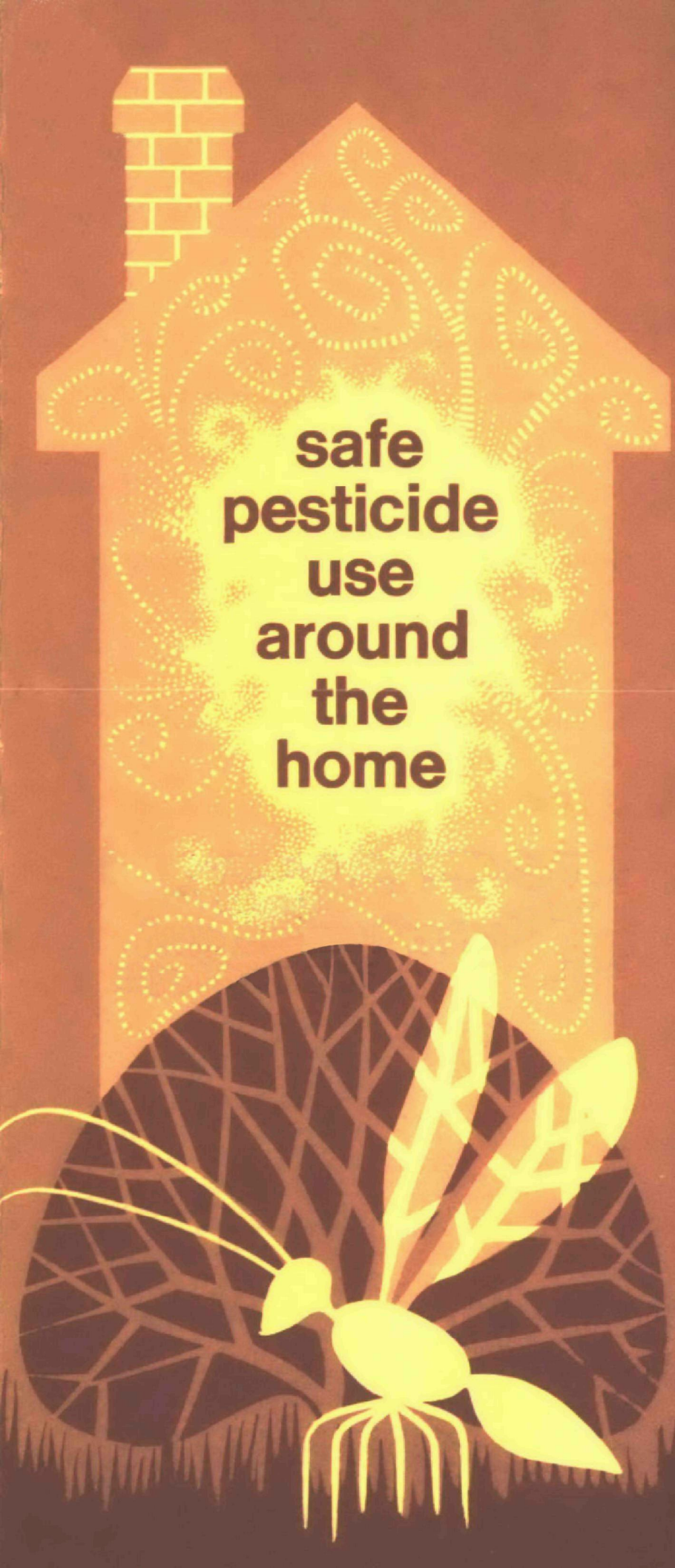
safe pesticide use around the home



Insecticides, herbicides, fungicides, disinfectants, rodenticides, animal repellants—chances are that you have one, some, or all of these around your home.

They are pesticides—products you use to help plants grow, to disinfect and sanitize your house, or to eliminate unwanted insect and animal pests. They are effective and useful products that make our lives better and help to keep us healthier. But they should be used carefully, according to directions, especially around your home and your family.

This booklet has been developed to help you to be more aware of the benefits and the hazards of pesticides and how to use them in a safe manner.

U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

September 1974

for your protection

The hazards and risks of using pesticides have increased in recent years with the sharp rise in their consumption. Congress acted on this problem in October 1972 by amending the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), substantially strengthened the Federal Government's ability to protect you, as a consumer, from hazards caused by the misuse of pesticides.

