

PESTICIDE SAFETY



Information

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

A No. 1

Working Safely with Pesticides in Agricultural Settings

Workers who handle pesticides must be trained how to protect themselves. Workers who handle pesticides in agriculture (on farms, forests, nurseries or enclosed spaces) must be at least 18 years old. Handle means to mix, load, or apply pesticides; repair or clean equipment that was used for pesticides; repair or remove tarps on a field; or touch unrinsed pesticide containers. The information in this leaflet will help teach you about working safely with pesticides.



WHY SHOULD I WORRY ABOUT PESTICIDES?

Pesticides can get into your body many different ways and can have both immediate (acute) and long-term (chronic) effects on your health.

- Pesticides can make you sick by moving into your body through your skin, mouth, eyes, or your lungs as you breathe.
- If a pesticide can hurt you or make you sick right away, that is an acute health effect.

If you have to be exposed to a pesticide for a long time (months or years) before it makes you sick, that's called a chronic health effect.

WHAT CAN A PESTICIDE LABEL TELL ME?

Most labels have a special word in capital letters on the front of the label. It tells you what the acute health hazard is.

The words you might see are:

- **DANGER** or **DANGER-POISON**, this pesticide is extremely harmful.
- **WARNING**, this pesticide is moderately harmful.
- **CAUTION**, this pesticide is less harmful, but still can make you sick.



If the label doesn't have one of these words, it means that the pesticide is less likely to harm you. However, you should handle every pesticide carefully.

The label also gives you information on:

- first aid
- personal protective equipment
- environmental hazards
- storage and disposal
- how to safely and correctly apply the pesticide to the listed sites

You must use pesticides according to the directions on the label. If you can't read the label, ask your employer to tell you what it says. California has stricter rules for your safety than those on the label. Your employer must know these rules and tell you about them.

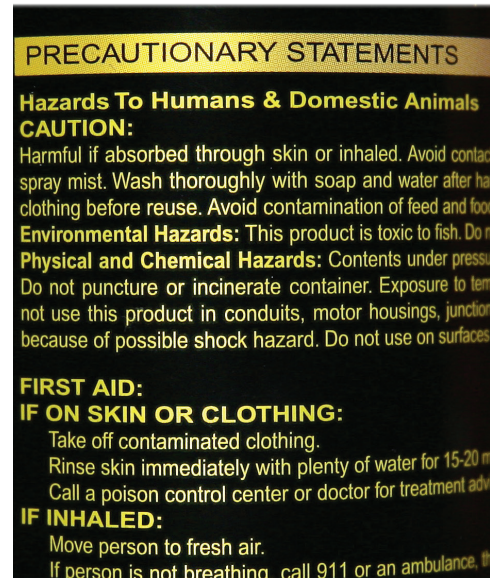
WHAT ELSE DOES THE LABEL TELL ME?

- **“Restricted Use Pesticide”** will be on the label for certain pesticides that are more likely to make you or others sick or harm the environment. These pesticides have extra rules and can only be applied by, or under the supervision of, a certified applicator. Ask your employer for a copy of the A-8 safety leaflet for more information on restricted pesticides.
- **“Corrosive”** or **“Causes eye and skin damage”** will be on the label if the pesticide can severely hurt your eyes or skin.
- **“POISON”** and a skull-and-crossbones symbol will be on the label if the pesticide can make you very sick.
- **“Fatal”** or **“may be fatal if swallowed, inhaled, or absorbed through the skin”** will be on the label if the pesticide can make you very sick or even kill you.

WHAT SAFETY RULES DO I NEED TO FOLLOW?

1. Look at the Conditions

After you read the label, look at your application situation (including your equipment and the weather conditions) for things like sensitive crops, people, buildings, or schools around you. If there is no wind, it can be dangerous to apply pesticides because pesticides can stay in the air. When the wind picks up, the pesticides can move with the air. Too much wind can make pesticides drift onto people and make them sick, or onto other crops and cause damage. Look at these conditions and decide if it's safe before you apply a pesticide, and be on the lookout during application to see if it is still safe to continue. If you don't think it's safe, stop and talk to your employer before starting or continuing the application.



