.60	17.7	47.1	200
	Rural	16	0.661	2.94	5.44	13.8	65.5	65.5
	Low Income	33	0.876	2.55	5.42	7.61	22.1	40.2
	Mid/High Income	62	0.203	4.90	7.92	16.9	47.1	200
	Home Children	58	2.22	6.15	11.1	23.9	65.5	200
	Day Care Children	50	0.203	2.07	3.53	6.37	18.0	43.3
Potential Absorbed Dose in OH Adults (pmoles/kg/day)								
Potential Absorbed Dose via Inhalation (pmoles/kg/day)	Overall	115	0.073	0.159	0.230	0.498	2.58	15.3
	Urban	99	0.073	0.158	0.233	0.601	3.11	15.3
	Rural	16	0.086	0.164	0.222	0.305	0.507	0.507
	Low Income	36	0.091	0.184	0.230	0.757	5.21	7.33
	Mid/High Income	66	0.073	0.149	0.227	0.390	1.26	1.91
	Home Children	64	0.073	0.149	0.226	0.515	3.72	15.3
	Day Care Children	51	0.091	0.182	0.247	0.390	1.22	2.58
Potential Absorbed Dose via Dietary Ingestion (pmoles/kg/day)	Overall	127	<MDL	15.8	30.6	81.4	237	1,010
	Urban	110	<MDL	15.8	31.2	84.8	237	1,010
	Rural	17	3.15	16.3	28.5	61.2	330	330
	Low Income	41	4.00	12.6	25.3	38.1	197	273
	Mid/High Income	73	<MDL	21.8	39.3	78.0	237	1,010
	Home Children	69	6.86	28.3	52.2	111	282	1,010
	Day Care Children	58	<MDL	6.77	17.1	30.6	142	226
Potential Absorbed Dose via Indirect Ingestion (pmoles/kg/day)	Overall	120	0.003	0.018	0.034	0.073	0.564	2.18
	Urban	103	0.003	0.019	0.038	0.089	0.637	2.18
	Rural	17	0.005	0.010	0.020	0.034	0.145	0.145
	Low Income	38	0.003	0.020	0.044	0.151	1.60	2.18
	Mid/High Income	69	0.005	0.017	0.034	0.063	0.431	1.31
	Home Children	63	0.005	0.013	0.034	0.070	0.455	1.31
	Day Care Children	57	0.003	0.019	0.034	0.074	1.02	2.18
Potential Absorbed Dose – Aggregated (pmoles/kg/day)	Overall	108	1.02	16.5	32.2	83.3	237	1,010
	Urban	92	1.02	17.0	33.3	89.1	237	1,010
	Rural	16	3.33	14.8	27.4	69.7	330	330
	Low Income	33	4.42	12.8	27.3	38.3	112	203
	Mid/High Income	62	1.02	24.7	39.9	85.0	237	1,010
	Home Children	58	11.2	31.0	55.8	120	330	1,010
	Day Care Children	50	1.02	10.5	17.8	32.1	90.9	218

^a Estimates are labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. “Potential Absorbed Dose” was calculated as the Potential Exposure times 50% (the assumed absorption factor into the body), divided by the subject’s body weight.

Appendix P

Descriptive Statistics of Urinary Biomarker Concentrations for Target Pollutants in NC Study Participants

This appendix contains tables of descriptive statistics of urine biomarker data (unadjusted, adjusted for specific gravity, and adjusted for creatinine levels, with units expressed in both ng and pmoles) in NC children and adults for the following pollutants and metabolites:

Pollutant/Metabolite	Table Numbers (Children)	Table Numbers (Adults)
2,4-D (2,4-dichlorophenoxyacetic acid)	Tables P-1a, P-1b	Tables P-1c, P-1d
1-hydroxybenz[a]anthracene	Tables P-2a, P-2b	Tables P-2c, P-2d
3-hydroxychrysene	Tables P-3a, P-3b	Tables P-3c, P-3d
Pentachlorophenol	Tables P-4a, P-4b	Tables P-4c, P-4d
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)	Tables P-5a, P-5b	Tables P-5c, P-5d

Descriptive statistics are presented separately for the following groups of participants:

- All participants
- Participants from urban areas
- Participants from rural areas
- Participants from low-income areas
- Participants from middle/upper-income areas
- Stay-at-home children (or their caregivers)
- Day care children (or their caregivers)

Table P-1a. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimated Urinary Biomarker Concentrations in NC Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	128	93.8	0.775	0.561	0.594	0.759
	Urban	107	93.5	0.812	0.575	0.624	0.768
	Rural	21	95.2	0.583	0.453	0.465	0.670
	Low Income	59	96.6	0.836	0.558	0.665	0.710
	Mid/High Income	65	90.8	0.707	0.573	0.522	0.799
	Home Children	65	87.7	0.715	0.556	0.519	0.841
	Day Care Children	63	100.0	0.836	0.565	0.684	0.640
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	93.8	0.758	0.549	0.582	0.758
	Urban	107	93.5	0.795	0.562	0.611	0.768
	Rural	21	95.2	0.571	0.442	0.456	0.669
	Low Income	59	96.6	0.819	0.546	0.652	0.710
	Mid/High Income	65	90.8	0.692	0.561	0.511	0.799
	Home Children	65	87.7	0.700	0.545	0.508	0.841
	Day Care Children	63	100.0	0.819	0.552	0.670	0.638
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	110	93.6	1.16	0.761	0.933	0.687
	Urban	93	93.5	1.19	0.795	0.947	0.703
	Rural	17	94.1	1.00	0.536	0.862	0.610
	Low Income	49	98.0	1.23	0.733	1.04	0.584
	Mid/High Income	57	89.5	1.08	0.792	0.835	0.764
	Home Children	55	87.3	1.16	0.873	0.869	0.809
	Day Care Children	55	100.0	1.15	0.639	1.00	0.537
Urinary concentration (pmoles/mL)	Overall	128	93.8	3.50	2.54	2.69	0.759
	Urban	107	93.5	3.67	2.60	2.82	0.768
	Rural	21	95.2	2.64	2.05	2.10	0.670
	Low Income	59	96.6	3.78	2.52	3.01	0.710
	Mid/High Income	65	90.8	3.20	2.59	2.36	0.799
	Home Children	65	87.7	3.23	2.52	2.35	0.841
	Day Care Children	63	100.0	3.78	2.55	3.09	0.640
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	93.8	3.43	2.48	2.63	0.758
	Urban	107	93.5	3.60	2.54	2.76	0.768
	Rural	21	95.2	2.59	2.00	2.06	0.669
	Low Income	59	96.6	3.70	2.47	2.95	0.710
	Mid/High Income	65	90.8	3.13	2.54	2.31	0.799
	Home Children	65	87.7	3.17	2.46	2.30	0.841
	Day Care Children	63	100.0	3.70	2.50	3.03	0.638
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	110	93.6	0.592	0.389	0.477	0.687
	Urban	93	93.5	0.606	0.406	0.484	0.703
	Rural	17	94.1	0.513	0.274	0.441	0.610
	Low Income	49	98.0	0.627	0.375	0.532	0.584
	Mid/High Income	57	89.5	0.555	0.405	0.427	0.764
	Home Children	55	87.3	0.594	0.446	0.444	0.809
	Day Care Children	55	100.0	0.590	0.326	0.512	0.537

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table P-1b. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Estimated Urinary Biomarker Concentrations in NC Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	128	<MDL	0.343	0.652	1.09	1.97	2.64
	Urban	107	<MDL	0.349	0.690	1.10	2.11	2.64
	Rural	21	<MDL	0.280	0.430	0.656	1.40	1.97
	Low Income	59	<MDL	0.405	0.736	1.10	1.97	2.64
	Mid/High Income	65	<MDL	0.276	0.510	0.945	2.11	2.61
	Home Children	65	<MDL	0.245	0.510	1.07	1.93	2.41
	Day Care Children	63	0.172	0.412	0.707	1.10	2.17	2.64
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	<MDL	0.336	0.639	1.07	1.92	2.57
	Urban	107	<MDL	0.344	0.673	1.08	2.06	2.57
	Rural	21	<MDL	0.276	0.420	0.647	1.37	1.92
	Low Income	59	<MDL	0.396	0.721	1.08	1.92	2.57
	Mid/High Income	65	<MDL	0.270	0.498	0.922	2.06	2.54
	Home Children	65	<MDL	0.240	0.498	1.05	1.89	2.38
	Day Care Children	63	0.170	0.401	0.686	1.08	2.13	2.57
Urinary concentration adjusted for creatinine (ng/mg)	Overall	110	<MDL	0.598	0.975	1.47	2.60	3.92
	Urban	93	<MDL	0.580	0.998	1.48	2.62	3.92
	Rural	17	<MDL	0.732	0.898	1.29	2.33	2.33
	Low Income	49	<MDL	0.703	1.10	1.62	2.60	3.51
	Mid/High Income	57	<MDL	0.518	0.931	1.40	2.62	3.92
	Home Children	55	<MDL	0.518	0.984	1.43	3.35	3.92
	Day Care Children	55	0.351	0.703	0.966	1.53	2.52	3.44
Urinary concentration (pmoles/mL)	Overall	128	<MDL	1.55	2.95	4.95	8.91	11.9
	Urban	107	<MDL	1.58	3.12	5.00	9.55	11.9
	Rural	21	<MDL	1.27	1.95	2.97	6.33	8.91
	Low Income	59	<MDL	1.83	3.33	5.00	8.91	11.9
	Mid/High Income	65	<MDL	1.25	2.31	4.27	9.55	11.8
	Home Children	65	<MDL	1.11	2.31	4.84	8.73	10.9
	Day Care Children	63	0.780	1.86	3.20	5.00	9.83	11.9
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	<MDL	1.52	2.89	4.82	8.70	11.6
	Urban	107	<MDL	1.56	3.05	4.87	9.31	11.6
	Rural	21	<MDL	1.25	1.90	2.93	6.18	8.70
	Low Income	59	<MDL	1.79	3.26	4.87	8.70	11.6
	Mid/High Income	65	<MDL	1.22	2.25	4.17	9.31	11.5
	Home Children	65	<MDL	1.09	2.25	4.77	8.56	10.8
	Day Care Children	63	0.770	1.81	3.10	4.87	9.61	11.6
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	110	<MDL	0.306	0.498	0.752	1.33	2.01
	Urban	93	<MDL	0.296	0.510	0.756	1.34	2.01
	Rural	17	<MDL	0.374	0.459	0.659	1.19	1.19
	Low Income	49	<MDL	0.359	0.561	0.829	1.33	1.79
	Mid/High Income	57	<MDL	0.265	0.476	0.716	1.34	2.01
	Home Children	55	<MDL	0.265	0.503	0.730	1.72	2.01
	Day Care Children	55	0.179	0.359	0.494	0.783	1.29	1.76

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table P-1c. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimated Urinary Biomarker Concentrations in NC Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	128	86.7	0.935	1.05	0.593	0.956
	Urban	107	86.0	0.978	1.11	0.610	0.975
	Rural	21	90.5	0.717	0.584	0.516	0.862
	Low Income	59	86.4	0.995	1.28	0.573	1.02
	Mid/High Income	65	89.2	0.920	0.808	0.645	0.891
	Home Children	65	87.7	0.927	0.978	0.603	0.941
	Day Care Children	63	85.7	0.943	1.12	0.584	0.978
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	86.7	0.914	1.02	0.580	0.956
	Urban	107	86.0	0.956	1.08	0.596	0.975
	Rural	21	90.5	0.699	0.568	0.504	0.861
	Low Income	59	86.4	0.971	1.25	0.560	1.02
	Mid/High Income	65	89.2	0.899	0.788	0.631	0.891
	Home Children	65	87.7	0.906	0.953	0.589	0.940
	Day Care Children	63	85.7	0.922	1.09	0.570	0.979
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	112	84.8	0.705	0.682	0.476	0.925
	Urban	95	84.2	0.726	0.726	0.473	0.965
	Rural	17	88.2	0.586	0.324	0.491	0.683
	Low Income	50	84.0	0.656	0.722	0.425	0.957
	Mid/High Income	58	87.9	0.774	0.659	0.556	0.853
	Home Children	55	85.5	0.811	0.771	0.558	0.912
	Day Care Children	57	84.2	0.602	0.571	0.408	0.919
Urinary concentration (pmoles/mL)	Overall	128	86.7	4.23	4.73	2.68	0.956
	Urban	107	86.0	4.43	5.03	2.76	0.975
	Rural	21	90.5	3.24	2.64	2.34	0.862
	Low Income	59	86.4	4.50	5.80	2.59	1.02
	Mid/High Income	65	89.2	4.16	3.66	2.92	0.891
	Home Children	65	87.7	4.20	4.42	2.73	0.941
	Day Care Children	63	85.7	4.27	5.07	2.64	0.978
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	86.7	4.13	4.62	2.62	0.956
	Urban	107	86.0	4.32	4.90	2.70	0.975
	Rural	21	90.5	3.16	2.57	2.28	0.861
	Low Income	59	86.4	4.40	5.65	2.53	1.02
	Mid/High Income	65	89.2	4.07	3.57	2.85	0.891
	Home Children	65	87.7	4.10	4.31	2.67	0.940
	Day Care Children	63	85.7	4.17	4.95	2.58	0.979
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	112	84.8	0.360	0.348	0.243	0.925
	Urban	95	84.2	0.371	0.371	0.242	0.965
	Rural	17	88.2	0.300	0.165	0.251	0.683
	Low Income	50	84.0	0.335	0.369	0.217	0.957
	Mid/High Income	58	87.9	0.396	0.337	0.284	0.853
	Home Children	55	85.5	0.415	0.394	0.285	0.912
	Day Care Children	57	84.2	0.308	0.292	0.209	0.919

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table P-1d. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Estimated Urinary Biomarker Concentrations in NC Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	128	<MDL	0.290	0.615	1.13	2.99	6.65
	Urban	107	<MDL	0.290	0.640	1.14	3.18	6.65
	Rural	21	<MDL	0.290	0.440	0.880	1.88	2.01
	Low Income	59	<MDL	0.260	0.560	1.04	4.39	6.65
	Mid/High Income	65	<MDL	0.350	0.720	1.14	2.18	4.64
	Home Children	65	<MDL	0.320	0.590	1.11	2.79	5.07
	Day Care Children	63	<MDL	0.260	0.660	1.14	2.99	6.65
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	<MDL	0.284	0.604	1.10	2.95	6.46
	Urban	107	<MDL	0.282	0.631	1.12	3.10	6.46
	Rural	21	<MDL	0.286	0.431	0.867	1.83	1.96
	Low Income	59	<MDL	0.255	0.546	1.01	4.33	6.46
	Mid/High Income	65	<MDL	0.343	0.706	1.12	2.13	4.50
	Home Children	65	<MDL	0.312	0.578	1.09	2.76	4.92
	Day Care Children	63	<MDL	0.255	0.644	1.12	2.95	6.46
Urinary concentration adjusted for creatinine (ng/mg)	Overall	112	<MDL	0.267	0.498	0.869	2.20	3.89
	Urban	95	<MDL	0.256	0.494	0.926	2.30	3.89
	Rural	17	<MDL	0.427	0.507	0.709	1.46	1.46
	Low Income	50	<MDL	0.209	0.482	0.728	2.30	3.89
	Mid/High Income	58	<MDL	0.323	0.599	0.974	2.20	3.52
	Home Children	55	<MDL	0.310	0.618	0.940	2.30	3.89
	Day Care Children	57	<MDL	0.209	0.419	0.696	2.08	2.75
Urinary concentration (pmoles/mL)	Overall	128	<MDL	1.31	2.78	5.09	13.5	30.1
	Urban	107	<MDL	1.31	2.90	5.16	14.4	30.1
	Rural	21	<MDL	1.31	1.99	3.98	8.51	9.09
	Low Income	59	<MDL	1.18	2.53	4.71	19.9	30.1
	Mid/High Income	65	<MDL	1.58	3.26	5.16	9.86	21.0
	Home Children	65	<MDL	1.45	2.67	5.02	12.6	22.9
	Day Care Children	63	<MDL	1.18	2.99	5.16	13.5	30.1
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	<MDL	1.28	2.73	4.99	13.3	29.2
	Urban	107	<MDL	1.27	2.85	5.06	14.0	29.2
	Rural	21	<MDL	1.29	1.95	3.92	8.26	8.87
	Low Income	59	<MDL	1.15	2.47	4.59	19.6	29.2
	Mid/High Income	65	<MDL	1.55	3.19	5.08	9.62	20.4
	Home Children	65	<MDL	1.41	2.62	4.95	12.5	22.3
	Day Care Children	63	<MDL	1.15	2.91	5.06	13.3	29.2
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	112	<MDL	0.136	0.255	0.444	1.13	1.99
	Urban	95	<MDL	0.131	0.252	0.473	1.18	1.99
	Rural	17	<MDL	0.218	0.259	0.363	0.747	0.747
	Low Income	50	<MDL	0.107	0.246	0.372	1.18	1.99
	Mid/High Income	58	<MDL	0.165	0.306	0.498	1.13	1.80
	Home Children	55	<MDL	0.159	0.316	0.481	1.18	1.99
	Day Care Children	57	<MDL	0.107	0.214	0.356	1.06	1.41

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table P-2a. 1-hydroxybenz[a]anthracene (69847-26-3): Estimated Urinary Biomarker Concentrations in NC Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	128	1.6	--	--	--	--
	Urban	107	1.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	59	3.4	--	--	--	--
	Mid/High Income	65	0.0	--	--	--	--
	Home Children	65	1.5	--	--	--	--
	Day Care Children	63	1.6	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	1.6	--	--	--	--
	Urban	107	1.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	59	3.4	--	--	--	--
	Mid/High Income	65	0.0	--	--	--	--
	Home Children	65	1.5	--	--	--	--
	Day Care Children	63	1.6	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	110	1.8	--	--	--	--
	Urban	93	2.2	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	49	4.1	--	--	--	--
	Mid/High Income	57	0.0	--	--	--	--
	Home Children	55	1.8	--	--	--	--
	Day Care Children	55	1.8	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	128	1.6	--	--	--	--
	Urban	107	1.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	59	3.4	--	--	--	--
	Mid/High Income	65	0.0	--	--	--	--
	Home Children	65	1.5	--	--	--	--
	Day Care Children	63	1.6	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	1.6	--	--	--	--
	Urban	107	1.9	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	59	3.4	--	--	--	--
	Mid/High Income	65	0.0	--	--	--	--
	Home Children	65	1.5	--	--	--	--
	Day Care Children	63	1.6	--	--	--	--
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	110	1.8	--	--	--	--
	Urban	93	2.2	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	49	4.1	--	--	--	--
	Mid/High Income	57	0.0	--	--	--	--
	Home Children	55	1.8	--	--	--	--
	Day Care Children	55	1.8	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table P-2b. 1-hydroxybenz[a]anthracene (69847-26-3): Range of Estimated Urinary Biomarker Concentrations in NC Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	2.37
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	2.37
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	59	<MDL	<MDL	<MDL	<MDL	<MDL	2.37
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	2.37
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.398
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	2.32
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	2.32
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	59	<MDL	<MDL	<MDL	<MDL	<MDL	2.32
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	2.32
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.391
Urinary concentration adjusted for creatinine (ng/mg)	Overall	110	<MDL	<MDL	<MDL	<MDL	<MDL	2.07
	Urban	93	<MDL	<MDL	<MDL	<MDL	<MDL	2.07
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	49	<MDL	<MDL	<MDL	<MDL	<MDL	2.07
	Mid/High Income	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	2.07
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	0.571
Urinary concentration (pmoles/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	9.70
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	9.70
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	59	<MDL	<MDL	<MDL	<MDL	<MDL	9.70
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	9.70
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	<MDL	1.63
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	9.51
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	9.51
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	59	<MDL	<MDL	<MDL	<MDL	<MDL	9.51
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	9.51
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	<MDL	1.60
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	110	<MDL	<MDL	<MDL	<MDL	<MDL	0.959
	Urban	93	<MDL	<MDL	<MDL	<MDL	<MDL	0.959
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	49	<MDL	<MDL	<MDL	<MDL	<MDL	0.959
	Mid/High Income	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	0.959
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	0.264

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table P-2c. 1-hydroxybenz[a]anthracene (69847-26-3): Estimated Urinary Biomarker Concentrations in NC Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	128	31.3	--	--	--	--
	Urban	107	31.8	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	59	27.1	--	--	--	--
	Mid/High Income	65	33.8	--	--	--	--
	Home Children	65	35.4	--	--	--	--
	Day Care Children	63	27.0	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	31.3	--	--	--	--
	Urban	107	31.8	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	59	27.1	--	--	--	--
	Mid/High Income	65	33.8	--	--	--	--
	Home Children	65	35.4	--	--	--	--
	Day Care Children	63	27.0	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	112	32.1	--	--	--	--
	Urban	95	31.6	--	--	--	--
	Rural	17	35.3	--	--	--	--
	Low Income	50	28.0	--	--	--	--
	Mid/High Income	58	34.5	--	--	--	--
	Home Children	55	36.4	--	--	--	--
	Day Care Children	57	28.1	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	128	31.3	--	--	--	--
	Urban	107	31.8	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	59	27.1	--	--	--	--
	Mid/High Income	65	33.8	--	--	--	--
	Home Children	65	35.4	--	--	--	--
	Day Care Children	63	27.0	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	31.3	--	--	--	--
	Urban	107	31.8	--	--	--	--
	Rural	21	28.6	--	--	--	--
	Low Income	59	27.1	--	--	--	--
	Mid/High Income	65	33.8	--	--	--	--
	Home Children	65	35.4	--	--	--	--
	Day Care Children	63	27.0	--	--	--	--
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	112	32.1	--	--	--	--
	Urban	95	31.6	--	--	--	--
	Rural	17	35.3	--	--	--	--
	Low Income	50	28.0	--	--	--	--
	Mid/High Income	58	34.5	--	--	--	--
	Home Children	55	36.4	--	--	--	--
	Day Care Children	57	28.1	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table P-2d. 1-hydroxybenz[a]anthracene (69847-26-3): Range of Estimated Urinary Biomarker Concentrations in NC Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	128	<MDL	<MDL	<MDL	0.245	0.990	3.74
	Urban	107	<MDL	<MDL	<MDL	0.250	0.990	3.74
	Rural	21	<MDL	<MDL	<MDL	0.210	0.660	1.24
	Low Income	59	<MDL	<MDL	<MDL	0.250	1.24	2.18
	Mid/High Income	65	<MDL	<MDL	<MDL	0.240	0.930	1.70
	Home Children	65	<MDL	<MDL	<MDL	0.255	1.04	3.74
	Day Care Children	63	<MDL	<MDL	<MDL	0.230	0.650	2.18
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	<MDL	<MDL	<MDL	0.240	0.966	3.67
	Urban	107	<MDL	<MDL	<MDL	0.245	0.966	3.67
	Rural	21	<MDL	<MDL	<MDL	0.206	0.641	1.22
	Low Income	59	<MDL	<MDL	<MDL	0.244	1.22	2.14
	Mid/High Income	65	<MDL	<MDL	<MDL	0.233	0.916	1.66
	Home Children	65	<MDL	<MDL	<MDL	0.248	1.02	3.67
	Day Care Children	63	<MDL	<MDL	<MDL	0.227	0.634	2.14
Urinary concentration adjusted for creatinine (ng/mg)	Overall	112	<MDL	<MDL	<MDL	0.246	0.964	4.48
	Urban	95	<MDL	<MDL	<MDL	0.248	0.964	4.48
	Rural	17	<MDL	<MDL	<MDL	0.238	1.25	1.25
	Low Income	50	<MDL	<MDL	<MDL	0.176	0.670	1.72
	Mid/High Income	58	<MDL	<MDL	<MDL	0.248	0.964	1.13
	Home Children	55	<MDL	<MDL	<MDL	0.350	1.13	4.48
	Day Care Children	57	<MDL	<MDL	<MDL	0.152	0.580	1.72
Urinary concentration (pmoles/mL)	Overall	128	<MDL	<MDL	<MDL	1.00	4.05	15.3
	Urban	107	<MDL	<MDL	<MDL	1.02	4.05	15.3
	Rural	21	<MDL	<MDL	<MDL	0.860	2.70	5.08
	Low Income	59	<MDL	<MDL	<MDL	1.02	5.08	8.92
	Mid/High Income	65	<MDL	<MDL	<MDL	0.982	3.81	6.96
	Home Children	65	<MDL	<MDL	<MDL	1.04	4.26	15.3
	Day Care Children	63	<MDL	<MDL	<MDL	0.942	2.66	8.92
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	<MDL	<MDL	<MDL	0.981	3.95	15.0
	Urban	107	<MDL	<MDL	<MDL	1.00	3.95	15.0
	Rural	21	<MDL	<MDL	<MDL	0.843	2.62	5.00
	Low Income	59	<MDL	<MDL	<MDL	0.998	5.00	8.75
	Mid/High Income	65	<MDL	<MDL	<MDL	0.954	3.75	6.79
	Home Children	65	<MDL	<MDL	<MDL	1.02	4.19	15.0
	Day Care Children	63	<MDL	<MDL	<MDL	0.928	2.60	8.75
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	112	<MDL	<MDL	<MDL	0.114	0.446	2.07
	Urban	95	<MDL	<MDL	<MDL	0.115	0.446	2.07
	Rural	17	<MDL	<MDL	<MDL	0.110	0.579	0.579
	Low Income	50	<MDL	<MDL	<MDL	0.081	0.310	0.798
	Mid/High Income	58	<MDL	<MDL	<MDL	0.115	0.446	0.521
	Home Children	55	<MDL	<MDL	<MDL	0.162	0.521	2.07
	Day Care Children	57	<MDL	<MDL	<MDL	0.070	0.268	0.798

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table P-3a. 3-hydroxychrysene (63019-39-6): Estimated Urinary Biomarker Concentrations in NC Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	128	2.3	--	--	--	--
	Urban	107	2.8	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	59	3.4	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	63	4.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	2.3	--	--	--	--
	Urban	107	2.8	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	59	3.4	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	63	4.8	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	110	2.7	--	--	--	--
	Urban	93	3.2	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	49	4.1	--	--	--	--
	Mid/High Income	57	1.8	--	--	--	--
	Home Children	55	0.0	--	--	--	--
	Day Care Children	55	5.5	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	128	2.3	--	--	--	--
	Urban	107	2.8	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	59	3.4	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	63	4.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	2.3	--	--	--	--
	Urban	107	2.8	--	--	--	--
	Rural	21	0.0	--	--	--	--
	Low Income	59	3.4	--	--	--	--
	Mid/High Income	65	1.5	--	--	--	--
	Home Children	65	0.0	--	--	--	--
	Day Care Children	63	4.8	--	--	--	--
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	110	2.7	--	--	--	--
	Urban	93	3.2	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	49	4.1	--	--	--	--
	Mid/High Income	57	1.8	--	--	--	--
	Home Children	55	0.0	--	--	--	--
	Day Care Children	55	5.5	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table P-3b. 3-hydroxychrysene (63019-39-6): Range of Estimated Urinary Biomarker Concentrations in NC Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25th Percentile	50th Percentile	75th Percentile	95th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	0.574
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	0.574
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	59	<MDL	<MDL	<MDL	<MDL	<MDL	0.574
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.232
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.574
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	0.564
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	0.564
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	59	<MDL	<MDL	<MDL	<MDL	<MDL	0.564
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.227
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.564
Urinary concentration adjusted for creatinine (ng/mg)	Overall	110	<MDL	<MDL	<MDL	<MDL	<MDL	0.824
	Urban	93	<MDL	<MDL	<MDL	<MDL	<MDL	0.824
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	49	<MDL	<MDL	<MDL	<MDL	<MDL	0.824
	Mid/High Income	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.553
	Home Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	0.523	0.824
Urinary concentration (pmoles/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	2.35
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	2.35
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	59	<MDL	<MDL	<MDL	<MDL	<MDL	2.35
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.949
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	<MDL	2.35
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	<MDL	2.31
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	2.31
	Rural	21	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	59	<MDL	<MDL	<MDL	<MDL	<MDL	2.31
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.928
	Home Children	65	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	<MDL	2.31
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	110	<MDL	<MDL	<MDL	<MDL	<MDL	0.381
	Urban	93	<MDL	<MDL	<MDL	<MDL	<MDL	0.381
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	49	<MDL	<MDL	<MDL	<MDL	<MDL	0.381
	Mid/High Income	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.256
	Home Children	55	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	55	<MDL	<MDL	<MDL	<MDL	0.242	0.381

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table P-3c. 3-hydroxychrysene (63019-39-6): Estimated Urinary Biomarker Concentrations in NC Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	128	7.8	--	--	--	--
	Urban	107	6.5	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	59	13.6	--	--	--	--
	Mid/High Income	65	3.1	--	--	--	--
	Home Children	65	7.7	--	--	--	--
	Day Care Children	63	7.9	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	7.8	--	--	--	--
	Urban	107	6.5	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	59	13.6	--	--	--	--
	Mid/High Income	65	3.1	--	--	--	--
	Home Children	65	7.7	--	--	--	--
	Day Care Children	63	7.9	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	112	8.9	--	--	--	--
	Urban	95	7.4	--	--	--	--
	Rural	17	17.6	--	--	--	--
	Low Income	50	16.0	--	--	--	--
	Mid/High Income	58	3.4	--	--	--	--
	Home Children	55	9.1	--	--	--	--
	Day Care Children	57	8.8	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	128	7.8	--	--	--	--
	Urban	107	6.5	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	59	13.6	--	--	--	--
	Mid/High Income	65	3.1	--	--	--	--
	Home Children	65	7.7	--	--	--	--
	Day Care Children	63	7.9	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	7.8	--	--	--	--
	Urban	107	6.5	--	--	--	--
	Rural	21	14.3	--	--	--	--
	Low Income	59	13.6	--	--	--	--
	Mid/High Income	65	3.1	--	--	--	--
	Home Children	65	7.7	--	--	--	--
	Day Care Children	63	7.9	--	--	--	--
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	112	8.9	--	--	--	--
	Urban	95	7.4	--	--	--	--
	Rural	17	17.6	--	--	--	--
	Low Income	50	16.0	--	--	--	--
	Mid/High Income	58	3.4	--	--	--	--
	Home Children	55	9.1	--	--	--	--
	Day Care Children	57	8.8	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table P-3d. 3-hydroxychrysene (63019-39-6): Range of Estimated Urinary Biomarker Concentrations in NC Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	0.220	1.15
	Urban	107	<MDL	<MDL	<MDL	<MDL	0.220	1.11
	Rural	21	<MDL	<MDL	<MDL	<MDL	0.550	1.15
	Low Income	59	<MDL	<MDL	<MDL	<MDL	0.610	1.15
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.220
	Home Children	65	<MDL	<MDL	<MDL	<MDL	0.220	0.610
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	0.220	1.15
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	0.215	1.12
	Urban	107	<MDL	<MDL	<MDL	<MDL	0.215	1.08
	Rural	21	<MDL	<MDL	<MDL	<MDL	0.542	1.12
	Low Income	59	<MDL	<MDL	<MDL	<MDL	0.604	1.12
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.215
	Home Children	65	<MDL	<MDL	<MDL	<MDL	0.215	0.604
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	0.215	1.12
Urinary concentration adjusted for creatinine (ng/mg)	Overall	112	<MDL	<MDL	<MDL	<MDL	0.271	0.851
	Urban	95	<MDL	<MDL	<MDL	<MDL	0.269	0.851
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.734	0.734
	Low Income	50	<MDL	<MDL	<MDL	<MDL	0.670	0.851
	Mid/High Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	0.271
	Home Children	55	<MDL	<MDL	<MDL	<MDL	0.271	0.851
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	0.496	0.734
Urinary concentration (pmoles/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	0.901	4.71
	Urban	107	<MDL	<MDL	<MDL	<MDL	0.901	4.54
	Rural	21	<MDL	<MDL	<MDL	<MDL	2.25	4.71
	Low Income	59	<MDL	<MDL	<MDL	<MDL	2.50	4.71
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.901
	Home Children	65	<MDL	<MDL	<MDL	<MDL	0.901	2.50
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	0.901	4.71
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	<MDL	<MDL	<MDL	<MDL	0.879	4.59
	Urban	107	<MDL	<MDL	<MDL	<MDL	0.879	4.43
	Rural	21	<MDL	<MDL	<MDL	<MDL	2.22	4.59
	Low Income	59	<MDL	<MDL	<MDL	<MDL	2.47	4.59
	Mid/High Income	65	<MDL	<MDL	<MDL	<MDL	<MDL	0.879
	Home Children	65	<MDL	<MDL	<MDL	<MDL	0.879	2.47
	Day Care Children	63	<MDL	<MDL	<MDL	<MDL	0.879	4.59
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	112	<MDL	<MDL	<MDL	<MDL	0.126	0.394
	Urban	95	<MDL	<MDL	<MDL	<MDL	0.124	0.394
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.340	0.340
	Low Income	50	<MDL	<MDL	<MDL	<MDL	0.310	0.394
	Mid/High Income	58	<MDL	<MDL	<MDL	<MDL	<MDL	0.126
	Home Children	55	<MDL	<MDL	<MDL	<MDL	0.126	0.394
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	0.229	0.340

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table P-4a. Pentachlorophenol (87-86-5): Estimated Urinary Biomarker Concentrations in NC Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	128	89.1	0.605	0.629	0.433	0.766
	Urban	107	88.8	0.639	0.672	0.447	0.798
	Rural	21	90.5	0.433	0.280	0.369	0.564
	Low Income	59	94.9	0.659	0.625	0.498	0.705
	Mid/High Income	65	84.6	0.571	0.649	0.388	0.810
	Home Children	65	80.0	0.642	0.734	0.419	0.876
	Day Care Children	63	98.4	0.567	0.500	0.448	0.637
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	89.1	0.592	0.615	0.424	0.765
	Urban	107	88.8	0.625	0.658	0.437	0.797
	Rural	21	90.5	0.425	0.273	0.363	0.564
	Low Income	59	94.9	0.645	0.611	0.488	0.705
	Mid/High Income	65	84.6	0.559	0.636	0.380	0.810
	Home Children	65	80.0	0.629	0.720	0.410	0.877
	Day Care Children	63	98.4	0.555	0.488	0.439	0.636
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	110	88.2	0.898	0.946	0.643	0.763
	Urban	93	88.2	0.940	1.01	0.653	0.802
	Rural	17	88.2	0.665	0.323	0.593	0.506
	Low Income	49	93.9	0.913	0.752	0.710	0.696
	Mid/High Income	57	84.2	0.915	1.11	0.610	0.821
	Home Children	55	78.2	0.991	1.11	0.665	0.853
	Day Care Children	55	98.2	0.804	0.741	0.622	0.667
Urinary concentration (pmoles/mL)	Overall	128	89.1	2.27	2.36	1.63	0.766
	Urban	107	88.8	2.40	2.52	1.68	0.798
	Rural	21	90.5	1.63	1.05	1.39	0.564
	Low Income	59	94.9	2.47	2.35	1.87	0.705
	Mid/High Income	65	84.6	2.14	2.44	1.46	0.810
	Home Children	65	80.0	2.41	2.76	1.57	0.876
	Day Care Children	63	98.4	2.13	1.88	1.68	0.637
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	89.1	2.22	2.31	1.59	0.765
	Urban	107	88.8	2.35	2.47	1.64	0.797
	Rural	21	90.5	1.60	1.03	1.36	0.564
	Low Income	59	94.9	2.42	2.30	1.83	0.705
	Mid/High Income	65	84.6	2.10	2.39	1.43	0.810
	Home Children	65	80.0	2.36	2.70	1.54	0.877
	Day Care Children	63	98.4	2.08	1.83	1.65	0.636
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	110	88.2	0.381	0.401	0.273	0.763
	Urban	93	88.2	0.399	0.430	0.277	0.802
	Rural	17	88.2	0.282	0.137	0.252	0.506
	Low Income	49	93.9	0.387	0.319	0.301	0.696
	Mid/High Income	57	84.2	0.388	0.472	0.259	0.821
	Home Children	55	78.2	0.421	0.472	0.282	0.853
	Day Care Children	55	98.2	0.341	0.315	0.264	0.667

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table P-4b. Pentachlorophenol (87-86-5): Range of Estimated Urinary Biomarker Concentrations in NC Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	128	<MDL	0.262	0.394	0.654	1.92	3.45
	Urban	107	<MDL	0.258	0.400	0.694	2.43	3.45
	Rural	21	<MDL	0.290	0.328	0.500	0.901	1.33
	Low Income	59	<MDL	0.296	0.460	0.773	1.92	3.45
	Mid/High Income	65	<MDL	0.220	0.335	0.564	2.43	3.08
	Home Children	65	<MDL	0.246	0.370	0.658	2.70	3.45
	Day Care Children	63	<MDL	0.281	0.402	0.646	1.38	2.84
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	<MDL	0.256	0.387	0.640	1.89	3.38
	Urban	107	<MDL	0.252	0.392	0.677	2.37	3.38
	Rural	21	<MDL	0.284	0.321	0.493	0.884	1.30
	Low Income	59	<MDL	0.290	0.451	0.760	1.89	3.38
	Mid/High Income	65	<MDL	0.217	0.329	0.548	2.37	3.02
	Home Children	65	<MDL	0.243	0.365	0.645	2.66	3.38
	Day Care Children	63	<MDL	0.277	0.395	0.634	1.34	2.77
Urinary concentration adjusted for creatinine (ng/mg)	Overall	110	<MDL	0.374	0.564	0.965	3.30	6.43
	Urban	93	<MDL	0.374	0.561	1.06	3.59	6.43
	Rural	17	<MDL	0.406	0.601	0.809	1.37	1.37
	Low Income	49	<MDL	0.417	0.686	1.14	2.41	3.62
	Mid/High Income	57	<MDL	0.374	0.516	0.937	3.80	6.43
	Home Children	55	<MDL	0.350	0.583	1.15	3.59	6.43
	Day Care Children	55	<MDL	0.396	0.560	0.873	2.41	3.83
Urinary concentration (pmoles/mL)	Overall	128	<MDL	0.982	1.48	2.46	7.22	13.0
	Urban	107	<MDL	0.968	1.50	2.61	9.14	13.0
	Rural	21	<MDL	1.09	1.23	1.88	3.38	4.99
	Low Income	59	<MDL	1.11	1.73	2.90	7.22	13.0
	Mid/High Income	65	<MDL	0.826	1.26	2.12	9.14	11.6
	Home Children	65	<MDL	0.924	1.39	2.47	10.1	13.0
	Day Care Children	63	<MDL	1.06	1.51	2.43	5.17	10.7
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	<MDL	0.962	1.45	2.40	7.08	12.7
	Urban	107	<MDL	0.947	1.47	2.54	8.92	12.7
	Rural	21	<MDL	1.07	1.21	1.85	3.32	4.87
	Low Income	59	<MDL	1.09	1.69	2.85	7.08	12.7
	Mid/High Income	65	<MDL	0.814	1.24	2.06	8.92	11.3
	Home Children	65	<MDL	0.913	1.37	2.42	9.99	12.7
	Day Care Children	63	<MDL	1.04	1.48	2.38	5.04	10.4
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	110	<MDL	0.159	0.239	0.409	1.40	2.73
	Urban	93	<MDL	0.159	0.238	0.450	1.52	2.73
	Rural	17	<MDL	0.172	0.255	0.343	0.580	0.580
	Low Income	49	<MDL	0.177	0.291	0.484	1.02	1.54
	Mid/High Income	57	<MDL	0.159	0.219	0.398	1.61	2.73
	Home Children	55	<MDL	0.148	0.247	0.486	1.52	2.73
	Day Care Children	55	<MDL	0.168	0.237	0.370	1.02	1.62

