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Once you are familiar with the Worker Protection Standard (WPS) regulations, training topics, and different ways that you can present such information, you can prepare for your training class. Training preparation can be time consuming, but the training class is likely to be more effective and successful if you are better prepared.

### Gathering Information

#### Current Federal Regulation

It is important to stay current with federal pesticide regulations as they can change. You can do this by reviewing new or revised training materials, attending industry and association meetings, and searching the Internet for pesticide safety updates. Possible sources are U.S. EPA ([epa.gov](http://epa.gov)), local Cooperative Extension Service, Pesticide Educational Resources Collaborative ([pesticideresources.org](http://pesticideresources.org)) and National Pesticide Information Center ([npic.orst.edu](http://npic.orst.edu)).



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

#### State, Tribal, and Local Regulations

Federal pesticide laws are the minimum national guidelines that everyone must follow. A state or tribe may have stricter rules, regulations, guidelines, or laws governing pesticide use and safety.

Before training, contact local state or tribal pesticide regulatory agencies, or visit their websites to become familiar with additional information you may need to include when training. Some states may have more than one agency that regulates pesticide use and pesticide safety training. State Departments of Agriculture, Occupational Safety and Health, Labor, and Environmental Quality are good sources for area requirements on training, hazard notification, field sanitation, decontamination supplies, environmental impacts, and worker safety issues.



Photo courtesy of Stewart Jacobson, Arizona Department of Agriculture

## The Agricultural Workforce

Groups of employees can vary greatly and may consist of workers or handlers from diverse ethnic, cultural, and language backgrounds as well as different educational levels. If you would like to gather information on the characteristics of the local agricultural workforce, contact local service agencies that assist agricultural employees, such as migrant health clinics, migrant education programs, job training programs and employment agencies, farmworker organizations, and agricultural associations.

### Type of Training Needed

If an agricultural employer needs assistance in deciding which employees need to attend WPS training and the type of training (i.e., training for workers or handlers), you can help them by asking a series of questions about the tasks or activities each person will perform.

**Table 9.1: Type of WPS Training Required by Activity**

Activity	Condition	Type of Training
<b>Harvests, thins, or prunes as part of a labor contracting crew</b>	The employee works in a “treated area.”	Agricultural Worker
	The employee does not work in a “treated area” at any time.	No WPS Training Required
<b>Controls weeds</b>	The employee weeds by hand or with a tool, while working in a “treated area.”	Agricultural Worker
	The employee uses an herbicide to control weeds in an agricultural production area.	Pesticide Handler
	The employee uses an herbicide to control weeds in a non-crop area, such as on a sidewalk.	No WPS Training Required
<b>Helps with the harvest as a volunteer or gleaner</b>	The volunteer or gleaner works on an agricultural establishment but receives no financial compensation.	No WPS Training Required  <b>However, agricultural worker training is encouraged.</b>

Activity	Condition	Type of Training
<p><b>Packs produce</b></p>	<p>The employee harvests and packs produce in a “treated area” such as a field or orchard.</p>	<p>Agricultural Worker</p>
	<p>The employee packs produce while working inside a packing shed or other type of building.</p>	<p>No WPS Training Required</p>
<p><b>Controls rodents, such as gophers, voles, and rats</b></p>	<p>The employee uses pesticides to control rodents in the agricultural production area.</p>	<p>Pesticide Handler</p>
	<p>The employee uses pesticides to control rodents outside of the agricultural production area (e.g., in a building).</p>	<p>No WPS Training Required</p>
	<p>The employee uses traps or non-chemical means to control rodents in a “treated area.”</p>	<p>Agricultural Worker</p>
<p><b>Works on a project as an agricultural research student</b></p>	<p>The student receives direct financial compensation in the form of a salary or wage to handle pesticides.</p>	<p>Pesticide Handler</p>
	<p>The student receives direct financial compensation in the form of a salary or wage to perform agricultural worker tasks.</p>	<p>Agricultural Worker</p>
	<p>The student does <b>not</b> receive direct financial compensation in the form of a salary or wage to handle pesticides or perform agricultural worker tasks.</p>	<p>No WPS Training Required</p> <p><b>However, the appropriate type of WPS training (worker or handler) is encouraged.</b></p>
<p><b>Performs hand labor tasks following a fumigation</b></p>	<p>The employee performs any task following a fumigation, such as turning over soil, removing tarp, or irrigating.</p>	<p>Pesticide Handler</p>
<p><b>Works for a nursery located inside a government/public park or botanical garden</b></p>	<p>The employee is only caring for and cultivating plants.</p>	<p>Agricultural Worker</p>
	<p>The employee is handling pesticides or moving pesticide containers to the storage room.</p>	<p>Pesticide Handler</p>

