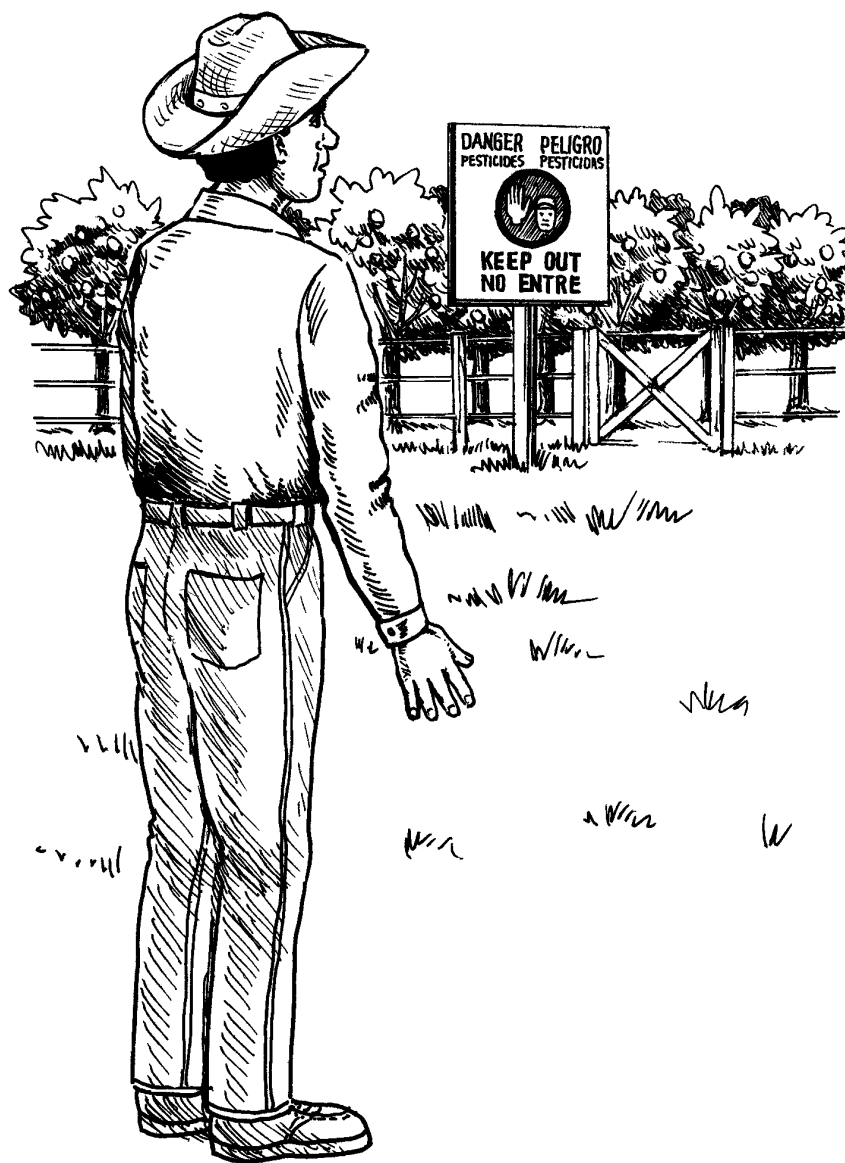


WPS TRAINING FOR FIELDWORKERS

Teaching Workers How to Protect Themselves
From Pesticide Hazards in the Workplace



University of California
Statewide Integrated Pest Management Project
Division of Agriculture and Natural Resources

Funding for this project was provided by the U.S. Department of Agriculture, Cooperative State Research, Education, and Extension Service, under agreement number 97-EXCA-3-0639.

The University of California prohibits discrimination against or harassment of any person employed by or seeking employment with the University on the basis of race, color, national origin, religion, sex, physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (special disabled veteran, Vietnam era veteran, or any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized). University Policy is intended to be consistent with the provisions of applicable State and Federal laws.

Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 1111 Franklin, 6th Floor, Oakland, CA 94607-5200; (510) 987-0096.

Acknowledgements

Technical Editor: Patrick J. O'Connor-Marer, University of California

Author: Melanie Zavala, University of California

Production

Design: Words Express, Melanie Zavala, and Patrick J. O'Connor-Marer, University of California

Drawings: U.S. EPA—*Protect Yourself from Pesticides—Guide for Agricultural Workers* (pages 14, 39, 56, and 57)
Javier Juarez (pages 11 and 49)
David Kidd (pages 33 and 34)

Technical Committee and Principal Reviewers

Charles M. Andrews, California Department of Pesticide Regulation

Susan Bauer, Community Health Partnership of Illinois

Barry Brennan, University of Hawaii

Jon Carpenter, Nevada Department of Agriculture

Raymond Chavira, U.S. Environmental Protection Agency, Region 9

Jeanne Heying, U.S. Environmental Protection Agency

Adolfo Marvin Gallo, California Department of Pesticide Regulation

Edwin Moscoso, San Luis Obispo Co. Department of Agriculture

O. Norman Nesheim, University of Florida

Frank Schneider, California Department of Pesticide Regulation

Myron Shenk, Oregon State University

Michael W. Stimmann, University of California

Jennifer Weber, University of California

TABLE OF CONTENTS

INTRODUCTION	3
CHAPTER 1:	
GIVING FIRST AID AND OBTAINING MEDICAL HELP FOR PESTICIDE EXPOSURE	9
CHAPTER 2:	
DRINKING AND EATING WHILE WORKING IN THE FIELD	24
CHAPTER 3:	
ROUTES OF EXPOSURE: HOW CONTAMINATION OCCURS AND HOW TO AVOID IT	32
CHAPTER 4:	
RESTRICTED ENTRY AND EMPLOYER RESPONSIBILITIES.....	39
CHAPTER 5:	
GETTING EXPOSED TO PESTICIDE RESIDUES WHILE WORKING IN THE FIELD	47
CHAPTER 6:	
KEEPING PESTICIDES OUT OF THE HOME.....	57
CHAPTER 7:	
USING QUIZ GAMES TO REVIEW THE INFORMATION PROVIDED IN A WPS TRAINING FOR FIELDWORKERS	65
FIGURES	79

Introduction

In 1992 the federal Worker Protection Standard (WPS) was signed into law. The WPS requires that agricultural employers make sure that all pesticide handlers receive pesticide safety training and the great majority of fieldworkers receive information and training on how to avoid exposure to pesticides. This law applies to employees working in commercial outdoor and indoor nurseries, greenhouses, forests, and on farms. Specific information that fieldworkers must receive is spelled out by the WPS.

The Need to Train Fieldworkers

Fieldworkers, unlike pesticide handlers, do not work directly with pesticides. However, since they may work in recently treated fields or near areas where pesticides are being mixed, loaded, applied, or stored, they need information on how to avoid pesticide exposure. Fieldworkers need to know how they might come into contact with pesticide residues and what they should do to protect themselves. They need to recognize that pesticides can be present in irrigation water so they should never drink or wash in this water. Fieldworkers must understand that when they

touch or brush up against treated plants or other treated surfaces, pesticide residues can get on their clothing and on their hands and other parts of their bodies. Fieldworkers should know that their employers are legally responsible for protecting them from pesticide exposure. Finally, fieldworkers should understand that they must take responsibility for protecting themselves by following the practices that are detailed in WPS training programs.

Employer Responsibility for WPS Training

Under WPS, employers must make sure their employees receive the required training within the first five days of working in areas that have had a restricted-entry interval (REI) in effect within the past 30 days. An REI is a waiting period that must pass before entering an area that has been treated with pesticides. WPS training for fieldworkers remains valid for five years. After five years the training must be repeated. Employers are responsible for verifying that this training has been provided to employees who will enter treated areas after the REI expires and for the next 30 days.

The training can be presented by anyone qualified to instruct fieldworkers according to the WPS, although some states have additional requirements for WPS trainers. If a worker has received WPS training during the past five years, a new employer does not need to retrain this worker before the five years have passed. However, new employers are responsible for verifying that the workers they hire have received the required training within the past five years. If a previous employer trained new employees, the employee may have a WPS training verification card distributed by the instructor. However, since distribution of these verification cards is optional, fieldworkers may not have received them even though they have had the required WPS training.

The Purpose of This Training Packet

This training packet consists of a video and this manual. The video has six segments and the manual is made up of six corresponding chapters plus a review

chapter. The packet is designed to enable you to provide WPS training to workers in an interactive manner. By combining the video with activities from the training manual you will keep your trainees actively involved in the learning process.

Interactive training is a very effective teaching method for adult learners. Using the methods suggested here will help workers better understand the potential risks of working in areas where pesticides have been used. After receiving this training, they will know what they must do to protect themselves and their families from exposure to pesticide residues.

When you provide WPS training to fieldworkers, remind them that pesticide exposure is only one of the potential dangers in the workplace. Agriculture is a very hazardous occupation, but pesticide-related injuries and illnesses make up a very small percentage of agricultural workplace accidents. Back injuries and injuries from agricultural vehicles and machinery are responsible for the largest number of injuries and deaths. Encourage the fieldworkers to take all aspects of workplace safety seriously and to do everything possible to protect their health.

Well-trained employees are less likely to be involved in workplace accidents that could result in lost work time and possible legal action. The information in this training packet will help employers avoid illnesses and injuries among their fieldworkers. Providing effective safety training to workers is not only a legal requirement, it is good business.

How to Use This Packet

The goal of this packet is to give instructors an effective training tool that allows them to provide fieldworkers with the WPS-required pesticide information. The video segments cover all the information fieldworkers need to know about protecting themselves from pesticides according to federal regulations. The segments are dramatizations of situations that fieldworkers might encounter at work or in their homes. The segments are designed to be interesting as well as informative so that the fieldworkers will pay attention to the messages and learn the information being presented.

While videos can be valuable training tools, a training program is most effective when the instructor and the trainees interact. Interaction allows the instructor to make sure individuals understand the information being conveyed. Simply showing a video and failing to follow up with a discussion of the content is not effective training. To ensure learning, encourage everyone to participate in the teaching process. This manual offers interactive training techniques for you to use with each of the video segments.

These interactive techniques include:

- ✓ role play
- ✓ question-and-answer
- ✓ discussion
- ✓ illustrations
- ✓ educational games
- ✓ hands-on activities

To use this packet correctly, show each segment of the video separately, and then involve the fieldworkers in one or more of the training activities from the corresponding chapter. Use these activities to clarify the information presented in each video segment and to make sure that the fieldworkers have understood and learned the messages. Where activities require the use of an illustration, small versions of these illustrations are included in the text and a large version, suitable for photocopying, will be found in the appendix at the end of the manual.

The topics that must be addressed when providing WPS training to fieldworkers are:

- ✓ first aid for pesticide injury and poisoning and emergency decontamination procedures
- ✓ obtaining medical help

- ✓ where and how fieldworkers may come in contact with pesticides or pesticide residues during work, including hazards from chemigation and drift
- ✓ acute, delayed, and long-term health effects of pesticide exposure, including sensitization
- ✓ the routes by which pesticides can enter the body: through the skin and eyes, by swallowing, and inhalation
- ✓ how fieldworkers can protect themselves from exposure: using the correct clothing; avoiding skin, eye, and mouth contact; and personal hygiene
- ✓ signs and symptoms of poisoning from some of the commonly used pesticides
- ✓ entry restrictions, posting of emergency numbers, and warning signs or oral warnings regarding fieldworker entry into restricted areas
- ✓ access to pesticide use information
- ✓ protection from employer retaliation
- ✓ after-work care of work clothes
- ✓ warnings about taking home pesticides or pesticide containers

Each chapter starts with a list of the WPS points and messages that are addressed in the corresponding video segment. A summary of the plot and the written script are provided. A number of possible interactive training activities related to the topics covered in the video segment are described. You do not need to use all of the recommended activities in every training session. Choose the ones you feel will work best for you and for the fieldworkers you are training.

Your job as an instructor is to make sure that the fieldworkers you train understand and learn the information you are providing. WPS specifically requires instructors to present the information listed above in a way that fieldworkers will understand. By using the recommended activities along with the video, you will be able to train effectively and help the people who attend your training sessions avoid pesticide hazards in their workplaces.

Chapter 1

Giving First Aid and Obtaining Medical Help for Pesticide Exposure

(First Video Segment)

WPS Points Covered

- ✓ First aid for pesticide injury and poisoning, and emergency decontamination procedures
- ✓ Obtaining medical help
- ✓ Entry restrictions, posting of emergency numbers and entry signs, and access to pesticide use information

Messages

- ✓ There are specific first aid steps for various types of pesticide exposure:

Skin—immediately wash with clean water and soap.

Eye—rinse eye(s) with a gentle stream of clean water for at least 15 minutes.

Swallowing—induce vomiting only if the label recommends it and the victim is conscious and is placed in a position where choking cannot occur. If the label recommends against vomiting, follow label first aid instructions.

Inhalation—get the victim to fresh air. Give cardiopulmonary resuscitation (CPR) if the victim has no pulse, or administer rescue breathing if the person has stopped breathing or is having difficulty breathing.

- ✓ Employers are required to post the names, phone numbers, and addresses of emergency facilities in a place where fieldworkers can find this information.
- ✓ Employers are responsible for making sure that injured fieldworkers are immediately taken to a medical facility.

Plot Summary

A person is applying a pesticide in a greenhouse. Someone fails to see the warning sign, enters, and gets sprayed. Fellow fieldworkers help the victim, communicate with the office, and take the victim to a medical facility.

SCRIPT

(A pesticide applicator is spraying inside a greenhouse. A worker opens the door and is exposed to the spray.)

Applicator: Oh, no!

Franco: *(simultaneously)* Oh! My eyes!

Applicator: *(still in shock)* I didn't see you. What are you doing in here? Didn't you see the sign? Come on.

Cardiopulmonary Resuscitation (CPR) and Rescue Breathing

Cardiopulmonary resuscitation (CPR) is a procedure designed to restore heartbeat and normal breathing after both heartbeat and breathing have stopped. Rescue breathing, also known as mouth-to-mouth or artificial respiration, should be administered to restore breathing to a person who has stopped breathing but still has a pulse.

(The applicator takes Franco outside and has him sit down. Franco is covering his eyes and is obviously in pain. Other fieldworkers are walking past, and the applicator calls to a woman named Isabel.)

Applicator: I need help! He just got sprayed with pesticides.