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table P-4c. Pentachlorophenol (87-86-5): Estimated Urinary Biomarker Concentrations in NC Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	128	69.5	0.478	0.595	0.327	0.789
	Urban	107	70.1	0.514	0.641	0.343	0.824
	Rural	21	66.7	0.296	0.168	0.257	0.533
	Low Income	59	69.5	0.500	0.696	0.330	0.806
	Mid/High Income	65	69.2	0.470	0.509	0.328	0.796
	Home Children	65	72.3	0.461	0.494	0.331	0.759
	Day Care Children	63	66.7	0.496	0.687	0.323	0.825
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	69.5	0.467	0.579	0.320	0.788
	Urban	107	70.1	0.502	0.623	0.335	0.822
	Rural	21	66.7	0.289	0.163	0.251	0.531
	Low Income	59	69.5	0.488	0.677	0.322	0.805
	Mid/High Income	65	69.2	0.458	0.496	0.321	0.795
	Home Children	65	72.3	0.450	0.482	0.324	0.758
	Day Care Children	63	66.7	0.484	0.668	0.316	0.823
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	112	66.1	0.336	0.363	0.242	0.766
	Urban	95	67.4	0.356	0.387	0.252	0.789
	Rural	17	58.8	0.227	0.138	0.193	0.593
	Low Income	50	64.0	0.312	0.383	0.219	0.777
	Mid/High Income	58	67.2	0.363	0.357	0.264	0.772
	Home Children	55	69.1	0.368	0.347	0.279	0.706
	Day Care Children	57	63.2	0.306	0.378	0.210	0.802
Urinary concentration (pmoles/mL)	Overall	128	69.5	1.80	2.23	1.23	0.789
	Urban	107	70.1	1.93	2.41	1.29	0.824
	Rural	21	66.7	1.11	0.629	0.966	0.533
	Low Income	59	69.5	1.88	2.61	1.24	0.806
	Mid/High Income	65	69.2	1.76	1.91	1.23	0.796
	Home Children	65	72.3	1.73	1.85	1.24	0.759
	Day Care Children	63	66.7	1.86	2.58	1.21	0.825
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	69.5	1.75	2.17	1.20	0.788
	Urban	107	70.1	1.88	2.34	1.26	0.822
	Rural	21	66.7	1.08	0.611	0.944	0.531
	Low Income	59	69.5	1.83	2.54	1.21	0.805
	Mid/High Income	65	69.2	1.72	1.86	1.21	0.795
	Home Children	65	72.3	1.69	1.81	1.22	0.758
	Day Care Children	63	66.7	1.82	2.51	1.18	0.823
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	112	66.1	0.143	0.154	0.102	0.766
	Urban	95	67.4	0.151	0.164	0.107	0.789
	Rural	17	58.8	0.096	0.058	0.082	0.593
	Low Income	50	64.0	0.132	0.163	0.093	0.777
	Mid/High Income	58	67.2	0.154	0.151	0.112	0.772
	Home Children	55	69.1	0.156	0.147	0.118	0.706
	Day Care Children	57	63.2	0.130	0.160	0.089	0.802

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table P-4d. Pentachlorophenol (87-86-5): Range of Estimated Urinary Biomarker Concentrations in NC Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	128	<MDL	<MDL	0.290	0.535	1.52	4.71
	Urban	107	<MDL	<MDL	0.310	0.580	1.60	4.71
	Rural	21	<MDL	<MDL	0.270	0.413	0.564	0.740
	Low Income	59	<MDL	<MDL	0.295	0.520	1.89	4.71
	Mid/High Income	65	<MDL	<MDL	0.280	0.580	1.52	3.19
	Home Children	65	<MDL	<MDL	0.295	0.560	1.34	3.19
	Day Care Children	63	<MDL	<MDL	0.280	0.520	1.52	4.71
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	<MDL	<MDL	0.282	0.523	1.48	4.57
	Urban	107	<MDL	<MDL	0.301	0.563	1.56	4.57
	Rural	21	<MDL	<MDL	0.262	0.403	0.549	0.718
	Low Income	59	<MDL	<MDL	0.288	0.505	1.84	4.57
	Mid/High Income	65	<MDL	<MDL	0.276	0.569	1.48	3.11
	Home Children	65	<MDL	<MDL	0.288	0.544	1.31	3.11
	Day Care Children	63	<MDL	<MDL	0.273	0.510	1.48	4.57
Urinary concentration adjusted for creatinine (ng/mg)	Overall	112	<MDL	<MDL	0.228	0.385	0.843	2.59
	Urban	95	<MDL	<MDL	0.229	0.402	0.844	2.59
	Rural	17	<MDL	<MDL	0.179	0.311	0.575	0.575
	Low Income	50	<MDL	<MDL	0.194	0.372	0.805	2.59
	Mid/High Income	58	<MDL	<MDL	0.236	0.418	1.16	1.84
	Home Children	55	<MDL	<MDL	0.259	0.427	0.843	1.84
	Day Care Children	57	<MDL	<MDL	0.192	0.366	0.844	2.59
Urinary concentration (pmoles/mL)	Overall	128	<MDL	<MDL	1.09	2.01	5.71	17.7
	Urban	107	<MDL	<MDL	1.16	2.18	6.01	17.7
	Rural	21	<MDL	<MDL	1.01	1.55	2.12	2.78
	Low Income	59	<MDL	<MDL	1.11	1.95	7.10	17.7
	Mid/High Income	65	<MDL	<MDL	1.05	2.18	5.71	12.0
	Home Children	65	<MDL	<MDL	1.11	2.10	5.03	12.0
	Day Care Children	63	<MDL	<MDL	1.05	1.95	5.71	17.7
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	<MDL	<MDL	1.06	1.96	5.54	17.2
	Urban	107	<MDL	<MDL	1.13	2.11	5.86	17.2
	Rural	21	<MDL	<MDL	0.984	1.51	2.06	2.70
	Low Income	59	<MDL	<MDL	1.08	1.90	6.92	17.2
	Mid/High Income	65	<MDL	<MDL	1.04	2.13	5.54	11.7
	Home Children	65	<MDL	<MDL	1.08	2.04	4.91	11.7
	Day Care Children	63	<MDL	<MDL	1.03	1.91	5.54	17.2
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	112	<MDL	<MDL	0.097	0.163	0.358	1.10
	Urban	95	<MDL	<MDL	0.097	0.171	0.358	1.10
	Rural	17	<MDL	<MDL	0.076	0.132	0.244	0.244
	Low Income	50	<MDL	<MDL	0.082	0.158	0.341	1.10
	Mid/High Income	58	<MDL	<MDL	0.100	0.177	0.490	0.781
	Home Children	55	<MDL	<MDL	0.110	0.181	0.358	0.781
	Day Care Children	57	<MDL	<MDL	0.082	0.155	0.358	1.10

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table P-5a. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimated Urinary Biomarker Concentrations in NC Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	128	98.4	7.28	10.3	5.22	0.741
	Urban	107	98.1	7.28	10.9	5.18	0.744
	Rural	21	100.0	7.28	6.93	5.46	0.742
	Low Income	59	98.3	6.55	7.36	4.90	0.691
	Mid/High Income	65	98.5	8.02	12.7	5.48	0.805
	Home Children	65	96.9	8.12	13.7	5.15	0.862
	Day Care Children	63	100.0	6.42	4.76	5.31	0.597
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	98.4	7.13	10.1	5.12	0.739
	Urban	107	98.1	7.13	10.7	5.07	0.742
	Rural	21	100.0	7.14	6.77	5.36	0.741
	Low Income	59	98.3	6.41	7.18	4.80	0.689
	Mid/High Income	65	98.5	7.85	12.5	5.37	0.804
	Home Children	65	96.9	7.95	13.4	5.04	0.861
	Day Care Children	63	100.0	6.28	4.65	5.20	0.595
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	110	98.2	10.5	12.4	7.96	0.663
	Urban	93	97.8	10.2	12.7	7.70	0.664
	Rural	17	100.0	12.1	10.6	9.55	0.650
	Low Income	49	98.0	9.45	10.2	7.13	0.664
	Mid/High Income	57	98.2	11.5	14.4	8.75	0.674
	Home Children	55	96.4	11.9	16.0	8.43	0.741
	Day Care Children	55	100.0	9.10	7.24	7.52	0.576
Urinary concentration (pmoles/mL)	Overall	128	98.4	36.7	52.0	26.3	0.741
	Urban	107	98.1	36.7	54.9	26.1	0.744
	Rural	21	100.0	36.7	34.9	27.5	0.742
	Low Income	59	98.3	33.0	37.1	24.7	0.691
	Mid/High Income	65	98.5	40.4	64.0	27.6	0.805
	Home Children	65	96.9	40.9	69.1	25.9	0.862
	Day Care Children	63	100.0	32.3	24.0	26.7	0.597
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	98.4	35.9	51.0	25.8	0.739
	Urban	107	98.1	35.9	53.8	25.6	0.742
	Rural	21	100.0	36.0	34.1	27.0	0.741
	Low Income	59	98.3	32.3	36.2	24.2	0.689
	Mid/High Income	65	98.5	39.6	62.8	27.1	0.804
	Home Children	65	96.9	40.1	67.7	25.4	0.861
	Day Care Children	63	100.0	31.6	23.4	26.2	0.595
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	110	98.2	5.98	7.07	4.53	0.663
	Urban	93	97.8	5.82	7.26	4.39	0.664
	Rural	17	100.0	6.87	6.06	5.44	0.650
	Low Income	49	98.0	5.38	5.81	4.06	0.664
	Mid/High Income	57	98.2	6.57	8.22	4.98	0.674
	Home Children	55	96.4	6.77	9.09	4.80	0.741
	Day Care Children	55	100.0	5.18	4.12	4.28	0.576

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table P-5b. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Estimated Urinary Biomarker Concentrations in NC Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	128	<MDL	3.70	5.26	8.18	15.5	104
	Urban	107	<MDL	3.68	5.22	8.28	14.3	104
	Rural	21	1.01	3.95	5.29	6.51	19.9	30.9
	Low Income	59	<MDL	3.40	5.08	5.86	19.9	49.1
	Mid/High Income	65	<MDL	3.81	5.22	10.1	14.7	104
	Home Children	65	<MDL	3.68	5.16	8.27	15.5	104
	Day Care Children	63	1.56	3.74	5.29	7.82	12.0	30.9
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	<MDL	3.63	5.12	8.00	15.1	102
	Urban	107	<MDL	3.61	5.07	8.06	14.0	102
	Rural	21	0.993	3.87	5.18	6.41	19.5	30.1
	Low Income	59	<MDL	3.33	4.99	5.72	19.5	47.9
	Mid/High Income	65	<MDL	3.73	5.07	9.80	14.4	102
	Home Children	65	<MDL	3.61	5.06	8.10	15.1	102
	Day Care Children	63	1.54	3.68	5.18	7.68	11.7	30.1
Urinary concentration adjusted for creatinine (ng/mg)	Overall	110	<MDL	5.37	7.27	11.2	21.8	111
	Urban	93	<MDL	5.23	7.18	11.2	21.3	111
	Rural	17	2.66	6.75	9.39	11.0	40.3	40.3
	Low Income	49	<MDL	4.77	6.56	9.39	38.6	57.1
	Mid/High Income	57	<MDL	5.94	8.31	13.9	21.3	111
	Home Children	55	<MDL	5.58	7.60	13.3	23.1	111
	Day Care Children	55	2.43	5.23	7.20	9.87	21.8	40.3
Urinary concentration (pmoles/mL)	Overall	128	<MDL	18.6	26.5	41.2	78.2	522
	Urban	107	<MDL	18.5	26.3	41.7	72.2	522
	Rural	21	5.09	19.9	26.6	32.8	100	156
	Low Income	59	<MDL	17.1	25.6	29.5	100	247
	Mid/High Income	65	<MDL	19.2	26.3	50.7	74.2	522
	Home Children	65	<MDL	18.5	26.0	41.7	78.2	522
	Day Care Children	63	7.85	18.9	26.6	39.4	60.4	156
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	<MDL	18.3	25.8	40.3	76.3	512
	Urban	107	<MDL	18.2	25.6	40.6	70.8	512
	Rural	21	5.00	19.5	26.1	32.3	98.4	152
	Low Income	59	<MDL	16.8	25.2	28.8	98.4	241
	Mid/High Income	65	<MDL	18.8	25.6	49.4	72.4	512
	Home Children	65	<MDL	18.2	25.5	40.8	76.3	512
	Day Care Children	63	7.75	18.5	26.1	38.7	58.9	152
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	110	<MDL	3.06	4.14	6.37	12.4	63.3
	Urban	93	<MDL	2.98	4.09	6.37	12.1	63.3
	Rural	17	1.51	3.84	5.35	6.27	23.0	23.0
	Low Income	49	<MDL	2.72	3.74	5.35	22.0	32.5
	Mid/High Income	57	<MDL	3.38	4.73	7.92	12.1	63.3
	Home Children	55	<MDL	3.18	4.33	7.57	13.2	63.3
	Day Care Children	55	1.38	2.98	4.10	5.62	12.4	23.0

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table P-5c. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimated Urinary Biomarker Concentrations in NC Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	128	98.4	5.42	4.09	4.28	0.682
	Urban	107	99.1	5.49	3.97	4.40	0.666
	Rural	21	95.2	5.06	4.73	3.74	0.761
	Low Income	59	96.6	4.93	4.01	3.76	0.736
	Mid/High Income	65	100.0	5.77	3.96	4.78	0.604
	Home Children	65	98.5	5.67	4.32	4.47	0.683
	Day Care Children	63	98.4	5.16	3.86	4.10	0.684
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	98.4	5.29	3.98	4.18	0.680
	Urban	107	99.1	5.36	3.87	4.30	0.664
	Rural	21	95.2	4.93	4.59	3.65	0.758
	Low Income	59	96.6	4.81	3.91	3.68	0.734
	Mid/High Income	65	100.0	5.64	3.86	4.67	0.602
	Home Children	65	98.5	5.53	4.20	4.37	0.680
	Day Care Children	63	98.4	5.04	3.75	4.00	0.683
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	112	98.2	4.07	2.84	3.31	0.654
	Urban	95	98.9	4.11	2.90	3.34	0.656
	Rural	17	94.1	3.88	2.56	3.18	0.657
	Low Income	50	96.0	3.41	2.62	2.66	0.721
	Mid/High Income	58	100.0	4.63	2.99	3.95	0.548
	Home Children	55	98.2	4.79	3.40	3.95	0.602
	Day Care Children	57	98.2	3.38	1.96	2.80	0.661
Urinary concentration (pmoles/mL)	Overall	128	98.4	27.3	20.6	21.6	0.682
	Urban	107	99.1	27.7	20.0	22.2	0.666
	Rural	21	95.2	25.5	23.8	18.8	0.761
	Low Income	59	96.6	24.9	20.2	19.0	0.736
	Mid/High Income	65	100.0	29.1	20.0	24.1	0.604
	Home Children	65	98.5	28.6	21.8	22.5	0.683
	Day Care Children	63	98.4	26.0	19.4	20.7	0.684
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	98.4	26.7	20.1	21.1	0.680
	Urban	107	99.1	27.0	19.5	21.7	0.664
	Rural	21	95.2	24.9	23.1	18.4	0.758
	Low Income	59	96.6	24.3	19.7	18.5	0.734
	Mid/High Income	65	100.0	28.4	19.5	23.5	0.602
	Home Children	65	98.5	27.9	21.2	22.0	0.680
	Day Care Children	63	98.4	25.4	18.9	20.2	0.683
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	112	98.2	2.32	1.62	1.89	0.654
	Urban	95	98.9	2.34	1.65	1.90	0.656
	Rural	17	94.1	2.21	1.46	1.81	0.657
	Low Income	50	96.0	1.94	1.49	1.52	0.721
	Mid/High Income	58	100.0	2.64	1.71	2.25	0.548
	Home Children	55	98.2	2.73	1.93	2.25	0.602
	Day Care Children	57	98.2	1.93	1.12	1.59	0.661

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table P-5d. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Estimated Urinary Biomarker Concentrations in NC Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	128	<MDL	2.55	4.01	6.86	14.4	21.9
	Urban	107	<MDL	2.75	4.11	7.24	14.4	21.9
	Rural	21	<MDL	2.39	2.74	6.43	13.8	20.7
	Low Income	59	<MDL	2.36	3.53	6.45	14.4	20.7
	Mid/High Income	65	1.69	2.89	4.63	7.01	14.1	21.9
	Home Children	65	<MDL	2.64	4.07	7.74	14.4	21.9
	Day Care Children	63	<MDL	2.44	3.96	6.43	11.1	20.7
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	128	<MDL	2.51	3.91	6.68	14.1	21.3
	Urban	107	<MDL	2.71	4.01	7.06	14.1	21.3
	Rural	21	<MDL	2.34	2.67	6.29	13.4	20.1
	Low Income	59	<MDL	2.30	3.44	6.29	14.1	20.1
	Mid/High Income	65	1.66	2.83	4.56	6.81	13.8	21.3
	Home Children	65	<MDL	2.58	3.96	7.63	14.1	21.3
	Day Care Children	63	<MDL	2.37	3.86	6.30	10.7	20.1
Urinary concentration adjusted for creatinine (ng/mg)	Overall	112	<MDL	2.21	3.42	4.94	10.7	16.5
	Urban	95	<MDL	2.26	3.42	4.93	11.0	16.5
	Rural	17	<MDL	1.91	3.43	5.07	10.7	10.7
	Low Income	50	<MDL	1.52	2.85	4.22	9.37	14.1
	Mid/High Income	58	1.16	2.48	3.73	5.24	11.7	16.5
	Home Children	55	<MDL	2.45	3.63	5.24	11.8	16.5
	Day Care Children	57	<MDL	1.71	3.33	4.86	7.01	9.37
Urinary concentration (pmoles/mL)	Overall	128	<MDL	12.9	20.2	34.6	72.4	110
	Urban	107	<MDL	13.9	20.7	36.5	72.4	110
	Rural	21	<MDL	12.0	13.8	32.4	69.7	104
	Low Income	59	<MDL	11.9	17.8	32.5	72.4	104
	Mid/High Income	65	8.52	14.6	23.3	35.3	71.1	110
	Home Children	65	<MDL	13.3	20.5	39.0	72.4	110
	Day Care Children	63	<MDL	12.3	20.0	32.4	55.7	104
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	128	<MDL	12.6	19.7	33.6	70.9	108
	Urban	107	<MDL	13.7	20.2	35.6	70.9	108
	Rural	21	<MDL	11.8	13.5	31.7	67.7	101
	Low Income	59	<MDL	11.6	17.4	31.7	70.9	101
	Mid/High Income	65	8.35	14.3	23.0	34.3	69.4	108
	Home Children	65	<MDL	13.0	19.9	38.4	70.9	108
	Day Care Children	63	<MDL	11.9	19.5	31.8	54.1	101
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	112	<MDL	1.26	1.95	2.82	6.12	9.42
	Urban	95	<MDL	1.29	1.95	2.81	6.27	9.42
	Rural	17	<MDL	1.09	1.95	2.89	6.12	6.12
	Low Income	50	<MDL	0.863	1.62	2.40	5.33	8.02
	Mid/High Income	58	0.661	1.41	2.12	2.98	6.66	9.42
	Home Children	55	<MDL	1.39	2.07	2.98	6.69	9.42
	Day Care Children	57	<MDL	0.976	1.90	2.77	3.99	5.33

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Appendix Q

Descriptive Statistics of Urinary Biomarker Concentrations for Target Pollutants in OH Study Participants

This appendix contains tables of descriptive statistics of urine biomarker data (unadjusted, adjusted for specific gravity, and adjusted for creatinine levels, with units expressed in both ng and pmoles) in OH children and adults for the following pollutants and metabolites:

Pollutant/Metabolite	Table Numbers (Children)	Table Numbers (Adults)
2,4-D (2,4-dichlorophenoxyacetic acid)	Tables Q-1a, Q-1b	Tables Q-1c, Q-1d
1-hydroxybenz[a]anthracene	Tables Q-2a, Q-2b	Tables Q-2c, Q-2d
3-hydroxybenz[a]anthracene	Tables Q-3a, Q-3b	Tables Q-3c, Q-3d
3-hydroxybenz[a]pyrene	Tables Q-4a, Q-4b	Tables Q-4c, Q-4d
3-hydroxychrysene	Tables Q-5a, Q-5b	Tables Q-5c, Q-5d
6-hydroxychrysene	Tables Q-6a, Q-6b	Tables Q-6c, Q-6d
6-hydroxyindeno[1,2,3-cd]pyrene	Tables Q-7a, Q-7b	Tables Q-7c, Q-7d
1-hydroxypyrene	Tables Q-8a, Q-8b	Tables Q-8c, Q-8d
Pentachlorophenol	Tables Q-9a, Q-9b	Tables Q-9c, Q-9d
3-phenoxybenzoic acid	Tables Q-10a, Q-10b	Tables Q-10c, Q-10d
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)	Tables Q-11a, Q-11b	Tables Q-11c, Q-11d

Descriptive statistics are presented separately for the following groups of participants:

- All participants
- Participants from urban areas
- Participants from rural areas
- Participants from low-income areas
- Participants from middle/upper-income areas
- Stay-at-home children (or their caregivers)
- Day care children (or their caregivers)

Table Q-1a. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	98.4	1.32	1.59	0.927	0.794
	Urban	109	98.2	1.32	1.68	0.902	0.822
	Rural	17	100.0	1.30	0.904	1.11	0.571
	Low Income	40	100.0	1.36	1.14	1.03	0.765
	Mid/High Income	73	97.3	1.37	1.90	0.908	0.842
	Home Children	69	97.1	1.50	1.84	1.03	0.853
	Day Care Children	57	100.0	1.10	1.21	0.816	0.703
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	98.4	1.29	1.56	0.909	0.793
	Urban	109	98.2	1.29	1.64	0.884	0.822
	Rural	17	100.0	1.27	0.877	1.08	0.568
	Low Income	40	100.0	1.33	1.12	1.00	0.763
	Mid/High Income	73	97.3	1.35	1.86	0.890	0.842
	Home Children	69	97.1	1.47	1.80	1.01	0.852
	Day Care Children	57	100.0	1.08	1.19	0.800	0.703
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	111	98.2	1.75	1.97	1.31	0.726
	Urban	96	97.9	1.71	2.08	1.24	0.753
	Rural	15	100.0	1.98	0.988	1.82	0.404
	Low Income	38	100.0	1.77	1.35	1.37	0.731
	Mid/High Income	63	96.8	1.77	2.39	1.26	0.767
	Home Children	59	96.6	1.91	2.03	1.46	0.738
	Day Care Children	52	100.0	1.56	1.89	1.16	0.700
Urinary concentration (pmoles/mL)	Overall	126	98.4	5.97	7.21	4.20	0.794
	Urban	109	98.2	5.98	7.59	4.08	0.822
	Rural	17	100.0	5.89	4.09	5.00	0.571
	Low Income	40	100.0	6.16	5.18	4.64	0.765
	Mid/High Income	73	97.3	6.22	8.61	4.11	0.842
	Home Children	69	97.1	6.80	8.33	4.66	0.853
	Day Care Children	57	100.0	4.96	5.46	3.69	0.703
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	98.4	5.84	7.05	4.11	0.793
	Urban	109	98.2	5.85	7.43	4.00	0.822
	Rural	17	100.0	5.76	3.97	4.90	0.568
	Low Income	40	100.0	6.03	5.06	4.55	0.763
	Mid/High Income	73	97.3	6.09	8.43	4.03	0.842
	Home Children	69	97.1	6.65	8.13	4.57	0.852
	Day Care Children	57	100.0	4.86	5.36	3.62	0.703
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	111	98.2	0.892	1.01	0.668	0.726
	Urban	96	97.9	0.873	1.06	0.634	0.753
	Rural	15	100.0	1.01	0.505	0.932	0.404
	Low Income	38	100.0	0.904	0.692	0.700	0.731
	Mid/High Income	63	96.8	0.905	1.22	0.643	0.767
	Home Children	59	96.6	0.975	1.04	0.744	0.738
	Day Care Children	52	100.0	0.798	0.968	0.591	0.700

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-1b. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25th Percentile	50th Percentile	75th Percentile	95th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	0.566	1.02	1.35	3.59	12.5
	Urban	109	<MDL	0.560	0.994	1.34	3.59	12.5
	Rural	17	0.370	0.857	1.15	1.36	4.35	4.35
	Low Income	40	0.230	0.589	1.12	1.60	3.97	5.63
	Mid/High Income	73	<MDL	0.550	1.02	1.33	7.04	12.5
	Home Children	69	<MDL	0.710	1.16	1.44	4.35	12.5
	Day Care Children	57	0.251	0.525	0.809	1.17	3.21	7.55
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	<MDL	0.552	0.992	1.33	3.49	12.2
	Urban	109	<MDL	0.546	0.973	1.31	3.49	12.2
	Rural	17	0.366	0.837	1.14	1.33	4.22	4.22
	Low Income	40	0.227	0.574	1.09	1.57	3.85	5.53
	Mid/High Income	73	<MDL	0.542	1.00	1.29	6.89	12.2
	Home Children	69	<MDL	0.696	1.14	1.40	4.22	12.2
	Day Care Children	57	0.246	0.514	0.788	1.15	3.14	7.42
Urinary concentration adjusted for creatinine (ng/mg)	Overall	111	<MDL	0.842	1.39	2.01	3.41	15.4
	Urban	96	<MDL	0.785	1.34	1.89	3.41	15.4
	Rural	15	0.932	1.38	1.79	2.33	5.08	5.08
	Low Income	38	0.400	0.775	1.54	2.16	5.41	5.88
	Mid/High Income	63	<MDL	0.847	1.38	1.86	2.90	15.4
	Home Children	59	<MDL	0.989	1.52	2.23	5.08	15.4
	Day Care Children	52	0.400	0.686	1.19	1.74	3.41	13.2
Urinary concentration (pmoles/mL)	Overall	126	<MDL	2.56	4.60	6.11	16.2	56.7
	Urban	109	<MDL	2.53	4.50	6.05	16.2	56.7
	Rural	17	1.67	3.88	5.22	6.15	19.7	19.7
	Low Income	40	1.04	2.66	5.05	7.22	18.0	25.5
	Mid/High Income	73	<MDL	2.49	4.61	6.02	31.9	56.7
	Home Children	69	<MDL	3.21	5.25	6.51	19.7	56.7
	Day Care Children	57	1.14	2.38	3.66	5.28	14.5	34.2
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	<MDL	2.50	4.49	6.00	15.8	55.3
	Urban	109	<MDL	2.47	4.40	5.91	15.8	55.3
	Rural	17	1.66	3.79	5.15	6.02	19.1	19.1
	Low Income	40	1.03	2.60	4.93	7.11	17.4	25.0
	Mid/High Income	73	<MDL	2.45	4.55	5.84	31.2	55.3
	Home Children	69	<MDL	3.15	5.17	6.34	19.1	55.3
	Day Care Children	57	1.11	2.32	3.56	5.20	14.2	33.6
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	111	<MDL	0.430	0.709	1.03	1.74	7.86
	Urban	96	<MDL	0.401	0.687	0.965	1.74	7.86
	Rural	15	0.476	0.706	0.915	1.19	2.60	2.60
	Low Income	38	0.204	0.396	0.790	1.10	2.76	3.00
	Mid/High Income	63	<MDL	0.433	0.706	0.951	1.48	7.86
	Home Children	59	<MDL	0.506	0.779	1.14	2.60	7.86
	Day Care Children	52	0.204	0.351	0.609	0.890	1.74	6.77

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-1c. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	89.7	1.02	1.03	0.701	0.876
	Urban	109	89.0	1.000	1.04	0.685	0.877
	Rural	17	94.1	1.15	1.05	0.810	0.883
	Low Income	41	90.2	1.05	1.02	0.733	0.866
	Mid/High Income	72	90.3	1.02	1.10	0.689	0.895
	Home Children	69	87.0	0.999	1.16	0.647	0.928
	Day Care Children	57	93.0	1.04	0.866	0.773	0.806
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	90.4	1.00	1.01	0.694	0.868
	Urban	108	89.8	0.984	1.01	0.679	0.868
	Rural	17	94.1	1.12	1.03	0.793	0.882
	Low Income	41	90.2	1.03	0.997	0.716	0.868
	Mid/High Income	72	90.3	0.998	1.07	0.674	0.894
	Home Children	68	88.2	0.989	1.14	0.646	0.916
	Day Care Children	57	93.0	1.02	0.850	0.755	0.806
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	109	89.0	0.771	0.841	0.536	0.856
	Urban	94	88.3	0.766	0.856	0.527	0.873
	Rural	15	93.3	0.800	0.765	0.601	0.751
	Low Income	38	89.5	0.817	1.11	0.509	0.950
	Mid/High Income	62	88.7	0.771	0.689	0.568	0.808
	Home Children	58	86.2	0.811	0.827	0.540	0.937
	Day Care Children	51	92.2	0.725	0.863	0.532	0.762
Urinary concentration (pmoles/mL)	Overall	126	89.7	4.61	4.68	3.17	0.876
	Urban	109	89.0	4.52	4.69	3.10	0.877
	Rural	17	94.1	5.19	4.75	3.67	0.883
	Low Income	41	90.2	4.75	4.60	3.32	0.866
	Mid/High Income	72	90.3	4.62	4.96	3.12	0.895
	Home Children	69	87.0	4.52	5.26	2.93	0.928
	Day Care Children	57	93.0	4.72	3.92	3.50	0.806
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	90.4	4.54	4.59	3.14	0.868
	Urban	108	89.8	4.45	4.59	3.07	0.868
	Rural	17	94.1	5.08	4.66	3.59	0.882
	Low Income	41	90.2	4.65	4.51	3.24	0.868
	Mid/High Income	72	90.3	4.52	4.85	3.05	0.894
	Home Children	68	88.2	4.47	5.15	2.92	0.916
	Day Care Children	57	93.0	4.62	3.85	3.42	0.806
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	89.0	0.394	0.430	0.274	0.856
	Urban	94	88.3	0.392	0.438	0.269	0.873
	Rural	15	93.3	0.409	0.391	0.307	0.751
	Low Income	38	89.5	0.418	0.569	0.260	0.950
	Mid/High Income	62	88.7	0.394	0.352	0.290	0.808
	Home Children	58	86.2	0.414	0.423	0.276	0.937
	Day Care Children	51	92.2	0.371	0.441	0.272	0.762

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-1d. 2,4-D (2,4-dichlorophenoxyacetic acid) (94-75-7): Range of Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	0.410	0.710	1.24	2.82	7.31
	Urban	109	<MDL	0.405	0.690	1.19	2.82	7.31
	Rural	17	<MDL	0.440	0.830	1.38	4.36	4.36
	Low Income	41	<MDL	0.410	0.770	1.13	2.76	4.54
	Mid/High Income	72	<MDL	0.389	0.710	1.29	3.13	7.31
	Home Children	69	<MDL	0.370	0.673	1.19	3.25	7.31
	Day Care Children	57	<MDL	0.570	0.720	1.28	2.82	4.54
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	<MDL	0.400	0.702	1.21	2.74	7.14
	Urban	108	<MDL	0.399	0.676	1.16	2.74	7.14
	Rural	17	<MDL	0.427	0.814	1.36	4.27	4.27
	Low Income	41	<MDL	0.400	0.751	1.10	2.72	4.50
	Mid/High Income	72	<MDL	0.383	0.691	1.26	3.05	7.14
	Home Children	68	<MDL	0.360	0.697	1.19	3.17	7.14
	Day Care Children	57	<MDL	0.556	0.702	1.25	2.74	4.50
Urinary concentration adjusted for creatinine (ng/mg)	Overall	109	<MDL	0.345	0.533	0.832	2.04	6.20
	Urban	94	<MDL	0.327	0.528	0.841	2.04	6.20
	Rural	15	<MDL	0.389	0.611	0.802	3.26	3.26
	Low Income	38	<MDL	0.327	0.506	0.820	3.33	6.20
	Mid/High Income	62	<MDL	0.365	0.555	0.978	1.57	4.05
	Home Children	58	<MDL	0.315	0.551	0.904	3.26	4.05
	Day Care Children	51	<MDL	0.389	0.507	0.820	1.47	6.20
Urinary concentration (pmoles/mL)	Overall	126	<MDL	1.85	3.21	5.61	12.8	33.1
	Urban	109	<MDL	1.83	3.12	5.38	12.8	33.1
	Rural	17	<MDL	1.99	3.75	6.24	19.7	19.7
	Low Income	41	<MDL	1.85	3.48	5.11	12.5	20.5
	Mid/High Income	72	<MDL	1.76	3.21	5.84	14.2	33.1
	Home Children	69	<MDL	1.67	3.05	5.38	14.7	33.1
	Day Care Children	57	<MDL	2.58	3.26	5.79	12.8	20.5
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	<MDL	1.81	3.18	5.47	12.4	32.3
	Urban	108	<MDL	1.81	3.06	5.26	12.4	32.3
	Rural	17	<MDL	1.93	3.68	6.15	19.3	19.3
	Low Income	41	<MDL	1.81	3.40	4.99	12.3	20.3
	Mid/High Income	72	<MDL	1.73	3.13	5.68	13.8	32.3
	Home Children	68	<MDL	1.63	3.15	5.36	14.3	32.3
	Day Care Children	57	<MDL	2.52	3.18	5.65	12.4	20.3
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	<MDL	0.177	0.272	0.425	1.04	3.17
	Urban	94	<MDL	0.167	0.270	0.430	1.04	3.17
	Rural	15	<MDL	0.199	0.312	0.410	1.67	1.67
	Low Income	38	<MDL	0.167	0.259	0.419	1.70	3.17
	Mid/High Income	62	<MDL	0.187	0.284	0.500	0.803	2.07
	Home Children	58	<MDL	0.161	0.282	0.462	1.67	2.07
	Day Care Children	51	<MDL	0.199	0.259	0.419	0.750	3.17

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-2a. 1-hydroxybenz[a]anthracene (69847-26-3): Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	4.8	--	--	--	--
	Urban	109	4.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	5.0	--	--	--	--
	Mid/High Income	73	4.1	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	57	8.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	4.8	--	--	--	--
	Urban	109	4.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	5.0	--	--	--	--
	Mid/High Income	73	4.1	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	57	8.8	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	111	3.6	--	--	--	--
	Urban	96	4.2	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	5.3	--	--	--	--
	Mid/High Income	63	3.2	--	--	--	--
	Home Children	59	0.0	--	--	--	--
	Day Care Children	52	7.7	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	126	4.8	--	--	--	--
	Urban	109	4.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	5.0	--	--	--	--
	Mid/High Income	73	4.1	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	57	8.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	4.8	--	--	--	--
	Urban	109	4.6	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	5.0	--	--	--	--
	Mid/High Income	73	4.1	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	57	8.8	--	--	--	--
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	3.6	--	--	--	--
	Urban	96	4.2	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	5.3	--	--	--	--
	Mid/High Income	63	3.2	--	--	--	--
	Home Children	59	0.0	--	--	--	--
	Day Care Children	52	7.7	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-2b. 1-hydroxybenz[a]anthracene (69847-26-3): Range of Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.799
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.799
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.153	0.153
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	0.799
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	0.199
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.150
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	0.184	0.799
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.780
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.780
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.150	0.150
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	0.780
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	0.194
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.146
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	0.180	0.780
Urinary concentration adjusted for creatinine (ng/mg)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	0.852
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	0.679
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	0.599	0.679
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.852
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	0.353	0.679
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	3.27
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	3.27
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.628	0.628
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	3.27
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	0.815
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.613
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	0.754	3.27
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	3.19
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	3.19
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.613	0.613
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	3.19
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	0.795
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.599
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	0.736	3.19
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	0.394
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	0.314
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	0.277	0.314
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.394
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	0.163	0.314

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-2c. 1-hydroxybenz[a]anthracene (69847-26-3): Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	27.8	--	--	--	--
	Urban	109	27.5	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	41	29.3	--	--	--	--
	Mid/High Income	72	23.6	--	--	--	--
	Home Children	69	26.1	--	--	--	--
	Day Care Children	57	29.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	27.2	--	--	--	--
	Urban	108	26.9	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	41	29.3	--	--	--	--
	Mid/High Income	72	23.6	--	--	--	--
	Home Children	68	25.0	--	--	--	--
	Day Care Children	57	29.8	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	109	22.9	--	--	--	--
	Urban	94	23.4	--	--	--	--
	Rural	15	20.0	--	--	--	--
	Low Income	38	28.9	--	--	--	--
	Mid/High Income	62	19.4	--	--	--	--
	Home Children	58	19.0	--	--	--	--
	Day Care Children	51	27.5	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	126	27.8	--	--	--	--
	Urban	109	27.5	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	41	29.3	--	--	--	--
	Mid/High Income	72	23.6	--	--	--	--
	Home Children	69	26.1	--	--	--	--
	Day Care Children	57	29.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	27.2	--	--	--	--
	Urban	108	26.9	--	--	--	--
	Rural	17	29.4	--	--	--	--
	Low Income	41	29.3	--	--	--	--
	Mid/High Income	72	23.6	--	--	--	--
	Home Children	68	25.0	--	--	--	--
	Day Care Children	57	29.8	--	--	--	--
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	109	22.9	--	--	--	--
	Urban	94	23.4	--	--	--	--
	Rural	15	20.0	--	--	--	--
	Low Income	38	28.9	--	--	--	--
	Mid/High Income	62	19.4	--	--	--	--
	Home Children	58	19.0	--	--	--	--
	Day Care Children	51	27.5	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-2d. 1-hydroxybenz[a]anthracene (69847-26-3): Range of Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	<MDL	0.150	0.600	29.3
	Urban	109	<MDL	<MDL	<MDL	0.150	0.520	29.3
	Rural	17	<MDL	<MDL	<MDL	0.141	1.09	1.09
	Low Income	41	<MDL	<MDL	<MDL	0.200	0.390	23.1
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	0.710	29.3
	Home Children	69	<MDL	<MDL	<MDL	0.141	0.520	1.09
	Day Care Children	57	<MDL	<MDL	<MDL	0.200	0.780	29.3
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	<MDL	<MDL	<MDL	0.141	0.588	28.6
	Urban	108	<MDL	<MDL	<MDL	0.144	0.505	28.6
	Rural	17	<MDL	<MDL	<MDL	0.140	1.07	1.07
	Low Income	41	<MDL	<MDL	<MDL	0.195	0.380	22.6
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	0.693	28.6
	Home Children	68	<MDL	<MDL	<MDL	<MDL	0.505	1.07
	Day Care Children	57	<MDL	<MDL	<MDL	0.195	0.757	28.6
Urinary concentration adjusted for creatinine (ng/mg)	Overall	109	<MDL	<MDL	<MDL	<MDL	0.802	41.9
	Urban	94	<MDL	<MDL	<MDL	<MDL	0.857	41.9
	Rural	15	<MDL	<MDL	<MDL	<MDL	0.802	0.802
	Low Income	38	<MDL	<MDL	<MDL	0.152	0.319	18.8
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	0.857	41.9
	Home Children	58	<MDL	<MDL	<MDL	<MDL	0.857	1.38
	Day Care Children	51	<MDL	<MDL	<MDL	0.154	0.381	41.9
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	0.613	2.46	120
	Urban	109	<MDL	<MDL	<MDL	0.613	2.13	120
	Rural	17	<MDL	<MDL	<MDL	0.579	4.46	4.46
	Low Income	41	<MDL	<MDL	<MDL	0.819	1.60	94.8
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	2.91	120
	Home Children	69	<MDL	<MDL	<MDL	0.579	2.13	4.46
	Day Care Children	57	<MDL	<MDL	<MDL	0.819	3.19	120
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	<MDL	<MDL	<MDL	0.579	2.41	117
	Urban	108	<MDL	<MDL	<MDL	0.588	2.07	117
	Rural	17	<MDL	<MDL	<MDL	0.573	4.37	4.37
	Low Income	41	<MDL	<MDL	<MDL	0.799	1.56	92.5
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	2.84	117
	Home Children	68	<MDL	<MDL	<MDL	<MDL	2.07	4.37
	Day Care Children	57	<MDL	<MDL	<MDL	0.799	3.10	117
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	<MDL	<MDL	<MDL	<MDL	0.371	19.4
	Urban	94	<MDL	<MDL	<MDL	<MDL	0.396	19.4
	Rural	15	<MDL	<MDL	<MDL	<MDL	0.371	0.371
	Low Income	38	<MDL	<MDL	<MDL	0.070	0.148	8.68
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	0.396	19.4
	Home Children	58	<MDL	<MDL	<MDL	<MDL	0.396	0.641
	Day Care Children	51	<MDL	<MDL	<MDL	0.071	0.176	19.4

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-3a. 3-hydroxybenz[a]anthracene (4834-35-9): Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	0.8	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	2.5	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	0.8	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	2.5	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	111	0.9	--	--	--	--
	Urban	96	1.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	2.6	--	--	--	--
	Mid/High Income	63	0.0	--	--	--	--
	Home Children	59	0.0	--	--	--	--
	Day Care Children	52	1.9	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	126	0.8	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	2.5	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	0.8	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	2.5	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	0.9	--	--	--	--
	Urban	96	1.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	2.6	--	--	--	--
	Mid/High Income	63	0.0	--	--	--	--
	Home Children	59	0.0	--	--	--	--
	Day Care Children	52	1.9	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-3b. 3-hydroxybenz[a]anthracene (4834-35-9): Range of Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.176
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.176
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	0.176
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.176
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.173
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.173
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	0.173
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.173
Urinary concentration adjusted for creatinine (ng/mg)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	0.852
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	0.629
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	0.599
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	<MDL	0.514
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.722
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.722
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	0.722
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.722
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.708
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.708
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	0.708
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.708
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	0.394
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	0.291
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	0.277
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	<MDL	0.238

