



## ***ABOUT PREVENTING EYE INJURIES***

**LENGTH: 12 MINUTES**

### **PROGRAM SYNOPSIS:**

Our workplace is full of hazards, hazards that can hurt us or kill us. Controlling these hazards and preventing injuries is the point of our safety and health program. One such hazard is the one presented by things that can injure our eyes. Taking proper precautions and wearing the appropriate protection against eye hazards can prevent eye injuries. That is the point of our facility's plan to protect your sight and that is the point of this program. So, pay close attention as we get to the point about preventing eye injuries.

Topics include employee training, safety glasses, safety goggles, face shields, laser and welding protection, eyewear maintenance and storage, basic eye safety precautions and responding to an eye injury.

### **PROGRAM OBJECTIVES:**

After watching the program, the participant will be able to explain the following:

- The importance of taking responsibility to wear the appropriate eyewear;
- The levels of protection provided by safety glasses, safety goggles and face shields;
- How to properly protect your eyes if you wear prescription lenses or contact lenses;
- The importance of protecting the eyes near welding and laser operations;
- Basic eye safety precautions;
- How to respond to an eye injury properly.

### **EMPLOYEE RESPONSIBILITY TO WEAR APPROPRIATE EYE PROTECTION**

- Before we discuss the various types of protection, the point must be made that those employees who suffer the most severe eye injuries are those who neglect to wear any eye protection.
- Also, nearly half of workplace eye injuries occur when employees are wearing inadequate protection.
- The point here is that we will supply you with the necessary eye protection and it is your responsibility to wear it properly during each job task.
- Can you imagine what your life would be like without your sight? That thought alone should be reason enough to want to wear the proper protection whenever eye hazards are present.

### **EYEWEAR TRAINING**

- In addition to being supplied with proper eye protection, you will also be trained in its proper selection and use.
- This training will include which types of hazard each device is designed to guard against.
- After you have been trained, you will be capable of selecting the proper protection for each job task.
- Remember, it is your responsibility to choose and wear the appropriate eyewear for every task, every time.
- Keep in mind that you must also wear the proper eye protection when you are traveling through an area where eye hazards are present. Many eye injuries occur to passersby who neglect to wear eye protection.
- If you have any questions about your choice of eyewear or have difficulty getting it to fit properly, ask your supervisor.

### **SAFETY GLASSES**

- Be aware that safety glasses only provide a minimal amount of protection.
- Appropriate safety glasses must bear a mark that indicates they comply with ANSI's Z87.1 standard for protective eyewear.
- Safety glasses should have side shields or wrap-around lenses to protect against objects passing around the lens and entering the eye.
- Some safety glasses include a brow bar which protects against objects falling through the gap between the frame and forehead.
- There are also glasses available that have foam or rubber around the lenses that provide a better fit and added protection. Work with your supervisor to help select the most appropriate type of safety glasses for your job task.

### **PRESCRIPTION & CONTACT LENSES**

- It's important to understand that standard prescription glasses do not meet the same impact requirements as safety glasses. Prescription lenses can shatter on impact.
- If you wear prescription glasses, you can choose a style of safety glasses or safety goggles designed to properly fit over them.
- Another alternative is to obtain safety glasses with prescription lenses made of the same material as regular safety glasses.
- If you wear prescription glasses and have any questions about proper eye protection, make sure to discuss your concerns with your supervisor.
- Of course, many people choose to wear contact lenses instead of prescription glasses. Contact lenses can present some additional hazards to consider.
- Contact lenses should not be worn in areas in which your eyes can be exposed to dangerous gases, fumes, mists or liquids because they can be absorbed into the lenses or trapped underneath them.
- Contact lens wearers should make a habit of properly cleaning their contacts each day after work.

- If you have any question about whether wearing contact lenses is permitted in your work area, ask your supervisor.

### **SAFETY GOGGLES**

- The main point you need to understand about eye safety is that you must match the level of protection to the hazards which are present and standard safety glasses often do not provide adequate protection.
- For the increased hazard presented by large amounts of flying particles, splashing chemicals or high-pressure liquids or gases, safety goggles should be worn instead of safety glasses.
- Safety goggles provide a complete seal around the eye and provide much more protection than safety glasses.
- Many goggles now have anti-fogging lenses, but if those aren't available, make sure to select ones that have vents to reduce fogging.
- When working with hazardous liquids or fine dusts, make sure to choose goggles with indirect venting to prevent exposure through the vent openings.
- Whenever putting on your goggles, make sure they make a complete seal around your eyes and face for maximum protection.

### **FACE SHIELDS**

- Many jobs also create an additional hazard to your face. It's important to understand that face protection is separate from eye protection. Face protection is provided in the form of a face shield.
- In areas where chipping and grinding take place or your face may be exposed to chemical splashes or bloodborne pathogens, a face shield is required.
- Make it a point to always wear appropriate eye protection, such as safety glasses or safety goggles anytime a face shield is used. This not only protects you if an eye hazard were to get under the shield, but also prevents exposure when you lift or take off the shield.
- Choose a face shield that extends below your chin for additional protection.

