Protect Yourself and Your Family from Pesticide Exposure

The Worker Protection Standard (WPS) Agricultural Worker Booklet

Supplemental material
This is not a complete set of training materials under the Worker Protection Standard (WPS) (40 CFR 170.401.)
This booklet is intended as a short reference for agricultural workers. It contains important information about protecting oneself and one’s family. It is not a complete set of training materials under the Worker Protection Standard (WPS) (40 CFR 170.401), and it has not been approved by the EPA under 40 CFR 170.401(c)1.

As partners in cooperative agreements related to this project, EPA personnel reviewed the content and illustrations for regulatory accuracy. The information in this publication does not in any way replace or supersede the restrictions, precautions, directions, or other information on the pesticide label or any other regulatory requirements, nor does it necessarily reflect the position of the U.S. EPA.
This material may not be used (alone) to provide annual WPS training under 40 CFR Part 170.130. An EPA-approved piece of training material must be used instead.

The Pesticide Educational Resources Collaborative is a cooperative agreement (agreement #X8-83616301) between the U.S. EPA's Office of Pesticide Programs and University of California Davis Extension, in collaboration with Oregon State University. The Association of Farmworker Opportunity Programs (AFOP) made contributions to this work under a cooperative agreement with the U.S EPA's Office of Pesticide Programs (agreement #83597001).

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Contributors
Pesticide Educational Resources Collaborative (PERC)
Director - Suzanne Forsyth, University of California Davis Extension
Deputy Director – Kaci Buhl, Oregon State University
Project Officer – Stephanie Burkhardt, U.S. EPA, Office of Pesticide Programs

Contributing Authors
Kaci Buhl, Oregon State University
Melanie Forti, Association of Farmworker Opportunity Programs
Jessica Werder, Association of Farmworker Opportunity Programs

Reviewers
Carmina Hanson, NC Dept of Ag and Consumer Services
Juan Concha-Holmes, Web Art Hosting
Catherine LePrevost, NC State University

Illustrations
William A. North

Layout & Design
Brandon Lee, Brandon Lee Design

Project Coordinator
Suzanne Forsyth, University of California Davis Continuing and Professional Education

Content Sources
The Association of Farmworker Opportunity Programs (AFOP) – Shared illustrations and training content from its WPS Flipchart: Pesticide Safety Training for Agricultural Workers

The Pesticide Educational Resources Collaborative (PERC) – Developed and adapted educational content from its WPS Compliance Assistance Library (CAL) and Pesticide Safety Information Poster (central posting), and its Pesticide Handler Training (presentation).
If you work around the plants on an agricultural establishment where they have used pesticides in the last 30 days, a regulation called “the Worker Protection Standard (WPS)” probably applies to you. Your employer is required to provide you with information, protections, and emergency assistance. This guide is an incomplete summary of the required protections for workers.

Your employer must provide you with certain protections.
Before you work in a treated area, you should receive training and access to site-specific information about the recent pesticide application(s).

- When you’re working in a treated area, your employer should provide materials for routine washing and emergency decontamination.
- Within two years after working in a treated area, you can request information about pesticides you may have been exposed to, either by asking directly or through a designated representative.
- You must be at least 18 years old to perform “early entry” tasks.
- Your employer cannot retaliate against you for complying with the WPS.
The WPS regulations protect workers in all agricultural settings.
Do you work in agriculture?
Including:
• food/oil crops, turf, and forest products
• ornamental plants like flowers and shade trees
• organic operations
• greenhouses, mushroom houses, and warehouse production facilities

Does your work put you in contact with pesticides?
• Harvesting
• Thinning
• Hand-weeding
• Pest-scouting
• Pruning
• Planting
• Preparing sites/media for planting
• Carrying nursery stock
• Watering

Even if you don’t mix or spray chemicals, these activities can put you in touch with pesticides. That’s why you need to be trained and informed, so you can protect yourself and your family.

