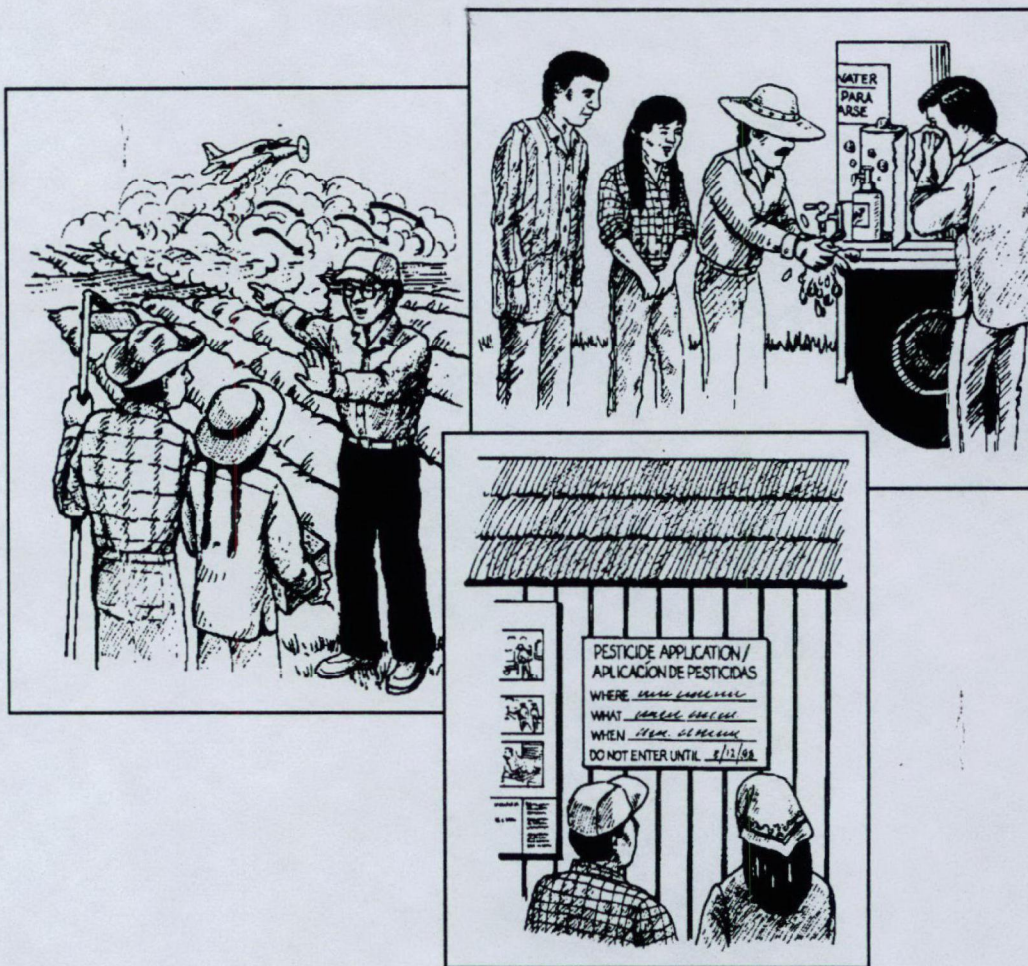




Protect Yourself from Pesticides:

Safety Training for Agricultural Workers



Training Notebook

This training notebook was prepared by the

Occupational Safety Branch (7506C)

Office of Pesticide Programs

U.S. Environmental Protection Agency

401 M Street, S.W.

Washington, DC 20460

(703) 305-7666

For More Information

If you need more information about the Worker Protection Standard or have questions or concerns about pesticides, contact the agency responsible for regulating pesticides in your area or the EPA Regional Office nearest you.

Region 1 (MA, CT, RI, NH, VT, ME)

U.S. Environmental Protection Agency, Region 1
Pesticides and Toxic Substances Branch (APT)
1 Congress St.
Boston, MA 02203
(617) 565-3273

Region 2 (NY, NJ, PR, VI)

U.S. Environmental Protection Agency, Region 2
Pesticides and Toxic Substances Branch (MS-105)
2890 Woodbridge Ave., Building #10
Edison, NJ 08837-3679
(908) 321-6765

Region 3 (PA, MD, VA, WV, DE)

U.S. Environmental Protection Agency, Region 3
Toxics and Pesticides Branch (3AT-30)
841 Chestnut Building
Philadelphia, PA 19107
(215) 597-8598

Region 4 (GA, NC, SC, AL, MS, KY, FL, TN)

U.S. Environmental Protection Agency, Region 4
Pesticides & Toxic Substances Branch (4-APT-MD)
345 Courtland St., N.E.
Atlanta, GA 30365
(404) 347-5201

Region 5 (IL, MI, MN, IN, OH, WI)

U.S. Environmental Protection Agency, Region 5
Pesticides and Toxic Substances Branch (SP-14-J)
77 W. Jackson Blvd.
Chicago, IL 60604
(312) 886-6006

Region 6 (TX, OK, AR, LA, NM)

U.S. Environmental Protection Agency, Region 6
Pesticides and Toxics Branch (6T-P)
1445 Ross Ave.
Dallas, TX 75202-2733
(214) 655-7235

Region 7 (MO, KS, IA, NB)

U.S. Environmental Protection Agency, Region 7
Toxics and Pesticides Branch (TOPE)
726 Minnesota Ave.
Kansas City, KS 66101
(913) 551-7020

Region 8 (CO, MT, ND, SD, UT, WY)

U.S. Environmental Protection Agency, Region 8
Toxic Substances Branch (8ART-TS)
One Denver Place, Suite 500
999 18th St.
Denver, CO 80202-2405
(303) 293-1730

Region 9 (CA, NV, AZ, HI, GU)

U.S. Environmental Protection Agency, Region 9
Pesticides and Toxics Branch (A-4)
75 Hawthorne St.
San Francisco, CA 94105
(415) 744-1090

Region 10 (WA, OR, ID, AK)

U.S. Environmental Protection Agency, Region 10
Pesticides and Toxic Substances Branch (AT-083)
1200 Sixth Ave.
Seattle, WA 98191
(206) 553-1918

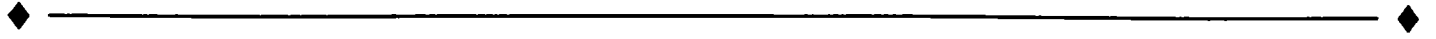
Protect Yourself from Pesticides:

Safety Training for Agricultural Workers

Training Notebook

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Introduction

Few chemicals have had as much impact or been the subject of as much controversy in recent decades as pesticides. Introduced on a massive scale following the Second World War, pesticides have become an integral part of American agricultural production, making possible the most plentiful and the safest food supply in human history.

Over time, however, public concerns have mounted about the toxic effects of chemical pesticides. Pesticide residues in food, farmworker exposure to pesticides, and pesticide contamination of ground water have all contributed to a growing unease over the widespread use of pesticides.

Some of these concerns have had beneficial results. Consumers are using more caution in handling pesticides and in limiting their exposures to pesticides in food. In the agricultural community, many growers are using fewer chemical pesticides and adopting a more integrated approach to managing pests. And new pesticides coming on the market tend to be less toxic than the chemicals they replace. While all of these are encouraging signs, pesticides nevertheless remain a fact of our daily lives. Managing pesticides to minimize their risks and maximize their benefits is the task we face.

The U.S. Environmental Protection Agency (EPA) has been charged by Congress with the job of regulating the use of pesticides and balancing the risks and benefits associated with pesticide use.

To carry out this task, EPA has developed a variety of regulatory and educational programs to protect human health and the environment from the harmful effects of pesticides. These programs include registering pesticides for specific uses, setting tolerances that limit the amount of pesticide residues allowed on food, setting standards to protect workers who are exposed to pesticides, certifying and training pesticide applicators, and educating consumers about pesticide use and exposure.

Regulating Pesticides: EPA's Role

EPA regulates the use of pesticides in the United States under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). No pesticide may legally be sold or used in the United States unless it bears an EPA registration number. It is a violation of the law for any person to use a pesticide in a manner inconsistent with its label.

FIFRA gives EPA the authority and responsibility for registering pesticides for specified uses, provided that such uses do not pose an unreasonable risk to human health or to the environment.

FIFRA includes provisions for monitoring the distribution and use of pesticides and imposing civil as well as criminal penalties for violations. For example, it is unlawful under FIFRA to use a registered pesticide product in a manner inconsistent with its label.

State Enforcement

Since 1978, States and Tribes have been given primary enforcement responsibility for pesticide use violations, subject to oversight by EPA. Through cooperative enforcement agreements, all States (except Wyoming) and several Tribes have assumed primary enforcement responsibility. (EPA sets FIFRA enforcement policy and conducts compliance monitoring and enforcement programs in Wyoming.)

