



EPA Worker Protection Standard for Agricultural Pesticides

The Worker Protection Standard (WPS) was issued by the U.S. Environmental Protection Agency (EPA). This regulation covers pesticides that are used in the production of agricultural plants on farms, forests, nurseries, and greenhouses. The WPS requires employers and workers to take steps to reduce the risk of pesticide-related illness and injury if these individuals may potentially be exposed to pesticides. The primary purpose of the WPS is to protect not only those who apply pesticides but also employees and family members who will work in areas that have been treated with pesticides within the past 30 days. The WPS requires employers to provide handlers and workers with (1) information about potential exposure to pesticides, (2) protection to prevent exposure to pesticides, and (3) ways to respond and manage exposures to pesticides if they occur.

For private applicators, the one major difference that is important to understand between the WPS and the Pennsylvania Pesticide Control Act of 1973 is that when pesticides are being used in the production of an agricultural crop, the Pesticide Control Act only applies to the application of restricted-use pesticides. However, the WPS applies when any type of pesticide, including growth regulators, is being used in the production of an agricultural crop or on another application site listed in the WPS definitions. In Pennsylvania, the Pennsylvania Department of Agriculture (PDA) is responsible for the enforcement of the WPS. PDA is working with the Penn State Pesticide Education Program, the Pennsylvania Rural Health Farm Worker Protection Safety Program, and numerous agricultural associations to provide outreach services and educational materials to agricultural employers and workers.

WPS Definitions

The following definitions will help determine if and when there is a need for compliance with the WPS:

Agricultural plants: Plants grown or maintained for commercial or research purposes. Examples are food, feed, and fiber plants, trees, turfgrass, flowers, shrubs, ornamentals, and seedlings.

Crop adviser: Any person who is assessing pest populations, damage, distribution, status, condition, or requirements of agricultural plants. Examples are crop/IPM consultants and field scouts.

Farms: Operations other than nurseries or forests that produce agricultural plants outdoors.

Forests: Operations, including Christmas tree plantations, that produce agricultural plants outdoors for wood, fiber, or timber products.

Greenhouses: Operations that produce agricultural plants indoors in an area that is enclosed with a nonporous

covering and is large enough to allow a person to enter. Examples are plastic houses, mushroom houses and caves, and rhubarb houses, as well as traditional greenhouses. Malls, atriums, conservatories, arboreta, and office buildings that grow or maintain plants primarily for decorative or environmental benefits are not included; however, growing areas in arboreta, conservatories, botanical gardens, and other similar facilities where plants are produced for sale or are intended for use in display areas are covered under the WPS.

Hand labor: Any agricultural activity performed by hand or with hand tools that might cause a worker to have substantial contact with surfaces (such as plants, plant parts, or soil) that may contain pesticide residues. Examples of hand-labor tasks include harvesting, detasseling, thinning, weeding, topping, planting, sucker removal, pruning, disbudding, roguing, and packing produce into containers in the field.

Immediate family: The immediate family includes a spouse, brothers, sisters, children (including stepchildren

and foster children), and parents (including stepparents and foster parents).

Nurseries: Operations that produce agricultural plants outdoors for (1) transplanting to another location or (2) flower or fern cuttings. Examples are flowering and foliage plantings or trees; tree seedlings; live Christmas trees; vegetable, fruit, and ornamental transplants; and turfgrass produced for sod.

Pesticide handlers: Anyone who is (1) employed for compensation of any type (for example, students receiving grades or growers who trade for services) and (2) performing tasks such as mixing, loading, or applying pesticides; assisting in pesticide applications; cleaning; repairing or adjusting spray equipment; or acting as a flagger.

Restricted-entry interval (REI): The REI is the time immediately after a pesticide application when entry into the treated area is limited. Some pesticides have one REI, such as 12 hours, for all crops and uses. Other products have different REIs depending on the

crop or method of application. When two or more pesticides with different REIs are applied at the same time, the longer interval must be followed.

Workers: Anyone who is (1) employed for compensation (for example, students receiving grades, growers who trade for services, and individuals who are self-employed) and (2) performing tasks such as harvesting, pruning, weeding, or watering in the production of agricultural plants.

WPS trainers: In Pennsylvania, an approved handler or worker trainer must have current Pennsylvania Pesticide Applicator Certification.

Centrally Located Information about Pesticide Application

Basic Responsibilities

Agricultural establishments that employ their own handlers and have employees that will be working in treated areas must make sure that certain information, as described below, is displayed at a central location whenever (1) any handler who they employ is on their agricultural establishment and (2) a pesticide is about to be applied or has recently been applied. This information must be readily available in an area where workers have unrestricted access.

What Information Must Be Displayed?

The following three types of information must be displayed:

1. A pesticide safety poster, which must be either the WPS safety poster developed by EPA or an equivalent poster containing the concepts displayed on the EPA's WPS safety poster.



Owners and immediate family are exempt from many WPS requirements but must still comply with all label requirements. Immediate family includes spouse, children, brothers, sisters, parents, stepchildren, stepparents, foster children, and foster parents.