If you work more directly with pesticides, pesticide equipment, or pesticide containers, you must:

have a pesticide applicator’s license OR receive extra training as a ‘pesticide handler’
Pesticide residues are pesticides that may remain long after being applied.

Pesticides can be in many places.

- They can be on plants, in plants, in soil and in irrigation water.
- Pesticides can drift in the air from nearby applications.
- They can also be on tractors and other equipment.
- Pesticides can also be found on used gloves, goggles, boots, and other personal protective equipment.
• Sometimes you can see and feel the residues like a white sticky substance or light powder.
• On other occasions you may not see the residues but that does not mean they are not there.
• Pesticide residues can remain on plants, produce, and equipment many days after pesticides are applied.
Pesticides can be dangerous for your health if you are not protected from exposure.

Pesticides can enter your body through your eyes, nose, mouth, and skin.

If a pesticide gets on you or inside your body, you might suffer from pesticide poisoning.

Pesticide exposure can cause short and/or long-term health effects.
Short-term or acute health effects are symptoms that you may experience immediately or within a few hours of exposure. These symptoms include:

- Skin rash
- Irritation of nose throat or eyes
- Drooling or runny nose
- Sweating more than usual
- Dizziness, confusion, nausea, vomiting
- In rare cases, seizure, coma, and death

Long-term or chronic health effects are symptoms that you may experience weeks, months or years after repeated, low-dose exposure to pesticides. These include:

- Cancers
- Asthma
- Reproductive health problems, including infertility, miscarriage, and birth defects
Being in contact with pesticides can be harmful, especially during pregnancy.

- Pregnant women exposed to pesticides may put their health and the health of their unborn child at risk.
- Exposure to pesticides during pregnancy may lead to miscarriages, pre-term births, and low birth weight.
- Pesticides can also cause harm to children because their systems are still developing and their bodies are small.
- Pregnant mothers risk pesticide exposure from their worker spouses.
- It is important for everyone in the household to take precautions to reduce their exposure to pesticides.

IMPORTANT
There are hazards to children and pregnant women from pesticide-treated areas. It is important to keep children and non-working family members away from areas treated with pesticides.
Protect your body from pesticide residue.
- Wear long-sleeved shirts and long pants when working.
- Also, wear shoes, socks, and a hat or scarf.
- Wash your hands before you eat, drink, or chew gum.
- Also, wash before smoking, using the toilet, or using your phone.
- Wash your body and hair with soap or shampoo right after work.
- Wash your work clothes before wearing them again.

You may also protect yourself by:
- Covering your neck and mouth with a bandana.
- Wearing your own clean gloves while working.
- Wearing a clean hat each day or one that can be washed daily.

IMPORTANT
It is very important to wear clothes that cover most of your skin when you are working in areas where pesticides have been applied.
Stay out of treated areas when told, and whenever you see signs displayed saying, “DANGER PESTICIDES.”

- When you see a pesticide application taking place, stay back.
- Applicators must suspend their work if you get too close.
You can make a difference for yourself, your co-workers, and your family.

• Learn all you can about pesticide health and safety from the training materials and safety poster.
• Prevent unnecessary exposure to pesticides.
• Recognize the symptoms of pesticide poisoning.
• Avoid taking pesticide residues home with you.
• Wash your work clothes separately from other clothes.
• Remember that children and pregnant women are especially sensitive to the effects of pesticides.
Your employer is required to give you information.

Before you begin working in areas that have been treated with pesticides, you must receive training about the risks of pesticide poisoning, the symptoms, first aid, and ways to protect yourself.

- The training must be provided in a language or manner that you can understand.
- A qualified trainer must be present at the training to answer any questions you may have. This training must be provided once a year.
- You can request a record of your training and take it with you to other jobs.
Your employer must tell you where to find these things on each establishment where you work. They should be freely accessible during work hours:

- A pesticide safety poster at a central location,
- Records of pesticide applications in the last 30 days, including the dates, times, and places where pesticides were applied, and
- Safety data sheets for pesticides applied recently

Your employer must tell you which fields or areas to avoid when entry is restricted because of recent pesticide use. They might tell you verbally at the beginning of your shift, or they might post warning signs.

