



Tailgate Safety Training for Landscaping and Horticultural Services

Agricultural Safety Program, 590 Woody Hayes Drive, Columbus, OH 43210

Personal Eye Protection

Objective: Describe the proper selection, use, and care of eye protection.

How to Use This Module

Most eye damage is permanent. Therefore, eye protection is vital in hazardous situations. For this module:

- Read the information below on eye and face protection and types of protective eyewear.
- Ask your supervisor to show you examples of the different types of protective eyewear.
- Discuss how and when to use each piece.
- Try on the eyewear while your supervisor observes.
- Review the important points.
- Take the True/False quiz to check your learning.

Background

Shatterproof safety glasses, safety goggles, and face shields offer eye and face protection. And yet they provide for clear vision. Many eye protectors also have side shields and/or filter lenses. Side shields offer protection from flying objects. However, eye protection may not stop high-velocity flying objects. Filter lenses provide protection from radiation such as is encountered in welding. For more information, see the Tailgate Safety Training modules *Gas Welding Safety* and *Arc Welding Safety*.

As of July 5, 1994, all safety glasses must meet the minimum standards set forth by the American National Standards Institute (ANSI). Approved lenses are marked by the manufacturer. ANSI standard Z87.2 is for high impact protection. ANSI standard Z87.1 is for general eye and face protection including chemical splash protection.



ANSI Z87.2 High Impact Lenses



ANSI Z87.1 Chemical Splash Lenses

Workers who wear prescription glasses should wear additional protective eyewear. Protective eyewear can either incorporate prescription lenses or fit comfortably over prescription glasses without disturbing the fit.

Select Protective Eyewear

- Wear goggles or a face shield around hazards:
 - ◆ Flying chips or particles
 - ◆ Electrical arcing or sparks
 - ◆ Chemical gases or vapors
 - ◆ Harmful light
 - ◆ Liquid chemicals, acids, or caustics (e.g., fertilizer solutions, acids used to lower water pH, pesticides, or growth regulators)
 - ◆ Molten metal
 - ◆ Dust
 - ◆ Swinging objects like ropes or chains.
- Goggles only provide eye protection. Face shields provide protection for the whole face.
- Be certain that protective eyewear is approved protection against the hazard for which it is being used. For example, workers need impact resistance for protection against flying objects. They need chemical splash resistance when working with liquid chemicals.
- If filter lenses are used, be certain that the filter lens is of a shade number appropriate for the type of work.
- Check with suppliers for most appropriate types of eye protection for the hazard.

Inspect Protective Eyewear

- The arm pieces on safety glasses should touch the side of the head and curl behind the ears.
- Goggle lenses should be centered. The strap should rest low on the back of the head.
- Flexible elastic headbands must be in good shape.
- Discard pitted or scratched eyewear. Eyewear should be clean and defogged.
- Protective eyewear should fit snugly. It should be reasonably comfortable under conditions of use.

Keep Protective Eyewear Clean

- Clean the lenses thoroughly with soap and water.
- Disinfect eyewear that has been exposed to a hazardous substance or worn by someone else.
- Store clean eye wear in a closed, dustproof case. Plastic bags with a zipper work well.

To Protect the Eyes, Follow These Safety Tips

- Turn containers away from the face when opening.
- Remove protective eyewear only after turning off the tool.
- Replace outdated or scratched prescription lenses; they can distort vision.
- Replace cracked, pitted, or damaged goggles or spectacles.
- Concentrate on the task at hand when using power tools.
- Stop and relax the eyes if they are becoming strained.
- Keep sharp or pointed objects away from the face and eyes.

Review These Important Points

- Tools should be turned off before removing goggles.
- Inspect eyewear before wearing.
- Protective eyewear must comply with the minimum requirements of the American National Standards Institute.

- Store eye wear in a clean, dustproof case.
- Clean eye wear regularly.

About These Modules

The author team for the training modules in the landscape and horticultural tailgate training series includes Dee Jepsen, Program Director, Agricultural Safety and Health, Ohio State University Extension; Michael Wonacott, Research Specialist, Vocational Education; Peter Ling, Greenhouse Specialist; and Thomas Bean, Agricultural Safety Specialist. Modules were developed with funding from the Occupational Safety and Health Administration, U.S. Department of Labor, Grant Number 46E3-HT09.

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Answer Key: 1 = T, 2 = T, 3 = F, 4 = T, 5 = F.

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Name _____

True or False?

- | | | |
|---|---|---|
| 1. The type of protective eyewear worn must be appropriate for the hazard. | T | F |
| 2. Tools should be turned off before removing goggles. | T | F |
| 3. Eye protection should be inspected once a year. | T | F |
| 4. Workers who wear prescription glasses should wear additional protective eyewear. | T | F |
| 5. It is acceptable to wear cracked, pitted, or damaged goggles when working in hazardous situations. | T | F |