

# ***WORKER PROTECTION STANDARD***



Presented by the Public Education Section  
Oregon OSHA  
Department of Consumer and Business Services



## **Oregon OSHA Public Education Mission:**

We provide knowledge and tools to advance self-sufficiency in workplace safety and health

### **Consultative Services:**

- Offers no-cost on-site assistance to help Oregon employers recognize and correct safety and health problems

### **Enforcement:**

- Inspects places of employment for occupational safety and health rule violations and investigates complaints and accidents

### **Public Education and Conferences:**

- Presents educational opportunities to employers and employees on a variety of safety and health topics throughout the state

### **Standards and Technical Resources:**

- Develops, interprets, and provides technical advice on safety and health standards
- Publishes booklets, pamphlets, and other materials to assist in the implementation of safety and health rules

**Questions?  
Call us**



### **Field Offices:**

Portland	503-229-5910
Salem	503-378-3274
Eugene	541-686-7562
Medford	541-776-6030
Bend	541-388-6066
Pendleton	541-276-2353

### **Salem Central Office:**

Toll Free number in English: 800-922-2689

Toll Free number in Spanish: 800-843-8086

Web site: [www.orosha.org](http://www.orosha.org)

# **Welcome**

# **WPS**

## **PURPOSE**

**The purpose of this workshop is to provide an introduction to the Worker Protection Standard.**

**To get the most out of this workshop, please participate fully in all the activities. We hope you have fun and learn something of value.**

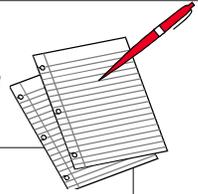
## **GOAL**

**At the end of this workshop you will be able to:**

- 1. Identify the requirements of the WPS**
- 2. Differentiate between the OR-OSHA and WPS rules**
- 3. Identify the components of an effective training team**
- 4. Identify the 8 label elements of the WPS**

Notice: This safety program is intended to provide general information and guidance. It does not replace OR-OSHA standards or established organization policies and practices. Rather, its purpose is to enhance them.

# note to the instructor



This workshop was created by  
Oregon OSHA  
Salem, Oregon  
Contact information:  
Tomas Schwabe  
503-947-7436  
tomas.schwabe@state.or.us

## Supplies:

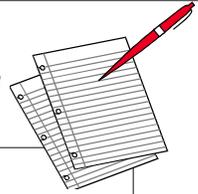
Although not necessary, this workshop works best if you obtain some items to “show and tell.”

1. A WPS poster.
2. A copy of the WPS video produced by IDAHO. (You don’t have to show the video for this workshop.)
3. A WPS Flip Chart.
4. A half-face respirator with organic vapor cartridge and prefilter.
5. A variety of rubber gloves ie., neoprene, nitrile, PVC, and Teflon.
6. Copies of the OR-OSHA rules that govern agriculture; OAR 437- Division 4 in either hard copy or CD-ROM. It never hurts to have the hard copy in class if someone wants to “see” the rule.
7. A copy of the OR-OSHA brochure, Safe Practices When Working Around Hazardous Agricultural Chemicals.

Continues...

**Please Note:** This material or any other material used to inform employers of compliance requirements of Oregon OSHA standards through simplification of the regulations should not be considered a substitute for any provisions of the Oregon Safe Employment Act or for any standards issued by Oregon OSHA.

# note to the instructor



Instructor: You may link to the OR-OSHA WPS rule by clicking on the link below

[http://www.cbs.state.or.us/external/osha/pdf/rules/division\\_4/div4w.pdf](http://www.cbs.state.or.us/external/osha/pdf/rules/division_4/div4w.pdf)

Instructor: You may link to the entire entire OR-OSHA Division 4 rule, by clicking the link below

[http://www.cbs.state.or.us/external/osha/pdf/rules/division\\_4/div4.pdf](http://www.cbs.state.or.us/external/osha/pdf/rules/division_4/div4.pdf)

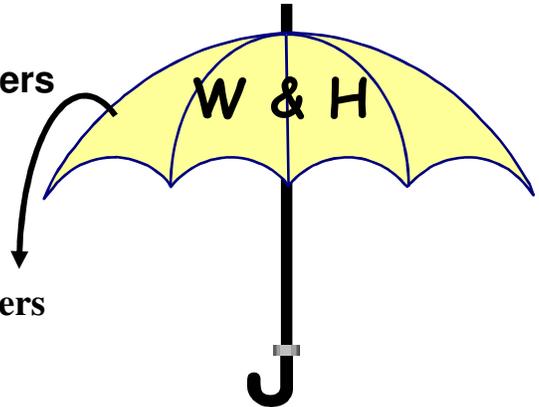
See page **13** of the **student** workbook or page **26** of **this instructor** workbook for contact information to obtain the WPS poster, the IDAHO video and the flip chart and copies of the Division 4 rule.

The respirator and gloves can be obtained from any personal protective equipment supplier.

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

## Requirements For *Both* Workers and Handlers

- ◆ Information at a Central Location
- ◆ Pesticide Safety Training
- ◆ Decontamination Sites
- ◆ Notice of Applications to Handler Employers
- ◆ Emergency Assistance



## Requirements for *Workers*

- ◆ Restrictions During Applications
- ◆ Restricted-Entry Intervals (REIs)
- ◆ Posted Warning Signs
- ◆ Oral Warnings

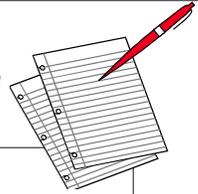


## Additional Requirements for *Handlers*

- ◆ Application Restrictions and Monitoring
- ◆ Specific Instructions for Handlers
- ◆ Equipment Safety
- ◆ Personal Protective Equipment
  - Duties Related to PPE
  - Care of PPE
  - Replacing Respirator Purifying Elements
  - Disposal of PPE
  - Instructions for People Who Clean PPE



# note to the instructor



The page with the umbrellas represents the 3 part of the WPS standard.

The first part of the WPS represented by the large umbrella has language that protects **BOTH** workers and handlers.

The second part of the WPS represented by the smaller umbrella, has **additional** protective language for **WORKERS**.

The third part of the WPS represented by the other smaller umbrella, has **additional** protective language for **HANDLERS**.

Flip the pages in the workbook and show the audience that each of the pages has a miniature of the three umbrellas representing each of the 3 sections of the WPS. The downward arrows from the umbrella, shows the audience in what part of the WPS standard they are.

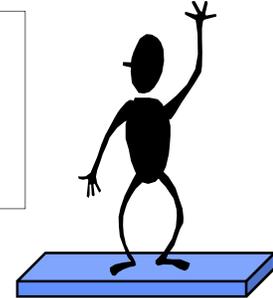
**This page is the outline of the material covered in the WPS.**

# Special Note

**Agricultural employers with 10 or fewer employees are exempt from routine inspections if they meet the following criteria (Oregon Revised Statute ORS 654.172 and Oregon Administrative Rule OAR 437-001-0057):**

- **No accidents resulting in death or serious disabling injury occur within the preceding two-year period.**
- **The agricultural place of employment is inspected once every four years by an individual acting in a safety consultant capacity and the employer has corrected the violations noted by the consultant within 90 days of receipt of the consultant's report.**
- **The employer and principal supervisors annually attend four hours of instruction on agricultural safety rules and procedures.**

**Please remember that the above exemption doesn't hold for a field sanitation inspection, a labor camp inspection, a fatality, catastrophe or accident investigation, or a valid complaint inspection.**

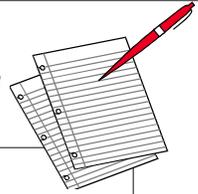


**The certificate confirms that you attended four hours of safety instruction.**

**All OR-OSHA workshops meet the training requirement!**

A sample certificate with a blue border. At the top left is the logo for the Department of Consumer Business & Services. At the top right is the Oregon OSHA logo. The text reads: "This certificate acknowledges that" followed by a line for "STUDENT NAME". Below that, it says "successfully completed the x hour workshop" followed by a line for "Class Title". At the bottom left is a signature line with the name "Roy Kraker" and his title "Consultation & Public Education Manager, Oregon OSHA". To the right of the signature is the Oregon State Seal. Further right is a date field with "Month 01, 2013" and a line for "Date".

## note to the instructor



The exemption from inspections was passed by the 1995 Oregon Legislature.