The law extends federal control to actual application of pesticides by the user and regulates both intrastate and interstate marketing of products. Thus, all pesticides legally sold in the United States will be registered by the Environmental Protection Agency (EPA). These products must carry an EPA registration number on the label which indicates that the product is safe and effective when used according to label directions. (Older products may have a U.S. Department of Agriculture (USDA) number on the label.) Currently nearly 34,000 pesticide products are registered by EPA and by October 1976, all such products must be registered.

danger: poison

Although under the amended FIFRA penalties may be levied against consumers who misuse pesticides, common sense demands that you regard all pesticides as poisons. Pesticides vary in their toxicity and in unwanted side effects but the misuse of any pesticide almost certainly endangers some part of our natural environment—people, pets, wildlife, plants or streams. Take the extra time and make the extra effort required to follow the proper safety measures when buying, storing or applying pesticides and disposing of leftover chemicals or empty containers.

buy with care

Before you buy—study the label. Is the product registered for use in or around the home or garden? Does it list the pest you want to eliminate? What are the safety precautions?

Pesticides are available in many forms. They come as powders or liquids that require mixing with water. Pre-mixed sprays are available in pressurized cans or containers with pumps. Dusts, pellets, paint-on compounds and many other formulations are also available. Get the one that best suits your purpose.

If a pesticide spray is for use against household pests, see whether it is a space spray or a surface spray. Surface sprays have coarser particles which leave a coating that kills crawling insects; space sprays are generally fine mists directed against flying insects. The two types are not interchangeable.

Whenever possible, choose the pesticide that is effective against only a few other pests in addition to the one you want to get rid of. This allows you to solve your problem without harming the beneficial life forms such as honeybees or parasites and predators that help control pests.

When planning to treat plants be sure you don't kill the plant along with the pest. Some compounds will kill or injure certain plants and manufacturers have formulated different compounds for the same pest in order to avoid this hazard. Don't endanger your prized plants; read the precautionary statements on the label.

safe storage

Children and pets are curious; put pesticides safely away as soon as you bring them home and immediately after each use. In the past several years, approximately 70 percent of the pesticide case reports received by poison control centers across the country involved children under five years of age.

Usually these accidental poisonings were the result of adult carelessness.

A locked cabinet in a well-ventilated utility area is the best place to store pesticides and the only reasonably safe place. Never put these compounds in cabinets with or near food, medical supplies, or cleaning materials. Always store pesticides in their original containers, complete with labels that list ingredients, directions for use, and antidotes in case of accidental poisoning. NEVER transfer pesticides to soft drink bottles or other containers that children associate with something to eat or drink.

safe application

Wear clothing that covers your arms and legs when working with pesticides. When you are ready to use a pesticide, always reread the label or leaflet. Never trust your memory.

If the material you chose must be mixed or diluted, do this outdoors or in a well-ventilated area. Mix only the amount you need and use recommended portions. Don't think that twice the recommended portion will do a better job. Actually, a higher concentration, like over-application, will only increase the risk of harm to plants or animals.

Keep children and pets away from areas where you mix or apply pesticides, and promptly clean up any spills.

Before applying pesticides, remove toys from the area to be treated. Remove food, dishes, pots and pans before treating kitchen cabinets and don't let pesticides get on these utensils. Wait until shelves are dry before refilling them.

Most surface sprays should be applied only to limited areas. Don't treat entire floors, walls or ceilings.

NEVER place rodent or insect baits where small children or pets can get to them.

Before spraying remove birds and pets and cover aquariums and fish bowls.

When spraying outdoors, cover fish ponds and avoid applying pesticides near dug wells. Always avoid over-application when treating the lawn, shrubs or garden. Run-off or seepage from excess pesticides may contaminate water supplies. In addition over-application may cause potentially harmful pesticide residues on vegetables and fruit grown in your garden.

When applying a herbicide, keep it from coming into contact with flowers and shrubs.

Never spray or dust outdoors on a windy day when the pesticide may drift back on you or kill or injure your own or neighbors' desirable plants.

Bypass birds' or squirrels' nests when treating trees. Avoid applying any pesticides to blooming plants, especially if you see honeybees and other pollinating insects around them.

Never smoke while applying pesticides. They can be carried from hand to mouth by cigarettes. In addition, some are flammable.

If you spill a pesticide on your skin, wash it off with soap and water right away. If you spill it on your clothing, remove the clothing, and wash the skin. Then launder the clothes before wearing them again.

finishing the job

When you have finished applying pesticides, clean any equipment that you used and safely dispose of any containers. Empty pesticide containers can be as hazardous as full ones because of residues left in them.

Wrap single, empty pesticide containers in several layers of newspaper and tie securely. Then, put them in a **covered** trash can if you have regular collection service. (If you do not, empty pesticide containers should be crushed and then buried at least 18 inches deep in a place on your land where there is no danger

of contaminating water. DO NOT, HOWEVER, PUNCTURE PRESSURIZED CONTAINERS!)