2. Be Especially Careful With Pesticides Before They Are Mixed with Water

Moving opened pesticide containers before the pesticide is mixed with water, and hand-pouring pesticides from their containers, are the most dangerous parts of working with pesticides. Pesticides that are mixed with water and are in the application equipment may be less dangerous, but can still hurt you. When working with these or any pesticides, you should always try to avoid getting pesticide on yourself.

3. Wear the Right Kind of Protection

Your employer must give you personal protective equipment when it is required by the label or California's regulations, and tell you what to wear. Your employer must inspect, clean, and when needed repair or replace this protective equipment. Your employer must also make sure that it is stored in a pesticide-free place. You must properly wear the equipment provided. Ask your employer for a copy of the A-3 safety leaflet for more information about using personal protective equipment.

Protecting Your EYES:

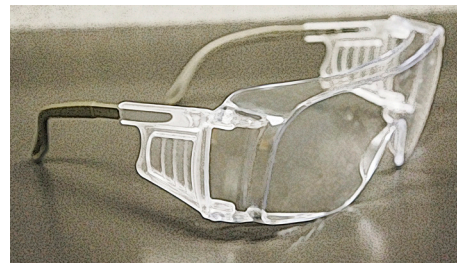
- You must wear eye protection when you mix, load, or apply pesticides; clean or repair equipment that was used for pesticides; and anytime the label says so.
- The label will tell you what type of protection to wear. If it does not, the eye protection can be safety glasses (with temple and brow protection), goggles, a face shield, or a full-face respirator. Pilots can use a helmet with a lowered face shield for eye protection.

Regular eyeglasses and sunglasses DO NOT provide enough protection. Pesticides can easily get around these glasses and into your eyes.

Protecting Your HANDS:

Keeping pesticides off your hands is often the hardest part of working safely with pesticides. Once a pesticide gets on your hands, it can get in your eyes if you rub them or in your mouth if you touch your food. Always wash your hands after handling pesticides and before eating, drinking, smoking, using your phone, or going to the bathroom.

- You must wear gloves when you mix, load, or apply pesticides; clean or repair pesticide application equipment; and anytime the label says so.
- The label will tell you what type of gloves you must wear. If the label does not say what type you need, you must use gloves made of chemical-resistant material like nitrile or neoprene. You cannot use thin disposable gloves when you apply pesticides. Never wear fabric or leather gloves unless the label or other rules specifically say you may.
- In a few cases, the label may tell you not to wear gloves. If it does, do not wear them.



dpr Glove Category Selection Key		
Label code	Materials Required by Law	Material Code
A	1,2,3,4,5,6,7,8	1 Laminate
B	1,2	2 Butyl
C	1,2,3,4,7,8	3 Nitrile
D	1,2	4 Neoprene
E	1,3,4,8	5 Natural
F	1,2,3,8	6 Polyethylene
G	1,8	7 PVC
H	1,8	8 Viton

All but Laminate and Polyethylene must be 14 mils or thicker.



Protecting your LUNGS:

You must wear a respirator anytime the label or your employer requires one, or if you are mixing, loading, or applying most pesticides on California's list of Minimal Exposure Pesticides. Ask your employer for a copy of the A-5 safety leaflet for more information about respirators or for a copy of the A-6 safety leaflet for more information on Minimal Exposure Pesticides.

Protecting your BODY:

- You must wear clean coveralls provided by your employer each day that you work with pesticides that have either the word DANGER or WARNING on the label, unless the label says you cannot wear coveralls. A long-sleeved shirt and long pants provided by your employer as personal protective equipment also meet this requirement.
- Your employer must give you other chemical-resistant clothes and equipment (such as a suit that covers your body, an apron, foot and head protection) if the label or other rules call for them.
- If it is hot outside, wearing a chemical-resistant suit that covers your body may make you so hot that you can get sick. If the label or DPR's rules say you must wear a chemical-resistant suit, then you must not work in temperatures above 80°F (27°C) during the day or 85°F (29°C) at night.
- You must use a closed mixing system if the label requires it or if you mix or load liquid pesticides with special language on their labels about exposure to the skin. Ask your employer for a copy of the A-3 safety leaflet for more information on closed mixing systems.

