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Industrial
Eye Injuries:
The Gory Story

Leader’s Guide

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INDUSTRIAL EYE INJURIES: THE GORY STORY

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 site-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**

Eye injury prevention is one of the most basic and talked about topic in the entire safety field. Even though there is nothing magical about preventing eye injuries, you must take the initiative: think of the hazard, then take the appropriate action to prevent the hazard from causing an injury. Most eye injuries could be avoided if employees wear the proper protective devices for the job tasks they are performing.

This program uses graphic photographs of tragic eye injuries suffered in industrial settings to force viewers to think about the consequences of not wearing the required eye protection at all times. Topics include causes of eye injuries, wearing eye protection, eye diseases, optical examinations and emergency response to eye injuries.

**PROGRAM OUTLINE**

**CAUSES OF EYE INJURIES**

- Studies show that three out of every five workers who have suffered eye injuries were not wearing eye protection at the time of the incident.

- Others wore the wrong kind of protection. Most injured workers were most likely to be wearing glasses with no side shields.

- Almost 70 percent of the eye injuries resulted from flying objects or sparks striking the eye.

- Contact with chemicals caused one-fifth of the injuries.

- Other injuries were caused by objects swinging from a fixed or attached position, such as tree limbs, ropes, chains or tools that were pulled into the eye while the worker was using them.
WHERE DO EYE INJURIES OCCUR?
• Potential eye hazards can be found in nearly every industry, but more than 40 percent of the injuries occurred among craft workers, such as mechanics, carpenters and plumbers.

• Over a third of injured workers were assemblers, sanders and grinding machine operators.

• Laborers suffered about one-fifth of all eye injuries.

• Almost half of injured workers were employed in manufacturing, while slightly more than 20 percent were in construction.

WEARING PROTECTION
• Always wear effective eye protection. About 94 percent of injuries to workers wearing eye protection resulted from objects or chemicals going around or under the protector.

• Only a small percentage of workers were injured while wearing eye protection report breakage of the equipment.

• Nearly one-fifth of injured workers with eye protection wore face shields or welding helmets.

• Only six percent of the injured workers wore goggles, which generally offer better protection for the eyes. Best protection is afforded when goggles are worn with face shields.

• Workers injured while not wearing protection often said they believed it was not required by the situation.

• Even though the vast majority of employers furnished eye protection at no cost to employees, about 40 percent of the workers received no information on where and what kind of eyewear should be used.

• Eye protection devices must be properly maintained. Scratched and dirty devices reduce vision, cause glare and may contribute to accidents.

EYE DISEASES
• Eye examinations are recommended on at least an annual basis or anytime you believe that your vision has any type of symptoms or abnormality.

• Several diseases of the eye can be discovered upon examination and as you get older, your vision has a tendency to fail. This necessitates the need for glasses or other corrective procedures.

• Macular degeneration, cataracts, glaucoma, retinitis pigmentosa, cancer and other eye problems can be quite serious.

• According to Prevent Blindness America, twice as many people will blind by the year 2030 as there are today.

• Macular degeneration will continue to be the leading cause of blindness and there will be a near doubling of the total cases of glaucoma.

• No one wants his or her vision distorted or interrupted, so it’s up to you to have eye examinations that will determine if you have such diseases or other problems.

• Waiting until the vision becomes a major problem could result in loss of vision or permanent damage to your vision.
APPROVED PROTECTION

• When your eyes are exposed to hazards, prevention is the key. You prevent eye injuries by wearing approved personal protective equipment.

• When your employer purchases protective equipment, it must meet certain standards or it cannot be used.

• Prescription glasses are not approved safety glasses unless you specifically tell the optometrist that you must have industrial safety glasses.

• This means your prescription glasses will meet the rigid standards of safety glasses and the glasses will have a special mark on the lens identifying them as safety glasses. You cannot wear regular prescription lenses as safety glasses.

• If you are welding, you must use approved lenses for the material or welding process. Goggles and shields come in several shades, so make sure you use the approved shades of eye protection when welding, cutting or brazing.

• Sunglasses can help shield your eyes from the harmful rays of the sun, but they do not afford protection from welding activities.