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-3c. 3-hydroxybenz[a]anthracene (4834-35-9): Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	2.4	--	--	--	--
	Urban	109	2.8	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	2.4	--	--	--	--
	Mid/High Income	72	2.8	--	--	--	--
	Home Children	69	2.9	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	2.4	--	--	--	--
	Urban	108	2.8	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	2.4	--	--	--	--
	Mid/High Income	72	2.8	--	--	--	--
	Home Children	68	2.9	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	109	0.9	--	--	--	--
	Urban	94	1.1	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	62	1.6	--	--	--	--
	Home Children	58	0.0	--	--	--	--
	Day Care Children	51	2.0	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	126	2.4	--	--	--	--
	Urban	109	2.8	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	2.4	--	--	--	--
	Mid/High Income	72	2.8	--	--	--	--
	Home Children	69	2.9	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	2.4	--	--	--	--
	Urban	108	2.8	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	2.4	--	--	--	--
	Mid/High Income	72	2.8	--	--	--	--
	Home Children	68	2.9	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	0.9	--	--	--	--
	Urban	94	1.1	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	62	1.6	--	--	--	--
	Home Children	58	0.0	--	--	--	--
	Day Care Children	51	2.0	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-3d. 3-hydroxybenz[a]anthracene (4834-35-9): Range of Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.360
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.360
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	0.141
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	0.360
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.141
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.360
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.351
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	0.351
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	0.140
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	0.351
	Home Children	68	<MDL	<MDL	<MDL	<MDL	<MDL	0.141
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.351
Urinary concentration adjusted for creatinine (ng/mg)	Overall	109	<MDL	<MDL	<MDL	<MDL	<MDL	1.27
	Urban	94	<MDL	<MDL	<MDL	<MDL	<MDL	1.27
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	<MDL	1.27
	Home Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	51	<MDL	<MDL	<MDL	<MDL	<MDL	0.286
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	1.47
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	1.47
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	0.579
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	1.47
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	0.579
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	1.47
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	1.44
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	1.44
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	0.573
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	1.44
	Home Children	68	<MDL	<MDL	<MDL	<MDL	<MDL	0.579
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	1.44
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.589
	Urban	94	<MDL	<MDL	<MDL	<MDL	<MDL	0.589
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.589
	Home Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	51	<MDL	<MDL	<MDL	<MDL	<MDL	0.132

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-4a. 3-hydroxybenz[a]pyrene (13345-21-6): Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	0.0	--	--	--	--
	Urban	109	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	0.0	--	--	--	--
	Urban	109	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	111	0.0	--	--	--	--
	Urban	96	0.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	63	0.0	--	--	--	--
	Home Children	59	0.0	--	--	--	--
	Day Care Children	52	0.0	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	126	0.0	--	--	--	--
	Urban	109	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	0.0	--	--	--	--
	Urban	109	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	111	0.0	--	--	--	--
	Urban	96	0.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	63	0.0	--	--	--	--
	Home Children	59	0.0	--	--	--	--
	Day Care Children	52	0.0	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-4b. 3-hydroxybenz[a]pyrene (13345-21-6): Range of Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration adjusted for creatinine (ng/mg)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-4c. 3-hydroxybenz[a]pyrene (13345-21-6): Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	0.0	--	--	--	--
	Urban	109	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	0.0	--	--	--	--
	Urban	108	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	0.0	--	--	--	--
	Home Children	68	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	109	0.0	--	--	--	--
	Urban	94	0.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	62	0.0	--	--	--	--
	Home Children	58	0.0	--	--	--	--
	Day Care Children	51	0.0	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	126	0.0	--	--	--	--
	Urban	109	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	0.0	--	--	--	--
	Urban	108	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	0.0	--	--	--	--
	Home Children	68	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	0.0	--	--	--	--
	Urban	94	0.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	62	0.0	--	--	--	--
	Home Children	58	0.0	--	--	--	--
	Day Care Children	51	0.0	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-4d. 3-hydroxybenz[a]pyrene (13345-21-6): Range of Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration adjusted for creatinine (ng/mg)	Overall	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	94	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	51	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	94	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	51	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-5a. 3-hydroxychrysene (63019-39-6): Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	1.6	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	1.6	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	111	0.9	--	--	--	--
	Urban	96	1.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	63	1.6	--	--	--	--
	Home Children	59	1.7	--	--	--	--
	Day Care Children	52	0.0	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	126	1.6	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	1.6	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	1.4	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	0.9	--	--	--	--
	Urban	96	1.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	63	1.6	--	--	--	--
	Home Children	59	1.7	--	--	--	--
	Day Care Children	52	0.0	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-5b. 3-hydroxychrysene (63019-39-6): Range of Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	1.32
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	1.32
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.159	0.159
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	1.32
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	1.32
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.159
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	1.29
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	1.29
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.156	0.156
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	1.29
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	1.29
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.156
Urinary concentration adjusted for creatinine (ng/mg)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	1.71
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	1.71
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	1.71
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	1.71
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	5.40
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	5.40
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.653	0.653
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	5.40
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	5.40
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.653
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	5.27
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	5.27
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.638	0.638
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	5.27
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	5.27
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.638
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	0.792
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	0.792
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.792
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	0.792
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-5c. 3-hydroxychrysene (63019-39-6): Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	0.8	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	1.4	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	1.4	--	--	--	--
	Home Children	68	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	109	0.9	--	--	--	--
	Urban	94	1.1	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	62	1.6	--	--	--	--
	Home Children	58	0.0	--	--	--	--
	Day Care Children	51	2.0	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	126	0.8	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	1.4	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	1.4	--	--	--	--
	Home Children	68	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	109	0.9	--	--	--	--
	Urban	94	1.1	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	62	1.6	--	--	--	--
	Home Children	58	0.0	--	--	--	--
	Day Care Children	51	2.0	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-5d. 3-hydroxychrysene (63019-39-6): Range of Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	4.58
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	4.58
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	4.58
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	4.58
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	4.47
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	4.47
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	4.47
	Home Children	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	4.47
Urinary concentration adjusted for creatinine (ng/mg)	Overall	109	<MDL	<MDL	<MDL	<MDL	<MDL	6.56
	Urban	94	<MDL	<MDL	<MDL	<MDL	<MDL	6.56
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	<MDL	6.56
	Home Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	51	<MDL	<MDL	<MDL	<MDL	<MDL	6.56
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	18.7
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	18.7
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	18.7
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	18.7
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	18.3
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	18.3
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	18.3
	Home Children	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	18.3
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	<MDL	<MDL	<MDL	<MDL	<MDL	3.04
	Urban	94	<MDL	<MDL	<MDL	<MDL	<MDL	3.04
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	<MDL	3.04
	Home Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	51	<MDL	<MDL	<MDL	<MDL	<MDL	3.04

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-6a. 6-hydroxychrysene (NA8): Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	2.4	--	--	--	--
	Urban	109	1.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	2.5	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	5.3	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	2.4	--	--	--	--
	Urban	109	1.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	2.5	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	5.3	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	111	1.8	--	--	--	--
	Urban	96	2.1	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	2.6	--	--	--	--
	Mid/High Income	63	1.6	--	--	--	--
	Home Children	59	0.0	--	--	--	--
	Day Care Children	52	3.8	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	126	2.4	--	--	--	--
	Urban	109	1.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	2.5	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	5.3	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	2.4	--	--	--	--
	Urban	109	1.8	--	--	--	--
	Rural	17	5.9	--	--	--	--
	Low Income	40	2.5	--	--	--	--
	Mid/High Income	73	1.4	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	5.3	--	--	--	--
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	1.8	--	--	--	--
	Urban	96	2.1	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	2.6	--	--	--	--
	Mid/High Income	63	1.6	--	--	--	--
	Home Children	59	0.0	--	--	--	--
	Day Care Children	52	3.8	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-6b. 6-hydroxychrysene (NA8): Range of Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.203
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.203
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.150	0.150
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	0.203
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	0.168
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	0.150	0.203
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.199
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.199
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.146	0.146
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	0.199
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	0.165
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	0.146	0.199
Urinary concentration adjusted for creatinine (ng/mg)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	0.852
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	0.629
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	0.599
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.852
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	<MDL	0.514
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.829
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.829
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.613	0.613
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	0.829
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	0.688
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	0.613	0.829
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.813
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.813
	Rural	17	<MDL	<MDL	<MDL	<MDL	0.599	0.599
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	0.813
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	0.675
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	0.599	0.813
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	0.394
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	0.291
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	0.277
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	0.394
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	<MDL	0.238

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-6c. 6-hydroxychrysene (NA8): Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	0.8	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	1.4	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	1.4	--	--	--	--
	Home Children	68	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	109	0.9	--	--	--	--
	Urban	94	1.1	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	62	1.6	--	--	--	--
	Home Children	58	0.0	--	--	--	--
	Day Care Children	51	2.0	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	126	0.8	--	--	--	--
	Urban	109	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	1.4	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	0.8	--	--	--	--
	Urban	108	0.9	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	72	1.4	--	--	--	--
	Home Children	68	0.0	--	--	--	--
	Day Care Children	57	1.8	--	--	--	--
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	0.9	--	--	--	--
	Urban	94	1.1	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	62	1.6	--	--	--	--
	Home Children	58	0.0	--	--	--	--
	Day Care Children	51	2.0	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-6d. 6-hydroxychrysene (NA8): Range of Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.200
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.200
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	0.200
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.200
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.195
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	0.195
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	0.195
	Home Children	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.195
Urinary concentration adjusted for creatinine (ng/mg)	Overall	109	<MDL	<MDL	<MDL	<MDL	<MDL	1.27
	Urban	94	<MDL	<MDL	<MDL	<MDL	<MDL	1.27
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	<MDL	1.27
	Home Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	51	<MDL	<MDL	<MDL	<MDL	<MDL	0.286
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	0.819
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.819
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	0.819
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.819
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	0.799
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	0.799
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	72	<MDL	<MDL	<MDL	<MDL	<MDL	0.799
	Home Children	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	0.799
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	<MDL	<MDL	<MDL	<MDL	<MDL	0.589
	Urban	94	<MDL	<MDL	<MDL	<MDL	<MDL	0.589
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	62	<MDL	<MDL	<MDL	<MDL	<MDL	0.589
	Home Children	58	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	51	<MDL	<MDL	<MDL	<MDL	<MDL	0.132

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-7a. 6-hydroxy indeno[1,2,3-cd]pyrene (NA9): Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	0.0	--	--	--	--
	Urban	109	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	0.0	--	--	--	--
	Urban	109	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	111	0.0	--	--	--	--
	Urban	96	0.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	63	0.0	--	--	--	--
	Home Children	59	0.0	--	--	--	--
	Day Care Children	52	0.0	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	126	0.0	--	--	--	--
	Urban	109	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	0.0	--	--	--	--
	Urban	109	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	40	0.0	--	--	--	--
	Mid/High Income	73	0.0	--	--	--	--
	Home Children	69	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	0.0	--	--	--	--
	Urban	96	0.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	63	0.0	--	--	--	--
	Home Children	59	0.0	--	--	--	--
	Day Care Children	52	0.0	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-7b. 6-hydroxy indeno[1,2,3-cd]pyrene (NA9): Range of Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration adjusted for creatinine (ng/mg)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	109	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	40	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	73	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	69	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	96	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	63	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	59	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	52	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-7c. 6-hydroxy indeno[1,2,3-cd]pyrene (NA9): Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	125	0.0	--	--	--	--
	Urban	108	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	71	0.0	--	--	--	--
	Home Children	68	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	124	0.0	--	--	--	--
	Urban	107	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	71	0.0	--	--	--	--
	Home Children	67	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	108	0.0	--	--	--	--
	Urban	93	0.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	61	0.0	--	--	--	--
	Home Children	57	0.0	--	--	--	--
	Day Care Children	51	0.0	--	--	--	--
Urinary concentration (pmoles/mL)	Overall	125	0.0	--	--	--	--
	Urban	108	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	71	0.0	--	--	--	--
	Home Children	68	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	124	0.0	--	--	--	--
	Urban	107	0.0	--	--	--	--
	Rural	17	0.0	--	--	--	--
	Low Income	41	0.0	--	--	--	--
	Mid/High Income	71	0.0	--	--	--	--
	Home Children	67	0.0	--	--	--	--
	Day Care Children	57	0.0	--	--	--	--
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	108	0.0	--	--	--	--
	Urban	93	0.0	--	--	--	--
	Rural	15	0.0	--	--	--	--
	Low Income	38	0.0	--	--	--	--
	Mid/High Income	61	0.0	--	--	--	--
	Home Children	57	0.0	--	--	--	--
	Day Care Children	51	0.0	--	--	--	--

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-7d. 6-hydroxy indeno[1,2,3-cd]pyrene (NA9): Range of Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	124	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration adjusted for creatinine (ng/mg)	Overall	108	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	93	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	61	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	51	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration (pmoles/mL)	Overall	125	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	108	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	68	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	124	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	107	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	17	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	41	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	71	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	67	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	108	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Urban	93	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Rural	15	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Low Income	38	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Mid/High Income	61	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Home Children	57	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
	Day Care Children	51	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-8a. 1-hydroxypyrene (5315-79-7): Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	79.4	0.382	0.316	0.305	0.644
	Urban	109	79.8	0.360	0.240	0.297	0.614
	Rural	17	76.5	0.519	0.608	0.358	0.816
	Low Income	40	82.5	0.404	0.273	0.333	0.622
	Mid/High Income	73	80.8	0.392	0.355	0.307	0.662
	Home Children	69	73.9	0.409	0.368	0.315	0.702
	Day Care Children	57	86.0	0.348	0.238	0.293	0.569
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	79.4	0.374	0.308	0.299	0.642
	Urban	109	79.8	0.353	0.234	0.292	0.612
	Rural	17	76.5	0.508	0.592	0.351	0.814
	Low Income	40	82.5	0.395	0.266	0.327	0.621
	Mid/High Income	73	80.8	0.384	0.346	0.302	0.659
	Home Children	69	73.9	0.400	0.359	0.309	0.700
	Day Care Children	57	86.0	0.342	0.232	0.289	0.566
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	111	77.5	0.542	0.447	0.443	0.618
	Urban	96	78.1	0.503	0.286	0.431	0.572
	Rural	15	73.3	0.790	0.969	0.526	0.864
	Low Income	38	81.6	0.532	0.325	0.451	0.578
	Mid/High Income	63	77.8	0.556	0.529	0.444	0.637
	Home Children	59	71.2	0.586	0.540	0.467	0.654
	Day Care Children	52	84.6	0.493	0.309	0.417	0.574
Urinary concentration (pmoles/mL)	Overall	126	79.4	1.75	1.45	1.40	0.644
	Urban	109	79.8	1.65	1.10	1.36	0.614
	Rural	17	76.5	2.38	2.78	1.64	0.816
	Low Income	40	82.5	1.85	1.25	1.53	0.622
	Mid/High Income	73	80.8	1.79	1.63	1.41	0.662
	Home Children	69	73.9	1.87	1.69	1.45	0.702
	Day Care Children	57	86.0	1.60	1.09	1.34	0.569
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	79.4	1.71	1.41	1.37	0.642
	Urban	109	79.8	1.62	1.07	1.34	0.612
	Rural	17	76.5	2.33	2.71	1.61	0.814
	Low Income	40	82.5	1.81	1.22	1.50	0.621
	Mid/High Income	73	80.8	1.76	1.58	1.39	0.659
	Home Children	69	73.9	1.83	1.65	1.41	0.700
	Day Care Children	57	86.0	1.57	1.06	1.32	0.566
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	111	77.5	0.281	0.232	0.229	0.618
	Urban	96	78.1	0.261	0.148	0.223	0.572
	Rural	15	73.3	0.409	0.502	0.273	0.864
	Low Income	38	81.6	0.275	0.168	0.234	0.578
	Mid/High Income	63	77.8	0.288	0.274	0.230	0.637
	Home Children	59	71.2	0.303	0.280	0.242	0.654
	Day Care Children	52	84.6	0.255	0.160	0.216	0.574

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-8b. 1-hydroxypyrene (5315-79-7): Range of Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	0.174	0.307	0.484	0.860	2.69
	Urban	109	<MDL	0.174	0.304	0.480	0.800	1.40
	Rural	17	<MDL	0.200	0.310	0.670	2.69	2.69
	Low Income	40	<MDL	0.199	0.350	0.518	0.981	1.40
	Mid/High Income	73	<MDL	0.176	0.300	0.532	0.860	2.69
	Home Children	69	<MDL	<MDL	0.320	0.540	0.940	2.69
	Day Care Children	57	<MDL	0.183	0.291	0.410	0.762	1.40
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	<MDL	0.171	0.301	0.479	0.839	2.62
	Urban	109	<MDL	0.171	0.298	0.470	0.777	1.37
	Rural	17	<MDL	0.196	0.305	0.650	2.62	2.62
	Low Income	40	<MDL	0.194	0.345	0.508	0.956	1.37
	Mid/High Income	73	<MDL	0.172	0.293	0.518	0.839	2.62
	Home Children	69	<MDL	<MDL	0.314	0.532	0.917	2.62
	Day Care Children	57	<MDL	0.179	0.284	0.401	0.745	1.37
Urinary concentration adjusted for creatinine (ng/mg)	Overall	111	<MDL	0.263	0.460	0.675	1.14	4.09
	Urban	96	<MDL	0.275	0.449	0.661	1.14	1.57
	Rural	15	<MDL	<MDL	0.605	0.878	4.09	4.09
	Low Income	38	<MDL	0.274	0.473	0.709	1.30	1.57
	Mid/High Income	63	<MDL	0.263	0.439	0.682	1.09	4.09
	Home Children	59	<MDL	<MDL	0.496	0.731	1.22	4.09
	Day Care Children	52	<MDL	0.256	0.428	0.626	1.14	1.57
Urinary concentration (pmoles/mL)	Overall	126	<MDL	0.797	1.41	2.22	3.94	12.3
	Urban	109	<MDL	0.797	1.39	2.20	3.67	6.43
	Rural	17	<MDL	0.916	1.42	3.07	12.3	12.3
	Low Income	40	<MDL	0.912	1.60	2.37	4.50	6.43
	Mid/High Income	73	<MDL	0.808	1.37	2.44	3.94	12.3
	Home Children	69	<MDL	<MDL	1.47	2.47	4.31	12.3
	Day Care Children	57	<MDL	0.837	1.33	1.88	3.49	6.43
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	<MDL	0.784	1.38	2.19	3.84	12.0
	Urban	109	<MDL	0.784	1.37	2.15	3.56	6.27
	Rural	17	<MDL	0.898	1.40	2.98	12.0	12.0
	Low Income	40	<MDL	0.891	1.58	2.33	4.38	6.27
	Mid/High Income	73	<MDL	0.788	1.34	2.37	3.84	12.0
	Home Children	69	<MDL	<MDL	1.44	2.44	4.20	12.0
	Day Care Children	57	<MDL	0.819	1.30	1.84	3.42	6.27
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	<MDL	0.136	0.238	0.350	0.589	2.12
	Urban	96	<MDL	0.143	0.233	0.342	0.589	0.815
	Rural	15	<MDL	<MDL	0.313	0.455	2.12	2.12
	Low Income	38	<MDL	0.142	0.245	0.367	0.675	0.815
	Mid/High Income	63	<MDL	0.136	0.227	0.353	0.564	2.12
	Home Children	59	<MDL	<MDL	0.257	0.378	0.630	2.12
	Day Care Children	52	<MDL	0.132	0.221	0.324	0.589	0.815

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-8c. 1-hydroxypyrene (5315-79-7): Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	69.0	0.322	0.218	0.267	0.601
	Urban	109	68.8	0.308	0.199	0.260	0.571
	Rural	17	70.6	0.412	0.305	0.318	0.766
	Low Income	41	78.0	0.343	0.219	0.289	0.590
	Mid/High Income	72	62.5	0.315	0.230	0.255	0.631
	Home Children	69	69.6	0.331	0.214	0.277	0.586
	Day Care Children	57	68.4	0.312	0.223	0.255	0.621
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	68.8	0.313	0.213	0.259	0.600
	Urban	108	68.5	0.299	0.194	0.252	0.568
	Rural	17	70.6	0.404	0.299	0.312	0.767
	Low Income	41	78.0	0.335	0.215	0.282	0.590
	Mid/High Income	72	62.5	0.307	0.225	0.249	0.630
	Home Children	68	69.1	0.320	0.210	0.268	0.584
	Day Care Children	57	68.4	0.304	0.218	0.249	0.621
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	109	67.0	0.253	0.181	0.203	0.679
	Urban	94	67.0	0.246	0.180	0.198	0.661
	Rural	15	66.7	0.299	0.187	0.235	0.797
	Low Income	38	76.3	0.241	0.160	0.197	0.661
	Mid/High Income	62	61.3	0.272	0.198	0.219	0.682
	Home Children	58	67.2	0.289	0.197	0.240	0.613
	Day Care Children	51	66.7	0.212	0.154	0.168	0.705
Urinary concentration (pmoles/mL)	Overall	126	69.0	1.48	0.998	1.22	0.601
	Urban	109	68.8	1.41	0.913	1.19	0.571
	Rural	17	70.6	1.89	1.40	1.46	0.766
	Low Income	41	78.0	1.57	1.00	1.33	0.590
	Mid/High Income	72	62.5	1.44	1.05	1.17	0.631
	Home Children	69	69.6	1.52	0.982	1.27	0.586
	Day Care Children	57	68.4	1.43	1.02	1.17	0.621
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	68.8	1.43	0.976	1.19	0.600
	Urban	108	68.5	1.37	0.889	1.15	0.568
	Rural	17	70.6	1.85	1.37	1.43	0.767
	Low Income	41	78.0	1.54	0.983	1.29	0.590
	Mid/High Income	72	62.5	1.41	1.03	1.14	0.630
	Home Children	68	69.1	1.47	0.963	1.23	0.584
	Day Care Children	57	68.4	1.39	0.999	1.14	0.621
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	67.0	0.131	0.094	0.105	0.679
	Urban	94	67.0	0.127	0.093	0.103	0.661
	Rural	15	66.7	0.155	0.097	0.121	0.797
	Low Income	38	76.3	0.125	0.083	0.102	0.661
	Mid/High Income	62	61.3	0.141	0.103	0.113	0.682
	Home Children	58	67.2	0.150	0.102	0.124	0.613
	Day Care Children	51	66.7	0.110	0.080	0.087	0.705

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-8d. 1-hydroxypyrene (5315-79-7): Range of Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	0.259	0.410	0.790	1.22
	Urban	109	<MDL	<MDL	0.250	0.393	0.680	1.15
	Rural	17	<MDL	<MDL	0.370	0.514	1.22	1.22
	Low Income	41	<MDL	0.210	0.290	0.440	0.630	1.15
	Mid/High Income	72	<MDL	<MDL	0.230	0.385	0.790	1.22
	Home Children	69	<MDL	<MDL	0.270	0.430	0.790	1.22
	Day Care Children	57	<MDL	<MDL	0.230	0.380	0.940	1.15
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	<MDL	<MDL	0.251	0.392	0.767	1.20
	Urban	108	<MDL	<MDL	0.239	0.375	0.667	1.12
	Rural	17	<MDL	<MDL	0.365	0.499	1.20	1.20
	Low Income	41	<MDL	0.205	0.282	0.427	0.618	1.12
	Mid/High Income	72	<MDL	<MDL	0.226	0.377	0.775	1.20
	Home Children	68	<MDL	<MDL	0.258	0.415	0.767	1.20
	Day Care Children	57	<MDL	<MDL	0.224	0.369	0.917	1.12
Urinary concentration adjusted for creatinine (ng/mg)	Overall	109	<MDL	<MDL	0.221	0.318	0.601	1.27
	Urban	94	<MDL	<MDL	0.213	0.314	0.601	1.27
	Rural	15	<MDL	<MDL	0.277	0.470	0.606	0.606
	Low Income	38	<MDL	0.127	0.204	0.314	0.651	0.751
	Mid/High Income	62	<MDL	<MDL	0.229	0.352	0.581	1.27
	Home Children	58	<MDL	<MDL	0.229	0.355	0.606	1.27
	Day Care Children	51	<MDL	<MDL	0.182	0.272	0.601	0.751
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	1.19	1.88	3.62	5.59
	Urban	109	<MDL	<MDL	1.15	1.80	3.12	5.27
	Rural	17	<MDL	<MDL	1.70	2.35	5.59	5.59
	Low Income	41	<MDL	0.962	1.33	2.02	2.89	5.27
	Mid/High Income	72	<MDL	<MDL	1.05	1.76	3.62	5.59
	Home Children	69	<MDL	<MDL	1.24	1.97	3.62	5.59
	Day Care Children	57	<MDL	<MDL	1.05	1.74	4.31	5.27
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	<MDL	<MDL	1.15	1.80	3.51	5.51
	Urban	108	<MDL	<MDL	1.10	1.72	3.05	5.12
	Rural	17	<MDL	<MDL	1.67	2.29	5.51	5.51
	Low Income	41	<MDL	0.939	1.29	1.96	2.83	5.12
	Mid/High Income	72	<MDL	<MDL	1.03	1.73	3.55	5.51
	Home Children	68	<MDL	<MDL	1.18	1.90	3.51	5.51
	Day Care Children	57	<MDL	<MDL	1.03	1.69	4.20	5.12
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	<MDL	<MDL	0.114	0.165	0.311	0.660
	Urban	94	<MDL	<MDL	0.110	0.162	0.311	0.660
	Rural	15	<MDL	<MDL	0.143	0.243	0.314	0.314
	Low Income	38	<MDL	0.066	0.105	0.163	0.337	0.389
	Mid/High Income	62	<MDL	<MDL	0.119	0.182	0.301	0.660
	Home Children	58	<MDL	<MDL	0.119	0.184	0.314	0.660
	Day Care Children	51	<MDL	<MDL	0.094	0.141	0.311	0.389

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-9a. Pentachlorophenol (87-86-5): Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	99.2	1.27	2.20	0.876	0.765
	Urban	109	99.1	1.23	2.32	0.830	0.773
	Rural	17	100.0	1.52	1.19	1.25	0.618
	Low Income	40	100.0	1.05	0.884	0.797	0.750
	Mid/High Income	73	98.6	1.47	2.80	0.959	0.797
	Home Children	69	98.6	1.54	2.89	0.993	0.800
	Day Care Children	57	100.0	0.946	0.638	0.753	0.698
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	99.2	1.24	2.14	0.859	0.764
	Urban	109	99.1	1.20	2.26	0.813	0.772
	Rural	17	100.0	1.49	1.16	1.22	0.615
	Low Income	40	100.0	1.03	0.863	0.781	0.749
	Mid/High Income	73	98.6	1.44	2.73	0.939	0.795
	Home Children	69	98.6	1.50	2.82	0.972	0.798
	Day Care Children	57	100.0	0.926	0.624	0.739	0.697
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	111	99.1	1.73	2.19	1.27	0.749
	Urban	96	99.0	1.65	2.26	1.19	0.755
	Rural	15	100.0	2.25	1.65	1.86	0.604
	Low Income	38	100.0	1.37	1.05	1.07	0.731
	Mid/High Income	63	98.4	2.01	2.76	1.43	0.761
	Home Children	59	98.3	2.10	2.87	1.48	0.785
	Day Care Children	52	100.0	1.31	0.823	1.07	0.672
Urinary concentration (pmoles/mL)	Overall	126	99.2	4.77	8.25	3.29	0.765
	Urban	109	99.1	4.62	8.70	3.12	0.773
	Rural	17	100.0	5.72	4.46	4.68	0.618
	Low Income	40	100.0	3.94	3.32	2.99	0.750
	Mid/High Income	73	98.6	5.53	10.5	3.60	0.797
	Home Children	69	98.6	5.78	10.9	3.73	0.800
	Day Care Children	57	100.0	3.55	2.40	2.83	0.698
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	99.2	4.67	8.05	3.22	0.764
	Urban	109	99.1	4.52	8.48	3.05	0.772
	Rural	17	100.0	5.59	4.35	4.59	0.615
	Low Income	40	100.0	3.86	3.24	2.93	0.749
	Mid/High Income	73	98.6	5.41	10.2	3.53	0.795
	Home Children	69	98.6	5.65	10.6	3.65	0.798
	Day Care Children	57	100.0	3.48	2.34	2.77	0.697
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	111	99.1	0.734	0.931	0.538	0.749
	Urban	96	99.0	0.700	0.960	0.507	0.755
	Rural	15	100.0	0.954	0.701	0.789	0.604
	Low Income	38	100.0	0.581	0.444	0.452	0.731
	Mid/High Income	63	98.4	0.852	1.17	0.608	0.761
	Home Children	59	98.3	0.893	1.22	0.627	0.785
	Day Care Children	52	100.0	0.555	0.349	0.452	0.672

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-9b. Pentachlorophenol (87-86-5): Range of Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	0.536	0.835	1.39	2.71	23.8
	Urban	109	<MDL	0.520	0.755	1.38	2.47	23.8
	Rural	17	0.430	0.871	1.24	1.52	5.23	5.23
	Low Income	40	0.208	0.486	0.769	1.59	2.33	5.02
	Mid/High Income	73	<MDL	0.640	0.876	1.39	3.56	23.8
	Home Children	69	<MDL	0.640	0.920	1.39	3.96	23.8
	Day Care Children	57	0.208	0.483	0.738	1.36	2.37	2.71
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	<MDL	0.528	0.821	1.37	2.65	23.2
	Urban	109	<MDL	0.512	0.740	1.35	2.41	23.2
	Rural	17	0.426	0.854	1.21	1.49	5.10	5.10
	Low Income	40	0.204	0.474	0.754	1.55	2.27	4.90
	Mid/High Income	73	<MDL	0.624	0.859	1.36	3.47	23.2
	Home Children	69	<MDL	0.624	0.902	1.37	3.86	23.2
	Day Care Children	57	0.204	0.472	0.724	1.33	2.31	2.65
Urinary concentration adjusted for creatinine (ng/mg)	Overall	111	<MDL	0.829	1.25	1.92	3.73	21.4
	Urban	96	<MDL	0.792	1.20	1.87	3.58	21.4
	Rural	15	0.746	1.21	1.88	2.59	6.62	6.62
	Low Income	38	0.272	0.658	1.18	1.75	3.32	5.46
	Mid/High Income	63	<MDL	0.931	1.28	2.02	4.96	21.4
	Home Children	59	<MDL	0.977	1.32	2.06	5.46	21.4
	Day Care Children	52	0.272	0.674	1.19	1.83	2.99	3.58
Urinary concentration (pmoles/mL)	Overall	126	<MDL	2.01	3.14	5.22	10.2	89.3
	Urban	109	<MDL	1.95	2.83	5.18	9.27	89.3
	Rural	17	1.61	3.27	4.66	5.72	19.6	19.6
	Low Income	40	0.780	1.83	2.89	5.97	8.75	18.8
	Mid/High Income	73	<MDL	2.40	3.29	5.22	13.4	89.3
	Home Children	69	<MDL	2.40	3.45	5.22	14.9	89.3
	Day Care Children	57	0.780	1.81	2.77	5.12	8.89	10.2
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	<MDL	1.98	3.08	5.14	9.94	87.1
	Urban	109	<MDL	1.92	2.78	5.05	9.05	87.1
	Rural	17	1.60	3.21	4.54	5.59	19.2	19.2
	Low Income	40	0.764	1.78	2.83	5.84	8.53	18.4
	Mid/High Income	73	<MDL	2.34	3.22	5.12	13.0	87.1
	Home Children	69	<MDL	2.34	3.39	5.14	14.5	87.1
	Day Care Children	57	0.764	1.77	2.72	5.01	8.68	9.94
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	<MDL	0.352	0.530	0.814	1.58	9.08
	Urban	96	<MDL	0.336	0.508	0.792	1.52	9.08
	Rural	15	0.316	0.515	0.796	1.10	2.81	2.81
	Low Income	38	0.115	0.279	0.500	0.744	1.41	2.32
	Mid/High Income	63	<MDL	0.395	0.541	0.856	2.11	9.08
	Home Children	59	<MDL	0.415	0.561	0.873	2.32	9.08
	Day Care Children	52	0.115	0.286	0.507	0.776	1.27	1.52

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-9c. Pentachlorophenol (87-86-5): Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	96.0	0.776	0.715	0.575	0.746
	Urban	109	95.4	0.742	0.700	0.550	0.742
	Rural	17	100.0	0.990	0.795	0.769	0.722
	Low Income	41	97.6	0.740	0.619	0.569	0.709
	Mid/High Income	72	94.4	0.764	0.763	0.550	0.772
	Home Children	69	95.7	0.712	0.608	0.551	0.704
	Day Care Children	57	96.5	0.853	0.825	0.606	0.797
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	96.0	0.757	0.701	0.560	0.747
	Urban	108	95.4	0.723	0.686	0.534	0.743
	Rural	17	100.0	0.970	0.779	0.752	0.723
	Low Income	41	97.6	0.723	0.603	0.556	0.708
	Mid/High Income	72	94.4	0.747	0.746	0.538	0.772
	Home Children	68	95.6	0.693	0.596	0.534	0.705
	Day Care Children	57	96.5	0.833	0.807	0.592	0.797
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	109	95.4	0.650	0.879	0.433	0.806
	Urban	94	94.7	0.628	0.905	0.415	0.800
	Rural	15	100.0	0.789	0.707	0.569	0.815
	Low Income	38	97.4	0.508	0.446	0.388	0.724
	Mid/High Income	62	93.5	0.748	1.07	0.471	0.851
	Home Children	58	94.8	0.638	0.766	0.465	0.704
	Day Care Children	51	96.1	0.664	1.00	0.400	0.909
Urinary concentration (pmoles/mL)	Overall	126	96.0	2.91	2.68	2.16	0.746
	Urban	109	95.4	2.79	2.63	2.06	0.742
	Rural	17	100.0	3.72	2.98	2.89	0.722
	Low Income	41	97.6	2.78	2.32	2.14	0.709
	Mid/High Income	72	94.4	2.87	2.87	2.07	0.772
	Home Children	69	95.7	2.67	2.28	2.07	0.704
	Day Care Children	57	96.5	3.20	3.10	2.27	0.797
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	96.0	2.84	2.63	2.10	0.747
	Urban	108	95.4	2.72	2.57	2.01	0.743
	Rural	17	100.0	3.64	2.93	2.82	0.723
	Low Income	41	97.6	2.71	2.27	2.09	0.708
	Mid/High Income	72	94.4	2.80	2.80	2.02	0.772
	Home Children	68	95.6	2.60	2.24	2.01	0.705
	Day Care Children	57	96.5	3.13	3.03	2.22	0.797
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	95.4	0.276	0.373	0.184	0.806
	Urban	94	94.7	0.267	0.384	0.176	0.800
	Rural	15	100.0	0.335	0.300	0.241	0.815
	Low Income	38	97.4	0.216	0.189	0.164	0.724
	Mid/High Income	62	93.5	0.317	0.456	0.200	0.851
	Home Children	58	94.8	0.271	0.325	0.197	0.704
	Day Care Children	51	96.1	0.282	0.425	0.169	0.909

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-9d. Pentachlorophenol (87-86-5): Range of Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	0.356	0.530	0.890	2.62	3.69
	Urban	109	<MDL	0.345	0.510	0.830	2.37	3.69
	Rural	17	0.220	0.510	0.810	1.10	3.02	3.02
	Low Income	41	<MDL	0.370	0.530	0.900	2.01	2.97
	Mid/High Income	72	<MDL	0.342	0.510	0.830	2.73	3.69
	Home Children	69	<MDL	0.380	0.530	0.840	1.72	3.43
	Day Care Children	57	<MDL	0.356	0.530	0.930	2.97	3.69
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	<MDL	0.348	0.517	0.864	2.56	3.60
	Urban	108	<MDL	0.335	0.499	0.808	2.31	3.60
	Rural	17	0.214	0.500	0.794	1.08	2.95	2.95
	Low Income	41	<MDL	0.361	0.515	0.891	1.96	2.90
	Mid/High Income	72	<MDL	0.337	0.498	0.808	2.69	3.60
	Home Children	68	<MDL	0.354	0.517	0.815	1.67	3.33
	Day Care Children	57	<MDL	0.348	0.515	0.903	2.90	3.60
Urinary concentration adjusted for creatinine (ng/mg)	Overall	109	<MDL	0.245	0.400	0.603	2.38	6.44
	Urban	94	<MDL	0.238	0.399	0.596	2.38	6.44
	Rural	15	0.176	0.320	0.504	1.29	2.51	2.51
	Low Income	38	<MDL	0.236	0.392	0.585	1.34	2.41
	Mid/High Income	62	<MDL	0.265	0.425	0.654	2.38	6.44
	Home Children	58	<MDL	0.296	0.425	0.603	2.38	5.14
	Day Care Children	51	<MDL	0.216	0.338	0.630	2.41	6.44
Urinary concentration (pmoles/mL)	Overall	126	<MDL	1.34	1.99	3.34	9.84	13.9
	Urban	109	<MDL	1.29	1.91	3.12	8.90	13.9
	Rural	17	0.826	1.91	3.04	4.13	11.3	11.3
	Low Income	41	<MDL	1.39	1.99	3.38	7.55	11.2
	Mid/High Income	72	<MDL	1.29	1.91	3.12	10.3	13.9
	Home Children	69	<MDL	1.43	1.99	3.15	6.45	12.9
	Day Care Children	57	<MDL	1.34	1.99	3.49	11.2	13.9
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	<MDL	1.30	1.94	3.24	9.60	13.5
	Urban	108	<MDL	1.26	1.87	3.03	8.68	13.5
	Rural	17	0.802	1.88	2.98	4.05	11.1	11.1
	Low Income	41	<MDL	1.36	1.93	3.35	7.36	10.9
	Mid/High Income	72	<MDL	1.26	1.87	3.03	10.1	13.5
	Home Children	68	<MDL	1.33	1.94	3.06	6.27	12.5
	Day Care Children	57	<MDL	1.30	1.93	3.39	10.9	13.5
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	<MDL	0.104	0.170	0.256	1.01	2.73
	Urban	94	<MDL	0.101	0.169	0.253	1.01	2.73
	Rural	15	0.075	0.136	0.214	0.548	1.06	1.06
	Low Income	38	<MDL	0.100	0.166	0.248	0.567	1.02
	Mid/High Income	62	<MDL	0.113	0.180	0.277	1.01	2.73
	Home Children	58	<MDL	0.126	0.180	0.256	1.01	2.18
	Day Care Children	51	<MDL	0.092	0.143	0.267	1.02	2.73

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-10a. 3-phenoxybenzoic acid (3739-38-6): Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	73.0	0.689	2.49	0.310	1.01
	Urban	109	73.4	0.743	2.68	0.316	1.05
	Rural	17	70.6	0.343	0.248	0.273	0.697
	Low Income	40	82.5	0.565	0.615	0.367	0.907
	Mid/High Income	73	67.1	0.806	3.25	0.287	1.07
	Home Children	69	65.2	0.478	0.529	0.292	0.983
	Day Care Children	57	82.5	0.944	3.66	0.334	1.05
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	73.0	0.674	2.44	0.301	1.02
	Urban	109	73.4	0.726	2.62	0.306	1.06
	Rural	17	70.6	0.336	0.242	0.268	0.697
	Low Income	40	82.5	0.554	0.605	0.360	0.906
	Mid/High Income	73	67.1	0.787	3.18	0.277	1.09
	Home Children	69	65.2	0.468	0.519	0.286	0.983
	Day Care Children	57	82.5	0.922	3.59	0.321	1.07
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	111	70.3	1.40	6.38	0.456	1.15
	Urban	96	70.8	1.53	6.85	0.463	1.20
	Rural	15	66.7	0.584	0.564	0.410	0.862
	Low Income	38	81.6	0.884	1.67	0.474	1.01
	Mid/High Income	63	63.5	1.79	8.37	0.428	1.26
	Home Children	59	61.0	0.812	1.00	0.443	1.11
	Day Care Children	52	80.8	2.07	9.26	0.471	1.22
Urinary concentration (pmoles/mL)	Overall	126	73.0	3.21	11.6	1.45	1.01
	Urban	109	73.4	3.47	12.5	1.48	1.05
	Rural	17	70.6	1.60	1.16	1.28	0.697
	Low Income	40	82.5	2.64	2.87	1.72	0.907
	Mid/High Income	73	67.1	3.76	15.1	1.34	1.07
	Home Children	69	65.2	2.23	2.47	1.36	0.983
	Day Care Children	57	82.5	4.40	17.1	1.56	1.05
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	73.0	3.14	11.4	1.41	1.02
	Urban	109	73.4	3.39	12.2	1.43	1.06
	Rural	17	70.6	1.57	1.13	1.25	0.697
	Low Income	40	82.5	2.59	2.82	1.68	0.906
	Mid/High Income	73	67.1	3.68	14.9	1.29	1.09
	Home Children	69	65.2	2.19	2.42	1.33	0.983
	Day Care Children	57	82.5	4.30	16.8	1.50	1.07
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	70.3	0.739	3.37	0.240	1.15
	Urban	96	70.8	0.806	3.61	0.244	1.20
	Rural	15	66.7	0.308	0.297	0.216	0.862
	Low Income	38	81.6	0.466	0.883	0.250	1.01
	Mid/High Income	63	63.5	0.944	4.42	0.226	1.26
	Home Children	59	61.0	0.428	0.528	0.233	1.11
	Day Care Children	52	80.8	1.09	4.89	0.249	1.22