4. Washing Pesticides Off and Changing Into Clean Clothes

Your employer must provide you with a clean, pesticide-free place to store your personal clothes while not in use, and where you can change clothes and wash up when you are done handling pesticides for the day.

Your employer must have a place with extra coveralls, clean water, soap, and paper towels, both at the mixing and loading site and within ¼ mile of where you are working.

If the label tells you to wear eye protection, you must have immediate access to eyewash water so that you can flush your eyes if there is an accident (you must carry eyewash water or it must be on the application vehicle). At the mixing and loading site, there must also be an eyewash station to flush your eyes with water for 15 minutes.



HOW DO I LEARN ABOUT WORKING SAFELY WITH PESTICIDES?

California law says you must be trained before you handle pesticides for the first time and every year after that. Safety leaflets A-2 through A-10 also provide helpful information that you must be trained on. Your pesticide handler training must be presented in a way you understand, at a location free of distraction, with your trainer present the entire time.

Additionally, for each pesticide (or group of pesticides that are alike chemically), your training must include all of these things:

Health Effects:

- Where and how pesticides can get in your body or make you sick.
- How you may feel or look if you get pesticides in or on you.
- How to prevent a heat-related illness, how you may feel or look if you get sick from the heat, and first aid for this illness.
- Ways to clean yourself if you get pesticides on you.
- Why special medical care is needed when you work with certain pesticides (the A-10 safety leaflet has more information on this).
- Hazards of the pesticide, including immediate and delayed effects.

What to Do in an Emergency:

- First aid, emergency decontamination, and eye flushing techniques (the A-4 safety leaflet has more information on this).
- How and where to get emergency medical care.

Personal Protective Equipment (PPE):

- Why you need to wear PPE.
- How to use and take care of the PPE correctly.
- What PPE can and cannot protect you against.

Pesticide Safety:

- Your responsibility to protect people, animals, and property when you apply pesticides and not to apply pesticides in a way that may contact people who are not involved in the application.
- The meaning of safety statements on the label.
- Safety rules for handling pesticides (including closed mixing systems and enclosed cabs, pesticide disposal, and spill clean-up).



- Field posting requirements and restricted entry intervals.
- Hazard information provided by labels, safety leaflets, and Safety Data Sheets (SDSs). SDSs tell you about pesticide hazards, medical treatment, and other information.
- How to tell if a pesticide is restricted, and the additional information you need to know if it is.
- Why you should not take pesticides or pesticide containers home from work.
- Why you should never put pesticides in a food or drink container.
- Potential hazards to children and pregnant women, including keeping children and family members away from treated areas, removing boots or shoes before entering your home, and removing your work clothes and washing or showering before contact with your family members.
- Pesticide dangers to the environment, such as drift, runoff, or wildlife hazards.



If you don't get all the information you need in your training or want to make a pesticide use complaint, you should call your County Agricultural Commissioner, or the DPR for more information. You can find the Commissioner's number in your local white pages phone directory, by calling 1-87PestLine, or at: www.cdpr.ca.gov/exec/county/countymap

WHAT ARE MY EMPLOYEE RIGHTS?

You have the right as an employee:

- To know where you can find more information about pesticides, job safety information, safety leaflets, and SDSs.
- To have your physician or authorized representative receive information about pesticides you may have been exposed to.
- To be protected against retaliation for your exercise of these rights.
- To report suspected pesticide problems to the County Agricultural Commissioner or the Department of Pesticide Regulation (DPR).

DPR's Regional Offices are:

- Northern (Sacramento) (916) 603-7700
- Central (Clovis) (559) 297-3511
- Southern (Anaheim) (714) 279-7690



All safety leaflets are available at: www.cdpr.ca.gov/worker-health-and-safety/education-series