Isabel: What shall I do?

Applicator: Tell the people in the office that there's been a pesticide accident and we're going to need to take Franco to the medical center. And send Faustino here. He knows how to give first aid.

(Isabel goes to inform the people in the office.)

Isabel: *(to office receptionist)* A worker has just been sprayed with pesticides. He's going to need medical help.

Receptionist: Is it serious?

Isabel: I don't know. I think the stuff got in his eyes, but I don't know what else. They told me to tell you to send Faustino to help. He knows how to give first aid.

Receptionist: I'll call him right now. Where did this happen?

Isabel: At house 15A, behind the area where they mix soil.

Receptionist: Okay. *(makes a loudspeaker announcement)* Faustino, please go immediately to house 15A. There's been an accident and they need your help.

(The receptionist gets up and goes into an inner office and speaks to someone. She comes out and says to Isabel:)

Receptionist: While Faustino is helping the guy, I'll send a car over to take him to the doctor.

Isabel: Okay. I'm going back over to the house to see if there is anything I can do.

(Isabel returns to the accident site and finds Faustino, who is wearing chemical-resistant gloves, already at the site removing the victim's pesticide-soaked shirt.)

Faustino: All this should have been done immediately to keep the pesticide from getting through his skin. Find me a clean hose and attach it to a drinking water faucet. I need to wash his skin and start rinsing his eyes right away. And bring me some soap.

(The applicator goes to look for a hose. Meanwhile Faustino comments to Isabel:)

Faustino: Everyone here should know basic first aid. That way no time is lost looking for someone who knows what they're doing. Haven't your supervisors discussed chemical safety with you ever?

Isabel: In the year and a half that I've worked here nobody has told me anything.

Leonidas: *(an onlooker)* Two or three years ago they sent a woman from the State or somewhere to talk to us about pesticide safety. Seems to me she said some stuff about how

to deal with accidents, but it's been so long...

(The applicator has come back with a hose, and Faustino is starting to wash the contaminated parts of the victim's body and to rinse his eyes.)

Faustino: Yeah, well, there's the problem. Everybody who works around pesticides should be given first aid training often enough that they don't forget.

(Faustino is in the process of rinsing out the victim's eyes.)

Since we're all here anyway, why don't you watch what I'm doing? Always use a gentle stream of clean water, not too hot and not too cold. The rinsing process should continue 15 minutes. Oh, here they come with the car. Luckily he never stopped breathing. If he had, the thing to do would be to loosen his clothes and give him mouth-to-mouth resuscitation.

(Enrique gets out of car.)

Faustino: Enrique, just let me finish rinsing his eyes. Meanwhile is there a blanket or something warm in there? I had to take off his shirt.

Isabel: What if some of the spray got into his mouth and he swallowed it?

Faustino: If that happens, you need to know what the label says about first aid for swallowing. Some labels tell you to make the person vomit, while others specifically tell you not to.

Isabel: But if the label says so, you should make the victim vomit?

Faustino: Well, only if the person is conscious. Then you have to turn his head so he is in a position where he won't choke. And only if you can do it right away. You don't want to spend a lot of time trying to make someone throw up. It's more important to get to the hospital as quickly as possible. If the person is conscious, drinking a lot of water or milk to dilute the poison is quicker. The doctors can take care of the rest.

(Enrique goes back to the car and pulls out a blanket.)

Faustino: *(to the applicator)* Did you bring the label for the pesticide?

(The applicator holds up the label and gives it to Faustino.)

Applicator: Yes, here it is.

Faustino: *(handing the label to Enrique)* Don't forget to give this label to the doctors when you get to the emergency room. They'll need to know the name of the pesticide to give Franco the right treatment.

Enrique: Understood. I won't forget.

Faustino: And you know where to go?

Enrique: Yes. They told me in the office, but I already knew.

The telephone number and address of the hospital are written on a poster, along with other emergency numbers, near the time clock.

Isabel: Huh! I never noticed that.

(They help get Franco into the car and Enrique gets into the driver's seat and drives away.)

Faustino: Well, I hope everything turns out. I think he'll be okay, but it would have been better if he could have gotten first aid a little quicker.

(The applicator looks embarrassed.)

Isabel: A little quicker? How?

Faustino: Actually, everyone here should be trained on how to give first aid in case there's an accident. That way nearby people can help instead of waiting for someone else to arrive. It was just lucky that Enrique already knew where the boss wants us to go for emergency treatment. Everyone should know. But Isabel didn't, and if it had been her job to take Franco to the hospital, more time might have been lost while she was looking for the information.

Isabel: Yes, that's true. Nobody ever pointed the poster out to me, and I just never noticed it. Accidents shouldn't happen, but since sometimes they do, we should all know what to do to help each other out.

Interactive Training Activities

There are a number of interactive techniques you can use to help fieldworkers better understand the pesticide safety messages that are presented in each video segment. The techniques described below for this segment include hands-on activities, discussion, the use of pictures, and role-play. Make sure you ask the fieldworkers questions. Their answers will let you know whether or not they have understood the messages.

Training Activity #1: First Aid and Emergency Decontamination

This activity demonstrates work situations that can lead to pesticide exposure. The activity uses hands-on first aid activities to teach fieldworkers ways to avoid exposure situations and to show them how to respond to pesticide exposure emergencies.

Props

Scenario #1

- ✓ Soap and a small container of water
- ✓ Paper towels
- ✓ Measuring cup
- ✓ Empty container (to simulate a pesticide container)
- ✓ Two pairs of safety goggles
- ✓ Picture of two men measuring a pesticide (Figure 1-1)



Figure 1-1

Scenario #2

- ✓ Two empty soft drink bottles
- ✓ Picture of man drinking from a soft drink container (Figure 1-2)

Ask for four volunteers to work in pairs. One person in each pair will be the victim and the other will be the rescuer who performs emergency first aid. The rest of the fieldworkers will be the audience. Give each pair one of the pictures provided with this activity. Tell them to develop an exposure scenario like the one they see in the picture and to then give the proper first aid and emergency help to the exposure victim. Allow them a few minutes to plan their scenarios.

Tell the audience to think about the following as they observe the scenarios:

- ✓ What is the correct first aid for the type of exposure being shown?
- ✓ Did the rescuer provide the proper first aid?
- ✓ How did the fieldworker get exposed?
- ✓ How could this situation be avoided?

While the volunteers are practicing the scenarios, discuss the proper way to respond to pesticide injuries



Figure 1-2

(through the skin and eyes, by swallowing, or inhaling a pesticide) with the other fieldworkers. After each scenario is presented, ask the questions below:

Scenario #1: Pesticides on Skin

<i>Question</i>	<i>Answer</i>
<i>What did the rescuer do to help the victim? What other things could the rescuer have done?</i>	The answer will depend on how the rescuer responded.
<i>What caused the fieldworker to get exposed?</i>	The person was a fieldworker not a handler. He hadn't received handler training and therefore did not know the handling procedures.
<i>What is the correct way to respond to this emergency?</i>	Immediately remove any contaminated clothing and wash the affected skin areas with lots of water and soap.
<i>What if soap is not available?</i>	Rinse with plenty of water. Use soap when available.
<i>What if the fieldworker's clothes are contaminated?</i>	Remove the contaminated clothing and wash the affected skin to prevent further exposure.
<i>When should you take a pesticide exposure victim to a medical facility?</i>	For victims of skin exposure, get medical help if the affected area becomes irritated, other symptoms develop, or if it is part of company policy or label instructions. For eye, inhalation, or oral exposure, always get medical help.
<i>How could this accident have been prevented?</i>	All employees should be properly trained for the types of jobs they are doing and should not participate in work activities for which they have not been trained. Supervisors or employers should instruct all handlers to never allow fieldworkers to handle pesticides or pesticide equipment.

Scenario #2: Swallowing a Pesticide

<i>Question</i>	<i>Answer</i>
<i>What is wrong with the situation? How did the fieldworker get exposed?</i>	<ul style="list-style-type: none"> • Someone put a pesticide in a soda bottle. • The fieldworker drank from a container without knowing what was in it. • An incorrectly bottled pesticide was left unattended.
<i>What would be the correct response to this type of situation?</i>	The answers will depend on what the fieldworkers do to provide first aid.
<i>Why should you not always induce vomiting when a person has swallowed a pesticide?</i>	<ul style="list-style-type: none"> • Some pesticides are caustic or cause tissue damage. If the victim vomits, the linings of the mouth and throat will be burned in the vomiting process, causing additional damage apart from that caused by swallowing. • Sometimes, if the victim vomits, pesticides can get into the lungs and cause damage.
<i>If the victim is unconscious, should you attempt to induce vomiting?</i>	No, because an unconscious person can choke and suffocate if you induce vomiting.
<i>How could this situation have been avoided?</i>	Pesticides should never be stored in unmarked containers, or stored or measured in any type of food and beverage container. Fieldworkers should never drink or eat something they find near a pesticide mixing site. Pesticides and pesticide containers should never be left unattended.

Training Activity #2: Emergency Numbers in the Workplace

This training activity uses discussion to help fieldworkers become aware of the location of posted emergency numbers at their workplaces. Lead the fieldworkers in a discussion of the location and use of emergency numbers at their workplaces by asking them the following questions:

- ✓ Where are the emergency numbers posted at your place of work?
- ✓ How did you become aware of these numbers? For example, were you shown the location of the numbers, or did you happen to notice them?
- ✓ Have you or any of your fellow fieldworkers ever needed to make an emergency phone call because of an incident at work?
- ✓ What kind of pesticide-related emergencies have occurred at your workplaces and how were these emergencies handled?

Training Activity #3: Posting Warning Signs in Areas of Restricted Entry

This activity uses a picture of a pesticide exposure incident to start a discussion of the importance of posting warning signs in areas where entry is restricted. Show Figure 1-3 to the fieldworkers, and ask them the following questions:



Figure 1-3

<i>Question</i>	<i>Answer</i>
<i>What is happening in this picture?</i>	A woman has entered a pesticide-treated area before it is safe.
<i>What do you think has made this person ill?</i>	Pesticides were applied inside the area recently enough that they were still harmful to people entering the treated area.

<p><i>How could this incident have been avoided?</i></p>	<p>All employees should have been notified about the restricted entry, or a warning sign prohibiting entry should have been posted.</p>
<p><i>Who is responsible for this accident?</i></p>	<ul style="list-style-type: none"> • The victim is partly at fault for not realizing it was unsafe to enter. • The applicator or employer is partly at fault for not notifying workers or putting up warning signs. • The employer should have given his employees better training.

Training Activity #4: Staying Out of Restricted Areas and Obtaining Medical Help

This activity uses role-play. The fieldworkers will play the roles of the fictional characters described below. When leading a role-play activity:

- ✓ Provide the actors with a description or a picture of the scenario they will present.
- ✓ Encourage the actors to respond as if they were in a real situation.
- ✓ Know exactly what information you are trying to communicate so that you can clarify or correct any misinformation at the end of the activity and so the fieldworkers understand that they should never stay in an enclosed area that is being treated with a pesticide.
- ✓ Allow time for discussion after each activity.

Role-play #1: The Importance of Leaving an Area Scheduled for Treatment

Ask for three volunteers to act in the scenario, and describe the situation. One will be an applicator who is about to apply a pesticide in a greenhouse, and the

other two will be greenhouse workers who have instructions to work there and are not willing to leave the area.

In this scenario, a pesticide applicator goes into a greenhouse and finds people working inside. He tells them that he has instructions to spray a pesticide in the greenhouse and asks them to leave. They are unwilling to leave, however, because they have been told to work there. The applicator argues that the plants need to be sprayed immediately, but the greenhouse workers won't leave without permission from their supervisor. They suggest that maybe they can stay out of the spray by working on the other side of the greenhouse. The discussion continues as the applicator tries to convince them to leave.

After you have described the scenario tell the actors that it is up to them to make up a script, decide on the attitudes of the characters they are playing, and make their own decisions on how to correctly respond to the situation. Give them about 5 minutes to plan the activity. While they are working on this, tell the rest of the fieldworkers that during the role-play they should try to decide who is right and how well each side has argued their case. Ask them to determine how the situation arose and how it could have been avoided. *(You want them to say that it is important that workplace spraying activities be organized so that everyone knows what everyone else is doing.)*

After the role-play is finished you can ask the following questions:

<i>Question</i>	<i>Answer</i>
<i>Can you describe a similar event that has happened at your workplace?</i>	The responses will vary from group to group, but if someone describes a similar event, make sure that the responding person explains how the problem was resolved.
<i>What attitudes should the supervisor have regarding working in areas being sprayed with pesticides?</i>	<ul style="list-style-type: none"> • The supervisor should know that greenhouse workers and field-workers have a right to protect themselves and

	<p>that they should never be required to stay in an area where there is a potential hazard.</p> <ul style="list-style-type: none"> • Supervisors should know that it is illegal to apply pesticides in greenhouses when people are present. • The greenhouse workers and their supervisor should know that it is impossible to work safely in an enclosed area while a pesticide application is in progress. • Supervisors must protect workers from workplace hazards.
<p><i>What sorts of things did the applicator say to convince the greenhouse workers to leave the area? Is there anything else the applicator could have said?</i></p>	<p>Answers will depend on how the actors decide to play the roles.</p>

Role-play #2: Obtaining Medical Help

Ask for four volunteers to act in the scenario, and explain to them the situation that you want them to depict. One actor will play the greenhouse worker who is exposed to pesticides, two will be fellow greenhouse workers who help the victim, and the fourth volunteer will play the part of the supervisor. In this scenario a greenhouse worker walks past a greenhouse and notices a radio on the ground inside. There is a warning sign on the door prohibiting entry because of a recent pesticide application, but the worker doesn't notice and enters the greenhouse, walks over to the radio, and starts to pick it up. The greenhouse worker is overcome by pesticide vapors, drops the radio, stumbles out of the greenhouse, and falls to the ground. Two people walk by and see the victim coming out of the greenhouse. They rush over to help. While one stays with the victim, the other person goes to notify the supervisor. Upon hearing about the

accident, the supervisor goes to arrange emergency transportation to get the victim to a medical facility.

Tell the story to the actors and ask them to make up a script, decide on the attitudes of the characters they are playing, and make their own decisions on how to correctly respond to the situation. Give them about 5 minutes to plan the activity. In the meantime, tell the rest of the group that during the role-play they should try to decide if the rescuers and the supervisor are responding correctly. Ask them to pay attention to the attitudes of each of the characters and to think about how these attitudes compare to the attitudes of people at their workplaces.