The 10 or fewer employees only applies to permanent employees working either full or part time. If the farm hires large numbers of migrant workers, these workers don't count toward the total of 10 or fewer.

If OR-OSHA compliance were to arrive at an agricultural place of employment to conduct an inspection and the employer had complied with all the conditions, the compliance officer would cease the inspection process and leave.

If the OR-OSHA compliance officer were to observe a serious or life-threatening hazard during the time he/she is on site, the compliance officer would address the hazard and cite the employer.

Question often asked: If the farm is incorporated as a partnership between a husband and wife, do both have to attend the training? Answer: No, only one; it is assumed they couple will communicate with each other.

OR-OSHA has what's called "emphasis program inspections" which override exemptions such as this one. Currently there is an emphasis program on **field sanitation**. In other words, all that is required for an OR-OSHA compliance officer to stop and conduct **field sanitation** inspections is one or more workers in a field. Usually, the cause for which a compliance officer will stop to conduct a field sanitation inspection is the lack of visible toilet facilities from the road. When a **field sanitation** inspection is initiated, a **WPS** and a **Hazard Communication** inspection may occur.

**If the instructor isn't with OR-OSHA, you are responsible for providing your certificate to the attendees.**

# ***Introduction***

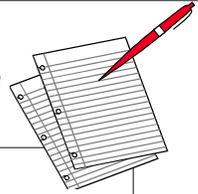
**WPS**

***In Oregon, the  
Occupational Safety and Health Division  
(OR-OSHA)  
administers occupational  
safety and health related laws.***

***OR-OSHA's activities include  
enforcement of the  
Worker Protection Standard  
and other applicable pesticide  
safety and health rules such as  
Hazard Communication,  
Personal Protective Equipment,  
Respiratory Protection, and  
Ventilation.***

***You are welcome to your free copy of the  
agricultural occupational safety and health  
rule by calling any of the telephone numbers  
listed on the inside of this workbook's front  
cover and requesting a copy of Division 4 in  
hard copy, CD-ROM,  
or by visiting our  
Web site: [www.orosha.org](http://www.orosha.org)***

## note to the instructor



Emphasize that the WPS standard is an EPA rule enforced in Oregon by Oregon OSHA. In other words, farms, nurseries, greenhouses must comply with all of the OR-OSHA rules under OAR 437, Division 4 AND the EPA Worker Protection Standard.

Oregon is the only state in the U.S. where the OSHA entity in each state enforces BOTH the OSHA and the WPS.

Farms in other states have two entities governing farm safety; OSHA and EPA. In Washington for example, the OSHA entity known as WISHA, enforces farm safety and the Washington Department of Agriculture enforces the WPS.

When Oregon OSHA safety rules are more protective (stricter) than the WPS, the more protective rule applies. For example, under the WPS, the rule says pesticide handlers “must be trained” but under the Hazard Communication Rule, pesticide handlers “must be effectively trained.” In other words, in Oregon, handlers must demonstrate understanding of the training by answering questions or demonstrating that they’ve actually learned how to handle the chemical safely.

Remind attendees to obtain a copy of the rule in either CD-ROM, hard copy, or through our Web page.

## ***Does WPS apply to you?***

# WPS

*Yes*

If you employ **WORKERS** or **HANDLERS** and pesticides (herbicides, insecticides, fungicides, miticides, etc.) have been applied **OR** a restricted-entry interval has been in effect within the last 30 days.



If you apply either restricted or non restricted-use pesticides.

If you apply either restricted or non restricted-use pesticides in the following circumstances:

If you employ **WORKERS** to perform hand-labor on a farm, nursery, greenhouse, or forest.

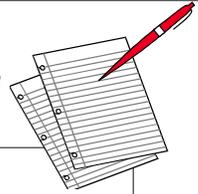
If you employ pesticide **HANDLERS** on a farm, nursery, greenhouse, or forest.



**WPS**  
**does not**  
**apply to fertilizers**



# note to the instructor



Go through all the five “ifs” first.

Return to the first one that has the key  on the margin and remind the audience that for the WPS to apply, that “if” **must** be met. If not met, **NONE** of the WPS applies.

Example: Christmas tree farmers apply fungicides in February or March, to kill fungi and moss. However, workers don’t enter the fields to trim the trees into the classic shapes of cones until May or June. In other words, the WPS doesn’t apply because there were no workers in the Christmas tree fields within 30 days of application or the restricted entry interval.

However, Hazard Communication **DOES** apply because Hazard Communication applies its requirements during the **ENTIRE** growing season.

The pages that follow under the Training category will cover this difference further.

## ***Does WPS apply to you?***

# WPS

***NO***

**If you apply either restricted or non restricted-use pesticides in the following circumstances:**

**For mosquito abatement, or similar wide-area public pest control programs sponsored by government agencies.**

**On livestock or other animals.**

**On plants grown for other than commercial or research purposes such as in habitations, and home fruit and vegetable gardens.**

**On plants, that are in ornamental gardens, parks, and public or private lawns and golf courses.**

**By injection directly into agricultural plants. Direct injection does not include “hack and squirt,” chemigation, soil incorporation, or soil-injection.**

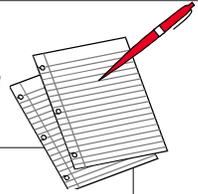
**For structural pest control, rights-of-way vegetation control, and other noncrop areas, pastures and rangeland.**

**For control of vertebrate pests.**

**As attractants or repellents in traps.**

**On the harvested portions of agricultural plants or on harvested timber.**

## note to the instructor



It should be clear from the areas in which the WPS doesn't apply that the intent of the WPS is mostly intended to protect migrant and seasonal workers.

Mention this fact to the audience and illustrate it by pointing to the bullet items that exempt city parks, golf courses and home vegetable gardens.

# Definitions

# WPS

## Hand labor

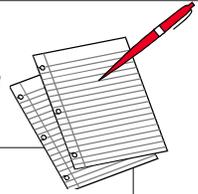
Any agricultural activity performed by hand or with hand tools that causes a WORKER to have substantial contact with surfaces (such as plants, plant parts, or soil) that may contain pesticide residues.

These activities include, but are not limited to, harvesting, thinning, weeding, tipping, planting, pruning, and packing produce into containers in the field.

Hand labor **does not** include operating, moving, or repairing irrigation or watering equipment or performing the tasks of crop advisors.



# note to the instructor



The majority of hand labor working in agriculture in the U.S. are migrant workers from Mexico.

OR-OSHA offers a workshop, Safety Training and Your Hispanic Workforce (course number 499) that addresses language and cultural barriers to creating a safe work culture in the workplace.

OR-OSHA's course catalog:

<http://www.cbs.state.or.us/external/osha/pdf/pubs/coursecatalog0405.pdf>

# Definitions

# WPS

## Handler

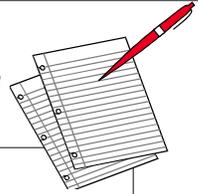
Any person, including a self-employed person who is:

- Mixing, loading, transferring, or applying pesticides.
- Disposing of pesticides or pesticide containers.
- Handling opened containers of pesticides.
- Acting as a flagger.
- Cleaning, adjusting, handling, or repairing the parts of mixing, loading, or application equipment that may contain pesticide residues.
- Assisting with the application of pesticides.
- Entering a greenhouse or other enclosed area after the application and before the inhalation exposure level listed in the labeling has been reached or one of the ventilation criteria established by this standard or in the labeling has been met:
  - ◆ To operate ventilation equipment.
  - ◆ To adjust or remove coverings used in fumigation.
  - ◆ To monitor air levels.
- Entering treated area outdoors after application of any soil fumigant to adjust or remove soil coverings such as tarpaulins.

Does not include handling pesticide containers that have been emptied or cleaned according to pesticide product labeling instructions or in absence of instructions, have been triple-rinsed or its equivalent.



## note to the instructor



If you ask the audience what crops they grow and the kind of application methods to use to apply chemicals, you'll get a better idea of your audience.

Don't be surprised to find a number of structural pest applicators in your workshop. This workshop is endorsed by the Oregon Department of Agriculture and provides 4 Core credit hours to the Recertification of applicator's licenses.

If people have questions about their applicator's licenses, refer them to the Oregon Department of Agriculture Pesticides Division:

Phone: 503-986-4550

Ask for someone in the Pesticides Division.