The EPA-approved WPS poster must be on display at a location that is accessible to workers at all times. The name, address, and telephone number of the nearest emergency medical facility should be included on the poster.

2. Emergency information, which must include the name, telephone number, and address of the nearest emergency medical facility.
 - a. The location and description of the area to be treated
 - b. The product's name, EPA registration number, and active ingredient(s) of the pesticide
 - c. The time and date the pesticide is scheduled to be applied
 - d. The REI of the pesticide
3. An application list including the following information:
 - a. At least 30 days after the restricted-entry interval expires

Where Must the Information Be Displayed?

Display all the required information in one central location on your agricultural establishment where it can be easily seen and read by workers and handlers. Workers must have access to the information without having to ask anyone.

Exception: If the workplace is a forest, the information may be displayed near the forest. However, the location must be in a place where workers and handlers can easily see and read it and where they are likely to gather or pass by. For example, the information might be displayed at a decontamination site or an equipment storage site.

When Must the Information Be Displayed?

Display the information whenever any worker or handler is on your agricultural establishment and if a pesticide has been applied or a REI has been in effect within the past 30 days. The following specific information describes when/how to display information:

1. If workers or handlers are on the establishment at the start of an application, record the required pesticide-specific information on the application list and display it before the application takes place.
2. If workers or handlers are not on the establishment at the start of an application, display pesticide-specific information no later than the beginning of their first work period.
3. Continue to display pesticide-specific information when workers or handlers are on the establishment until:
 - a. At least 30 days after the restricted-entry interval expires

- b. At least 30 days after the end of the application, if there is no REI for the pesticide

Other Responsibilities

The employer also has the following responsibilities:

1. Tell workers and handlers where the information is located
2. Give workers and handlers access to the information
3. Be sure that the poster, emergency information, and application list remain legible and up to date during the time they are posted
4. Promptly inform workers if there is any change in the information on emergency medical facilities, and update the emergency information listed along with the poster

Employee Training under the WPS

Employers are legally responsible for protecting their workers from potential exposure to pesticides. Their basic responsibilities are to inform workers about the hazards of pesticides, to provide them with information regarding the pesticides that are being used, and to ensure that workers know how to receive proper treatment in the event of exposure. Training must be provided for any worker who may potentially come into contact with pesticide-treated areas and for any worker who will be applying or who will assist with the application of pesticides. Owners of the agricultural establishment, their immediate family members, certified applicators, or registered pesticide application technicians are the only persons exempt from this WPS training requirement.

Training requirements differ for workers and handlers, but the basic premise is the same—to protect workers against pesticide exposure.

Qualifications of WPS Trainers

In Pennsylvania, WPS training can only be provided by a currently certified pesticide applicator or by someone who is under the direct supervision of a certified applicator. Training must be provided in a language that workers can understand. To meet this requirement, a translator can be used by a WPS trainer to convey the information to the workers.

Handler Training

Those persons who are applying or are in some way assisting with the application of pesticides must be trained as handlers, including employees who may do repair work on pesticide application equipment. Handlers must be trained before they are allowed to complete any handling task. Training for handlers must include at least the following information:

1. The layout and meaning of information on pesticide labels, including safety information such as precautionary statements about human health hazards
2. The hazards of pesticide toxicity and exposure, including acute effects and sensitization
3. The routes of pesticide entry into the body
4. How to recognize the signs and symptoms of pesticide poisoning
5. How to provide emergency first aid for pesticide injuries or poisonings
6. How to obtain emergency medical care

7. The need for and appropriate use of PPE
8. How to prevent, recognize, and treat heat-related illness
9. The safety requirements for handling, transporting, storing, and disposing of pesticides, including general procedures for spill clean up
10. Environmental concerns regarding pesticides, such as drift, runoff, and wildlife hazards
11. The WPS requirements designed to protect workers, such as notification of application and entry restrictions, availability of information about applications, and all other necessary precautions

In Pennsylvania, the person who conducts the training for handlers must currently be a certified applicator of restricted-use pesticides. Due to the similarities in training, employees who have been trained as handlers do not have to be trained as workers. However, employees who have received training that meets the criteria for workers must receive additional training before they perform handler-related tasks.

Worker Training

Workers who will enter treated areas on farms, forests, nurseries, or greenhouses must receive worker protection training. The agricultural employer must ensure that workers receive basic pesticide safety information before they enter a treated area on the establishment if a pesticide has been applied or an REI has been in effect within the past 30 days. Workers can receive this basic safety information while they wait for the complete WPS pesticide safety training, which is required within the first five days of entering a treated area. Although

not required by the WPS regulation, providing workers with the complete training before the required five-day grace period provides the most protection from potential exposure. The five-day grace period for training that applies to other agricultural workers does not apply to early entry workers. Early entry workers, or those who will return to the treated area before the REI has expired, must receive training before they do any early entry task.