Cases of pesticide misuse or accidents should be reported to the State or Tribal agency with responsibility for pesticides—generally the State Department of Agriculture. Such cases also may be reported to an EPA Regional Office (see pages i and ii).

The Revised Worker Protection Standard

In August 1992, EPA issued revised regulations governing the protection of employees on farms, forests, nurseries, and greenhouses from occupational exposures to agricultural pesticides. The new Worker Protection Standard (WPS) covers both workers in areas treated with pesticides and employees who handle (mix, load, apply, etc.) pesticides for use in these areas.

EPA determined that its previous regulations were inadequate to protect agricultural workers and pesticide handlers who are occupationally exposed to pesticides. The revised regulations are intended to reduce the risk of pesticide poisonings and injuries among agricultural workers and pesticide handlers through appropriate exposure reduction measures.

The regulations expand the requirements for warnings about pesticide applications, use of personal protective equipment, and restrictions on entry to treated areas. New requirements are added for decontamination, emergency assistance, maintaining contact with handlers of highly toxic pesticides, and pesticide safety training.

Pesticide registrants are required to add appropriate labeling statements referring to these regulations and specifying application restrictions and other requirements.

The provisions in the revised Worker Protection Standard apply to the working conditions of two types of employees:

- ◆ **agricultural workers**—those who perform tasks related to the cultivation and harvesting of plants on farms or in greenhouses, nurseries, or forests, and
- ◆ **pesticide handlers**—those who handle agricultural pesticides (mix, load, apply, clean or repair equipment, act as flaggers, etc.).

Concern Over Pesticides

In recent years, concerns over the toxic effects of chemical pesticides have mounted. The toxic effects of pesticides are of particular concern for growers, pesticide handlers, and farmworkers who are exposed to pesticides in their daily work. Where chemical pesticides are in use, growers, handlers, and agricultural workers must work together to reduce their exposure to the chemicals.

The Health Risks of Pesticides

The term *pesticide* refers to any chemical substance used to kill or control pests such as insects, weeds, and other organisms. Pesticides can also hurt—even kill—people. WPS is aimed at protecting workers from pesticide poisoning.

The dangers of pesticide poisoning are real. Short-term exposures to pesticide residues or sprays can result in acute illnesses ranging from headaches, eye irritation, and upper respiratory complaints to depression and fatigue. Exposures to high levels of some pesticides over a long period of time can inhibit an enzyme called cholinesterase, causing symptoms such as nausea, weakness, dizziness, excessive sweating, salivation, vomiting, abdominal pain, diarrhea, blurred vision, slurred speech, and rapid heart rate.

The effects of chronic exposure to low levels of pesticides can be as serious or more serious. The medical literature links pesticides to a variety of chronic diseases including cancer (particularly leukemia), birth defects, blood disorders, sterility, abnormalities in liver and kidney function, genetic damage, and neurological, psychological, and behavioral effects.

How Many People Are Affected?

Millions of people are exposed to pesticide products or residues through their work. Farmers and agricultural workers and their families are potentially at risk from direct, indirect, or accidental exposure to pesticides. This includes breathing pesticide fumes, having skin contact with pesticide residues or pesticide spills, and swallowing or absorbing pesticides from contaminated water.

Some 10,000–20,000 acute pesticide poisoning incidents are diagnosed annually by physicians. However, this is probably only a fraction of the true number of cases. All available evidence indicates that pesticide-related illnesses frequently go unrecognized and, even when recognized, often go unreported. Even so, data collected by the U.S. Department of Labor suggest that agricultural workers suffer the highest rate of chemical-related illnesses of any occupational group—about five times greater than that of other industries.

According to one physician who has treated pesticide poisoning, “Workers are exposed to unknown chemicals about which they have the unfortunate combination of no information and great fear.”

The Revised WPS

EPA revised the WPS for agricultural pesticides in August 1992. The revised WPS supplants the previous rule issued in 1974, which was widely acknowledged to offer inadequate protection for agricultural workers and pesticide handlers. The revised WPS will reduce the risk of pesticide poisonings and injuries among agricultural workers and pesticide handlers through reducing their exposure to pesticides.

The revised WPS covers 3.9 million workers employed on farms, forests, nurseries, and greenhouses. It is the product of extensive consultations with workers, growers, States, industry, and other Federal agencies. Evidence shows that pesticide illnesses in agricultural workers result when safety precautions are not taken.

The revised WPS expands requirements for warnings about pesticide applications, use of personal protective equipment, and restrictions on entry to treated areas. New requirements are added for decontamination, emergency assistance, maintaining contact with handlers of highly toxic pesticides, and pesticide safety training. Pesticide registrants are required to modify their product labels to adhere to the revised regulations. These modified labels will begin to appear in the marketplace in late 1993 and early 1994.

The new standard offers the opportunity for growers, workers, and handlers to help protect themselves and one another from pesticides. Compliance with the new rule is expected to avert 80 percent of the adverse health effects of pesticides. Associated benefits to employers include reduction of lost work time, reduced medical expenses, and increased productivity.

How will the WPS protect agricultural workers?

The WPS will—

- ♦ reduce exposure to pesticides,
- ♦ mitigate exposures that do occur, and
- ♦ inform employees about the hazards of pesticides.

How does the WPS reduce pesticide exposure?

The WPS reduces pesticide exposure to agricultural workers through these requirements:

- ♦ **Restricted-Entry Intervals (REIs)**

REIs are established for all pesticides used in the production of agricultural plants. The REI for each pesticide is based on the product toxicity. REIs range from 12 to 72 hours.

Agricultural workers are excluded from areas under an REI, with only narrow exceptions.

- ♦ **Notification about Pesticide Applications**

Workers must be notified about treated areas so they can avoid inadvertent exposures. In most cases, employers can notify workers either orally or by posting a warning sign at entrances to the pesticide-treated area. However, some product labels will require both oral and posted notification.

How will WPS requirements mitigate pesticide exposure?

The WPS includes two key provisions to mitigate pesticide exposure:

- ♦ **Decontamination Supplies**

Workers must be provided with water, soap, and towels for routine washing. The decontamination supplies must be within ¼ mile of the workers unless the worksite cannot be reached by vehicles (i.e., cars, trucks, tractors).

- ♦ **Emergency Assistance**

Employers must make transportation available to a medical care facility if an agricultural worker may have been poisoned or injured by a pesticide. Employers must also provide information about the pesticide(s) to which the worker may have been exposed.

What are the WPS provisions for informing agricultural workers about the hazards of pesticides?

The WPS provides information about pesticide hazards through these requirements:

- ◆ **Pesticide Safety Training**

All agricultural workers must receive pesticide safety training. The pesticide safety training requirements are described in Unit Two of this notebook.

- ◆ **Pesticide Safety Poster**

EPA has prepared an English/Spanish pesticide safety poster. This poster, or its equivalent, must be displayed at a central location on every agricultural establishment where pesticides are used.

- ◆ **Specific Information About Pesticide Applications**

At the central location on the agricultural establishment, information about recent pesticide applications must be displayed. This information includes the location and description of the area treated, time and date of scheduled application, and the product name, EPA registration number, and active ingredient(s) for each pesticide used. The information also must include the restricted-entry interval (REI) for the pesticide. (The REI is the time after a pesticide application when entry into the treated area is strictly limited.)

Who needs pesticide safety training?

The revised WPS requires pesticide safety training for all agricultural workers and pesticide handlers. Workers, in general, perform hand labor tasks, such as weeding, planting, cultivating, and harvesting, or other tasks involved in the production of agricultural plants. Pesticide handlers, in general, mix, load, or apply pesticides, or do other tasks that bring them into direct contact with pesticides.

Separate WPS training programs are required for agricultural workers and for pesticide handlers. EPA has developed training materials for both programs.

What is the purpose of this notebook?

This training notebook was prepared for those who will conduct pesticide safety training programs for agricultural workers. It provides valuable information that—

- ◆ Describes the WPS protections for agricultural workers.
- ◆ Explains the WPS safety training requirements for agricultural workers.
- ◆ Provides helpful advice for training delivery.
- ◆ Explains the EPA training verification program.

EPA is producing separate materials for use by trainers of pesticide handlers.

When must workers be trained?

After April 15, 1994, workers must be trained about general pesticide safety before they accumulate more than 15 separate days of entry into treated areas. These 15 days need not be consecutive and may occur over several periods of employment or over several seasons or years.

.....
Important: Beginning October 20, 1997, workers must be trained before they accumulate more than 5 separate days of entry into treated areas.
.....

Workers must be trained at least once every 5 years.

