The Worker Protection Standard for Agricultural Pesticides (WPS) is a regulation issued by the U.S. Environmental Protection Agency (EPA). The final rules were fully implemented in 1995 to protect people who are exposed through their work to pesticides on farms, forests, nurseries, and greenhouses. The WPS covers both workers in areas treated with pesticides and employees who handle pesticides (handlers).
WPS requirements pertain to all pesticides that have the following statement on their label:

“AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment, notification of workers, and restricted-entry intervals.”
The WPS considers Agricultural Workers in a vineyard as being:

1. Those who perform tasks related to growing grapes, such as: site preparation, watering, pruning, sucker removal, shoot thinning, cluster thinning, cane tucking, canopy combing, netting, hedging, trellis installation and maintenance, weeding, harvesting, etc. and

2. Anyone employed for any type of compensation (including self-employed persons).
Vineyard employers must comply with the worker requirements of the WPS if all of the following apply:

1. Own or operate a vineyard where pesticides are used.

2. Workers are hired who are not his family members.

3. Hire or contract with workers to perform activities in the vineyard related to the production of grapes, such as: site preparation, watering, pruning, sucker removal, shoot thinning, cluster thinning, cane tucking, canopy combing, netting, hedging, trellis installation and maintenance, weeding, harvesting, etc…

4. Pesticides have been applied within 30 days of workers being on an establishment within ¼ mile of a pesticide-treated area.
Employers must not prevent or discourage any worker from complying or attempting to comply with the WPS, and must not fire or otherwise retaliate against any worker who attempts to comply.

Employers can be subject to civil and criminal penalties if found not complying with the WPS.
The WPS requires workers to be informed about pesticide safety and have access to:

1. The EPA WPS Pesticide Safety poster
2. Pesticide label information for early-entry workers*
3. On-premise pesticide application and safety information, posted at a centrally located area

*Early-entry workers are those who perform tasks in a pesticide-treated area prior to the expiration of the restricted entry interval (REI) stated on the pesticide label.
Workers have a right to be protected from exposure to pesticides.

1. Workers should not be exposed to pesticide applications.

2. Workers will be excluded from areas being treated with pesticides.

3. Workers will be excluded from areas that remain under a pesticide restricted-entry interval (REI), with narrow exceptions.

4. Employers need to protect early-entry workers who perform permitted tasks in treated areas during an REI. Special instructions for the correct use of personal protective equipment (PPE) will be provided.

5. Workers will be notified about treated areas so they can avoid pesticide exposures.
DECONTAMINATION SUPPLIES — Workers will be provided an ample supply of water, soap, and towels for routine washing and emergency decontamination. These decontamination materials will be within ¼ mile of the worksite or nearest point of vehicle access and will not be in an area being treated or in an area covered with the restricted entry interval (REI) of pesticide(s’) treatment.

EMERGENCY ASSISTANCE — transportation will be made available to a medical care facility if a worker may have been poisoned or injured by a pesticide. Information about the pesticide(s) to which the worker may have been exposed will be provided to medical personnel.
1. Pesticides may be on or in plants, soil, irrigation water, or pesticide drift from nearby applications.

2. Prevent pesticides from entering your body by:

- Following directions and/or signs about keeping out of treated or restricted areas
- Washing before eating, drinking, using chewing gum or tobacco, or using the toilet
- Wearing work clothing that protects the body from pesticide residues
- Washing/showering with soap and water, shampooing hair and putting on clean clothes after work
- Washing work clothes separately from other clothes before wearing them again
- Washing immediately in the nearest clean water if pesticides are spilled or sprayed on the body and, as soon as possible, showering, shampooing, and changing into clean clothes

- More complete WPS training will be provided within five (5) days of your initial entry into a treated area.
1. Pesticides may be on or in plants, soil, irrigation water, or drifting from nearby applications.

Pesticides can be in the form of liquids, powders, granules or gases.