As of 3-15-05, Laurie Gordon is good person to ask for. Her direct number is 503-986-4789.

Ag's Web page: <http://www.oregon.gov/ODA/index.shtml>



# WPS

## Protection For Both Workers and Handlers

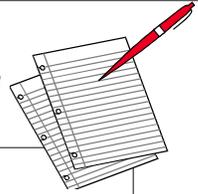
### Information at a Central Location

- ◆ In an easily seen central location on each agricultural establishment, display close together:
  - ✓ Pesticide safety poster.
  - ✓ Name, address, and telephone number of the nearest emergency, medical facility or 911 if used.
  - ✓ 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.
- ◆ Tell workers and handlers where the information is posted, and allow them access.
- ◆ Tell them if emergency facility information changes and update the posted information.
- ◆ Keep the posted information legible.



APPLICATION LIST					
Location Description	Product Name	Registration Number	Active Ingredient	Time/Date Application	REI <small>(3 HOURS TO 30 DAYS)</small>
St. Paul Field	Phorate	9779-293	Phorate (EPA Reg. No. 9779-293)	July 18 6:30 AM	July 20 9:30 AM
Dayton Vineyard	Guthion	3125-301	Guthion (EPA Reg. No. 3125-301)	August 2 7:20 AM	August 24 10:20 AM
Wilsonville Nursery	Temik	264-330	Temik (EPA Reg. No. 264-330)	August 11 10:20 AM	August 13 1:20 PM

## note to the instructor



Its not required, but you may consider using a WPS poster, a large “911” sign and the Application List (found in the appendix of this workbook) as props and post these three items on a wall at the location where the class is being conducted.

Mention that the Application List requires that the long chemical name be listed (Not just the name of the product). People may ask why. The answer is that this name becomes very important to medical providers in the event of an emergency

Mention that the Application List shows that the chemical application takes 3 hours. Three hours is only an example. Actual time of application will vary. The important thing to mention is that the Restricted Entry Interval (REI) starts **after** the application of the chemical is completed and not when it begins.



# WPS

## Protection For Both Workers and Handlers

### *Pesticide Safety Training*

- ◆ Unless handlers possess a certified applicator's license, train handlers and workers before they perform pesticide handling tasks and at least once every 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.
  - ✓ Conduct the training orally and/or audiovisually in a manner the employees can understand, using easily understood terms, and respond to questions.

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### **When to train:**

Train ALL workers BEFORE the 6th day.

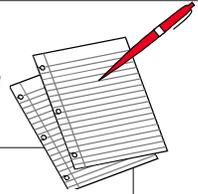
Prior to entry to the fields, train workers on the basic elements as covered in the brochure: "Safe Practices When Working Around Hazardous Agricultural Chemicals."

Handlers: Need Hazard Communication in addition to WPS.



If someone is a Certified Applicator, they must still be trained on Hazard Communication !

## note to the instructor



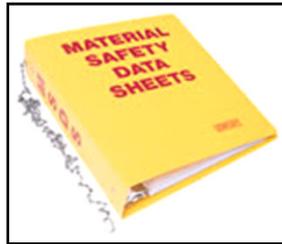
If a student receives training on WPS once every 5 years they will be in compliance with the WPS rule. However, it isn't likely that the workers and handlers will remember what they learned in the 2nd, 3rd and 4th years.

Hazard Communication however, requires worker who work with chemicals be trained *effectively*.

Therefore, OR-OSHA recommends that at a minimum, employers verify that workers know the health and physical effects of the chemicals, the PPE requirements and what to do in the event of an emergency.

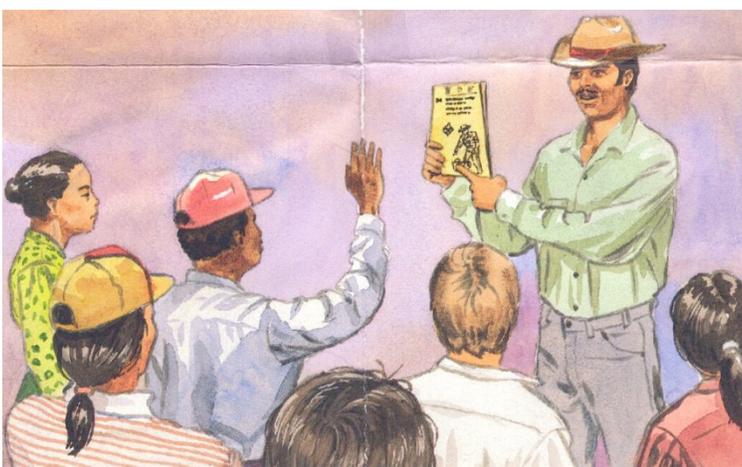
It enhances the workshop if you can show the audience a copy of the audiovisual materials used to train the WPS.

## Training Difference Between The Hazard Communication Rule and The Worker Protection Standard for Workers

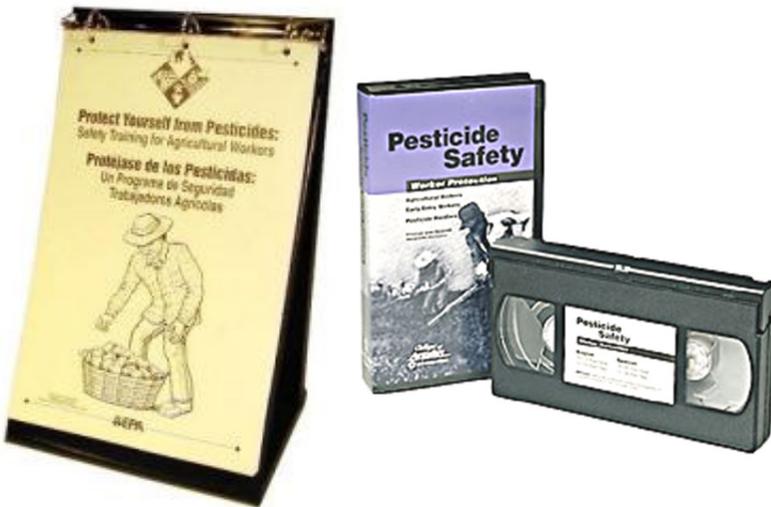


Hazard Communication training for Workers.

Hazard Communication must be completed **before** workers enter fields.



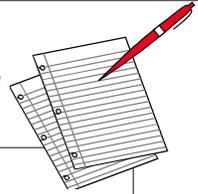
Worker Protection Standard for Workers.



WPS training must be completed **before 6th day** workers enter fields.



## note to the instructor



There's two training requirements for workers and handlers. One is Hazard Communication, the other is WPS.

Hazard Communication training must occur **BEFORE** workers place a foot onto a field. Under Hazard Communication, it doesn't matter when pesticides are applied to the field; as long as pesticides have been applied to the field during the current growing season, the workers shall receive a copy of the Brochure and have access to the MSDSs.

WPS training must occur **BEFORE** workers place a foot onto a field on the 6th day (Doesn't have to be consecutive days). Unlike Hazard Communication, WPS applies only if pesticides have been applied or an REI has been in effect within the last 30 days.

Point to the picture of the training taking place. Bring attention to the person in the audience with his hand raised asking a question. Herein is the biggest difference between Hazard Communication and WPS.

Under WPS, workers are trained interactively in the language used to communicate with the workers.

Contrast this with Hazard Communication where just providing the worker a copy of the Brochure and telling them of the location and availability of the MSDSs is all the training required.

Many farms in Oregon conduct both Hazard Communication and WPS training simultaneously, usually on a day soon after they are hired and before anyone goes to work in the fields.



