

HIGH-IMPACT EYE SAFETY

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

INTRODUCTION: A brief description of the program and the subject that it addresses.

PROGRAM OUTLINE: Summarizes the program content. If the program outline is discussed before the video is presented, the entire program will be more meaningful and successful.

PREPARING FOR AND CONDUCTING THE PRESENTATION: These sections will help you set up the training environment, help you relate the program to cite specific incidents, and provide program objectives for focusing your presentation.

REVIEW QUESTIONS AND ANSWERS: Questions may be copied and given to participants to document how well they understood the information that was presented. Answers to the review questions are provided separately.

ATTENDANCE RECORD: Document the date of your presentation as well as identify the program participants. The attendance record may be copied as needed.

INTRODUCTION

More than 1,000 work-related eye injuries occur everyday. Had those who had the accidents been wearing proper eye protection, all of these injuries could have been prevented. Some 60% of these accident victims were not wearing any eye protection, while 40% were wearing inadequate protection for the jobs they were doing. Almost all of the victims had received training on the proper selection and wearing of eye protective devices.

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 OUTLINE

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.

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 not 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.

PREPARE FOR THE SAFETY MEETING

Review each section of this Leader's Guide as well as the videotape. Here are a few suggestions for using the program:

Make everyone aware of the importance the company places on health and safety and how each person must be an active member of the safety team.

Introduce the videotape program. Play the videotape without interruption. Review the program content by presenting the information in the program outline.

Copy the review questions included in this Leader's Guide and ask each participant to complete them.

Copy the attendance record as needed and have each participant sign the form. Maintain the attendance record and each participant's test paper as written documentation of the training performed.

Here are some suggestions for preparing your Videotape equipment and the room or area you use:

Check the room or area for quietness, adequate ventilation and temperature, lighting and unobstructed access.

Check the seating arrangement and the audiovisual equipment to ensure that all participants will be able to see and hear the videotape program.

CONDUCTING THE PRESENTATION

Begin the meeting by welcoming the participants. Introduce yourself and give each person the opportunity to become acquainted if there are new people joining the training session.

Explain that the primary purpose of the program is to help anyone exposed to eye hazards to remember to wear appropriate eye protection devices.

Introduce the videotape program. Play the videotape without interruption. Review the program content by presenting the information in the program outline. Lead discussions about dangerous situations that may cause eye injuries. Use the review questions to check how well the program participants understood the information.

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

- The types of available 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.

**HIGH IMPACT EYE SAFETY
REVIEW QUIZ**

Name _____ Date _____

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

1. Sixty percent of all eye injuries are suffered by victims who are wearing _____ eye protection.
 - a. proper
 - b. inadequate
 - c. no

2. Which of the following best describes why the three victims in the video lost the sight in one of their eyes?
 - a. they didn't think they were required to wear the appropriate protection
 - b. they forgot that they weren't wearing the proper protection
 - c. they forgot where they left their protection
 - d. they didn't take the time to retrieve their protection before proceeding with their work

3. A face shield should never be worn alone.
 - a. true
 - b. false

4. You should always flush an eye that has been splashed with a chemical for at least _____ minutes.
 - a. 5
 - b. 10
 - c. 15

5. You should only attempt to remove a foreign object from your eye if you have been trained in first aid.
 - a. true
 - b. false

6. Your eyewear should be cleaned and inspected _____.
 - a. daily
 - b. weekly
 - c. monthly
 - d. only when your supervisor tells you to do so

7. Where should you look to find eye protection required for a certain chemical?
 - a. your employee handbook
 - b. the company's controlling hazardous energy plan
 - c. the chemical's MSDS
 - d. ask a co-worker

8. You can determine if your safety glasses conform to industry standards by checking the manufacturer's mark on the lenses and the ANSI mark on the frames.
 - a. true
 - b. false

ANSWERS TO THE REVIEW QUESTIONS

1. c

2. d

3. a

4. c

5. b

6. a

7. c

8. a