Some pesticides have a restricted-entry interval (REI) which is the amount of time after a pesticide application when people cannot enter. If you have to enter treated areas before the restricted-entry interval (REI) has expired, your employer must give you extra information and personal protective equipment.
Your employer must provide protections.

• Your employer must keep workers and others out of an area when pesticides are being applied. If the pesticide label requires a restricted-entry interval (REI), your employer must keep workers out for that period of time.

• Your employer must keep workers and others away from pesticide application equipment while pesticides are being used.

Your employer is not allowed to have workers under age 18:

• enter treated areas early (before the REI expires)
• mix, load, or apply pesticides
• dispose of pesticides
• handle open pesticide containers unless they have been triple-rinsed
• act as a flagger during pesticide applications
• clean, handle, or repair equipment that may have pesticide residues help with pesticide applications
Your employer must provide soap/water for washing.

- Your employer will make sure you have enough water, soap, and single-use towels for hand-washing during your shift. That means at least 1 gallon of water per worker, within 1/4 mile of where you’re working.

- When pesticides are spilled or sprayed on your body, wash immediately. Use the nearest clean water. After that, wash your body and hair with soap or shampoo as soon as possible. Put on clean clothes.
Get medical help as soon as possible if you think pesticides caused an injury or illness.

Your employer must provide transportation to a medical facility.

- The location of the nearest emergency medical facility must be written on WPS Safety Poster at a central location.

- Your employer must provide your medical team with information about the situation that occurred, the pesticide(s) you were exposed to, and the pesticide Safety Data Sheet(s).

FOR MEDICAL TREATMENT INFORMATION, CALL THE POISON CONTROL CENTER: 1-800-222-1222
If you get pesticides on your skin or clothes:

- Take off the clothes that have pesticides on them.
- Rinse your skin right away! Use the hand wash supplies or the nearest clean water, such as a stream, lake or other source, if the hand wash supplies are far away.
- Wash with soap and water and shampoo hair as soon as possible.
- Change into a clean set of clothing. Don’t put on the clothes that have pesticides on them.
- If you see a doctor, tell them any symptoms you have and what happened.
If someone swallows a pesticide:

Get medical help as soon as possible!

- Call 9-1-1 or go to the doctor, if it’s faster.
- Check the pesticide label or Safety Data Sheet (SDS), if handy, for first aid for ingestion because some poisonings can be made worse by making the person vomit.

If readily available, give the SDS or the pesticide label to the doctor for proper treatment.

FOR MEDICAL TREATMENT INFORMATION, CALL THE POISON CONTROL CENTER:
1-800-222-1222
What should you do if you get pesticides in your eye?

Pesticides can cause serious damage to your eyes, a few can even cause blindness. Eye damage can happen fast! If a pesticide gets in your eyes, you must take steps to remove the pesticide and get medical attention immediately.

Follow these steps:

• Hold your eye open with your fingers.
• Rinse eye for 15 minutes with a gentle stream of cool water, holding the affected eye lower than the other so it doesn’t contaminate the unaffected eye.

Get medical help right away!
IMPORTANT

If you are exposed, or you think you have been exposed, to a pesticide while working, your employer has to get you to a medical facility and give information, including the SDS, product information, and details about the exposure to the doctors. Not all pesticides have the same first aid steps. That’s why it is important to bring with you the name of the pesticide, the pesticide label and its Safety Data Sheet (SDS) in order to receive the right treatment.
Your employer must provide you with documents if you ask within two years.

- You may request a record of your WPS pesticide safety training.
- You may request pesticide application information and safety data sheets. It must be provided within 15 days.
- If you would rather not ask for the records yourself, you can designate a representative, someone you trust, to request them for you. You will have to sign your name and provide your dates of employment to request this information.
How can I learn about what pesticides I have been exposed to at work?