Basic pesticide safety information must include the following concepts:

1. Pesticides may be on or in plants, soil, or irrigation water, or in drift from nearby applications.
2. Pesticides can be prevented from entering the body by having workers do the following:
 - a. Follow directions and/or signs about keeping out of treated or restricted areas
 - b. Wash before eating, drinking, using chewing gum or tobacco, or using the toilet
 - c. Wear work clothing that protects the body from pesticide residues
 - d. Wash or shower with soap and water, shampoo hair, and put on clean clothes after work
 - e. Wash work clothes separately from other clothes before wearing them again
 - f. Wash immediately in the nearest clean water if pesticides are spilled or sprayed on the body and shower, shampoo, and change into clean clothes as soon as possible
3. Further training will be provided within five days.

The complete WPS safety training for workers includes the following topics:

1. Where and how workers may come into contact with pesticides or pesticide residues during work-related activities
2. Hazards of pesticide toxicity and exposure
3. Routes of pesticide entry into the body
4. Signs and symptoms of pesticide poisonings
5. How to provide emergency first aid for pesticide injuries or poisonings
6. How to obtain emergency medical care
7. Routine emergency decontamination procedures, including eye-flushing techniques
8. Hazards of chemigation and drift
9. Hazards of pesticide residues on clothing
10. Warnings against taking pesticides or pesticide containers home
11. The WPS requirements designed to protect workers, such as notification of application and entry restrictions, availability of information about applications, and all other necessary precautions

The agricultural employer must ensure that the information is communicated to agricultural workers in a manner or language they can understand. Agricultural employers must be able to verify compliance with this requirement by keeping employee training records.

REI Requirements

Under the WPS, each agricultural pesticide label will specify an REI, usually ranging from 4 to 72 hours; however, some labels may specify a longer REI. The REI begins immediately after the pesticide application. When a specific REI is listed, under no circumstances are workers permitted to enter a treated area during the first four hours following a pesticide application. Workers must be kept out of a treated area during the REI, except in certain situations listed in the following section.

Exception for Limited-Contact Activities

Under specified conditions, the WPS allows workers to enter pesticide-treated areas during an REI to perform tasks that involve limited contact with pesticide-treated surfaces. This exception gives workers the flexibility to perform limited-contact tasks—irrigation tasks, tasks that could not have been foreseen, and tasks that would cause significant economic loss if delayed—during an REI. At the same time, the exception includes significant provisions to limit the risks associated with pesticide exposure to employees performing limited-contact tasks.

The conditions of exception for limited-contact/irrigation, early entry activities are as follows:

1. Workers' contact with treated surfaces is minimal and is limited to the feet, lower legs, hands, and forearms.
2. The pesticide product for which the REI applies does not have a statement in the labeling requiring both oral and posted notification.

3. Personal protective equipment for early entry is provided to the worker and must either conform with the label requirements or include at least coveralls, chemical-resistant gloves, socks, chemical-resistant footwear, and eyewear (if eyewear is required by the product labeling).
4. No hand-labor activity (e.g., hoeing, picking, pruning) is performed.
5. The time in treated areas under an REI for any worker may not exceed a total of eight hours in a 24-hour period.
6. Workers do not enter the area during the first four hours, until applicable ventilation criteria have been met, and until any label-specified inhalation exposure level has been reached.
7. Before workers enter a treated area under an REI, the agricultural employer must give them oral or written notification about the specifics of the exception to early entry. The notification must be in a language the workers understand.

Special Application Restrictions

For more complete information, refer to *The Worker Protection Standard for Agricultural Pesticides—How to Comply* manual (WPS: *How to Comply* manual).

Nurseries

Employers must make sure that during certain nursery applications, workers and other persons do not enter treated areas of the nursery, or in some circumstances, do not enter

areas that are near the treated areas. In some cases, depending on the pesticide application method, workers and other persons are prohibited from entering the pesticide-treated area plus a buffer area up to 100 feet in all directions.

Greenhouses

Employers must make sure that workers and other persons do not enter specific areas within the greenhouse during and, in some instances, after certain greenhouse pesticide applications. After some types of pesticide applications, ventilation restrictions apply. Ventilation criteria must be met before workers may enter the pesticide-treated area.

Tasks during an Agricultural Emergency

Early entry workers may go into treated areas before the REI is over to do tasks that are necessary because of an agricultural emergency if they are provided with the protection and PPE required for an early entry. The following limitations apply:

1. Workers may perform only tasks needed to manage the emergency.
2. They must wait at least four hours after the pesticide application is complete before entering the treated area.
3. They must also wait until any inhalation exposure level listed on the product label has been reached or all WPS ventilation criteria have been met.

Personal Protective Equipment (PPE)

One of the changes that happened as a direct result of implementing the WPS regulation is that protective clothing requirements are more clearly and completely listed on product labels. Each product label should list the specific PPE to be worn when the product is being used or when the potential for exposure to the product exists. Most labels now include the protective clothing requirements outside of the “Agricultural Use Requirements” section. As a result, even those who are exempt from the WPS must wear the protective clothing listed.