After the role-play is finished ask the following questions:

<i>Question</i>	<i>Answer</i>
<i>How did the victim become exposed to pesticides?</i>	<ul style="list-style-type: none"> • The person didn't pay attention to the warning sign. • The person went into the greenhouse before it was safe to enter.
<i>What should the rescuers do to assist the victim?</i>	<ul style="list-style-type: none"> • Get the person to fresh air. • If they know how to administer the appropriate first aid they should begin that immediately. If not, one of them should look for someone who can help while the other one notifies the front office or arranges transportation to a medical facility. • If the person has stopped breathing, it is essential to either administer rescue breathing or look for someone who knows

	<p>how to help the victim.</p> <ul style="list-style-type: none"> • If there is more than one rescuer present, one person can administer first aid while the other arranges medical help.
<i>If the rescuers responded correctly to the emergency, what did they do? If they did not respond correctly, what did they fail to do?</i>	If they knew how, one should have administered first aid while the other went to get additional help.
<i>What did the supervisor do?</i>	Answers will depend on how the actors decide to play the roles.
<i>Where is the medical information located in your workplace?</i>	Answers will vary from person to person within the group
<i>Who has the responsibility of making sure that an injured worker gets immediate medical attention?</i>	<ul style="list-style-type: none"> • The employer, the supervisor, or both have this responsibility. • Fieldworkers should be trained to know what to do in an emergency and be prepared to transport or arrange for immediate transportation of an injured person to a medical facility.
<i>What conclusions can you draw from this scenario?</i>	<ul style="list-style-type: none"> • Pay attention to warning signs and take them seriously. • Know where the emergency medical information is located at your workplace.

- You, your supervisor, and your employer share the responsibility for workplace safety.

Chapter 2

Drinking and Eating While Working in the Field

(Second Video Segment)

WPS Points Covered

- ✓ Where and how fieldworkers may come in contact with pesticides or pesticide residues during work, including hazards from chemigation (drift is discussed in the third video segment)
- ✓ Some of the ways fieldworkers can protect themselves from pesticide exposure while working
- ✓ Acute, delayed, and long-term health effects of pesticide exposure (sensitization is discussed in the third video segment)

Messages

- ✓ Fieldworkers have a right to drink water whenever they get thirsty during work, whether or not the water station is close by.
- ✓ Fieldworkers should never drink water from irrigation ditches.
- ✓ It is important for fieldworkers to wash their hands before eating, drinking, smoking, and using the bathroom.
- ✓ Frequent hand washing does not cause health problems, but failure to do so can result in ongoing, low-level exposure to pesticide residues when working in fields where pesticides have been used.
- ✓ Low-level pesticide exposure may not cause immediate symptoms, but in some cases, ongoing, low-level exposure may cause health problems.

Plot Summary

Roberto, a fieldworker, is thirsty but is afraid his supervisor will be upset if he walks to the water station at the other end of the field. He decides to drink out of an irrigation ditch. Catalino and Linda, who are fellow fieldworkers, tell him that irrigation water should not be used for drinking or for washing hands. Roberto replies that he never washes his hands at work, since that can cause rheumatism. Catalino and Linda assure him that he is mistaken, and that while washing his hands won't harm him, eating or drinking with contaminated hands could result in ingestion of pesticide residues. In addition, failure to wash his hands before using the bathroom might cause pesticide residues to contact other parts of his body.

SCRIPT

(Roberto stops working and wipes his face. He looks toward the water station and notices that it is at the other end of the field. He glances at his crew leader who is standing nearby. He walks to an irrigation ditch, kneels down, and is about to scoop up some water to drink.)

Catalino: Hey, what are you doing? You aren't going to drink from that ditch, are you? I don't recommend it! Who knows what's in that water?

Linda: All sorts of disgusting stuff, I'm sure. Remember when they told us about how they sometimes put pesticides or fertilizers in the irrigation water? That water is not for drinking. That's why they bring us water to drink and wash with while we are working.

Roberto: Yeah, but when the drinking water is on the other side of the field, I don't like to go all that way just to get a drink. (*glancing at crew boss*) I don't want the boss to think I'm just wasting time.

Linda: Well, what are we supposed to do? Pass out in the heat because we don't want to take the time to get a drink when we need it? I don't think so!

(later in the day, during lunch)

Linda: (*to Roberto, jokingly scolding him*) You aren't going to drink some more ditch water, are you?

Roberto: (*sheepishly and a little defensive*) Okay, okay. I get the point.

Catalino: Apart from being undrinkable, you shouldn't use it to wash your hands before lunch, either.

Roberto: No problem. I never wash my hands at work. That's how you get rheumatism.

Linda: (*under her breath while rolling her eyes*) Can you believe it?

Catalino: Rheumatism? That's not really true! That's just an old belief. Washing your hands won't hurt you. What may very well hurt you in the long run is eating, drinking, smoking, or using the bathroom without washing pesticide residues off your hands first.

Roberto: You're beginning to sound like my mother. What's the big deal?

Linda: Well look. If you are working in fields that have been sprayed with pesticides and handle plants or get some dirt on your hands and then you eat or somehow touch yourself, some pesticide residues can get into your body.

Roberto: (*talking to himself under his breath*) Could be. Sounds logical.

Catalino: You probably won't get sick right away if you do that kind of stuff, but if you keep it up for all the years you work in the fields, one day you may feel the results. When they talk about the possible long-term problems from pesticides they always talk about cancer, nerve damage, all sorts of serious stuff.

Linda: I've heard that too much exposure to some pesticides may affect your ability to have children, or cause your children to be born with defects. So like Catalino says, "all

sorts of serious stuff"! And really, that's the whole point! One of the things they said to us when we went to the pesticide safety training is that they still don't know everything about the possible long-term health effects of pesticide exposure.

Catalino: And since we don't know what might happen to us if we don't do everything possible to avoid exposure, it makes sense to be careful.

Roberto: *(to himself, while nodding his head affirmatively)* Yeah, that makes sense.

Epilogue: *(a physician speaking to the audience)* Many people still believe hand washing is the cause of rheumatism or arthritis in their hands. Let me assure you that washing your hands has no connection with these diseases. As a matter of fact, if you work in fields where pesticides have been used, you should wash your hands as frequently as possible. This will remove any pesticide residues that are on them before you handle food or use the bathroom.

Interactive Training Activities

The interactive techniques used in the following section include games, discussion, pictures, and role-play.

Training Activity #1: The Importance of Washing Your Hands While Working

This activity uses an educational game to help fieldworkers understand why washing their hands can help them avoid pesticide exposure.

Game Rules:

- ✓ Divide the fieldworkers into two teams.
- ✓ Tell each team to list as many ways as possible to get exposed to pesticide residues by not washing their hands.
- ✓ Explain to them that each possible exposure situation their team describes is worth one point and that they can get a second point if they can identify the correct exposure route for each possible exposure situation.
- ✓ Give each team 5 minutes to develop their lists of "ways-to-get-exposed."

- ✓ Compare the two lists, reading the answers out loud.
- ✓ If a team fails to identify the exposure route for a listed exposure incident, ask the other team if they can identify the route and win some extra points.
- ✓ The team that identifies the largest number of possible ways that exposure can occur and correctly identifies the types of exposure gets a prize.

One example of an exposure situation that might be mentioned by the players is: If you do not wash your hands before eating, the food you eat will be contaminated with pesticide residues from your dirty hands. This will cause oral exposure to pesticide residues.

This response would be worth two points, one for listing the exposure potential and one for identifying it as an oral exposure.

Training Activity #2: Possible Long-Term Health Effects of Pesticide Exposure

This training activity uses discussion to heighten awareness of the potential long-term health effects of overexposure to certain types of pesticides. Ask the fieldworkers if they can list some of the possible long-term health effects of overexposure to some pesticides. Make sure that the fieldworkers understand that little is known about the possible long-term health effects of exposure to some pesticides. Have individuals describe how they protect themselves at work. Ask the fieldworkers if they plan to do anything different at work now that they have seen this video segment. Have them explain what behavior at work they plan to change.

Remind the group that their best protection against exposure to pesticide residues in the workplace is to follow all the recommendations they receive in this training program. Make sure they understand that they should wash their hands before eating, drinking, smoking, and using the bathroom and that they should change their work clothes daily and bathe or shower as soon as they get home from work.

Training Activity #3: Avoiding Oral Exposure to Pesticide Residues

In this training activity you will use pictures to lead a discussion on safe eating and drinking habits while at work.

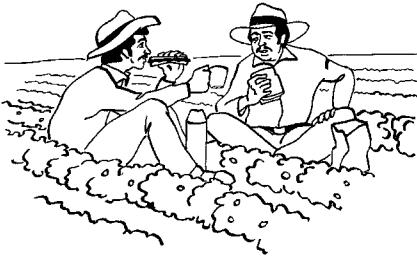


Figure 2-1

Scenario #1: Lunchtime in the Field

Ask the fieldworkers to identify any problems they see in Figure 2-1. *(They should mention that it is not good to store or eat lunches in areas that may have been treated with pesticides.)* Have them give opinions as to whether it is likely that these two fieldworkers washed their hands before lunch. *(If the fieldworkers are eating in the field, they probably left their lunches nearby and began eating without leaving the field. Therefore, they probably did not wash their hands.)*

Have members of the group describe where they store and eat their lunches at work. Ask them to explain what factors influence whether they wash their hands before eating.

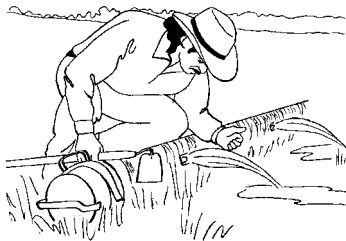


Figure 2-2

Scenario #2: Drinking Water While Working

Ask fieldworkers what is happening in Figure 2-2. Have them identify any problems with what the worker in the picture is doing. Lead a discussion of why fieldworkers should never use irrigation water for washing or drinking.

Training Activity #4: The Dangers of Drinking Irrigation Water

This activity involves the use of role-play. In this role-play a fieldworker gets thirsty while working in the field and starts walking toward the drinking water to get a drink. Some fellow fieldworkers see him crossing the field and give him a hard time, saying he is trying to avoid working and that he should wait until break or take a drink from the nearby irrigation ditch. The actors may choose a scenario where the crew boss supports the worker's actions and tells everyone that they should drink plenty of clean water

while they are working and should never drink out of irrigation ditches.

Describe the scenario to the actors and explain that it is up to them to make up a script, decide on the attitudes of the characters they are playing, and make decisions about how to correctly respond to the situation. Give them at least 5 minutes to plan the role-play. In the meantime, tell the other fieldworkers that during the role-play they should try to decide if the fieldworkers and the supervisor acted correctly or foolishly. Ask them to notice what kind of attitudes each of the characters has and to think about how these attitudes compare to the attitudes of people at their workplaces.

After the role-play is finished you can ask the following questions:

<i>Question</i>	Answer
<i>What do you do if you get thirsty while working in the field?</i>	Answers will vary from group to group.
<i>How do your crew bosses react if you walk to the far end of the field for a drink?</i>	Answer will vary among fieldworkers.
<i>How should your crew bosses react when you take time to get a drink of water while you are working?</i>	Field bosses should never discourage their workers from drinking water while they are working.
<i>Why shouldn't you postpone drinking water while working in fields, especially on hot days?</i>	When you work in the heat it is very important to drink plenty of water in order to avoid heat stress and other heat-related illnesses.
<i>What is heat stress, and how can it be avoided?</i>	<ul style="list-style-type: none"> ● Heat stress is caused by excessive water loss. ● Some of the symptoms of heat stress include tiredness, weakness, headache, sweating, nausea, dizziness and unconsciousness.

- Other symptoms are confusion and aggressive behavior. In some cases, a person with heat-related illness will stop perspiring. This is especially dangerous since perspiration helps the body to cool down.
- Heat stress and other heat-related illnesses can be avoided by frequently drinking water, taking frequent short breaks on extremely hot days, and finding shady areas to rest during these breaks.

At the end of this activity make sure that the fieldworkers understand that heat stress and other heat-related illness can be avoided by drinking plenty of water and by taking frequent breaks in the shade.

Chapter 3

Routes of Exposure: How Contamination Occurs and How to Avoid It

(Third Video Segment)

WPS Points Covered

- ✓ The routes by which pesticides enter the body (through the skin and eyes, by swallowing, or by breathing them in)
- ✓ How fieldworkers can protect themselves from exposure (wearing adequate clothing, avoiding skin, eye, and mouth contact with contaminated plants, containers, and other contaminated items, personal hygiene)

- ✓ Signs of injury with some commonly used pesticides (skin irritation and eye injury)
- ✓ Sensitization to pesticides

Messages

- ✓ Pesticides can get into the body through the skin and eyes, and by swallowing or breathing in residues.
- ✓ It is important to remove work clothes at the end of the day and to wash this clothing before re-use in order to avoid buildup of pesticide residues that could lead to skin exposure.
- ✓ Skin contamination can cause rashes, irritation, other skin damage, and systemic poisoning, depending on the type of pesticide.
- ✓ Getting pesticide residues in the eyes can cause both direct effects such as irritation, burning, and blindness, or systemic effects such as poisoning.
- ✓ It is important to bathe or shower immediately after work in order to remove pesticide residues from your skin.

Plot Summary

This is a continuation of the previous video segment titled **“Drinking and Eating While Working in the Field.”** In this segment, Mariaelena, who works with Catalino, Linda, and Roberto, has overheard part of the earlier conversation. It is the end of the day and she asks Linda questions about some pesticide safety information they were given at a recent meeting. She doesn’t understand why it is so important to wear clean clothes daily. Isabel, another worker, joins their conversation and adds some other points regarding how exposure occurs and the importance of personal hygiene.

SCRIPT

(It is the end of the day and people are walking toward their cars to go home. Mariaelena walks up to Linda.)

Mariaelena: Linda? I happened to hear your conversation at lunchtime and....

Linda: *(smiles and says jokingly)* Gee, I hope I didn't say anything that could get me in trouble!

Mariaelena: *(very serious)* No, of course not. But remember when you were talking with Catalino and Roberto about pesticides. It reminded me of something I didn't understand the day we had that safety class.

Linda: Well, I'm not exactly a safety expert, but tell me what it was you did not understand.