Activity	Condition	Type of Training
<p><b>Works as a salesperson at a retail nursery or greenhouse where pesticides with the WPS (“Agricultural Use Requirements”) statement on the label are used</b></p>	<p>The salesperson occasionally touches the leaves or growing compound of a plant or surface that had a pesticide applied directly onto it and where a restricted-entry interval (REI) has been in effect in the previous 30 days.</p> <p>The salesperson will only work the cash register and has no potential of coming into contact with a treated area, plant or surface.</p>	<p>Agricultural Worker</p> <p>No WPS Training Required</p>
<p><b>Handles pesticides at a golf course</b></p>	<p>The handler is also a certified applicator, as is often the case for Golf Course Superintendents.</p> <p>The handler works for a golf course that purchases replacement sod and other plants from a separate company.</p> <p>The handler works for a golf course that applies WPS pesticides to an area where they grow their own replacement sod or other plants for the golf course.</p>	<p>No WPS Training Required</p> <p>No WPS Training Required</p> <p>Pesticide Handler</p>
<p><b>Irrigates</b></p>	<p>The irrigator works with equipment used for chemigation (the application of pesticides through an irrigation system).</p> <p>The irrigator assists the pesticide handler when it is time to “water-in” the pesticide as part of the application process prescribed by the pesticide label.</p> <p>The irrigator is occasionally asked to use an herbicide to “clean up” the irrigation ditches (non-crop areas).</p> <p>The irrigator does not participate in any of the above activities and won't be in the area during an application or REI.</p>	<p>Pesticide Handler</p> <p>Pesticide Handler</p> <p>No WPS Training Required</p> <p><b>However, pesticide handler training is encouraged.</b></p> <p>Agricultural Worker</p>

Activity	Condition	Type of Training
<p><b>Repairs or cleans farm equipment</b></p>	<p>The mechanic, while working for his or her employer, repairs or cleans equipment, tractors or all-terrain vehicles that contain pesticide residues.</p> <p>The mechanic, while working for a person other than his or her employer, repairs or cleans equipment, tractors or all-terrain vehicles that contain pesticide residues.</p> <p>The mechanic does not come into contact with pesticides or pesticide residues at any time.</p>	<p>Pesticide Handler</p> <p>No WPS Training Required.</p> <p><b>However, this person must be told that the equipment may have residues and given steps on how to protect themselves</b></p> <p>No WPS Training Required</p>
<p><b>Works as a truck driver or hauler</b></p>	<p>The employee drives a truck into an agricultural area to pick up harvested crops.</p> <p>The employee drives a tractor and equipment into a “treated area” to assist with the harvest and transfer of the crop.</p> <p>The person is a delivery truck driver (i.e., UPS or FedEx) who drives through a treated area to get to the main office.</p>	<p>No WPS Training Required</p> <p>Agricultural Worker</p> <p>No WPS Training Required</p>
<p><b>Receives deliveries of agricultural pesticides</b></p>	<p>The employee handles open containers at any time.</p> <p>The employee puts opened and unopened pesticide containers in the storage area and may come into direct contact with pesticide residues on open containers, shelves, and other surfaces.</p> <p>The employee works in an office and will only receive the delivery and paperwork.</p>	<p>Pesticide Handler</p> <p>Pesticide Handler</p> <p>No WPS Training Required</p>
<p><b>Works at an organic farm where pesticide products with the WPS language (“Agricultural Use Requirements”) on the label are used</b></p>	<p>The employee performs agricultural worker tasks in a “treated area.”</p> <p>The employee performs pesticide handling tasks.</p>	<p>Agricultural Worker</p> <p>Pesticide Handler</p>