For more information about the new WPS, see *The Worker Protection Standard for Agricultural Pesticides—How To Comply: What Employers Need To Know*. Information about how to obtain the *How To Comply* manual and other WPS materials is found in a separate section of this notebook. You may also contact the Agency responsible for pesticide regulation in your area.

What materials must be used in the training program?

The WPS lists 11 concepts that must be covered in worker safety training (see details below). *Protect Yourself from Pesticides* is a safety program developed by EPA to cover these 11 concepts. The program is designed to help agricultural workers learn how to work safely where pesticides are used. To conduct worker safety training, trainers must (1) use written and/or audiovisual materials and (2) present the training orally or audiovisually.

EPA has prepared a training handbook to use in the pesticide safety training for agricultural workers. The handbook is entitled *Protect Yourself from Pesticides: Guide for Agricultural Workers*. EPA recommends distributing the worker safety handbook to workers whenever safety training is conducted. EPA also has produced a training flipchart that uses the handbook text and drawings and includes valuable background information for the trainer. The flipchart or the handbook may be used by trainers to deliver pesticide safety training according to the WPS requirements.

Other organizations are developing training materials that meet the WPS training requirements. EPA will be compiling and updating a listing of these materials. The list will be available from EPA Headquarters and the EPA Regional Office for your State.

Are there training requirements in addition to the WPS requirements?

Some States and Tribes have additional requirements for pesticide safety training for agricultural workers. Contact the agency responsible for pesticide enforcement in your area to obtain information needed to comply with all State or Tribal requirements.

Who can conduct WPS training?

To conduct WPS worker safety training, you must meet at least one of the following criteria:

1. Currently be a certified applicator of restricted-use pesticides. OR
2. Currently be designated as a trainer of certified pesticide applicators or pesticide handlers by a State, Federal, or Tribal agency having jurisdiction. OR

-
3. Have completed a pesticide-safety train-the-trainer program approved by a State, Federal, or Tribal agency having jurisdiction. OR
 4. Currently be trained (as specified in EPA's certification and training regulations) as a handler who works under the supervision of a certified pesticide applicator. OR
 5. Currently be trained as a WPS pesticide handler. Because pesticide handlers do jobs that may bring them into direct contact with pesticides, WPS handler training is more detailed and technical than worker training.

Also, be sure you meet the trainer criteria established by the State or Tribe with jurisdiction over the area where you do your training.

If you do not meet one of the WPS criteria, you may not deliver training that meets WPS requirements.

What are the requirements for delivering WPS worker safety training?

The specific criteria for delivering WPS worker safety training are listed below. Some States and Tribes have additional requirements for pesticide safety training for agricultural workers. Contact the Agency responsible for pesticide enforcement in your area to obtain information needed to comply with all State or Tribal requirements.

What has to be covered in WPS worker safety training?

The WPS lists 11 concepts that must be covered in worker safety training (see below). The EPA flipchart and handbook present each of the required concepts. If the flipchart or the handbook is used to deliver training, and if you meet the criteria for trainers and for how to conduct training, your training will comply with the WPS.

Remember, if you want your training to comply with the WPS requirements, you must cover **every** concept in the flipchart or the handbook. If you leave information out, your training will not meet the WPS requirements. Be sure your training also complies with the State or Tribal requirements where you do your training.

WPS pesticide safety training must convey all of the following information:

1. Descriptions of where and in what form pesticides may be encountered during work activities.
2. Hazards of pesticides resulting from toxicity and exposure, including acute and chronic effects, delayed effects, and sensitization.
3. Routes through which pesticides can enter the body.

-
4. Signs and symptoms of common types of pesticide poisoning.
 5. Emergency first aid for pesticide injuries or poisonings.
 6. Instructions on how to obtain emergency medical care.
 7. Routine and emergency decontamination procedures, including emergency eyeflushing techniques.
 8. Hazards from chemigation and drift.
 9. Hazards from pesticide residues on clothing.
 10. Warnings about taking pesticides or pesticide containers home.
 11. Requirements of the WPS designed to reduce the risks of illness or injury resulting from workers' occupational exposure to pesticides, including application and entry restrictions, the design of the warning sign, posting of warning signs, oral warnings, the availability of specific information about applications, and protection against retaliatory acts.

How do trainers conduct WPS training?

To conduct WPS worker safety training, trainers must—

1. Use written and/or audiovisual materials.
2. Present the training orally or audiovisually.
3. Present the training in a manner the trainees can understand, using a translator if necessary.
4. Use nontechnical terms the workers can understand.
5. Respond to trainees' questions.

If there are additional State or Tribal requirements, be sure to observe them as well.

What are the additional training requirements for early-entry workers?

In general, workers may not enter a treated area during a Restricted-Entry Interval (REI). Early entry that will result in contact with surfaces treated with pesticides is permitted in only three work situations:

- ◆ short-term tasks that last less than one hour and do not involve hand labor,
- ◆ emergency tasks that take place because of an agricultural emergency, and
- ◆ specific tasks approved by EPA through a formal exception process.

Early-entry workers must receive pesticide safety training for workers **before** entering a treated area on the agricultural establishment during an REI. The 5-day (or 15-day) grace period for training that applies to other agricultural workers does not apply to early-entry workers.

In addition to the basic pesticide safety training, early-entry workers must receive specific information and instructions **before** beginning an early-entry task:

- ◆ how to put on, use, and take off the early-entry personal protective equipment (PPE) that is specified on the product label for early-entry tasks,
- ◆ the importance of washing thoroughly after removing PPE, and
- ◆ how to prevent, recognize, and give correct first aid for heat illness (too much heat stress).

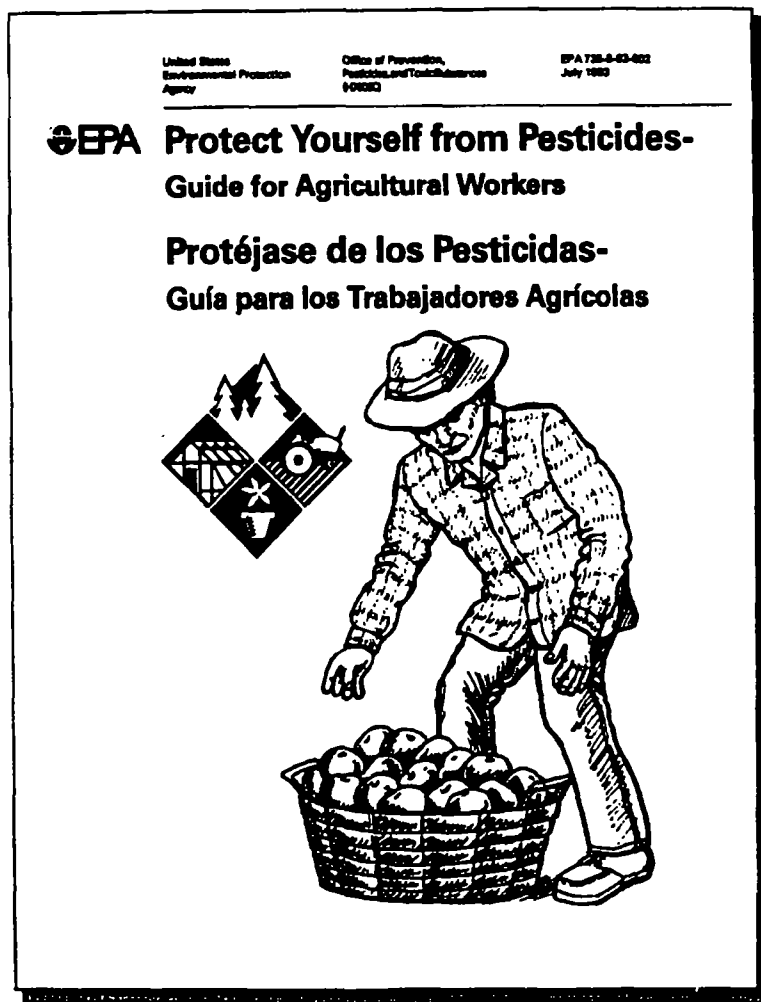
Early-entry workers must also be informed, in a manner they can understand, about the safety information and instructions on the pesticide label(s) to which the REI applies, including

- ◆ human hazard statements and precautions,
- ◆ first aid,
- ◆ signs and symptoms of poisoning,
- ◆ PPE required for early entry, and
- ◆ any other precautions or instructions related to safe use or early entry.

Option: Workers who will do early-entry tasks may read the labeling themselves, if they are able to read and understand it.

