



## EYE PROTECTION

**INTRODUCTION:** Sight is one of your most valuable senses. Every waking second, your eyes transfer about a billion pieces of information to your brain, enabling you to interpret the world around you. We seldom think about protecting our eyes from injury, even when it comes to workplace eye hazards.

***The fact is wearing appropriate protective eyewear and following basic safety rules can prevent the majority of eye injuries.***

### WHAT CONTRIBUTES TO EYE INJURIES AT WORK?

- Not wearing eye protection- a U.S. Labor Department's Bureau of Labor Statistics (BLS) survey found that three out of five workers injured were not wearing eye protection at the time of accident.
- Flying particles, such as wood chips from a saw or metal fragments from grinding, can penetrate or cut the eye.
- Dangerous substances, like solid and liquid caustic chemicals, can burn and scar the eye.
- Contact with objects, like pipes or blunt tools, can cause internal and external damage to the eye.
- Sharp or pointed tools, such as nail guns, awls and screwdrivers, can puncture or scratch the eye.

**SPECIFIC EYE HAZARDS** - Performing certain jobs may require the use of special equipment that can protect your eyes from injury.

### WELDING HAZARDS

- During welding, your eyes can be bombarded with hot sparks and spatter that can permanently scar your eyes.
- If your job involves arc welding, your eyes are exposed to ultraviolet light that can cause a serious injury - welding flash.

## LASER HAZARDS

- When using high-powered lasers, your eyes are exposed to non-ionizing radiation that can severely burn your retina and cornea.
- Certain classes of lasers are so strong that even looking at a reflection of the laser's intense light beam can cause eye injury.

## HOW CAN EYE INJURIES BE PREVENTED?

You can prevent most eye injuries by taking the following steps:

- Follow all posted safety rules and procedures.
- Never take shortcuts when using machinery.
- If your workstation features a transparent safety barrier, such as a static shield, always stay behind it while working.
- Always wear the appropriate safety eyewear whenever you may be exposed to eye hazards.
- When working with chemicals, refer to the Material Safety Data Sheet (MSDS), for information on appropriate safety eyewear, chemical properties and first-aid measures.
- Use machine guards whenever available.

## PROTECTIVE EYEWEAR

All industrial eyeglasses must meet the requirements of the American National Standards Institute (ANSI Z87). Sunglasses are not considered safety eyewear, even if they are impact resistant.

## TYPES OF SAFETY EYEWEAR

- Goggles - fit the face snugly and are effective in sealing the entire eye area and protecting it from hazards like spatter, splash, fumes and vapors.
- Face Shields - provide extra protection for extremely hazardous jobs. However, face shields are not designed to be worn alone. Safety glasses must always be worn with a face shield to ensure full eye protection.
- Chemical goggles - with hooded or indirect ventilation holes protect against chemical splashes and flying particles. To prevent fogging, use specially coated goggles with ventilation holes.
- Safety glasses - shield against frontal impact from hazards like flying particles or dust. Safety glasses with side shields are required if there is a danger of something striking the eye.

## **EYE PROTECTION WORKS**

*It is estimated that 90% of eye injuries can be prevented through the use of proper protective eyewear.*

*That is our goal and, by working together, safety personnel, employers, and workers, can make it happen.*