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-10b. 3-phenoxybenzoic acid (3739-38-6): Range of Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25th Percentile	50th Percentile	75th Percentile	95th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	<MDL	0.253	0.620	1.83	27.8
	Urban	109	<MDL	<MDL	0.255	0.660	1.88	27.8
	Rural	17	<MDL	<MDL	0.250	0.425	0.933	0.933
	Low Income	40	<MDL	0.193	0.317	0.792	2.00	2.86
	Mid/High Income	73	<MDL	<MDL	0.229	0.510	1.88	27.8
	Home Children	69	<MDL	<MDL	0.240	0.620	1.88	2.29
	Day Care Children	57	<MDL	0.176	0.271	0.436	1.83	27.8
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	126	<MDL	<MDL	0.248	0.605	1.80	27.3
	Urban	109	<MDL	<MDL	0.249	0.647	1.85	27.3
	Rural	17	<MDL	<MDL	0.245	0.417	0.912	0.912
	Low Income	40	<MDL	0.189	0.309	0.773	1.96	2.82
	Mid/High Income	73	<MDL	<MDL	0.224	0.500	1.85	27.3
	Home Children	69	<MDL	<MDL	0.233	0.605	1.85	2.26
	Day Care Children	57	<MDL	0.173	0.265	0.425	1.80	27.3
Urinary concentration adjusted for creatinine (ng/mg)	Overall	111	<MDL	<MDL	0.355	1.04	2.84	66.7
	Urban	96	<MDL	<MDL	0.342	1.14	3.06	66.7
	Rural	15	<MDL	<MDL	0.390	0.807	2.17	2.17
	Low Income	38	<MDL	0.205	0.404	1.12	1.95	10.4
	Mid/High Income	63	<MDL	<MDL	0.296	0.897	3.06	66.7
	Home Children	59	<MDL	<MDL	0.411	1.04	3.06	4.71
	Day Care Children	52	<MDL	0.184	0.351	1.01	2.03	66.7
Urinary concentration (pmoles/mL)	Overall	126	<MDL	<MDL	1.18	2.89	8.57	130
	Urban	109	<MDL	<MDL	1.19	3.08	8.78	130
	Rural	17	<MDL	<MDL	1.17	1.99	4.35	4.35
	Low Income	40	<MDL	0.899	1.48	3.70	9.32	13.4
	Mid/High Income	73	<MDL	<MDL	1.07	2.38	8.78	130
	Home Children	69	<MDL	<MDL	1.12	2.89	8.78	10.7
	Day Care Children	57	<MDL	0.823	1.27	2.03	8.57	130
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	126	<MDL	<MDL	1.16	2.82	8.40	127
	Urban	109	<MDL	<MDL	1.16	3.02	8.65	127
	Rural	17	<MDL	<MDL	1.15	1.95	4.26	4.26
	Low Income	40	<MDL	0.884	1.44	3.61	9.17	13.2
	Mid/High Income	73	<MDL	<MDL	1.05	2.33	8.65	127
	Home Children	69	<MDL	<MDL	1.09	2.82	8.65	10.5
	Day Care Children	57	<MDL	0.807	1.24	1.99	8.40	127
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	111	<MDL	<MDL	0.187	0.551	1.50	35.2
	Urban	96	<MDL	<MDL	0.180	0.602	1.61	35.2
	Rural	15	<MDL	<MDL	0.205	0.426	1.14	1.14
	Low Income	38	<MDL	0.108	0.213	0.593	1.03	5.49
	Mid/High Income	63	<MDL	<MDL	0.156	0.473	1.61	35.2
	Home Children	59	<MDL	<MDL	0.217	0.551	1.61	2.48
	Day Care Children	52	<MDL	0.097	0.185	0.535	1.07	35.2

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-10c. 3-phenoxybenzoic acid (3739-38-6): Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	124	66.1	0.580	0.802	0.322	1.05
	Urban	107	68.2	0.619	0.848	0.338	1.07
	Rural	17	52.9	0.334	0.331	0.238	0.818
	Low Income	40	60.0	0.612	0.865	0.337	1.05
	Mid/High Income	71	64.8	0.548	0.817	0.291	1.07
	Home Children	68	61.8	0.438	0.630	0.261	0.961
	Day Care Children	56	71.4	0.752	0.948	0.414	1.10
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	123	65.9	0.569	0.788	0.315	1.05
	Urban	106	67.9	0.608	0.834	0.331	1.08
	Rural	17	52.9	0.327	0.324	0.233	0.818
	Low Income	40	60.0	0.597	0.841	0.329	1.05
	Mid/High Income	71	64.8	0.537	0.804	0.284	1.07
	Home Children	67	61.2	0.431	0.624	0.256	0.969
	Day Care Children	56	71.4	0.735	0.928	0.404	1.10
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	107	62.6	0.487	0.723	0.244	1.16
	Urban	92	65.2	0.526	0.765	0.262	1.18
	Rural	15	46.7	--	--	--	--
	Low Income	37	56.8	0.462	0.708	0.221	1.18
	Mid/High Income	61	62.3	0.514	0.778	0.252	1.20
	Home Children	57	57.9	0.447	0.741	0.230	1.11
	Day Care Children	50	68.0	0.533	0.706	0.262	1.22
Urinary concentration (pmoles/mL)	Overall	124	66.1	2.71	3.74	1.50	1.05
	Urban	107	68.2	2.89	3.96	1.58	1.07
	Rural	17	52.9	1.56	1.54	1.11	0.818
	Low Income	40	60.0	2.86	4.04	1.57	1.05
	Mid/High Income	71	64.8	2.56	3.81	1.36	1.07
	Home Children	68	61.8	2.04	2.94	1.22	0.961
	Day Care Children	56	71.4	3.51	4.43	1.93	1.10
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	123	65.9	2.66	3.68	1.47	1.05
	Urban	106	67.9	2.84	3.89	1.54	1.08
	Rural	17	52.9	1.53	1.51	1.09	0.818
	Low Income	40	60.0	2.79	3.93	1.54	1.05
	Mid/High Income	71	64.8	2.51	3.75	1.33	1.07
	Home Children	67	61.2	2.01	2.91	1.19	0.969
	Day Care Children	56	71.4	3.43	4.33	1.89	1.10
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	107	62.6	0.257	0.381	0.129	1.16
	Urban	92	65.2	0.277	0.403	0.138	1.18
	Rural	15	46.7	--	--	--	--
	Low Income	37	56.8	0.244	0.373	0.116	1.18
	Mid/High Income	61	62.3	0.271	0.411	0.133	1.20
	Home Children	57	57.9	0.236	0.391	0.121	1.11
	Day Care Children	50	68.0	0.281	0.373	0.138	1.22

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as "detected" if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-10d. 3-phenoxybenzoic acid (3739-38-6): Range of Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25th Percentile	50th Percentile	75th Percentile	95th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	124	<MDL	<MDL	0.260	0.787	1.54	4.93
	Urban	107	<MDL	<MDL	0.270	0.840	1.83	4.93
	Rural	17	<MDL	<MDL	0.220	0.430	1.38	1.38
	Low Income	40	<MDL	<MDL	0.255	0.765	1.86	4.93
	Mid/High Income	71	<MDL	<MDL	0.239	0.750	1.83	4.69
	Home Children	68	<MDL	<MDL	0.220	0.574	1.14	4.69
	Day Care Children	56	<MDL	<MDL	0.350	1.20	2.42	4.93
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	123	<MDL	<MDL	0.254	0.772	1.50	4.79
	Urban	106	<MDL	<MDL	0.263	0.820	1.78	4.79
	Rural	17	<MDL	<MDL	0.214	0.420	1.35	1.35
	Low Income	40	<MDL	<MDL	0.248	0.748	1.83	4.79
	Mid/High Income	71	<MDL	<MDL	0.233	0.732	1.78	4.62
	Home Children	67	<MDL	<MDL	0.215	0.585	1.11	4.62
	Day Care Children	56	<MDL	<MDL	0.341	1.16	2.36	4.79
Urinary concentration adjusted for creatinine (ng/mg)	Overall	107	<MDL	<MDL	0.196	0.637	1.58	5.15
	Urban	92	<MDL	<MDL	0.221	0.682	1.71	5.15
	Rural	15	<MDL	<MDL	<MDL	0.277	1.02	1.02
	Low Income	37	<MDL	<MDL	0.149	0.572	1.86	3.74
	Mid/High Income	61	<MDL	<MDL	0.210	0.640	1.32	5.15
	Home Children	57	<MDL	<MDL	0.207	0.520	1.58	5.15
	Day Care Children	50	<MDL	<MDL	0.195	0.781	1.86	3.74
Urinary concentration (pmoles/mL)	Overall	124	<MDL	<MDL	1.21	3.67	7.19	23.0
	Urban	107	<MDL	<MDL	1.26	3.92	8.54	23.0
	Rural	17	<MDL	<MDL	1.03	2.01	6.44	6.44
	Low Income	40	<MDL	<MDL	1.19	3.57	8.71	23.0
	Mid/High Income	71	<MDL	<MDL	1.12	3.50	8.54	21.9
	Home Children	68	<MDL	<MDL	1.03	2.68	5.32	21.9
	Day Care Children	56	<MDL	<MDL	1.63	5.58	11.3	23.0
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	123	<MDL	<MDL	1.18	3.61	7.01	22.3
	Urban	106	<MDL	<MDL	1.23	3.83	8.29	22.3
	Rural	17	<MDL	<MDL	0.997	1.96	6.32	6.32
	Low Income	40	<MDL	<MDL	1.16	3.49	8.52	22.3
	Mid/High Income	71	<MDL	<MDL	1.09	3.42	8.29	21.6
	Home Children	67	<MDL	<MDL	1.00	2.73	5.19	21.6
	Day Care Children	56	<MDL	<MDL	1.59	5.42	11.0	22.3
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	107	<MDL	<MDL	0.104	0.336	0.835	2.72
	Urban	92	<MDL	<MDL	0.117	0.360	0.900	2.72
	Rural	15	<MDL	<MDL	<MDL	0.146	0.536	0.536
	Low Income	37	<MDL	<MDL	0.079	0.302	0.982	1.97
	Mid/High Income	61	<MDL	<MDL	0.111	0.338	0.695	2.72
	Home Children	57	<MDL	<MDL	0.109	0.275	0.835	2.72
	Day Care Children	50	<MDL	<MDL	0.103	0.412	0.982	1.97

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-11a. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	122	100.0	5.61	3.38	4.64	0.636
	Urban	107	100.0	5.68	3.43	4.71	0.634
	Rural	15	100.0	5.08	3.07	4.21	0.658
	Low Income	40	100.0	5.68	3.11	4.89	0.570
	Mid/High Income	70	100.0	5.69	3.59	4.60	0.683
	Home Children	67	100.0	6.05	3.73	4.90	0.687
	Day Care Children	55	100.0	5.06	2.84	4.34	0.565
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	122	100.0	5.50	3.34	4.56	0.637
	Urban	107	100.0	5.58	3.39	4.62	0.636
	Rural	15	100.0	4.97	3.01	4.13	0.657
	Low Income	40	100.0	5.56	3.04	4.79	0.568
	Mid/High Income	70	100.0	5.60	3.56	4.52	0.686
	Home Children	67	100.0	5.92	3.65	4.80	0.686
	Day Care Children	55	100.0	5.00	2.87	4.27	0.571
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	106	100.0	7.69	4.29	6.52	0.604
	Urban	93	100.0	7.74	4.36	6.57	0.599
	Rural	13	100.0	7.35	3.91	6.20	0.661
	Low Income	37	100.0	7.16	3.88	6.32	0.504
	Mid/High Income	60	100.0	8.18	4.73	6.68	0.692
	Home Children	57	100.0	8.46	4.50	7.13	0.637
	Day Care Children	49	100.0	6.80	3.90	5.88	0.551
Urinary concentration (pmoles/mL)	Overall	122	100.0	28.2	17.1	23.4	0.636
	Urban	107	100.0	28.6	17.3	23.7	0.634
	Rural	15	100.0	25.6	15.5	21.2	0.658
	Low Income	40	100.0	28.6	15.7	24.6	0.570
	Mid/High Income	70	100.0	28.7	18.1	23.2	0.683
	Home Children	67	100.0	30.5	18.8	24.7	0.687
	Day Care Children	55	100.0	25.5	14.3	21.9	0.565
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	122	100.0	27.7	16.8	23.0	0.637
	Urban	107	100.0	28.1	17.1	23.3	0.636
	Rural	15	100.0	25.1	15.2	20.8	0.657
	Low Income	40	100.0	28.0	15.3	24.1	0.568
	Mid/High Income	70	100.0	28.2	17.9	22.8	0.686
	Home Children	67	100.0	29.8	18.4	24.2	0.686
	Day Care Children	55	100.0	25.2	14.5	21.5	0.571
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	106	100.0	4.38	2.44	3.71	0.604
	Urban	93	100.0	4.41	2.48	3.74	0.599
	Rural	13	100.0	4.19	2.23	3.53	0.661
	Low Income	37	100.0	4.08	2.21	3.60	0.504
	Mid/High Income	60	100.0	4.66	2.69	3.80	0.692
	Home Children	57	100.0	4.81	2.56	4.06	0.637
	Day Care Children	49	100.0	3.87	2.22	3.35	0.551

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-11b. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Estimated Urinary Biomarker Concentrations in OH Preschool Children, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	122	1.18	2.87	5.07	7.33	12.3	15.3
	Urban	107	1.18	2.90	4.79	7.50	12.8	15.3
	Rural	15	1.38	2.08	5.28	6.12	12.3	12.3
	Low Income	40	1.23	3.38	5.15	7.42	12.0	14.1
	Mid/High Income	70	1.18	2.73	5.12	7.78	12.3	15.3
	Home Children	67	1.18	3.01	5.28	9.08	12.9	15.3
	Day Care Children	55	1.38	2.68	4.43	6.88	11.2	12.8
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	122	1.15	2.82	4.96	7.17	12.1	14.9
	Urban	107	1.15	2.84	4.68	7.32	12.6	14.9
	Rural	15	1.35	2.03	5.18	6.00	12.1	12.1
	Low Income	40	1.21	3.30	5.04	7.24	11.8	13.8
	Mid/High Income	70	1.15	2.66	5.03	7.63	12.1	14.9
	Home Children	67	1.15	2.97	5.18	8.82	12.6	14.9
	Day Care Children	55	1.35	2.62	4.32	6.78	11.6	12.6
Urinary concentration adjusted for creatinine (ng/mg)	Overall	106	1.31	4.25	6.74	10.4	16.1	20.1
	Urban	93	1.31	4.25	6.49	10.3	17.8	20.1
	Rural	13	1.79	5.25	7.04	10.4	14.1	14.1
	Low Income	37	1.76	4.25	6.10	8.27	17.8	19.2
	Mid/High Income	60	1.31	4.02	7.49	11.7	17.0	20.1
	Home Children	57	1.31	5.21	7.65	11.7	17.8	19.2
	Day Care Children	49	1.72	4.04	5.80	8.21	14.1	20.1
Urinary concentration (pmoles/mL)	Overall	122	5.95	14.4	25.6	37.0	62.2	77.2
	Urban	107	5.95	14.6	24.1	37.8	64.5	77.2
	Rural	15	6.95	10.5	26.6	30.9	62.2	62.2
	Low Income	40	6.20	17.0	26.0	37.4	60.4	71.2
	Mid/High Income	70	5.95	13.8	25.8	39.2	62.2	77.2
	Home Children	67	5.95	15.2	26.6	45.8	65.1	77.2
	Day Care Children	55	6.95	13.5	22.3	34.7	56.3	64.5
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	122	5.80	14.2	25.0	36.1	61.1	75.3
	Urban	107	5.80	14.3	23.6	36.9	63.4	75.3
	Rural	15	6.82	10.3	26.1	30.3	61.1	61.1
	Low Income	40	6.11	16.6	25.4	36.5	59.3	69.5
	Mid/High Income	70	5.80	13.4	25.3	38.4	61.1	75.3
	Home Children	67	5.80	14.9	26.1	44.4	63.7	75.3
	Day Care Children	55	6.82	13.2	21.8	34.2	58.6	63.6
Urinary concentration, adjusted for creatinine (µmoles/mole)	Overall	106	0.747	2.42	3.84	5.95	9.20	11.4
	Urban	93	0.747	2.42	3.70	5.85	10.1	11.4
	Rural	13	1.02	2.99	4.01	5.95	8.04	8.04
	Low Income	37	1.00	2.42	3.47	4.71	10.2	10.9
	Mid/High Income	60	0.747	2.29	4.27	6.67	9.66	11.4
	Home Children	57	0.747	2.97	4.36	6.67	10.1	10.9
	Day Care Children	49	0.981	2.30	3.30	4.67	8.04	11.4

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Table Q-11c. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	% Detected	Arithmetic Mean	Std. Dev.	Geometric Mean	Log Std. Dev.
Urinary concentration (ng/mL)	Overall	126	97.6	4.75	4.47	3.51	0.756
	Urban	109	99.1	5.01	4.65	3.73	0.746
	Rural	17	88.2	3.06	2.66	2.37	0.718
	Low Income	41	100.0	4.57	4.53	3.38	0.745
	Mid/High Income	72	97.2	4.33	3.46	3.36	0.708
	Home Children	69	98.6	5.12	4.89	3.69	0.793
	Day Care Children	57	96.5	4.29	3.91	3.30	0.710
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	97.6	4.65	4.38	3.44	0.756
	Urban	108	99.1	4.92	4.55	3.67	0.746
	Rural	17	88.2	3.00	2.59	2.32	0.718
	Low Income	41	100.0	4.46	4.46	3.30	0.745
	Mid/High Income	72	97.2	4.23	3.37	3.29	0.706
	Home Children	68	98.5	5.05	4.78	3.64	0.794
	Day Care Children	57	96.5	4.19	3.84	3.23	0.709
Urinary concentration, adjusted for creatinine (ng/mg)	Overall	109	97.2	3.55	3.92	2.53	0.783
	Urban	94	98.9	3.79	4.15	2.69	0.786
	Rural	15	86.7	2.02	1.25	1.69	0.645
	Low Income	38	100.0	2.84	2.55	2.16	0.727
	Mid/High Income	62	96.8	3.92	4.44	2.78	0.772
	Home Children	58	98.3	4.44	4.99	3.02	0.834
	Day Care Children	51	96.1	2.54	1.72	2.06	0.672
Urinary concentration (pmoles/mL)	Overall	126	97.6	23.9	22.5	17.7	0.756
	Urban	109	99.1	25.2	23.4	18.8	0.746
	Rural	17	88.2	15.4	13.4	11.9	0.718
	Low Income	41	100.0	23.0	22.8	17.0	0.745
	Mid/High Income	72	97.2	21.8	17.5	17.0	0.708
	Home Children	69	98.6	25.8	24.6	18.6	0.793
	Day Care Children	57	96.5	21.6	19.7	16.6	0.710
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	97.6	23.5	22.1	17.4	0.756
	Urban	108	99.1	24.8	22.9	18.5	0.746
	Rural	17	88.2	15.1	13.1	11.7	0.718
	Low Income	41	100.0	22.5	22.5	16.6	0.745
	Mid/High Income	72	97.2	21.3	17.0	16.6	0.706
	Home Children	68	98.5	25.4	24.1	18.3	0.794
	Day Care Children	57	96.5	21.1	19.3	16.3	0.709
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	97.2	2.02	2.23	1.44	0.783
	Urban	94	98.9	2.16	2.36	1.53	0.786
	Rural	15	86.7	1.15	0.709	0.963	0.645
	Low Income	38	100.0	1.62	1.45	1.23	0.727
	Mid/High Income	62	96.8	2.23	2.53	1.58	0.772
	Home Children	58	98.3	2.53	2.84	1.72	0.834
	Day Care Children	51	96.1	1.45	0.981	1.18	0.672

^a Not detected results are replaced by the method detection limit (MDL) divided by the square root of 2. Multiple sample results for a given study subject have been log-transformed, averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries. Means and standard deviations are not reported when the percentage of detected results is below 50%.

Table Q-11d. 3,5,6-TCP (3,5,6-trichloro-2-pyridinol) (6515-38-4): Range of Estimated Urinary Biomarker Concentrations in OH Adults, Summarized by Strata^a

Biomarker Concentration Parameter	Strata	N	Minimum	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Maximum
Urinary concentration (ng/mL)	Overall	126	<MDL	1.96	3.25	5.84	11.7	29.7
	Urban	109	<MDL	2.11	3.56	6.07	12.8	29.7
	Rural	17	<MDL	1.72	2.03	3.44	11.7	11.7
	Low Income	41	1.01	1.95	3.24	5.34	11.6	26.7
	Mid/High Income	72	<MDL	1.96	3.18	5.56	11.5	20.4
	Home Children	69	<MDL	1.99	3.24	6.09	13.3	29.7
	Day Care Children	57	<MDL	1.96	3.34	5.35	11.6	26.7
Urinary concentration, adjusted for specific gravity (ng/mL)	Overall	125	<MDL	1.92	3.20	5.70	11.4	28.8
	Urban	108	<MDL	2.12	3.57	5.93	12.5	28.8
	Rural	17	<MDL	1.68	1.98	3.37	11.4	11.4
	Low Income	41	0.985	1.89	3.15	5.29	11.3	26.4
	Mid/High Income	72	<MDL	1.92	3.11	5.42	11.1	19.9
	Home Children	68	<MDL	1.95	3.17	6.15	13.1	28.8
	Day Care Children	57	<MDL	1.92	3.26	5.23	11.3	26.4
Urinary concentration adjusted for creatinine (ng/mg)	Overall	109	<MDL	1.51	2.51	4.14	11.7	25.4
	Urban	94	<MDL	1.59	2.80	4.15	12.9	25.4
	Rural	15	<MDL	1.10	1.83	2.47	4.99	4.99
	Low Income	38	0.446	1.28	2.09	3.52	8.15	14.2
	Mid/High Income	62	<MDL	1.71	2.66	4.43	11.7	25.4
	Home Children	58	<MDL	1.71	2.80	4.45	16.6	25.4
	Day Care Children	51	<MDL	1.36	2.12	3.25	4.91	9.38
Urinary concentration (pmoles/mL)	Overall	126	<MDL	9.88	16.4	29.4	58.8	149
	Urban	109	<MDL	10.6	17.9	30.6	64.4	149
	Rural	17	<MDL	8.67	10.2	17.3	58.8	58.8
	Low Income	41	5.09	9.83	16.3	26.9	58.3	135
	Mid/High Income	72	<MDL	9.86	16.0	28.0	57.7	103
	Home Children	69	<MDL	10.0	16.3	30.7	67.1	149
	Day Care Children	57	<MDL	9.88	16.8	27.0	58.3	135
Urinary concentration, adjusted for specific gravity (pmoles/mL)	Overall	125	<MDL	9.68	16.1	28.7	57.3	145
	Urban	108	<MDL	10.7	18.0	29.9	62.8	145
	Rural	17	<MDL	8.46	9.98	17.0	57.3	57.3
	Low Income	41	4.97	9.54	15.9	26.6	56.8	133
	Mid/High Income	72	<MDL	9.67	15.7	27.3	56.2	100
	Home Children	68	<MDL	9.81	16.0	31.0	65.9	145
	Day Care Children	57	<MDL	9.68	16.4	26.4	56.8	133
Urinary concentration, adjusted for creatinine (μmoles/mole)	Overall	109	<MDL	0.859	1.43	2.36	6.67	14.5
	Urban	94	<MDL	0.906	1.60	2.36	7.34	14.5
	Rural	15	<MDL	0.625	1.04	1.40	2.84	2.84
	Low Income	38	0.254	0.730	1.19	2.00	4.64	8.09
	Mid/High Income	62	<MDL	0.972	1.51	2.52	6.67	14.5
	Home Children	58	<MDL	0.972	1.60	2.53	9.44	14.5
	Day Care Children	51	<MDL	0.774	1.21	1.85	2.80	5.34

^a For a given study subject, multiple sample results have been log-transformed (after replacing not detected results by the method detection limit (MDL) divided by the square root of 2), averaged, and exponentiated back to regular units prior to summarizing the data within a stratum. This result is labeled as “detected” if any measurement entering into the calculation was detected. Thus, N specifies the number of subjects having data entering into the summaries.

Appendix R

Detailed Results of Statistical Analyses Performed on Potential Exposure Level and Potential Absorbed Dose Estimates and on Urinary Biomarker Concentrations for the Study Participants

Table R-1. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating NC Children, and 95% Confidence Intervals on This Ratio

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
Benz[a]anthracene			
Potential Exposure via Inhalation	1.50 (0.88,2.54)	1.38 (0.99,1.92)	0.85 (0.52,1.40)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.88 (0.42,1.84)	0.66 (0.39,1.14)	1.72 (0.93,3.19)
Potential Absorbed Dose via Inhalation	1.66 (0.94,2.91)	1.34 (0.94,1.91)	0.74 (0.44,1.25)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	0.95 (0.44,2.04)	0.61 (0.35,1.07)	1.53 (0.80,2.91)
Benzo[b]fluoranthene			
Potential Exposure via Inhalation	1.44 (0.85,2.45)	1.58* (1.12,2.24)	1.08 (0.66,1.76)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.93 (0.45,1.89)	0.74 (0.44,1.27)	1.81* (1.01,3.23)
Potential Absorbed Dose via Inhalation	1.59 (0.91,2.78)	1.52* (1.04,2.21)	0.94 (0.57,1.57)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	0.99 (0.47,2.09)	0.68 (0.39,1.19)	1.60 (0.87,2.95)
Benzo[k]fluoranthene			
Potential Exposure via Inhalation	1.14 (0.84,1.56)	1.25* (1.02,1.53)	1.01 (0.76,1.35)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.83 (0.40,1.72)	0.70 (0.41,1.19)	1.72 (0.94,3.15)
Potential Absorbed Dose via Inhalation	1.26 (0.88,1.80)	1.20 (0.95,1.53)	0.88 (0.64,1.22)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	0.89 (0.42,1.91)	0.64 (0.36,1.12)	1.53 (0.81,2.88)
Benzo[ghi]perylene			
Potential Exposure via Inhalation	1.31 (0.78,2.21)	1.33 (0.96,1.83)	0.96 (0.59,1.58)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.96 (0.48,1.90)	0.72 (0.43,1.19)	1.60 (0.92,2.80)
Potential Absorbed Dose via Inhalation	1.45 (0.83,2.54)	1.30 (0.91,1.84)	0.84 (0.50,1.42)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	1.03 (0.50,2.11)	0.66 (0.38,1.12)	1.42 (0.79,2.56)
Benzo[a]pyrene			
Potential Exposure via Inhalation	1.18 (0.74,1.87)	1.57** (1.13,2.19)	1.03 (0.69,1.54)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.97 (0.48,1.99)	0.68 (0.40,1.15)	1.65 (0.91,3.00)
Potential Absorbed Dose via Inhalation	1.29 (0.79,2.11)	1.51* (1.06,2.15)	0.90 (0.59,1.37)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	1.04 (0.49,2.21)	0.62 (0.36,1.08)	1.46 (0.78,2.74)

Table R-1. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating NC Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
Benzo[e]pyrene			
Potential Exposure via Inhalation	1.15 (0.81,1.65)	1.36* (1.07,1.74)	1.05 (0.76,1.45)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.89 (0.44,1.79)	0.74 (0.44,1.24)	1.67 (0.94,2.96)
Potential Absorbed Dose via Inhalation	1.27 (0.86,1.87)	1.31* (1.00,1.72)	0.92 (0.65,1.29)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	0.95 (0.46,1.99)	0.68 (0.39,1.17)	1.48 (0.81,2.71)
Benzylbutylphthalate			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.54 (0.25,1.19)	1.55 (0.88,2.75)	1.49 (0.80,2.79)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	0.57 (0.25,1.30)	1.35 (0.74,2.45)	1.33 (0.68,2.63)
Bisphenol-A			
Potential Exposure via Inhalation	1.03 (0.57,1.86)	1.33 (0.91,1.93)	0.81 (0.47,1.41)
Potential Exposure via Dietary Ingestion	0.68 (0.38,1.20)	0.90 (0.60,1.35)	2.47** (1.54,3.96)
Potential Exposure via Indirect Ingestion ^b	0.83 (0.41,1.66)	0.76 (0.45,1.28)	1.16 (0.70,1.92)
Potential Absorbed Dose via Inhalation	1.14 (0.61,2.12)	1.28 (0.85,1.91)	0.71 (0.40,1.27)
Potential Absorbed Dose via Dietary Ingestion	0.73 (0.41,1.32)	0.84 (0.56,1.28)	2.19** (1.36,3.53)
Potential Absorbed Dose via Indirect Ingestion ^b	0.84 (0.41,1.73)	0.65 (0.38,1.12)	1.05 (0.57,1.91)
Aggregated Potential Exposure	0.68 (0.41,1.12)	0.87 (0.58,1.31)	2.12** (1.42,3.17)
Aggregated Potential Absorbed Dose	0.73 (0.44,1.22)	0.82 (0.54,1.25)	1.85** (1.23,2.79)
<i>alpha</i>-Chlordane			
Potential Exposure via Inhalation	0.77 (0.35,1.68)	1.36 (0.78,2.38)	1.33 (0.67,2.61)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.66 (0.27,1.63)	0.84 (0.44,1.57)	1.79 (0.80,3.98)
Potential Absorbed Dose via Inhalation	0.84 (0.38,1.88)	1.30 (0.73,2.31)	1.16 (0.58,2.32)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	0.72 (0.28,1.85)	0.76 (0.39,1.46)	1.58 (0.68,3.65)
<i>gamma</i>-Chlordane			
Potential Exposure via Inhalation	0.78 (0.34,1.78)	1.43 (0.80,2.56)	1.36 (0.66,2.80)
Potential Exposure via Dietary Ingestion ^a	--	--	--

Table R-1. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating NC Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
Potential Exposure via Indirect Ingestion	0.68 (0.27,1.75)	0.83 (0.43,1.58)	1.81 (0.78,4.18)
Potential Absorbed Dose via Inhalation	0.85 (0.37,1.97)	1.36 (0.75,2.47)	1.19 (0.57,2.47)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	0.74 (0.28,1.96)	0.75 (0.38,1.46)	1.60 (0.67,3.81)
Chlorpyrifos			
Potential Exposure via Inhalation	0.87 (0.42,1.78)	1.02 (0.61,1.71)	1.51 (0.83,2.77)
Potential Exposure via Dietary Ingestion	1.13 (0.54,2.39)	1.14 (0.70,1.85)	1.29 (0.66,2.51)
Potential Exposure via Indirect Ingestion	0.88 (0.41,1.90)	0.99 (0.56,1.75)	1.40 (0.77,2.57)
Potential Absorbed Dose via Inhalation	0.95 (0.47,1.93)	0.98 (0.59,1.64)	1.32 (0.73,2.39)
Potential Absorbed Dose via Dietary Ingestion	1.24 (0.60,2.55)	1.08 (0.66,1.75)	1.13 (0.60,2.12)
Potential Absorbed Dose via Indirect Ingestion	0.96 (0.44,2.07)	0.90 (0.51,1.61)	1.24 (0.67,2.28)
Aggregated Potential Exposure	1.04 (0.51,2.08)	1.27 (0.75,2.14)	1.21 (0.65,2.27)
Aggregated Potential Absorbed Dose	1.11 (0.57,2.17)	1.17 (0.70,1.95)	1.05 (0.59,1.87)
Chrysene			
Potential Exposure via Inhalation	1.46 (0.90,2.37)	1.57** (1.14,2.17)	0.93 (0.60,1.44)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.91 (0.43,1.91)	0.69 (0.40,1.19)	1.83 (0.99,3.39)
Potential Absorbed Dose via Inhalation	1.61 (0.96,2.70)	1.52* (1.07,2.15)	0.81 (0.51,1.29)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	0.98 (0.45,2.10)	0.63 (0.36,1.11)	1.62 (0.86,3.07)
Cyfluthrin			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion ^c	0.62 (0.22,1.74)	0.70 (0.33,1.49)	1.07 (0.43,2.66)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion ^c	0.67 (0.23,1.95)	0.64 (0.30,1.39)	0.95 (0.37,2.40)
Diazinon			
Potential Exposure via Inhalation	0.93 (0.36,2.39)	2.24* (1.15,4.38)	1.38 (0.62,3.11)
Potential Exposure via Dietary Ingestion ^b	0.86 (0.52,1.42)	1.07 (0.76,1.50)	1.37 (0.87,2.14)
Potential Exposure via Indirect Ingestion	0.74 (0.23,2.38)	1.60 (0.71,3.63)	1.53 (0.53,4.42)
Potential Absorbed Dose via Inhalation	1.02 (0.40,2.62)	2.14* (1.09,4.18)	1.21 (0.54,2.73)
Potential Absorbed Dose via Dietary Ingestion ^b	0.94 (0.58,1.52)	1.04 (0.74,1.46)	1.20 (0.79,1.82)

Table R-1. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating NC Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
Potential Absorbed Dose via Indirect Ingestion	0.80 (0.24,2.61)	1.43 (0.62,3.27)	1.35 (0.46,3.99)
Aggregated Potential Exposure	0.93 (0.44,1.94)	1.42 (0.81,2.49)	1.44 (0.74,2.83)
Aggregated Potential Absorbed Dose	1.00 (0.48,2.08)	1.32 (0.76,2.30)	1.26 (0.65,2.44)
Dibenzo[a,h]anthracene			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.81 (0.39,1.65)	0.72 (0.43,1.23)	1.66 (0.92,3.01)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	0.87 (0.41,1.84)	0.66 (0.38,1.16)	1.47 (0.79,2.76)
Di-n-butylphthalate			
Potential Exposure via Inhalation	1.16 (0.85,1.58)	1.10 (0.90,1.35)	1.77** (1.33,2.37)
Potential Exposure via Dietary Ingestion ^b	0.88 (0.46,1.67)	0.66 (0.40,1.08)	1.56 (0.84,2.89)
Potential Exposure via Indirect Ingestion	1.12 (0.69,1.83)	1.02 (0.70,1.50)	1.30 (0.91,1.86)
Potential Absorbed Dose via Inhalation	1.28 (0.91,1.80)	1.07 (0.85,1.35)	1.54** (1.14,2.10)
Potential Absorbed Dose via Dietary Ingestion ^b	0.90 (0.47,1.72)	0.58* (0.35,0.95)	1.41 (0.76,2.61)
Potential Absorbed Dose via Indirect Ingestion	1.19 (0.69,2.06)	0.88 (0.58,1.34)	1.15 (0.75,1.75)
Aggregated Potential Exposure	0.90 (0.49,1.65)	0.73 (0.45,1.19)	1.66 (0.93,2.96)
Aggregated Potential Absorbed Dose	0.92 (0.50,1.67)	0.64 (0.39,1.04)	1.48 (0.83,2.62)
p,p'-DDE			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion	0.97 (0.55,1.71)	1.06 (0.74,1.50)	1.57 (0.94,2.62)
Potential Exposure via Indirect Ingestion ^a	--	--	--
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion	1.06 (0.59,1.92)	0.99 (0.69,1.44)	1.38 (0.81,2.36)
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--
2,4-D (2,4-dichlorophenoxyacetic acid)			
Potential Exposure via Inhalation ^c	1.21 (0.65,2.24)	1.46 (0.96,2.22)	2.23** (1.28,3.89)
Potential Exposure via Dietary Ingestion	1.22 (0.72,2.09)	1.01 (0.69,1.48)	1.59* (1.04,2.42)
Potential Exposure via Indirect Ingestion	3.39** (1.64,7.02)	0.27** (0.15,0.47)	0.54* (0.31,0.94)
Potential Absorbed Dose via Inhalation ^c	1.33 (0.71,2.48)	1.41 (0.92,2.16)	1.94* (1.12,3.39)
Potential Absorbed Dose via Dietary Ingestion	1.30 (0.76,2.24)	0.93 (0.63,1.36)	1.43 (0.94,2.17)
Potential Absorbed Dose via Indirect Ingestion	3.68** (1.74,7.77)	0.25** (0.14,0.45)	0.47* (0.27,0.84)

Table R-1. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating NC Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
Aggregated Potential Exposure	1.27 (0.70,2.29)	1.08 (0.70,1.66)	1.46 (0.95,2.23)
Aggregated Potential Absorbed Dose	1.35 (0.73,2.50)	0.99 (0.63,1.54)	1.27 (0.82,1.95)
Heptachlor			
Potential Exposure via Inhalation	1.11 (0.47,2.65)	1.30 (0.74,2.29)	1.82 (0.82,4.07)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion ^a	--	--	--
Potential Absorbed Dose via Inhalation	1.21 (0.50,2.93)	1.23 (0.69,2.22)	1.60 (0.71,3.59)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--
Indeno[1,2,3-<i>cd</i>]pyrene			
Potential Exposure via Inhalation	1.20 (0.75,1.92)	1.48* (1.09,2.01)	0.97 (0.63,1.50)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	1.03 (0.51,2.05)	0.73 (0.43,1.22)	1.49 (0.85,2.63)
Potential Absorbed Dose via Inhalation	1.33 (0.80,2.20)	1.43* (1.02,2.00)	0.85 (0.53,1.34)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	1.10 (0.53,2.27)	0.67 (0.39,1.14)	1.32 (0.73,2.40)
Pentachlorophenol			
Potential Exposure via Inhalation	0.76 (0.40,1.44)	1.36 (0.89,2.08)	1.61 (0.90,2.89)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.91 (0.44,1.92)	1.04 (0.59,1.82)	0.83 (0.46,1.50)
Potential Absorbed Dose via Inhalation	0.84 (0.43,1.61)	1.31 (0.85,2.02)	1.40 (0.77,2.55)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	0.99 (0.46,2.11)	0.96 (0.54,1.70)	0.74 (0.40,1.35)
<i>cis</i>-Permethrin			
Potential Exposure via Inhalation	0.67 (0.30,1.50)	2.38** (1.35,4.22)	1.44 (0.72,2.90)
Potential Exposure via Dietary Ingestion ^b	1.86 (0.61,5.62)	0.88 (0.41,1.91)	2.13 (0.85,5.35)
Potential Exposure via Indirect Ingestion	1.03 (0.40,2.65)	1.19 (0.59,2.38)	1.20 (0.55,2.62)
Potential Absorbed Dose via Inhalation	0.73 (0.32,1.65)	2.26** (1.27,4.02)	1.26 (0.62,2.58)
Potential Absorbed Dose via Dietary Ingestion ^b	2.02 (0.67,6.13)	0.82 (0.38,1.78)	1.88 (0.75,4.73)
Potential Absorbed Dose via Indirect Ingestion	1.11 (0.42,2.94)	1.08 (0.53,2.19)	1.06 (0.48,2.39)
Aggregated Potential Exposure	1.78 (0.67,4.73)	0.81 (0.38,1.70)	2.08 (0.90,4.84)
Aggregated Potential Absorbed Dose	1.92 (0.72,5.16)	0.74 (0.35,1.58)	1.80 (0.77,4.22)

Table R-1. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating NC Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
<i>trans</i>-Permethrin			
Potential Exposure via Inhalation	0.71 (0.32,1.60)	2.45** (1.37,4.36)	1.46 (0.73,2.91)
Potential Exposure via Dietary Ingestion ^b	1.88 (0.67,5.26)	0.95 (0.46,1.96)	1.85 (0.79,4.34)
Potential Exposure via Indirect Ingestion	1.05 (0.39,2.84)	1.05 (0.50,2.19)	1.28 (0.57,2.86)
Potential Absorbed Dose via Inhalation	0.77 (0.34,1.77)	2.31** (1.29,4.15)	1.28 (0.62,2.61)
Potential Absorbed Dose via Dietary Ingestion ^b	2.05 (0.73,5.77)	0.88 (0.43,1.82)	1.63 (0.69,3.84)
Potential Absorbed Dose via Indirect Ingestion	1.14 (0.41,3.16)	0.95 (0.45,2.03)	1.13 (0.49,2.60)
Aggregated Potential Exposure	1.96 (0.77,4.99)	0.81 (0.40,1.65)	1.84 (0.82,4.12)
Aggregated Potential Absorbed Dose	2.13 (0.83,5.48)	0.74 (0.36,1.53)	1.58 (0.70,3.59)
PCB 52			
Potential Exposure via Inhalation	0.89 (0.59,1.35)	0.97 (0.71,1.33)	1.30 (0.94,1.81)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion ^a	--	--	--
Potential Absorbed Dose via Inhalation	0.97 (0.62,1.50)	0.93 (0.67,1.29)	1.14 (0.80,1.62)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--
PCB 95			
Potential Exposure via Inhalation	0.95 (0.61,1.47)	1.14 (0.82,1.59)	1.16 (0.82,1.62)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion ^a	--	--	--
Potential Absorbed Dose via Inhalation	1.03 (0.64,1.63)	1.09 (0.77,1.54)	1.01 (0.70,1.46)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--
PCB 101			
Potential Exposure via Inhalation	0.83 (0.50,1.36)	1.12 (0.77,1.62)	1.12 (0.75,1.66)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion ^a	--	--	--
Potential Absorbed Dose via Inhalation	0.90 (0.54,1.50)	1.07 (0.73,1.56)	0.98 (0.65,1.47)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)			
Potential Exposure via Inhalation	0.96 (0.49,1.89)	0.96 (0.60,1.54)	1.44 (0.80,2.61)
Potential Exposure via Dietary Ingestion	0.80 (0.45,1.44)	0.65* (0.47,0.90)	1.82* (1.05,3.15)

Table R-1. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating NC Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
Potential Exposure via Indirect Ingestion	0.67 (0.30,1.50)	1.09 (0.59,2.01)	0.92 (0.49,1.74)
Potential Absorbed Dose via Inhalation	1.06 (0.54,2.07)	0.92 (0.57,1.49)	1.26 (0.71,2.25)
Potential Absorbed Dose via Dietary Ingestion	0.87 (0.50,1.53)	0.60** (0.43,0.84)	1.62 (0.96,2.72)
Potential Absorbed Dose via Indirect Ingestion	0.72 (0.32,1.63)	1.01 (0.54,1.86)	0.81 (0.43,1.54)
Aggregated Potential Exposure	0.79 (0.46,1.37)	0.61* (0.41,0.89)	1.76* (1.05,2.95)
Aggregated Potential Absorbed Dose	0.86 (0.51,1.45)	0.56** (0.38,0.81)	1.54 (0.95,2.50)

^a Results are not presented because, for each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected.