• Check with your optometrist when choosing all vision products.

OTHER SAFETY TIPS

• All industrial eyeglasses must meet the ANSI Z87 Standard.

• Safety glasses with side shields are required if there is a danger of something striking the eye.

• Goggles fit the face snugly and are effective in sealing the entire eye area and protecting it from hazards like spatter, fumes and vapors.

• Face shields provide extra protection for extremely hazardous jobs.

• When removing your glasses after working around dust or debris, tilt your head forward and remove the glasses from the back of your head. This will keep debris from falling into your eyes.

• When using high-powered lasers, your eyes are exposed to non-ionizing radiation that can severely burn your retina and cornea.

EMERGENCY PROCEDURES FOR EYE INJURIES

• You should know what to do in an emergency before it happens. Following emergency procedures can help save your eyesight or that of a co-worker in the event of an accidental eye injury.

• If you get anything in your eye such as metal, dirt or dust particles, go to the nearest eyewash fountain or water source. Flush the eye with water until the object has been rinsed out.

• Do not rub your eye. This can scratch your eye or further embed the object. If the particle doesn’t rinse free, bandage your eye loosely and seek medical attention.
• If splashed by a chemical, go immediately to the nearest eyewash fountain or emergency shower. Look directly into the stream of water, hold your eyes open with your fingers and flush your eyes and face for a minimum of 15 minutes. If necessary, ask someone to assist you in seeking medical attention.

• If you are exposed to welding, laser or other radiant light without appropriate eyewear, you will probably not feel pain right away. After four to 12 hours, your eyes may feel gritty, sensitive to light, or may get red or swell. If this occurs keep your eyes closed to avoid irritation and seek medical attention.

• If your eye is cut, do not rub, press or wash the cut because this can cause further damage. Loosely bandage the injured eye and seek medical attention.

• If you receive a bump or blow to the eye, apply a cold compress for 15 minutes to reduce pain and swelling and get medical attention.

CONCLUSION
• There is nothing magical about eye injury prevention, but you must take initiative. Think of the hazard, then take the appropriate action to prevent the hazard or exposure from becoming an injury.

• Annual visits to your optometrist can detect diseases of the eye, even those that don’t have any symptoms but can cause you to go blind.

• Safety awareness on your part is the most important ingredient in accident/illness prevention.

PREPARE FOR THE SAFETY MEETING OR TRAINING SESSION
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.

Place or secure extension cords to prevent them from becoming a tripping hazard.
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 show viewers why their vision is so valuable and the steps they can take to make sure they don’t suffer a traumatic eye injury.

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

Lead discussions about hazardous work operations at your facility and the required eye protection for them. Discuss any eye injuries that have occurred during these operations and how they could have been prevented. 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 explain the following:

• Causes of eye injuries and operations where they are likely to occur;

• The use of protection in preventing eye injuries;

• Eye diseases and the importance of eye examinations in detecting and treating them;

• Emergency response procedures for eye injuries.
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REVIEW QUESTIONS

Name______________________________________________Date______________________

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

1. Most eye injuries are the direct result of breakage in eye protection equipment.
   a. true
   b. false

2. It is recommended that you have an eye examination at least every _________________.
   a. month
   b. year
   c. two years
   d. three years

3. Prescription glasses must meet rigid standards and have a special mark on the lens if they are to be worn as safety glasses.
   a. true
   b. false

4. What should you do when removing safety glasses after working around dust and debris?
   a. tilt head back and remove the glasses from the front
   b. tilt head sideways and remove the glasses from the back
   c. tilt head forward and remove the glasses from the back
   d. none of the above

5. You shouldn’t attempt to wash a cut to the eye because it could cause further damage.
   a. true
   b. false

6. You eyes are protected best when you are wearing _________________________.
   a. safety goggles
   b. a face shield
   c. safety glasses with a face shield
   d. safety goggles with a face shield

7. If you are exposed to radiant light such as that from welding or lasers, you probably won’t feel any pain right away.
   a. true
   b. false
ANSWERS TO THE REVIEW QUESTIONS

1. b
2. b
3. a
4. c
5. a
6. d
7. a