# WPS

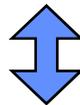
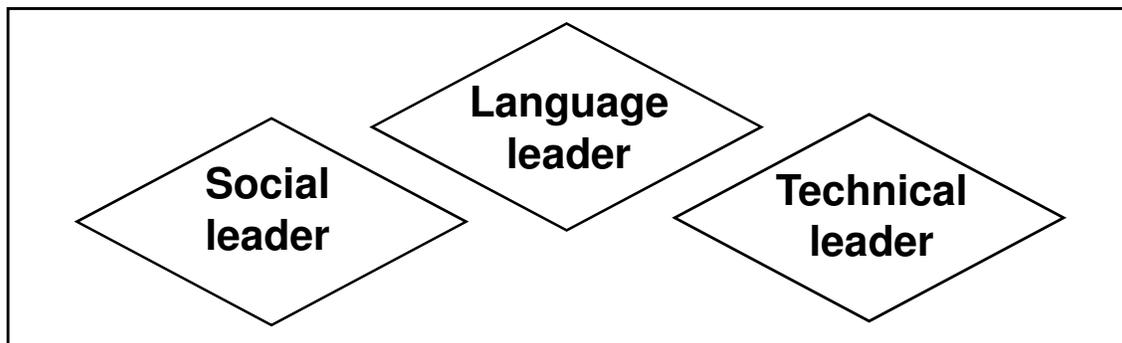
## Training Limited English-Speaking Workers

**LANGUAGE LEADER** The person with the best English communication skills

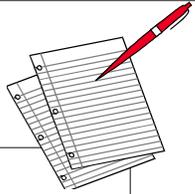
**SOCIAL LEADER** The person the group sees as their leader; the person they trust the most

**TECHNICAL LEADER** The person with the best job and safety related knowledge and skills

*Train with a team !*



# note to the instructor



Job training for limited-English Hispanic workers in many Oregon workplaces often happens like this:

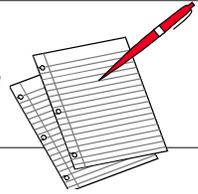
- The trainer, usually a native English speaker without bilingual skills, grabs a native Spanish speaker with some English skills from the group of workers, and uses this person as an interpreter.
- The training begins with the trainer speaking through the interpreter.
- Sometime during the training session, the trainer asks the trainees if there are any questions.
- The trainees hardly ever have any questions.
- The training ends with the trainer asking the trainees if they understood everything.
- The trainees nod their heads in a “yes” motion, indicating they understood everything.

They didn't.

When formal training takes place its very important to bring together a team of people to ensure that the training is successful. This is accomplished by bringing together 3 key people: The Language, the Social, and the Technical Leaders. It may happen that the the language leader and the social leader or the technical leader are the same person. If this is the case, the employer is lucky to have such a person as a member of their training team.

Continues on next page...

# note to the instructor



**The Language Leader** can be a worker, a foreman, a supervisor or a professional interpreter. If the job is complex and requires multiple safety measures, it may be very important to obtain the services of a professional interpreter.

Without the Language Leader as a member of the training team, communication will likely be limited to hand signs.



**The Social Leader** is usually one of the workers. This person may be the individual who helped the workers get to Oregon from Latin America, someone in high standing in the group's home village, or simply, the person recognized as the one who makes the important group decisions or who influences others.

Without the Social Leader as a member of the training team, the group may not trust what is being communicated. If the Social Leader is excluded from the training team and he or she and the Language Leader don't trust each other, the training session could be undermined by the Social Leader with just a few glances to coworkers.

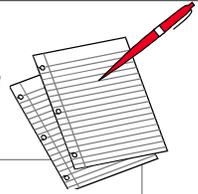


**The Technical Leader** can be the owner, the foreman, the supervisor, or the person with the most experience. The Technical Leader must have two important qualities: He or she must know how to do the job well and be able to do it safely – high production but without safety shortcuts!

Without the Technical Leader as a member of the training team the best and safest way to do the job will not be communicated. It is harder to relearn to do something right than to be taught to do it right the first time.

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# note to the instructor

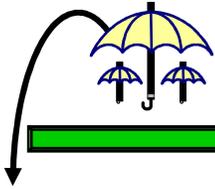


The critical element of these 3 key people is that they **DEMONSTRATE** by actions what the workers are expected to do and how they are going to accomplish this task safely!

Trainers of workers and handlers should use props, should demonstrate, should ask for volunteers to repeat the training.

The trainers should be 100 percent certain that the workers know how to do the job and how to do it safely!





## Training Resources and Materials

### ***Agriculture Division 4 (OR-OSHA Rule)***

The OR-OSHA Code for Agriculture. In paper or CD-ROM. (Free from OR-OSHA)

### ***Pesticide Safety - Worker Protection II (Video)***

Produced by the University of Idaho. The video contains both English and Spanish version of training for agricultural workers and pesticide handlers. OR-OSHA VIDEO NUMBER 323 (**Borrow from OR-OSHA, Obtain from EPA, or Purchase from University of Idaho or GEMPLER'S**).

### ***How to Conduct Worker Protection Training/Train-the-Trainer (Video)***

Condensed version of the December 16, 1993, AGSAT broadcast of the Train-the-Trainer, EPA approved course for the Worker Protection Standard. OR-OSHA VIDEO NUMBER 352 (**Borrow from OR-OSHA**).

***Protect Yourself from Pesticides - Safety Training for Agricultural Workers. (Flip Chart)*** The flip chart used for worker training - bilingual, English and Spanish. (**Obtain from EPA, or Purchase from GEMPLER'S**).

### ***Worker Protection Standard Poster***

Required poster in all workplaces covered by the WPS. (**Obtain from EPA, or Purchase from GEMPLER'S**).

#### **University of Idaho**

1997 #846  
Order# 7034  
\$35.00  
208.885.7982  
Fax 208.885.4648  
Email: [agpubs@uidaho.edu](mailto:agpubs@uidaho.edu)  
Catalog: <http://info.ag.uidaho.edu/catalog/catalog.html>

#### **Oregon OSHA**

Resource Center  
350 Winter St. NE  
Salem, OR 97310  
(503) 378-3272  
(800) 922-2689  
[www.orosha.org](http://www.orosha.org)

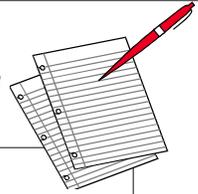
#### **Environmental Protection Agency (EPA)**

1-800-490-9198 or fax at 1-513-489-8695.  
<http://www.epa.gov/oppfead1/Publications/catalog/subpage7.htm>  
<http://www.epa.gov/oppfead1/safety/workers/amendmnt.htm>

#### **GEMPLER'S**

PO Box 270  
Mt. Horeb, WI 53572  
(800) 382-8473  
[www.gemplers.com](http://www.gemplers.com)

# note to the instructor



The phones and addresses and Web addresses on this page are current as of April 1, 2005.



# WPS

## Protection For Both Workers and Handlers

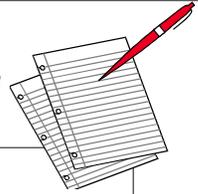
### *Decontamination Sites*

- ◆ Establish a decontamination site within 1/4 mile of all workers and handlers (similar to the Field Sanitation Rule). Supply:
  - ✓ Enough water for routine and emergency whole-body washing and for eye flushing.
  - ✓ Plenty of soap and single-use towels.
  - ✓ A clean coverall for handlers.
- ◆ Provide water that is safe and cool enough for washing, for eye flushing, and for drinking. Do not use tank-stored water that is also used for mixing pesticides unless they have working back-flow devices.
- ◆ Provide handlers the same decontamination supplies at the location where personal protective equipment (PPE) is removed at the end of a task.
- ◆ Provide the same supplies at each mixing and loading site.
- ◆ Make at least 1 pint eye flush water immediately accessible to each handler.
- ◆ Do not put worker decontamination sites in areas being treated or currently under an REI. If the decontamination supplies must be in the treated area because of travel distance, place the supplies in a closed container that is washable.



“Tupperware” type container works well because you can easily wash it off before opening.

# note to the instructor



One quarter mile can be described by a person walking at a leisurely pace for 5 minutes in a farming field. Within this radius, there must be a decontamination facility. This is also the distance at which there needs to be the required items under the Field Sanitation Rule - Portable toilet at a ratio of 1-20, handwashing water, soap and disposable towels, and drinking water with disposable cups.

For water to be “safe” it must be able to pass the Oregon Health Division potability standards.

Don’t recommend using ice to keep water cool. Ice just introduces a potential contaminant. Fill coolers with cool water and keep it/them in the shade.

How much water should be on hand? Employers need to determine the day’s water needs for BOTH drinking and decontamination depending on number of workers, the day’s temperature and the type of work being done.



## EYE WASH

Plumbed

Portable

The Worker Protection Standard requires a one pint eye flush bottle for splashes of pesticides into the eyes. Although this meets the requirements of the WPS, it fails to meet the label requirements which require the eyes be continually flushed for 15 minutes.