Pesticide residues are often not able to be detected by sight or smell, and may be present on or in plants, soil, irrigation water and/or may have drifted from a nearby application.
2. Prevent pesticides from entering your body by following directions and/or signs about keeping out of treated or restricted areas:

Workers will be notified about pesticide applications orally and by posting WPS designed warning signs at entrances to treated areas if the following statement is on the pesticide label:

“Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.”

Note: if the label does not require both posting and oral notification, workers must receive either oral OR posted notification of an application or an area under an REI.

Warning signs must be similar to the design shown here (right). Signs may be posted no earlier than 24 hours before application. They must remain during the REI and must be removed before workers enter, or within three (3) days after the end of the REI.

These warning signs must be posted so they can be seen at all normal entrances to treated areas.
2. (Continued) Prevent pesticides from entering your body by:

- Washing before eating, drinking, using chewing gum or tobacco, or using the toilet

- Wearing work clothing that protects the body from pesticide residues

- Washing/showering with soap and water, shampooing hair and putting on clean clothes after work

- Washing work clothes separately from other clothes before wearing them again

- Washing immediately in the nearest clean water if pesticides are spilled or sprayed on the body and, as soon as possible, showering, shampooing, and changing into clean clothes
Employers must assure that untrained workers receive initial pesticide safety information before they enter a pesticide-treated area.

By the sixth day of their entry into a treated area, all agricultural workers must receive the complete WPS pesticide safety training.

Workers must be trained at least once every five (5) years, counting from the end of the month in which the previous training was completed.
WPS worker training required before the sixth day of entry into a treated area:

1. Where and in what form pesticides may be encountered during work activities.
2. Hazards of pesticides resulting from toxicity and exposure, including acute effects, 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. How to obtain emergency medical care.
7. Routine and emergency decontamination procedures, including emergency eye-flushing techniques.
8. Hazards from chemigation and drift.
9. Hazards from pesticide residues on clothing.
10. Warnings about taking pesticides or pesticide containers home.
11. An explanation of the WPS requirements designed to protect workers, including application and early entry restrictions, design of the warning sign, posting of warning signs, oral warnings, availability of specific information about applications, and protection against retaliatory acts.

Note: WPS worker training materials must use terms that the worker can understand.
1. Where and in what form pesticides may be encountered during work activities.

Pesticide Application and Safety Information will be displayed at a Central Location

1. Facts about each pesticide application includes:
   - EPA registration #
   - Active ingredient(s)
   - Pesticide Formulation
   - Location and description of treated area
   - Time and date of application
   - Restricted entry interval (REI)

2. Name, address and telephone number of the nearest emergency medical facility.

3. EPA WPS Safety Poster
Pesticides are used to control pests like insects, diseases and weeds. Pesticides can also harm or even kill people if used improperly. Some people can be more sensitive than others to the same amount of pesticide. Repeated exposure to a pesticide can increase a person’s sensitivity to a pesticide.

**CHRONIC** poisoning occurs from long-term repeated or continuous exposure to a poison where symptoms do not occur immediately after each exposure.

**ACUTE** poisoning occurs in cases of exposure to a poison on one occasion or within a short period of time.

**DELAYED** adverse health effects of a pesticide exposure or repeated exposure can occur days, weeks or years afterwards. These delayed effects may include cancer, nerve damage, kidney damage or birth defects from pesticide exposure to pregnant women.
3. Routes through which pesticides can enter the body:

Skin contact
Eye contact
Inhalation (breathing)
Swallowing

The most common form of pesticide poisoning in vineyards occurs through skin contact with surfaces, such as the plant foliage or other treated areas. Pesticide residues existing on these surfaces may not be visible.
Common signs of pesticide poisoning can include skin rashes and/or pain or discomfort in the nose, throat or eyes.

Other common symptoms of pesticide poisoning may include:

7. Troubled breathing  8. Small eye pupils
9. Loss of consciousness
5. Emergency first aid for pesticide injuries or poisonings.

Quickly remove yourself from the pesticide treated area.

Quickly remove any pesticide contaminated clothing from your body and wash thoroughly with soap and water to remove the residue from your skin.

Tell your supervisor immediately if you or someone else becomes ill or injured from a pesticide exposure in the vineyard.

