

## Eye Protection

Sight is one of our most valuable senses. Partial or complete loss of sight would be a challenge to all of us. Hazards to the eyes can take a variety of forms, such as flying particles, biohazards, electromagnetic radiation and corrosive liquids or vapors. Have you ever thought about what life would be like without eyesight? Eye protection is a major line of defense used to protect you from eye injuries. Wearing eye protection and wearing it correctly is a must in any situation where injuries to the eyes are possible.

### When Do I Wear Eye Protection?

The most important thing you can do is to wear eye protection when there is a danger of flying objects, dust or harmful liquid getting into your eyes. This is very true for Maintenance Department employees. They are exposed to flying particles of paint, metal, plaster, and wood when performing their duties.

### First AID

By wearing appropriate eye protection, you should be able to avoid injuries to your eyes. However, there is still a possibility that you or those around you might need first aid eye care. Here are a few points you should remember in case of an eye injury.

#### **In the case of a foreign particle entering an eye:**

- Wash your hands before examining the eye; this helps prevent infection.
- Do not rub the eye, because this may force the particle deeper into the tissue.
- Do not attempt to remove a particle that is embedded in the tissue; this will result in further damage. Place clean, preferably sterile, patches over both eyes and get to a physician as quickly as possible.

### ANSI Z87.1

The American National Standards Institute (ANSI) is an organization that issues voluntary safety standards in the United States. Some of these standards have been adopted by OSHA. An example of this is ANSI Z87.1, a standard for the design, construction and testing of Safety Eyewear. Eyewear used to protect employees from injury must meet this standard. To see if your eyewear meets this requirements, check on the frame or lens for a mark that reads “Z87”.

### Regular Glasses vs. Safety Glasses

Perhaps you think that your ordinary eyeglasses offer enough protection against any eye hazards you may encounter. Think again! On impact, regular lenses tend to shatter and do not provide side shields. Side shields prevent airborne projectiles from contacting eyes from the side. Various types of eye protective devices have been designed, including safety glasses, goggles and full-face shields that fit over prescription glasses. Use the proper type of protective eyewear for the hazards you encounter, over you prescription glasses.

Or, wear specially designed prescription glasses that meet ANSI Z87.1 Standards, consult your optometrist if you have questions.



Thousands of workers have eye injuries each year. If they were wearing eye protection, these injuries would most likely have been prevented. It's important to know what types of protection are available and when you should use each type.

## Safety Glasses

- Guard Against Impact & Heat.
- Can withstand impact of a quarter inch ball traveling at 150 feet per second.
- Must ensure a proper fit.



## Safety Goggles

- Provide a shield around the eyes to flying particles.
- Protect from chemical splashes.
- Some types can be worn over regular glasses.
- Some goggles are designed to protect from intense light.



## Face Shield

- Protects from splashes and small particles **NOT Forceful Impact.**
- Offers full face protection.
- Must wear safety glasses or safety goggles underneath.
- Some shields are designed to protect from intense light.



## CARE OF PROTECTIVE EYEWEAR

- Protective eyewear is designed to guard against accidental injury. They will not withstand repeated impact or abuse. Inspect them regularly for scratches, cracks, or other wear. Replace them if they are scratched, bent or uncomfortable.
- Clean your lenses after every use with soap or mild detergent and water or special solution designed for that purpose. Avoid rough handling that can scratch lenses. Scratches impair vision and can weaken lenses.
- Store your eye protection equipment in a clean, dry place where it cannot fall or be stepped on. Keep them in a case when they are not worn.
- Disinfect eyewear if it's contaminated by a hazardous chemical, or if it may be worn by another person.
- Replace glasses when lenses are scratched, broken, bent or you cannot see through them for any reason. Replace knotted, twisted worn or stretched out goggle straps. Damaged glasses interfere with vision and do not provide protection.

## Eye Wash Stations

- Know where eyewash stations are located throughout the facility.
- The first 10 to 15 seconds after exposure to a hazardous substance are critical. Delaying treatment for even a few seconds can contribute to a serious injury.
- The initial first-aid treatment should be to immediately wash the eyes for 15 minutes using emergency eyewash equipment. Even though you may have difficulty keeping the injured eye open during this painful treatment, quick removal of the chemical is essential.
- When using the eyewash, hold your eyelids open with your fingers to ensure proper flushing
- If further medical treatment is needed, do not hesitate, seek it immediately.

# Safety Toolbox Quiz - Eye Protection

Name (Print) \_\_\_\_\_

Company Name \_\_\_\_\_

Name (Sign) \_\_\_\_\_

Date \_\_\_\_\_ Department \_\_\_\_\_

1. Rated Safety Glasses can be identified by a mark on the glasses of \_\_\_\_\_.
  - a. ABC123
  - b. Z87.1
  - c. XCDGs321
  
2. Regular eyeglasses offer the same amount of protection as safety glasses.
  - a. True
  - b. False
  
3. Faceshields are worn to protect your face against small particles and splashes from hazardous substances. If you wear a faceshield, you do not have to wear goggles.
  - a. True
  - b. False
  
4. If your eyes are exposed to chemicals, the initial first aid treatment is to flush the eyes out with water for:
  - a. 5 minutes
  - b. 10 minutes
  - c. 30 seconds
  - d. 15 minutes.