Employers must supply handlers with personal protective equipment (PPE) as required by the pesticide label. All PPE should be stored in an area separate from pesticides. PPE should be well maintained, frequently cleaned, and checked for wear. Employers are responsible for making sure handlers wear the proper PPE.

When the PPE requirement falls under the WPS, the employer has the following responsibilities:

1. Provide PPE to each early entry worker or handler.
2. Clean and maintain PPE.
3. Make sure that each person wears and uses PPE correctly.
4. Provide each person with a clean place to put on, take off, and store PPE.
5. Take action, if necessary, to prevent heat-related illness while PPE is being worn.
6. Provide soap, single-use towels, and water to each person at the end of any handling activity when PPE is removed.
7. Prevent any person from wearing or taking home contaminated PPE, unless proper instructions have been given regarding the washing and care of PPE.

The type of PPE needed depends on the specific application and the type equipment being used. Although every pesticide is different and the label should be consulted to determine the PPE requirements for each chemical, some general rules apply for choosing PPE according to the different pesticide toxicity levels found in Table 1.

Table 1. Minimum PPE and work clothing for pesticide-handling activities.

Route of Exposure	Toxicity Category of End-Use Product			
	I	II	III	IV
Dermal toxicity or skin irritation potential	Coveralls worn over long-sleeved shirts and long pants	Coveralls worn over short-sleeved shirts and short pants	Long-sleeved shirt and long pants	Long-sleeved shirt and long pants
	Socks	Socks	Socks	Socks
	Chemical-resistant footwear	Chemical-resistant footwear	Shoes	Shoes
Inhalation toxicity	Chemical-resistant gloves	Chemical-resistant gloves	No minimum	No minimum
	Respiratory protection device	Respiratory protection device	No minimum	No minimum
Eye irritation potential	Protective eyewear	Protective eyewear	No minimum	No minimum

Proper cleaning and maintenance of PPE is just as important as making it available to early entry workers and handlers. Employers must instruct persons who clean or launder PPE to keep pesticide-contaminated PPE away from other clothing or laundry and to wash it separately. In addition, employers are required to perform the following tasks:

1. If PPE will be reused, clean it before each day of reuse according to the PPE manufacturer's instructions. If instructions are unavailable, wash PPE with detergent in hot water.
2. Thoroughly wash and dry all PPE before it is reused or stored.
3. Store clean PPE separate from personal clothing and away from pesticide-contaminated areas. PPE that has been soaked or otherwise heavily contaminated should be discarded.

In regard to the proper care of respiratory PPE, employers must take the following actions:

1. Replace dust/mist respirator filters at the following times:
 - a. When breathing becomes difficult
 - b. If the filter is damaged or torn
 - c. Whenever the respirator manufacturer or pesticide label says to replace them
 - d. At the end of each day's work period if no other instructions regarding service life are available
2. Replace gas-and-vapor-removing respirators or canisters at the following times:
 - a. At the first sign of odor, taste, or irritation
 - b. When the respirator manufacturer or pesticide label says to replace them
 - c. At the end of each day's work period if no other instructions regarding service life are available

EPA WPS Required Worker Notices about Pesticide Applications

Under most circumstances, the WPS requires employers to make sure that workers are notified about areas where pesticide applications are taking place or REIs are in effect. Most pesticide labels allow notification to be given either orally or by posting warning signs at the entrances to treated areas. However, some pesticide labels require that workers are notified both orally and with signs posted at entrances to the treated area. If both types of notification are required, the following statement will be in the “Directions for Use” section of the pesticide labeling under the heading “Agricultural Use Requirements”: “Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.”

Notification on Farms, Forests, and Nurseries

Unless the pesticide label requires both types of notification, notify workers either orally or by posting warning signs at entrances to treated areas. Workers must be made aware in advance of which method of notification will be used by their employer.

Notification in Greenhouses

In greenhouses, all treated areas must be posted, except as described in the next column. If the pesticide label requires both types of notification, employers are responsible for ensuring that workers are notified orally.

Exceptions to Worker Notification

1. Oral warnings need not be given to the following:
 - a. Any worker on a farm, forest, or nursery who will not be in the treated area or will not walk within $\frac{1}{4}$ mile of a treated area during the pesticide application or while the REI is in effect
 - b. Any worker who will not be in the greenhouse during a pesticide application or while an REI is in effect
 - c. Any worker who applied (or supervised the application of) the pesticide and is aware of all of the information to be given in the oral warning
2. Posting at the treated area is not required in the event of the following:
 - a. No workers on the farm, forest, greenhouse, or nursery will be in the treated area or walk within $\frac{1}{4}$ mile of the treated area during the pesticide application or while the REI is in effect
 - b. The only workers for whom posted notification is required applied (or supervised the application of) the pesticide and are aware of all the information to be given in the oral warning

Posted Warning Signs

WPS-designed signs must be used when warnings are posted at entrances to treated areas as described in the EPA’s *WPS: How to Comply* manual.