Mariaelena: Okay, look: I understand why it is important to wash your hands, and about how you shouldn't drink water from irrigation ditches. And it makes sense that we shouldn't eat fruits or vegetables from work unless we wash them first and check with the boss to be sure they don't have dangerous residues from a recent pesticide application. It isn't hard to figure out that if you swallow poison you can get poisoned.

Roberto: *(walking past them and glancing back with a smile)* Wow. That's deep!

Mariaelena: *(smiles at Roberto's comment and then says with a puzzled frown)* But what's the big deal about changing your clothes and wearing something clean every day? It's not like anyone's about to eat their shirt or anything. So what's the problem with using the same work clothes for a few days?

Linda: *(looks pleased and smiles)* All right! You actually asked me something I can answer! The thing is, eating without washing your hands isn't the only way pesticide residues can get into your body. Some pesticide residues can also pass through your skin.

Mariaelena: Are you serious?

Linda: Sure am! And if fieldworkers like us use the same clothes for several days in a row there's a chance that all the pesticide residues that our clothing comes in contact with will build up. Then, when we get hot and start perspiring, these residues dissolve, penetrate the skin, and get into our bodies.

Mariaelena: I know that there are pesticides that cause rashes and irritate the skin, but get into the body? I didn't know that. Is that really true?

(Meanwhile, Isabel has walked up and is listening to the conversation.)

Isabel: Yes. I'm sure Linda is right. Some pesticides can get through your skin and poison you. I've heard that lots of times. And there's something else I heard. If you are exposed over and over again to even tiny amounts of certain pesticides, you can end up getting sensitized.

Mariaelena: What does that mean?

Isabel: The way I heard it, “sensitization” is like an allergy that you develop over time. I guess it’s sort of like poison oak where the first time you touch it nothing happens. But once you come across it a few more times, you maybe develop an allergy so that it starts giving you a really nasty rash. And every time you touch it, it gets worse.

Linda: Right. And if you wear the same pesticide-contaminated clothes day after day, you could develop the same kind of allergy to certain pesticides. There you have all the reasons why it is important to wash your work clothes before you wear them again.

Isabel: And why we all need to take a bath or shower as soon as we get home from work.

Linda: Yes, that too. And before we hug our kids. We shouldn’t let them touch our dirty work clothing.

Mariaelena: Yeah, I guess that makes sense.

Linda: But now that we are on the subject, there is something else I wanted to mention.

Mariaelena and Isabel together: We’re all ears!

Linda: There are other ways that you can get poisoned by pesticides. One is by breathing them in.

Mariaelena: That’s not supposed to happen. Applicators aren’t supposed to spray if anyone is near or if people could get contaminated from spray drift.

Linda: That’s true. With the kind of work we do we aren’t really likely to be in a situation where we might breathe in pesticides.

Isabel: I think inhaling pesticides is more likely to be a danger for people working in greenhouses. For instance, suppose someone is inside a greenhouse making an application and someone outside decides to walk in. That could end up being a real mess!

Mariaelena: Do things like that happen?

Isabel: When I was working in a nursery it happened once. Somebody walked into a greenhouse during an application and got sprayed with pesticide. Fortunately he was taken to the emergency room right away and he recovered. But when you apply pesticides inside a greenhouse you’re supposed to put warning signs on the doors during and after the application so no one goes in.

Mariaelena: Okay, so let me get this straight. You can get exposed to pesticides if you swallow them, if you get them on your skin, or if you breathe them in, right?

Linda: Wait! We’re not done yet. If you rub your eyes with dirty hands, and if your hands have pesticide residues on them, you can get eye irritation. But apart from the eye irritation, there are some pesticides that can get into your

body through your eyes, just like through your skin.

(Mariaelena nods her head. They all glance at their watches or waiting friends and start to move toward their cars.)

Mariaelena: Wow, I'm glad we had this conversation. I've just learned a lot of new stuff about pesticides and how to protect myself from them.

Interactive Training Activities

The interactive techniques recommended for use with this segment include discussion, the use of questions and answers, and illustrations.

Training Activity #1: Wearing Clean Clothes Daily

One of the messages in this video segment is that fieldworkers should start each workday with clean work clothes. Lead the group in a discussion of the reasons for wearing clean clothes and some of the things that might make it difficult for them to wear clean clothes daily. Ask them to discuss the following points:

- ✓ The reasons for starting each workday with clean clothes
- ✓ The difficulties that they may encounter in trying to follow this recommendation (Some problems could include limited access to adequate laundering facilities and lack of sufficient work clothes to allow for changing daily.)
- ✓ Ways they can resolve these problems so that they can obtain clean work clothes for daily changing (Some solutions could include buying inexpensive, used clothing and setting up a schedule with fellow fieldworkers for sharing rides to a laundromat.)

Training Activity #2: How Pesticide Residues From the Field Can Get Into Your Body

The following questions will make the fieldworkers think about the information covered in this video segment. Use this question-and-answer

technique by asking the questions listed below and making sure the fieldworkers provide correct answers. Only a few questions are included here. You may want to add additional questions:

<i>Question</i>	Answer
<i>What are the four ways that pesticides can get into your body?</i>	Pesticides can get into the body through the eyes, through the skin, by swallowing them, and by breathing them in.
<i>What is meant by the term "sensitization"?</i>	Sensitization is when you develop a sensitivity or allergy to a substance as a result of more than one exposure.
<i>Why should you change work clothes daily?</i>	You should change work clothes daily to avoid pesticide residue buildup on clothes that could lead to skin exposure.
<i>Why should you check before eating fruits and vegetables you pick from the fields where you are working?</i>	Crops may have been treated with pesticides recently enough that it is not safe for you to eat them yet. They could contain excessive pesticide residues that cannot be removed even by washing.



Figure 3-1

Training Activity #3: Oral and Skin Exposure to Pesticides

This is a two-part activity that uses a picture and a chart to help fieldworkers understand more about pesticide exposure resulting from accidental swallowing and skin contact.

Part 1: Eating Food from the Field

Show Figure 3-1 to the fieldworkers and ask them what the woman is doing wrong and why it may be hazardous to eat fruits and vegetables directly from the field. Ask them if they pick things from the field to eat or to take home to their families. Make sure they

understand that sometimes when food crops have been recently treated with a pesticide, it is necessary to wait a certain period of time before the crop can be harvested and sent to market. This waiting period is called the preharvest interval, and it allows time for the pesticide residues on treated crops to break down so that these fruits and vegetables can be safely eaten. At the end of this activity, fieldworkers should understand that they could be risking their health or the health of their family if they eat food from the field or bring it home without knowing whether there is a preharvest interval in effect.

Part 2: How Different Areas of the Skin Vary in Their Ability to Absorb Pesticides

Figure 3-2 is an absorbcency chart that shows how the skin on various parts of the body absorbs pesticides at different rates. Some parts of the skin, such as the palms of the hands, are not very absorbent. However, substances are easily absorbed through the skin of the underarms and the scrotum.

Show the fieldworkers this chart and ask them what it means. Make sure they understand the chart and can identify the least and most absorbent parts of the human body. Go over each of the 12 areas of the body listed and have the fieldworkers describe how each might come in contact with pesticides. Encourage them to talk about what they can do to avoid the kinds of contact they describe.

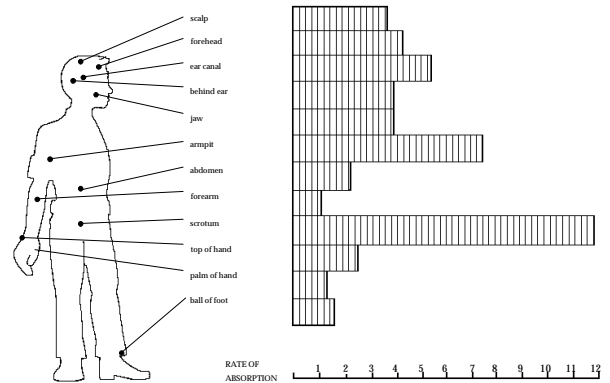


Figure 3-2

Chapter 4

Restricted Entry and Employer Responsibilities

(Fourth Video Segment)

WPS Points Covered

- ✓ Entry restrictions and the use of oral warnings and posting signs to keep people out of treated areas
- ✓ Protection from employer retaliation

Messages

- ✓ Except for specially trained and equipped applicators and early-entry workers, no one should enter an area during the restricted-entry interval.

- ✓ Safe working conditions benefit fieldworkers as well as employers. Employers are required to make worker safety an important concern.
- ✓ Employers are required to make sure that their instructions are clearly understood.
- ✓ Problems can arise as a result of misunderstanding or miscommunication when there is a “chain of communication,” such as when instructions are given to someone, who, in turn, gives the instructions to a third person.
- ✓ Crew leaders are responsible for protecting fieldworkers from workplace hazards.
- ✓ If fieldworkers recognize a danger, they have a right to refuse to place themselves in jeopardy. Employers cannot punish their fieldworkers for attempting to comply with the provisions of the Worker Protection Standard.

Plot Summary

A grower uses fieldworkers provided by a labor contractor. A particular field is scheduled for treatment with a highly hazardous pesticide that has a 72-hour restricted-entry interval (REI). A work crew has instructions to start work the following morning in a nearby field. On the day of the scheduled application the grower asks his son to call the spray company and confirm the arrangements. The son misunderstands his father’s instructions and unintentionally tells the spray company to treat the field where the work crew is scheduled to work in the morning.

The next morning the crew arrives at the treated field and finds REI signs posted. The fieldworkers have received WPS training and don’t want to enter the area. The supervisor, anxious to please the grower, says that they should follow instructions and work in the treated field. An argument ensues. The crew leader points out that if “early-entry fieldworkers” are allowed to go into recently treated areas it ought to be okay for them to enter. One of the fieldworkers replies that they are not trained as early-entry fieldworkers and don’t have the necessary protective equipment.

Finally, the crew prevails and they don’t enter the treated field. They decide to work in a field across the

road. The field has fewer weeds, but there is enough work to keep them busy for a while.

Later in the morning the grower arrives at the farm headquarters. In talking to his son, he realizes that the son told the spray company to treat the area where the work crew is supposed to be. Father and son become concerned and drive out to the field.

When they get there, they are relieved to see that the fieldworkers are not in the treated field but across the road. After some discussion, the grower makes it clear that the fieldworkers made the right decision.

SCRIPT

(A grower and his son are at their office. The son is doing some paperwork. The father looks like he is about to leave.)

Grower: Joe, I'm on my way to the dentist. Do me a favor and call Encino Valley Pest Control. Tell them that the field I want treated is the one on the north side of Langford Rd. Have them make the application this evening.

Joe: *(concentrating on his paperwork and a little annoyed at the interruption, barely looks up and says vaguely)* Sure, Dad, I'll let them know.

(Later, Joe is on the phone with the spray company.)

Spray company receptionist: *(consulting a map)* Okay, the vineyard on Langford Road. Which side? You have fields on both sides of the road. Which one shall we treat?

Joe: *(caught by surprise and clearly unsure of the answer)* Umm...the south side. Yeah, it's the one on the south side of the road.

Spray company receptionist: Okay, then, we'll send a crew out to treat the south field this evening.

(The next morning, the crew arrives and finds the area posted. Everyone is at the edge of the field unsure what to do. They look at the crew leader.)

Rigoberto: *(to crew leader)* Hey, Isaac, are you sure this is where we're supposed to be?

Isaac: Yes, I'm sure.

Roberto: So what should we do?

Isaac: Go in and start working.

Roberto: And the warning signs?

Isaac: Just ignore them. They told us to work in this field and this is where we're going to work.

Rigoberto: That's assuming that we're willing. It looks like they just finished spraying the field, and there are signs telling us not to go in. Linda and I aren't going to work in this field.

Linda: And I don't think anyone else should either. It was just a few weeks ago that they sent us to a safety class and talked about how we should never go into a field if there are pesticide warning signs or if we have been told not to enter by the grower or the guy who's spraying.

Isaac: Yes, but at that same meeting they told us that some fieldworkers enter treated fields to do certain kinds of necessary work. Well, it's necessary for us to weed this field.

Linda: You're talking about the early-entry fieldworkers that sometimes have to go in to irrigate, right?

Isaac: Exactly. To irrigate, or to do other kinds of jobs too.

Rigoberto: But, if I remember right, those fieldworkers are specially trained and they wear special protective equipment. We don't have special training or safety gear. So there is no way we ought to be going into this field.

(He points to the field under restricted-entry.)

Roberto: I'm not going in either.

Mariaelena and other fieldworkers: We're not going in there.

Roberto: Why don't we work in the field on the other side?
(points to other side of the road)

Isaac: But this field *(points to treated area)* has more weeds.

Linda: Yes. And it also has warning signs telling us not to enter.

Isaac: *(obviously displeased)* Okay, go ahead and start working over there at least until I can get this mess worked out. Just remember that we are going to have to deal with the consequences if the boss gets mad.

Rigoberto: We'll just have to wait and see. Whatever happens, I'd rather risk getting the boss mad than getting sick.

(They walk across the road, hoes in hand, to start working in the other field. Meanwhile, back at the office, the grower has already arrived when Joe comes in.)

Grower: Morning, Joe.

Joe: Hi Dad, how's it going?

Grower: Okay. Did you get in touch with Encino Valley Pest Control?

Joe: Yeah, no problem. They said they'd be going out about 9:00 last night. *(pauses, a little uncertain)* That was the field on the south side of the road, right?

Grower: *(reading the paper and therefore distracted)* No. The north. *(looks up slowly and concern comes over his face)* Did they spray the south side?

Joe: *(now worried and nervous)* Well...yes. I thought that's what you told me. Is there a problem?

Grower: *(upset and worried)* Joe, I specifically asked you to

have them spray the field on the north side. There's a crew scheduled to start working in that south field as of about 3 hours ago! I hope they have the sense to stay out!

(They look at each other, grower concerned and angry and Joe worried and embarrassed-looking. Without a word, they get up simultaneously and head for the door.)

(In the next scene, Joe and the grower pull up to the vineyards. They see the posted field to the south and note that the crew is working across the road. The crew leader sees them and walks over.)

Grower: *(as crew leader gets closer)* What a relief. Thank goodness you realized...

Isaac: *(interrupting)* Look, Mr. Ross, I told them that the field was the one on the other side *(indicates posted field)*. They wouldn't go in because of the signs. *(points at sign)*

(Meanwhile, Joe, feeling embarrassed and trying to hide his error, walks over to some fieldworkers.)