Currently Division 4, Agriculture, exempts pesticides from the Emergency eyewash requirements, due to the Worker Protection Standard. Products capable of severely damaging the eye are denoted on the label, DANGER-TOXIC OR DANGER-CORROSIVE. It is highly recommended that an emergency eyewash station be provided when using this type of chemicals. The emergency eyewash must be capable of providing a continuous flow of water for 15 minutes to both eyes. The emergency eyewash stations should be immediately available wherever products are either mixed or loaded which have the potential to cause permanent eye damage.



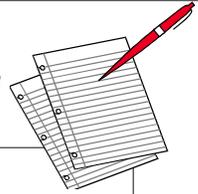
WPS

## Protection For Both Workers and Handlers

### *Notice of Applications by Handler Employers*

- ◆ Before any application, commercial handlers hired by a grower 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.
- ◆ Operators of agricultural establishments must make sure any commercial pesticide 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.

## note to the instructor



The commercial handler is the one that has possession of the label and therefore, the one that needs to provide the information that the employer needs to post at the central location.

Although not a part of the WPS, its also the commercial handler that should have the MSDSs which the employer also needs to have available to his/her workers.



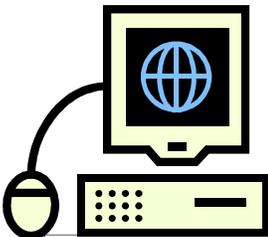
# WPS

## Protection For Both Workers and Handlers

### Emergency Assistance



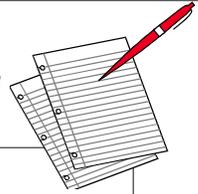
- ◆ When any handler or worker may have been poisoned or injured by pesticides, employers must:
  - ✓ Promptly make transportation available to an appropriate medical facility.
  - ✓ Promptly provide to the victim and to medical personnel:
    - ✓ Product name, EPA registration number, active ingredient(s).
    - ✓ All first aid and medical information from label.
    - ✓ Description of how the pesticide was used.
    - ✓ Information about victim's exposure.
    - ✓ Although not an element of WPS, this is the perfect place to include the Material Safety Data Sheet (MSDS) required by the Hazard Communication Rule and the Pesticide Label.



**LABELS AND MSDSs on the WEB:** A very good website for pesticide labels and MSDSs is Crop Data Management Systems. CDMS, Inc. is a privately held corporation located in Marysville, CA. Founded in 1983, the company provides software service to access crop protection product label, MSDS, WPS and DOT information.

<http://www.cdms.net/manuf/manuf.asp>

## note to the instructor



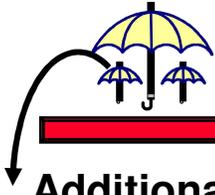
In remote areas, it may be necessary for the employer to provide transportation on the way to meet the ambulance.

Employers should contact their local emergency services to discuss emergency plans based on the likely emergencies they are likely to encounter.

Point out that the “product name, EPA registration number, active ingredient(s)” can be readily obtained from the Central Posting Location.

**THIS IS THE END OF THE SECTION OF THE RULE THAT COVERS BOTH WORKERS AND HANDLERS.**

**THE NEXT SECTION COVERS ADDITIONAL PROTECTION FOR WORKERS.**



WPS

## Additional Protection for Workers

### *Restrictions During Applications*

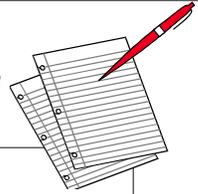
- ◆ In areas being treated with pesticides, allow entry only to appropriately trained and equipped handlers.
- ◆ In nursery settings, keep workers at least 25-100 feet away from nursery areas being treated, depending on treatment method.
- ◆ Allow only handlers to be in a greenhouse:
  - ✓ during a pesticide application.
  - ✓ until labeling-listed air concentration level is met or, if no such level, until after 2 hours of ventilation with fans.
  - ✓ Special application & aeration requirements apply to greenhouses when fumigant is applied.

### *Restricted-Entry Intervals (REI's)*

During any REI, do not allow workers to enter treated areas for the amount of time specified on the label.

- ◆ Always orally warn workers and post treated areas if the pesticide label requires.
- ◆ If the label is silent on notification, either orally warn workers or post entrances to treated areas.
- ◆ Tell workers which method is in effect.
- ◆ Post all greenhouse applications on the entrance to the greenhouse.

# note to the instructor



Point out that the arrow on the umbrellas has moved from the big to the small.

## Treatment Method

We normally provide this information if asked.

Otherwise, we tell the audience to consult the label.

The chart below was obtained at the following address on the EPA's  
Web Page:

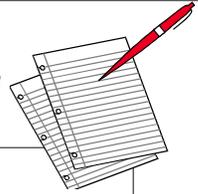
<http://www.epa.gov/oppfod01/safety/workers/equip.htm>

## Entry-Restricted Areas in Nurseries During Pesticide Applications

During Application of a Pesticide	Workers and other persons are prohibited in:
(1)(a) Applied: aerially, in an upward direction, or using a spray pressure greater than 150 psi (pounds per square inch), or (b) Applied as a: fumigant, smoke, mist, fog, or aerosol	Pesticide treated area plus 100 feet in all directions on the nursery
(2)(a) Applied downward using: a height of greater than 12 inches from the planting medium, a fine spray, or a spray pressure greater than 40 psi and less than 150 psi. (b) Not as in 1 or 2(a) above, but for which a respiratory protection device is required for application by the product labeling	Treated area plus 25 feet in all directions on the nursery
(3) Applied otherwise	Pesticide treated area

Continues on next page...

## note to the instructor



Basically this section of the standard can be summarized in a few simple ways: Workers, get out OUT! Workers, you are not trained or equipped to be in or near the treated areas. Leave. Don't return until we tell you its safe!

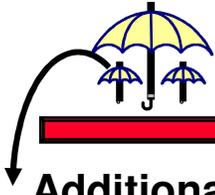
There are several chemicals which DO NOT specify which way to communicate with the employees as to the REIs.

Tell the audience that some of these chemicals surprisingly include pesticides with Danger-Poison on the label.

Tell the audience over and over and over: **READ THE LABEL!**

Take a look a the EPAs main site for worker safety and health to get a feel for the WPS but also to see lots of helpful related items such as heat stress when working with PPE and also to read more recent updates to the rule:

**<http://www.epa.gov/pesticides/health/worker.htm>**



WPS

## Additional Protection for Workers

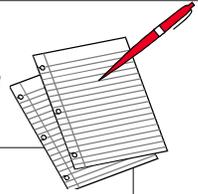
### *Notice About Applications*

- ◆ Post legible 14” x 16” WPS-design signs just before application; keep posted during REI; remove sign before workers enter and within 3 days after the end of the REI. A smaller sign is approved for nursery sites.
- ◆ Post signs so they can be seen at all entrances to treated areas, including entrances from labor camps.

### *Oral Warnings*

- ◆ 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.
- ◆ Workers who enter the establishment after application starts must receive the same warning at the start of their work period.

# note to the instructor



Read requirements.

**THIS IS THE END OF THE SECTION OF THE RULE THAT COVERS  
ADDITIONAL PROTECTION FOR WORKERS.**

**THE NEXT SECTION COVERS THE ADDITIONAL PROTECTION FOR  
HANDLERS.**



WPS

## Additional Protection for Handlers

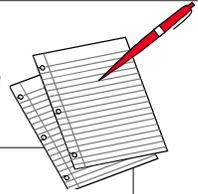
### ***Application Restrictions and Monitoring***

- ◆ Do not allow handlers to apply a pesticide so as to contact, directly or through drift, anyone other than properly trained and PPE-equipped handlers.
- ◆ Make sight or voice contact at least every 2 hours with anyone handling pesticides labeled with a skull and crossbones.
- ◆ 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***

- ◆ Before handlers do any handling tasks (mix, load, apply), inform them in a manner they can understand, of all pesticide labeling instructions for safe use.
- ◆ Keep pesticide labeling accessible to each handler during entire handling task.

# note to the instructor



Point out that the arrow on the umbrellas has moved from the small left side to the small right side.

When covering the Specific Instructions for Handlers especially the part of informing them in a manner they can understand, of all pesticide labeling instructions for safe use, remind them of the importance of using demonstration and the team approach using the language, social, and technical leader.



# WPS

## Additional Protection for Handlers

### ***Equipment Safety***

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

### ***Personal Protective Equipment (PPE)***

- ◆ 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.
- ◆ Be sure respirators fit correctly.
- ◆ Take steps to avoid heat related illnesses.