Location of Signs

1. On farms, forests, and nurseries, signs must be posted so that they can be seen from all points where workers usually enter the treated areas. The following are specific examples where signs must be posted:
 - a. Access roads
 - b. Borders with any labor camp adjacent to the treated area
 - c. Established walking routes that enter the treated area



Unless the pesticide label requires both oral and posted notification, either type of notification is allowed. When posting is required, EPA-approved warning signs (such as the one pictured in the inset) must be used. With few exceptions, all greenhouse applications require posted notification of treated areas.

2. When there are no usual points of worker entry, post signs in the corners of the treated area or in places where they will be most easily seen.
3. In greenhouses, post signs so they can be seen from all points where workers usually enter the treated area, including doorways, aisles, and other walking routes. When there are no usual points of worker entry to the treated area, post signs in the corners of the treated area or in places where they will be easily seen.

Timing and Visibility of Warning Signs

1. Post signs at least 24 hours before the scheduled application of the pesticide.
2. Keep signs posted during application and throughout the REI (if any exists).
3. Remove signs within three days after the end of the REI. If there is no REI for that application, remove the signs within three days after the end of the application.
4. Keep workers out of the treated area during the entire time the signs are posted.
5. Keep signs visible and legible while they are posted.

Posting Adjoining Areas

When several adjoining areas are to be treated with pesticides on a rotating or sequential basis, you may post the entire area at the same time. Worker entry, except for early entry permitted by the WPS, is prohibited for the entire area while the signs are posted.

Design and Size

1. Each warning sign must look like the one below.
2. Additional information can be included on the warning sign, such as the name of the pesticide or the date of application, if it does not lessen the impact of the sign or change the meaning of the required information. If required information is added in other languages, the words must be translated correctly. Employers are also permitted to replace the Spanish language on signs with another language if that language is used more often by workers in a particular location. The English portion of the sign cannot be removed.
3. Under most circumstances, signs must be at least 14 inches by 16 inches, and the letters must be at least 1 inch high. EPA does, however, allow the use of smaller warning signs in nurseries and greenhouses. Signs of approximately 4.5 inches by 5 inches can be used if the distance between signs is 25 feet or less; signs of approximately 7 inches by 8 inches can be used if the distance between signs is 50 feet or less. Growers may use small signs at any time if the treated area is too small to accommodate standard-sized signs. For example, when a single potted plant needs to be posted, a small sign would be appropriate.

**DANGER
PESTICIDES**

**PELIGRO
PESTICIDAS**



**KEEP OUT
NO ENTRE**

Oral Warnings to Workers

1. The content of oral warnings must include the following:
 - a. The location and description of the treated area
 - b. The time during which entry is restricted
 - c. Instructions not to enter the treated area until the REI has expired
2. Oral warnings must be communicated to workers in a language they understand.
3. Workers who are on your establishment at the start of an application must be orally warned before the application takes place.
4. Workers who are not on your establishment at the start of an application must be orally warned at the beginning of their first work period if the application is still taking place or if the REI for the pesticide is in effect.

Instructions Related to PPE

Early entry workers must receive the following instructions in a language they can understand:

1. How to correctly put on, use, and take off early entry PPE
2. The importance of washing thoroughly after removing PPE
3. How to prevent, recognize, and give correct first aid for heat-related illnesses

If there is a chance that the PPE will be worn home, instructions must be given to make sure the worker knows that the PPE must be kept and washed separately from all other laundry.

Labeling Information and Instructions

In a language they can understand, inform early entry workers about the safety information and instructions on any pesticide label to which an REI applies, including the following:

1. Human hazard statements and precautions
2. First aid instructions
3. The signs and symptoms of poisoning
4. The PPE required for early entry
5. Any other precautions or instructions related to safe usage or early entry

WPS Decontamination and Emergency Assistance Requirements

Decontamination Supply Requirements

Employers must make sure to provide handlers with decontamination supplies for washing off pesticides and pesticide residues while they are performing handling tasks and to workers who are in a pesticide-treated area and are performing tasks that involve contact with anything that has been treated with pesticides, including soil, water, or plant surfaces.

The WPS requires that decontamination supplies be provided regardless of the number of employees. Whenever provided to workers or handlers, decontamination and emergency eye-flush water must, at all times, be of a quality and temperature that will not cause illness or injury if it comes in contact with the skin or eyes or if it is swallowed.