Worker Handbook

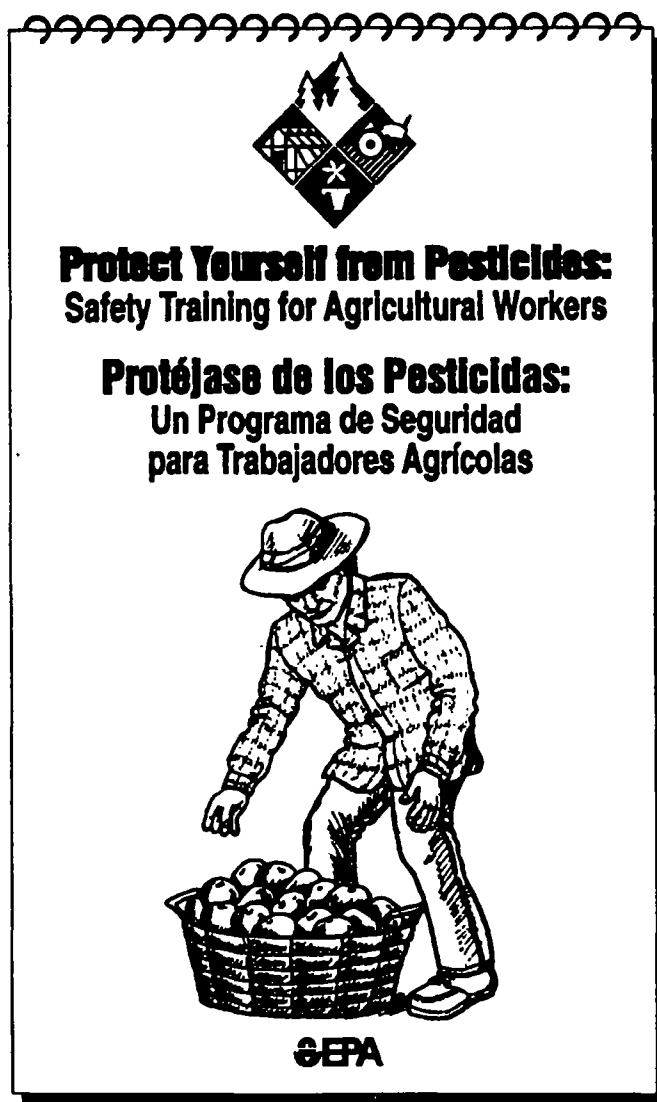
Training agricultural workers? Looking for a guide with all the information that workers need to know about basic pesticide safety? You need . . .



The English/Spanish WPS Safety Handbook *Protect Yourself from Pesticides: Guide for Agricultural Workers* is available from a number of sources including the Government Printing Office (GPO). To order a copy from GPO, call (202) 783-3238. The reference number is 055-000-00443-9. The handbook may also be available from your local Cooperative Extension Service office, your State Pesticide Regulatory office, or the EPA Regional Office for your State. EPA plans to translate the handbook into other languages and will announce the availability of each translated version.

Flipchart

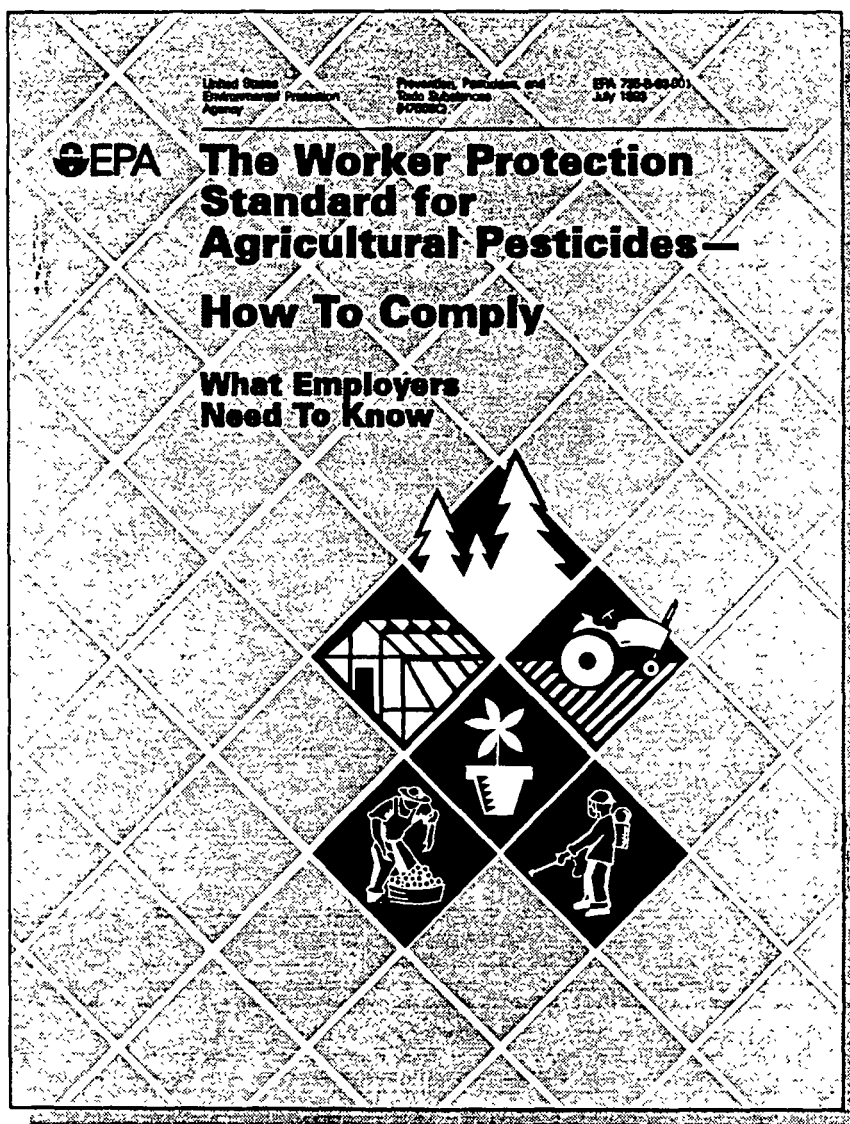
Training agricultural workers outdoors? You need the easy-to-use, portable training tool with all the information that workers need to know about basic pesticide safety . . .



Production and distribution of the training flipchart is now being determined by EPA. For information about obtaining the flipchart, contact the EPA Regional Office for your State.

How To Comply Manual

Are you asked questions about WPS during your training sessions? Are you looking for one guide that clearly states the WPS requirements and details the restrictions, exceptions, exemptions, and options? You need . . .




The WPS *How To Comply* manual is available from a number of sources including the Government Printing Office (GPO). To order a copy from GPO, call (202) 783-3238. The reference number is 055-000-00442-1. The manual may also be available from your local Cooperative Extension Service office, your State Pesticide Regulatory office, or the EPA Regional Office for your State.

Quick Reference Guide Poster


Do you, or agricultural employers you know, want a brief, handy guide to the Worker Protection Standard requirements? You need . . .

Quick Reference Guide to the 1992 Worker Protection Standard (WPS)

 The Environmental Protection Agency (EPA) revised the Worker Protection Standard (WPS) for Agricultural Pesticides in 1992. The WPS is a Federal regulation designed to protect agricultural workers (people involved in the production of agricultural plants and products) from pesticides through training, labeling, or applying pesticides or doing other tasks involving direct contact with pesticides.


This poster presents the essential WPS requirements. It does not include exceptions that may permit agricultural employers to do less or systems that may involve different requirements. This will be in compliance with the Federal WPS if you make sure that the requirements listed here are met. There are some exceptions for owners of agricultural establishments and members of their immediate families.

Some States and Tribes having jurisdiction over the enforcement of pesticide use may have additional worker protection requirements.



EPA has prepared a poster "Worker Protection Standard for Agricultural Pesticides: How to Comply—What Employers Must Do." The poster is available from the U.S. Government Printing Office (GPO), Washington, D.C. 20540, (202) 783-3238. (Distribution fee: \$1.00 per copy plus \$0.50 per copy for shipping and handling.) This poster also is available from EPA Publications Order (204-000-000-1).

For more information about the WPS, contact the agency responsible for pesticides in your area: the EPA regional office nearest you, or EPA Headquarters at the address: Occupational Safety Health (OSHA), Office of Pesticide Programs, EPA, Washington, D.C. 20460. (202) 783-7000.



Duties for All Employers

And-Resilience

Do not allow anyone to handle or use except in emergency use the WPS.

Information at a Central Location

1. In an outdoor establishment, make sure that agricultural establishments, display information:
 - the WPS safety poster;
 - safety, training, and information materials; and
 - other information materials.
2. Do not allow anyone to handle or use except in emergency use the WPS.
3. Do not allow anyone to handle or use except in emergency use the WPS.
4. Do not allow anyone to handle or use except in emergency use the WPS.
5. Do not allow anyone to handle or use except in emergency use the WPS.