Normally, you should not burn pesticide boxes or sacks either outdoors or in apartment incinerators. Many compounds do not decompose under these conditions, and the updraft from the fire will carry the chemicals long distances.

Exceptions may be made for small quantities of certain empty pesticide containers. Those formerly containing organic or metallo-organic pesticides other than organic mercury, lead, cadmium or arsenic compounds may be burned. However, incineration should never take place in densely populated areas. It is best to dispose of these containers in a covered trash can, too.

Never pour leftover pesticides down the sink or into toilet bowls. (Only solutions labeled for use in cleaning pipes and toilet bowls should be used in this manner.) Chemicals can interfere with the operation of septic tanks. In addition, waterways may be polluted because many municipal waste disposal systems do not remove all pesticide residues from the effluent water. Avoid this problem by planning ahead when you begin

the job and mixing only the amount of pesticide that you will use.

After spraying and cleaning all equipment, wash your hands and face with soap and water as a matter of routine, regardless of whether you spilled any pesticide on yourself.

when emergency strikes

If you get a pesticide in your eyes, flush them with water for 15 minutes and call a doctor.

If someone accidentally swallows a pesticide, quickly check the container. It may recommend an antidote or other first aid. Call a doctor in any case. Read him the label, including the active ingredient of the pesticide. Take the labeled container along if you go to the doctor or a hospital.

Poison Control Centers are available to all doctors. They can call these Centers for additional advice and information on antidotes for specific pesticides.

for more information

EPA as a regulatory agency cannot recommend specific chemicals or brands. However, additional information on pesticide use and safety is available from the EPA or its regional offices, Cooperative Extension Service in States and counties, other agricultural authorities, and county health departments. Names and numbers are listed in your local telephone directory.

an ounce of prevention

The first step in any home pest control program is prevention. Insects and rodents come onto your property or into your home in search of food or shelter. By taking sensible precautionary measures you can make your living spaces less attractive to unwanted visitors.

Particular attention should be paid to food storage. Crumbs and other food scraps should

be completely cleaned up. Air out woolens, clothing drawers and closets where moths lay eggs. Air out places such as bath and laundry rooms which tend to collect moisture. This will discourage the growth of mildew and other fungi.

Keep your property free of litter that could provide a breeding ground for flies or rats. Be especially careful to keep wood away from buildings because it can lead termites right to your home. Eliminate breeding grounds for mosquitos by getting rid of places where water can collect and stagnate.

Remember that birds, given food and shelter, tend to stay around the home and garden and can be a considerable asset in insect control. The ladybug and the praying mantis are insect predators that destroy aphids and other harmful pests. Bees are needed for pollination of fruits and flowers. Misused, pesticides can destroy these helpful allies. Therefore, the guiding rule of any pest control project should be: Do no harm.

Before you resort to pesticides, be certain that chemical control is the best solution. If you have any doubts about the nature of your pest problem or how to cure it, check with your County Extension Agent. Use natural controls first, but if chemical control is necessary:

- get the proper pesticide for the specific problem;
- read the label;
- store it securely;
- apply it properly;
- clean up thoroughly; and
- dispose of containers safely.

Following these few basic rules will help insure your safety and that of your family.

potential hazards

Improper or careless pesticide use may result in harmful side-effects.

For example:

Persistence—some materials may remain in the environment for long periods of time and pollute the air, water and soil. This is especially true if a pesticide is applied in excessive amounts or at higher concentrations than recommended, or if improperly disposed of.

Broad-spectrum effects—some pesticides affect many different life forms, destroying beneficial as well as harmful insects.

Harm to plants or animals—improperly used, some pesticides can harm plants, birds, fish, squirrels or other wildlife.

Harm to humans—certain pesticides can injure the applicator if consumed, absorbed through the skin, or inhaled. Children or pets may also be affected unless pesticides are used and stored properly.

benefits

Used properly, pesticides are invaluable in the protection of human and animal health and in the production of food and fiber.

For example:

Homeowners have at their disposal easy-to-use pesticides that eliminate pests in and around the house, protect clothing against moths, and disinfect living quarters.

Home gardeners can protect their ornamentals or vegetables with pesticides, including compounds that break down within a relatively short time. This reduces residue problems.

Farmers use pesticides to produce the crops that provide Americans with abundant, wholesome food supplies and make this country a major source of food and fiber for the world.

Human lives by the tens of thousands have been saved from malaria, typhus, and other deadly diseases through the planned use of pesticides.

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