



Training Solutions, Delivered!

HIGH-IMPACT EYE SAFETY

**Leader's Guide, Fact Sheet
& Quiz**

This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes before the quiz itself, which is on the final page.

CONDUCTING THE PRESENTATION

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

1401 HIGH-IMPACT EYE SAFETY FACT SHEET

LENGTH: 19 MINUTES

PROGRAM SYNOPSIS:

More than 1,000 eye injuries occur in the workplace every day. Although most eye injury victims are aware of proper eye protection, more than half are not wearing any when their accident happens. Another 40 percent are wearing protective devices that are not adequate for the task they are performing. When properly selected and used, proper eye protection can prevent all work-related eye injuries.

This program dramatically reenacts work-related eye accidents. It features the personal accounts of six accident victims, in which eyesight was saved or lost. The accident re-creations will help motivate anyone potentially exposed to eye hazards. Wearing proper eye protection is essential to preventing the loss of eyesight.

PROGRAM OBJECTIVES:

After watching the video, the viewer will be able to identify the following:

- The types of eye protection devices and the hazards for which they should be used;
- Ways to prevent further eye injury if exposed to hazards;
- Techniques for ensuring that eye wear is safe and effective.

INSTRUCTIONAL CONTENT:

BACKGROUND

- Many work tasks require hand-eye coordination. As important as vision is to our way of life, it's difficult to understand why it is not more highly protected.
- Taking eyesight for granted is a major reason that there are more than 1,000 eye injuries daily.
- Injuries are produced by flying particles, small projectiles, chemical splashes, and retinal burns from lasers or welding arcs.

ACCIDENTS AND THEIR SAFETY LESSONS

Accident 1: Utility Worker Loses Eye

- While nailing a shipping crate together in preparation for shipping a transformer, Steve is hit in the eye by a nail. He was not wearing any eye protection and lost his eye.

LESSON: Always wear the eye protection required for the job. Nearly 60% of eye injuries occur as a result of victims wearing any eye protection.

Accident 2: Metal Worker Loses Eye

- A metal worker lost an eye while grinding excess metal from a weld. She was only wearing safety glasses when she realized she needed to retrieve her grinding goggles. She did not immediately leave the line to get the goggles because parts were backing up and was injured by small flying particles.

LESSON: You must wear proper eye protection to match job hazards. Goggles completely enclose the area around the eyes and offer more protection than standard safety glasses. Face shields provide more protection for heavier work, but should not be worn alone.

Accident 3: Safety Glasses Save Eyesight

- Mike, a maintenance electrician troubleshooting problem motor circuits, was wearing proper safety glasses when he threw the switch on an electrical disconnect box to test the circuits. The circuits in the box exploded, shooting particles into his face. His safety glasses prevented serious injury.

LESSON: Maintenance workers often work closely to a wide variety of hazards. Because many of these hazards can cause eye injuries, it is important that maintenance workers always use the proper eye protection.

Accident 4: Welder Avoids Eye Injury

- While performing a routine weld, Fred noticed a problem and lifted his welding mask to inspect the weld. When he leaned over to take a closer look, slag popped out of the weld and hit his safety glasses. If he had not been wearing safety glasses under his helmet, he could have been blinded.

LESSON: Always wear the eye protection required for the job. Match welding helmet lenses to meet the requirements of the type of light emitted from the materials during different types of welding operations.

Accident 5: Chemical Goggles Save Eyesight

- Harold, a chemical operator, had his eyesight saved by chemical goggles during an attempt to close an isolation valve on the main storage tank. A mechanical failure resulted in a sudden release of a chemical that sprayed his body and face.

LESSON: Although the hazards required additional PPE, the goggles saved Harold's sight. Prompt use of the emergency shower and eyewash station also prevented serious injury.

Accident 6: Corrosive Claim Eye

- Ralph, a chemical maintenance worker, broke a chemical line at a flange while not wearing the proper eye protection. A corrosive drop from the opened flange landed on his forehead and ran under his safety glasses. To make matters worse, he wasn't close to an eyewash station and had forgotten the portable one usually carried on his truck.