Worker Decontamination Supplies

Supplies must be located within $\frac{1}{4}$ mile of the work area if a WPS-labeled pesticide has been used within 30 days, except in those cases where low-risk pesticides (those with REIs of four hours or less) are used. When pesticides with an REI of four hours or less are used, decontamination supplies only need to be available for seven days. Supplies must be located in an area free of spray residues. Existing facilities, such as restrooms, will qualify as decontamination sites if they meet the minimum requirements for decontamination supplies, which include the following:

1. Water—a minimum of one gallon of water per worker or a source of potable tap water
2. Soap—for use in washing prior to eating, drinking, smoking, chewing tobacco or gum, or using the bathroom
3. Single-use, disposable towels—for drying hands (multiple-use towels are not acceptable)

Handler Decontamination Supplies

Supplies must be provided at the mixing site and within $\frac{1}{4}$ mile of the application area. Supplies may be in the application area if protected from drift and spray residues. Supplies must include the following:

1. Water—a minimum of three gallons per handler or a potable source of tap water
2. Soap and single-use towels
3. A whole-body wash—a means of rinsing the handler if a spill occurs



Decontamination sites must be located with ¼ mile of the application or work site and where personal protective clothing is removed. Decontamination sites must include soap, single-use paper towels, coveralls, and adequate water.

4. Clean clothes or coveralls and a towel for after a whole-body wash
5. Emergency eyewash if the pesticides used require protective eyewear as stated on the label; potable water may be used as eyewash

Emergency Assistance Requirements

Employers of workers and/or handlers must provide emergency assistance to anyone who is or has recently been employed as a worker/handler on their agricultural establishment if there is a reason to believe that the person has been injured or poisoned through contact with pesticides or pesticide residues.

Employers are responsible for making emergency transportation available to take a worker/handler from the agricultural establishment or a farm labor camp located on the establishment to an emergency medical facility with the ability to provide proper treatment. Employers can provide this transportation by taking the employee to the emergency medical facility, by calling an emergency vehicle such as an ambulance, or by making sure the employee has a ride to the medical facility with someone else.

Employers are also responsible for providing emergency information concerning pesticides that have been applied to any worker, handler, or treating medical personnel promptly on request. Such information must include the following:

1. The name, EPA registration number, and active ingredient(s) for any product(s) to which the person may have been exposed
2. The antidotes, first aid, statement of practical treatment, and other medical or emergency information from the label
3. A description of the way the pesticide was being used
4. The circumstances of the worker's/handler's exposure to the pesticide

Protections for Crop Advisers

In April 1995, the EPA completed a final-rule amendment to the WPS that exempts certified or licensed crop advisers and persons under their direct supervision performing crop-adviser tasks from all WPS provisions, except pesticide safety training.

Summary of Final-Rule Amendment

1. Certified or licensed crop advisers and persons under their direct supervision are exempt from WPS provisions, except pesticide safety training.
2. The exemption applies only after the pesticide application ends and while performing crop-advising tasks.
3. The exemption describes what constitutes "direct supervision" and the information that crop

advisers must convey to those under their direct supervision.

4. Certified or licensed crop advisers may substitute pesticide safety training received during certification or licensing if it is equivalent to WPS pesticide handler training.

Discussion

As handlers under the WPS, crop advisers may enter treated areas during application and the REI without time limitations if they are provided with the required PPE and other protection requirements specified on the product for handlers. Employees of agricultural establishments who are performing crop-adviser tasks in a treated area within 30 days of the expiration of the REI are provided the same protection as workers under the WPS.

The exemption established by this action allows certified or licensed crop advisers to choose appropriate protection to be used while performing crop-advising tasks in treated areas after pesticide application.

After the pesticide application ends, if crop advisers are only performing advising tasks, they and persons under their direct supervision are exempt from several requirements of the WPS, including PPE, label knowledge, site-specific information, decontamination, and emergency assistance. Certified or licensed crop advisers may substitute pesticide safety training received during federal-, state-, or tribal-approved certification or licensing programs if such training is at least equivalent to the WPS training.

Commercial Pesticide Applicators

Commercial (custom) pesticide applicators must provide certain information about the pesticide(s) to the owner/operator of a farm, forest, nursery, or greenhouse who hires them before their pesticides are applied on the agricultural establishment.

Information for Agricultural Establishment Operators

Commercial pesticide applicators must inform the operator of a farm, forest, nursery, or greenhouse about the following information:

1. The specific location and description of the areas on the agricultural establishment that are to be treated with the pesticide(s)
2. The time and date the pesticide is scheduled to be applied
3. The product name, EPA registration number, and active ingredient(s) of the pesticide
4. The REI for the pesticide
5. The product's requirements regarding both treated-area postings and oral notifications
6. Any other specific requirements on the pesticide label concerning protection of workers and other persons during or after application

Operators of agricultural establishments must have this information to protect their employees.