Joe: How come you guys are working here? This side doesn't even need hoeing.

Grower: *(glances at his son)* Relax, Joe. We should just be grateful they didn't go and work in the treated area. I would rather pay for a few hours of unnecessary work than have these people getting sick.

(Joe looks down and nods grudgingly.)

Joe: Yeah, you're right.

Rigoberto: *(talking to the grower, but indirectly to Joe and to Isaac as well)* A few weeks ago you sent us to a meeting about keeping ourselves safe at work. One of the things they told us was that if we see warning signs in a field, we aren't supposed to go in.

Linda: *(breathes deeply before speaking, as if she's a little nervous talking to the grower)* When we got here this morning we didn't know what to do. There wasn't any way to check with you so early in the morning. So we did what we thought was best.

Grower: And you made the right decision. *(looks at crew leader sternly)* Let's hope this kind of problem never happens again, but if it does I don't want you to ever put fieldworkers in a dangerous situation. *(looking toward Rigoberto and the crew)* You've done the right thing.

Isaac: *(shrugs his shoulders and looks confused)* So what should we do? Continue working here?

Grower: *(looking at his watch)* Let's see...What time is it? *(pauses and thinks)* Keep working here until 12:00. I don't think there's enough work here to justify any more time than that.

(The fieldworkers start walking back into field to continue working.)

Roberto: *(talking and walking with Rigoberto)* You see how it is? They say you did the right thing and all and then turn around

and tell you to quit early. Six hours! This check is going to be small.

Rigoberto: It would have been nice to work the whole day, but I'd rather come up a few hours short than get poisoned and have to miss a bunch of days.

Interactive Training Activities

The interactive techniques that are recommended for use with this segment include the use of questions and answers with pictures, discussion, and role-play.

Training Activity #1: Restricted Entry Intervals and Obeying Warnings

This activity uses a question-and-answer technique together with pictures to help fieldworkers understand the significance of oral or posted warnings against entry into recently treated areas.

Show Figure 4-1 to the fieldworkers and explain that in this picture a fieldworker is about to go into an orchard to work. As he gets closer to the orchard he sees posted warning signs prohibiting entry into the area.

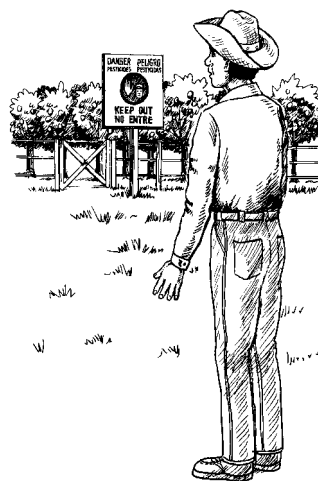


Figure 4-1

Lead a discussion using the following questions.

Question	Answer
<i>What is the significance of the sign in the picture?</i>	The area has been treated with pesticides, and it is not yet safe to enter the area.
<i>When is it okay for you to enter a posted area? For example, if the sign indicates that the REI date has expired, is it okay to enter? Explain your answer.</i>	It is never okay for workers to enter posted areas. As long as the signs are in place, entry into posted areas remains restricted.
<i>Who can enter posted fields or fields where an REI is in effect?</i>	Only properly trained early-entry workers and applicators that are wearing the label-required personal

	protective equipment can enter areas where a restricted-entry interval is in effect.
<i>What is the difference between early-entry workers and fieldworkers?</i>	Early-entry workers have received special training and have been given the personal protective equipment specified on the pesticide label for early entry.
<i>Can you think of any situations where entry into treated areas is restricted but no warning signs are posted?</i>	Many times pesticide labels allow for oral, rather than posted, warning against entry into restricted areas. Employers must notify all workers who might work within 1/4 mile of the treated area.

Training Activity #2: Staying Out of Restricted Areas at Work

This training activity uses discussion to help fieldworkers understand their rights and responsibilities regarding entry into areas where a restricted-entry interval is in effect. Ask the fieldworkers to explain, in their own words, what happened in this video segment. Lead a discussion about what they would have done under the same circumstances and whether they think that their crew leader would react like the crew leader in the segment. Ask them if, under similar circumstances, they think that their employers and supervisors would have been pleased or angry to find them working somewhere other than the assigned area because of restricted-entry interval requirements.

Training Activity #3: Understanding Rights and Responsibilities for Keeping Out of Restricted Areas

This is a role-play activity in which volunteers act out a situation similar to the one in the video segment. In this role-play, a crew of fieldworkers arrives at a

field to work. They find that the field is posted and know they are not supposed to enter. However, the crew leader, like the one in the video segment, tries to convince them that they should go in and work despite the warning signs.

Select several volunteers to be in the role-play. There should be a crew leader and at least three fieldworkers. Explain the situation to the actors and tell them to make up a script. They should decide on the attitudes of the characters they are playing and make their own decisions on how to correctly deal with the situation. Encourage them to give the crew leader the reasons why they should not enter the area to work. Give the actors at least 5 minutes to plan the activity and make up a script. Tell the rest of the fieldworkers that during the role-play they should try to decide if the fieldworkers and the supervisor acted correctly or illegally and foolishly. Tell them to notice what kind of attitudes each of the characters had and to think about how these attitudes compare to the attitudes of people at their workplace. Ask them to pay attention to, and to comment on, how well the fieldworkers presented their arguments to the crew leader. Once the role-play is finished, make sure there is adequate discussion of the points covered. Remember that there are certain conclusions that you want the fieldworkers to reach regarding their rights and the responsibilities of supervisors and employers. Make sure to go over any points you do not feel were clearly illustrated in the role-play once it is finished.

Chapter 5

Getting Exposed to Pesticide Residues While Working in the Field

(Fifth Video Segment)

WPS Points Covered

- ✓ Signs and symptoms of acute poisoning from some of the commonly used pesticides
- ✓ Access to pesticide use information
- ✓ Protection from employer retaliation

- ✓ Responsibility of employers for getting fieldworkers to a hospital or clinic where they can receive medical care in case of pesticide-related illness or injury

Messages

- ✓ Many of the symptoms of poisoning from commonly used pesticides resemble symptoms of the flu or a hangover.
- ✓ Crew bosses have a responsibility to protect the fieldworkers they supervise from workplace hazards.
- ✓ Labor contractors and growers have a shared responsibility for protecting fieldworkers from workplace hazards.
- ✓ If fieldworkers or their representatives, such as medical personnel, request information regarding pesticides used at the workplace, employers have a legal responsibility to provide this information.
- ✓ Fieldworkers, by law, cannot be punished by their employers for complying with or attempting to comply with the provisions of the Worker Protection Standard.
- ✓ The safety of fieldworkers is to the advantage of employers and supervisors, as well as to the fieldworkers themselves.

Plot Summary

José is part of a field crew that works for a farm labor contractor. One day José and his fellow fieldworkers enter a field to work. After he has been working for a while, he begins to feel sick. His head hurts, he feels dizzy, and is slightly nauseous. José remembers his adventures of the previous night with his friend and fellow-worker Jorge. He dismisses his illness with a shrug and continues working. As time goes by he feels worse. Finally, he comments to Jorge that he feels sick. Jorge says that he doesn't feel well either. José suggests that they are hung over, and Jorge comments that they only had 2 or 3 beers, not enough

to cause a hangover. They decide to keep working, thinking they'll feel better later on.

At morning break they are both feeling worse. After some conversation with fellow fieldworkers it becomes clear that everyone is experiencing the same sorts of symptoms. Someone suggests it may be a kind of flu, but most of them agree that not everyone would have come down with the flu at the same time. Someone comments that something in the field might be making them sick. They talk about mentioning their illness to the crew boss, but some are hesitant to say anything. They finally agree to tell the crew leader, who reacts by immediately getting the fieldworkers out of the field and calling the farm office for help.

SCRIPT

(A crew of fieldworkers is hoeing. Focus on one worker, José. He pauses to wipe his forehead, frowns, shrugs, and continues working. A fellow worker, Jorge, is working close by. José pauses again and squeezes his eyes. He grimaces and touches his head as if it hurt.)

José: I've got a headache you wouldn't believe! Plus I'm dizzy and feel like throwing up.

Jorge: That's weird, I feel lousy too.

José: It feels like a hangover, except I felt fine when I got up this morning.

Jorge: Why should you have a hangover? We only drank two or three beers the whole night.

José: Well then, maybe it's lack of sleep. I don't know. Let's just see if we feel better by break time.

(Morning break comes, and a group of men and women, including Jorge and José, are sitting and talking.)

Jorge: *(to José)* Instead of feeling better, I feel worse.

Ricardo: *(another worker, frowning, but curious, anxious)* What's wrong with you?

Jorge: Headache, nausea, sort of dizzy...

José: And with absolutely no desire to do anything!

Ricardo: What? You too?

(José nods.)

Ricardo: I feel crummy too. *(to a nearby woman)* Excuse me Hortensia, are you two feeling all right?

Hortensia: No. We both feel sick. I have a headache, but not just any headache. This may be the worst one I ever had!

Lucho: Me too. And I feel like throwing up, totally exhausted. I feel awful. Maybe it's some kind of flu we're all getting.

Jorge: All of us? It doesn't seem likely. I don't know about the rest of you, but when I got up this morning I felt fine. It wasn't until I started working that I began to feel sick.

Lucho: That's how it was with me too.

Ricardo: And me. If you ask me, this isn't any flu. Could there be something in this field that is making us sick? Let's talk to Isaac when he comes back. What do you think?

José: I don't know. I don't like to make trouble. If you say something to these guys they start acting as if you're dreaming up ways to avoid working or that you're some kind of troublemaker.

Hortensia: I suppose that could happen, but if something in that field is making us sick, we're going to get even sicker if we go back in.

Lucho: And we still have seven more hours to go. There's no way I can stick this out that long.

Ricardo: We shouldn't have to stick anything out. We've got to talk to Isaac. We won't be doing the boss or the grower any favors if we tough it out and end up in the hospital.

Jorge: *(with some irony)* We won't be doing ourselves any favors either. Let's go talk to Isaac. He just pulled up.

(Isaac, the field boss, gets out of his pickup.)

Ricardo: Hey, Isaac, something is going on here. We're all feeling sick.

Isaac: *(frowning)* What do you mean, "sick"?

Ricardo: I mean like headaches, nausea, I can hardly see straight. Basically, I just feel lousy.

Isaac: *(slightly mocking smile)* What did you guys do last night?

Hortensia: *(irritated, and looking sick)* This is no joke, Isaac. We all feel lousy. I think there is something in the field that is making us sick.

Isaac: *(realizes that this is serious and looks concerned)* Something in the field.... What could be causing the problem?

Hortensia: Who knows? Could it be that they sprayed pesticides and forgot to warn us?

Isaac: I don't know, but don't go back into the field! Stay where you are while I call the ranch. Let me find out what's going on. Also, they're going to have to arrange to take all of you to a clinic!

José: *(sick, but nervous)* Wait, I don't think we need to make such a big deal out of this. With our luck, they'll get angry and fire us for causing problems.

Isaac: They can't do that. Don't you remember what they told us at that safety meeting? Anyway, for my part, I really stuck my foot in it one time with a grower. He ended up thinking that I'm irresponsible and don't take care of my fieldworkers.

Jorge: What happened?

Isaac: Forget it. It's not important. But that's how I learned the hard way that crew leaders have the responsibility to make sure that fieldworkers are never put in dangerous situations. I'm not about to make the same mistake twice. *(starts to walk away)* I'll be right back. Stay where you are.

(Isaac goes to his truck to use the cellular phone. In a close-up shot we see when he calls headquarters. A woman answers on the other end.)

(at the office)

Secretary: Hello?

(back to the field)

Isaac: Good morning, miss, I'm the boss for one of the crews working on this ranch. We're working in a tomato field on road 15, near the dry creek. Do you know the field?

(office)

Secretary: *(She sounds a little bored and indifferent and irritated by being bothered with unimportant details.)* No. Why?

(field)

Isaac: *(impatient, nervous)* Because my whole crew is getting sick. I need to know if the field has been recently sprayed!

(office)

Secretary: I don't know anything about that, and I'm not at all sure that I ought to give out that kind of information without authorization from my boss.

(field)

Isaac: *(tense and barely courteous)* Listen, miss, my fieldworkers are sick. I happen to know for sure that fieldworkers always have the right to know what pesticides have been applied in the areas where they are working. That information is supposed to be kept in a place where anyone can find it easily.

(office)

Secretary: *(confused)* Yes, but...

(field)

Isaac: *(interrupting her)* I think we need to get medical help for these people soon. Please help me find the information, or if you don't know where to look, call your boss. But do it now!

(office)

Secretary: *(now embarrassed and concerned)* I'm sorry, I just started working here.

(field)

Isaac: Well this might be an emergency! If a pesticide is causing the problem, the doctor is going to have to know the name of the chemical. Call your boss and tell him he needs to

find the information and give it to the medical center that is going to see these fieldworkers. And he needs to arrange transportation to get them to the medical center.

(office)

Secretary: Yes, okay, fine. We'll find the information and call the clinic so that by the time you get there they'll know what is happening.

(field, with sick fieldworkers in background)

Isaac: Good. *(glances toward fieldworkers)* In the meantime I'm going back to see how my fieldworkers are doing.

Interactive Training Activities

The interactive techniques recommended for use with this segment include the use of questions and answers, pictures, games, role-play, and discussion.

Training Activity #1: Symptoms of Acute Pesticide Poisoning or Injury

This activity is designed to help fieldworkers understand the segment they have just seen and to relate the information covered in this segment to their own work situations.

After showing this video segment, you can lead a question-and-answer session using the following questions:

<i>Question</i>	<i>Answer</i>
<i>What could have caused the crew to become ill?</i>	They may have become ill from exposure to pesticide residues from an earlier pesticide application.
<i>What factors could cause some of the symptoms the crew is suffering?</i>	A hangover could cause similar symptoms. Also a cold, the flu, and possibly morning sickness could produce some of these symptoms.
<i>In this scenario, why are the symptoms probably not caused by a hangover, a cold, the flu, or morning sickness?</i>	• Everyone is experiencing the same symptoms, and it is unlikely that they all have the flu or a similar illness.

