

# Welcome to Training on Eye and Face Protection



# EYE & FACE PROTECTION



- OSHA Regulations - **OSHA estimates that there were at least 25,000 work-related eye injuries causing temporary or permanent disability in 2025 year. Some people lost their sight entirely.** The U.S. Department of Labor says the three most common reasons for industrial eye injuries are:
  - Not being aware of potential eye hazards
  - Not using protective eyewear
  - Using the wrong type of eyewear for the hazard
- Eye Hazards
- Eyewear
  - Standards
  - Selection
  - Maintenance
- Safety Procedures

# EYE & FACE PROTECTION, OSHA REGULATIONS CONT.



OSHA's regulations (1910.133) requires workers to use protection “ when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors or potentially injurious light radiation

# EYE & FACE PROTECTION STANDARDS



- Standards for various protective gear, including eye and face protection, are set by the American National Standards Institute (ANSI). When we buy protective glasses, goggles or face shields, they're labeled to show that they meet the ANSI standards (Z87.1), (Z87.1+)



# EYE & FACE PROTECTION STANDARDS (OSHA)



- OSHA standard is considered performance-oriented. So it doesn't necessarily list required PPE. Its purpose is to assure that people use what is needed when it's needed. Employers must let employees know what PPE is available and make sure each employee gets a good fit.

# EYE & FACE PROTECTION STANDARDS (OSHA) CONT.



The regulation also requires training employees who have to use PPE so they know:

- When to use it
- What to use-and its limitations
- How to put it on, adjust it, use it and take it off properly
- How to properly care for, maintain and dispose of it.

**OSHA violations for eye and face protection in 2025 was 1665 citations.**

# EYE & FACE PROTECTION (cont.)

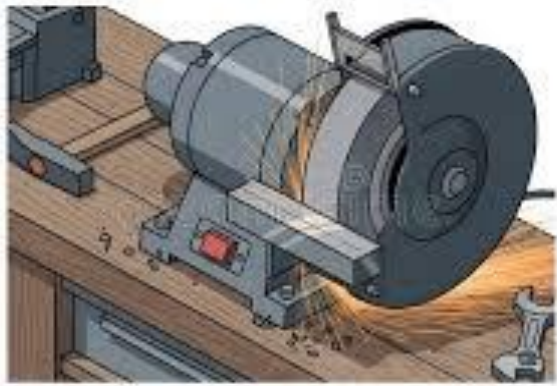


## Eye Hazards

- Flying objects
- Harmful dust particles
- Chemical splashing or spraying
- High-intensity heat or light
- Welding, brazing and torch cutting
- Direct or reflected sunlight



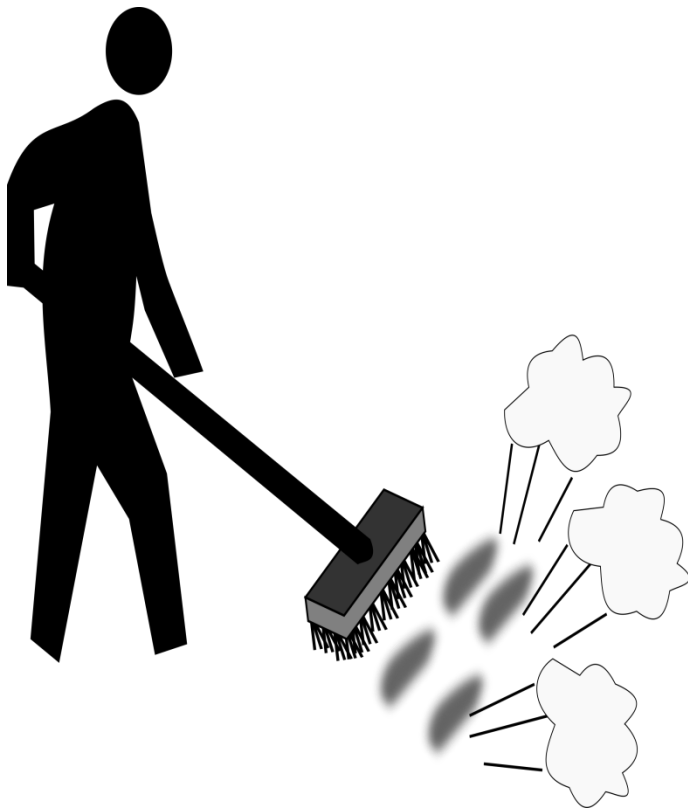
# EYE & FACE PROTECTION (cont.)



- Flying objects cause **70%** of eye injuries
  - Hazard – fragments, particles, chips, sand and dirt
  - Work Processes that can cause an eye injury include chipping, grinding, framing, masonry, etc.
  - Eye Protection – glasses, goggles and face shields



# EYE & FACE PROTECTION (cont.)



- Dust Hazards
  - Hazard – wood dust, foam dust and soot
  - Work Processes – woodworking, buffing and cleaning
  - Eye Protection – goggles

# EYE & FACE PROTECTION (cont.)



- Chemical Hazards
  - Splash, spray or mists can cause burning pain or blurred vision
- Work process
  - Handling, using or processing a chemical
- Eye protection
  - Goggles, face shield – Chemical-resistant goggles are a must if you are working with any liquid chemical that could splash or spray into your eyes. **A face shield worn over goggles is required if you are working with highly dangerous chemicals such as acids or in situations with the potential for severe exposure.**

# EYE & FACE PROTECTION (cont.)



- Welding Hazards
  - Flash and Flying Sparks
- Work Processes
  - Walking unprotected near welding operations
- Eye Protection
  - Welder's face shield as **sunglasses** are completely inadequate for welding purposes



# EYE & FACE PROTECTION (cont.)



- Sunlight Hazards
  - Direct or Reflected Sunlight
- Work Processes
  - Working outside and/or near water, concrete or sand
- Eye Protection
  - Sunglasses and hat

# EYE & FACE PROTECTION (cont.)

- **Eyewear**

- Selection
  - Prescription Eyewear
- Maintenance



Now we'll discuss the selection, use, and care of protective eyewear that can protect you from eye injuries. Use proper protective eyewear whenever there is the possibility of eye hazards.