## Trainees' Backgrounds

Background information about trainees can help you tailor the training resources and activities to their informational needs. If you are unable to gather information about the trainees before class, you can spend a few minutes at the beginning of class to get to know them by asking a few work- and training-related questions. The following are examples of questions you can ask workers and handlers:

### Agricultural Workers

- How long have you worked here?
- What kind of agricultural work have you done in the past?
- What type of work will you do here?
- Have you attended a WPS training?

### Pesticide Handlers

- How long have you worked here?
- What types of pests do they control at this location?
- Do you know the names of any of the pesticides you will use?
- Have you ever attended a WPS training for pesticide handlers?
- Have you worked with pesticides in the past?

It is also helpful for trainers to know if the trainees are migrant, seasonal, or permanent employees. Migrant workers move from one area to another to find agricultural work. Seasonal employees live in the area in which they work but are only employed as agricultural workers during the growing or harvest season. Permanent employees live and work in the area and are employed by the same agricultural establishment on a year-round basis.

## Crops and Cropping Cycles

It is helpful to become familiar with crops and cropping cycles, seasonal labor requirements, and typical tasks of agricultural employees in the areas where you train. This information is available from State Departments of Agriculture, Departments of Labor, University Extension offices, an local organizations that provide outreach to agricultural employees and agricultural associations. Knowing the cycles of the various crops and peak harvest times will help you identify the best time to provide WPS pesticide safety training in a particular geographical area. Information on crop profiles can be found at the following website:

[ipmcenters.org/cropprofiles](http://ipmcenters.org/cropprofiles)

## Organizing Your Training

Once you have studied the required topics, have updates, and know if you will train agricultural workers or pesticide handlers, it is time to get organized.

Write the topics down in the order that you would like to present them during your course. You may want to start by looking at your list of topics and separating them into themes that blend well together.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture



Photo courtesy of Dr. Kurt D. Nolte, University of Arizona Cooperative Extension

In the following example, the trainer is planning to present WPS pesticide safety training to pesticide handlers. The trainer begins by grouping all pesticide-related health topics together, followed by details about the pesticide label, and information on how to use pesticides safely and effectively. The trainer finishes with employer responsibilities and employee rights.



**Table 9.2: Sample Training Plan****TOPICS FOR PESTICIDE HANDLER TRAINING**

**The first section will include general pesticide-related health information for people who will work directly with agricultural pesticides. It will include**

- an overview of agricultural pests at their worksite and the different types and formulations of pesticides they might use to control these pests;
- where and in what form pesticides and their residues may be found at work;
- routes through which pesticides can enter the body;
- signs and symptoms of exposure, plus the health hazards of pesticides resulting from toxicity and exposure including acute effects, chronic effects, delayed effects and increased sensitivity; and
- potential hazards to pregnant women and children from pesticide exposure.

**This section of the training will focus on ways to recognize, prevent and treat pesticide exposure and will include**

- minimum age requirements for pesticide handling activities;
- decontamination requirements and supplies at the various worksite locations;
- protective clothing and/or PPE listed on label;
- recognizing, preventing and treating heat illness;
- ways to protect family members, such as the importance of keeping family away from pesticides and pesticide treated areas;
- hazards from residue on clothing and how to care for and wash work clothing;
- emergency first aid for pesticide injuries or poisonings and how to obtain emergency medical care and information about the pesticides used at work (central location); and
- hazards from residue on clothing and how to care for/wash work clothing.