^b For each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected. However, results are presented because this was one of the eight pollutants mentioned at the end of Section 9.2.

^c The largest detection percentage among the environmental sample types whose measurements were used to calculate the potential exposure/absorbed dose was between 45 and 50%.

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

Table R-2. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating OH Children, and 95% Confidence Intervals on This Ratio

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
Benz[a]anthracene			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	3.69** (1.80,7.56)	0.43** (0.26,0.70)	3.29** (1.88,5.76)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	3.65** (1.74,7.66)	0.43** (0.26,0.72)	3.08** (1.73,5.47)
Benzo[b]fluoranthene			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	3.55** (1.80,6.99)	0.43** (0.27,0.69)	3.15** (1.86,5.32)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	3.52** (1.74,7.12)	0.43** (0.26,0.70)	2.94** (1.71,5.07)
Benzo[k]fluoranthene			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	3.18** (1.59,6.36)	0.43** (0.26,0.69)	3.16** (1.85,5.40)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	3.16** (1.54,6.51)	0.43** (0.26,0.71)	2.95** (1.69,5.16)
Benzo[ghi]perylene			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	3.18** (1.61,6.30)	0.43** (0.27,0.69)	3.12** (1.83,5.32)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	3.16** (1.55,6.43)	0.43** (0.26,0.71)	2.92** (1.68,5.08)
Benzo[a]pyrene			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	3.35** (1.64,6.81)	0.41** (0.25,0.67)	3.09** (1.77,5.38)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	3.32** (1.59,6.95)	0.41** (0.25,0.69)	2.89** (1.62,5.12)

Table R-2. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating OH Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
Benzo[e]pyrene			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	3.23** (1.63,6.39)	0.43** (0.27,0.70)	3.04** (1.79,5.16)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	3.21** (1.57,6.53)	0.44** (0.26,0.72)	2.84** (1.64,4.92)
Benzylbutylphthalate			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion	1.75 (0.62,4.91)	0.87 (0.41,1.86)	2.83** (1.33,6.02)
Potential Exposure via Indirect Ingestion	0.63 (0.32,1.24)	0.96 (0.59,1.55)	2.73** (1.64,4.57)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion	1.73 (0.61,4.94)	0.95 (0.44,2.04)	2.44* (1.14,5.25)
Potential Absorbed Dose via Indirect Ingestion	0.63 (0.31,1.27)	0.97 (0.59,1.61)	2.54** (1.51,4.29)
Bisphenol-A			
Potential Exposure via Inhalation	0.95 (0.61,1.48)	1.38* (1.00,1.90)	1.39 (0.98,1.97)
Potential Exposure via Dietary Ingestion	1.17 (0.64,2.12)	1.14 (0.77,1.69)	1.44 (0.97,2.13)
Potential Exposure via Indirect Ingestion	1.04 (0.61,1.79)	0.68 (0.45,1.03)	1.07 (0.70,1.63)
Potential Absorbed Dose via Inhalation	0.96 (0.61,1.50)	1.31 (0.94,1.81)	1.29 (0.91,1.83)
Potential Absorbed Dose via Dietary Ingestion	1.20 (0.67,2.15)	1.15 (0.77,1.72)	1.34 (0.91,1.96)
Potential Absorbed Dose via Indirect Ingestion	1.03 (0.57,1.87)	0.68 (0.44,1.07)	0.99 (0.65,1.53)
Aggregated Potential Exposure	1.42 (0.79,2.55)	1.28 (0.79,2.07)	1.55 (0.97,2.46)
Aggregated Potential Absorbed Dose	1.48 (0.79,2.77)	1.27 (0.76,2.13)	1.43 (0.87,2.33)
<i>alpha</i>-Chlordane			
Potential Exposure via Inhalation	1.03 (0.49,2.20)	1.44 (0.88,2.35)	0.78 (0.44,1.39)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	1.49 (0.62,3.59)	1.01 (0.53,1.90)	1.05 (0.55,2.03)
Potential Absorbed Dose via Inhalation	1.01 (0.48,2.14)	1.42 (0.86,2.34)	0.73 (0.41,1.28)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	1.47 (0.61,3.57)	1.02 (0.54,1.94)	0.98 (0.51,1.89)
<i>gamma</i>-Chlordane			
Potential Exposure via Inhalation	1.09 (0.49,2.41)	1.42 (0.85,2.37)	0.79 (0.43,1.46)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	1.40 (0.56,3.50)	1.05 (0.54,2.03)	1.10 (0.55,2.18)

Table R-2. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating OH Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
Potential Absorbed Dose via Inhalation	1.06 (0.48,2.34)	1.40 (0.83,2.37)	0.74 (0.41,1.34)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	1.38 (0.55,3.47)	1.06 (0.54,2.07)	1.02 (0.52,2.03)
Chlorpyrifos			
Potential Exposure via Inhalation	1.54 (0.78,3.06)	1.25 (0.76,2.04)	1.48 (0.83,2.65)
Potential Exposure via Dietary Ingestion	0.92 (0.50,1.72)	2.00** (1.29,3.08)	1.02 (0.66,1.60)
Potential Exposure via Indirect Ingestion	1.42 (0.58,3.45)	1.30 (0.68,2.48)	2.52** (1.31,4.85)
Potential Absorbed Dose via Inhalation	1.53 (0.76,3.09)	1.17 (0.70,1.96)	1.44 (0.80,2.60)
Potential Absorbed Dose via Dietary Ingestion	0.94 (0.51,1.73)	2.06** (1.34,3.18)	0.92 (0.60,1.39)
Potential Absorbed Dose via Indirect Ingestion	1.42 (0.57,3.53)	1.35 (0.69,2.62)	2.33* (1.20,4.54)
Aggregated Potential Exposure	1.03 (0.59,1.79)	1.64* (1.04,2.58)	1.20 (0.75,1.94)
Aggregated Potential Absorbed Dose	1.08 (0.61,1.90)	1.66* (1.04,2.66)	1.07 (0.67,1.72)
Chrysene			
Potential Exposure via Inhalation ^c	1.36 (0.88,2.11)	1.17 (0.86,1.59)	1.37 (0.97,1.92)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	3.51** (1.76,6.98)	0.42** (0.26,0.68)	3.24** (1.91,5.50)
Potential Absorbed Dose via Inhalation ^c	1.39 (0.89,2.19)	1.10 (0.79,1.52)	1.34 (0.95,1.90)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	3.47** (1.70,7.11)	0.42** (0.25,0.70)	3.03** (1.75,5.23)
Cyfluthrin			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	2.47* (1.07,5.69)	0.79 (0.44,1.39)	1.64 (0.85,3.14)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	2.44* (1.04,5.73)	0.79 (0.44,1.43)	1.53 (0.79,2.96)
Diazinon			
Potential Exposure via Inhalation	0.61 (0.27,1.42)	1.57 (0.88,2.82)	2.02* (1.13,3.59)
Potential Exposure via Dietary Ingestion ^b	0.84 (0.63,1.14)	1.15 (0.93,1.41)	1.37** (1.11,1.69)
Potential Exposure via Indirect Ingestion	1.57 (0.49,5.00)	0.77 (0.35,1.69)	3.45** (1.38,8.61)
Potential Absorbed Dose via Inhalation	0.62 (0.27,1.45)	1.57 (0.87,2.83)	1.88* (1.05,3.38)
Potential Absorbed Dose via Dietary Ingestion ^b	0.83 (0.60,1.15)	1.16 (0.93,1.46)	1.28* (1.02,1.60)
Potential Absorbed Dose via Indirect Ingestion	1.58 (0.49,5.11)	0.76 (0.35,1.68)	3.22* (1.27,8.17)

Table R-2. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating OH Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
Aggregated Potential Exposure	0.86 (0.50,1.49)	1.25 (0.83,1.86)	1.66* (1.11,2.48)
Aggregated Potential Absorbed Dose	0.88 (0.51,1.51)	1.28 (0.86,1.90)	1.52* (1.01,2.29)
Dibenzo[<i>a,h</i>]anthracene			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	3.50** (1.75,7.03)	0.44** (0.27,0.71)	3.19** (1.85,5.51)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	3.47** (1.68,7.14)	0.44** (0.27,0.73)	2.98** (1.70,5.25)
Di-<i>n</i>-butylphthalate			
Potential Exposure via Inhalation	0.65* (0.45,0.93)	1.05 (0.85,1.31)	1.44* (1.09,1.90)
Potential Exposure via Dietary Ingestion ^b	0.95 (0.44,2.05)	1.15 (0.66,2.02)	2.17** (1.24,3.82)
Potential Exposure via Indirect Ingestion	1.31 (0.74,2.29)	0.76 (0.51,1.15)	2.02** (1.32,3.10)
Potential Absorbed Dose via Inhalation	0.63* (0.44,0.92)	1.04 (0.81,1.32)	1.34* (1.02,1.76)
Potential Absorbed Dose via Dietary Ingestion ^b	0.94 (0.43,2.05)	1.25 (0.71,2.21)	1.87* (1.06,3.31)
Potential Absorbed Dose via Indirect Ingestion	1.26 (0.70,2.28)	0.76 (0.49,1.17)	1.88** (1.23,2.88)
Aggregated Potential Exposure	0.92 (0.46,1.87)	1.21 (0.70,2.09)	2.07** (1.21,3.52)
Aggregated Potential Absorbed Dose	0.93 (0.46,1.90)	1.27 (0.73,2.20)	1.76* (1.03,3.02)
<i>p,p'</i>-DDE			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion	0.95 (0.52,1.74)	0.86 (0.58,1.27)	1.44 (0.90,2.29)
Potential Exposure via Indirect Ingestion ^c	0.91 (0.41,2.05)	0.92 (0.53,1.58)	1.15 (0.61,2.16)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion	0.96 (0.52,1.77)	0.84 (0.56,1.27)	1.33 (0.83,2.11)
Potential Absorbed Dose via Indirect Ingestion ^c	0.91 (0.40,2.08)	0.91 (0.52,1.58)	1.08 (0.56,2.06)
2,4-D (2,4-dichlorophenoxyacetic acid)			
Potential Exposure via Inhalation ^b	0.60 (0.30,1.22)	0.87 (0.61,1.24)	0.96 (0.57,1.61)
Potential Exposure via Dietary Ingestion ^b	1.37 (0.73,2.59)	1.00 (0.66,1.51)	1.36 (0.85,2.19)
Potential Exposure via Indirect Ingestion	2.80* (1.03,7.62)	0.29** (0.15,0.54)	1.85 (0.86,3.97)
Potential Absorbed Dose via Inhalation ^b	0.59 (0.29,1.18)	0.80 (0.56,1.16)	0.90 (0.54,1.52)
Potential Absorbed Dose via Dietary Ingestion ^b	1.36 (0.72,2.57)	0.98 (0.65,1.49)	1.28 (0.80,2.07)
Potential Absorbed Dose via Indirect Ingestion	2.84* (1.04,7.79)	0.29** (0.15,0.54)	1.73 (0.80,3.75)
Aggregated Potential Exposure	1.58 (0.68,3.67)	0.86 (0.58,1.30)	1.23 (0.67,2.26)

Table R-2. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating OH Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
Aggregated Potential Absorbed Dose	1.56 (0.67,3.64)	0.83 (0.56,1.25)	1.15 (0.62,2.12)
Indeno[1,2,3-<i>cd</i>]pyrene			
Potential Exposure via Inhalation ^a	--	--	--
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	3.34** (1.66,6.72)	0.43** (0.27,0.69)	3.20** (1.85,5.53)
Potential Absorbed Dose via Inhalation ^a	--	--	--
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	3.31** (1.60,6.86)	0.43** (0.26,0.71)	3.00** (1.70,5.28)
Pentachlorophenol			
Potential Exposure via Inhalation	0.55 (0.23,1.36)	0.90 (0.50,1.61)	0.70 (0.36,1.36)
Potential Exposure via Dietary Ingestion ^a	--	--	--
Potential Exposure via Indirect Ingestion	0.71 (0.34,1.50)	0.82 (0.50,1.35)	1.33 (0.77,2.30)
Potential Absorbed Dose via Inhalation	0.54 (0.22,1.35)	0.87 (0.48,1.58)	0.66 (0.34,1.30)
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--
Potential Absorbed Dose via Indirect Ingestion	0.72 (0.33,1.56)	0.84 (0.50,1.43)	1.24 (0.71,2.17)
cis-Permethrin			
Potential Exposure via Inhalation ^b	1.10 (0.74,1.63)	1.15 (0.89,1.49)	1.28 (0.95,1.72)
Potential Exposure via Dietary Ingestion ^b	1.25 (0.42,3.70)	1.07 (0.51,2.24)	3.14** (1.43,6.89)
Potential Exposure via Indirect Ingestion	0.46 (0.20,1.09)	0.87 (0.47,1.61)	1.95* (1.04,3.69)
Potential Absorbed Dose via Inhalation ^b	1.10 (0.71,1.68)	1.13 (0.85,1.51)	1.20 (0.88,1.65)
Potential Absorbed Dose via Dietary Ingestion ^b	1.24 (0.42,3.64)	1.08 (0.52,2.28)	2.92** (1.34,6.34)
Potential Absorbed Dose via Indirect Ingestion	0.46 (0.19,1.11)	0.91 (0.48,1.71)	1.81 (0.95,3.43)
Aggregated Potential Exposure	0.98 (0.41,2.30)	1.29 (0.70,2.39)	2.34* (1.20,4.55)
Aggregated Potential Absorbed Dose	0.97 (0.42,2.26)	1.33 (0.72,2.44)	2.16* (1.13,4.14)
trans-Permethrin			
Potential Exposure via Inhalation ^b	1.05 (0.70,1.56)	1.11 (0.86,1.44)	1.30 (0.96,1.75)
Potential Exposure via Dietary Ingestion ^b	1.23 (0.43,3.52)	1.05 (0.51,2.15)	2.92** (1.36,6.26)
Potential Exposure via Indirect Ingestion	0.49 (0.19,1.28)	1.07 (0.51,2.25)	1.78 (0.84,3.78)
Potential Absorbed Dose via Inhalation ^b	1.04 (0.68,1.60)	1.11 (0.83,1.47)	1.22 (0.89,1.68)
Potential Absorbed Dose via Dietary Ingestion ^b	1.22 (0.43,3.46)	1.07 (0.52,2.18)	2.72* (1.28,5.76)
Potential Absorbed Dose via Indirect Ingestion	0.49 (0.19,1.29)	1.13 (0.53,2.42)	1.65 (0.78,3.49)
Aggregated Potential Exposure	0.91 (0.46,1.83)	1.05 (0.60,1.86)	1.50 (0.88,2.55)
Aggregated Potential Absorbed Dose	0.90 (0.45,1.79)	1.12 (0.64,1.96)	1.37 (0.80,2.32)

Table R-2. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating OH Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
PCB 52			
Potential Exposure via Inhalation	0.63 (0.34,1.14)	0.93 (0.66,1.31)	1.36 (0.83,2.23)
Potential Exposure via Dietary Ingestion ^d			
Potential Exposure via Indirect Ingestion	0.78 (0.39,1.57)	0.79 (0.48,1.30)	1.54 (0.91,2.62)
Potential Absorbed Dose via Inhalation	0.63 (0.35,1.14)	0.92 (0.63,1.34)	1.28 (0.80,2.04)
Potential Absorbed Dose via Dietary Ingestion ^d			
Potential Absorbed Dose via Indirect Ingestion	0.78 (0.38,1.60)	0.81 (0.48,1.35)	1.42 (0.83,2.42)
PCB 95			
Potential Exposure via Inhalation	0.77 (0.41,1.46)	0.96 (0.63,1.47)	1.43 (0.89,2.30)
Potential Exposure via Dietary Ingestion ^d			
Potential Exposure via Indirect Ingestion ^a	--	--	--
Potential Absorbed Dose via Inhalation	0.78 (0.41,1.47)	0.94 (0.61,1.45)	1.34 (0.84,2.13)
Potential Absorbed Dose via Dietary Ingestion ^d			
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--
PCB 101			
Potential Exposure via Inhalation	0.65 (0.33,1.28)	0.84 (0.54,1.32)	1.73* (1.05,2.85)
Potential Exposure via Dietary Ingestion ^d			
Potential Exposure via Indirect Ingestion ^a	--	--	--
Potential Absorbed Dose via Inhalation	0.65 (0.33,1.29)	0.83 (0.53,1.31)	1.62 (0.99,2.68)
Potential Absorbed Dose via Dietary Ingestion ^d			
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--

Table R-2. Estimated Ratio Between Selected Strata of Geometric Mean Potential Exposure and Potential Absorbed Dose Estimates in Participating OH Children, and 95% Confidence Intervals on This Ratio (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)			
Potential Exposure via Inhalation	1.53 (0.75,3.11)	1.70* (1.11,2.61)	1.01 (0.60,1.70)
Potential Exposure via Dietary Ingestion	0.83 (0.48,1.46)	0.87 (0.60,1.27)	1.14 (0.75,1.73)
Potential Exposure via Indirect Ingestion	1.68 (0.76,3.72)	0.92 (0.52,1.64)	1.81* (1.01,3.24)
Potential Absorbed Dose via Inhalation	1.49 (0.72,3.11)	1.73* (1.11,2.70)	0.94 (0.55,1.59)
Potential Absorbed Dose via Dietary Ingestion	0.84 (0.49,1.44)	0.87 (0.60,1.26)	1.07 (0.73,1.57)
Potential Absorbed Dose via Indirect Ingestion	1.65 (0.73,3.74)	0.96 (0.53,1.74)	1.67 (0.93,3.01)
Aggregated Potential Exposure	0.67 (0.35,1.32)	0.90 (0.59,1.38)	1.23 (0.75,2.00)
Aggregated Potential Absorbed Dose	0.67 (0.35,1.28)	0.92 (0.60,1.40)	1.13 (0.71,1.78)

^a Results are not presented because, for each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected.

^b For each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected. However, results are presented because this was one of the eight pollutants mentioned at the end of Section 9.2.

^c The largest detection percentage among the environmental sample types whose measurements were used to calculate the potential exposure/absorbed dose was between 45 and 50%.

^d No available data for calculations to be made.

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

Table R-3. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) NC Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between NC Children and Adults in the Same Household^(a)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Benz[a]anthracene							
Potential Exposure via Inhalation (ng/day)	0.132	0.056	0.514	1.000	0.515	0.001**	<0.001**
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.733	0.135	0.080	<0.001**	0.860	0.874	0.035*
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.078	0.106	0.255	<0.001**	0.797	0.315	0.026*
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.884	0.084	0.191	<0.001**	0.938	0.830	0.085
Benzo[b]fluoranthene							
Potential Exposure via Inhalation (ng/day)	0.173	0.010*	0.747	1.000	0.666	0.109	0.028*
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.830	0.271	0.046*	<0.001**	0.988	0.598	0.069
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.104	0.029*	0.821	<0.001**	0.294	0.870	0.223
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.984	0.177	0.125	<0.001**	0.802	0.401	0.154
Benzo[k]fluoranthene							
Potential Exposure via Inhalation (ng/day)	0.394	0.036*	0.930	1.000	0.934	0.032*	0.001**
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.616	0.184	0.077	<0.001**	0.975	0.773	0.064
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.198	0.123	0.447	<0.001**	0.429	0.984	0.142
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.765	0.116	0.185	<0.001**	0.826	0.518	0.141
Benzo[ghi]perylene							
Potential Exposure via Inhalation (ng/day)	0.304	0.083	0.878	1.000	0.963	0.405	0.584
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				

Table R-3. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) NC Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between NC Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Exposure via Indirect Ingestion (ng/day)	0.906	0.195	0.097	<0.001**	0.919	0.697	0.051
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.186	0.145	0.502	<0.001**	0.400	0.457	0.926
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.938	0.124	0.238	<0.001**	0.885	0.468	0.119
Benzo[a]pyrene							
Potential Exposure via Inhalation (ng/day)	0.486	0.007**	0.880	1.000	0.830	0.064	0.013*
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.942	0.150	0.098	<0.001**	0.783	0.926	0.052
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.307	0.022*	0.615	<0.001**	0.462	0.930	0.252
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.910	0.093	0.228	<0.001**	0.991	0.645	0.118
Benzo[e]pyrene							
Potential Exposure via Inhalation (ng/day)	0.431	0.014*	0.755	1.000	0.941	0.036*	0.001**
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.744	0.246	0.078	<0.001**	0.923	0.791	0.053
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.221	0.046*	0.615	<0.001**	0.434	0.949	0.085
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.901	0.159	0.196	<0.001**	0.879	0.542	0.124
Benzylbutylphthalate							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.122	0.127	0.193	<0.001**	0.502	0.266	0.014*
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--

Table R-3. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) NC Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between NC Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.177	0.323	0.383	<0.001**	0.660	0.134	0.036*
Bisphenol-A							
Potential Exposure via Inhalation (ng/day)	0.924	0.140	0.450	1.000	0.762	0.506	0.698
Potential Exposure via Dietary Ingestion (ng/day)	0.176	0.616	0.001**				
Potential Exposure via Indirect Ingestion (ng/day) ^(d)	0.569	0.287	0.531	<0.001**	0.251	0.955	0.838
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.682	0.231	0.236	<0.001**	0.414	0.922	0.995
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	0.295	0.419	0.003**				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day) ^(d)	0.622	0.118	0.871	<0.001**	0.400	0.685	0.634
Aggregated Potential Exposure (ng/day)	0.129	0.502	<0.001**				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.227	0.346	0.004**				
alpha-Chlordane							
Potential Exposure via Inhalation (ng/day)	0.500	0.273	0.397	1.000	0.129	0.341	0.023*
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.363	0.574	0.150	<0.001**	0.037*	0.724	0.002**
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.668	0.362	0.665	<0.001**	0.385	0.953	0.103
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.487	0.399	0.281	<0.001**	0.066	0.875	0.006**
gamma-Chlordane							
Potential Exposure via Inhalation (ng/day)	0.546	0.220	0.395	0.998	0.116	0.361	0.019*
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.422	0.560	0.160	<0.001**	0.030*	0.839	0.002**
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.695	0.302	0.635	<0.001**	0.318	0.886	0.074

Table R-3. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) NC Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between NC Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.543	0.388	0.286	<0.001**	0.056	0.948	0.005**
Chlorpyrifos							
Potential Exposure via Inhalation (ng/day)	0.695	0.945	0.170	1.000	0.055	0.187	0.727
Potential Exposure via Dietary Ingestion (ng/day)	0.742	0.604	0.446				
Potential Exposure via Indirect Ingestion (ng/day)	0.747	0.967	0.262	<0.001**	0.691	0.287	0.468
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.885	0.938	0.342	<0.001**	0.386	0.985	0.877
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	0.560	0.767	0.695				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.906	0.726	0.485	<0.001**	0.900	0.203	0.634
Aggregated Potential Exposure (ng/day)	0.920	0.368	0.531				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.754	0.537	0.853				
Chrysene							
Potential Exposure via Inhalation (ng/day)	0.123	0.006**	0.737	1.000	0.849	0.003**	0.006**
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.801	0.178	0.053	<0.001**	0.916	0.787	0.051
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.071	0.020*	0.368	<0.001**	0.343	0.465	0.120
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.949	0.110	0.132	<0.001**	0.878	0.899	0.116
Cyfluthrin							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day) ^(e)	0.360	0.353	0.876	<0.001**	0.835	0.077	0.285
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--

Table R-3. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) NC Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between NC Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day) ^(e)	0.462	0.256	0.906	<0.001**	0.732	0.092	0.370
Diazinon							
Potential Exposure via Inhalation (ng/day)	0.881	0.019*	0.417	0.999	0.716	0.377	0.042*
Potential Exposure via Dietary Ingestion (ng/day) ^(d)	0.542	0.703	0.164				
Potential Exposure via Indirect Ingestion (ng/day)	0.613	0.254	0.425	<0.001**	0.730	0.393	0.007**
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.965	0.027*	0.634	<0.001**	0.462	0.206	0.110
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(d)	0.787	0.806	0.354				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.706	0.395	0.575	<0.001**	0.883	0.333	0.012*
Aggregated Potential Exposure (ng/day)	0.842	0.216	0.271				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.994	0.318	0.482				
Dibenzo[a,h]anthracene							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.551	0.230	0.091	<0.001**	0.960	0.662	0.033*
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.702	0.145	0.217	<0.001**	0.784	0.453	0.082
Di-n-butylphthalate							
Potential Exposure via Inhalation (ng/day)	0.358	0.334	<0.001**	1.000	0.842	0.060	<0.001**
Potential Exposure via Dietary Ingestion (ng/day) ^(d)	0.680	0.096	0.157				
Potential Exposure via Indirect Ingestion (ng/day)	0.638	0.902	0.147	<0.001**	0.592	0.321	0.028*
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.155	0.577	0.007**	<0.001**	0.350	0.687	0.006**

Table R-3. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) NC Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between NC Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(d)	0.755	0.032*	0.271				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.515	0.552	0.500	<0.001**	0.810	0.152	0.078
Aggregated Potential Exposure (ng/day)	0.732	0.200	0.085				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.769	0.068	0.177				
p,p'-DDE							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	0.918	0.753	0.084				
Potential Exposure via Indirect Ingestion (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	0.841	0.973	0.229				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day) ^(c)	--	--	--	--	--	--	--
2,4-D (2,4-dichlorophenoxyacetic acid)							
Potential Exposure via Inhalation (ng/day) ^(e)	0.545	0.077	0.006**	0.976	0.547	0.814	<0.001**
Potential Exposure via Dietary Ingestion (ng/day)	0.452	0.945	0.035*	0.443	0.706	0.169	0.023*
Potential Exposure via Indirect Ingestion (ng/day)	0.001**	<0.001**	0.031*	<0.001**	0.752	0.037*	0.144
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(e)	0.368	0.114	0.02*	<0.001**	0.380	0.816	<0.001**
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	0.333	0.695	0.090	<0.001**	0.638	0.152	0.029*
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.001**	<0.001**	0.011*	<0.001**	0.638	0.039*	0.270
Aggregated Potential Exposure (ng/day)	0.417	0.730	0.079	0.309	0.814	0.498	0.018*
Aggregated Potential Absorbed Dose (ng/kg/day)	0.318	0.950	0.252	<0.001**	0.896	0.463	0.031*
Heptachlor							
Potential Exposure via Inhalation (ng/day)	0.805	0.363	0.137	0.988	0.048*	0.245	0.004**
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				

Table R-3. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) NC Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between NC Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Exposure via Indirect Ingestion (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.667	0.478	0.249	<0.001**	0.162	0.757	0.025*
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Indeno[1,2,3-cd]pyrene							
Potential Exposure via Inhalation (ng/day)	0.435	0.013*	0.89	1.000	0.882	0.341	0.189
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.942	0.221	0.162	<0.001**	0.864	0.865	0.034*
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.265	0.036*	0.468	<0.001**	0.476	0.600	0.678
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.796	0.139	0.347	<0.001**	0.935	0.597	0.085
Pentachlorophenol							
Potential Exposure via Inhalation (ng/day)	0.39	0.153	0.109	0.999	0.023*	0.049*	0.006**
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	0.810	0.896	0.526	<0.001**	0.708	0.242	0.269
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.588	0.220	0.266	<0.001**	0.132	0.235	0.036*
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.977	0.879	0.312	<0.001**	0.884	0.152	0.397
cis-Permethrin							
Potential Exposure via Inhalation (ng/day)	0.320	0.003**	0.297	1.000	0.080	0.860	0.769
Potential Exposure via Dietary Ingestion (ng/day) ^(d)	0.268	0.743	0.104				
Potential Exposure via Indirect Ingestion (ng/day)	0.946	0.622	0.628	<0.001**	0.475	0.665	0.159
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.441	0.006**	0.516	<0.001**	0.331	0.708	0.951

Table R-3. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) NC Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between NC Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(d)	0.210	0.610	0.175				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.823	0.839	0.875	<0.001**	0.639	0.516	0.297
Aggregated Potential Exposure (ng/day)	0.244	0.572	0.087				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.191	0.437	0.171				
trans-Permethrin							
Potential Exposure via Inhalation (ng/day)	0.403	0.003**	0.278	1.000	0.047*	0.297	0.127
Potential Exposure via Dietary Ingestion (ng/day) ^(d)	0.228	0.892	0.153				
Potential Exposure via Indirect Ingestion (ng/day)	0.915	0.896	0.541	<0.001**	0.558	0.861	0.045*
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.538	0.005**	0.494	<0.001**	0.253	0.786	0.376
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(d)	0.170	0.737	0.260				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.800	0.903	0.773	<0.001**	0.714	0.931	0.099
Aggregated Potential Exposure (ng/day)	0.157	0.552	0.136				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.116	0.413	0.262				
PCB 52							
Potential Exposure via Inhalation (ng/day)	0.582	0.859	0.112	1.000	0.928	0.462	0.063
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.876	0.659	0.453	<0.001**	0.546	0.936	0.246
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day) ^(c)	--	--	--	--	--	--	--
PCB 95							
Potential Exposure via Inhalation (ng/day)	0.818	0.434	0.395	1.000	0.808	0.757	0.059
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				

Table R-3. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) NC Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between NC Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Exposure via Indirect Ingestion (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.912	0.632	0.952	<0.001**	0.421	0.653	0.276
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day) ^(c)	--	--	--	--	--	--	--
PCB 101							
Potential Exposure via Inhalation (ng/day)	0.448	0.544	0.573	1.000	0.802	0.992	0.004**
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.675	0.731	0.915	<0.001**	0.452	0.625	0.041*
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day) ^(c)	--	--	--	--	--	--	--

Table R-3. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) NC Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between NC Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Potential Exposure via Inhalation (ng/day)	0.912	0.870	0.216	1.000	0.502	0.138	0.499
Potential Exposure via Dietary Ingestion (ng/day)	0.451	0.011*	0.033*	0.198	0.968	0.892	0.004**
Potential Exposure via Indirect Ingestion (ng/day)	0.320	0.778	0.793	<0.001**	0.500	0.406	0.533
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.863	0.745	0.419	<0.001**	0.897	0.967	0.392
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	0.633	0.003**	0.068	<0.001**	0.845	0.813	0.010*
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.419	0.985	0.505	<0.001**	0.685	0.304	0.389
Aggregated Potential Exposure (ng/day)	0.403	0.012*	0.034*	0.247	0.892	0.822	0.013*
Aggregated Potential Absorbed Dose (ng/kg/day)	0.569	0.003**	0.080	<0.001**	0.965	0.942	0.031*

^(a) Blank cells in this table indicate that insufficient data were available in this study to make the statistical comparison specified in the column heading for the given pollutant and exposure route.

^(b) Tests for statistical significance of the child-adult differences are one-sided tests to determine whether estimates for children are significantly higher than for adults.

^(c) Tests were not performed because, for each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected.

^(d) For each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected. However, tests were performed because this was one of the eight pollutants mentioned at the end of Section 9.2.

^(e) The largest detection percentage among the environmental sample types whose measurements were used to calculate the potential exposure/absorbed dose was between 45 and 50%.

* Statistically significant at the 0.05 level, but not at the 0.01 level.

** Statistically significant at the 0.01 level.

Table R-4. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) OH Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between OH Children and Adults in the Same Household^(a)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Benz[a]anthracene							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.001**	0.001**	<0.001**	<0.001**	0.386	0.022*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.001**	0.002**	<0.001**	<0.001**	0.338	0.074	<0.001**
Benzo[b]fluoranthene							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	<0.001**	0.001**	<0.001**	<0.001**	0.544	0.029*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.001**	0.001**	<0.001**	<0.001**	0.466	0.085	<0.001**
Benzo[k]fluoranthene							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.001**	0.001**	<0.001**	<0.001**	0.371	0.024*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.002**	0.001**	<0.001**	<0.001**	0.328	0.074	<0.001**
Benzo[ghi]perylene							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				

Table R-4. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) OH Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between OH Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Exposure via Indirect Ingestion (ng/day)	0.001**	0.001**	<0.001**	<0.001**	0.510	0.037*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.002**	0.001**	<0.001**	<0.001**	0.441	0.105	<0.001**
Benzo[a]pyrene							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.001**	<0.001**	<0.001**	<0.001**	0.390	0.032*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.002**	0.001**	0.001**	<0.001**	0.344	0.096	<0.001**
Benzo[e]pyrene							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.001**	0.001**	<0.001**	<0.001**	0.488	0.033*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.002**	0.001**	<0.001**	<0.001**	0.420	0.096	<0.001**
Benzylbutylphthalate							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day)	0.281	0.718	0.008**				
Potential Exposure via Indirect Ingestion (ng/day)	0.174	0.861	<0.001**	<0.001**	0.915	0.039*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--

Table R-4. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) OH Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between OH Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	0.294	0.894	0.023*				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.190	0.917	0.001**	<0.001**	0.950	0.088	0.001**
Bisphenol-A							
Potential Exposure via Inhalation (ng/day)	0.814	0.048*	0.064	1.000	0.721	0.858	0.148
Potential Exposure via Dietary Ingestion (ng/day)	0.601	0.522	0.068				
Potential Exposure via Indirect Ingestion (ng/day)	0.876	0.068	0.747	<0.001**	0.668	0.049*	0.014*
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.843	0.109	0.153	<0.001**	0.824	0.618	0.307
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	0.532	0.483	0.134				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.907	0.097	0.977	<0.001**	0.526	0.217	0.042*
Aggregated Potential Exposure (ng/day)	0.241	0.312	0.066				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.213	0.346	0.155				
alpha-Chlordane							
Potential Exposure via Inhalation (ng/day)	0.929	0.142	0.393	1.000	0.822	0.046*	0.661
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.370	0.987	0.873	<0.001**	0.628	0.005**	0.004**
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.978	0.172	0.263	<0.001**	0.965	0.889	0.998
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.386	0.957	0.950	<0.001**	0.526	0.044*	0.030*
gamma-Chlordane							
Potential Exposure via Inhalation (ng/day)	0.831	0.178	0.442	1.000	0.871	0.044*	0.265
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.462	0.892	0.780	<0.001**	0.632	0.009**	0.002**
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.880	0.210	0.302	<0.001**	0.947	0.865	0.661

Table R-4. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) OH Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between OH Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.483	0.865	0.948	<0.001**	0.528	0.063	0.019*
Chlorpyrifos							
Potential Exposure via Inhalation (ng/day)	0.213	0.372	0.177	1.000	0.165	0.177	0.101
Potential Exposure via Dietary Ingestion (ng/day)	0.796	0.002**	0.911				
Potential Exposure via Indirect Ingestion (ng/day)	0.438	0.421	0.006**	<0.001**	0.924	0.174	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.230	0.543	0.215	<0.001**	0.236	0.468	0.087
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	0.828	0.001**	0.674				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.452	0.376	0.014*	<0.001**	0.895	0.303	<0.001**
Aggregated Potential Exposure (ng/day)	0.911	0.033*	0.433				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.789	0.034*	0.753				
Chrysene							
Potential Exposure via Inhalation (ng/day) ^(e)	0.163	0.321	0.069	1.000	0.552	0.282	0.004**
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.001**	0.001**	<0.001**	<0.001**	0.449	0.029*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(e)	0.149	0.566	0.092	<0.001**	0.388	0.205	0.064
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.001**	0.001**	<0.001**	<0.001**	0.384	0.086	<0.001**
Cyfluthrin							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.034*	0.402	0.135	<0.001**	0.189	0.174	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--

Table R-4. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) OH Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between OH Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.041*	0.438	0.207	<0.001**	0.186	0.351	0.001**
Diazinon							
Potential Exposure via Inhalation (ng/day)	0.250	0.128	0.018*	0.730	0.168	0.088	0.011*
Potential Exposure via Dietary Ingestion (ng/day) ^(d)	0.265	0.200	0.003**				
Potential Exposure via Indirect Ingestion (ng/day)	0.443	0.514	0.009**	<0.001**	0.218	0.411	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.267	0.130	0.035*	<0.001**	0.124	0.764	0.018*
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(d)	0.257	0.192	0.033*				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.440	0.500	0.015*	<0.001**	0.182	0.501	0.001**
Aggregated Potential Exposure (ng/day)	0.591	0.277	0.015*				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.629	0.223	0.043*				
Dibenzo[a,h]anthracene							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				
Potential Exposure via Indirect Ingestion (ng/day)	0.001**	0.001**	<0.001**	<0.001**	0.435	0.035*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.001**	0.002**	<0.001**	<0.001**	0.384	0.104	<0.001**
Di-n-butylphthalate							
Potential Exposure via Inhalation (ng/day)	0.018*	0.634	0.012*	1.000	0.192	0.143	0.012*
Potential Exposure via Dietary Ingestion (ng/day) ^(d)	0.890	0.615	0.008**				
Potential Exposure via Indirect Ingestion (ng/day)	0.348	0.193	0.002**	<0.001**	0.837	0.006**	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.016*	0.773	0.039*	<0.001**	0.119	0.631	0.063

Table R-4. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) OH Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between OH Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(d)	0.875	0.425	0.031*				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.434	0.206	0.005**	<0.001**	0.609	0.053	<0.001**
Aggregated Potential Exposure (ng/day)	0.818	0.476	0.009**				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.841	0.382	0.039*				
p,p'-DDE							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	1.000	0.597	0.466	0.044*
Potential Exposure via Dietary Ingestion (ng/day)	0.872	0.433	0.125				
Potential Exposure via Indirect Ingestion (ng/day) ^(e)	0.826	0.754	0.665	<0.001**	0.114	0.022*	0.003**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	<0.001**	0.920	0.669	0.074
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	0.888	0.410	0.225				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day) ^(e)	0.828	0.736	0.824	<0.001**	0.060	0.066	0.007**
2,4-D (2,4-dichlorophenoxyacetic acid)							
Potential Exposure via Inhalation (ng/day) ^(d)	0.156	0.434	0.874	0.963	0.950	0.015*	0.001**
Potential Exposure via Dietary Ingestion (ng/day) ^(d)	0.327	0.999	0.200	0.527	0.423	0.592	0.001**
Potential Exposure via Indirect Ingestion (ng/day)	0.044*	<0.001**	0.114	<0.001**	0.967	0.986	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(d)	0.134	0.234	0.701	<0.001**	0.751	0.221	0.002**
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(d)	0.346	0.925	0.297	<0.001**	0.508	0.641	0.001**
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.042*	<0.001**	0.159	<0.001**	0.954	0.701	0.006**
Aggregated Potential Exposure (ng/day)	0.285	0.476	0.504	0.404	0.644	0.928	0.006**
Aggregated Potential Absorbed Dose (ng/kg/day)	0.303	0.374	0.656	<0.001**	0.725	0.943	0.008**
Indeno[1,2,3-cd]pyrene							
Potential Exposure via Inhalation (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--				

Table R-4. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) OH Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between OH Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Exposure via Indirect Ingestion (ng/day)	0.001**	0.001**	<0.001**	<0.001**	0.536	0.035*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.002**	0.001**	<0.001**	<0.001**	0.463	0.096	<0.001**
Pentachlorophenol							
Potential Exposure via Inhalation (ng/day)	0.196	0.717	0.279	1.000	0.984	0.641	0.266
Potential Exposure via Dietary Ingestion (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion (ng/day)	0.364	0.430	0.296	<0.001**	0.682	0.180	0.049*
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.183	0.642	0.226	<0.001**	0.976	0.776	0.399
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.399	0.520	0.448	<0.001**	0.518	0.378	0.113
cis-Permethrin							
Potential Exposure via Inhalation (ng/day) ^(d)	0.643	0.288	0.103	1.000	0.966	0.545	0.050
Potential Exposure via Dietary Ingestion (ng/day) ^(d)	0.680	0.860	0.005**				
Potential Exposure via Indirect Ingestion (ng/day)	0.076	0.661	0.039*	<0.001**	0.155	0.048*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(d)	0.675	0.384	0.243	<0.001**	0.818	0.772	0.165
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(d)	0.695	0.830	0.008**				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.082	0.760	0.071	<0.001**	0.121	0.144	<0.001**
Aggregated Potential Exposure (ng/day)	0.955	0.406	0.013*				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.945	0.355	0.021*				
trans-Permethrin							
Potential Exposure via Inhalation (ng/day) ^(d)	0.826	0.400	0.086	1.000	0.908	0.360	0.074
Potential Exposure via Dietary Ingestion (ng/day) ^(d)	0.690	0.891	0.007**				

Table R-4. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) OH Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between OH Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Exposure via Indirect Ingestion (ng/day)	0.141	0.858	0.125	<0.001**	0.338	0.010*	<0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day) ^(d)	0.845	0.482	0.212	<0.001**	0.780	0.824	0.187
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day) ^(d)	0.705	0.861	0.010*				
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.147	0.741	0.186	<0.001**	0.271	0.078	0.001**
Aggregated Potential Exposure (ng/day)	0.796	0.852	0.135				
Aggregated Potential Absorbed Dose (ng/kg/day)	0.759	0.697	0.244				
PCB 52							
Potential Exposure via Inhalation (ng/day)	0.126	0.685	0.211	1.000	0.851	0.036*	0.076
Potential Exposure via Dietary Ingestion (ng/day)							
Potential Exposure via Indirect Ingestion (ng/day)	0.487	0.351	0.108	<0.001**	0.394	0.551	0.001**
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.127	0.650	0.291	<0.001**	0.960	0.991	0.246
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)							
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.493	0.415	0.198	<0.001**	0.262	0.802	0.003**
PCB 95							
Potential Exposure via Inhalation (ng/day)	0.419	0.848	0.140	1.000	0.931	0.528	0.033*
Potential Exposure via Dietary Ingestion (ng/day)							
Potential Exposure via Indirect Ingestion (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.431	0.790	0.209	<0.001**	0.835	0.755	0.096
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)							
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day) ^(c)	--	--	--	--	--	--	--
PCB 101							
Potential Exposure via Inhalation (ng/day)	0.209	0.452	0.032*	1.000	0.739	0.832	0.027*
Potential Exposure via Dietary Ingestion (ng/day)							

Table R-4. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) OH Children's Exposure and Absorbed Dose Estimates, and 2) the Difference in Estimates Between OH Children and Adults in the Same Household^(a) (cont.)