Operators of farms, forests, nurseries, and greenhouses must also provide commercial pesticide applicators with certain information concerning previously treated areas on the agricultural establishment. This information must include the following:

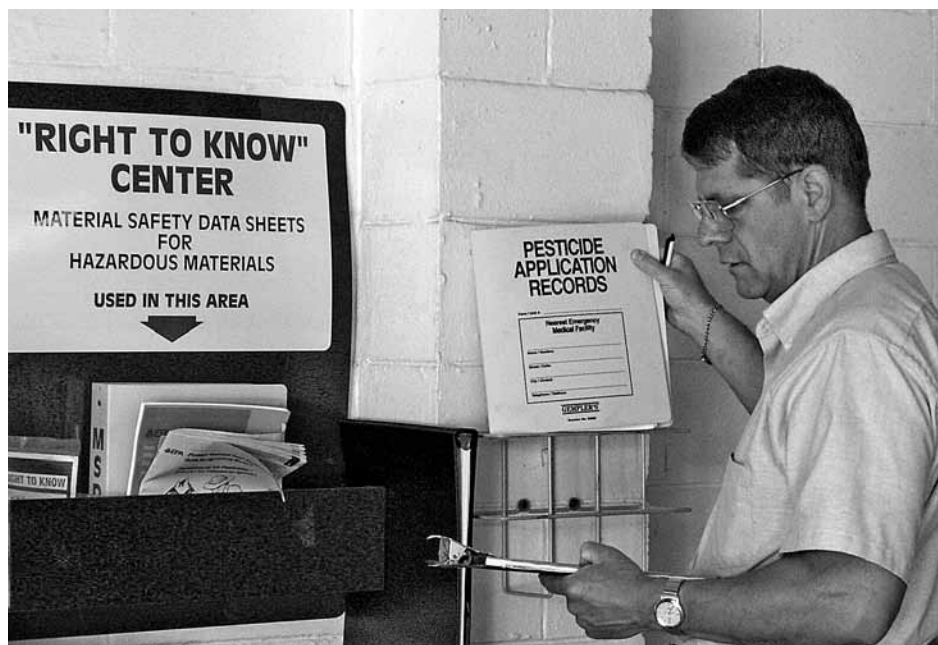
1. The specific location and description of all areas on the agricultural establishment that:
 - a. May be treated with a pesticide or be under a REI while the commercial applicator will be there
 - b. Are within ¼ mile of the applicator
 - c. Have entry restrictions

Operators of commercial pesticide applicator establishments must have this information to inform and protect their employees.

WPS Information Sources and Compliance Assistance

Compliance assistance is available through the Pennsylvania Rural Health Farm Worker Protection Safety Program. The mission of this Penn State-based program is to promote a better understanding of the EPA's WPS and to assist agricultural employers and employees in meeting the requirements of the WPS. The following publications are available for WPS compliance assistance from the Pennsylvania Rural Health Farm Worker Protection Safety Program by calling the program at 814-863-8214:

- *The Worker Protection Standard for Agricultural Pesticides: How to Comply* manual
- *Protect Yourself from Pesticides: A Guide for Agricultural Workers* (English/ Spanish)



Penn State worker protection specialists are available to conduct informational on-site audit evaluations, which, for educational purposes only, are to help growers identify areas where they may be out of compliance. Pennsylvania Department of Agriculture inspectors conduct compliance and enforcement inspections to determine violations.

- *Protect Yourself from Pesticides: A Guide for Handlers*
- *Protect Yourself from Pesticides: Color Safety Poster* (English/Spanish)

The following websites also contain useful information:

- *The Worker Protection Standard for Agricultural Pesticides: How to Comply* manual:
www.epa.gov/agriculture/htc.html
- Farm Worker Protection Safety Program:
www.porh.cas.psu.edu/fwpp
- Penn State Pesticide Education Program:
www.pested.psu.edu/issues/wps

Included in this fact sheet is a compliance checklist (see page 15) to help ensure that the operation is meeting the WPS requirements once it is completed. The Pennsylvania Rural Health Farm Worker Protection Safety Program offers on-site assessments of WPS compliance using this checklist free of charge. Voluntary compliance assistance visits are strictly educational and have no enforcement affiliation. They can be scheduled by contacting the office at 814-863-8214.

Pesticide Compliance Strategy for WPS

The WPS was developed to provide protection to agricultural workers and pesticide handlers from pesticide exposure. To ensure compliance with the WPS, the Pennsylvania Department of Agriculture (PDA) will use the guidelines below to evaluate agricultural operations for WPS compliance.

Central Location/Pesticide Record-Keeping Review

1. Ensure that all WPS requirements regarding application information, including the following, are present in pesticide records:
 - a. Pesticide brand or product name
 - b. Location and description of treated area
 - c. Active ingredient(s)
 - d. Date of application and time completed
 - e. Length of the REI
2. Display the color EPA WPS safety poster at a central location, listing the following information:
 - a. Emergency information
 - b. The telephone number of the PDA regional office
3. Make labels or material safety data sheets (MSDS) accessible in case of worker and handler emergency medical needs.