**This section will pertain to the pesticide label. Trainees will review sample product labels to practice locating and following health, safety and pesticide use information from a label. It will include**

- the different sections of a pesticide label;
- how to find health and safety information such as precautionary statements, PPE, and first aid information;
- how to find and follow use instructions to determine the pests that are controlled by the product, the sites to which the pesticide can be applied, and any application limitations or restrictions; and
- product-specific information listed on the label, such as the type of pesticide, active ingredients, formulation of the product, toxicity level, and environmental impacts.

**This section will focus on working safely when mixing, loading and applying pesticides. Trainees will also learn about environmental concerns such as water contamination and how to respond to emergency situations such as pesticide spills and leaking containers. It will include**

- need for PPE, including respirators if applicable;
- proper use, cleaning, and maintenance of PPE;
- safe practices when mixing, loading, and applying pesticides;
- ways to protect the environment when working with pesticides;
- pesticide Application Exclusion Zones (AEZs) and other ways to prevent pesticides from drifting onto and/or contaminating other people;
- safely transporting, storing and disposing of pesticides and their containers; and
- steps for cleaning up pesticide spills.

**The last section will focus on the employer's responsibilities and employee's rights. It will include**

- employer's responsibility for providing the handler with the respirator, medical evaluation, fit testing, and respirator training before the handler uses a respirator required by the label;
- employer's responsibility for providing, maintaining, replacing, and storing PPE;
- employee's rights to information about pesticides used at work and the ways that the employer must provide this information;
- employee's protection against anti-retaliation; and
- employee's right to a copy of the training record and application information.

## Training Length

As you prepare your training, think about how much time you will need to cover all of the required topics. Also take into consideration that the following situations may add extra time to your training:

- using an interpreter;
- presenting the training bilingually;
- including training activities such as role play, games, or demonstrations;
- distributing handouts;
- signing training records;
- trainees arriving late;
- noise or distractions
- audiovisual equipment set up; and
- glitches with training tools or equipment.



Photo courtesy of Penn State Extension, The Pennsylvania State University

## Training Objectives

After you have organized your topics, you can focus on the information, skills, and attitudes you would like your trainees to gain through the class. One way to do this is to develop a list of training objectives. Training objectives are simple sentences that describe what you would like the trainees to learn, know, demonstrate, or be able to do as a result of your training. Your objectives should

- be clear and concise;
- take into consideration the work situations and environment of the people who will attend the training;
- reflect the skills, knowledge, and attitudes that you want the trainees to have at the end of the session; and
- include activities that encourage trainees to participate in the learning process.

The following are three examples of training objectives with different levels of trainee participation.

*“Through this class, trainees will learn several ways they can prevent pesticide exposure at their worksites.”*

*“By the end of this session, trainees will be able to recognize potential pesticide hazards in a series of photos and talk about ways to prevent similar exposure situations when they are working with pesticides.”*

*“During this activity, trainees will demonstrate one way to prevent pesticide exposure by reading a pesticide label and selecting the proper PPE.”*

The first objective states that you, the trainer, will provide the trainees with the information they need to know in order to prevent exposure to pesticides at work.

The second objective covers the same type of information but requires trainees to participate in a hazard identification activity. The activity has been tailored to the work of the trainees by including photos of situations that might occur at their worksites.

The third objective requires trainees to become more involved in the learning process as they demonstrate how to select the PPE that is required on the label.

**You can also list your objectives as a set of skills** that you would like trainees to have at the end of the training, for example

**Skills:** After participating in the training, trainees will know how to:

- recognize pesticide exposure risks and explain how to prevent them at work, and
- read and follow label instructions for selecting the PPE they must wear to protect themselves from exposure to the product.