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(b)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
Potential Exposure via Indirect Ingestion (ng/day) ^(c)	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.213	0.421	0.057	<0.001**	0.975	0.483	0.085
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)							
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day) ^(c)	--	--	--	--	--	--	--
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Potential Exposure via Inhalation (ng/day)	0.240	0.016*	0.958	1.000	0.678	0.302	0.043*
Potential Exposure via Dietary Ingestion (ng/day)	0.521	0.476	0.522	0.617	0.704	0.580	<0.001**
Potential Exposure via Indirect Ingestion (ng/day)	0.198	0.777	0.047*	<0.001**	0.191	0.113	0.006**
Potential Absorbed Dose via Inhalation (ng/kg/day)	0.278	0.016*	0.806	<0.001**	0.794	0.157	0.296
Potential Absorbed Dose via Dietary Ingestion (ng/kg/day)	0.519	0.452	0.737	<0.001**	0.642	0.603	<0.001**
Potential Absorbed Dose via Indirect Ingestion (ng/kg/day)	0.223	0.879	0.085	<0.001**	0.139	0.270	0.017*
Aggregated Potential Exposure (ng/day)	0.245	0.631	0.397	0.498	0.493	0.854	<0.001**
Aggregated Potential Absorbed Dose (ng/kg/day)	0.218	0.684	0.600	<0.001**	0.402	0.691	<0.001**

^(a) Blank cells in this table indicate that insufficient data were available in this study to make the statistical comparison specified in the column heading for the given pollutant and exposure route.

^(b) Tests for statistical significance of the child-adult differences are one-sided tests to determine whether estimates for children are significantly higher than for adults.

^(c) Tests were not performed because, for each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected.

^(d) For each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected. However, tests were performed because this was one of the eight pollutants mentioned at the end of Section 9.2.

^(e) The largest detection percentage among the environmental sample types whose measurements were used to calculate the potential exposure/absorbed dose was between 45 and 50%.

* Statistically significant at the 0.05 level, but not at the 0.01 level.

** Statistically significant at the 0.01 level.

Table R-5. Estimated Ratio Between Selected Strata of Geometric Mean Urinary Biomarker Concentration Data in Participating NC Children, and 95% Confidence Intervals on This Ratio

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
2,4-D (2,4-dichlorophenoxyacetic acid)			
Urinary concentration (ng/mL)	1.41 (0.92,2.16)	1.23 (0.90,1.69)	1.28 (0.94,1.75)
Urinary concentration, adjusted for specific gravity (ng/mL)	1.41 (0.92,2.16)	1.23 (0.90,1.69)	1.28 (0.94,1.75)
Urinary concentration, adjusted for creatinine (μmoles/mole)	1.21 (0.77,1.92)	1.29 (0.93,1.79)	1.10 (0.76,1.60)
Pentachlorophenol			
Urinary concentration (ng/mL)	1.20 (0.75,1.92)	1.25 (0.90,1.75)	0.96 (0.65,1.43)
Urinary concentration, adjusted for specific gravity (ng/mL)	1.19 (0.74,1.91)	1.25 (0.90,1.75)	0.96 (0.65,1.43)
Urinary concentration, adjusted for creatinine (μmoles/mole)	1.19 (0.72,1.96)	1.22 (0.86,1.73)	0.85 (0.56,1.27)
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)			
Urinary concentration (ng/mL)	0.99 (0.60,1.62)	0.90 (0.66,1.24)	1.08 (0.70,1.69)
Urinary concentration, adjusted for specific gravity (ng/mL)	0.98 (0.60,1.61)	0.90 (0.66,1.24)	1.09 (0.70,1.69)
Urinary concentration, adjusted for creatinine (μmoles/mole)	1.02 (0.63,1.64)	0.97 (0.73,1.29)	0.91 (0.60,1.39)

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

Table R-6. Estimated Ratio Between Selected Strata of Geometric Mean Urinary Biomarker Concentration Data in Participating OH Children, and 95% Confidence Intervals on This Ratio

Exposure/Dose/Biomarker Parameter and Pathway	Estimated Ratio of Geometric Means (95% CI)		
	Urban vs. Rural	Low Income vs. Mid/High Income	Day Care vs. Home Children
2,4-D (2,4-dichlorophenoxyacetic acid)			
Urinary concentration (ng/mL)	0.75 (0.45,1.25)	1.36 (0.96,1.93)	0.65* (0.46,0.92)
Urinary concentration, adjusted for specific gravity (ng/mL)	0.75 (0.45,1.25)	1.36 (0.95,1.93)	0.65* (0.46,0.93)
Urinary concentration, adjusted for creatinine (μmoles/mole)	0.64 (0.40,1.02)	1.34 (0.97,1.87)	0.68* (0.49,0.96)
1-hydroxypyrene			
Urinary concentration (ng/mL)	0.84 (0.55,1.30)	1.22 (0.92,1.63)	0.85 (0.62,1.18)
Urinary concentration, adjusted for specific gravity (ng/mL)	0.84 (0.55,1.30)	1.21 (0.91,1.61)	0.86 (0.62,1.19)
Urinary concentration, adjusted for creatinine (μmoles/mole)	0.81 (0.54,1.22)	1.12 (0.85,1.49)	0.89 (0.65,1.21)
Pentachlorophenol			
Urinary concentration (ng/mL)	0.69 (0.42,1.15)	1.01 (0.72,1.43)	0.77 (0.53,1.12)
Urinary concentration, adjusted for specific gravity (ng/mL)	0.69 (0.42,1.15)	1.01 (0.72,1.43)	0.77 (0.53,1.12)
Urinary concentration, adjusted for creatinine (μmoles/mole)	0.67 (0.40,1.11)	0.95 (0.69,1.31)	0.80 (0.54,1.20)
3-phenoxybenzoic acid			
Urinary concentration (ng/mL)	1.19 (0.62,2.30)	1.16 (0.75,1.78)	0.98 (0.60,1.61)
Urinary concentration, adjusted for specific gravity (ng/mL)	1.18 (0.61,2.28)	1.21 (0.78,1.87)	0.95 (0.58,1.55)
Urinary concentration, adjusted for creatinine (μmoles/mole)	1.15 (0.53,2.48)	1.05 (0.62,1.76)	0.99 (0.56,1.76)
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)			
Urinary concentration (ng/mL)	1.19 (0.78,1.82)	1.13 (0.85,1.52)	0.84 (0.62,1.14)
Urinary concentration, adjusted for specific gravity (ng/mL)	1.20 (0.79,1.82)	1.13 (0.84,1.51)	0.85 (0.63,1.14)
Urinary concentration, adjusted for creatinine (μmoles/mole)	1.11 (0.73,1.68)	1.04 (0.78,1.40)	0.82 (0.61,1.11)

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

Table R-7. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) NC Children's Urinary Biomarker Concentrations, and 2) the Difference in Concentrations Between NC Children and Adults in the Same Household

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(a)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
2,4-D (2,4-dichlorophenoxyacetic acid)							
Urinary concentration (ng/mL)	0.109	0.187	0.108	0.771	0.492	0.148	0.109
Urinary concentration, adjusted for specific gravity (ng/mL)	0.113	0.188	0.108	0.762	0.501	0.148	0.108
Urinary concentration, adjusted for creatinine (μmoles/mole)	0.395	0.127	0.582	<0.001**	0.578	0.091	0.054
Pentachlorophenol							
Urinary concentration (ng/mL)	0.442	0.178	0.846	<0.001**	0.762	0.069	0.832
Urinary concentration, adjusted for specific gravity (ng/mL)	0.450	0.179	0.848	<0.001**	0.744	0.068	0.822
Urinary concentration, adjusted for creatinine (μmoles/mole)	0.496	0.266	0.404	<0.001**	0.447	0.014*	0.422
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Urinary concentration (ng/mL)	0.953	0.517	0.712	0.017*	0.523	0.538	0.524
Urinary concentration, adjusted for specific gravity (ng/mL)	0.946	0.520	0.710	0.015*	0.510	0.536	0.517
Urinary concentration, adjusted for creatinine (μmoles/mole)	0.942	0.828	0.667	<0.001**	0.569	0.352	0.230

^(a) Tests for statistical significance of the child-adult differences are one-sided tests to determine whether estimates for children are significantly higher than for adults.

* Statistically significant at the 0.05 level, but not at the 0.01 level.

** Statistically significant at the 0.01 level.

Table R-8. P-values of Statistical Tests to Determine the Significance of Urbanicity, Income Status, and Day Care Attendance on 1) OH Children's Urinary Biomarker Concentrations, and 2) the Difference in Concentrations Between OH Children and Adults in the Same Household

Exposure/Dose/Biomarker Parameter and Pathway	Analysis on Child Measures			Analysis on Differences Between Child and Adult Measures in Same Household			
	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect	Child vs. Adult Difference ^(a)	Urbanicity Effect	Income Status Effect	Day Care Attendance Effect
2,4-D (2,4-dichlorophenoxyacetic acid)							
Urinary concentration (ng/mL)	0.267	0.087	0.017*	0.013*	0.699	0.320	0.028*
Urinary concentration, adjusted for specific gravity (ng/mL)	0.265	0.088	0.018*	0.013*	0.706	0.321	0.029*
Urinary concentration, adjusted for creatinine (µmoles/mole)	0.059	0.078	0.028*	<0.001**	0.379	0.131	0.127
1-hydroxypyrene							
Urinary concentration (ng/mL)	0.425	0.172	0.323	0.109	0.721	0.974	0.937
Urinary concentration, adjusted for specific gravity (ng/mL)	0.429	0.190	0.353	0.105	0.700	0.947	0.991
Urinary concentration, adjusted for creatinine (µmoles/mole)	0.309	0.424	0.442	<0.001**	0.952	0.784	0.441
Pentachlorophenol							
Urinary concentration (ng/mL)	0.156	0.936	0.165	<0.001**	0.550	0.789	0.006**
Urinary concentration, adjusted for specific gravity (ng/mL)	0.154	0.941	0.167	<0.001**	0.558	0.790	0.006**
Urinary concentration, adjusted for creatinine (µmoles/mole)	0.120	0.748	0.283	<0.001**	0.512	0.976	0.213
3-phenoxybenzoic acid							
Urinary concentration (ng/mL)	0.600	0.497	0.941	0.292	0.689	0.401	0.164
Urinary concentration, adjusted for specific gravity (ng/mL)	0.625	0.392	0.831	0.298	0.681	0.311	0.121
Urinary concentration, adjusted for creatinine (µmoles/mole)	0.720	0.865	0.968	<0.001**	0.545	0.318	0.747
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Urinary concentration (ng/mL)	0.403	0.394	0.243	0.001**	0.256	0.557	0.937
Urinary concentration, adjusted for specific gravity (ng/mL)	0.395	0.426	0.263	0.001**	0.266	0.568	0.905
Urinary concentration, adjusted for creatinine (µmoles/mole)	0.624	0.780	0.197	<0.001**	0.156	0.464	0.315

^(a) Tests for statistical significance of the child-adult differences are one-sided tests to determine whether estimates for children are significantly higher than for adults.

* Statistically significant at the 0.05 level, but not at the 0.01 level.

** Statistically significant at the 0.01 level.

Table R-9. Estimated Mean Ratio Between NC Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Benz[a]anthracene							
Potential Exposure via Inhalation	0.76 (0.7,0.81)**	0.74 (0.69,0.79)**	0.77 (0.68,0.87)**	0.71 (0.65,0.77)**	0.81 (0.74,0.88)**	0.85 (0.76,0.95)**	0.67 (0.63,0.72)**
Potential Exposure via Indirect Ingestion	2.18 (1.74,2.72)**	2.14 (1.76,2.59)**	2.22 (1.50,3.29)**	2.15 (1.64,2.81)**	2.20 (1.67,2.91)**	2.64 (1.90,3.68)**	1.80 (1.42,2.27)**
Potential Absorbed Dose via Inhalation	3.32 (2.97,3.70)**	3.36 (3.06,3.69)**	3.27 (2.70,3.97)**	3.19 (2.80,3.64)**	3.45 (3.01,3.95)**	3.66 (3.12,4.3)**	3.00 (2.68,3.37)**
Potential Absorbed Dose via Indirect Ingestion	9.44 (7.41,12.02)**	9.53 (7.73,11.74)**	9.35 (6.09,14.36)**	9.62 (7.18,12.90)**	9.26 (6.84,12.54)**	11.17 (7.83,15.92)**	7.98 (6.16,10.33)**
Benzo[b]fluoranthene							
Potential Exposure via Inhalation	0.70 (0.65,0.76)**	0.71 (0.67,0.76)**	0.69 (0.61,0.79)**	0.68 (0.62,0.74)**	0.73 (0.67,0.8)**	0.75 (0.67,0.85)**	0.66 (0.61,0.71)**
Potential Exposure via Indirect Ingestion	2.10 (1.7,2.58)**	2.10 (1.75,2.51)**	2.09 (1.44,3.04)**	2.18 (1.69,2.82)**	2.01 (1.55,2.62)**	2.44 (1.8,3.31)**	1.80 (1.44,2.26)**
Potential Absorbed Dose via Inhalation	3.08 (2.77,3.43)**	3.25 (2.97,3.56)**	2.92 (2.43,3.52)**	3.06 (2.70,3.48)**	3.10 (2.72,3.53)**	3.25 (2.77,3.81)**	2.92 (2.62,3.26)**
Potential Absorbed Dose via Indirect Ingestion	9.11 (7.25,11.44)**	9.37 (7.70,11.39)**	8.85 (5.89,13.31)**	9.79 (7.41,12.94)**	8.47 (6.35,11.31)**	10.36 (7.47,14.38)**	8.00 (6.23,10.28)**
Benzo[k]fluoranthene							
Potential Exposure via Inhalation	0.71 (0.68,0.75)**	0.71 (0.68,0.74)**	0.72 (0.66,0.77)**	0.69 (0.66,0.73)**	0.74 (0.7,0.78)**	0.76 (0.71,0.82)**	0.67 (0.64,0.7)**
Potential Exposure via Indirect Ingestion	2.11 (1.7,2.62)**	2.11 (1.75,2.54)**	2.12 (1.45,3.11)**	2.16 (1.66,2.81)**	2.07 (1.58,2.71)**	2.49 (1.81,3.41)**	1.80 (1.43,2.26)**
Potential Absorbed Dose via Inhalation	3.14 (2.89,3.42)**	3.25 (3.03,3.49)**	3.04 (2.61,3.54)**	3.14 (2.84,3.48)**	3.14 (2.82,3.49)**	3.3 (2.93,3.71)**	2.99 (2.73,3.29)**
Potential Absorbed Dose via Indirect Ingestion	9.16 (7.25,11.57)**	9.40 (7.69,11.49)**	8.93 (5.89,13.56)**	9.69 (7.29,12.89)**	8.66 (6.45,11.63)**	10.51 (7.49,14.74)**	7.99 (6.19,10.3)**
Benzo[ghi]perylene							
Potential Exposure via Inhalation	0.68 (0.65,0.72)**	0.68 (0.65,0.71)**	0.68 (0.62,0.74)**	0.67 (0.63,0.71)**	0.69 (0.65,0.73)**	0.69 (0.64,0.75)**	0.67 (0.64,0.71)**
Potential Exposure via Indirect Ingestion	2.14 (1.73,2.64)**	2.11 (1.76,2.54)**	2.16 (1.48,3.15)**	2.20 (1.70,2.85)**	2.07 (1.59,2.71)**	2.53 (1.85,3.44)**	1.81 (1.44,2.27)**
Potential Absorbed Dose via Inhalation	3.00 (2.74,3.28)**	3.11 (2.88,3.36)**	2.89 (2.46,3.39)**	3.07 (2.75,3.43)**	2.93 (2.61,3.27)**	2.99 (2.62,3.40)**	3.01 (2.73,3.32)**
Potential Absorbed Dose via Indirect Ingestion	9.28 (7.37,11.68)**	9.43 (7.74,11.50)**	9.12 (6.05,13.77)**	9.87 (7.45,13.08)**	8.72 (6.51,11.66)**	10.71 (7.67,14.94)**	8.04 (6.25,10.33)**
Benzo[a]pyrene							
Potential Exposure via Inhalation	0.71 (0.67,0.75)**	0.71 (0.67,0.74)**	0.72 (0.65,0.78)**	0.69 (0.65,0.73)**	0.73 (0.69,0.78)**	0.75 (0.69,0.82)**	0.67 (0.64,0.71)**

Table R-9. Estimated Mean Ratio Between NC Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Potential Exposure via Indirect Ingestion	2.16 (1.74,2.68)**	2.09 (1.74,2.52)**	2.22 (1.52,3.25)**	2.17 (1.67,2.82)**	2.14 (1.63,2.8)**	2.56 (1.86,3.52)**	1.82 (1.45,2.28)**
Potential Absorbed Dose via Inhalation	3.12 (2.85,3.42)**	3.23 (2.98,3.49)**	3.02 (2.57,3.55)**	3.13 (2.81,3.49)**	3.11 (2.78,3.48)**	3.25 (2.85,3.72)**	2.99 (2.72,3.30)**
Potential Absorbed Dose via Indirect Ingestion	9.35 (7.40,11.82)**	9.34 (7.63,11.42)**	9.36 (6.18,14.19)**	9.73 (7.32,12.93)**	8.99 (6.70,12.06)**	10.83 (7.70,15.23)**	8.08 (6.28,10.39)**
Benzo[e]pyrene							
Potential Exposure via Inhalation	0.72 (0.69,0.76)**	0.72 (0.69,0.76)**	0.72 (0.66,0.79)**	0.70 (0.66,0.74)**	0.75 (0.7,0.8)**	0.78 (0.72,0.85)**	0.67 (0.64,0.70)**
Potential Exposure via Indirect Ingestion	2.13 (1.72,2.64)**	2.11 (1.75,2.54)**	2.15 (1.47,3.15)**	2.18 (1.68,2.82)**	2.09 (1.60,2.73)**	2.52 (1.84,3.45)**	1.80 (1.43,2.27)**
Potential Absorbed Dose via Inhalation	3.18 (2.90,3.48)**	3.29 (3.04,3.55)**	3.07 (2.61,3.60)**	3.17 (2.84,3.53)**	3.18 (2.84,3.56)**	3.38 (2.97,3.85)**	2.98 (2.71,3.29)**
Potential Absorbed Dose via Indirect Ingestion	9.25 (7.32,11.68)**	9.41 (7.70,11.50)**	9.09 (5.99,13.78)**	9.75 (7.34,12.96)**	8.77 (6.53,11.77)**	10.68 (7.61,14.98)**	8.01 (6.22,10.32)**
Benzylbutylphthalate							
Potential Exposure via Inhalation ^a	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	2.39** (1.92,2.96)	2.22** (1.88,2.62)	2.57** (1.72,3.82)	2.60** (1.99,3.41)	2.19** (1.68,2.85)	2.91** (2.16,3.93)	1.95** (1.55,2.47)
Potential Absorbed Dose via Inhalation ^a	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	10.50** (8.37,13.17)	9.99** (8.40,11.88)	11.04** (7.27,16.76)	11.89** (8.95,15.79)	9.27** (7.04,12.22)	12.51** (9.14,17.10)	8.82** (6.89,11.28)
Bisphenol-A							
Potential Exposure via Inhalation	0.68** (0.63,0.74)	0.69** (0.64,0.74)	0.67** (0.59,0.78)	0.67** (0.61,0.74)	0.69** (0.63,0.77)	0.69** (0.61,0.78)	0.67** (0.62,0.73)
Potential Exposure via Indirect Ingestion ^b	1.87** (1.56,2.25)	1.69** (1.44,1.98)	2.07** (1.50,2.87)	1.86** (1.48,2.35)	1.88** (1.50,2.35)	1.84** (1.41,2.41)	1.90** (1.56,2.31)
Potential Absorbed Dose via Inhalation	3.00** (2.67,3.36)	3.14** (2.84,3.46)	2.86** (2.34,3.51)	3.01** (2.62,3.45)	2.98** (2.59,3.44)	2.99** (2.52,3.55)	3.00** (2.66,3.38)
Potential Absorbed Dose via Indirect Ingestion ^b	8.30** (6.72,10.25)	7.59** (6.31,9.13)	9.07** (6.20,13.27)	8.58** (6.54,11.25)	8.02** (6.16,10.45)	7.98** (5.91,10.77)	8.63** (6.80,10.96)
alpha-Chlordane							
Potential Exposure via Inhalation	0.79 (0.7,0.89)**	0.72 (0.65,0.8)**	0.86 (0.70,1.05)	0.76 (0.66,0.87)**	0.82 (0.71,0.94)**	0.88 (0.73,1.06)	0.7 (0.63,0.79)**
Potential Exposure via Indirect Ingestion	3.21 (2.37,4.34)**	2.36 (1.82,3.06)**	4.36 (2.56,7.43)**	3.09 (2.15,4.44)**	3.33 (2.29,4.84)**	4.74 (3.02,7.45)**	2.17 (1.58,2.96)**
Potential Absorbed Dose via Inhalation	3.48 (3.02,4.02)**	3.28 (2.9,3.72)**	3.70 (2.88,4.75)**	3.47 (2.93,4.12)**	3.49 (2.93,4.16)**	3.83 (3.09,4.76)**	3.16 (2.73,3.66)**

Table R-9. Estimated Mean Ratio Between NC Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Potential Absorbed Dose via Indirect Ingestion	14.02 (10.17,19.4)**	10.52 (7.98,13.87)**	18.7 (10.62,32.9)**	13.78 (9.36,20.28)**	14.28 (9.59,21.24)**	20.26 (12.57,32.7)**	9.71 (6.95,13.55)**
gamma-Chlordane							
Potential Exposure via Inhalation	0.81 (0.71,0.93)**	0.74 (0.65,0.83)**	0.90 (0.71,1.14)	0.78 (0.67,0.92)**	0.85 (0.72,1.00)*	0.93 (0.75,1.15)	0.71 (0.62,0.81)**
Potential Exposure via Indirect Ingestion	3.3 (2.44,4.46)**	2.39 (1.84,3.09)**	4.57 (2.68,7.79)**	3.23 (2.24,4.66)**	3.38 (2.32,4.92)**	4.91 (3.15,7.65)**	2.22 (1.62,3.06)**
Potential Absorbed Dose via Inhalation	3.59 (3.06,4.22)**	3.33 (2.89,3.83)**	3.88 (2.94,5.12)**	3.57 (2.95,4.31)**	3.62 (2.98,4.4)**	4.05 (3.17,5.17)**	3.19 (2.71,3.75)**
Potential Absorbed Dose via Indirect Ingestion	14.49 (10.54,19.9)**	10.73 (8.16,14.10)**	19.56 (11.14,34.3)**	14.6 (9.92,21.49)**	14.38 (9.67,21.37)**	20.89 (13.11,33.3)**	10.05 (7.17,14.08)**
Chlorpyrifos							
Potential Exposure via Inhalation	0.70 (0.65,0.76)**	0.66 (0.61,0.70)**	0.76 (0.66,0.87)**	0.68 (0.62,0.74)**	0.73 (0.66,0.80)**	0.71 (0.64,0.80)**	0.70 (0.64,0.75)**
Potential Exposure via Indirect Ingestion	2.01 (1.62,2.50)**	1.93 (1.60,2.31)**	2.10 (1.42,3.10)**	2.19 (1.68,2.86)**	1.85 (1.40,2.42)**	2.14 (1.57,2.92)**	1.89 (1.49,2.40)**
Potential Absorbed Dose via Inhalation	3.12 (2.79,3.48)**	2.97 (2.70,3.27)**	3.27 (2.68,3.98)**	3.11 (2.72,3.56)**	3.12 (2.71,3.58)**	3.09 (2.64,3.63)**	3.14 (2.78,3.54)**
Potential Absorbed Dose via Indirect Ingestion	8.82 (6.95,11.19)**	8.69 (7.12,10.6)**	8.95 (5.82,13.78)**	9.89 (7.37,13.28)**	7.86 (5.82,10.61)**	9.22 (6.59,12.9)**	8.44 (6.46,11.03)**
Chrysene							
Potential Exposure via Inhalation	0.72 (0.67,0.78)**	0.73 (0.68,0.78)**	0.72 (0.63,0.81)**	0.68 (0.63,0.74)**	0.77 (0.7,0.83)**	0.79 (0.7,0.89)**	0.66 (0.62,0.71)**
Potential Exposure via Indirect Ingestion	2.12 (1.70,2.66)**	2.10 (1.73,2.55)**	2.15 (1.45,3.18)**	2.08 (1.59,2.72)**	2.17 (1.64,2.87)**	2.54 (1.83,3.52)**	1.78 (1.41,2.25)**
Potential Absorbed Dose via Inhalation	3.14 (2.82,3.51)**	3.31 (3.01,3.63)**	2.99 (2.46,3.63)**	3.06 (2.68,3.49)**	3.23 (2.82,3.7)**	3.37 (2.86,3.96)**	2.93 (2.61,3.29)**
Potential Absorbed Dose via Indirect Ingestion	9.2 (7.23,11.71)**	9.37 (7.61,11.53)**	9.04 (5.89,13.87)**	9.31 (6.94,12.47)**	9.10 (6.72,12.32)**	10.71 (7.53,15.23)**	7.90 (6.10,10.24)**
Cyfluthrin							
Potential Exposure via Inhalation ^a	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion ^c	2.10 (1.60,2.77)**	2.16 (1.70,2.74)**	2.05 (1.27,3.29)**	2.49 (1.80,3.45)**	1.78 (1.27,2.49)**	2.37 (1.57,3.59)**	1.87 (1.41,2.46)**
Potential Absorbed Dose via Inhalation ^a	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion ^c	9.25 (6.91,12.38)**	9.70 (7.52,12.5)**	8.82 (5.33,14.62)**	10.96 (7.77,15.47)**	7.80 (5.44,11.19)**	10.3 (6.60,16.06)**	8.31 (6.19,11.15)**

Table R-9. Estimated Mean Ratio Between NC Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Diazinon							
Potential Exposure via Inhalation	0.77 (0.66,0.9)**	0.79 (0.69,0.91)**	0.75 (0.58,0.98)*	0.80 (0.67,0.96)*	0.74 (0.62,0.89)**	0.88 (0.69,1.13)	0.67 (0.58,0.78)**
Potential Exposure via Indirect Ingestion	2.75 (1.99,3.81)**	2.61 (1.97,3.47)**	2.90 (1.66,5.07)**	3.02 (2.06,4.42)**	2.51 (1.69,3.74)**	4.01 (2.43,6.62)**	1.89 (1.37,2.61)**
Potential Absorbed Dose via Inhalation	3.38 (2.83,4.04)**	3.59 (3.07,4.20)**	3.18 (2.35,4.31)**	3.62 (2.95,4.45)**	3.15 (2.56,3.90)**	3.81 (2.89,5.02)**	3.00 (2.53,3.57)**
Potential Absorbed Dose via Indirect Ingestion	12.08 (8.61,16.97)**	11.81 (8.78,15.87)**	12.37 (6.90,22.17)**	13.50 (9.06,20.1)**	10.82 (7.14,16.4)**	17.33 (10.29,29.2)**	8.42 (6.01,11.8)**
Dibenzo[a,h]anthracene							
Potential Exposure via Inhalation ^a	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	2.15 (1.73,2.66)**	2.16 (1.79,2.6)**	2.14 (1.46,3.13)**	2.22 (1.71,2.89)**	2.07 (1.58,2.72)**	2.59 (1.89,3.55)**	1.78 (1.41,2.24)**
Potential Absorbed Dose via Inhalation ^a	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	9.32 (7.36,11.79)**	9.62 (7.86,11.77)**	9.03 (5.93,13.73)**	9.95 (7.47,13.25)**	8.73 (6.49,11.74)**	10.98 (7.81,15.43)**	7.91 (6.13,10.20)**
Di-n-butylphthalate							
Potential Exposure via Inhalation	0.76** (0.70,0.82)	0.77** (0.72,0.82)	0.76** (0.66,0.86)	0.73** (0.67,0.79)	0.79** (0.73,0.87)	0.88* (0.78,0.99)	0.66** (0.61,0.71)
Potential Exposure via Indirect Ingestion	2.32** (1.90,2.85)	2.20** (1.85,2.62)	2.45** (1.70,3.54)	2.51** (1.95,3.23)	2.15** (1.66,2.78)	2.78** (2.09,3.70)	1.94** (1.54,2.44)
Potential Absorbed Dose via Inhalation	3.32** (2.98,3.70)	3.49** (3.17,3.83)	3.16** (2.62,3.83)	3.27** (2.88,3.72)	3.37** (2.95,3.85)	3.76** (3.20,4.43)	2.93** (2.62,3.28)
Potential Absorbed Dose via Indirect Ingestion	10.17** (8.19,12.64)	9.91** (8.24,11.92)	10.45** (7.04,15.49)	11.51** (8.77,15.09)	9.00** (6.81,11.88)	11.84** (8.77,15.98)	8.74** (6.80,11.24)
p,p'-DDE							
Potential Exposure via Inhalation ^a	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion ^a	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation ^a	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--	--	--	--	--
2,4-D (2,4-dichlorophenoxyacetic acid)							
Potential Exposure via Inhalation ^c	0.87 (0.75,1.00)*	0.90 (0.80,1.02)	0.83 (0.65,1.07)	0.86 (0.72,1.02)	0.88 (0.73,1.05)	1.14 (0.93,1.40)	0.66 (0.56,0.77)**

Table R-9. Estimated Mean Ratio Between NC Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Potential Exposure via Dietary Ingestion	1.03 (0.69,1.53)	1.11 (0.81,1.51)	0.95 (0.46,1.99)	1.26 (0.79,2.00)	0.84 (0.50,1.41)	1.46 (0.84,2.54)	0.73 (0.47,1.12)
Potential Exposure via Indirect Ingestion	2.12 (1.71,2.63)**	2.19 (1.83,2.63)**	2.05 (1.38,3.03)**	2.53 (1.94,3.3)**	1.78 (1.35,2.34)**	2.39 (1.77,3.23)**	1.87 (1.47,2.39)**
Potential Absorbed Dose via Inhalation ^c	3.82 (3.25,4.48)**	4.09 (3.57,4.7)**	3.56 (2.68,4.74)**	3.87 (3.19,4.7)**	3.77 (3.08,4.60)**	4.95 (3.92,6.25)**	2.95 (2.48,3.51)**
Potential Absorbed Dose via Dietary Ingestion	4.49 (3.00,6.72)**	4.95 (3.61,6.77)**	4.08 (1.94,8.6)**	5.56 (3.47,8.91)**	3.63 (2.15,6.13)**	6.30 (3.58,11.09)**	3.20 (2.07,4.96)**
Potential Absorbed Dose via Indirect Ingestion	9.32 (7.30,11.90)**	9.88 (8.04,12.14)**	8.8 (5.65,13.71)**	11.35 (8.39,15.35)**	7.66 (5.6,10.47)**	10.35 (7.35,14.58)**	8.40 (6.38,11.05)**
Aggregated Potential Exposure	1.09 (0.77,1.53)	1.05 (0.79,1.38)	1.14 (0.60,2.14)	1.20 (0.80,1.78)	0.99 (0.62,1.59)	1.50 (0.93,2.41)	0.79 (0.54,1.16)
Aggregated Potential Absorbed Dose	4.71 (3.34,6.65)**	4.60 (3.49,6.07)**	4.82 (2.55,9.14)**	5.21 (3.48,7.79)**	4.26 (2.66,6.83)**	6.31 (3.9,10.2)**	3.52 (2.4,5.16)**
Heptachlor							
Potential Exposure via Inhalation	0.85 (0.74,0.98)*	0.75 (0.67,0.85)**	0.97 (0.77,1.22)	0.81 (0.69,0.95)*	0.90 (0.76,1.05)	1.01 (0.82,1.25)	0.72 (0.63,0.82)**
Potential Exposure via Indirect Ingestion ^a	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation	3.79 (3.22,4.46)**	3.39 (2.94,3.91)**	4.22 (3.18,5.61)**	3.72 (3.07,4.51)**	3.85 (3.16,4.7)**	4.41 (3.44,5.65)**	3.25 (2.75,3.84)**
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--	--	--	--	--
Indeno[1,2,3-cd]pyrene							
Potential Exposure via Inhalation	0.69 (0.66,0.73)**	0.69 (0.66,0.72)**	0.69 (0.63,0.76)**	0.68 (0.64,0.72)**	0.70 (0.66,0.75)**	0.71 (0.66,0.77)**	0.67 (0.64,0.71)**
Potential Exposure via Indirect Ingestion	2.18 (1.75,2.71)**	2.14 (1.77,2.58)**	2.22 (1.51,3.27)**	2.21 (1.70,2.88)**	2.15 (1.64,2.83)**	2.63 (1.91,3.62)**	1.81 (1.43,2.28)**
Potential Absorbed Dose via Inhalation	3.04 (2.78,3.33)**	3.14 (2.91,3.39)**	2.95 (2.51,3.46)**	3.1 (2.78,3.45)**	2.99 (2.68,3.35)**	3.09 (2.71,3.52)**	3.00 (2.72,3.31)**
Potential Absorbed Dose via Indirect Ingestion	9.46 (7.47,11.97)**	9.55 (7.80,11.70)**	9.37 (6.16,14.26)**	9.91 (7.43,13.2)**	9.03 (6.71,12.16)**	11.13 (7.91,15.67)**	8.04 (6.23,10.38)**
Pentachlorophenol							
Potential Exposure via Inhalation	0.83 (0.74,0.93)**	0.73 (0.66,0.81)**	0.94 (0.77,1.16)	0.77 (0.67,0.88)**	0.90 (0.78,1.04)	0.95 (0.79,1.15)	0.72 (0.64,0.81)**
Potential Exposure via Dietary Ingestion ^a	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	2.13 (1.69,2.69)**	2.04 (1.67,2.49)**	2.23 (1.46,3.39)**	2.37 (1.77,3.17)**	1.92 (1.43,2.58)**	2.36 (1.71,3.25)**	1.93 (1.48,2.51)**
Potential Absorbed Dose via Inhalation	3.66 (3.17,4.22)**	3.3 (2.91,3.74)**	4.05 (3.16,5.2)**	3.45 (2.92,4.09)**	3.87 (3.25,4.61)**	4.14 (3.33,5.16)**	3.22 (2.79,3.73)**

Table R-9. Estimated Mean Ratio Between NC Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Potential Absorbed Dose via Dietary Ingestion ^a	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	9.38 (7.35,11.97)**	9.21 (7.48,11.34)**	9.55 (6.13,14.87)**	10.77 (7.93,14.62)**	8.17 (5.99,11.16)**	10.17 (7.26,14.25)**	8.65 (6.53,11.46)**
cis-Permethrin							
Potential Exposure via Inhalation	0.72 (0.65,0.80)**	0.66 (0.61,0.72)**	0.79 (0.66,0.95)*	0.72 (0.63,0.82)**	0.73 (0.64,0.83)**	0.73 (0.63,0.86)**	0.72 (0.64,0.80)**
Potential Exposure via Indirect Ingestion	2.20 (1.73,2.80)**	2.02 (1.64,2.48)**	2.39 (1.56,3.67)**	2.28 (1.7,3.06)**	2.11 (1.56,2.86)**	2.51 (1.77,3.56)**	1.92 (1.48,2.49)**
Potential Absorbed Dose via Inhalation	3.20 (2.79,3.67)**	3.00 (2.67,3.37)**	3.41 (2.68,4.35)**	3.26 (2.76,3.84)**	3.14 (2.65,3.72)**	3.19 (2.61,3.89)**	3.21 (2.77,3.71)**
Potential Absorbed Dose via Indirect Ingestion	9.58 (7.36,12.47)**	9.01 (7.2,11.27)**	10.19 (6.35,16.34)**	10.21 (7.39,14.11)**	8.99 (6.45,12.53)**	10.68 (7.32,15.58)**	8.60 (6.44,11.47)**
trans-Permethrin							
Potential Exposure via Inhalation	0.76 (0.69,0.84)**	0.69 (0.63,0.75)**	0.84 (0.70,1.00)	0.73 (0.65,0.83)**	0.79 (0.69,0.89)**	0.81 (0.70,0.94)**	0.71 (0.64,0.79)**
Potential Exposure via Indirect Ingestion	2.33 (1.78,3.05)**	2.16 (1.72,2.72)**	2.52 (1.56,4.06)**	2.29 (1.65,3.18)**	2.37 (1.70,3.32)**	2.90 (1.96,4.29)**	1.88 (1.41,2.50)**
Potential Absorbed Dose via Inhalation	3.35 (2.93,3.82)**	3.11 (2.77,3.48)**	3.61 (2.85,4.57)**	3.31 (2.81,3.88)**	3.39 (2.87,4.00)**	3.51 (2.90,4.25)**	3.20 (2.77,3.69)**
Potential Absorbed Dose via Indirect Ingestion	10.15 (7.61,13.53)**	9.63 (7.54,12.31)**	10.69 (6.39,17.87)**	10.24 (7.21,14.55)**	10.05 (7.00,14.43)**	12.26 (8.09,18.60)**	8.39 (6.15,11.45)**
PCB 52							
Potential Exposure via Inhalation	0.72 (0.65,0.79)**	0.72 (0.66,0.79)**	0.72 (0.6,0.85)**	0.70 (0.62,0.79)**	0.74 (0.65,0.83)**	0.77 (0.67,0.90)**	0.67 (0.6,0.74)**
Potential Exposure via Indirect Ingestion ^a	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation	3.16 (2.78,3.58)**	3.27 (2.94,3.65)**	3.04 (2.43,3.80)**	3.17 (2.72,3.68)**	3.14 (2.69,3.68)**	3.34 (2.79,4.02)**	2.98 (2.6,3.41)**
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--	--	--	--	--
PCB 95							
Potential Exposure via Inhalation	0.71 (0.66,0.77)**	0.72 (0.67,0.77)**	0.71 (0.61,0.81)**	0.71 (0.64,0.78)**	0.72 (0.65,0.79)**	0.76 (0.67,0.86)**	0.67 (0.62,0.73)**
Potential Exposure via Indirect Ingestion ^a	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation	3.13 (2.81,3.49)**	3.27 (2.98,3.59)**	3.00 (2.47,3.64)**	3.19 (2.80,3.63)**	3.08 (2.69,3.52)**	3.28 (2.80,3.85)**	2.99 (2.66,3.35)**

Table R-9. Estimated Mean Ratio Between NC Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--	--	--	--	--
PCB 101							
Potential Exposure via Inhalation	0.75 (0.68,0.83)**	0.76 (0.7,0.83)**	0.74 (0.63,0.88)**	0.75 (0.67,0.84)**	0.75 (0.67,0.85)**	0.85 (0.73,0.99)*	0.67 (0.61,0.73)**
Potential Exposure via Indirect Ingestion ^a	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation	3.30 (2.92,3.74)**	3.45 (3.1,3.85)**	3.16 (2.54,3.92)**	3.37 (2.91,3.91)**	3.24 (2.78,3.77)**	3.67 (3.04,4.44)**	2.97 (2.62,3.37)**
Potential Absorbed Dose via Indirect Ingestion ^a	--	--	--	--	--	--	--
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Potential Exposure via Inhalation	0.66 (0.61,0.71)**	0.65 (0.6,0.69)**	0.68 (0.59,0.77)**	0.64 (0.58,0.70)**	0.69 (0.63,0.75)**	0.65 (0.58,0.73)**	0.68 (0.63,0.73)**
Potential Exposure via Dietary Ingestion	1.16 (0.81,1.66)	1.17 (0.87,1.58)	1.15 (0.61,2.18)	1.18 (0.78,1.80)	1.14 (0.74,1.78)	1.79 (1.05,3.04)*	0.76 (0.52,1.10)
Potential Exposure via Indirect Ingestion	1.83 (1.51,2.2)**	1.71 (1.46,2.01)**	1.95 (1.38,2.74)**	1.94 (1.53,2.45)**	1.72 (1.35,2.19)**	1.74 (1.34,2.28)**	1.91 (1.55,2.36)**
Potential Absorbed Dose via Inhalation	2.92 (2.61,3.26)**	2.94 (2.67,3.23)**	2.90 (2.38,3.52)**	2.91 (2.55,3.33)**	2.92 (2.55,3.35)**	2.81 (2.4,3.3)**	3.03 (2.69,3.41)**
Potential Absorbed Dose via Dietary Ingestion	5.12 (3.48,7.52)**	5.30 (3.82,7.36)**	4.94 (2.52,9.66)**	5.27 (3.37,8.24)**	4.97 (3.12,7.92)**	7.77 (4.35,13.9)**	3.37 (2.28,4.97)**
Potential Absorbed Dose via Indirect Ingestion	7.99 (6.46,9.88)**	7.65 (6.39,9.15)**	8.34 (5.66,12.3)**	8.70 (6.67,11.34)**	7.34 (5.59,9.63)**	7.44 (5.52,10.03)**	8.57 (6.73,10.92)**
Aggregated Potential Exposure	1.13 (0.79,1.61)	1.10 (0.80,1.52)	1.16 (0.62,2.14)	1.10 (0.71,1.69)	1.16 (0.75,1.81)	1.65 (0.95,2.86)	0.77 (0.54,1.10)
Aggregated Potential Absorbed Dose	4.93 (3.34,7.25)**	4.96 (3.51,7.03)**	4.89 (2.54,9.39)**	4.88 (3.07,7.74)**	4.97 (3.11,7.94)**	7.03 (3.82,12.90)**	3.45 (2.38,5.00)**

^a Results are not presented because, for each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected.