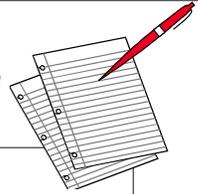
**OR-OSHA HAS  
ADDITIONAL PPE  
RULES!**

EXAMPLE: OR-OSHA  
REQUIRES A MEDICAL  
QUESTIONNAIRE AND  
FIT TESTING FOR  
WORKERS USING  
RESPIRATORS.

PLEASE CALL:  
800-922-2689 ENGLISH  
800-843-8086 SPANISH  
OR:  
WWW.OTOSHA.ORG

FOR YOUR COPY OF  
OR-OSHA DIVISION 4

# note to the instructor



This section introduces the subject of PPE. It gives you, the instructor a lot of latitude as to what examples and props you want to use to illustrate the subject of selection and use of PPE.

If you know of personal or professional stories of misuse of PPE, this is the time to mention them.

Ask the class openly: “How do you select the gloves you use?”

Something that’s useful to discussion started is to ask: “If you wear gloves and long sleeved shirt, does the shirt sleeve go over the glove, or the glove over the shirt?”

Three (3) correct answers:

**Answer:** If spraying downward, sleeve over glove. (Demonstrate your arms pointing downward toward the floor.) Spray lands on sleeve and drips downward over the glove, not into the glove.

**Answer:** If spraying upward, glove over sleeve. (Demonstrate your arms pointing upwards toward the ceiling.) Spray lands on the glove and drips downward over the sleeve, not into the sleeve.

**Answer:** If spraying both upward and downward, bind the glove and sleeve with duct tape.

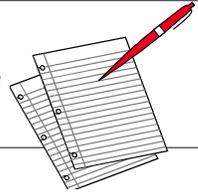
Yes, good old duct tape!

On the subject of PPE: I find it useful to print the EPA’s Chemical Resistance Category Chart and distribute a copy to the class.

**<http://www.epa.gov/oppfod01/safety/workers/equip.htm>**

Continues on next page...

# note to the instructor



Where it says the respirators must “fit correctly...” This means fit testing as per Division 4.

OAR 437-004-1040:

“Instruction of supervisors and workers must be by competent persons. Include an opportunity to handle the respirator, **have it fitted properly**, test its face-piece-to-face seal, wear it in normal air for a long familiarity period and finally, to wear it in a test environment.”

Division 4 does NOT require that workers complete the medical questionnaire.

However, OAR 437-004-1040 says this: “Do not assign workers to tasks requiring use of respirators unless they are physically able to do the work and use the equipment. A physician must make the determination based on the appropriate health and physical standards. Periodically review the respirator user.s medical status. (At least, annually.) The employer must give the physician the appropriate information about the worker to facilitate the examination.

At this point, you may encourage employers to utilize the questionnaire and let them know that its available on the OR-OSHA web page in both Spanish and English: [http://www.cbs.state.or.us/external/osha/pdf/rules/division\\_4/div4i.pdf](http://www.cbs.state.or.us/external/osha/pdf/rules/division_4/div4i.pdf)  
Go to pages 9 through 23.

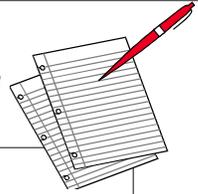


WPS

**New WPS Glove Requirements  
for Workers, Handlers, and Pilots**

- ◆ **All agricultural pesticide handlers and early-entry workers covered by the Worker Protection Standard are now permitted to wear separate glove liners beneath chemical-resistant gloves.**
- ◆ **Agricultural pilots do not have to wear chemical-resistant gloves when entering or exiting aircraft.**
- ◆ **Handlers and early entry workers may choose whether to wear the liners.**
- ◆ **The liners may not be longer than the chemical-resistant glove, and they may not extend outside the glove.**
- ◆ **The liners must be disposed of after 10 hours of use, or whenever the liners become contaminated.**
- ◆ **Lined or flocked gloves, where the lining is attached to the inside of the chemical-resistant outer glove, remain unacceptable.**
- ◆ **Regulatory action was taken to reduce the discomfort of unlined chemical resistant gloves, especially during hot or cold periods.**

# note to the instructor



These changes were made by EPA in November 2004.



# WPS

## Additional Protection for Handlers

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

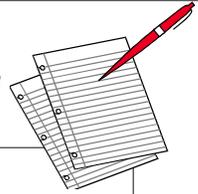
### **Care of PPE**

- ◆ Store and wash used PPE separately from other clothing and laundry.
- ◆ 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.
- ◆ Dry the clean PPE before storing, or hang to dry.
- ◆ Store clean PPE away from other clothing and away from pesticide areas.
- ◆ Store respirators in clean sealed plastic bags or coffee cans.



**Make sure the can or plastic bags is big enough for the respirator or the rubber will permanently deform and the respirator will be ruined.**

## note to the instructor



Many workers wear baseball caps and other types of hats. Its rare that these items ever get washed.

Let the audience know that baseball caps and hats are not PPE against chemicals unless specifically designed and used for that purpose.

Encourage the audience to wash caps and hats regularly.



# WPS

## Additional Protection for Handlers

### ***Replacing Respirator Purifying Elements***

#### ◆ 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.

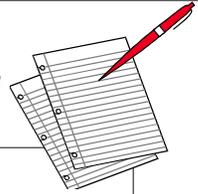


#### ◆ Replace vapor-removing cartridges/canisters:

- ✓ when odor/taste/irritation is noticed.
- ✓ when respirator label requires (whichever is shorter), OR at the end of day's work period, in the absence of any other instructions or indications.



## note to the instructor



This is pretty clear. It works for purposes of the WPS but there's more information than this in OR-OSHA Division 4, Respirator Section. It may be useful to print the whole section on PPE (its 30 pages). Staple it, and pass it around the class so they can take a look at the whole requirement on PPE and Respirators.

[http://www.cbs.state.or.us/external/osha/pdf/rules/division\\_4/div4i.pdf](http://www.cbs.state.or.us/external/osha/pdf/rules/division_4/div4i.pdf)



WPS

## Additional Protection for Handlers

### *Disposal of PPE*

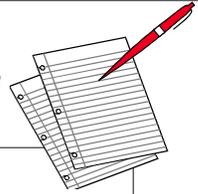
- ◆ Discard coveralls and other absorbent materials that are contaminated with undiluted pesticide having a DANGER or WARNING signal word.
- ◆ Follow Federal, State, and local laws when disposing of PPE that cannot be cleaned correctly.

### *Instructions for People Who Clean PPE*

- ✓ Inform people who clean or launder PPE:
- ✓ That PPE may be contaminated with pesticides.
- ✓ The potentially harmful effects of exposure to pesticides.
- ✓ How to protect themselves when handling PPE.
- ✓ How to clean PPE correctly.

**Make your workplace a  
language and cultural  
learning zone**

## note to the instructor



You may find it useful to encourage the class audience to try and  
Make their workplaces a language and cultural learning zone.

One successful employer in the Oregon mid-Willamette valley, has contracted with an interpreter who works at the farm's main office once a day. The interpreter is hired to handle all sorts of issues for the workers who don't speak English such as correspondence from their insurance companies, utilities, and medical offices. The interpreter makes phone calls, clarifies issues between the parties helps resolve problems. Workers at this farm find that the service make working for this employer is like working at home.

Employer ideas:

Get a wall-sized map of Mexico and colored push pins and place pins from the home locations of your workers. Then get a travel book at the library about that state, learn something about each of those states of Mexico, and then talk to them about it. They will be VERY surprised and pleased.

Tape weekly soccer games and soap operas on the Spanish T.V. channel and play back the tapes during lunch. Watch what happens!

If you connect with the workers in their culture, it will pay off for you in higher morale, and productivity.

Purchase some "learn English" tapes and a tape-player and offer to anyone who wants to practice English during their breaks or lunch periods.

Your workers are thousands of miles from home in a country that speaks a different language and culture. Anything you do to make your workplace seem a little like home to your workers will pay off - guaranteed!

## 8 REQUIRED ITEMS ON LABELS COVERED BY THE WPS

### 1. APPLICATION RESTRICTION STATEMENT

“Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.”

*Label location: DIRECTIONS FOR USE.*

### 2. 40 CFR PART 170 REFERENCE STATEMENT

“Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.”