- **Ninety percent of occupational eye injuries could have been avoided with proper protective eyewear, according to OSHA.** Note the word “proper” – many injuries have occurred when people thought they were wearing proper eyewear, but in fact were not.
- OSHA found that many of the injured workers believed that protective eyewear was not necessary in their particular work situation.
- Follow all company rules for wearing eye protection. We want to make sure that you know when it is necessary to wear eye protection and know what kind of eyewear to use for each potentially hazardous situation





## **Selection**

Choosing the right eye protection for the particular person and the particular job is very important. The first step is to determine what kind of protective eyewear should be used for the job.

Then:

- Fit the eyewear to the person who will be wearing it. Protective eyewear must fit well to protect properly and be comfortable.
- Use high-quality eyewear; it will last longer and protect better.
- Ensure good fit and comfort. If it doesn't fit well, it won't provide complete protection and you will be inclined to remove it to make adjustments or not wear it at all.
- Lens options include anti-fog, anti-glare, indoor/outdoor lenses and different colors or tints. Your supervisor will let you know if there is a particular kind of lens you should use.



## **Selection (cont.)**

**If you already wear prescription eyewear, there are some important safety points to know.**

- The National Institute for Occupational Safety and Health now recommends that contact lenses may be worn with appropriate PPE when handling hazardous chemicals provided that certain guidelines are followed and a hazard evaluation is performed. However, contact lenses may not be safe in radiation, high-dust or high- particulate environments.
- Prescription safety glasses and goggles are available. These will meet the ANSI Z87 standard as well as your prescription requirements.
- Over-glasses or partial face shields are also options as barriers to eye hazards. These are designed to fit over your normal prescription glasses

# **Maintenance**

Routinely inspect your protective eyewear.

- Eyewear should be inspected before each use.
- Check for cracked lenses or face shields and replace if necessary.
- Replace scratched lenses or shields if they impair your vision.
- Also check for loose frames and nose pieces.
- Finally, fit test your eyewear before each use. Make sure there has been no damage that prevents a proper fit.

## **Always maintain your eyewear properly.**

- Cleaning when needed
- Get new eyewear whenever necessary. When lenses are scratched or cracked, they are no longer safe. Note that some eyewear have removable lenses that can be replaced without having to replace the entire frame.

# EYE & FACE PROTECTION (cont.)



**Safety**matters

- Safety Procedures
  - General Guidelines

# **Safety Procedures**

As a reminder, the OSHA standard specifically requires us to identify any hazards to the eyes and face in our workplace and to provide you with the necessary protection. In addition, OSHA requires you to use the protective gear provide. OSHA also says you must know how to fit and maintain this PPE properly. You need safety glasses, goggles and face shields that are comfortable enough to work in but fit closely enough to keep hazards out.

When you wear safety goggles, your eyes should look through the center of the lenses and the nose bridge should be on your nose. Many goggles have adjustable straps that help you get a good fit. That strap should rest low on the back of your head. If your safety glasses or goggles tend to fog up, apply a lens defogging solution.

Like most PPE, safety eyewear can take a little getting used to. Once you know you have a good fit in terms of safety, wear them a bit in a nonhazardous situation. Then you'll know if you need to make adjustments or try something different

## Safety Procedures (cont.)

Before you put on any PPE, you have to inspect it to be sure it's in good condition to protect you. With eye and face protection, check that goggles straps aren't knotted, twisted, worn or stretched out. Check lenses and faceshield windows for pitting, scratches and other damage. If you can't see through them, they won't be very useful. **Turn in and replace any damaged PPE.**

When you remove eye and face protectors, inspect them again. Then clean them before you put them away. Use recommended cleaning procedures. Disinfect eyewear that is contaminated by a hazardous chemical or that may be worn by someone else.



## Safety Procedures (cont.)

The right PPE will prevent most injuries to your eyes and face. But you also have to practice common sense. Even if you're wearing eye protection, you don't want hot, toxic or simply painful things coming at your face and eyes. [Here are a few hints:](#)

- Don't open a container just to see what's inside.
- Keep shields around all potentially flying objects.
- Try to contain as many processes as possible.
- Look out for the other person. Before you start a job that could create an eye hazard, be sure other workers in the area are either "out of the line of fire" or are wearing eye protection.



# First Aid Procedures for eye or face injuries

Know what to do if something gets in your eye or on your face.

Eye or face injuries always require immediate medical attention. However, sometimes you can take useful first aid steps while you wait.

- If a chemical or other substance gets in your eye, go immediately to the emergency eyewash. Flush the eye with water for at least 15 minutes; get water under the eyelids as well as on the surface. Then see a doctor.
- If a chemical splashes on your face, check the SDS to be sure it's not reactive with water. If it's not, rinse with running water for at least 15 minutes and then see a doctor.
- If a particle gets in your eye, try to blink it out. If it doesn't come out, don't rub the eye. Keep it closed and covered and see a doctor.

If something hits your eye, let your supervisor know and see a doctor.





# First Aid Procedures for eye or face injuries (cont.)

OSHA 1910.151 & ANSI Z358.1

**Eyewash stations must be accessible to the employee within 55 feet (approximately 10 seconds) of places where accidental exposure may be expected.**



# Questions

