

Cleaning eyewear

Follow the directions for cleanup given by the manufacturer. If none are provided, these steps may help. While wearing rubber gloves, rinse the eyewear under running water to remove dust, then soak it 10 minutes in a solution of warm water and detergent. If this washing does not remove all the visible soil, use a soft sponge or cloth to wipe away the dirt. Rinse thoroughly. Air dry away from direct sunlight and heat to avoid premature degradation or deformation of materials. Research studies on cleanup of pesticides from rigid plastic materials have not been conducted.

Do not leave contaminated eyewear in cars, trucks, or areas where family members can be exposed to any pesticide residue that may be on them.

As with all protective gear, inspect eyewear frequently for signs of wear. Replace if lenses are badly scratched, or plastic/rubber parts start to soften, pit, tear, or stain.

Lung protection

Some pesticide labels may require respirators because pesticides are readily absorbed by your lungs and respiratory system and may be harmful to your health. Respirators are designed to protect against particulates (powder/dust), mist, fumes, or gases, and vapors. Most respirators cannot be worn by people with beards and all respirators should be fitted to your face by a professional.

If the pesticide you need to use requires a respirator, read the fine print to be sure that you obtain the correct type with the

appropriate filter system. Failure to get the correct protection could cause serious injury or death. Respirators must be selected according to the type of contaminant and its concentration. If the pesticide is toxic enough to require a respirator during mixing, loading, or application, you probably need more information about respirators than this pamphlet provides.

The National Institute for Occupational Safety and Health (NIOSH) regulates respirator design and use. Different types are required for different exposures. They can be a full-face style, which protects eyes as well as the lungs, or a half-face style, which requires goggles or other eye protection. The brief descriptions that follow suggest options you need to explore before selecting a respirator.

Air-purifying respirators

When you wear this respirator (half- or full-face style) air moves across charcoal or a filter as you breathe. These respirators do not supply fresh air; they filter the available air and cannot be used where the oxygen level is below 19.5 percent nor inside enclosed spaces with dangerous atmospheres. Air-purifying respirators may be disposable and look similar to the common dust mask, but they filter out smaller particles. Other air-purifying respirators are made with a reusable mask and disposable cartridges. With these types of respirators, part of the contamination in the air is removed, but not all of it. Breathing becomes difficult when filters are clogged.

Change the cartridge or filter immediately when you sense a different taste or odor.

Air-supplied respirators

These respirators are equipped with an air supply fed through a hose to your face mask. Air-supplied respirators are used in special situations where other types of respirators will not provide enough protection. For example, they may be used to protect you from some chemicals used in greenhouse sprays.

General tips for lung protection

Respirators must be cleaned or disposed of every time they've been worn in a contaminated area. If a respirator has disposable cartridges, they must be discarded and replaced after wearing. Contaminated filters must be disposed of as you would other contaminated materials.

Check the respirator manual; you may be able to take it apart for a thorough cleaning. If the manufacturer provides no cleanup directions, rinse the reusable parts thoroughly under running water. Then wash according to the procedures described for protective eyewear.

As with eyewear, store contaminated respirators separately from the ones that are ready for use. Whether you use large, self-close plastic bags or other containers, store them in a location separate from pesticides.

Web sites to visit

You can find additional information about eye and lung protection at the following Web sites:

www.safetyonline.com/BuyersGuide

Use the key words goggles or respirators to get a listing of manufacturers and suppliers. Links are provided to companies and their catalogs.

www.northsafety.com

This company offers a variety of PPE for eye, face, lung, and hand protection.

www.gemplers.com and www.labsafety.com

These mail-order firms supply a variety of PPE.

More information can be found in other publications in the *Family Pesticide Safety* series. Copies may be ordered through any ISU county extension office or through the ISU Extension Distribution Center Online Store at www.extension.iastate.edu/store. Ask for these titles:

- *Understand label precautions*, PM 1663a;
- *What to do when clothes are soiled with pesticides*, PM 1663b;
- *Wear the right gloves*, PM 1663c (revised 2006); and
- *Wear coveralls and aprons*, PM 1663d.

For additional information about the Worker Protection Standard, visit the US Environmental Protection Agency Web site at www.epa.gov/agriculture/epa-735-b-05-002.pdf.

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No endorsement of products or firms is intended, nor is criticism implied of those not mentioned. Suggestions in this publication are intended to alert pesticide users to safety concerns, however, following these procedures cannot guarantee total protection from pesticides.

... and justice for all

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jack M. Payne, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

File: Textiles and Clothing 1, 7; Health and Safety 2-2, 2-5

Use eye and lung protection

Family Pesticide Safety



IOWA STATE UNIVERSITY
University Extension

PM 1663E Revised October 2006

Use eye and lung protection

It is important to keep everyone in the family safe and healthy. This means that when pesticides are used, you should avoid exposure and use the right kinds of personal protective equipment (PPE). Certain pesticide labels may specify use of eyewear or respirators to protect eyes and the respiratory system during pesticide application.

Eye protection

Accidents with pesticides or exposure during application can lead to eye irritation, permanent damage, or loss of sight. Eye protective equipment includes safety glasses, goggles, and face shields.

Whatever protection you choose, make sure it

- does not interfere with your vision;
- fits securely over your eyes or glasses (NEVER wear contact lenses);
- prevents, or at least minimizes, pesticide exposure from vapors, dusts, or sprays;
- is NOT used by anyone else; and
- is cleaned after every use and stored in a clean area.

Safety glasses

This basic protection may suffice for the least toxic pesticides under minimum exposure conditions. Most have sturdy plastic frames across the brow; some also may have brow and side shields, with or without full frames around lenses. Polycarbonate lenses may resist fog, scratches, static, and ultraviolet rays. Lenses may be sized as “standard/regular” or “small” when glasses have a frame bridge over

the nose. Some glasses use a one-piece design with the lens material forming the bridge and are sized for various face widths. Safety glasses are available to fit over prescription lenses.

Goggles

This protection is designed with a soft plastic (vinyl or PVC) or rubber material that seals closely against the face around the eyes and fastens with a strap around the head. Goggles can fit over prescription lenses. Polycarbonate lenses may resist fog, scratches, static, and ultraviolet rays. Goggles may be vented to provide air flow (and comfort) where vapor, fumes, or dust are not a threat. They also may have adjustable splash protection vents.

Face shields

Rigid chemical-resistant materials are used to form a transparent wrap around the face to protect the user from splashes and other hazards. Shields are suspended from rigid headgear and may be worn with safety glasses or goggles and respiratory protection.

General tips for eye protection

Clean eyewear after each use. Use a clean plastic bag or container that you can seal to store safety glasses, goggles, or face shields between uses. If it is impractical to clean up the eyewear immediately after use, have two containers—one designated for storage before cleanup and one for afterward when the eyewear is ready for use. Store with other PPE, but not in the same area as pesticides.