Decontamination Inspection

1. For workers—inspect field or greenhouse areas where workers are present during the 30 days following a pesticide application or the end of an REI to ensure that the following criteria are met:
 - a. Soap, water (one gallon per worker), and single-use towels are available for decontamination
 - b. The decontamination site(s) is not in an area subject to spray drift or residues
 - c. The decontamination site(s) is within ¼ mile of the workers
2. For handlers—inspect mixing, loading, and application areas and equipment to ensure that the following handler decontamination requirements are met:
 - a. Soap, towels, water (three gallons per handler), clean coveralls, and whole-body wash are available
 - b. Complete PPE is in good condition and is properly stored and cleaned
 - c. Decontamination supplies and the PPE storage area are located in an area free from drift and pesticide residues

Field Inspection

Observe workers and handlers in the field to ensure compliance with the following WPS requirements:

1. Posting: WPS signs are in place where posting is required by the pesticide label. Ensure that no signs are up longer than 72 hours after the REI expires.
2. Oral notification: Ensure that all workers are notified orally of all pesticide applications if required by the WPS.



In Pennsylvania, approved trainers must have a current Pennsylvania Pesticide Applicator Certification. Trainers must use nontechnical terms and EPA-approved training materials. Workers must be trained in a language they can understand. Written safety training materials must be available to workers. All training must be documented.

3. Field work:

- a. Ensure that no early entry work is done within the REI except as allowed by the WPS.
- b. Ensure that all PPE is being used by mixing and loading employees and by application handlers.
- c. Evaluate the heat-related stress potential to determine the possibility of problems.
- d. Ensure that contact is made with the applicators of toxicity category I and II products every two hours during application as required by the WPS.

Training Records

1. Review worker training records to ensure that all workers were properly trained under the WPS.
2. Ask the grower which WPS materials were used for training.
3. Ask to see the training materials.
4. Inspect items 1–3 (above) for handler records.
5. Record the name of the WPS trainer for subsequent verification.

Postinspection Conference

1. Explain the strengths and shortcomings within the operation related to the WPS.
2. Offer suggestions orally on how the establishment can reach full compliance when warranted.
3. Provide available outreach materials to the grower.
4. Explain any follow-up actions needed related to the inspection, including the following:
 - a. a need for reinspection if violations are found
 - b. a written report of the findings to the grower
5. Ask the grower if he/she has any concerns or questions about the WPS for the establishment.

EPA Worker Protection Standard Checklist

Check to see if you are in compliance

This checklist serves only as a brief overview of basic Worker Protection Standard (WPS) requirements. For complete details of your responsibilities, refer to the EPA's *WPS: How to Comply* manual, or contact your nearest Pennsylvania Department of Agriculture office.

Central Location

- All information is legible, up to date, and accessible to employees
- The EPA-approved safety poster is posted and complete
- Emergency medical information is displayed
- The following records are displayed and available for at least 30 days following the expiration of the restricted-entry interval (REI): location of treated area, pesticide product name, active ingredient(s), EPA registration number, and the date and time of the application and of the REI

Pesticide Safety Training

- Complete WPS training is given to workers prior to the sixth day of their entering any treated areas and every five years thereafter
- Complete WPS training is given to handlers prior to their performing any handler tasks and every five years thereafter
- "Basic Pesticide Safety Information" is provided to workers as necessary
- EPA-developed or equivalent training materials are used in training
- Training is presented in a language the trainees can understand
- Trainers are properly qualified

Decontamination Sites

Handler decontamination sites:

- Have at least three gallons of water per handler, soap, single-use towels, and coveralls
- Are located at the mixing/loading sites, within ¼ mile of the application site, and where personal protective equipment (PPE) is removed
- Are supplied with at least one pint of immediately available clean water for eye flushing when a label specifies the use of protected eyewear

Worker decontamination sites:

- Have at least one gallon of water per handler, soap, and single-use towels
- Are located within ¼ mile of the work site
- Are provided for 30 days following the end of the REI (seven days with REIs of four hours or less)

Applicator Notification

- Oral and/or posted warnings are given according to label requirements
- Appropriate warning signs are used and posted at all usual entry points to treated areas
- Warning signs are posted not more than 24 hours prior to treatment and removed within three days following the end of the REI
- Oral warnings are given in a language workers can understand

Personal Protective Equipment (PPE)

- Label-required PPE is provided for handlers and early entry workers
- PPE is kept clean and well maintained
- A clean place for PPE storage is provided

Employer Information Exchange

- Information is supplied by the custom applicator for Central Location posting prior to applications
- Information is supplied to custom applicators about REIs in effect on the property to which they are exposed

Monitoring Handlers

- Sight or voice contact is made at least every two hours with handlers using skull and crossbones pesticides
- Constant voice or visual contact is maintained with handlers using fumigants indoors

Poison Control Centers 1-800-222-1222

Calling the toll-free National Poison Center hotline above will connect you to the nearest poison center. Pennsylvania residents are served by the Pittsburgh Poison Center and the Poison Control Center in Philadelphia.

Pesticide Safety Fact Sheets are produced by the Pesticide Education Program in Penn State's College of Agricultural Sciences. Topics covered in the series include:

- pesticide laws and regulations
- handling chemical spills
- personal protective gear
- pesticides in the environment
- equipment care and cleaning
- pesticide toxicity and health effects

For a complete list of fact sheets and electronic copies or for more information about the Pesticide Education Program, visit www.pested.psu.edu on the web.

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