## Materials and Handouts

There are many pesticide safety training materials available including flipcharts, DVDs, online videos, digital presentations, booklets, pamphlets, and games. Pesticide labels are also great training tools, especially when they represent the products the trainees will use at work. You can find resources through PERC, EPA, NPIC, or pesticide chemical companies.

When selecting training materials and handouts, make sure they

- cover the required information,
- can be easily supplemented with additional information if necessary,
- are correct and up-to-date with current laws and regulations,
- are approved by EPA,
- are in a language trainees understand,
- are accurate and clearly worded (especially if they have been translated),
- reflect the trainees' work or worksite as much as possible,
- include local information if possible, and
- can be presented in a way that enables trainees to participate in the training and ask questions.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

Always review your training materials before you present them in class. Even if a booklet or video has been approved by EPA, the laws may have been revised since the date the materials were produced. Additionally, the materials may not be appropriate for your particular situation or you may need to incorporate local state or tribal regulations into your training.

If you use training materials in a language that is not your native language, pay close attention to the translation to make sure that the information is correct and the translation is accurate. You should ask an interpreter to help you with this review if you cannot read the materials yourself.

## Interpreters

If you speak English and the trainees do not, you must also arrange for an interpreter. You may need to rely on other employees who are bilingual, professional interpreters, or bilingual community members who may volunteer to translate training material for your presentation. Other possible sources of translation services are community-based organizations, medical personnel, other employers, the Farm Bureau, the University Extension office, farm worker associations, and migrant health clinics. If they do not have a staff member who provides these services, they may be able to provide a referral to an individual or group that can help.

If you use an interpreter, it is important that the person has a clear understanding of pesticide terminology before training. Provide the interpreter with a copy of the training materials you plan to use and discuss these with him or her.

## Activities

Activities keep the trainees engaged in the course and allow them to participate in the learning process. Activities can be simple, such as a question-and-answer session about pesticide products or more complex, such as a mock pesticide spill clean-up activity. Look at your topics and objectives to help you decide which activities would fit in nicely with your training, while helping you to meet your training objectives. Sample activities have been included in Chapter 8 of this manual. Each activity includes a suggested training theme, objective, activity duration, materials or props, and instructions.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

After you have selected your materials, handouts, and activities, you can create a list of items you will need to take to the training class, as shown in the following example:

**Table 9.3: Sample Training Activities Plan**

<b>Topic</b>	<b>Activity</b>	<b>Props and Equipment</b>	<b>Materials and Handouts</b>
<b>First Aid</b>	Role play	Soda bottle Picture of scenario Pesticide label	Copy of the first aid recommendations from Chapter 5
<b>Pesticide Labels</b>	Label information search	None	“Acaramort” mock label training tool displaying different parts of the pesticide label  Copies of labels of two actual pesticide products
<b>Personal Protective Equipment</b>	Hands-on activity with PPE and labels	PPE that must be worn with each of the products you selected for this activity	Document showing effectiveness of different types of glove material
<b>Pesticide Storage</b>	Photo – Hazard Identification	Laminated photos with examples of good and bad storage	None

**Class Outline**

Like objectives and skill sets, an outline is a necessary tool that serves as a guide for trainers. A good outline will provide you with all of the information you need to know to conduct the training session in an organized way, and can also help you gauge the amount of time you will need for each topic and activity. Organize the outline so that it is easy to follow, such as is shown in the following example. As you gain more training experience, you may discover a simpler way to organize your topics, activities, handouts, and materials.