Prohibited Safety Training

Do not allow anyone to handle or use except in emergency use the WPS.

1. Do not allow anyone to handle or use except in emergency use the WPS.
2. Do not allow anyone to handle or use except in emergency use the WPS.
3. Do not allow anyone to handle or use except in emergency use the WPS.
4. Do not allow anyone to handle or use except in emergency use the WPS.
5. Do not allow anyone to handle or use except in emergency use the WPS.

Decontamination Sites

1. Establish decontamination sites within 100 feet of all pesticide application areas.
2. Establish decontamination sites within 100 feet of all pesticide application areas.
3. Establish decontamination sites within 100 feet of all pesticide application areas.
4. Establish decontamination sites within 100 feet of all pesticide application areas.
5. Establish decontamination sites within 100 feet of all pesticide application areas.

Emergency Assistance

When any worker or member of his family has been exposed to a pesticide, the employer must:

1. Immediately call the nearest hospital or clinic.
2. Immediately call the nearest hospital or clinic.
3. Immediately call the nearest hospital or clinic.
4. Immediately call the nearest hospital or clinic.
5. Immediately call the nearest hospital or clinic.

Additional Duties for Worker Employers

Restrictions During Applications

1. Do not allow anyone to handle or use except in emergency use the WPS.
2. Do not allow anyone to handle or use except in emergency use the WPS.
3. Do not allow anyone to handle or use except in emergency use the WPS.
4. Do not allow anyone to handle or use except in emergency use the WPS.
5. Do not allow anyone to handle or use except in emergency use the WPS.

Restricted-Entry Intervals (REI's)

During any REI, do not allow anyone to enter or perform any work in or near the treated area.

Notice About Applications

1. Give notice to workers before any application.
2. Give notice to workers before any application.
3. Give notice to workers before any application.
4. Give notice to workers before any application.
5. Give notice to workers before any application.

Additional Duties for Handler Employers

Application Restrictions and Monitoring

1. Do not allow anyone to handle or use except in emergency use the WPS.
2. Do not allow anyone to handle or use except in emergency use the WPS.
3. Do not allow anyone to handle or use except in emergency use the WPS.
4. Do not allow anyone to handle or use except in emergency use the WPS.
5. Do not allow anyone to handle or use except in emergency use the WPS.

Equipment Safety

1. Do not allow anyone to handle or use except in emergency use the WPS.
2. Do not allow anyone to handle or use except in emergency use the WPS.
3. Do not allow anyone to handle or use except in emergency use the WPS.
4. Do not allow anyone to handle or use except in emergency use the WPS.
5. Do not allow anyone to handle or use except in emergency use the WPS.

Personal Protective Equipment (PPE)

1. Do not allow anyone to handle or use except in emergency use the WPS.
2. Do not allow anyone to handle or use except in emergency use the WPS.
3. Do not allow anyone to handle or use except in emergency use the WPS.
4. Do not allow anyone to handle or use except in emergency use the WPS.
5. Do not allow anyone to handle or use except in emergency use the WPS.

The Quick Reference Guide is included in this notebook and in the *How To Comply* manual. The poster version of the Quick Reference Guide is available from the Government Printing Office (GPO). To order a copy from GPO, call (202) 783-3238. The reference number is 055-000-00445-5.

UNIT THREE ♦ WPS TRAINING MATERIALS

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Other WPS Materials

◆ Training Video for Agricultural Workers

An English/Spanish video covering the WPS safety training requirements for workers is scheduled to be available in early 1994. EPA will announce the availability of the video.

◆ WPS Pesticide Safety Poster

The safety poster that must be displayed on agricultural establishments at a central location is available from a number of sources including the Government Printing Office (GPO). The colorful poster presents the required messages simply using drawings and English/Spanish text. To order a copy from GPO, call (202) 783-3238. The reference number is 055-000-00444-7.

The safety poster may also be available from your local Cooperative Extension Service office, your State Pesticide Regulatory office, or the EPA Regional Office for your State.

◆ Pesticide Safety Training for Pesticide Handlers

EPA, in conjunction with the U.S. Department of Agriculture Cooperative Extension Service, will complete the safety training handbook for pesticide handlers in late December 1993. A training video for pesticide handlers will be available in Spring 1994. These materials will cover the training required by the WPS. EPA will announce the availability of the handbook and the video.

◆ WPS Field Warning Sign

The WPS field warning sign that is used to notify employees of pesticide applications is complete and available from agricultural supply houses and other printing sources.

◆ WPS Leaflets

A series of leaflets is being produced to aid in the outreach plan for the Worker Protection Standard. These leaflets are designed so that they can be placed in pockets of a WPS informational poster that EPA is producing. The leaflets cover such issues as WPS key elements, accelerated provisions, instructions for crop advisors, the *How To Comply* Quick Reference Guide, field posting requirements, and other issues. EPA will announce the availability of the leaflets.

◆ **Guide to Heat Stress in Agriculture**

The *Guide to Heat Stress in Agriculture* is a joint EPA and Occupational Safety and Health Administration (OSHA) publication. The Guide offers practical, step-by-step guidance to nontechnical managers on how to set up and operate a heat stress control program and how to tailor a program to particular conditions of agriculture and agricultural pesticide handling. The target audiences are private and commercial pesticide applicators and agricultural employers. The Guide has received final EPA clearance and is awaiting final clearance from OSHA. Separate summary charts in English and Spanish are being prepared. EPA will announce the availability of the Guide.

◆ **How To Comply Slide Set for Agricultural Employers**

EPA, in conjunction with the Cooperative Extension Service (CES) at the University of Florida, produced a half-hour slide program on compliance with the WPS. The program has been distributed to State and County CES offices, to the State Pesticide Regulatory offices, and to many other organizations. The program is packaged with the slides, the script and tape (English and Spanish), the *How To Comply* manual, the WPS field warning sign, a bulletin on WPS compliance dates, and the WPS Quick Reference Guide.

◆ **How To Comply (HTC) Video**

The HTC slides have been compiled onto a videotape. This tape was distributed to Cooperative Extension Service offices, State Pesticide Regulatory offices, and other organizations.

◆ **Materials Developed by Other Organizations**

Other organizations are developing training materials that meet the WPS training requirements. EPA will be compiling and updating a listing of these materials. The list will be available from EPA Headquarters and the EPA Regional Office for your State.

Recommendations for Effective Training

UNIT

4

Trainers' Goals

- ◆ To help agricultural workers stay safe and healthy when they work around pesticides.
- ◆ To familiarize agricultural workers with pesticide safety information.
- ◆ To meet the training requirements of the Worker Protection Standard and any local training requirements.

Trainees' Goals

As a result of this safety training program, workers should be able to protect themselves from pesticides because they know—

- ◆ How to prevent exposure to pesticides.
- ◆ What to do if they are exposed to a pesticide.
- ◆ Where to get information about pesticides.
- ◆ What employers must do to help protect workers from pesticides used at work.

Materials Needed

To ensure coverage of the 11 concepts required by WPS, trainers are encouraged to use at least one of the training publications developed by EPA:

Handbook *Protect Yourself from Pesticides: Guide for Agricultural Workers*

Flipchart *Protect Yourself from Pesticides: Safety Training for Agricultural Workers*

Special Note: Trainers should use EPA-developed or EPA-approved materials for WPS training. EPA-approved materials must be equivalent to EPA-developed materials and include the 11 concepts listed on pages 10 and 11 in Unit Two of this Training Notebook.

Training Time

Allow at least 40 minutes to present the required information. Trainers must also allow time for questions and answers.

Recommended Preparation

Before the training session

- ◆ Identify where and when the training will take place.
- ◆ Determine the size of your audience.
- ◆ Obtain the appropriate number of copies of the materials that you need.
- ◆ Obtain the necessary equipment. For example: a slide projector, a screen, a small table to hold the flipchart, a VCR if you plan to use a videotape.
- ◆ Become familiar with the training materials that you will be using. Read the objectives for each section. Study the information and the review questions and answers for each section. Consider the optional opening questions and the additional training tips that are described in this notebook. See if you feel comfortable trying some of the suggestions.
- ◆ Find out about the trainees' backgrounds: Who are they? Where are they from? What kind of agricultural work have they done in the past? What kind of work are they doing now? Have they ever been trained about pesticides or pesticide safety before? How much do they already know about pesticides? This information will help you make the training appropriate for each specific group of trainees.
- ◆ If you speak only English and the trainees do not, you must arrange for a translator.
- ◆ Remember, some workers do not read, either in English or in their native language. If you plan to use materials or activities that require the trainees to read, be sure to consider those in the group who do not read. Try to make the activity meaningful in a way that will not embarrass anyone in the group. For example, combine reading (by those who can read) with demonstrating (by those who cannot read).
- ◆ Arrive at least 15 minutes before the training session is scheduled to start.
- ◆ Take a deep breath and relax. The materials are well done and easy to use. The trainees will appreciate the value of the information as soon as you begin. We all want to stay healthy!