• While you are employed, you can refer to the application records to find the pesticides you were exposed to and the Safety Data Sheets to find what health symptoms those pesticides might cause.

• For pesticides applied in the last month or so, the records should be posted at a central location, like a bulletin board. For pesticides applied in the last two years, the records may be stored in the office.

• If you are not comfortable asking your employer for those records, you can choose someone to act on your behalf to get the records from your employer. That designation must be made in writing.

Questions about pesticides? Call 1-800-858-7378
The National Pesticide Information Center (NPIC) is operated at Oregon State University through a cooperative agreement with the US Environmental Protection Agency.
Heat Illness

Early signs of heat illness:

- Fatigue
- Muscle weakness
- Dizziness
- Headache
- Nausea
- Heavy sweating

Severe stages of heat illness:

- Chills
- Severe thirst and dry mouth
- Fainting
- Lack of sweat
- Hot, dry, clammy skin
- Slurred speech
- Irrational behavior and confusion
Seek medical assistance if symptoms persist
Your employer is not allowed to retaliate against you for following these rules.

- Your employer is not allowed to fire you, threaten you, or punish you in any way for following these rules.
- You may refuse to participate in activities that would violate the WPS.
- You may provide information to government authorities about WPS investigations.
- You may report WPS violations to the appropriate authorities. Look for the phone number on the WPS Safety Poster at a central location.
Questions about enforcement/regulations? Call your state’s pesticide regulatory agency. Look for the phone number on the WPS Safety Poster at a central location.
What is the REI?

REI means Restricted Entry Interval. An REI is the time you must wait to enter an area after a pesticide has been applied. Your employer must either orally notify you, or post warning signs, of areas under an REI. You can also find information about areas under an REI in the application records, located at the central location. Your employer must remove the warning sign before directing you to enter the area, unless you have been provided the early entry protections.

**IMPORTANT**

After a pesticide is used, you must NOT enter a field during the Restricted Entry Interval (REI) unless you are an early entry worker.
Who is an early entry worker?

An early entry worker is a worker that enters into a treated field or other area after the pesticide application is complete, but before the restricted entry interval (REI) has expired. If your employer directs you to enter a treated area under an REI, you must be 18 years old or older, and receive safety information about the pesticide and the early entry requirements before you enter the treated area.
How can you minimize your family’s exposure to pesticides?

You can minimize your, and your family’s exposure to pesticides through routine decontamination after working in a treated area.
At HOME you can do the following:

• After coming home from work, leave your work shoes outside your house, and out of the reach of children.
• Wash your work clothes separately from the rest of your clothes and the family’s laundry.
• Wash thoroughly from head to toe with plenty of soap, shampoo your hair, and change into clean clothes.
• After work bathe or shower right away before you hug, play, relax or have any physical contact with your family and children.
If pesticides are being applied near your home, you can limit your family’s exposure by closing your windows and turning off the air conditioner.

**IMPORTANT**

NEVER take pesticides or pesticide containers home from work.
If pesticides have been applied near your house, you can protect your family by:

- Washing toys left outside before children play with them.
- Covering bicycles and toys left outside.
- Cleaning your floors, and around the windows.
- Keeping children from playing in water runoff from the fields.
- Keeping children and non-working family members away from pesticide-treated areas.
Please remember...

- Wear clean clothes that cover your skin.
- Stay out of areas your employer tells you not to enter.
- Move away if pesticides drift into or are being applied, in the area where you are working.
- Wash your hands with soap and water after work and before eating, drinking, smoking or using the toilet.
- Know where a nearby medical healthcare facility is located.
- In case of pesticide poisoning, notify your employer and get medical help immediately.
- Shower before touching your children when you get home.
If you are unsure if an area or an activity is safe, ask your supervisor.

If you believe your workplace is unsafe, contact your state or tribal agency responsible for pesticide enforcement. The phone number should be on the poster at the central posting area.

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For non-emergency information about pesticides, call the National Pesticide Information Center (NPIC) at 1-800-858-7378.
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