



## GOALS

This safety session should teach employees to:

- Become familiar with all types of protective eyewear.
- Select the proper eye protection for the hazards they face.

### Applicable Regulations: 29 CFR 1910.13 and 29 CFR 1910.133



#### 1. It's important to wear eye protection in the workplace.

- The Occupational Safety and Health Administration (OSHA) requires employers to provide eye and face protection wherever there is a chance of eye injury.
- OSHA also requires employees to wear the protective eyewear that employers provide.
- Each year, thousands of eye injuries in the workplace lead to temporary or permanent blindness.
- A Bureau of Labor Statistics study found that 60 percent of workers who suffered eye injuries were not wearing any eye protection at all.
- Experts at Prevent Blindness America say that nearly half of the injured who did wear personal protective equipment (PPE) selected the wrong type of eyewear.

#### 2. Protective eyewear can protect against various eye hazards.

OSHA requires you to wear eye and face protection whenever you are exposed to the following hazards:

- Dust and debris
- Molten metal
- Acids or caustic liquids
- Potentially damaging light radiation
- Biohazards
- Flying objects or particles
- Liquid chemical splashes
- Chemical gases or vapors
- Glare

#### 3. Learn how to select the proper protection.

- Consider the kind of eye hazards you will be exposed to and whether you face a combination of hazards.
- Consider the degree of hazard—whether you will be exposed to a low-level hazard or an extreme hazard (for instance, low impact or high impact).
- Select the eyewear that protects against the greatest possible hazard level. You might need to wear a combination of protection to guard against multiple hazards.

#### 4. Become familiar with all types of eye and face protection.

- Safety Glasses:
  - Safety glasses are the minimum required eye protection.
  - Use safety glasses wherever there is minor dust, chips, or flying particles.
  - For greater side protection, use safety glasses with side shields or with wraparound protection.
  - Use safety glasses with antifog treatment to improve visibility.
  - Use an eyewear retainer to keep the glasses tightly fitted to your face.



- Goggles:
  - Goggles offer greater protection from high-impact hazards and fine dust.
  - They also protect against chemical splashes.
  - Choose goggles with indirect venting to minimize fogging when you are exposed to splashes or fine dust.
  - Choose goggles with direct venting when working with large particles.
- Face Shields:
  - Use face shields for the highest impact hazards and for protection from spraying, chipping, grinding, and critical chemical or bloodborne hazards.
  - Face shields may be tinted or metal coated for heat and splatter protection.
  - *Always* wear safety glasses or goggles *under* a face shield.
- Welding Goggles, Helmets, and Shields:
  - Welding goggles and welding helmets or shields have special filtered shades that protect against welding light, which can cause severe burns to the eye.
  - Lenses used in welding PPE are marked with shade numbers ranging from 1.5 (the lowest protection) to 14 (the darkest and highest protection).
  - Select the darkest shade possible that still allows for visibility.
  - Wear eye protection even when you lift up the helmet.

## 5. Take extra care with prescription eyewear.

Streetwear prescription eyeglasses and contact lenses are generally not suitable as eye protection. Consider these options instead:

- Wear prescription eyewear with special impact-resistant frames and lenses. Polycarbonate or Trivex® lenses are the most suitable for high-impact areas.
- Wear tight-fitting goggles over street-wear prescription glasses and contact lenses.
- Wear special prescription inserts that fit inside goggles or inside full-face respirators without breaking the seal.



### DISCUSSION POINTS:

Show employees examples of all types of protective eyewear, and review the hazards they protect against.



### CONCLUSION:

- Know which type of protective eyewear is right for the hazard.
- Know the eye hazards associated with the tasks you perform, and become familiar with the various types of eye protection available. Then you can select eyewear with the proper level of protection to guard against the hazards you face.



### TEST YOUR KNOWLEDGE:

Have your employees take the Types of Protective Eyewear quiz. By testing their knowledge, you can assess their ability to select the proper eye protection and determine whether they need to review this important topic again soon.



## TYPES OF PROTECTIVE EYEWEAR QUIZ

- 1. What percentage of eye injuries could be avoided each year if employees always wore their eye protection?**
  - a. 40 percent
  - b. 50 percent
  - c. 60 percent
- 2. Eye and face protection can protect against which of the following hazards?**
  - a. Flying objects and particles
  - b. Chemical splashes
  - c. Damaging light radiation
  - d. All of the above
- 3. Eye injuries can result in:**
  - a. Temporary loss of vision
  - b. Permanent blindness
  - c. Both a and b
- 4. You should choose protective eyewear that protects against:**
  - a. Flying particles only
  - b. The least possible hazard
  - c. The greatest possible hazard
- 5. Safety glasses with side shields or wraparound protection offer better protection than regular safety glasses.**
  - a. True
  - b. False
- 6. The vents in goggles help to reduce fogging.**
  - a. True
  - b. False
- 7. Employees who face bloodborne hazards should select:**
  - a. Welding helmets
  - b. Safety glasses with solid side shields plus full-face shields
  - c. Regular safety glasses
- 8. The darkest, most protective welding shade is number:**
  - a. 1.5
  - b. 7
  - c. 14
- 9. Regular street-wear prescription glasses and prescription contact lenses offer protection against common eye hazards.**
  - a. True
  - b. False
- 10. Wearing protective eyewear is a personal decision that is solely up to you.**
  - a. True
  - b. False

When you have completed this quiz, turn it in to your supervisor.

Name: \_\_\_\_\_

Date: \_\_\_\_\_



## ANSWERS TO TYPES OF PROTECTIVE EYEWEAR QUIZ

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1. c. Sixty percent of eye injuries can be avoided if employees always wear their eye protection.
2. d. Various types of safety eyewear and face protection can protect the eyes against many different hazards. At times, you might need to wear a combination of protection to guard against extreme or multiple hazards.
3. c. Both a and b. Eye injuries can result in temporary loss of vision and permanent blindness. That's why it's so important to wear protective eyewear wherever it's required.
4. c. You should protect against the greatest possible hazard.
5. a. True. Side shields and wraparound styles offer side protection for the eyes.
6. a. True. Vents help reduce fogging inside goggles and help to increase visibility.
7. b. Safety glasses with solid side shields can protect the eyes against bloodborne pathogens. A full-face shield offers even greater protection of the eyes, nose, and mouth from substantial splatters of blood.
8. c. The darkest, most protective welding shade is 14.
9. b. False. Regular street-wear prescription glasses and prescription contact lenses offer no protection from common eye hazards.
10. b. False. The Occupational Safety and Health Administration (OSHA) requires employers to provide protective eyewear wherever it's needed, and OSHA and your company's policy require you to wear it.