	<ul style="list-style-type: none"> • The symptoms appeared only after they had been working in the field for a while.
<i>In a similar situation, what would you and your fellow fieldworkers do to let your crew leader know that you felt sick?</i>	Responses will vary with fieldworkers.
<i>What might keep a crew of fieldworkers from telling the crew leader?</i>	Fieldworkers might be hesitant to speak out because they don't want to be considered trouble-makers.
<i>What would you expect a crew leader to do if fieldworkers said they felt ill? (Have them discuss the validity of the various possible crew leader responses.)</i>	<ul style="list-style-type: none"> • The crew leader might tell everyone to leave the field. • The crew leader might tell the employer or farm manager that there may be something in the field that is making people sick and arrange for transportation of anyone who has become ill to a medical facility. • Some crew leaders might tell fieldworkers to keep working and stop complaining. • The crew leader might tell fieldworkers to rest for a while and then go back to work. • Some crew leaders might respond by sending fieldworkers home.
<i>What should a crew leader do if the whole crew becomes ill while working?</i>	Take the crew out of the field, notify the employer, and get medical help.
<i>In a situation such as the one described in this scenario, what responsibility does a crew leader have to fieldworkers?</i>	Crew leaders are responsible for the workplace safety of the fieldworkers they supervise.

<p><i>What responsibility does a labor contractor have to fieldworkers?</i></p>	<p>Labor contractors have all the responsibilities of any other employer regarding workplace safety.</p>
<p><i>What responsibility does the property manager or owner have?</i></p>	<p>Property managers have responsibility for the workplace safety and well-being of people working on the property they own or manage.</p>
<p><i>What other responsibilities do property managers or owners have in a situation such as the one in this video segment?</i></p>	<ul style="list-style-type: none"> • Property managers must keep people out of treated fields during the REI. • Property managers must arrange for medical care in advance and assure that fieldworkers are taken to a medical facility if they become ill or are injured while working.

Training Activity #2: Common Symptoms of Pesticide Poisoning

In this activity, pictures are used to start a discussion of possible signs and symptoms of pesticide exposure. Show the fieldworkers Figure 5-1.

Ask the fieldworkers to identify each symptom shown in the picture. Lead a discussion of the symptoms and injuries that may be caused by exposure to different kinds of pesticides. Point out that not all pesticide exposure incidents cause the same kinds of symptoms. Symptoms vary with the pesticide, the degree of exposure, and the route of exposure. Have the fieldworkers list additional signs and symptoms of pesticide exposure. Ask if any of them have experienced some of the depicted symptoms or other symptoms as a result of exposure to pesticides.



Figure 5-1

Training Activity #3: Understanding Your Responsibilities and Rights Related to Pesticide Safety

This is an educational game where you describe a situation, and the fieldworkers have to tell you who would be harmed if the situation you've described were to actually occur. After you have presented the first few imaginary situations, you can ask the fieldworkers to think of additional scenarios that could result in injury. The conclusions that you want fieldworkers to reach are included in parentheses after each of the situations. Make sure that the fieldworkers reach the correct conclusion regarding each scenario.

Possible situations or scenarios:

- ✓ Your crew feels sick and you tell the crew leader, but the crew leader tells you to be quiet and keep working. Who loses? (Everyone.)
- ✓ Your crew feels sick but no one is willing to speak out. Who loses? (Everyone.)
- ✓ Your crew feels sick and you tell your crew leader. He tells the crew to stop working and leave the field while he goes and speaks to someone in the main office. He then makes sure that all crew members are taken to a medical facility. Who loses? (If fieldworkers talk to their crew leader as soon as they start feeling sick and the crew leader responds immediately by getting fieldworkers out of the field and to a medical facility, there may be no serious illness involved in this scenario.)

Training Activity #4: Knowing How to Protect Yourself From Pesticide Exposure at Work

This is a role-play activity in which fieldworkers act out a situation similar to the one they have just seen in this video segment. In this role-play, some fieldworkers in the field start to feel sick. They find out that everyone else in the crew is sick and decide to tell the crew leader. Depending on how the fieldworkers develop the scenario, the crew leader may react by taking the fieldworkers out of the area and getting

them to a medical facility. On the other hand, the crew leader might tell them that they probably have hangovers or the flu and that they should continue working.

Assign several people to take part in the role-play. There should be a crew leader and at least three fieldworkers. Explain the situation to the actors, and tell them to make up their own script. The actors should decide on the attitudes of the characters they are playing and how to correctly deal with the situation. In the meantime, tell the rest of the group that during the role-play they should try to decide if the fieldworkers and the supervisor acted correctly or illegally and foolishly. Tell them to notice what kind of attitudes each of the characters had and to think about how these attitudes compare to the attitudes of people at their workplaces.

Training Activity #5: Getting Information About Pesticides Used at the Workplace

This activity uses discussion to help fieldworkers understand how they can find out about pesticides used in the areas where they are working. By the end of this session fieldworkers should know that their employers are required to provide them information about pesticides used in fields where they work if they request this information. They should feel comfortable about asking employers for this information.

Ask the fieldworkers if they know how to find information about pesticides used in fields where they work. If so, have them explain how they can find this information. Ask the fieldworkers if they think they have the right to know about pesticides that have been used in the areas they are working. (Yes, they have the right.)

Have fieldworkers describe any experiences that they or fellow fieldworkers may have had trying to get information about pesticides used at work.

Chapter 6

Keeping Pesticides Out of the Home

(Sixth Video Segment)

WPS Points Covered

- ✓ After-work care of work clothes
- ✓ Warnings about taking home pesticides or pesticide containers

Messages

- ✓ Never bring pesticides or pesticide containers home from work
- ✓ Store pesticides in their original containers with the labels attached

- ✓ Never store pesticides in food or beverage containers.
- ✓ Always keep pesticides out of the reach of children.
- ✓ Store and wash clothes worn at work separately from the rest of the family laundry. Wash them in hot water with a strong detergent.
- ✓ When possible, work clothes should be dried in the sun.
- ✓ Avoid physical contact with family members until you have taken off your work clothes and bathed or showered.
- ✓ Don't get too close to areas where people are mixing or loading pesticides.

Plot Summary

Salvador works in a nursery. One day at work he sees a fellow worker, an applicator, mixing a pesticide. When the applicator is distracted, Salvador finishes off the beverage he is drinking and pours some of the pesticide into the bottle to use in his garden. When he gets home at the end of the day, he leaves the bottle in the garage. As he goes into the house, his son runs up to him and wants a hug. Salvador tells him to wait until he has showered and changed clothes.

While he is removing his work clothes, his wife walks past the bathroom, and he explains how she should care for his work clothes. In the meantime, the son goes into the garage to play and sees the bottle. He starts to drink from it and reconsiders. He asks his mother if he can finish his dad's "drink." When she realizes that the bottle contains pesticide she scolds Salvador, who then realizes his error.

SCRIPT

(A nursery pesticide applicator is mixing and loading a spray tank in preparation for an application. Salvador walks up and asks:)

Salvador: What are you mixing up? *(comes too close to the spray rig)*

Applicator: This house *(indicates greenhouse near where they are standing)* is full of aphids, and I'm getting ready to zap them. Don't get too close to the rig! This stuff is concentrated and very nasty. That's why I'm all suited up. Keep your distance.

Salvador: Yeah, yeah, I know. We just had a pesticide safety class. I actually know quite a lot about pesticides.

Applicator: Done. *(He puts the bottle in the back of his pickup and enters the greenhouse to spray. He calls back to Salvador.)* See ya.

Salvador: *(thinking)* My tomatoes at home have insects too. Let's see if this stuff works. *(He finishes off his drink, pours pesticide into the bottle, and walks off.)*

(It's the end of the day and Salvador arrives home from work. He carries the bottle into the garage and sets it on a table or counter. He goes into the house. His young son, Beto, sees him and runs to greet him.)

Beto: Hi, Daddy. *(stretches up his hands to be picked up)*

Salvador: Hi, Beto. Can't pick you up right now. I'm filthy. Let me take a shower and change my clothes and I'll give you your hug.

(He goes into the bathroom and starts taking off clothes and putting them into a plastic bag. His wife passes by and sees him.)

Lourdes: What are you doing? Aren't you going to put those in the laundry?

Salvador: *(with great knowledge)* Of course. But they use a lot of pesticides at work and you should wash all my work clothes separate from the family wash. You don't want to contaminate our towels, clothes, and stuff. Especially Beto's clothes.

Lourdes: You never mentioned all this before.

Salvador: Well, that's the way you should be doing it. My work clothes should be washed separately from the rest of the laundry, with a strong detergent and hot water. And there's something else.

Lourdes: *(a little irritated by his know-it-all attitude)* Tell me, please.

Salvador: You should hang my stuff out to dry. That works better than the dryer for breaking down any pesticide residues.

Lourdes: You certainly came home full of instructions!

Salvador: Just trying to protect my family. That's the role of any husband and father.

(Lourdes goes to the kitchen to make dinner. She speaks to Beto.)

Lourdes: It's still about a half an hour until dinner if you want to play outside for a while.

(Beto goes into the garage. He sees the bottled "drink" sitting on the counter and goes over to it. He looks at it and then picks it up, smiling. He opens it and starts to drink the contents. Then he hesitates and frowns, as though he's remembering something he's supposed to do. He goes to the back door with the bottle and calls out:)

Beto: Mom?

Lourdes: *(from inside)* What is it, Beto?

Beto: Can I drink the rest of Daddy's drink?

Lourdes: What drink?

Beto: The one he left in the garage.

Lourdes: Wait a second. Let me see.

(Lourdes goes to back door, takes the bottle from Beto's hand, and looks at it.)

Lourdes: Oh. It's a fruit drink. Sure, you can have it. *(She starts to give the bottle back to Beto but looks at it more carefully and frowns. She smells it.)*

Lourdes: Yuck. What's this? Don't even touch this. It smells like poison. How awful!

(Lourdes goes back into the house, leaving the bottle outside and pulling Beto by the hand. She goes to the bathroom where Salvador is finishing his shower.)

Lourdes: What kind of a weird mixture is in that bottle you left in the garage?

Salvador: *(as if it were a joke)* The boss was kind enough to lend me a little pesticide for the garden. Sort of an unintentional favor.

Lourdes: Like your "unintentional favor" of leaving it there for Beto to find. He thought it was something to drink and almost swallowed it.

Salvador: *(suddenly not amused, frightened)* What happened? Did he drink some?

Lourdes: No. Just by luck he decided to ask my permission before drinking something so close to dinner.

Salvador: But I left it in the garage.

Lourdes: *(furious)* And what did you think? Do you suppose that Beto never goes into the garage? He has half his toys stored in there! Leaving a soft drink bottle full of poison! After you were so impressed at your own amazing new knowledge of pesticides!

Salvador: *(defensively, but obviously embarrassed and horrified at his error)* The important thing is that he didn't drink any.

Lourdes: And if he had? You should know better than to sneak off with stuff from work. It's dishonest and it isn't worth the risk. Besides, we don't even have a product label that could tell us the name of the pesticide and give us some first aid instructions if something happened!

Salvador: *(now acknowledging his foolishness)* You're right. They even talked about that in the safety class I went to: how you should never put pesticides in food or drink containers and how you should always keep pesticides out of the reach of children. I don't know. It just seemed so easy to take a little pesticide for the garden. I don't know what I was thinking.

Lourdes: *(seeing him contrite and feeling calmer)* Well, it's all over now. And luckily nothing awful happened.

Beto: *(calling from the back door)* Excuse me. Like, where's my dinner?

Interactive Training Activities

The interactive techniques recommended for use with this segment include discussion, illustrations with discussion, games, and role-play.

Training Activity #1

This is a three-part training activity that uses illustrations to involve fieldworkers in a discussion. In the first part, you will discuss with the fieldworkers the importance of keeping pesticides in their original containers with the label attached, and why it is dangerous to put pesticides in food or beverage containers. In the second part of this activity, you will have the fieldworkers focus on the correct ways to store and wash work clothing that may have pesticide residues on it. The third part addresses the dangers of bringing pesticides or pesticide containers home from work.

Inappropriate Pesticide Containers

Show the fieldworkers Figure 6-1, and ask them what is happening and whether they see anything wrong. Ask them to discuss the likely outcome of what they see. Have them suggest how to avoid similar situations at their places of work.



Figure 6-1

Laundering Work Clothes That May Have Pesticide Residues

Show the fieldworkers Figure 6-2, and ask them what the man in the picture is doing. Have them explain the correct steps for storing, washing, and drying work clothes that may have pesticide residues on them. (The information that Salvador provides in the video segment on the care of work clothes is correct. Make sure that the fieldworkers understand the information and know how to care for work clothes.) Have the fieldworkers describe how they deal with their work clothes when they get home after work.



Figure 6-2

The Dangers of Bringing Pesticides and Pesticide Containers Home from Work

Show the fieldworkers Figure 6-3 and ask what is happening in this scenario. Have them explain why the woman is refusing to let her husband into the house. Lead a discussion about why it is dangerous to bring pesticides or pesticide containers home from work. Ask the fieldworkers if they think it is possible to wash all the residues out of pesticide containers. (The answer is “no.”) Ask them what they think could happen if the woman allowed her husband to bring the pesticide container into the house. Have them discuss poisoning incidents they know about involving contaminated pesticide containers or pesticides that have been stored in food containers.



Figure 6-3

Training Activity #2: After-work Cleanup

This activity involves a demonstration of after-work handling of work clothes and how to wash up after work. Have one of the fieldworkers act out the steps of arriving home and properly dealing with work clothes. Have the fieldworker explain each step to the group while going through this process. For example, when pretending to arrive home and go into the laundry room or bathroom to remove work clothes, the person might explain the reasons for immediately removing work clothes before having contact with other family members. When going through the motions of taking a shower, the demonstrator might describe the special care needed when washing hair and cleaning under fingernails.

The other fieldworkers should observe the demonstration and listen as the demonstrator explains each step. Encourage them to ask questions or suggest other methods if they feel the demonstrator has done something incorrectly or has forgotten a step. If someone has a different idea of how to correctly care for work clothes, invite that person to demonstrate the idea for the whole group. If the demonstrator makes errors and no one mentions them, point out the errors and make sure that at the end of the demonstration all of the fieldworkers know what to do when they get home from work.

This activity can continue, using other scenarios. For example, in one scenario a fieldworker could

decide not to go home after work but to go directly to a friend's house. The fieldworkers observing this scenario could comment on the problems involved in not changing clothes and not bathing or showering immediately after work.