LESSON: Always wear the proper eye protection and get prompt emergency care in the event of the accident. Flush the eye immediately for at least 15 minutes. Never rub an injured eye or attempt to remove foreign objects yourself.

WORKING WITH CHEMICALS

- Check the MSDS for each chemical to be used to determine the proper eye protection and other PPE.
- Wear flexible, ventilated goggles that fit the face tightly when transferring small amounts of non-toxic materials for use in your work area.
- Wear a face shield over proper eyewear for protection of your face and neck as well as for additional eye protection when working with toxic or sensitizing substances.
- Wear goggles and a face shield when working with lead acid batteries.

PREVENTING LENS FOGGING

- Be aware that lens fogging can be a problem in areas of high humidity or moderate temperature changes.
- Choose goggles with good ventilation and anti-fog coatings to reduce lens fogging.
- Wipe lenses often with anti-fog wipes or solution to prevent lens fogging.

INSPECTION AND STORAGE OF EYEWEAR

- Look for the manufacturer's mark on safety lenses and for the ANSI mark on the frames to verify that the glasses conform to industry standards for safety glasses.
- Inspect eye protection devices before use and replace them if there are scratches, cracks or broken parts.
- Clean and inspect eyewear daily to ensure that it is safe and effective.
- Use plenty of water and a soft cloth for cleaning eyewear.

OSHA PPE STANDARD HIGHLIGHTS OF CHANGES

General Requirements

(d) *Hazard assessment and equipment selection.* Document and certify the hazards present in the workplace, select appropriate PPE to prevent employee exposures, communicate selections to affected employees and require them to wear it.

(e) *Defective and damaged equipment.* Such equipment will not be used.

(f) *Training.* The employer is to train all affected employees on what PPE to wear and when; how to put it on, take it off and adjust PPE; limitations of PPE, and its maintenance, care, useful life and disposal. Employers must certify and document that employees can demonstrate the substance of the training. They must be retrained when they demonstrate lack of knowledge and skill, when changes occur in the work place that renders previous training useless, or when changes occur in the PPE that renders previous training useless.

Eye and Face Protection

(a) *General Requirements.* Eye or face protection must be worn to prevent exposure to flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation. Eyewear featuring side protection is to be worn to prevent exposures to flying objects. Eyewear worn over prescription lenses must not interfere with the position of the prescription lenses or the protective lenses. When working with potentially injurious light radiation, shade filters must be used that show the appropriate protective marking for the work being done.

(b) *Criteria for protective and face devices.* Devices purchased before July 5, 1994 must conform to ANSI Z787.1-1968, and those purchased after that date must conform to ANSI Z87.1-1989.

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ANSWERS TO THE REVIEW QUIZ

1. b

2. a

3. a

4. c

5. b

6. a

7. a

8. b

HIGH-IMPACT EYE SAFETY
REVIEW QUIZ

The following questions are provided to determine how well you understand the information presented in this program.

Name _____ Date _____

1. Simple tasks such as driving a nail into a two-by-four do not require eye protection.
 - a. True
 - b. False

2. Safety goggles offer _____ protection than safety glasses.
 - a. More
 - b. Less

3. Welding lenses must meet the requirements for the type of light emitted from each operation.
 - a. True
 - b. False

4. In the event of a chemical spill, the eyes must be flushed for at least _____ minutes.
 - a. 5
 - b. 10
 - c. 15

5. If you can see a foreign object in one eye with the other eye, you should try to remove it yourself.
 - a. True
 - b. False

6. Face shields should be worn for additional protection against toxic chemicals.
 - a. True
 - b. False

7. Goggles with good ventilation and an anti-fog coating should be worn in areas of high humidity.
 - a. True
 - b. False

8. Look for the manufacturer's mark on the lenses and the _____ mark on the frames to verify eyewear conforms to industry standards.
 - a. NIOSH
 - b. ANSI
 - c. OSHA