### **LASER & WELDING PROTECTION**

- Harmful light and radiation emitted from lasers and welding or cutting operations requires specialized eye protection to protect our eyes from harmful exposures.
- Exposure to light from welding and cutting can cause burns to the eyes and surrounding areas, which is known as welder's flash, arc eye or flash burn.
- To prevent this, stay clear of these types of operations and never look directly into the welding arc or any bright light generated by cutting operations.
- If you are a welder, always select a welding lens with the appropriate shade or use a properly functioning auto darkening lens.
- Working in areas where radiation is emitted from lasers requires safety glasses or goggles with filtered lenses designed for the type of laser being used.
- The laser safety eyewear you choose must protect against both the wavelength and density of all the laser beams being transmitted in the area.
- You can find these specifications on an outer edge of one of the lenses or on the frames of the glasses or goggles.
- It is important that you check these specifications whenever putting on a new pair of laser eyewear because the shading may not be obvious and lenses that provide different degrees of protection often look the same.
- If you have any questions about the proper protection for your work area, ask your supervisor or laser safety officer.

### **EYEWEAR MAINTENANCE & STORAGE**

- Make it a point to clean and store your eyewear properly at the end of each shift.
- Thoroughly clean all parts with warm water and soap. Rinse with cool water and allow to air dry.
- If any parts of your eyewear are broken, replace them if you can. If they cannot be replaced, you should discard the eyewear and get a new pair.
- Store your eyewear in an area that is dust-free and located away from heat sources.

### **BASIC EYE SAFETY PRECAUTIONS**

- Besides wearing eye protection, there are some basic precautions you can follow that reduce the risk of eye injuries.
- Good housekeeping is critical in preventing eye injuries. Keeping your work area clean reduces the risk of particles being dispersed into the air.
- Avoid cleaning your work area with compressed air. Compressed air can forcibly propel debris into the air that can easily enter the eye.
- Before starting a task, obtain all the tools and protective equipment you will need. Think the job through before starting and don your eye protection before doing any work.
- Stay focused on the job and on your safety until the job is complete.

### **RESPONDING TO AN EYE INJURY**

- Unfortunately, eye injuries do occur; some 2,000 requiring medical attention happen every day. How you respond to such an incident could mean the difference between saving and losing your sight.
- Make sure you know the location of the nearest eyewash station to your work area. You should practice reaching it with your eyes closed because a splash to the eyes may leave you unable to see.
- If you are splashed in the eyes by a hazardous chemical, get to an eye wash station immediately and flush your eyes for 15 to 20 minutes. Then, seek medical attention.
- You should also flush your eyes thoroughly if you get dust or fine particles in your eyes. If the material doesn't wash out or redness or pain persists, see a physician.
- If your eye is cut or punctured and the object becomes lodged in the eye, do not try to remove it. Have someone help you get to a medical facility as soon as possible for treatment.
- In all cases of a foreign substance or object entering the eye, do not rub the eye. Rubbing the eye can increase the damage which occurs.

## TO THE POINT ABOUT PREVENTING EYE INJURIES

### *Review Quiz*

Name \_\_\_\_\_ Date \_\_\_\_\_

*Please provide answers to the following to show how well you understand the information presented during this program.*

1. Nearly half of workplace eye injuries occur when employees are wearing inadequate protection.
  - a. True
  - b. False
  
2. Appropriate safety glasses must bear a mark that indicates they comply with ANSI Z87.1.
  - a. True
  - b. False
  
3. Standard prescription glasses meet the same impact requirements as safety glasses.
  - a. True
  - b. False
  
4. Appropriate eye protection should also be worn in situations that require a face shield.
  - a. True
  - b. False
  
5. Exposure to light from welding and cutting that causes burns to the eyes and surrounding areas is known as \_\_\_\_\_.
  - a. Welder's flash
  - b. Arc eye
  - c. Flash burn
  - d. All of the above
  
6. You can determine the how much protection laser safety eyewear offers by looking at its shading.
  - a. True
  - b. False
  
7. Your eyewear should be properly cleaned at the end of each shift.
  - a. True
  - b. False
  
8. You should avoid using compressed air to clean your work area.
  - a. True
  - b. False
  
9. Some \_\_\_\_\_ eye injuries requiring medical attention happen every day.
  - a. 200
  - b. 1,000
  - c. 2,000
  
10. If an object becomes lodged in your eye, you should try to remove it as soon as possible.
  - a. True
  - b. False

*ANSWERS TO THE REVIEW QUESTIONS*

1. a

2. a

3. b

4. a

5. d

6. b

7. a

8. a

9. c

10. b