In another scenario a fieldworker could arrive home and change his clothing and bathe, but not have facilities for laundering dirty work clothes. In this scenario, the other fieldworkers could discuss ways of laundering the dirty work clothes.

Training Activity #3: Staying Away from Application Equipment and Pesticide Containers

This activity involves role-play. You will need at least two actors—one to play the applicator and one to play an onlooker who wants to be helpful. Depending on how the actors decide to play the scenario, the applicator might scold the onlooker for getting too close and explain the dangers of getting too close to pesticide containers and application equipment. On the other hand, the applicator might decide to let the other person help, thereby putting that worker at risk by allowing his direct contact with pesticides, despite the onlooker's lack of training and proper protective equipment.

Explain the situation to the actors and tell them that it is up to them to develop a script, decide on the attitudes of the characters they are playing, and decide how to act in the situation. Give them about 5 minutes to plan the scenario.

While they are preparing the activity, tell the rest of the fieldworkers that during the role-play they should determine if the fieldworkers acted correctly or foolishly. Have them explain their opinions. Tell them to notice what kinds of attitudes each of the characters had and to think about how these attitudes compare to the attitudes of people at their workplaces.

Training Activity #4: Storing Pesticides in the Home

This is a discussion activity. Use this activity with fieldworkers who live with their families in

apartments or houses. It will be less useful for migrant fieldworkers living in work camps or dormitories. Ask the fieldworkers if they have pesticides and other toxic substances such as cleaning solutions, gasoline, and medicines at home. Make sure they realize that all of these are hazardous materials. Have them describe how they store hazardous materials where they live, and ask them if they think they have stored these materials safely. Remind them how areas that may be safe in a household with only adults are not necessarily safe in a household where there are young children. Ask the fieldworkers to relate any stories they have heard about children or other people who have come into contact with hazardous materials in the home.

Chapter 7

Using Quiz Games to Review the Information Provided in a WPS Training for Fieldworkers

Question and answer games or quiz games played at the end of a training session are a good way to help fieldworkers remember what has been covered. Playing educational games will also help you determine the effectiveness of your training session. Two formats for quiz games are shown here. The first is called the **Television Quiz Show Game** and the second is the **Wheel Game**. Both games allow you to test the fieldworkers on the information you have presented. By listening to their answers and noticing where their knowledge is weak, you can decide what topics you need to cover more thoroughly or clearly in future training sessions.

The Television Quiz Show Game

This game follows the format of a television quiz show. Make a game board like the one pictured below.

Routes of Exposure	Employee Rights	First Aid Procedures	Preventing Exposure	Miscellaneous
100 points	100 points	100 points	100 points	100 points
200 points	200 points	200 points	200 points	200 points
300 points	300 points	300 points	300 points	300 points
400 points	400 points	400 points	400 points	400 points
500 points	500 points	500 points	500 points	500 points

You can draw the game board on a piece of flip chart paper or on a chalkboard, or you may want to make a permanent game board out of cardboard or wood. Choose five categories, and place the category titles in the five squares along the top row. For the questions listed below, the five topics are **Routes of Exposure, Employee Rights, First Aid Procedures, Preventing Exposure, and Miscellaneous.**

Write five questions with increasing degrees of difficulty on index cards. On the back of each card, write the correct answer. The easiest question will be worth 100 points, and the most difficult will be worth 500 points.

Game Rules

Each square on the game board is associated with a card that has a question from the category under which the square appears. You should put the correct answer to the question on the back of the card. When playing the game, you will be the game show “host.” Ask for a volunteer to keep score. Each contestant selects one of the squares by choosing a category and a

game point value. You then ask the question that corresponds to that category and point value.

Divide the group into three teams. The teams will take turns competing, and every member of each team will have a turn. Each contestant selects a category and level of difficulty. Once the contestant has chosen, ask the whole group the corresponding question. The first player to raise a hand gets to answer the question. If the player answers correctly, that person's team gets the points. If the answer is incorrect, the second person to raise a hand gets to try to answer the question. If no one from any of the teams can answer the question correctly, tell the fieldworkers the correct answer before continuing the game. Keep playing until you have gone through all of the categories and questions. Remember that if you play the game at the end of a training session and the fieldworkers are able to answer the questions correctly you can be confident that your training was effective. If the fieldworkers do poorly and are unable to answer many of the questions, this is an indication that you need to improve your training so that the information is clearer and more thorough.

Quiz Game Questions

The following questions are listed by category. The game point value of each question is given in parentheses following the question. Where more than one question has been included for a particular category and point value, you can choose the question you prefer when playing the game.

These questions can also be used for the Wheel Game. When using the questions for the Wheel Game, you may prefer not to assign point values to the questions.

Routes of Exposure and Effects of Exposure

<i>Question</i>	<i>Answer</i>
<i>What are the four routes by which pesticides can get into the body? (100 pts.)</i>	Skin, eyes, inhalation (lungs), and ingestion (swallowing).
<i>Can skin exposure to pesticides cause internal poisoning? (100 pts.)</i>	Yes.
<i>How could a fieldworker inhale pesticides? (200 pts.)</i>	A fieldworker could inhale pesticides by being too close to an area where a pesticide application is taking place or by entering an enclosed area that is either being sprayed or has been recently treated. Inhalation of harmful levels of pesticides could also occur by entering a treated field where there are still toxic levels of pesticide in the air.
<i>Name five common symptoms of pesticide poisoning. (300 pts.)</i>	Common symptoms of pesticide poisoning include irritated skin or rash, irritated eyes, nausea, dizziness, headache, vomiting, diarrhea, fatigue, trembling, lack of coordination, excessive perspiration, drooling, watery eyes, and blurred vision.
<i>Name at least three suspected long-term or chronic health effects of excessive exposure to certain pesticides. (400 pts.)</i>	Some of the suspected long-term health effects of exposure to certain pesticides include cancer, birth defects,

	spontaneous abortion, sterility, nervous system effects, kidney, lung, liver, or other specific organ damage, and immunological disorders.
<i>What is sensitization? (500 pts.)</i>	Sensitization is the gradual development of an allergic reaction to a certain pesticide experienced by some people. Sensitization usually develops after several exposures to the pesticide.

Preventing Exposure

<i>Question</i>	<i>Answer</i>
<i>How can failing to wash your hands at work lead to swallowing pesticide residues? (100 pts.)</i>	If you put something into your mouth without washing your hands first, pesticide residues on your hands can get into your body through your mouth.
<i>How can failing to wash your hands at work lead to pesticide poisoning because of skin exposure? (100 pts.)</i>	If you touch pesticide-treated surfaces and do not wash your hands frequently, the pesticide residues on your hands may eventually penetrate your skin and get into your body.
<i>How can failing to wash your hands at work lead to eye exposure? (100 pts.)</i>	If you have pesticide residues from treated surfaces on your hands and rub your eyes, these residues can get into your eyes and cause eye irritation. Pesticides that get into your body through your eyes may also cause pesticide poisoning.

<p><i>Name three things you should never do at work until you have washed your hands. (200 pts.)</i></p>	<p>You should never eat, smoke, rub your eyes, touch your face or other parts of your body, drink, or use the bathroom until you have washed your hands.</p>
<p><i>Why is it important for you to wash your hands before eating and using the bathroom when you work in pesticide-treated areas? (200 pts.)</i></p>	<p>Your hands may have pesticide residues from touching treated surfaces, and if you eat or use the bathroom with pesticide-contaminated hands, these residues can get into your body.</p>
<p><i>Why should you never wash your hands in irrigation water? (200 pts.)</i></p>	<p>Pesticides and fertilizers are sometimes applied through irrigation systems. Even if pesticides are not being applied through the irrigation system, irrigation water is likely to contain traces of pesticides, fertilizers, and other harmful substances. There should be clean water provided at the workplace for washing and drinking.</p>
<p><i>Name two things you should do as soon as you get home from working in areas where pesticides have been used. (300 pts.)</i></p>	<p>Change out of your work clothes and take a shower or bath.</p>
<p><i>Why should you never take pesticides or pesticide containers home? (400 pts.)</i></p>	<ul style="list-style-type: none"> ● Pesticides from work may not be suitable for use in the home because of their concentration or toxicity. ● Pesticide residues can never be completely washed from empty pesticide containers.

<p><i>How should you wash and dry your work clothes? (400 pts.)</i></p>	<p>Always wash work clothes separately from the family laundry, using a heavy-duty detergent and hot water. If possible, line-dry the clothing rather than using the dryer. Run the emptied washing machine through a wash cycle after washing work clothes and before doing other family laundry.</p>
<p><i>Name five things you can do to avoid excessive pesticide exposure. (500 pts.)</i></p>	<ul style="list-style-type: none"> • Always wash your hands before eating, drinking, smoking, touching your eyes, and using the bathroom. • Change out of work clothes as soon as you get home from work, and wash work clothes before using them again. • Never pick and eat produce from the field unless you know for sure that it does not contain excessive pesticide residues from recent applications. • Leave your work area if you are being exposed to the drift from nearby pesticide applications. • Store and eat your lunch away from pesticide-treated areas. • Never drink irrigation water or wash yourself or your clothing with this water. • Do not use empty pesticide containers for other purposes. • Do not enter areas that have been posted with

	<p>REI warning signs or where you have been warned not to enter.</p> <ul style="list-style-type: none"> • Stay away from pesticide containers or application equipment that you find at work. • Do not touch surfaces that have been recently treated with pesticides.
--	--

First Aid for Pesticide Exposure

<i>Question</i>	<i>Answer</i>
<i>What is the first aid for skin exposure to pesticides? (100 pts.)</i>	Remove any contaminated clothing and wash the skin with clean water and soap. If symptoms of pesticide exposure develop, take the exposed person to the doctor.
<i>What are the first aid procedures for eye exposure to pesticides? (200 pts.)</i>	Rinse the affected eye for 15 minutes with a gentle stream of clean, cool water. Hold the lids of the affected eye open. Turn the head so that water running out of the affected eye does not run into the other eye. After rinsing the eye, take the person to a medical facility immediately.
<i>What is the correct first aid for someone who has inhaled a pesticide? (300 pts.)</i>	Take the person to fresh air immediately. Loosen any clothing that may restrict breathing. If the person has stopped breathing or is having difficulty breathing, provide rescue breathing (mouth-to-mouth resuscitation). Get the person to a doctor immediately.

<p><i>Why do medical personnel need to know the name of the pesticide involved in a poisoning or injury incident? (400 pts.)</i></p>	<p>There are many different types of pesticides, and they can affect people in very different ways. The doctor needs to know what pesticide is responsible for an injury or poisoning incident in order to provide the appropriate medical treatment.</p>
<p><i>Under what circumstances is it dangerous to induce vomiting? (500 pts.)</i></p>	<ul style="list-style-type: none"> • Vomiting should never be induced if the pesticide label specifically recommends against it. • Even if the label first aid instructions recommend vomiting, vomiting should not be induced if the victim is unconscious or suffering convulsions, because vomiting could make the person choke. • Vomiting shouldn't be induced unless the victim is standing, sitting, or in some other position that assures they cannot swallow their own vomit.

Employee Rights

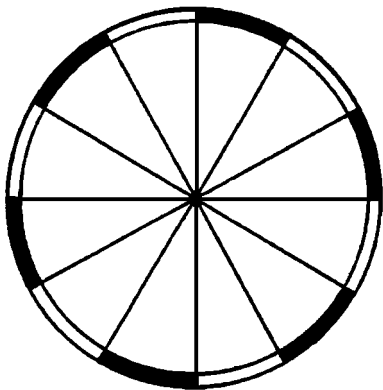
<i>Question</i>	Answer
<p><i>Who is responsible for making sure that injured fieldworkers are taken to a medical facility? (100 pts.)</i></p>	<p>Employers.</p>
<p><i>What responsibilities do supervisors and crew leaders have to protect their</i></p>	<p>Even though the final responsibility for protecting fieldworkers</p>

<p><i>fieldworkers from exposure to pesticides? (100 pts.)</i></p>	<p>lies with employers, supervisors and crew leaders have the day-to-day responsibility for protecting their fieldworkers from workplace injury.</p>
<p><i>Is it legal for employers or supervisors to discourage fieldworkers from drinking water frequently while they are working? (200 pts.)</i></p>	<p>No, employers and supervisors must not discourage fieldworkers from drinking adequate amounts of water during work.</p>
<p><i>Why is it in the best interest of employers to protect fieldworkers from workplace hazards? (300 pts.)</i></p>	<p>Workplace injuries are expensive because of loss of productivity and possible law suits. In states where employers are required to have workers' compensation insurance, workplace injuries result in increased insurance rates. Additionally, fieldworkers who know that their employers take an interest in their well-being are more likely to be productive and responsible employees.</p>
<p><i>What information do fieldworkers have a right to know about pesticides used in areas where they are working? (400 pts.)</i></p>	<p>If fieldworkers request information about the pesticides that have been used in areas where they are working during the 30 days following the end of the REI, employers must tell them what pesticides have been used in these areas and when individual applications were made.</p>
<p><i>What must an employer do before sending a fieldworker into a treated area in which the REI has not expired? (500 pts.)</i></p>	<p>Before sending fieldworkers into treated areas while the REI is still in effect, employers must</p>

	provide these field-workers with the required training for early entry into treated areas and with the personal protective equipment listed on the pesticide label for early-entry workers.
--	---

Miscellaneous

<i>Question</i>	<i>Answer</i>
<i>Where should emergency numbers be posted? (100 pts.)</i>	Close to a telephone at the workplace, where they can be easily seen.
<i>Why must you never put pesticides in food or drink containers? (200 pts.)</i>	Someone, especially a young child, could mistake the pesticide for something to eat or drink.
<i>Where should you store pesticides that you use at home? (300 pts.)</i>	In a closed box or cabinet that is either locked or out of the reach of children and other people who could injure themselves.
<i>What is chemigation? (400 pts.)</i>	Chemigation is the application of pesticides through irrigation water.
<i>Name three people who have the responsibility to protect you from workplace hazards. (500 pts.)</i>	Your employer, your supervisor, and you all share the responsibility for keeping you safe.



The Wheel Game

Construct a game board made from a large wheel. You can use a bicycle wheel or cut a large disk out of cardboard. Design the wheel so that it can spin freely when attached to a post or to the classroom wall. Give the front of the wheel a flat writing surface and divide this surface into pie-shaped sections. Attach an arrow

above the wheel that points downward so that when someone spins the wheel, the arrow will point to a section of the wheel when it stops spinning.