^b For each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected. However, results are presented because this was one of the eight pollutants mentioned at the end of Section 9.2.

^c The largest detection percentage among the environmental sample types whose measurements were used to calculate the potential exposure/absorbed dose was between 45 and 50%.

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

Table R-10. Estimated Mean Ratio Between NC Children and Adults in the Same Household of Urinary Biomarker Concentrations, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
2,4-D (2,4-dichlorophenoxyacetic acid)							
Urinary concentration (ng/mL)	0.91 (0.70,1.18)	0.99 (0.81,1.22)	0.83 (0.52,1.33)	1.05 (0.76,1.44)	0.78 (0.56,1.09)	1.07 (0.77,1.48)	0.77 (0.56,1.06)
Urinary concentration, adjusted for specific gravity (ng/mL)	0.91 (0.70,1.18)	1.00 (0.81,1.23)	0.83 (0.52,1.34)	1.05 (0.77,1.45)	0.79 (0.56,1.10)	1.07 (0.77,1.49)	0.77 (0.56,1.07)
Urinary concentration, adjusted for creatinine (μmoles/mole)	1.79** (1.32,2.43)	1.95** (1.53,2.49)	1.64 (0.93,2.89)	2.19** (1.49,3.21)	1.46 (1.00,2.15)	2.24** (1.51,3.33)	1.43 (0.99,2.07)
Pentachlorophenol							
Urinary concentration (ng/mL)	1.36** (1.15,1.60)	1.33** (1.16,1.51)	1.40* (1.03,1.89)	1.53** (1.25,1.87)	1.21 (0.98,1.50)	1.38** (1.12,1.70)	1.34** (1.09,1.65)
Urinary concentration, adjusted for specific gravity (ng/mL)	1.37** (1.16,1.61)	1.33** (1.16,1.52)	1.40* (1.04,1.90)	1.53** (1.25,1.88)	1.21 (0.98,1.50)	1.38** (1.12,1.71)	1.35** (1.10,1.65)
Urinary concentration, adjusted for creatinine (μmoles/mole)	2.87** (2.40,3.43)	2.67** (2.32,3.08)	3.07** (2.21,4.28)	3.40** (2.72,4.25)	2.42** (1.93,3.03)	3.03** (2.41,3.80)	2.71** (2.17,3.39)
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Urinary concentration (ng/mL)	1.29* (1.02,1.63)	1.20 (0.99,1.45)	1.39 (0.90,2.14)	1.36* (1.02,1.82)	1.22 (0.91,1.65)	1.36 (0.98,1.91)	1.22 (0.94,1.59)
Urinary concentration, adjusted for specific gravity (ng/mL)	1.30* (1.03,1.64)	1.20 (0.99,1.46)	1.40 (0.91,2.15)	1.37* (1.03,1.82)	1.23 (0.91,1.65)	1.37 (0.98,1.91)	1.23 (0.94,1.59)
Urinary concentration, adjusted for creatinine (μmoles/mole)	2.57** (2.03,3.24)	2.40** (1.98,2.92)	2.74** (1.80,4.18)	2.78** (2.09,3.69)	2.37** (1.78,3.16)	2.86** (2.04,4.01)	2.30** (1.79,2.97)

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

Table R-11. Estimated Mean Ratio Between OH Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Benz[a]anthracene							
Potential Exposure via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	1.92** (1.48,2.49)	1.72** (1.43,2.07)	2.14** (1.33,3.43)	1.55* (1.08,2.22)	2.37** (1.81,3.12)	2.92** (2.10,4.05)	1.26 (0.93,1.71)
Potential Absorbed Dose via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	8.23** (6.12,11.08)	7.17** (5.81,8.85)	9.45** (5.49,16.26)	6.80** (4.52,10.25)	9.97** (7.30,13.60)	12.33** (8.52,17.85)	5.50** (3.87,7.81)
Benzo[b]fluoranthene							
Potential Exposure via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	1.90** (1.46,2.47)	1.76** (1.46,2.12)	2.05** (1.28,3.30)	1.55* (1.08,2.22)	2.33** (1.77,3.07)	2.94** (2.11,4.09)	1.23 (0.91,1.67)
Potential Absorbed Dose via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	8.16** (6.06,10.99)	7.35** (5.96,9.08)	9.06** (5.27,15.59)	6.80** (4.51,10.23)	9.80** (7.18,13.38)	12.43** (8.58,18.01)	5.36** (3.78,7.61)
Benzo[k]fluoranthene							
Potential Exposure via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	1.97** (1.51,2.57)	1.75** (1.45,2.12)	2.21** (1.36,3.58)	1.59* (1.10,2.29)	2.44** (1.84,3.23)	3.08** (2.20,4.31)	1.26 (0.92,1.71)
Potential Absorbed Dose via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	8.44** (6.24,11.41)	7.32** (5.90,9.07)	9.73** (5.61,16.88)	6.95** (4.59,10.54)	10.24** (7.46,14.04)	12.99** (8.91,18.95)	5.48** (3.84,7.82)
Benzo[ghi]perylene							
Potential Exposure via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	1.94** (1.49,2.52)	1.78** (1.48,2.15)	2.11** (1.30,3.40)	1.59* (1.11,2.28)	2.36** (1.79,3.10)	3.01** (2.17,4.19)	1.24 (0.91,1.69)
Potential Absorbed Dose via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	8.31** (6.16,11.21)	7.43** (6.01,9.18)	9.29** (5.38,16.06)	6.98** (4.61,10.55)	9.89** (7.23,13.54)	12.73** (8.77,18.46)	5.42** (3.81,7.73)
Benzo[a]pyrene							
Potential Exposure via Inhalation ^(a)	--	--	--	--	--	--	--

Table R-11. Estimated Mean Ratio Between OH Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Potential Exposure via Indirect Ingestion	1.91** (1.47,2.48)	1.71** (1.42,2.06)	2.13** (1.32,3.43)	1.56* (1.09,2.24)	2.33** (1.77,3.07)	2.88** (2.07,4.00)	1.27 (0.93,1.72)
Potential Absorbed Dose via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	8.20** (6.08,11.05)	7.15** (5.78,8.83)	9.40** (5.44,16.22)	6.85** (4.54,10.35)	9.80** (7.17,13.40)	12.15** (8.37,17.63)	5.53** (3.89,7.87)
Benzo[e]pyrene							
Potential Exposure via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	1.91** (1.47,2.47)	1.75** (1.46,2.10)	2.08** (1.30,3.32)	1.57* (1.10,2.23)	2.32** (1.77,3.04)	2.92** (2.11,4.04)	1.25 (0.92,1.68)
Potential Absorbed Dose via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	8.19** (6.10,10.99)	7.30** (5.92,8.99)	9.18** (5.37,15.71)	6.87** (4.58,10.30)	9.76** (7.17,13.28)	12.33** (8.54,17.80)	5.43** (3.84,7.69)
Benzylbutylphthalate							
Potential Exposure via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	1.69** (1.28,2.22)	1.71** (1.40,2.09)	1.67* (1.02,2.72)	1.39 (0.97,2.01)	2.05** (1.54,2.73)	2.51** (1.75,3.61)	1.13 (0.83,1.54)
Potential Absorbed Dose via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	7.21** (5.31,9.79)	7.14** (5.72,8.92)	7.27** (4.19,12.63)	6.01** (3.97,9.10)	8.64** (6.27,11.90)	10.59** (7.13,15.74)	4.90** (3.46,6.95)
Bisphenol-A							
Potential Exposure via Inhalation	0.72** (0.67,0.78)	0.71** (0.67,0.75)	0.73** (0.64,0.84)	0.72** (0.65,0.80)	0.72** (0.66,0.78)	0.75** (0.68,0.84)	0.69** (0.64,0.75)
Potential Exposure via Indirect Ingestion	1.46** (1.22,1.74)	1.41** (1.23,1.61)	1.51* (1.10,2.08)	1.28 (1.00,1.65)	1.66** (1.38,2.00)	1.71** (1.36,2.14)	1.25* (1.02,1.53)
Potential Absorbed Dose via Inhalation	3.04** (2.71,3.42)	3.01** (2.76,3.28)	3.08** (2.49,3.81)	2.98** (2.54,3.50)	3.11** (2.74,3.52)	3.18** (2.72,3.71)	2.92** (2.55,3.34)
Potential Absorbed Dose via Indirect Ingestion	6.29** (5.10,7.77)	5.91** (5.06,6.91)	6.70** (4.60,9.77)	5.71** (4.23,7.72)	6.93** (5.60,8.59)	7.31** (5.64,9.46)	5.42** (4.22,6.96)
alpha-Chlordane							
Potential Exposure via Inhalation	0.69** (0.64,0.73)	0.69** (0.66,0.72)	0.68** (0.61,0.76)	0.71** (0.66,0.77)	0.66** (0.62,0.70)	0.68** (0.62,0.74)	0.69** (0.65,0.74)
Potential Exposure via Indirect Ingestion	1.46** (1.22,1.75)	1.40** (1.23,1.59)	1.53* (1.09,2.13)	1.21 (0.94,1.56)	1.77** (1.46,2.14)	1.76** (1.41,2.19)	1.22 (0.98,1.52)
Potential Absorbed Dose via Inhalation	2.87** (2.61,3.16)	2.86** (2.68,3.06)	2.88** (2.40,3.44)	2.88** (2.53,3.29)	2.86** (2.58,3.16)	2.87** (2.55,3.23)	2.87** (2.56,3.22)

Table R-11. Estimated Mean Ratio Between OH Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Potential Absorbed Dose via Indirect Ingestion	6.26** (5.04,7.78)	5.85** (5.03,6.81)	6.69** (4.49,9.96)	5.34** (3.94,7.23)	7.34** (5.86,9.20)	7.36** (5.67,9.56)	5.32** (4.09,6.92)
gamma-Chlordane							
Potential Exposure via Inhalation	0.68** (0.64,0.72)	0.68** (0.65,0.71)	0.67** (0.61,0.75)	0.70** (0.65,0.75)	0.65** (0.61,0.69)	0.66** (0.61,0.72)	0.69** (0.65,0.74)
Potential Exposure via Indirect Ingestion	1.49** (1.23,1.79)	1.42** (1.25,1.62)	1.55* (1.10,2.19)	1.24 (0.96,1.61)	1.78** (1.47,2.16)	1.82** (1.45,2.27)	1.22 (0.97,1.53)
Potential Absorbed Dose via Inhalation	2.83** (2.57,3.12)	2.82** (2.65,3.01)	2.84** (2.38,3.39)	2.85** (2.50,3.25)	2.82** (2.55,3.11)	2.79** (2.49,3.14)	2.87** (2.57,3.22)
Potential Absorbed Dose via Indirect Ingestion	6.37** (5.11,7.93)	5.95** (5.11,6.94)	6.81** (4.55,10.19)	5.48** (4.03,7.46)	7.39** (5.88,9.29)	7.61** (5.84,9.91)	5.33** (4.08,6.96)
Chlorpyrifos							
Potential Exposure via Inhalation	0.72** (0.64,0.81)	0.78** (0.71,0.85)	0.67** (0.54,0.82)	0.76** (0.65,0.89)	0.68** (0.60,0.77)	0.78** (0.66,0.91)	0.67** (0.58,0.76)
Potential Exposure via Indirect Ingestion	1.79** (1.39,2.29)	1.81** (1.51,2.17)	1.77* (1.13,2.77)	1.59** (1.14,2.23)	2.01** (1.55,2.61)	2.64** (1.91,3.64)	1.21 (0.91,1.61)
Potential Absorbed Dose via Inhalation	3.03** (2.62,3.51)	3.29** (2.96,3.67)	2.79** (2.15,3.63)	3.16** (2.58,3.86)	2.92** (2.49,3.41)	3.33** (2.76,4.03)	2.76** (2.32,3.28)
Potential Absorbed Dose via Indirect Ingestion	7.66** (5.82,10.06)	7.52** (6.20,9.14)	7.79** (4.74,12.81)	6.93** (4.76,10.08)	8.46** (6.35,11.26)	11.10** (7.87,15.66)	5.28** (3.84,7.26)
Chrysene							
Potential Exposure via Inhalation ^(c)	0.72** (0.67,0.76)	0.73** (0.70,0.76)	0.70** (0.63,0.78)	0.70** (0.65,0.76)	0.73** (0.69,0.78)	0.77** (0.71,0.83)	0.67** (0.63,0.72)
Potential Exposure via Indirect Ingestion	1.94** (1.49,2.52)	1.76** (1.46,2.13)	2.13** (1.32,3.44)	1.58* (1.10,2.27)	2.38** (1.81,3.14)	3.02** (2.16,4.20)	1.25 (0.92,1.70)
Potential Absorbed Dose via Inhalation ^(c)	2.90** (2.58,3.25)	3.04** (2.81,3.28)	2.76** (2.23,3.41)	2.74** (2.32,3.23)	3.06** (2.72,3.44)	3.12** (2.73,3.58)	2.68** (2.32,3.10)
Potential Absorbed Dose via Indirect Ingestion	8.33** (6.18,11.23)	7.34** (5.95,9.07)	9.44** (5.48,16.28)	6.93** (4.59,10.45)	10.01** (7.33,13.69)	12.75** (8.80,18.50)	5.44** (3.82,7.73)
Cyfluthrin							
Potential Exposure via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	1.99** (1.54,2.57)	1.69** (1.41,2.03)	2.34** (1.47,3.72)	1.76** (1.24,2.50)	2.25** (1.72,2.94)	2.92** (2.11,4.04)	1.35* (1.01,1.82)
Potential Absorbed Dose via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	8.51** (6.36,11.38)	7.07** (5.74,8.71)	10.24** (6.04,17.35)	7.74** (5.20,11.51)	9.36** (6.90,12.69)	12.25** (8.47,17.73)	5.91** (4.22,8.27)

Table R-11. Estimated Mean Ratio Between OH Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Diazinon							
Potential Exposure via Inhalation	0.94 (0.77,1.15)	0.83* (0.71,0.97)	1.07 (0.75,1.51)	1.01 (0.81,1.27)	0.87 (0.71,1.07)	1.14 (0.85,1.51)	0.78* (0.64,0.95)
Potential Exposure via Indirect Ingestion	2.29** (1.62,3.22)	1.88** (1.45,2.45)	2.78** (1.52,5.07)	2.10** (1.36,3.25)	2.49** (1.74,3.55)	3.69** (2.28,5.96)	1.42 (0.99,2.04)
Potential Absorbed Dose via Inhalation	3.95** (3.16,4.93)	3.37** (2.85,3.99)	4.62** (3.13,6.83)	4.01** (3.08,5.22)	3.88** (3.08,4.89)	4.80** (3.50,6.59)	3.24** (2.59,4.06)
Potential Absorbed Dose via Indirect Ingestion	9.87** (6.77,14.38)	7.82** (5.87,10.41)	12.46** (6.42,24.17)	9.13** (5.63,14.81)	10.66** (7.20,15.79)	15.76** (9.36,26.56)	6.18** (4.14,9.22)
Dibenzo[a,h]anthracene							
Potential Exposure via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	1.96** (1.51,2.55)	1.78** (1.47,2.14)	2.16** (1.34,3.49)	1.61* (1.12,2.31)	2.39** (1.82,3.15)	3.04** (2.19,4.22)	1.27 (0.93,1.72)
Potential Absorbed Dose via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	8.41** (6.23,11.35)	7.41** (6.00,9.16)	9.54** (5.52,16.50)	7.06** (4.66,10.68)	10.02** (7.33,13.71)	12.82** (8.85,18.58)	5.52** (3.87,7.87)
Di-n-butylphthalate							
Potential Exposure via Inhalation	0.78** (0.72,0.86)	0.74** (0.70,0.79)	0.83* (0.71,0.97)	0.81** (0.73,0.91)	0.76** (0.69,0.83)	0.85* (0.75,0.97)	0.72** (0.66,0.79)
Potential Exposure via Indirect Ingestion	1.75** (1.43,2.15)	1.72** (1.48,1.99)	1.79** (1.24,2.57)	1.44** (1.10,1.89)	2.13** (1.72,2.64)	2.62** (2.01,3.41)	1.18 (0.94,1.48)
Potential Absorbed Dose via Inhalation	3.36** (2.96,3.81)	3.06** (2.80,3.35)	3.69** (2.94,4.63)	3.43** (2.91,4.03)	3.30** (2.89,3.77)	3.65** (3.09,4.32)	3.09** (2.70,3.55)
Potential Absorbed Dose via Indirect Ingestion	7.54** (5.94,9.57)	7.11** (5.98,8.45)	7.99** (5.18,12.33)	6.39** (4.61,8.85)	8.89** (6.90,11.45)	10.99** (8.08,14.96)	5.17** (3.92,6.81)
p,p'-DDE							
Potential Exposure via Inhalation	0.73** (0.67,0.80)	0.74** (0.70,0.80)	0.71** (0.61,0.84)	0.74** (0.66,0.83)	0.72** (0.65,0.79)	0.78** (0.69,0.89)	0.68** (0.62,0.75)
Potential Exposure via Indirect Ingestion ^(c)	1.71** (1.38,2.12)	1.45** (1.25,1.69)	2.01** (1.37,2.97)	1.44* (1.07,1.92)	2.04** (1.63,2.55)	2.14** (1.64,2.81)	1.37* (1.07,1.75)
Potential Absorbed Dose via Inhalation	3.06** (2.71,3.46)	3.08** (2.83,3.35)	3.04** (2.44,3.79)	3.01** (2.57,3.53)	3.11** (2.74,3.54)	3.30** (2.81,3.87)	2.84** (2.48,3.25)
Potential Absorbed Dose via Indirect Ingestion ^(c)	7.48** (5.94,9.41)	6.05** (5.16,7.10)	9.23** (6.06,14.05)	6.41** (4.65,8.83)	8.72** (6.87,11.06)	9.26** (7.03,12.20)	6.03** (4.57,7.97)
2,4-D (2,4-dichlorophenoxyacetic acid)							
Potential Exposure via Inhalation ^(b)	0.87 (0.74,1.01)	0.87** (0.79,0.96)	0.86 (0.65,1.14)	0.96 (0.80,1.14)	0.79** (0.66,0.93)	1.04 (0.84,1.29)	0.72** (0.62,0.84)

Table R-11. Estimated Mean Ratio Between OH Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Potential Exposure via Dietary Ingestion ^(b)	0.99 (0.64,1.51)	1.16 (0.85,1.57)	0.84 (0.39,1.82)	1.06 (0.61,1.84)	0.92 (0.58,1.44)	1.67 (0.94,2.97)	0.58* (0.36,0.92)
Potential Exposure via Indirect Ingestion	1.76** (1.36,2.29)	1.77** (1.49,2.11)	1.76* (1.09,2.83)	1.77** (1.24,2.52)	1.76** (1.35,2.30)	2.40** (1.77,3.26)	1.30 (0.95,1.77)
Potential Absorbed Dose via Inhalation ^(b)	3.78** (3.11,4.59)	3.67** (3.26,4.14)	3.89** (2.73,5.53)	4.02** (3.21,5.03)	3.55** (2.87,4.39)	4.62** (3.54,6.04)	3.09** (2.57,3.71)
Potential Absorbed Dose via Dietary Ingestion ^(b)	4.20** (2.69,6.56)	4.83** (3.52,6.63)	3.65** (1.63,8.17)	4.48** (2.52,7.96)	3.93** (2.45,6.30)	7.14** (3.94,12.93)	2.47** (1.51,4.02)
Potential Absorbed Dose via Indirect Ingestion	7.49** (5.53,10.13)	7.42** (6.04,9.12)	7.55** (4.32,13.19)	7.79** (5.16,11.78)	7.19** (5.24,9.86)	9.96** (6.90,14.38)	5.63** (3.93,8.06)
Aggregated Potential Exposure	1.07 (0.61,1.86)	1.20 (0.85,1.70)	0.95 (0.35,2.57)	1.08 (0.58,2.03)	1.06 (0.58,1.92)	1.76 (0.81,3.82)	0.65 (0.39,1.08)
Aggregated Potential Absorbed Dose	4.56** (2.54,8.19)	5.00** (3.46,7.23)	4.15** (1.45,11.86)	4.51** (2.32,8.76)	4.60** (2.45,8.64)	7.63** (3.36,17.33)	2.72** (1.59,4.67)
Indeno[1,2,3-<i>cd</i>]pyrene							
Potential Exposure via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	1.96** (1.50,2.57)	1.81** (1.49,2.20)	2.13** (1.30,3.49)	1.60* (1.10,2.32)	2.41** (1.81,3.20)	3.11** (2.21,4.38)	1.24 (0.90,1.70)
Potential Absorbed Dose via Inhalation ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	8.42** (6.19,11.45)	7.55** (6.07,9.38)	9.38** (5.35,16.45)	7.00** (4.58,10.70)	10.11** (7.33,13.95)	13.15** (8.97,19.27)	5.39** (3.74,7.75)
Pentachlorophenol							
Potential Exposure via Inhalation	0.64** (0.53,0.78)	0.64** (0.56,0.74)	0.64* (0.45,0.91)	0.66** (0.52,0.83)	0.62** (0.51,0.77)	0.59** (0.45,0.78)	0.69** (0.57,0.84)
Potential Exposure via Dietary Ingestion ^(a)	--	--	--	--	--	--	--
Potential Exposure via Indirect Ingestion	1.45** (1.20,1.76)	1.40** (1.22,1.60)	1.51* (1.06,2.15)	1.33* (1.03,1.72)	1.59** (1.30,1.94)	1.65** (1.30,2.11)	1.28* (1.02,1.60)
Potential Absorbed Dose via Inhalation	2.73** (2.22,3.36)	2.72** (2.36,3.14)	2.74** (1.88,3.98)	2.78** (2.15,3.59)	2.68** (2.14,3.36)	2.57** (1.94,3.41)	2.90** (2.34,3.59)
Potential Absorbed Dose via Dietary Ingestion ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Indirect Ingestion	6.21** (5.02,7.69)	5.81** (5.03,6.71)	6.64** (4.48,9.84)	5.81** (4.33,7.80)	6.64** (5.32,8.28)	6.95** (5.40,8.95)	5.55** (4.28,7.18)
cis-Permethrin							
Potential Exposure via Inhalation ^(b)	0.76** (0.69,0.84)	0.76** (0.70,0.82)	0.76** (0.64,0.91)	0.77** (0.68,0.87)	0.75** (0.67,0.84)	0.82* (0.71,0.95)	0.71** (0.64,0.78)

Table R-11. Estimated Mean Ratio Between OH Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Potential Exposure via Indirect Ingestion	1.78** (1.46,2.17)	1.55** (1.35,1.78)	2.04** (1.42,2.94)	1.54** (1.17,2.03)	2.05** (1.66,2.53)	2.37** (1.85,3.03)	1.33* (1.05,1.69)
Potential Absorbed Dose via Inhalation ^(b)	3.19** (2.72,3.75)	3.14** (2.79,3.53)	3.25** (2.44,4.33)	3.15** (2.58,3.85)	3.24** (2.73,3.83)	3.46** (2.77,4.32)	2.95** (2.49,3.49)
Potential Absorbed Dose via Indirect Ingestion	7.61** (6.13,9.45)	6.46** (5.56,7.51)	8.96** (6.03,13.30)	6.79** (5.02,9.18)	8.53** (6.82,10.68)	9.94** (7.67,12.89)	5.82** (4.48,7.57)
trans-Permethrin							
Potential Exposure via Inhalation ^(b)	0.76** (0.68,0.86)	0.76** (0.70,0.83)	0.77** (0.63,0.94)	0.78** (0.69,0.89)	0.75** (0.67,0.84)	0.82* (0.70,0.97)	0.71** (0.63,0.79)
Potential Exposure via Indirect Ingestion	1.71** (1.39,2.10)	1.55** (1.33,1.81)	1.88** (1.30,2.71)	1.39* (1.04,1.87)	2.09** (1.69,2.59)	2.33** (1.80,3.01)	1.25 (0.98,1.60)
Potential Absorbed Dose via Inhalation ^(b)	3.20** (2.71,3.79)	3.13** (2.77,3.55)	3.27** (2.43,4.41)	3.17** (2.58,3.90)	3.24** (2.72,3.86)	3.47** (2.75,4.38)	2.96** (2.48,3.52)
Potential Absorbed Dose via Indirect Ingestion	7.34** (5.81,9.28)	6.49** (5.45,7.74)	8.30** (5.46,12.64)	6.27** (4.48,8.78)	8.60** (6.75,10.95)	9.79** (7.30,13.11)	5.51** (4.16,7.30)
PCB 52							
Potential Exposure via Inhalation	0.72** (0.68,0.77)	0.73** (0.70,0.76)	0.72** (0.65,0.80)	0.75** (0.70,0.80)	0.70** (0.66,0.74)	0.75** (0.69,0.82)	0.70** (0.66,0.74)
Potential Exposure via Indirect Ingestion	1.81** (1.46,2.25)	1.66** (1.42,1.94)	1.98** (1.34,2.94)	1.73** (1.29,2.33)	1.90** (1.51,2.38)	2.36** (1.79,3.09)	1.40** (1.09,1.80)
Potential Absorbed Dose via Inhalation	3.01** (2.71,3.34)	3.00** (2.79,3.23)	3.01** (2.49,3.64)	3.01** (2.62,3.46)	3.01** (2.70,3.35)	3.13** (2.74,3.59)	2.88** (2.57,3.24)
Potential Absorbed Dose via Indirect Ingestion	7.85** (6.23,9.87)	6.92** (5.90,8.13)	8.89** (5.84,13.55)	7.68** (5.57,10.60)	8.01** (6.31,10.18)	10.02** (7.59,13.22)	6.15** (4.65,8.12)
PCB 95							
Potential Exposure via Inhalation	0.74** (0.68,0.81)	0.74** (0.70,0.79)	0.74** (0.63,0.87)	0.75** (0.67,0.84)	0.73** (0.66,0.80)	0.79** (0.70,0.90)	0.69** (0.63,0.76)
Potential Exposure via Indirect Ingestion ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation	3.12** (2.74,3.55)	3.08** (2.81,3.38)	3.16** (2.50,3.98)	3.08** (2.61,3.63)	3.16** (2.76,3.62)	3.36** (2.83,4.00)	2.89** (2.51,3.33)
Potential Absorbed Dose via Indirect Ingestion ^(a)	--	--	--	--	--	--	--
PCB 101							
Potential Exposure via Inhalation	0.74** (0.66,0.83)	0.75** (0.69,0.82)	0.73** (0.60,0.88)	0.74** (0.64,0.84)	0.74** (0.66,0.84)	0.81** (0.69,0.94)	0.68** (0.60,0.76)
Potential Exposure via Indirect Ingestion ^(a)	--	--	--	--	--	--	--
Potential Absorbed Dose via Inhalation	3.12** (2.68,3.61)	3.11** (2.79,3.46)	3.12** (2.39,4.07)	3.02** (2.50,3.64)	3.21** (2.75,3.76)	3.41** (2.79,4.18)	2.84** (2.43,3.33)

Table R-11. Estimated Mean Ratio Between OH Children and Adults in the Same Household of Potential Exposure and Potential Absorbed Dose Estimates, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio (cont.)

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
Potential Absorbed Dose via Indirect Ingestion ^(a)	--	--	--	--	--	--	--
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Potential Exposure via Inhalation	0.74** (0.66,0.82)	0.75** (0.70,0.81)	0.72** (0.60,0.88)	0.76** (0.67,0.87)	0.72** (0.64,0.81)	0.80** (0.69,0.93)	0.69** (0.62,0.76)
Potential Exposure via Dietary Ingestion	0.94 (0.64,1.39)	0.88 (0.68,1.14)	1.01 (0.50,2.06)	0.88 (0.53,1.47)	1.02 (0.68,1.53)	1.77* (1.09,2.86)	0.51** (0.33,0.79)
Potential Exposure via Indirect Ingestion	1.65** (1.33,2.05)	1.44** (1.23,1.68)	1.89** (1.28,2.79)	1.46* (1.09,1.96)	1.86** (1.48,2.33)	2.04** (1.55,2.69)	1.33* (1.04,1.71)
Potential Absorbed Dose via Inhalation	3.17** (2.73,3.68)	3.11** (2.83,3.43)	3.23** (2.46,4.24)	3.37** (2.81,4.04)	2.99** (2.54,3.51)	3.34** (2.73,4.07)	3.02** (2.59,3.51)
Potential Absorbed Dose via Dietary Ingestion	4.02** (2.68,6.01)	3.67** (2.78,4.84)	4.40** (2.10,9.21)	3.75** (2.20,6.38)	4.31** (2.81,6.61)	7.49** (4.46,12.56)	2.16** (1.37,3.40)
Potential Absorbed Dose via Indirect Ingestion	7.04** (5.62,8.81)	5.98** (5.12,7.00)	8.27** (5.48,12.49)	6.43** (4.70,8.80)	7.70** (6.10,9.72)	8.47** (6.46,11.09)	5.85** (4.45,7.68)
Aggregated Potential Exposure	1.00 (0.65,1.55)	0.86 (0.66,1.14)	1.16 (0.51,2.64)	1.03 (0.59,1.79)	0.98 (0.60,1.58)	1.94* (1.11,3.42)	0.52** (0.32,0.82)
Aggregated Potential Absorbed Dose	4.28** (2.72,6.74)	3.56** (2.67,4.74)	5.15** (2.21,11.97)	4.53** (2.56,8.02)	4.04** (2.46,6.64)	8.03** (4.45,14.49)	2.28** (1.41,3.68)

^(a) Results are not presented because, for each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected.

^(b) For each environmental sample type whose measurements were used to calculate the potential exposure/absorbed dose, less than 45% of the measurements were detected. However, results are presented because this was one of the eight pollutants mentioned at the end of Section 9.2.

^(c) The largest detection percentage among the environmental sample types whose measurements were used to calculate the potential exposure/absorbed dose was between 45 and 50%.

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

Table R-12. Estimated Mean Ratio Between OH Children and Adults in the Same Household of Urinary Biomarker Concentrations, Calculated Overall and by Stratum, and 95% Confidence Intervals on This Mean Ratio

Exposure/Dose/ Biomarker Parameter and Pathway	Estimated Mean Ratio (95% CI) in Preschool Children vs. Adults in the Same Household						
	Overall	Urban	Rural	Low Income	Mid/High Income	Day Care Children	Home Children
2,4-D (2,4-dichlorophenoxyacetic acid)							
Urinary concentration (ng/mL)	1.42* (1.04,1.94)	1.34** (1.09,1.65)	1.51 (0.85,2.68)	1.59* (1.04,2.42)	1.28 (0.92,1.77)	1.13 (0.78,1.64)	1.79** (1.24,2.60)
Urinary concentration, adjusted for specific gravity (ng/mL)	1.43* (1.05,1.94)	1.35** (1.10,1.66)	1.51 (0.85,2.68)	1.59* (1.04,2.42)	1.28 (0.93,1.77)	1.14 (0.78,1.64)	1.79** (1.24,2.60)
Urinary concentration, adjusted for creatinine (μmoles/mole)	2.73** (2.00,3.71)	2.38** (1.94,2.94)	3.12** (1.76,5.52)	3.22** (2.12,4.88)	2.31** (1.66,3.21)	2.32** (1.59,3.38)	3.20** (2.22,4.62)
1-hydroxypyrene							
Urinary concentration (ng/mL)	1.18 (0.90,1.54)	1.23* (1.02,1.49)	1.13 (0.70,1.82)	1.18 (0.84,1.65)	1.18 (0.89,1.56)	1.17 (0.82,1.68)	1.19 (0.89,1.58)
Urinary concentration, adjusted for specific gravity (ng/mL)	1.18 (0.91,1.54)	1.24* (1.02,1.50)	1.13 (0.70,1.82)	1.18 (0.84,1.65)	1.19 (0.90,1.57)	1.18 (0.82,1.69)	1.18 (0.89,1.58)
Urinary concentration, adjusted for creatinine (μmoles/mole)	2.15** (1.60,2.90)	2.17** (1.76,2.67)	2.13** (1.23,3.70)	2.21** (1.48,3.30)	2.09** (1.51,2.88)	2.32** (1.58,3.42)	1.99** (1.41,2.81)
Pentachlorophenol							
Urinary concentration (ng/mL)	1.65** (1.31,2.07)	1.54** (1.32,1.79)	1.76** (1.16,2.68)	1.61** (1.18,2.20)	1.68** (1.33,2.13)	1.33* (1.02,1.75)	2.03** (1.55,2.67)
Urinary concentration, adjusted for specific gravity (ng/mL)	1.65** (1.32,2.07)	1.55** (1.33,1.80)	1.76** (1.16,2.67)	1.61** (1.19,2.20)	1.68** (1.33,2.13)	1.34* (1.02,1.75)	2.03** (1.55,2.67)
Urinary concentration, adjusted for creatinine (μmoles/mole)	3.08** (2.37,3.99)	2.83** (2.37,3.37)	3.35** (2.07,5.43)	3.09** (2.17,4.39)	3.07** (2.32,4.06)	2.75** (2.00,3.79)	3.44** (2.52,4.69)
3-phenoxybenzoic acid							
Urinary concentration (ng/mL)	1.11 (0.77,1.60)	1.03 (0.80,1.33)	1.19 (0.61,2.32)	1.23 (0.76,1.99)	1.00 (0.67,1.47)	0.93 (0.57,1.51)	1.31 (0.87,1.97)
Urinary concentration, adjusted for specific gravity (ng/mL)	1.10 (0.76,1.59)	1.02 (0.80,1.32)	1.19 (0.60,2.33)	1.25 (0.77,2.03)	0.97 (0.66,1.44)	0.91 (0.57,1.46)	1.33 (0.88,2.02)
Urinary concentration, adjusted for creatinine (μmoles/mole)	2.15** (1.42,3.26)	1.90** (1.43,2.53)	2.44* (1.13,5.26)	2.50** (1.42,4.39)	1.86** (1.19,2.90)	2.06** (1.24,3.42)	2.25** (1.38,3.70)
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)							
Urinary concentration (ng/mL)	1.66** (1.24,2.24)	1.41** (1.15,1.73)	1.96* (1.13,3.39)	1.77** (1.19,2.62)	1.57** (1.14,2.15)	1.68* (1.15,2.45)	1.65** (1.18,2.31)
Urinary concentration, adjusted for specific gravity (ng/mL)	1.67** (1.24,2.24)	1.42** (1.16,1.74)	1.96* (1.13,3.38)	1.77** (1.19,2.62)	1.57** (1.14,2.16)	1.69** (1.15,2.46)	1.65** (1.17,2.31)
Urinary concentration, adjusted for creatinine (μmoles/mole)	3.08** (2.32,4.09)	2.53** (2.09,3.05)	3.76** (2.22,6.38)	3.31** (2.27,4.83)	2.87** (2.11,3.90)	3.39** (2.38,4.83)	2.80** (2.01,3.89)

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

Appendix S

Detailed Results of Statistical Analysis to Investigate the Apportioning of Aggregated Potential Exposure Level and Aggregated Potential Absorbed Dose Estimates for the Study Participants Across Exposure Routes

Table S-1. Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating NC Children That is Attributable to Each Exposure Route, Calculated Overall and Separately by Stratum, and 95% Confidence Intervals on the Mean

Exposure Route	Estimate of Overall Mean Proportion (95% CI)	Stratum	Estimate of Stratum Mean Proportion (95% CI)	Significance Level of Stratum Effect on the Overall Proportion
Bisphenol-A				
Dietary Ingestion	0.99 (0.98,0.99)	Low Income Children	0.99 (0.98,0.99)	0.762
		Middle/Upper Income Children	0.99 (0.98,0.99)	
		Urban Children	0.99 (0.98,0.99)	0.349
		Rural Children	0.99 (0.98,1.00)	
		Non-Daycare Children	0.98 (0.96,0.99)	<0.001**
		Daycare Children	0.99 (0.99,1.00)	
Inhalation	0.01 (0.01,0.02)	Low Income Children	0.01 (0.01,0.02)	0.798
		Middle/Upper Income Children	0.01 (0.00,0.02)	
		Urban Children	0.01 (0.01,0.02)	0.376
		Rural Children	0.01 (0.00,0.02)	
		Non-Daycare Children	0.02 (0.01,0.04)	<0.001**
		Daycare Children	0.01 (0.00,0.01)	
Indirect Ingestion	0.00 (0.00,0.00)	Low Income Children	0.00 (0.00,0.00)	--
		Middle/Upper Income Children	0.00 (0.00,0.00)	
		Urban Children	0.00 (0.00,0.00)	--
		Rural Children	0.00 (0.00,0.00)	
		Non-Daycare Children	0.00 (0.00,0.00)	--
		Daycare Children	0.00 (0.00,0.00)	
Chlorpyrifos				
Dietary Ingestion	0.54 (0.49,0.59)	Low Income Children	0.55 (0.48,0.61)	0.755
		Middle/Upper Income Children	0.53 (0.46,0.60)	
		Urban Children	0.56 (0.50,0.61)	0.496
		Rural Children	0.52 (0.44,0.60)	
		Non-Day Care Children	0.57 (0.50,0.64)	0.303
		Day Care Children	0.51 (0.44,0.59)	
Inhalation	0.39 (0.34,0.45)	Low Income Children	0.39 (0.32,0.46)	0.847
		Middle/Upper Income Children	0.40 (0.33,0.47)	
		Urban Children	0.39 (0.34,0.45)	0.981
		Rural Children	0.39 (0.30,0.49)	
		Non-Day Care Children	0.37 (0.31,0.44)	0.357
		Day Care Children	0.42 (0.34,0.50)	
Indirect Ingestion	0.06 (0.04,0.10)	Low Income Children	0.05 (0.03,0.08)	0.097
		Middle/Upper Income Children	0.08 (0.05,0.13)	
		Urban Children	0.05 (0.04,0.07)	0.273
		Rural Children	0.08 (0.04,0.18)	
		Non-Day Care Children	0.06 (0.04,0.09)	0.463
		Day Care Children	0.07 (0.04,0.12)	

Table S-1. Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating NC Children That is Attributable to Each Exposure Route, Calculated Overall and Separately by Stratum, and 95% Confidence Intervals on the Mean (cont.)