During the Training Session

- ◆ If you were unable to find out about the trainees' background in advance, spend a few minutes at the start of the training session getting to know them.
- ◆ Trainees remember what they **see and hear** better than what they only hear. Make sure everyone you are training can see the illustrations and hear you. If you are using only the handbook for training, make sure there are enough copies so that everyone can easily see the illustrations.
- ◆ You will present the safety information in this training program to the workers mainly by reading the text to them.
- ◆ However, the trainees shouldn't remain silent or passive during the entire training session. At a minimum, you should ask review questions at the end of each section. WPS requires you to allow time for the workers to ask questions about the information provided in the training course.
- ◆ When you ask questions, give the trainees enough time to think about their answers. Allow a few moments of silence. Try not to answer your own questions. Be a good listener.
- ◆ Adults bring a wide range of experience to a training session, and they learn from each other by sharing their experiences. Whenever possible, involve your audience. Ask questions to lead them, based on their own work experiences, to suggest ways to protect themselves. Ask them to give specific examples of how to practice the safety steps described in your training. Encourage them to talk about how the new regulations affect them at their worksites.
- ◆ Encourage everyone to say something. Rephrase the question(s) if they don't seem to understand.
- ◆ Whenever possible, demonstrate a point for the trainees. Better yet, ask the trainees themselves to demonstrate points from the training program. If they can see real examples that apply to where they work, they will remember the concepts better than if they just look at the illustration.

Additional Training Tips

- ◆ Time permitting, it is very useful to begin each section with an opening question. A carefully chosen, open-ended question stimulates the trainees to think about one or more of the issues that are going to come up in the section. Their answers or comments provide a perfect lead-in to your presentation of the information in the section. Optional opening questions have been added to some sections in Unit Five of this notebook.

- ◆ Try using some of the illustrations as a starting point for a short discussion. For example, point to the illustration of workers running from pesticide drift, or the worker looking at the posted warning sign, or the worker coming out of the greenhouse, or the boss warning workers not to enter a field and ask—
 - ◆ Does this resemble your worksite?
 - ◆ Do you work in these conditions?
 - ◆ Do you do this at work?
 - ◆ Does your boss act like this?

Step-by-Step Guidelines

Using the flipchart

The flipchart includes an introduction, a written script—in English and Spanish—and illustrations for WPS worker safety training. It is designed to be portable and brief so that training may be done in a variety of settings. When training, hold the flipchart so everyone in the group can see the picture. For each picture, the information that you will read is on the page facing you. An arrow → indicates what you should read aloud; the information in the box is background information for you, the trainer.

The introduction and background information on training requirements for the Worker Protection Standard appear first, in English and then in Spanish, in front of the script. These introductory pages are cut at the corners to allow the trainer quick access to the script.

The flipchart is divided into eight sections. At the beginning of each section, background information and learning objectives for the section are presented in a box. You may find it helpful to go over the objectives with the trainees at the start of each section.

At the end of each section are some review questions in a box. Asking trainees these questions at the end of the section helps reinforce the information you have just given them. It also lets you know if there are things the trainees don't understand. If the trainees have trouble answering the questions at the end of a section, try going over the key points again. The review questions may also help start a group discussion if time permits.

Using the handbook

The handbook for WPS worker safety training is divided into eight sections and includes illustrations and text in English and Spanish. **The handbook does not include objectives and review questions for each section.** See Unit Five in this notebook for the section objectives and the review questions to ask the trainees.

You may find it helpful to go over the objectives with the trainees at the start of a new section. Asking trainees questions at the end of the section helps reinforce the information you have just given them. It also lets you know if there are things the trainees don't understand. If they have trouble answering the questions at the end of a section, try going over the key points again. The review questions may also help start a group discussion if time permits.

Introduction

This unit provides you with the training objectives, opening questions and review questions for sections in the EPA flipchart and the EPA worker handbook. Much of this material is included in the flipchart but it is not included in the worker handbook.

The statement of training objectives is information for both you and the trainees. Going over the objectives of each section before you begin the section should focus the trainees' attention on the purpose of the information that you provide to them.

The opening questions are for you to use to give the trainees a personal focus for the section as well as to encourage their active verbal participation.

The suggested review questions are for your use to reinforce the material that you presented. Getting correct answers from the trainees indicates that you have achieved the objectives of the section.

SECTION 1**Objectives**

After this section, workers should be able to—

1. Say why learning about pesticide safety is important.
2. Tell what to do if they do not understand something in this training.

Opening Questions

- ◆ Why do growers use pesticides?
- ◆ Do you and your co-workers ever talk about pesticides at work?
- ◆ Have you ever thought about pesticides and their possible effects on your health?
- ◆ Have you ever talked about pesticides with your boss? If so, when? Why?

Review Questions

1. **Q:** How many of you have had training on how to protect yourselves from pesticides?

2. **Q:** Why should you learn about pesticide safety?
A: Because pesticides can hurt or even kill people.
3. **Q:** What should you do if you don't understand something in this pesticide safety training?
A: Ask questions.

SECTION 2

Objectives

After this section, workers should be able to—

1. Name at least 5 ways to keep pesticides out of their bodies.
2. Recognize the EPA posted warning sign and say what it means.
3. Identify taking pesticides or pesticide containers home from work as hazardous.
4. Demonstrate routine decontamination practices.
5. Describe how to avoid hazards from pesticide residues on clothing.
6. Describe what to do if pesticides drift into the area where they are working.

Opening Questions

- ◆ Do you wear clothes like the ones in the illustration to work every day? (If yes) How long have you been wearing such clothes?
- ◆ Why do you wear these kinds of clothes?

Review Questions

1. **Q:** What are some ways to keep pesticides out of your body and off your skin?
A: Wear work clothes that cover the skin. Wash before eating, drinking, smoking, or chewing gum or tobacco at work. Wash your hands before using the toilet. Stay out of areas where pesticides are drifting, or where the warning sign is posted. Do not take pesticides or pesticide containers home. Wash your whole body after work each day. Keep dirty work clothes separate from family laundry.
2. **Q:** How can you tell if an area at work is safe to enter?
A: If it has no warning sign posted and the boss says it is safe to enter.
3. **Q:** Are pesticides used at work good to use around your home, too?
A: No.
4. **Q:** Describe what you should do before you eat or drink at work.
A: Wash your hands and face.

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5. **Q:** What should you do when you get home from work?
A: Wash your whole body, including your hair, with soap and water. Then put on clean clothes.
6. **Q:** If pesticides drift into the area where you're working, what should you do?
A: Get out right away.
7. **Q:** What should you do with dirty work clothes?
A: Store and wash them separately from the family laundry.
8. **Q:** Why is it important to wear clothes like those in the illustration?
A: To protect your skin from pesticides.
9. **Q:** How close is your worksite to where you eat lunch or get a drink?
10. **Q:** Why is it important to wash your face and hands before eating or drinking?
A: To remove any pesticides that might be on them from doing your work.
11. **Q:** Do you take cigarette breaks? Why should you wash your hands and face before smoking?
A: To remove any pesticides that might be on your hands so the pesticides don't enter your mouth, nose, or eyes.
12. **Q:** Why do people want to take empty pesticide containers home? Have you ever done this? Why is it a bad idea?

SECTION 3

Objectives

After this section, workers should be able to—

1. List at least 5 places pesticides are commonly found at work.
2. Identify 3 forms of pesticides.

Opening Questions

(When the first illustration is shown) Which of the three types of spraying devices are used where you work? Are any other types used?

Review Questions

1. **Q:** Where can you find pesticides at work?
A: On plants and in the soil, in irrigation water and on irrigation equipment, in storage areas, and where pesticides are mixed and loaded.
2. **Q:** Pesticides come in different forms. Name 3 or 4.
A: Liquids and sprays, powders and granules, and gases.
3. **Q:** Can you always see pesticides when they have been applied?

A: No.

4. **Q:** Do you know where pesticides are stored at work?
5. **Q:** Are pesticides stored in one place or in many different places?

SECTION 4

Objectives

After this section, workers should be able to—

1. List the 4 ways pesticides can get into their bodies.
2. Recognize at least 5 common signs and symptoms of pesticide poisoning.
3. Name 3 possible delayed effects of pesticide exposure.
4. Recognize that pesticides do not always affect workers the same way.