Give each section a category title that corresponds to one of the pesticide safety topics in your presentation. For example, one section could be called “After-Work Care of Work Clothes” and another could be called “Symptoms of Acute Pesticide Poisoning and Injury.” Develop at least five questions for each topic. Write these questions along with the correct answers on individual cards or slips of paper and place them in envelopes that are labeled to correspond to each topic.

Play the game by letting each fieldworker take a turn spinning the wheel. When the wheel stops after each spin, the arrow will be pointing to one of the topics. Select a question for that topic, and read it out loud.

Give the contestant at least ten seconds to answer the question. If a contestant is unable to answer correctly, invite the rest of the group to raise their hands if they think they have the answer. Select the first person that responds. If that person does not provide the correct answer, try again. If no one has been able to answer the question after three or four tries, give the group the correct answer and continue on with the game. If your budget allows, provide small prizes for correct answers.

The following are questions you might want to include when playing this game. Questions from the Television Quiz Show Game, above, may also be used.

Field Entry Restrictions

<i>Question</i>	Answer
<i>Who is allowed to enter treated areas before the restricted-entry interval has expired?</i>	Only pesticide handlers and early-entry workers are allowed to enter treated areas.
<i>What distinguishes early-entry workers from other fieldworkers?</i>	Early-entry workers have additional training and personal protective

	equipment to allow them to safely enter treated areas.
<i>What is a restricted-entry interval?</i>	A restricted-entry interval is the time that must pass before it is legal to enter a treated field without special protective equipment and training.

Employee Rights

<i>Question</i>	<i>Answer</i>
<i>What are some things your boss must do to help protect you from pesticide exposure?</i>	<p>Employers must do several things to protect their fieldworkers from accidental exposure to pesticides:</p> <ul style="list-style-type: none"> • They must warn fieldworkers, either orally or through posting, against going into areas where pesticides have been applied and where it is not yet legal to enter. • They must make sure that fieldworkers have received necessary training on how to avoid exposure to pesticides. • Employers must make available information regarding recent pesticide applications in the areas where employees may be working. • They must post certain information regarding ways to avoid pesticide exposure. • They must arrange for emergency medical

	<p>treatment and provide transportation to a medical facility in case of workplace accidents.</p>
<p><i>If you are exposed to pesticides at work and suffer an injury or illness, who has the responsibility to make sure you are taken immediately to a medical facility?</i></p>	<p>Your employer must make sure you are taken to a medical facility if you become ill or get injured at work.</p>
<p><i>Where can you get information about a pesticide that may have made you sick?</i></p>	<p>Your employer must provide you, your designated representative, or the medical personnel treating you with information about pesticides to which you may have been exposed at work.</p>

Figures



Figure 1-1



Figure 1-2



Figure 1-3



Figure 2-1

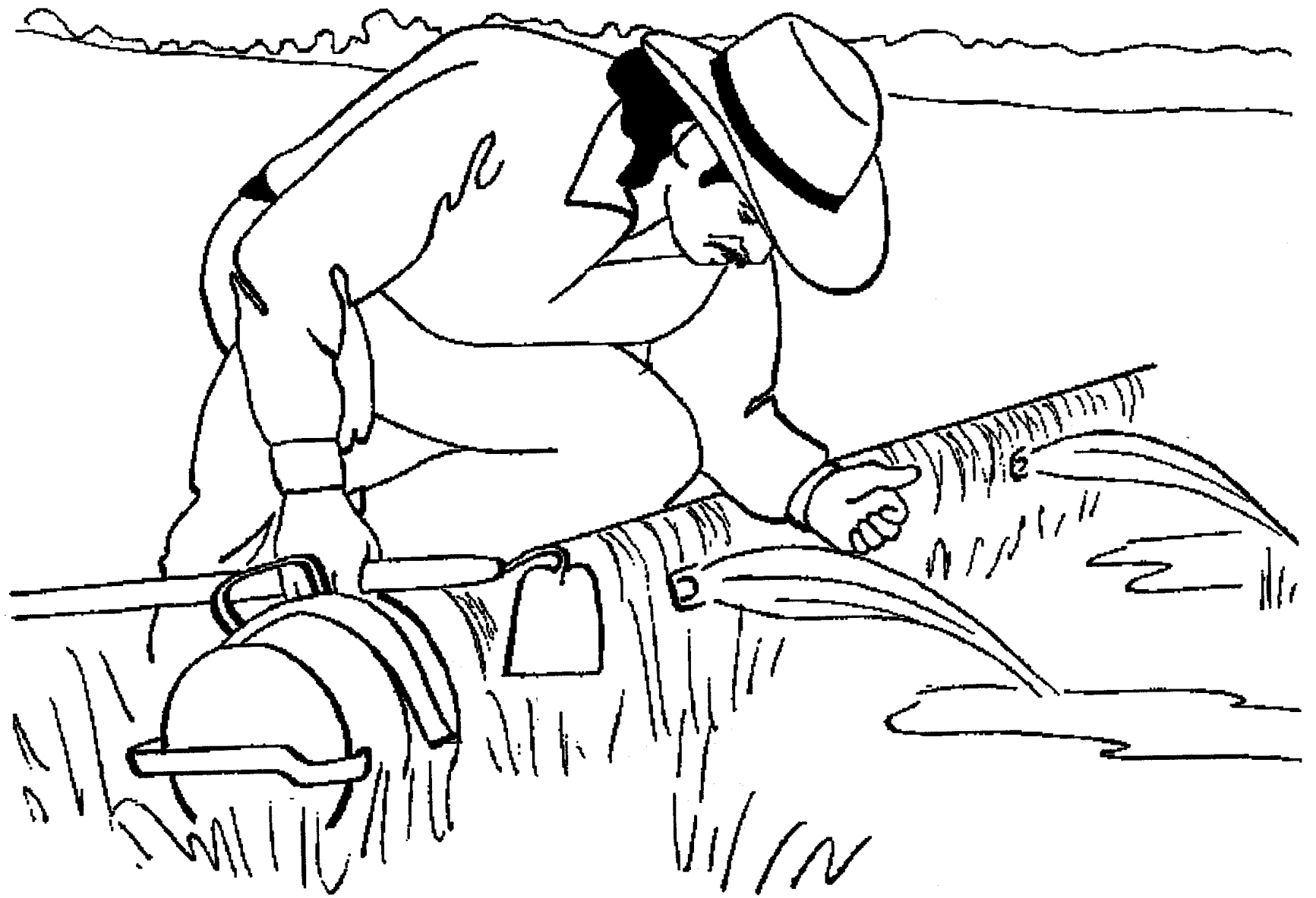


Figure 2-2



Figure 3-1

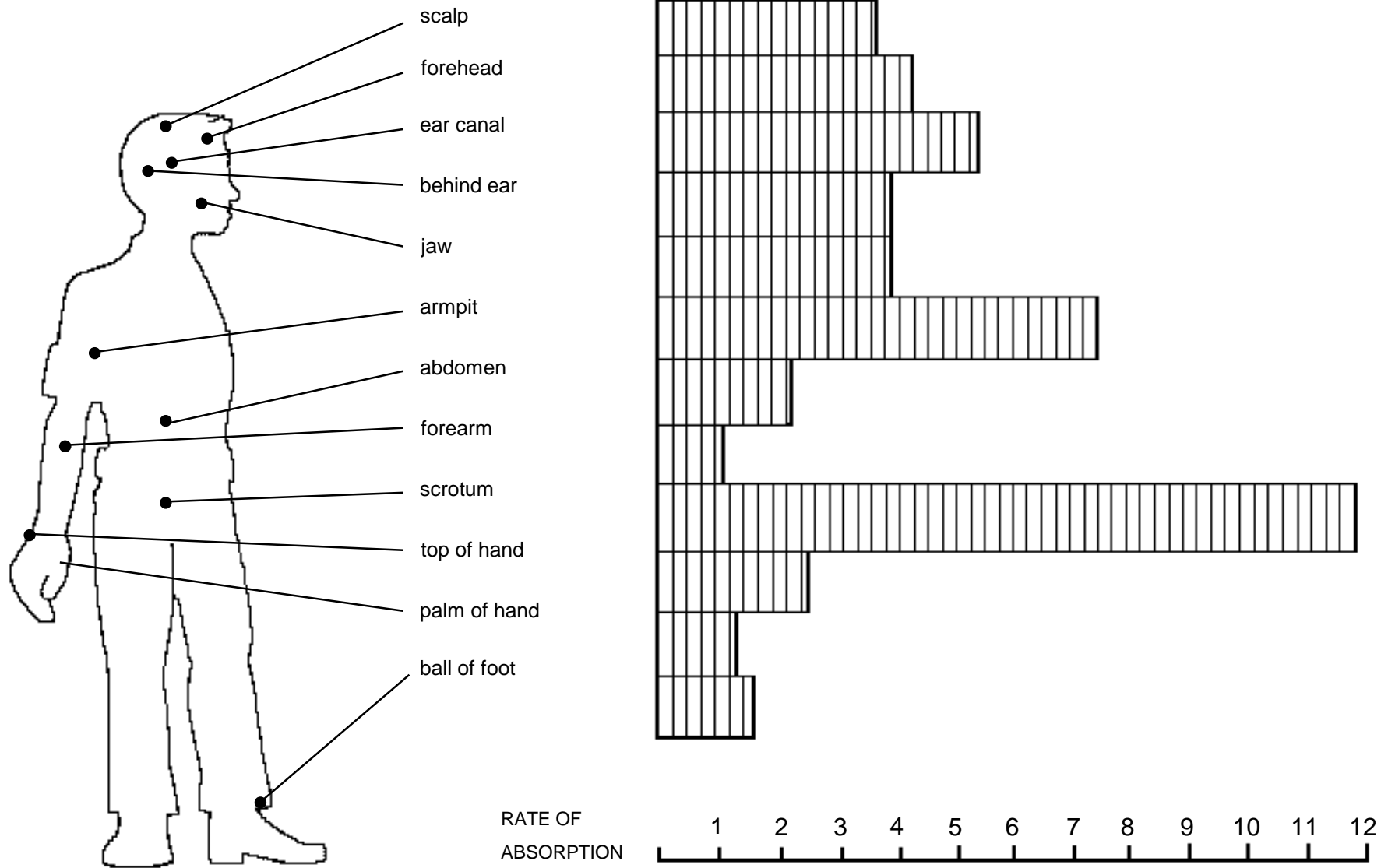


Figure 3-2

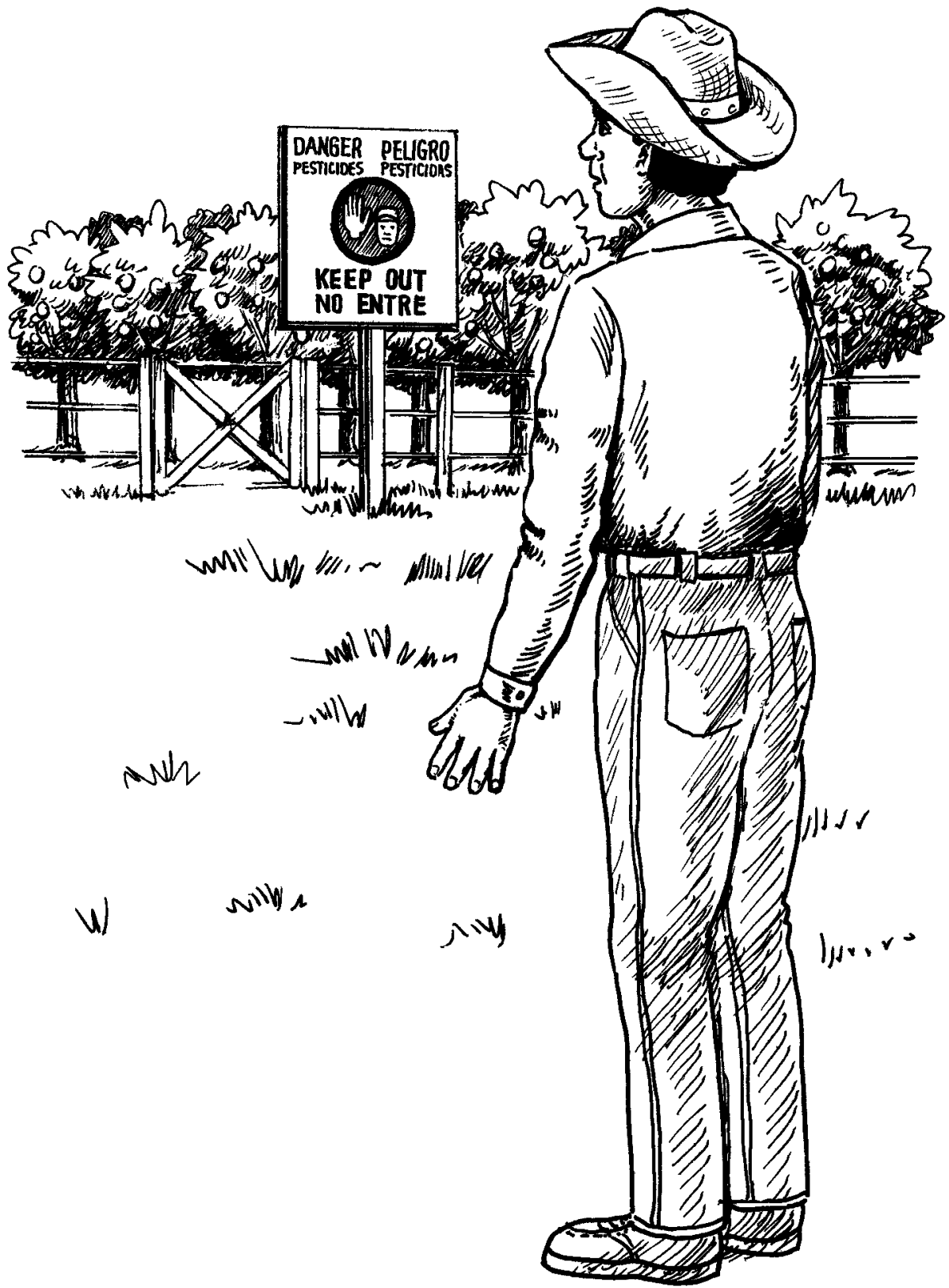


Figure 4-1



Figure 5-1



Figure 6-1



Figure 6-2



Figure 6-3