First aid instructions can be found on the pesticide label.
Your employer must provide you emergency transportation to the nearest medical clinic if you become sick or injured and must provide the needed pesticide poisoning information to medical personnel.

This information will include:

1. Product name, EPA registration number, and active ingredients for any products(s) to which you may have been exposed.
2. Antidote, first aid, statement of practical treatment and other medical or emergency information from the product labeling.
3. Description of the way the pesticide was being applied.
4. Circumstances of the worker’s exposure to the pesticide.

6. How to obtain emergency medical care.
Workers should quickly use the soap, water and towels provided when exposed to pesticides in the vineyard.

Workers should wash their hands and face with soap and water prior to eating or smoking.

Workers should wash their whole body, including their hair at the end of each work day, and put on clean clothes.

Eye damage from pesticide exposure can occur quickly. Make sure to rinse your eyes out with a stream of cool, clean water for at least 15 minutes, if possible. Make sure to notify your supervisor and visit a doctor quickly afterwards.
Fertilizers and pesticides are sometimes applied through a vineyard drip irrigation system. Care should be taken to avoid contact with irrigation systems.

Pesticide drift can sometimes contaminate unintended areas from misapplications by malfunctioning equipment, human error or windy conditions. Quickly remove yourself from these areas if drift occurs and notify your supervisor as soon as possible.
9. Hazards from pesticide residues on clothing.

Work clothes should be removed at the end of each day and kept separately from other clothes in the home.

Your dirty vineyard work clothes should not be worn again until washed thoroughly with soap and hot water.

Work clothes should be washed separately from your normal family laundry.

**WASHING PESTICIDE WORK CLOTHING**

- Wear rubber gloves.
- Keep separate from other clothes.
- Use a pre-soak cycle or run through the wash cycle twice.
- Use the highest water level.
- Wash a full cycle, in very hot water.
- Use strong detergent.
- If possible, dry the clothes outside on a line.
- Clean the washing machine by running a cycle with no clothes.
10. Warnings about taking pesticides or pesticide containers at home.

Pesticides should only be stored in their original containers.

Empty pesticide containers should be properly disposed of. They should not be taken home and used for any other purpose.
11. An explanation of the WPS requirements designed to protect workers, including application and entry restrictions, design of the warning sign, posting of warning signs, oral warnings, availability of specific information about applications, and protection against retaliatory acts.

Information on the WPS requirements mentioned above has already been covered in this document. Further explanation of WPS requirements for workers can be found in the 48-page publication whose cover is shown to the right.

You can view or download and print this online document at no charge: http://www.epa.gov/region1/eco/pest/pdfs/ProtectYourselfFromPesticidesSpanish.pdf

Or, you can obtain a CD-ROM of this document at no charge by contacting your nearest EPA regional office.

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Early-entry Workers and Their Training

Early-entry workers perform tasks in a pesticide-treated area prior to the restricted entry interval (REI) expiring.

Early-entry workers must receive the complete WPS training before they do any early-entry task.

The five-day grace period for training that applies to other workers does not apply to early-entry workers.

Early-entry workers involving contact with treated surfaces are only permitted in four work situations:

1. Short-term tasks that last less than one hour and do not involve hand labor

2. Limited-contact tasks that could not have been foreseen, cannot be delayed, and do not involve hand labor

3. Emergency tasks that take place because of an agricultural emergency (Hand labor permitted)

4. Specific tasks approved by EPA through a formal exception process.
What is Hand Labor?

Hand labor is defined as any activity performed by hand or using hand tools that involves substantial contact with treated surfaces.

Examples include planting, pruning, removing suckers, shoot thinning, shoot positioning, cluster thinning, trellis maintenance, netting, hedging and harvesting.

Early-entry workers may enter treated areas before the REI is expired to do short-term tasks that do not involve hand labor:

1. If provided with the protections and personal protective equipment (PPE) required for early entry.
2. Each worker must:

   - Wait at least four (4) hours after the pesticide application is completed before entering the treated area.