*Label location: AGRICULTURAL USE REQUIREMENTS.*

### 3. PRODUCT-TYPE IDENTIFICATION STATEMENT

N-methyl carbamates, organophosphates, and fumigants must be identified as such.

*Label location: Either near the product name, product-type identification or in the STATEMENT OF PRACTICAL TREATMENT or FIRST AID TREATMENT Fumigants must be identified as part of, or close to, the product name.*

### 4. STATE RESTRICTIONS

“For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.”

*Label location: DIRECTIONS FOR USE.*

### 5. SPANISH WARNING STATEMENT

If the product is classified as Tox I (Danger) or Tox II (Warning), the signal word shall appear in Spanish and English followed by the statement, “Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.” (If you don’t understand the label, find someone to explain it to you in detail).

DANGER = PELIGRO

WARNING = AVISO

*Label location: Close to the product name.*

## 8 REQUIRED ITEMS ON LABELS COVERED BY THE WPS

### 6. RESTRICTED ENTRY STATEMENT

“Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI).” If only one REI, it must be listed after the above statement in the Agriculture use box. If more than one REI for different crops, the REI will be associated with the directions for use for each crop and identified as such (example, 24 hour REI). Most ranges are 4 hours to 72 hours.

**Label location:** AGRICULTURAL USE REQUIREMENTS.

### 7. NOTIFICATION-TO-WORKERS STATEMENT

TOXICITY I for acute dermal toxicity or skin irritation shall state “Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.” For fumigants used in green houses shall state “For greenhouse application” by warning them orally and by posting warning signs outside all entrances to the greenhouse.

For any pesticide other than those for which the labeling requires both posting and oral notification of applications and the label is silent on notification, the agricultural employer shall give notice of the application to the worker either by the posting of warning signs or orally. The workers shall be informed which method of notification is in effect.

**Label location:** AGRICULTURAL USE REQUIREMENTS.

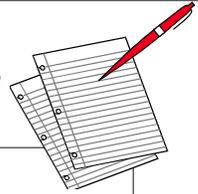
### 8. PERSONAL PROTECTIVE EQUIPMENT STATEMENT

These requirements are for all handlers of the product for all uses unless the exceptions are clearly identified and are located in two locations on the label.

**Label location:**

- a) PPE for Handlers will be in the HAZARDS TO HUMANS AND DOMESTIC ANIMALS.
- b) PPE for EARLY ENTRY WORKERS will be placed in the AGRICULTURAL USE REQUIREMENTS and immediately after the REI statement.

## note to the instructor



Take a few minutes and identify and review each of the 8 key elements of the WPS on any pesticide label.

Depending on the class and the time remaining you can ask the attendees to find each of the 8 elements or you can direct them to their locations.

Emphasize the element of PPE. Identify that there are 2 locations on the label where PPE can be found. The first is for the applicator/handler and the second is in the Agriculture Use Box for early entry workers.

You should emphasize that the label is the LAW! If OR-OSHA does an inspection and finds that handlers and early entry workers are not using the labeling required PPE, they will be cited!!

# RESTRICTED USE PESTICIDE

**Due to acute oral, dermal and inhalation toxicity and avian hazards.**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

## Phorate® 20G

20% Granular Systemic Low-Odor Insecticide

ACTIVE INGREDIENT

Phorate (O,O-diethyl -S-[(ethylthio)methyl]- phosphorodithioate)..... 20.0%

INERT INGREDIENTS ..... 80.0%

TOTAL ..... 100.0%



**STOP--READ LABEL BEFORE USING  
KEEP OUT OF REACH OF CHILDREN**



**DANGER**



**POISON**

**PELIGRO**

**VENENO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand this label, find someone to explain it to you in detail.)



### STATEMENT OF PRACTICAL TREATMENT ORGANOPHOSPHATE

**FIRST AID TREATMENT:** Call a doctor (physician), clinic, or hospital immediately. Explain that the victim has been exposed to Phorate and describe his condition.

**IF BREATHING HAS STOPPED,** start artificial respiration immediately and maintain until doctor sees victim.

**IF SWALLOWED,** call a physician or poison control center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or if available, by administering syrup of ipecac. **DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.**

**IN CASE OF CONTACT,** immediately flush eyes or skin with plenty of water for at least 15 minutes. See doctor immediately.

Read Additional PRECAUTIONARY STATEMENTS.

EPA Reg. No. 9779-293  
Manufactured For  
Terra International, Inc.  
P.O. Box 6000, Sioux City, Iowa 51102-6000  
*Riverside@ Serves Agriculture. Agriculture Serves Everyone.*

EPA Est. No. 34704-NE-1  
  
NET CONTENTS  
LBS.  
9/A07/8

# Phorate® 20G

## PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
DANGER

### CAN KILL IF SWALLOWED

This product can kill you if swallowed,  
even in small amounts:  
spray mist may be fatal if swallowed



### CAN KILL BY SKIN CONTACT

This product can kill you if touched by hands  
or spilled or splashed on skin,  
in eyes or on clothing (liquid goes through clothes).



### CAN KILL IF BREATHED

This product can kill you if vapors or  
spray mist are breathed.



## WORK SAFETY RULES

REPEATED EXPOSURES TO CHOLINESTERASE INHIBITORS SUCH AS ARE  
CONTAINED IN THIS PRODUCT MAY, WITHOUT WARNING, CAUSE PROLONGED  
SUSCEPTIBILITY TO VERY SMALL DOSES OF ANY CHOLINESTERASE INHIBITOR.

Persons working with this product should have frequent blood tests of their cholinesterase levels. If the cholinesterase level falls below a critical point, no further exposure should be allowed until it has been determined by means of blood tests that the cholinesterase level has returned to normal. Before using this product, consult the National Pesticide Telecommunications Network for recommendations regarding such blood tests, poisoning management, emergency treatment, and other information regarding the toxicity of Phorate. The toll free number for the National Pesticide Telecommunications Network is 1-800-858-7378. If handled indoors provide mechanical exhaust ventilation.

Do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. See First Aid (Practical Treatment) section.

**POISON SIGNS** (Symptoms) Phorate is a very dangerous poison. It rapidly enters the body on contact with all skin surfaces and eyes. Exposed persons must receive prompt medical treatment or they may die. Some of the signs and symptoms of poisoning are headache, nausea, vomiting, cramps, weakness, blurred vision, pin-point pupils, tightness in chest, labored breathing, nervousness, sweating, watering, of eyes, drooling or frothing of mouth and nose, muscle spasms and coma.

## Phorate® 20G

**NOTE TO PHYSICIAN:** Antidote - administer atropine sulfate in large doses. TWO to FOUR mg. intravenously or intramuscularly as soon as cyanosis is overcome. Repeat at 5 to 10 minute intervals until signs of atropinization appear. 2-PAM chloride is also antidotal and may be administered in conjunction with atropine. DO NOT GIVE MORPHINE OR TRANQUILIZERS. Phorate is a strong cholinesterase inhibitor affecting the central and peripheral nervous systems and producing cardiac and respiratory depression. At first sign of pulmonary edema, the patient should be given supplemental oxygen and treated symptomatically. Continued absorption of the poison may occur and fatal relapses have been reported after initial improvement. VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS.

8

### Personal Protective Equipment:

Applicators and other handlers must wear chemical-resistant protective suit, waterproof gloves, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure, and a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### Engineering Controls Statement:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

DURING AERIAL APPLICATION, HUMAN FLAGGERS ARE PROHIBITED UNLESS IN A TOTALLY ENCLOSED VEHICLE.

### USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# Phorate® 20G

## ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and wildlife. Birds feeding in treated areas may be killed. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Collect or incorporate granules that are spilled during loading or are visible on soil surface in turn areas. Do not contaminate water when disposing of equipment washwaters.

1

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not use this product through any type of irrigation system.

NOT FOR USE OR STORAGE IN OR AROUND THE HOME.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

4

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 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 (PPE), notification to workers, and restricted-entry interval.

2

The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours. Each 48-hr. REI is increased to 72 hours in outdoor areas where average rainfall is less than 25 inches per year.

6

Exception: If the product is soil-injected, or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: chemical-resistant protective suit, waterproof gloves, chemical resistant footwear plus socks, protective eyewear, and chemical-resistant headgear for overhead exposure.

8

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

7

# WPS

## Review - Which Rule Applies?

Have pesticides (herbicides, insecticides, fungicides, miticides, etc.) been applied or has a restricted-entry interval been in effect within the last 30 days?