Exposure Route	Estimate of Overall Mean Proportion (95% CI)	Stratum	Estimate of Stratum Mean Proportion (95% CI)	Significance Level of Stratum Effect on the Overall Proportion
Diazinon				
Dietary Ingestion	0.55 (0.48,0.62)	Low Income Children	0.50 (0.43,0.57)	0.058
		Middle/Upper Income Children	0.60 (0.50,0.69)	
		Urban Children	0.55 (0.48,0.62)	0.987
		Rural Children	0.55 (0.43,0.66)	
		Non-Day Care Children	0.55 (0.48,0.62)	0.983
		Day Care Children	0.55 (0.43,0.67)	
Inhalation	0.40 (0.34,0.46)	Low Income Children	0.46 (0.40,0.53)	0.008**
		Middle/Upper Income Children	0.34 (0.27,0.43)	
		Urban Children	0.41 (0.35,0.47)	0.701
		Rural Children	0.39 (0.30,0.49)	
		Non-Day Care Children	0.41 (0.35,0.48)	0.673
		Day Care Children	0.39 (0.30,0.49)	
Indirect Ingestion	0.05 (0.03,0.08)	Low Income Children	0.04 (0.02,0.07)	0.049*
		Middle/Upper Income Children	0.06 (0.04,0.09)	
		Urban Children	0.04 (0.02,0.07)	0.381
		Rural Children	0.06 (0.03,0.11)	
		Non-Day Care Children	0.03 (0.02,0.05)	0.206
		Day Care Children	0.06 (0.03,0.15)	
Di-n-butylphthalate				
Dietary Ingestion	0.93 (0.91,0.94)	Low Income Children	0.92 (0.90,0.94)	0.561
		Middle/Upper Income Children	0.93 (0.91,0.95)	
		Urban Children	0.91 (0.88,0.93)	0.014*
		Rural Children	0.94 (0.93,0.96)	
		Non-Daycare Children	0.93 (0.91,0.94)	0.842
		Daycare Children	0.93 (0.90,0.95)	
Inhalation	0.06 (0.05,0.07)	Low Income Children	0.07 (0.05,0.09)	0.297
		Middle/Upper Income Children	0.05 (0.04,0.07)	
		Urban Children	0.08 (0.06,0.10)	0.010*
		Rural Children	0.05 (0.03,0.06)	
		Non-Daycare Children	0.06 (0.05,0.07)	0.892
		Daycare Children	0.06 (0.04,0.09)	
Indirect Ingestion	0.01 (0.01,0.01)	Low Income Children	0.01 (0.01,0.01)	0.301
		Middle/Upper Income Children	0.01 (0.01,0.02)	
		Urban Children	0.01 (0.01,0.02)	0.470
		Rural Children	0.01 (0.01,0.02)	
		Non-Daycare Children	0.01 (0.01,0.02)	0.079
		Daycare Children	0.01 (0.01,0.01)	

Table S-1. Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating NC Children That is Attributable to Each Exposure Route, Calculated Overall and Separately by Stratum, and 95% Confidence Intervals on the Mean (cont.)

Exposure Route	Estimate of Overall Mean Proportion (95% CI)	Stratum	Estimate of Stratum Mean Proportion (95% CI)	Significance Level of Stratum Effect on the Overall Proportion
2,4-D (2,4-dichlorophenoxyacetic acid)				
Dietary Ingestion	0.95 (0.93,0.96)	Low Income Children	0.95 (0.93,0.97)	0.412
		Middle/Upper Income Children	0.94 (0.91,0.96)	
		Urban Children	0.92 (0.90,0.94)	0.038*
		Rural Children	0.96 (0.93,0.98)	
		Non-Day Care Children	0.94 (0.92,0.96)	0.629
		Day Care Children	0.95 (0.92,0.97)	
Inhalation	0.03 (0.02,0.04)	Low Income Children	0.03 (0.02,0.05)	0.422
		Middle/Upper Income Children	0.03 (0.01,0.05)	
		Urban Children	0.04 (0.03,0.06)	0.021*
		Rural Children	0.02 (0.01,0.04)	
		Non-Day Care Children	0.03 (0.02,0.04)	0.850
		Day Care Children	0.03 (0.02,0.06)	
Indirect Ingestion	0.02 (0.01,0.03)	Low Income Children	0.01 (0.00,0.02)	0.009**
		Middle/Upper Income Children	0.03 (0.01,0.07)	
		Urban Children	0.02 (0.01,0.04)	0.383
		Rural Children	0.01 (0.00,0.04)	
		Non-Day Care Children	0.02 (0.01,0.04)	0.191
		Day Care Children	0.01 (0.01,0.03)	
cis-Permethrin				
Dietary Ingestion	0.55 (0.47,0.63)	Low Income Children	0.53 (0.42,0.63)	0.542
		Middle/Upper Income Children	0.57 (0.47,0.67)	
		Urban Children	0.60 (0.51,0.70)	0.102
		Rural Children	0.49 (0.38,0.60)	
		Non-Day Care Children	0.50 (0.42,0.59)	0.309
		Day Care Children	0.59 (0.45,0.72)	
Inhalation	0.05 (0.03,0.07)	Low Income Children	0.07 (0.04,0.11)	0.020*
		Middle/Upper Income Children	0.03 (0.02,0.05)	
		Urban Children	0.03 (0.02,0.05)	0.065
		Rural Children	0.07 (0.03,0.13)	
		Non-Day Care Children	0.06 (0.04,0.11)	0.065
		Day Care Children	0.04 (0.03,0.05)	
Indirect Ingestion	0.39 (0.31,0.47)	Low Income Children	0.39 (0.30,0.50)	0.920
		Middle/Upper Income Children	0.39 (0.29,0.49)	
		Urban Children	0.36 (0.27,0.46)	0.401
		Rural Children	0.42 (0.31,0.54)	
		Non-Day Care Children	0.42 (0.34,0.51)	0.452
		Day Care Children	0.36 (0.24,0.50)	

Table S-1. Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating NC Children That is Attributable to Each Exposure Route, Calculated Overall and Separately by Stratum, and 95% Confidence Intervals on the Mean (cont.)

Exposure Route	Estimate of Overall Mean Proportion (95% CI)	Stratum	Estimate of Stratum Mean Proportion (95% CI)	Significance Level of Stratum Effect on the Overall Proportion
trans-Permethrin				
Dietary Ingestion	0.57 (0.50,0.65)	Low Income Children	0.57 (0.46,0.67)	0.870
		Middle/Upper Income Children	0.58 (0.48,0.67)	
		Urban Children	0.61 (0.51,0.70)	0.241
		Rural Children	0.53 (0.43,0.63)	
		Non-Day Care Children	0.54 (0.45,0.61)	0.390
		Day Care Children	0.61 (0.47,0.73)	
Inhalation	0.04 (0.03,0.06)	Low Income Children	0.07 (0.04,0.11)	0.004**
		Middle/Upper Income Children	0.03 (0.02,0.04)	
		Urban Children	0.03 (0.02,0.04)	0.068
		Rural Children	0.06 (0.03,0.12)	
		Non-Day Care Children	0.06 (0.03,0.10)	0.048*
		Day Care Children	0.03 (0.02,0.04)	
Indirect Ingestion	0.37 (0.30,0.45)	Low Income Children	0.36 (0.26,0.47)	0.651
		Middle/Upper Income Children	0.39 (0.30,0.48)	
		Urban Children	0.36 (0.27,0.46)	0.618
		Rural Children	0.39 (0.29,0.50)	
		Non-Day Care Children	0.40 (0.32,0.48)	0.541
		Day Care Children	0.35 (0.23,0.48)	
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)				
Dietary Ingestion	0.95 (0.93,0.97)	Low Income Children	0.94 (0.91,0.96)	0.209
		Middle/Upper Income Children	0.96 (0.93,0.98)	
		Urban Children	0.95 (0.92,0.96)	0.671
		Rural Children	0.96 (0.92,0.97)	
		Non-Day Care Children	0.94 (0.90,0.96)	0.093
		Day Care Children	0.96 (0.94,0.98)	
Inhalation	0.03 (0.02,0.04)	Low Income Children	0.04 (0.02,0.06)	0.018*
		Middle/Upper Income Children	0.02 (0.01,0.03)	
		Urban Children	0.03 (0.02,0.05)	0.146
		Rural Children	0.02 (0.01,0.04)	
		Non-Day Care Children	0.03 (0.02,0.05)	0.381
		Day Care Children	0.02 (0.01,0.04)	
Indirect Ingestion	0.02 (0.01,0.03)	Low Income Children	0.02 (0.01,0.03)	0.926
		Middle/Upper Income Children	0.02 (0.01,0.04)	
		Urban Children	0.02 (0.01,0.03)	0.454
		Rural Children	0.02 (0.01,0.05)	
		Non-Day Care Children	0.03 (0.02,0.06)	0.019*
		Day Care Children	0.01 (0.01,0.02)	

* Statistically significant at the 0.05 level, but not at the 0.01 level.

** Statistically significant at the 0.01 level.

Note: Caution should be taken when interpreting results of statistical analysis when estimated proportions are near 0 or 1.

Table S-2. Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating OH Children That is Attributable to Each Exposure Route, Calculated Overall and Separately by Stratum, and 95% Confidence Intervals on the Mean

Exposure Route	Estimate of Overall Mean Proportion (95% CI)	Stratum	Estimate of Stratum Mean Proportion (95% CI)	Significance Level of Stratum Effect on the Overall Proportion
Bisphenol-A				
Dietary Ingestion	0.99 (0.99,0.99)	Low Income Children	0.99 (0.99,1.00)	0.364
		Middle/Upper Income Children	0.99 (0.99,0.99)	
		Urban Children	0.99 (0.99,0.99)	0.087
		Rural Children	0.99 (0.99,1.00)	
		Non-Daycare Children	0.99 (0.99,1.00)	0.015*
		Daycare Children	0.99 (0.99,0.99)	
Inhalation	0.01 (0.00,0.01)	Low Income Children	0.01 (0.00,0.01)	0.516
		Middle/Upper Income Children	0.01 (0.01,0.01)	
		Urban Children	0.01 (0.01,0.01)	0.039*
		Rural Children	0.00 (0.00,0.01)	
		Non-Daycare Children	0.00 (0.00,0.01)	0.008**
		Daycare Children	0.01 (0.01,0.01)	
Indirect Ingestion	0.00 (0.00,0.00)	Low Income Children	0.00 (0.00,0.00)	--
		Middle/Upper Income Children	0.00 (0.00,0.00)	
		Urban Children	0.00 (0.00,0.00)	--
		Rural Children	0.00 (0.00,0.00)	
		Non-Daycare Children	0.00 (0.00,0.00)	--
		Daycare Children	0.00 (0.00,0.00)	
Chlorpyrifos				
Dietary Ingestion	0.76 (0.69,0.82)	Low Income Children	0.78 (0.67,0.86)	0.440
		Middle/Upper Income Children	0.74 (0.67,0.81)	
		Urban Children	0.71 (0.65,0.77)	0.174
		Rural Children	0.80 (0.67,0.89)	
		Non-Day Care Children	0.79 (0.70,0.86)	0.272
		Day Care Children	0.74 (0.64,0.81)	
Inhalation	0.19 (0.14,0.26)	Low Income Children	0.19 (0.12,0.29)	0.900
		Middle/Upper Income Children	0.20 (0.15,0.26)	
		Urban Children	0.24 (0.20,0.29)	0.147
		Rural Children	0.16 (0.08,0.27)	
		Non-Day Care Children	0.19 (0.12,0.27)	0.650
		Day Care Children	0.20 (0.15,0.27)	
Indirect Ingestion	0.04 (0.03,0.06)	Low Income Children	0.03 (0.02,0.04)	<0.001**
		Middle/Upper Income Children	0.05 (0.04,0.08)	
		Urban Children	0.04 (0.03,0.06)	0.560
		Rural Children	0.04 (0.02,0.07)	
		Non-Day Care Children	0.03 (0.02,0.04)	0.038*
		Day Care Children	0.06 (0.03,0.09)	

Table S-2. Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating OH Children That is Attributable to Each Exposure Route, Calculated Overall and Separately by Stratum, and 95% Confidence Intervals on the Mean (cont.)

Exposure Route	Estimate of Overall Mean Proportion (95% CI)	Stratum	Estimate of Stratum Mean Proportion (95% CI)	Significance Level of Stratum Effect on the Overall Proportion
Diazinon				
Dietary Ingestion	0.62 (0.52,0.70)	Low Income Children	0.60 (0.49,0.70)	0.519
		Middle/Upper Income Children	0.64 (0.53,0.73)	
		Urban Children	0.62 (0.56,0.68)	0.897
		Rural Children	0.61 (0.44,0.76)	
		Non-Day Care Children	0.67 (0.59,0.74)	0.103
		Day Care Children	0.57 (0.43,0.70)	
Inhalation	0.33 (0.27,0.41)	Low Income Children	0.38 (0.28,0.48)	0.155
		Middle/Upper Income Children	0.30 (0.23,0.37)	
		Urban Children	0.30 (0.26,0.36)	0.348
		Rural Children	0.37 (0.25,0.50)	
		Non-Day Care Children	0.29 (0.23,0.35)	0.058
		Day Care Children	0.38 (0.28,0.49)	
Indirect Ingestion	0.05 (0.03,0.08)	Low Income Children	0.03 (0.02,0.06)	0.009**
		Middle/Upper Income Children	0.07 (0.04,0.13)	
		Urban Children	0.06 (0.04,0.08)	0.472
		Rural Children	0.04 (0.01,0.11)	
		Non-Day Care Children	0.05 (0.03,0.08)	0.667
		Day Care Children	0.05 (0.03,0.11)	
Di-n-butylphthalate				
Dietary Ingestion	0.80 (0.76,0.83)	Low Income Children	0.82 (0.76,0.87)	0.303
		Middle/Upper Income Children	0.78 (0.72,0.83)	
		Urban Children	0.82 (0.80,0.84)	0.379
		Rural Children	0.78 (0.70,0.85)	
		Non-Day Care Children	0.76 (0.69,0.81)	0.017*
		Day Care Children	0.84 (0.80,0.87)	
Inhalation	0.18 (0.15,0.21)	Low Income Children	0.16 (0.12,0.22)	0.365
		Middle/Upper Income Children	0.20 (0.15,0.26)	
		Urban Children	0.16 (0.14,0.18)	0.186
		Rural Children	0.21 (0.15,0.28)	
		Non-Day Care Children	0.22 (0.17,0.28)	0.047*
		Day Care Children	0.15 (0.12,0.19)	
Indirect Ingestion	0.02 (0.01,0.03)	Low Income Children	0.01 (0.01,0.03)	0.447
		Middle/Upper Income Children	0.02 (0.01,0.03)	
		Urban Children	0.02 (0.02,0.03)	0.257
		Rural Children	0.01 (0.00,0.03)	
		Non-Day Care Children	0.02 (0.01,0.05)	0.008**
		Day Care Children	0.01 (0.01,0.02)	

Table S-2. Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating OH Children That is Attributable to Each Exposure Route, Calculated Overall and Separately by Stratum, and 95% Confidence Intervals on the Mean (cont.)

Exposure Route	Estimate of Overall Mean Proportion (95% CI)	Stratum	Estimate of Stratum Mean Proportion (95% CI)	Significance Level of Stratum Effect on the Overall Proportion
2,4-D (2,4-dichlorophenoxyacetic acid)				
Dietary Ingestion	0.92 (0.89,0.95)	Low Income Children	0.95 (0.90,0.97)	0.040*
		Middle/Upper Income Children	0.89 (0.83,0.93)	
		Urban Children	0.91 (0.88,0.93)	0.354
		Rural Children	0.93 (0.88,0.97)	
		Non-Day Care Children	0.93 (0.89,0.95)	0.633
		Day Care Children	0.92 (0.85,0.95)	
Inhalation	0.03 (0.02,0.04)	Low Income Children	0.02 (0.01,0.04)	0.417
		Middle/Upper Income Children	0.03 (0.02,0.05)	
		Urban Children	0.02 (0.01,0.02)	0.085
		Rural Children	0.04 (0.02,0.09)	
		Non-Day Care Children	0.03 (0.02,0.05)	0.100
		Day Care Children	0.02 (0.01,0.04)	
Indirect Ingestion	0.03 (0.02,0.05)	Low Income Children	0.02 (0.01,0.05)	0.058
		Middle/Upper Income Children	0.05 (0.03,0.09)	
		Urban Children	0.07 (0.05,0.11)	<0.001**
		Rural Children	0.02 (0.01,0.03)	
		Non-Day Care Children	0.03 (0.02,0.05)	0.414
		Day Care Children	0.04 (0.02,0.08)	
cis-Permethrin				
Dietary Ingestion	0.56 (0.48,0.64)	Low Income Children	0.60 (0.47,0.71)	0.269
		Middle/Upper Income Children	0.53 (0.44,0.61)	
		Urban Children	0.61 (0.53,0.68)	0.197
		Rural Children	0.51 (0.37,0.65)	
		Non-Daycare Children	0.58 (0.49,0.67)	0.618
		Daycare Children	0.54 (0.42,0.66)	
Inhalation	0.04 (0.03,0.05)	Low Income Children	0.04 (0.02,0.05)	0.165
		Middle/Upper Income Children	0.05 (0.04,0.07)	
		Urban Children	0.06 (0.04,0.08)	0.010*
		Rural Children	0.03 (0.02,0.05)	
		Non-Daycare Children	0.04 (0.03,0.06)	0.700
		Daycare Children	0.05 (0.03,0.08)	
Indirect Ingestion	0.39 (0.31,0.48)	Low Income Children	0.36 (0.25,0.49)	0.405
		Middle/Upper Income Children	0.42 (0.34,0.50)	
		Urban Children	0.33 (0.26,0.41)	0.088
		Rural Children	0.45 (0.32,0.59)	
		Non-Daycare Children	0.38 (0.29,0.47)	0.719
		Daycare Children	0.40 (0.29,0.52)	

Table S-2. Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating OH Children That is Attributable to Each Exposure Route, Calculated Overall and Separately by Stratum, and 95% Confidence Intervals on the Mean (cont.)

Exposure Route	Estimate of Overall Mean Proportion (95% CI)	Stratum	Estimate of Stratum Mean Proportion (95% CI)	Significance Level of Stratum Effect on the Overall Proportion
trans-Permethrin				
Dietary Ingestion	0.58 (0.49,0.66)	Low Income Children	0.58 (0.45,0.70)	0.962
		Middle/Upper Income Children	0.58 (0.49,0.67)	
		Urban Children	0.61 (0.53,0.68)	0.516
		Rural Children	0.55 (0.40,0.70)	
		Non-Daycare Children	0.60 (0.51,0.69)	0.435
		Daycare Children	0.56 (0.44,0.67)	
Inhalation	0.04 (0.03,0.06)	Low Income Children	0.02 (0.02,0.04)	<0.001**
		Middle/Upper Income Children	0.06 (0.04,0.08)	
		Urban Children	0.05 (0.04,0.08)	0.015*
		Rural Children	0.03 (0.02,0.05)	
		Non-Daycare Children	0.03 (0.02,0.04)	0.054
		Daycare Children	0.05 (0.03,0.09)	
Indirect Ingestion	0.37 (0.29,0.46)	Low Income Children	0.38 (0.26,0.51)	0.820
		Middle/Upper Income Children	0.36 (0.29,0.45)	
		Urban Children	0.33 (0.26,0.41)	0.296
		Rural Children	0.41 (0.28,0.56)	
		Non-Daycare Children	0.36 (0.27,0.45)	0.635
		Daycare Children	0.38 (0.28,0.50)	
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)				
Dietary Ingestion	0.98 (0.96,0.99)	Low Income Children	0.97 (0.93,0.99)	0.023*
		Middle/Upper Income Children	0.99 (0.97,0.99)	
		Urban Children	0.97 (0.96,0.98)	0.393
		Rural Children	0.99 (0.94,1.00)	
		Non-Day Care Children	0.97 (0.94,0.99)	0.148
		Day Care Children	0.99 (0.96,0.99)	
Inhalation	0.02 (0.01,0.04)	Low Income Children	0.03 (0.01,0.06)	0.010**
		Middle/Upper Income Children	0.01 (0.00,0.02)	
		Urban Children	0.02 (0.01,0.03)	0.493
		Rural Children	0.01 (0.00,0.06)	
		Non-Day Care Children	0.02 (0.01,0.05)	0.147
		Day Care Children	0.01 (0.00,0.03)	
Indirect Ingestion	0.00 (0.00,0.01)	Low Income Children	0.00 (0.00,0.01)	--
		Middle/Upper Income Children	0.00 (0.00,0.01)	
		Urban Children	0.01 (0.00,0.01)	--
		Rural Children	0.00 (0.00,0.01)	
		Non-Day Care Children	0.00 (0.00,0.01)	--
		Day Care Children	0.00 (0.00,0.01)	

* Statistically significant at the 0.05 level, but not at the 0.01 level.

** Statistically significant at the 0.01 level.

Note: Caution should be taken when interpreting results of statistical analysis when estimated proportions are near 0 or 1.

Table S-3. Estimated Mean Proportion of Total Potential Exposure Level and Total Potential Exposed Dose in NC Adults That is Attributable to Each Exposure Route, Calculated Overall and Separately by Stratum, and 95% Confidence Intervals on the Mean

Exposure Route	Estimate of Overall Mean Proportion (95% CI)	Stratum	Estimate of Stratum Mean Proportion (95% CI)	Significance Level of Stratum Effect on the Overall Proportion
2,4-D (2,4-dichlorophenoxyacetic acid)				
Dietary Ingestion	0.93 (0.82,0.97)	Low Income	0.92 (0.77,0.97)	0.663
		Middle/Upper Income	0.94 (0.80,0.98)	
		Urban	0.90 (0.82,0.95)	0.542
		Rural	0.95 (0.71,0.99)	
		Non-Daycare Households	0.95 (0.82,0.98)	0.455
		Daycare Households	0.91 (0.74,0.97)	
Inhalation	0.05 (0.02,0.15)	Low Income	0.08 (0.02,0.24)	0.236
		Middle/Upper Income	0.03 (0.01,0.14)	
		Urban	0.06 (0.03,0.14)	0.665
		Rural	0.04 (0.00,0.26)	
		Non-Daycare Households	0.04 (0.01,0.15)	0.509
		Daycare Households	0.06 (0.02,0.22)	
Indirect Ingestion	0.01 (0.00,0.24)	Low Income	0.00 (0.00,0.32)	0.348
		Middle/Upper Income	0.02 (0.00,0.39)	
		Urban	0.02 (0.00,0.14)	0.667
		Rural	0.00 (0.00,0.74)	
		Non-Daycare Households	0.01 (0.00,0.25)	0.721
		Daycare Households	0.01 (0.00,0.31)	
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)				
Dietary Ingestion	0.94 (0.84,0.98)	Low Income	0.92 (0.76,0.97)	0.276
		Middle/Upper Income	0.96 (0.85,0.99)	
		Urban	0.92 (0.85,0.96)	0.556
		Rural	0.96 (0.74,1.00)	
		Non-Daycare Households	0.95 (0.84,0.99)	0.606
		Daycare Households	0.93 (0.78,0.98)	
Inhalation	0.05 (0.01,0.15)	Low Income	0.07 (0.02,0.22)	0.298
		Middle/Upper Income	0.03 (0.01,0.14)	
		Urban	0.07 (0.03,0.14)	0.529
		Rural	0.03 (0.00,0.26)	
		Non-Daycare Households	0.04 (0.01,0.15)	0.631
		Daycare Households	0.06 (0.01,0.21)	
Indirect Ingestion	0.01 (0.00,0.10)	Low Income	0.01 (0.00,0.18)	0.767
		Middle/Upper Income	0.01 (0.00,0.20)	
		Urban	0.01 (0.00,0.08)	0.978
		Rural	0.01 (0.00,0.46)	
		Non-Daycare Households	0.01 (0.00,0.18)	0.865
		Daycare Households	0.01 (0.00,0.21)	

* Statistically significant at the 0.05 level, but not at the 0.01 level.

** Statistically significant at the 0.01 level.

Note: Caution should be taken when interpreting results of statistical analysis when estimated proportions are near 0 or 1.

Table S-4. Estimated Mean Proportion of Aggregate Potential Exposure Level and Potential Absorbed Dose in Participating OH Adults That is Attributable to Each Exposure Route, Calculated Overall and Separately by Stratum, and 95% Confidence Intervals on the Mean

Exposure Route	Estimate of Overall Mean Proportion (95% CI)	Stratum	Estimate of Stratum Mean Proportion (95% CI)	Significance Level of Stratum Effect on the Overall Proportion
2,4-D (2,4-dichlorophenoxyacetic acid)				
Dietary Ingestion	0.93 (0.78,0.98)	Low Income	0.96 (0.77,0.99)	0.225
		Middle/Upper Income	0.88 (0.70,0.96)	
		Urban	0.92 (0.83,0.96)	0.807
		Rural	0.94 (0.59,0.99)	
		Non-Daycare Households	0.95 (0.79,0.99)	0.339
		Daycare Households	0.90 (0.70,0.97)	
Inhalation	0.04 (0.01,0.17)	Low Income	0.04 (0.00,0.30)	0.942
		Middle/Upper Income	0.03 (0.01,0.18)	
		Urban	0.03 (0.01,0.10)	0.779
		Rural	0.04 (0.00,0.51)	
		Non-Daycare Households	0.04 (0.00,0.23)	0.982
		Daycare Households	0.03 (0.00,0.24)	
Indirect Ingestion	0.03 (0.01,0.18)	Low Income	0.01 (0.00,0.18)	0.157
		Middle/Upper Income	0.07 (0.02,0.28)	
		Urban	0.05 (0.02,0.14)	0.631
		Rural	0.02 (0.00,0.37)	
		Non-Daycare Households	0.02 (0.00,0.16)	0.246
		Daycare Households	0.05 (0.01,0.26)	
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)				
Dietary Ingestion	0.98 (0.76,1.00)	Low Income	0.98 (0.60,1.00)	0.737
		Middle/Upper Income	0.98 (0.79,1.00)	
		Urban	0.97 (0.90,0.99)	0.818
		Rural	0.99 (0.26,1.00)	
		Non-Daycare Households	0.99 (0.73,1.00)	0.578
		Daycare Households	0.97 (0.66,1.00)	
Inhalation	0.02 (0.00,0.24)	Low Income	0.02 (0.00,0.42)	0.722
		Middle/Upper Income	0.01 (0.00,0.21)	
		Urban	0.02 (0.00,0.09)	0.856
		Rural	0.01 (0.00,0.77)	
		Non-Daycare Households	0.01 (0.00,0.29)	0.664
		Daycare Households	0.02 (0.00,0.34)	
Indirect Ingestion	0.00 (0.00,0.94)	Low Income	0.00 (0.00,0.98)	0.981
		Middle/Upper Income	0.00 (0.00,0.93)	
		Urban	0.00 (0.00,0.16)	0.877
		Rural	0.00 (0.00,1.00)	
		Non-Daycare Households	0.00 (0.00,0.98)	0.709
		Daycare Households	0.00 (0.00,0.96)	

* Statistically significant at the 0.05 level, but not at the 0.01 level.

** Statistically significant at the 0.01 level.

Note: Caution should be taken when interpreting results of statistical analysis when estimated proportions are near 0 or 1.

Table S-5. Estimated Ratio Between Two Exposure Routes of Geometric Mean Potential Exposure Level and Potential Absorbed Dose Estimates in Participating NC Children, and 95% Confidence Intervals on This Ratio

Parameter	Significance Level for Overall Differences Among the Three Exposure Routes	Ratio of Geometric Means (95%CI)		
		Dietary Ingestion Route vs. Inhalation Route	Dietary Ingestion Route vs. Indirect Ingestion Route	Inhalation Route vs. Indirect Ingestion Route
Bisphenol-A				
Potential Exposure Level	<0.0001	207.17** (139.92,306.76)	2235.24** (1459.50,3423.30)	10.79** (7.38,15.77)
Potential Absorbed Dose	<0.0001	207.37** (139.96,307.25)	2212.20** (1438.94,3401.01)	10.67** (7.33,15.53)
Chlorpyrifos				
Potential Exposure Level	<0.0001	1.41 (0.98,2.03)	12.60** (8.24,19.27)	8.92** (6.61,12.05)
Potential Absorbed Dose	<0.0001	1.41 (0.98,2.02)	12.61** (8.24,19.28)	8.93** (6.61,12.06)
Diazinon				
Potential Exposure Level	<0.0001	1.42 (0.99,2.04)	20.70** (12.62,33.96)	14.58** (10.84,19.60)
Potential Absorbed Dose	<0.0001	1.41 (0.98,2.03)	20.68** (12.62,33.88)	14.62** (10.88,19.65)
Di-n-butylphthalate				
Potential Exposure Level	<0.0001	22.92** (16.08,32.67)	126.17** (86.76,183.47)	5.50** (4.12,7.35)
Potential Absorbed Dose	<0.0001	22.61** (15.87,32.20)	124.38** (85.01,182.00)	5.50** (4.16,7.27)
2,4-D (2,4-dichlorophenoxyacetic acid)				
Potential Exposure Level	<0.0001	48.67** (31.68,74.77)	194.41** (121.38,311.36)	3.99** (2.37,6.72)
Potential Absorbed Dose	<0.0001	48.63** (31.63,74.77)	193.78** (120.86,310.70)	3.98** (2.37,6.71)
cis-Permethrin				
Potential Exposure Level	<0.0001	22.18** (11.90,41.34)	2.09 (0.99,4.44)	0.09** (0.06,0.15)
Potential Absorbed Dose	<0.0001	22.17** (11.89,41.31)	2.10 (0.99,4.44)	0.09** (0.06,0.15)
trans-Permethrin				
Potential Exposure Level	<0.0001	22.02** (12.06,40.19)	1.80 (0.85,3.82)	0.08** (0.05,0.13)
Potential Absorbed Dose	<0.0001	21.81** (11.95,39.79)	1.77 (0.84,3.75)	0.08** (0.05,0.13)

Table S-5. Estimated Ratio Between Two Exposure Routes of Geometric Mean Potential Exposure Level and Potential Absorbed Dose Estimates in Participating NC Children, and 95% Confidence Intervals on This Ratio (cont.)

Parameter	Significance Level for Overall Differences Among the Three Exposure Routes	Ratio of Geometric Means (95%CI)		
		Dietary Ingestion Route vs. Inhalation Route	Dietary Ingestion Route vs. Indirect Ingestion Route	Inhalation Route vs. Indirect Ingestion Route
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)				
Potential Exposure Level	<0.0001	72.58** (48.94,107.64)	229.05** (136.67,383.88)	3.16** (2.12,4.70)
Potential Absorbed Dose	<0.0001	72.84** (49.12,108.02)	230.39** (137.23,386.82)	3.16** (2.12,4.71)

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

Table S-6. Estimated Ratio Between Two Exposure Routes of Geometric Mean Potential Exposure Level and Potential Absorbed Dose Estimates in Participating OH Children, and 95% Confidence Intervals on This Ratio

Parameter	Significance Level for Overall Differences Among the Three Exposure Routes	Ratio of Geometric Means (95%CI)		
		Dietary Ingestion Route vs. Inhalation Route	Dietary Ingestion Route vs. Indirect Ingestion Route	Inhalation Route vs. Indirect Ingestion Route
Bisphenol-A				
Potential Exposure Level	<0.0001	181.33** (118.07,278.49)	1853.99** (1235.33,2782.49)	10.22** (6.74,15.52)
Potential Absorbed Dose	<0.0001	183.70** (120.11,280.98)	1851.10** (1233.56,2777.80)	10.08** (6.67,15.22)
Chlorpyrifos				
Potential Exposure Level	<0.0001	6.03** (3.62,10.05)	30.88** (17.83,53.47)	5.12** (3.23,8.13)
Potential Absorbed Dose	<0.0001	6.06** (3.63,10.13)	31.03** (17.93,53.70)	5.12** (3.24,8.11)
Diazinon				
Potential Exposure Level	<0.0001	2.04** (1.20,3.44)	20.68** (10.96,39.00)	10.15** (5.93,17.38)
Potential Absorbed Dose	<0.0001	2.04** (1.20,3.46)	20.78** (11.00,39.27)	10.19** (5.95,17.45)
Di-n-butylphthalate				
Potential Exposure Level	<0.0001	4.68** (2.94,7.44)	53.07** (33.60,83.84)	11.34** (7.75,16.60)
Potential Absorbed Dose	<0.0001	4.63** (2.89,7.42)	51.94** (32.47,83.07)	11.21** (7.68,16.36)
2,4-D (2,4-dichlorophenoxyacetic acid)				
Potential Exposure Level	<0.0001	52.25** (29.55,92.38)	47.52** (25.29,89.31)	0.91 (0.46,1.78)
Potential Absorbed Dose	<0.0001	51.75** (29.24,91.58)	47.22** (25.10,88.85)	0.91 (0.47,1.79)
cis-Permethrin				
Potential Exposure Level ^a	--	--	--	--
Potential Absorbed Dose	<0.0001	22.00** (11.20,43.24)	2.60* (1.07,6.32)	0.12** (0.07,0.21)
trans-Permethrin				
Potential Exposure Level	<0.0001	24.32** (12.72,46.49)	3.52** (1.40,8.89)	0.14** (0.08,0.27)
Potential Absorbed Dose	<0.0001	24.29** (12.70,46.45)	3.38** (1.34,8.56)	0.14** (0.07,0.26)

Table S-6. Estimated Ratio Between Two Exposure Routes of Geometric Mean Potential Exposure Level and Potential Absorbed Dose Estimates in Participating OH Children, and 95% Confidence Intervals on This Ratio (cont.)

Parameter	Significance Level for Overall Differences Among the Three Exposure Routes	Ratio of Geometric Means (95%CI)		
		Dietary Ingestion Route vs. Inhalation Route	Dietary Ingestion Route vs. Indirect Ingestion Route	Inhalation Route vs. Indirect Ingestion Route
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)				
Potential Exposure Level	<0.0001	132.32** (76.69,228.30)	546.95** (313.76,953.47)	4.13** (2.59,6.59)
Potential Absorbed Dose	<0.0001	129.55** (75.17,223.29)	541.95** (310.36,946.37)	4.18** (2.63,6.65)

^a Model would not converge.

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

Table S-7. Estimated Ratio of Geometric Mean for Potential Exposure Level and Potential Absorbed Dose Estimates in NC Adults, Calculated Between Two Exposure Routes, and 95% Confidence Intervals on This Ratio

Parameter	Significance Level for Overall Differences Among the Three Exposure Routes	Ratio of Geometric Means (95%CI)		
		Dietary Ingestion Route vs. Inhalation Route	Dietary Ingestion Route vs. Indirect Ingestion Route	Inhalation Route vs. Indirect Ingestion Route
2,4-D (2,4-dichlorophenoxyacetic acid)				
Potential Exposure Level	<0.0001	40.74** (25.45,65.21)	379.85** (212.96,677.50)	9.32** (5.28,16.48)
Potential Absorbed Dose	<0.0001	40.88** (25.53,65.47)	379.64** (212.71,677.60)	9.29** (5.26,16.38)
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)				
Potential Exposure Level	<0.0001	41.76** (27.05,64.48)	358.70** (219.26,586.83)	8.59** (6.08,12.13)
Potential Absorbed Dose	<0.0001	41.74** (27.04,64.44)	358.31** (218.93,586.41)	8.58** (6.08,12.12)

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.

Table S-8. Estimated Ratio Between Two Exposure Routes of Geometric Mean Potential Exposure Level and Potential Absorbed Dose Estimates in Participating OH Adults, and 95% Confidence Intervals on This Ratio

Parameter	Significance Level for Overall Differences Among the Three Exposure Routes	Ratio of Geometric Means (95%CI)		
		Dietary Ingestion Route vs. Inhalation Route	Dietary Ingestion Route vs. Indirect Ingestion Route	Inhalation Route vs. Indirect Ingestion Route
2,4-D (2,4-dichlorophenoxyacetic acid)				
Potential Exposure Level	<0.0001	49.33** (31.89,76.32)	78.75** (40.28,153.93)	1.60 (0.85,3.00)
Potential Absorbed Dose	<0.0001	49.32** (31.89,76.27)	78.63** (40.16,153.96)	1.59 (0.84,3.01)
3,5,6-TCP (3,5,6-trichloro-2-pyridinol)				
Potential Exposure Level	<0.0001	102.37** (62.73,167.06)	907.46** (519.56,1584.93)	8.86** (5.70,13.79)
Potential Absorbed Dose	<0.0001	102.51** (62.72,167.53)	907.69** (519.81,1585.00)	8.85** (5.67,13.82)

* Statistically significantly different from 1 at the 0.05 level, but not at the 0.01 level.

** Statistically significantly different from 1 at the 0.01 level.