   - Wait at least until any inhalation exposure level listed on the product labeling has been reached or any WPS ventilation criteria have been met.

   - Spend no more than one hour in a 24-hour period on short-term early-entry tasks.
Early-entry workers may enter treated areas before the REI is expired to do Limited –Contact tasks:

1. Where early-entry workers’ only contact with treated surfaces — including soil, water, surfaces of plants, crops, and irrigation equipment — is minimal and is limited to their feet, lower legs, hands, and forearms.

2. Hand labor tasks are not considered limited-contact tasks.

Examples of limited-contact tasks would include operating, moving, or repairing irrigation or watering equipment; operating or repairing weather monitoring and frost protection equipment, and repairing non-application field equipment
No-Contact Early-entry workers are allowed if:

Early-entry workers will have no contact with anything that has been treated with the pesticide to which the restricted-entry interval (REI) applies.

Examples would include:

- Wearing footwear and walking in aisles or on roads, footpaths or other pathways through the treated area where the plants or other treated surfaces cannot contaminate pesticides on to the worker.

- Operating an open-cab vehicle in a treated area where the plants cannot contaminate the worker with pesticides

- After a pesticide application that is incorporated or injected into the soil, the worker is doing tasks that do not involve touching or disrupting the soil subsurface.

- The worker is in an enclosed cab on a truck, tractor, or other vehicle.
Early entry workers may enter treated areas before the REI in cases of a Declared Agricultural Emergency.

Early-entry workers may enter treated areas before the REI is over to do tasks that are necessary because of an agricultural emergency, if provided with the protections and PPE required for early entry.

Each early-entry worker must:
- do only those tasks relating to mitigating the emergency, and
- wait at least four (4) hours after the pesticide application is completed before entering the treated area, and
- wait at least until any inhalation exposure level listed on the product labeling has been reached or any WPS ventilation criteria have been met.
A state, tribal, or federal agency having jurisdiction must declare that circumstances exist, have occurred, or are forecast that might cause an agricultural emergency where the vineyard operation is located. Such circumstances may include, for example, flooding, hail, high winds, tornado, freeze, or frost.
Additional Decontamination materials for Early-entry workers:

**EMERGENCY EYE-FLUSHING** - Provide each early-entry worker with at least one (1) pint of eye-flush water when the pesticide labeling requires protective eyewear for early entry. The emergency eye-flush water must be immediately accessible.

**DECONTAMINATION at the End of Exposure Period** - At the site where early-entry workers take off their PPE, provide soap, clean towels, and enough water to allow early-entry workers to wash thoroughly after removing their PPE (At least one gallon per early-entry worker recommended).
Personal Protective Equipment (PPE) is apparel and devices worn to protect the body from contact with pesticides or pesticide residues, including coveralls, chemical-resistant suits, gloves, footwear, aprons, and headgear, protective eyewear, and respirators.

While the following attire is not defined as PPE, the labeling may require early-entry workers to wear it for some tasks: long- and short-sleeved shirts, long and short pants, shoes and socks, or other items of regular work clothing. If such non-PPE attire is required, the employer must make sure that it is worn.
Vineyard owners and members of their immediate families are exempt from many WPS requirements. However, EPA encourages owners to provide themselves and their families with all WPS protections.

*Immediate family includes only spouse, children, stepchildren, foster children, parents, stepparents, parents, brothers and sisters.*
Agricultural owners are *not* required to provide themselves or members of their immediate family with the following protections of the WPS:

1. Posting information at a central location
2. Pesticide safety training
3. Decontamination supplies
4. Emergency assistance
5. Notice about pesticide applications
6. All the specific duties related to the care of PPE management and its use
7. The following duties related to early entry:
   - Training and instructions
   - Decontamination supplies

Special Exemptions for family members!
These are the primary requirements vineyard workers, owners and family members need to know to comply with the Worker Protection Standard. Both organic and conventional pesticides fall within these requirements. Further information can be found here:


3. EPS WPS publications: http://www.epa.gov/agriculture/awor.html#farmworkers
Questions?

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