

# Eye Protection: A Guide for Supervisors

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## HIGHLIGHTS:

- Choosing eye protection
- Preventing eye injuries
- Supervisor's role: setting a good example
- Eyeglasses and contact lens wearers

As a supervisor, you have multiple responsibilities when it comes to eye protection for employees.

These responsibilities include:

- Eliminating or controlling eye hazards
- Providing the proper type of protective devices
- Ensuring that these devices are used

## Choosing Eye Protection

Eye protection devices come in several varieties, including safety glasses, goggles and face shields. The type of eye protection used should be determined by the nature of the work, materials handled, processes used and any associated hazards. If the eye protection does not fit, is uncomfortable, impairs vision or even looks ugly, employees may be reluctant to wear it. Providing various options with sizes and types of protection available improves the likelihood of sustained use.

When selecting protective eyewear, consider these points:

- Safety glasses offer protection against moderate impact hazards. Always include side shields if particles or dust could enter the eye area from the side.
- Goggles are used to protect eyes from chemical splashes and fine dust.
- Face shields protect the user from flying particles, spray and sparks, and can be worn over glasses or goggles to provide additional protection.
- Eye protection is normally built into welder's hoods, sand blast helmets and some types of gas masks.
- Sunglasses are not a replacement for tinted filter lenses and may not provide impact protection of flying objects.

## Prepare a Hazard Assessment

To identify hazards in your operation, list all jobs under your supervision, indicating those that present eye hazards and require protection. Describe the types of necessary protective devices in the written work specifications and enforce their use. Determine which type(s) of eye protection will be required and under what conditions or processes they will be expected to be in use. Regarding payment provisions, refer to the federal OSHA site for more details ([OSHA PPE regulations](#)).



When performing your hazard assessment, avoid limiting eye protection to only those jobs that are production-type tasks. Keep in mind that a high percentage of eye injuries occur on jobs usually not considered to be hazardous. A mechanic might go over to the grinder to do a quick touchup on a cutting tool without wearing safety glasses. Such a short job may not seem hazardous, but it only takes a split second to lose an eye. It does not matter what kind of job it is; if an eye hazard exists, protective devices should be worn.

### **Work Hazards that Cause Eye Injuries**

Many individuals who suffer eye damage cannot tell exactly what caused it. Eye incidents can occur from countless sources, making it difficult to determine when, where and what type of eye protection should be used.

Common sources of eye injuries include:

- Airborne dust
- Compressed air blasts
- Flying sawdust, plaster, concrete, metal fragments, nails, or rivets
- Hazardous dusts and gases
- High-energy laser beams, direct or reflected
- Particles from grinding or scaling
- Radiant energy and welding arcs
- Splashes of acids, alkalis or corrosives
- Oil mist from cutting fluids or poorly maintained machines
- Splashes of molten metal during pouring, casting, furnace operations, soldering or welding
- Wood splinters

In some workplaces, all employees are required to wear eye protection at all times. In others, eye protection might be required only on certain jobs. Regardless of medical advances to treat eye injuries, no one should be allowed to take chances or shortcuts when it comes to eye protection.

Eye injury prevention is based on three fundamentals, in order of preference:

1. Eliminate the hazard by using an alternate process.
2. Install engineering controls to greatly reduce the hazard at its source by installing devices and equipment that contain or provide a protective barrier for the worker (e.g., shields, baffles, hoods, etc.).
3. If the hazard cannot be eliminated or reduced through redesign, combine good operating practices with the use of personal protective equipment such as safety glasses, goggles and/or face shields. Be certain to protect employees and visitors who are passing through or work in adjacent areas.

The best approach to eye protection is through preventive measures that eliminate or control the hazard at the source. Take every step to avoid the need for eye protection. Engineering controls cannot be implemented in all situations, so ask the following questions before relying on eye protection devices:

- Are there alternate methods of performing this task that are less hazardous?
- Can the equipment be rearranged into a safer configuration?
- Would the installation of hoods, shields, partitions, exhaust ventilation, etc., eliminate or lessen the hazards?

### **Supervisor's Role**

- Set a good example by always wearing eye protection as required, and follow all safe work procedures.
- Influence upper management to also wear eye protection when they enter areas where protection is required. There should be no exceptions unless other equally effective controls are in place first.
- Insist and ensure that all protective devices are used.

- Observe work areas and jobs to identify hazards and to ensure eye protection is use when and where required. Document observations and coach those who may be observed not using PPE appropriately.
- Provide suitable personal protective equipment for the face, head, eyes and other parts of the body for every job where uncontrolled hazards exist.
- If possible, let employees select the type of the protective devices that fit well, they like and will agree to wear.
- Provide safety glasses with side shields to minimize the risk of foreign objects entering the eyes.
- Have a qualified individual instruct your workforce in methods to adjust, care for and maintain all personal protective equipment.
- Make sure the jobs involving eye hazards are adequately illuminated. This may be a contributing factor to workplace eye injuries.
- Keep compressed air line pressures as low as possible, especially those used for clearing debris.
- Require employees to report eye injuries and obtain medical care immediately.
- Locate and maintain an adequate number of eyewash stations for immediate flushing of chemicals from the eyes. Identify eyewash locations, keep them accessible, test them on a regular basis and use them only for their intended purpose. Refer to ANSI Z358.1 for more details on common locations, water flow rates and sources, and system maintenance.

### **Eyeglass and Contact Lens Wearers**

Individuals who wear prescription eyewear that do not meet the ANSI Z87.1 standard, should wear eye protection over their glasses or use prescription safety glasses.

Workers who wear contact lenses should use the same type of eye protection as those who do not use corrective lenses. If the contact lens user removes the lenses, prescription safety glasses must be worn.

Any employee who has vision in only one eye should wear eye protection at all times.

### **References**

Lombardi DA, Verma SK, Brennan MJ, Perry MJ, Factors Influencing Worker Use of Personal Protective Eyewear, *Accident; Analysis and Prevention*, 2009 Jul;41(4):755-62.

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