**YES**



WPS applies.  
Requires: All of #1 and maybe #2.  
Hazard Communication applies.

**NO**



WPS does NOT apply.  
Hazard Communication applies.

### # 1 Posting information at a central location:

- Central posting location can either be at the main farm if workers report there, or if workers report directly to the field, it shall be at the field location.
- Post the WPS poster and emergency phone numbers.



# WPS

## Review - Which Rule Applies?

**# 1 List the pesticides which have been applied within the last 30 days or have had a restricted-entry interval in effect within the last 30 days. Provide the following information for each:**

- Location of application
- Product name
- EPA registration number
- Active ingredients
- Time & date of application
- Restricted entry interval

Location Description	Product Name	Registration Number	Active Ingredient	Time/Date Application	REI <small>3 HOURS TO APPLY</small>
St. Paul Field	Phorate	9779-293	Phorate (O,O-dimethyl S-(diethylamino) phosphorothioate)	July 18 6:30 AM	July 20 9:30 AM
Dayton Vineyard	Guthion	3125-301	O,O-dimethyl S-(diethylamino) 1,1-dithioether-3-(4H)-thiazol-4-ylidene phosphorothioate	August 2 7:20 AM	August 24 10:20 AM
Wilsonville Nursery	Temik	264-330	Alfathion (2-methyl-2-methylthio propionylthio 0 dimethylcarbamoylthioacetate)	August 11 10:20 AM	August 13 1:20 PM

Tell the workers where is the central posting location and, Keep the poster and emergency information legible.

**#2 Have workers been in the treated field for more than 5 days?**

**YES**



Workers must have trained with WPS video or flip chart within the last 5 years. WPS worker cards OK, but growers must assure workers were trained.

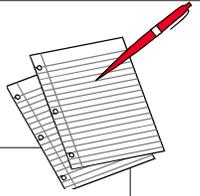
**NO**



WPS training does NOT apply. Hazard Communication applies.

OR-OSHA Brochure plus Material Safety Data Sheets (MSDSs).

# note to the instructor



Review of the two standards. Everyone should be able to get the answers right by now!

## ADDITIONAL WPS LABEL INFORMATION

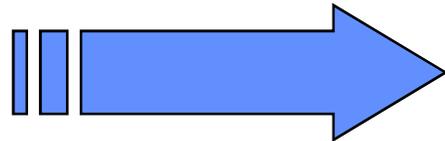
### Worker Protection Program Update Reduced Restricted Entry Intervals for Lower Toxicity Pesticides

Active ingredient and end-use product must be:

- Toxicity category III or IV for all acute toxicity categories (dermal, oral, eye irritation, etc.)
- Cannot be a carcinogen, mutagen, or teratogen
- Cannot cause developmental or reproductive effects
- Cannot be a known sensitizer



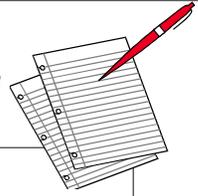
***The following 114 end-use active ingredients meet the Low Toxicity Criteria and have 4-hour REIs.***



## 114 LOW TOXICITY - 4 HOUR RESTRICTED RE-ENTRY INTERVALS

Acetylchitin	Methyl nonyl ketone
Agrobacterium radiobacter	Metsulfuron-methyl
Ampelomyces quisqualis isolate M-10	Milky spore
Azadirachtin (neem extract)	Mineral oil
B.t. subsp. aizawai	Muscalure, component of (e)-9-tricosene
B.t. subsp. aizawai strain GC-91	Muscalure, component of (z)-9-tricosene
B.t. subsp. israelensis	N-6-Benzyladenine
B.t. subsp. kurstaki	NAA, Ethyl ester
B.t. subsp. kurstaki HD-263	Nerolidol
B.t. subsp. kurstaki strain EG2348	Nicosulfuron
B.t. subsp. kurstaki strain EG2371	Nosema locustae
B.t. subsp. kurstaki strain EG2424	Octyl bicycloheptenedicarboxamide
B.t. subsp. san diego	Oxytetracycline hydrochloride
B.t. subsp. tenebrionis	Paradichlorobenzene
Bacillus popilliae and B. lentimorbus	Paraffin oils
Bacillus sphaericus	Periplanone
Bacillus subtilis GB03	Polyhedral inclusion bodies of Autographa californica
Bacillus subtilis MBI 600	Polyhedral inclusion bodies of Heliothis zea NPV or Helicoverpa zea NPV
BNOA (b-naphthoxy acetic acid)	Polyhedral inclusion bodies of beet armyworm npv
Borax	Polyhedral inclusion bodies, Neodiprion sertifer NVP
Calcium hypochlorite	Potassium gibberellate
Calcium oxytetracycline	Promalin
Calcium thiosulfate	Pseudomonas cepacia type wiscons.
Candida oleophila	Pseudomonas fluorescens
Capsicum oleoresin	Pseudomonas fluorescens A506
Checkmate peach twig borer pheromone	Pseudomonas fluorescens EG-1053
Chitosan	Pseudomonas fluorescens strain NCIB 12089
Chlorsulfuron	Pseudomonas syringae
Colletotricum gleosporoides	Puccinia canaliculata (Schweinitz)
Copper as ammonia complex	Rimsulfuron DPX-E9636
Copper salts of fatty acids	Ryania speciosa
Cytokinin	Ryanodine
2,4-DB, isooctyl	s-Kinoprene
Diatomaceous earth	s-Methoprene
Disodium octaborate tetrahydrate	Sesame plant, ground
Disparlure	Siduron
Ethylene	Silica gel
Ethoxyquin	Silicon dioxide
Farenesol	Sodium carboxymethylcellulose
Fatty acids, C8-12, Methyl esters	Sodium metaborate
Fendridazone-potassium	Soybean oil
Fluazifop-butyl	Streptomyces griseoviridis
Fluazifop-r-butyl	Streptomycin
Gibberellic acid	Streptomycin sesquisulfate
Gibberellins A4 and A7	Sulfometuron-methyl
Gliocladium virens G-21	Thifensulfuron-methyl
Glyphosate, ammonium	Thiobencarb
Glyphosate, isopropylamine	Tomato pinworm (e)-4-tridecen-1-yl acetate
Glyphosate, sodium	Tomato pinworm (e)-11-tetradecenyl acetate
Gossyplure: hexadecadien-1-ol acetate	Triasulfuron
Cypsy moth npv	1-Triacontanol
Heavy aromatic naphtha	Trichoderma harzianum var. rifai (KRL-AG2)
Imazethapyr	Trichoderma harzianum (ATCC 20476)
Imazethapyr, ammonium salt	Trichoderma polysporum (ATCC 20475)
Indole-3-butyric acid	Tussock moth npv
Legendidium giganteum, mycelium	

# note to the instructor



Self explanatory!

# ***Appendices***

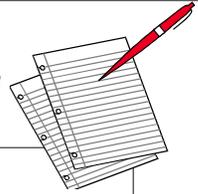
## **Sample Application List**



# APPLICATION LIST

Location Description	Product Name	Registration Number	Active Ingredient	Time/Date Application	REI 3 HOURS TO APPLY
<i>St. Paul Field</i>	<i>Phorate</i>	<i>9779-293</i>	<i>Phorate (O,O,-diethyl-S-[ethylthio)methyl] phosphorodithioate</i>	<i>July 18 6:30 AM</i>	<i>July 20 9:30 AM</i>
<i>Dayton Vineyard</i>	<i>Guthion</i>	<i>3125-301</i>	<i>O,O-dimethyl-S-[(4oxo-1,2,3-benzotriazin-3(4H)-yl)methyl] phosphorodithioate</i>	<i>August 2 7:20 AM</i>	<i>August 23 10:20 AM</i>
<i>Wilsonville Nursery</i>	<i>Temik</i>	<i>264-330</i>	<i>Aldicarb [2-methyl-2-(methylthio)propionaldehyde O (methylcarbamoyl)oxime]</i>	<i>August 11 10:20 AM</i>	<i>August 13 1:20 PM</i>

# note to the instructor



Remind them of this sheet but emphasize that its and example only.

No kidding, there's people who will assume that this is the sheet they need to post rather than one that contains the chemical they are applying!

Congratulations, you've completed WPS training.

Call OR-OSHA if you have any questions about this workshop.



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