**Table 9.4: Sample Class Outline**

<b>Topic</b>	<b>Activity</b>	<b>Time</b>	<b>Materials</b>
<b>Trainee Introductions</b>	Ice Breaker	5-15 minutes	Dry erase board and pens
<b>Pesticides at work</b>	Small group activity with lists of sites	10 minutes	Lists of sites (one copy per group)
<b>Definitions of pests and pesticides</b>	Question and answer	5 minutes	None
<b>Routes of exposure</b>	Hazard Identification	10 minutes	Photos of potential pesticide exposure situations
<b>First Aid</b>	Label information search	10 minutes	Labels and photos of potential pesticide exposure situations

**Equipment and Supplies**

Now you can focus on the training equipment and supplies. Make a list of everything you will need to conduct your training. You can avoid carrying extra equipment by checking to see if items are available at the training site. Once you know what is already available, decide what items you will need to bring. The following is an example of a checklist of equipment and supplies for a more formal pesticide safety training class, during which the trainer will use a digital presentation, case study, and label activities.

**Table 9.5: Sample List of Training Equipment and Supplies**

<b>Equipment/Supplies</b>	<b>Need</b>	<b>Provided at Site</b>	<b>Need to Bring</b>
Laptop	✓		✓
Projector	✓		✓
Extension Cord	✓	✓	
Screen	✓	✓	
TV/VCR/DVD Player			
Writing Surface/Pens	✓	✓ (dry erase board)	
PPE	✓	✓ (employer purchased new PPE for training)	
Pesticide Labels	✓		✓
Case Study	✓		✓

**Additional Considerations**

**Timing**

Training sessions are more effective when trainees are able to concentrate on the information. Therefore, the best time to train may be in the morning when everyone is alert. If the morning is not a convenient time and you need to present the class in the afternoon, provide short breaks and refreshments, if possible.

The employer or supervisor can help determine the best time of day for training. Many agricultural employees work at least 10 hours per day, 6 days a week. Therefore, you may be asked to present the class in the evening or during a weekend.

The training schedule may vary depending on the season, type of agricultural establishment (farm, forest, nursery, or enclosed space production area), and needs of the trainees.

**Training Site**

A good training site will contribute to the success of the training. You may not always have control over training locations, but when you do, choose a place that is quiet, conducive to learning, and where there will be few outside disturbances.

If the class is presented indoors, minimize distractions by closing doors and windows. If the class is held in a farm shop, warehouse, or in a field, it will be more difficult to minimize distractions. You may discover you will need to use more hands-on activities and discussion to keep the group focused when training outdoors.



Photo courtesy of Jennifer Weber, Arizona Department of Agriculture

When you train at a new location, find out as much as you can about the training site. If you know about problems in advance, you may be able to change sites or arrange to minimize or eliminate situations that could be distracting during the class. The type of training location can also influence the training methods you will be able to use.



Photo courtesy of Association of Farmworker Opportunity Programs

**Personal Safety**

Always make sure the training location does not present any hazards to you or trainees. Dress appropriately for the conditions and site. Consider wearing a hat, sun visor, or putting on sunscreen. Bring plenty of water if you will present your training outdoors or in the heat.

Likewise, wear warm clothes and a jacket if you will be training outdoors or in cold weather.

Be aware of possible tripping and electrical hazards when using extension cords for training equipment.

Take additional safety precautions if you travel and train alone or after dark. Make sure you have enough light to see where you are going to avoid potential hazards. If you do not feel safe on your own, ask someone to accompany you.

### **Class Size**

It is much easier to train a small group of 15 people than it is to train a large group of 50 or more. Trainees in smaller groups are better able to hear you and see the information and have more opportunities to participate and ask questions. Furthermore, you will have more control over the course and will find it easier to keep all trainees focused on training. When it is necessary to train a large group, have trainees form smaller subgroups to work on activities such as problem-solving exercises. Move around the room so you can give the groups more individualized attention.

### **Room Arrangement**

When arranging the room, think about the class size and training activities. The room should be set up so all trainees will be able to see and hear well.

If you use a table, flipchart, dry erase board or props, place these items off to one side. This will provide you with more room to conduct the course and activities and will eliminate a barrier between the trainees and you. Setting a flipchart or dry erase board off to the side of the room will enable you to face the class as much as possible as you write. In this way, you will create a much friendlier training atmosphere.