Review Questions

1. **Q:** How many of you know the names of the pesticides that are used where you work?
2. **Q:** Let's list the names of the pesticides that you know are used where you work. If we cannot name them all, you can find out and add to the list later.
3. **Q:** How can pesticides get into your body?
A: Through the skin and eyes, by breathing them in, and by swallowing them.
4. **Q:** Describe the common signs and symptoms of pesticide poisoning.
A: Throwing up, headaches, sweating a lot, muscle pains and cramps, dizziness, sleepiness, skin rashes, drooling and runny nose, trouble breathing, and very small pupils of the eyes.
5. **Q:** Have you ever had any of these common signs or problems? Did you think that they might have been caused by pesticides? Did you tell your boss? Did you see a doctor? Have you known anyone at work with these problems? What did they do?
6. **Q:** What are some possible delayed effects from getting pesticides in you?
A: Cancer, harm to kidneys, liver, or nervous system, and birth defects.
7. **Q:** Do pesticides affect everyone the same way?
A: No.

SECTION 5

Objectives

After this section, workers should be able to—

-
1. Describe how to get emergency medical care if they get sick because of pesticides at work.
 2. Recognize that their boss will provide transportation to medical help if they think they've been poisoned at work by pesticides.

Review Questions

1. **Q:** Where can you find the address and phone number of the nearest emergency medical facility where you work?
A: On or near the pesticide safety poster at work.
2. **Q:** What should you do if you get sick at work and you think it's because of pesticides?
A: Tell your boss right away and get medical help.
3. **Q:** How can you get to a clinic if you become sick at work?
A: Your boss must make sure you get to medical help if you've been poisoned at work by pesticides.
4. **Q:** Where can you get information about the pesticide that might have made you sick?
A: Your boss must provide you or the person treating you with information about the pesticide that might have made you sick.
5. **Q:** Where is the pesticide safety poster located at work?
6. **Q:** Where is the nearest phone?
7. **Q:** Who knows where the nearest clinic or doctor is? Has anyone already been there?
8. **Q:** Has anyone ever felt sick while working in the fields? (like the illustration) (If yes) What happened? Who helped you? Where did you go?

SECTION 6

Objectives

After this section, workers should be able to describe the correct steps to take if—

1. Pesticides get on their skin.
2. Someone swallows a pesticide.
3. Someone breathes in a pesticide.
4. Pesticides get in their eyes.

Review Questions

1. **Q:** What should you do if you get pesticides on your skin?
A: (1) Take off clothes with pesticides on them, (2) rinse skin with nearest clean water, (3) wash with soap and water as soon as possible, (4) get medical help if you start to feel sick or have poisoning symptoms.
2. **Q:** What should you do if someone swallows a pesticide?
A: (1) Call a doctor or poison control center, or go to the doctor if it's faster, and give the name of the pesticide and the first aid directions from the label, (2) if you can't call for help, or while you wait for help, follow the first aid steps on the label of the pesticide, (3) then get to a doctor as fast as possible—be sure to have the name of the pesticide with you.
3. **Q:** Describe what to do if someone breathes in a pesticide.
A: (1) Get them to fresh air right away, (2) loosen their clothing, (3) then, if they are not breathing, give mouth-to-mouth resuscitation, (4) call for help.
4. **Q:** Describe the correct steps to take if pesticides get in your eyes.
A: (1) Hold your eyes open and rinse with a gentle stream of cool water, (2) rinse for 15 minutes if possible, (3) then get medical help.
5. **Q:** What must your boss do if you get sick from pesticides while you are working?
A: Your boss must make sure you are taken to a clinic or doctor.
6. **Q:** If pesticides get on your clothes and you take them off to wash, should you put them back on?
A: No, put on clean clothes.
7. **Q:** What should you do if you are working in an enclosed area (a greenhouse or other building where pesticides have been used) and begin to feel sick?
A: Get out into the fresh air.
8. **Q:** Do you know any co-worker who has swallowed a pesticide? (How could that accidentally happen?) What did you do for him or her? What happened?

SECTION 7

Objectives

After this section, workers should be able to—

1. Identify at least 3 ways their boss must help protect them from pesticides used at work.
2. Name 3 work activities for which they need extra training.

3. Recognize that their boss must not punish them for trying to follow pesticide safety rules.

Review Questions

1. **Q:** How many of you have been poisoned by pesticides or know workers who have been poisoned? What were you/they doing? What pesticides were being used? What symptoms did you/they have?
2. **Q:** What are some things your boss must do to help protect you from pesticides at work?
A: Tell you about pesticides used at work, give you information about pesticides applied in or near areas where you work, warn you about areas where pesticides are to be applied and areas you may not enter, and keep workers out of areas where pesticides are being applied or where pesticides may drift onto them.
3. **Q:** What are some examples of jobs for which you need extra pesticide safety training?
A: Mixing, loading, applying, or handling pesticides, working as a flagger, or working in an area where entry is restricted.
4. **Q:** Is it okay for your boss to punish you for trying to follow pesticide safety rules?
A: No.
5. **Q:** Do you know where the signs about pesticide applications are posted at work?
6. **Q:** When was the last time your boss warned you to stay out of a field or work area? What was the reason for the warning?
7. **Q:** Why do loaders, handlers, mixers, and flaggers need special training and special equipment?

SECTION 8

Objectives

After this section, workers should be able to describe 4 important ways they can help protect themselves from pesticides.

Review Questions

1. **Q:** What kinds of clothes should you wear to work each day?
A: Clean clothes that cover the skin, like long pants, long-sleeved shirts, shoes and socks.
2. **Q:** How can you tell if a work area is safe to enter?
A: If it has no warning sign posted and the boss says it is safe to enter.

3. **Q:** What should you do if pesticides drift into the area where you are working?
A: Leave the area right away.
4. **Q:** After work, when should you wash if you've been working where pesticides may have been used?
A: Right away.
5. **Q:** Name 5 things your boss must do to protect you from pesticides.
A: ♦ Give you information about pesticides applied in or near areas where you work.
♦ Be sure you are trained in pesticide safety.
♦ Provide you with soap, water, and towels.
♦ Make sure you get to medical help if you think you've been poisoned at work by pesticides.
♦ Provide you with extra training if you work in areas where entry is restricted, work as a flagger, or mix, load, apply, or handle pesticides.

General Review Question

- Q:** Name all the things you can do to protect yourself from pesticides.
- A:** ♦ Learn how to protect yourself—make sure you are trained in pesticide safety.
♦ Ask for help when you don't understand something about pesticide safety.
♦ Wear clean clothes that cover your skin: long pants, a long-sleeved shirt, shoes and socks.
♦ Wash your hands and face before you eat, drink, smoke, or chew gum or tobacco.
♦ Wash your hands before using the toilet.
♦ Stay out of areas where pesticides are being applied.
♦ If pesticides drift to where you are working, get out.
♦ If you see the "Danger—Keep Out" sign, stay out of that area.
♦ Stay out of areas your boss tells you not to enter.
♦ Never take pesticides or pesticide containers home from work.
♦ After work each day, wash your whole body, including your hair.
♦ Keep dirty work clothes away from other clothes and from the family laundry.
♦ At work, make sure you know where to find the pesticide safety poster and the nearest telephone.

About the Training Verification Program

The Training Verification Program is a voluntary program to document that agricultural workers (and pesticide handlers) have completed pesticide safety training that satisfies WPS requirements. This program benefits employers, trainers, and workers alike. It minimizes the need for retraining and maximizes the effective use of training resources.

The Trainer's Role in the Training Verification Program

If your State or Tribe chooses to join this program, you may participate by taking these steps:

- ◆ Enter into an agreement either with the State or Tribal agency responsible for WPS training in your area or with a training organization that is approved to offer WPS training by the State or Tribal agency.
- ◆ Use only EPA-developed or EPA-approved materials to conduct training.
- ◆ Issue EPA training verification cards to workers who have been properly trained.
- ◆ Obtain the information listed on the cards issued.
- ◆ Keep a roster of those trained, including the unique number of the card issued to each worker, until the training verification card expires.
- ◆ Promptly respond to any request from EPA, State, or Tribal agencies or agricultural employers for information concerning training verification cards you have issued.

Remember that participation in the Training Verification Program is voluntary. You are required to issue cards and maintain records only if you choose to participate.

Quick Reference Guide to the WPS

UNIT

7

The U.S. Environmental Protection Agency (EPA) revised its Worker Protection Standard (WPS) for Agricultural Pesticides in 1992. The WPS is a Federal regulation designed to protect **agricultural workers** (people involved in the production of agricultural plants) and **pesticide handlers** (people mixing, loading, or applying pesticides or doing other tasks involving direct contact with pesticides).

This summary presents the maximum WPS requirements. It does not include exceptions that may permit agricultural employers to do less or options that may involve different requirements. **Agricultural employers will be in compliance with the Federal WPS if they make sure that the requirements listed here are met.** There are some exemptions for owners of agricultural establishments and members of their immediate families.

Some States and Tribes having jurisdiction over the enforcement of pesticide use may have additional worker protection requirements.

QUICK REFERENCE GUIDE TO THE 1992 WORKER PROTECTION STANDARD (WPS)

The Environmental Protection Agency (EPA) revised its Worker Protection Standard (WPS) for Agricultural Pesticides in 1992. The WPS is a Federal regulation designed to protect **agricultural workers** (people involved in the production of agricultural plants) and **pesticide handlers** (people mixing, loading, or applying pesticides or doing other tasks involving direct contact with pesticides).

This poster presents the maximum WPS requirements. It does not include exceptions that may permit agricultural employers to do less or options that may involve different requirements. **Agricultural employers will be in compliance with the Federal WPS if they make sure that the requirements listed here are met.** There are some exemptions for owners of agricultural establishments and members of their immediate families.

Some States and Tribes having jurisdiction over the enforcement of pesticide use may have additional worker protection requirements.

Duties for All Employers

Anti-Retaliation

Do not retaliate against a worker or handler who attempts to comply with the WPS.

Information at a Central Location

1. In an easily seen central location on each agricultural establishment, display close together:
 - ◆ EPA WPS safety poster,
 - ◆ name, address, and telephone number of the nearest emergency medical facility,
 - ◆ these facts about each pesticide application [from before each application begins until 30 days after the restricted-entry interval (REI)]:
 - ◆ product name, EPA registration number, and active ingredient(s),
 - ◆ location and description of treated area,
 - ◆ time and date of application, and REI.
2. Tell workers and handlers where the information is posted, and allow them access.
3. Tell them if emergency facility information changes and update the posted information.
4. Keep the posted information legible.

Pesticide Safety Training

Unless they possess a valid EPA-approved training card, train **handlers and workers** before they begin work and at least once each 5 years:

- ◆ use written and/or audiovisual materials,
- ◆ use EPA WPS handler training materials for training handlers,
- ◆ use EPA WPS worker training materials for training workers,
- ◆ have a certified applicator conduct the training orally and/or audiovisually in a manner the employees can understand, using easily understood terms, and respond to questions.

Decontamination Sites

1. Establish a decontamination site within 1/4 mile of all workers and handlers. Supply:
 - ◆ enough water for routine and emergency whole-body washing and for eyeflushing,
 - ◆ plenty of soap and single-use towels,
 - ◆ a clean coverall.
2. Provide water that is safe and cool enough for washing, for eyeflushing, and for drinking. Do not use tank-stored water that is also used for mixing pesticides.

3. Provide **handlers** the same supplies where personal protective equipment (PPE) is removed at the end of a task.
4. Provide the same supplies at each mixing and loading site.
5. Make at least 1 pint eyeflush water immediately accessible to each **handler**.
6. Do not put **worker** decontamination sites in areas being treated or under an REI.
7. In areas being treated, put decontamination supplies for **handlers** in enclosed containers.

Employer Information Exchange

1. Before any application, commercial handler employers must make sure the operator of the agricultural establishment where a pesticide will be applied is aware of:
 - ◆ location and description of area to be treated,
 - ◆ time and date of application,
 - ◆ product name, EPA registration number, active ingredient(s), and REI,
 - ◆ whether the product label requires both oral warnings and treated area posting,
 - ◆ all other safety requirements on labeling for workers or other people.
2. Operators of agricultural establishments must make sure any commercial pesticide establishment operator they hire is aware of:
 - ◆ specific location and description of all areas on the agricultural establishment where pesticides will be applied or where an REI will be in effect while the commercial handler is on the establishment,
 - ◆ restrictions on entering those areas.

Emergency Assistance

When any handler or worker may have been poisoned or injured by pesticides:

1. Promptly make transportation available to an appropriate medical facility.
2. Promptly provide to the victim and to medical personnel:
 - ◆ product name, EPA registration number, and active ingredient(s),
 - ◆ all first aid and medical information from label,
 - ◆ description of how the pesticide was used,
 - ◆ information about victim's exposure.

Additional Duties for Worker Employers

Restrictions During Applications

1. In areas being treated with pesticides, allow entry only to appropriately trained and equipped handlers.
2. Keep nursery workers at least 100 feet away from nursery areas being treated.
3. Allow only handlers to be in a greenhouse:
 - ◆ during a pesticide application,
 - ◆ until labeling-listed air concentration level is met or, if no such level, until after 2 hours of ventilation with fans

Restricted-Entry Intervals (REI's)

During any REI, do not allow workers to enter a treated area and contact anything treated with the pesticide to which the REI applies.

Notice About Applications

1. Orally warn workers and post treated areas if the pesticide labeling requires.
2. Otherwise, either orally warn workers or post entrances to treated areas. Tell workers which method is in effect.
3. Post all greenhouse applications.

Posted Warning Signs:

1. Post legible 14" X 16" WPS-design signs just before application; keep posted during REI; remove before workers enter and within 3 days after the end of the REI.
2. Post signs so they can be seen at all entrances to treated areas, including entrances from labor camps.

Oral Warnings:

1. Before each application, tell workers who are on the establishment (in a manner they can understand):
 - ◆ location and description of treated area,
 - ◆ REI, and not to enter during REI.
2. Workers who enter the establishment after application starts must receive the same warning at the start of their work period.

Additional Duties for Handler Employers

Application Restrictions and Monitoring

1. Do not allow handlers to apply a pesticide so that it contacts, directly or through drift, anyone other than trained and PPE-equipped handlers.
2. Make sight or voice contact at least every 2 hours with anyone handling pesticides labeled with a skull and crossbones.
3. Make sure a trained handler equipped with labeling-specified PPE maintains constant voice or visual contact with any handler in a greenhouse who is doing fumigant-related tasks, such as application or air-level monitoring.

Specific Instructions for Handlers

1. Before handlers do any handling task, inform them, in a manner they can understand, of all pesticide labeling instructions for safe use.
2. Keep pesticide labeling accessible to each handler during entire handling task.
3. Before handlers use any assigned handling equipment, tell them how to use it safely.
4. When commercial handlers will be on an agricultural establishment, inform them beforehand of:
 - ◆ areas on the establishment where pesticides will be applied or where an REI will be in effect,
 - ◆ restrictions on entering those areas.

(The agricultural establishment operator must give you these facts.)

Equipment Safety

1. Inspect pesticide handling equipment before each use, and repair or replace as needed.
2. Allow only appropriately trained and equipped handlers to repair, clean, or adjust pesticide equipment that contains pesticides or residues.

Personal Protective Equipment (PPE)

Duties Related to PPE:

1. Provide handlers with the PPE the pesticide labeling requires for the task, and be sure it is:
 - ◆ clean and in operating condition,
 - ◆ worn and used correctly,
 - ◆ inspected before each day of use,
 - ◆ repaired or replaced as needed.
2. Be sure respirators fit correctly.
3. Take steps to avoid heat illness.

4. Provide handlers a pesticide-free area for:

- ◆ storing personal clothing not in use,
- ◆ putting on PPE at start of task,
- ◆ taking off PPE at end of task.

5. Do not allow used PPE to be worn home or taken home.

Care of PPE:

1. Store and wash used PPE separately from other clothing and laundry.
2. If PPE will be reused, clean it before each day of reuse, according to the instructions from the PPE manufacturer unless the pesticide labeling specifies other requirements. If there are no other instructions, wash in detergent and hot water.
3. Dry the clean PPE before storing, or hang to dry.
4. Store clean PPE away from other clothing and away from pesticide areas.

Replacing Respirator Purifying Elements:

1. Replace dust/mist filters:
 - ◆ when breathing becomes difficult,
 - ◆ when filter is damaged or torn,
 - ◆ when respirator label or pesticide label requires (whichever is shorter), OR
 - ◆ at the end of day's work period, in the absence of any other instructions or indications.
2. Replace vapor-removing cartridges/canisters:
 - ◆ when odor/taste/irritation is noticed,
 - ◆ when respirator label or pesticide label requires (whichever is shorter), OR
 - ◆ at the end of day's work period, in the absence of any other instructions or indications.

Disposal of PPE:

1. Discard coveralls and other absorbent materials that are heavily contaminated with undiluted pesticide having a DANGER or WARNING signal word.
2. Follow Federal, State, and local laws when disposing of PPE that cannot be cleaned correctly.

Instructions for People Who Clean PPE:

Inform people who clean or launder PPE:

- ◆ that PPE may be contaminated with pesticides,
- ◆ of the potentially harmful effects of exposure to pesticides,
- ◆ how to protect themselves when handling PPE,
- ◆ how to clean PPE correctly.

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