



---

## Protecting Your Eyes from Injury

The typical eye injuries occur by rubbed or abraded foreign matter, such as metal chips, dirt particles, and splinters, or by striking the eye; surface wounds, such as abrasions, scratches, and foreign bodies (splinters and chips) are among the most common types of injuries to the eyes. Other hazards include, but are not limited to, chemicals, adhesives, radiation, tools, and equipment. The highest categories contributing to eye injuries are related to household, workplace and sports.

### On-the-job eye protection

You may be exposed to several hazards at the same time. The right equipment can protect your eyes against irritation and injury. Ask your supervisor or industrial hygienist to help you select the right eye protection.

If you need prescription eyeglasses, make sure your goggles or spectacles have prescription eyeglass lenses or wear extra protection over your prescription eyeglasses. Contact lenses don't provide protection from on-the-job eye hazards. If you wear contact lenses, be extra cautious around gases, vapors, fumes, and dust. Possible reaction can occur. Wear eye protection equipment in addition to contact lenses. Follow the specific management policies on contact lenses in your workplace.

- **Spectacles** -- Semi/flat-folded sideshields. Provide primary protection against impact and optical radiation. Sideshield spectacles are recommended.
- **Goggles** -- There are many different kinds of goggles that can vary in appearance and protection.
  - Flexible fitting, regular ventilation. Cushion the face, protect eyes at sides, top, and bottom.
  - Flexible fitting, hooded ventilation. Protect against impact, sparks, chemical splashes, and dust.
  - Cushioned fit, rigid body. Protect against impact, sparks, chemical splashes, irritating mists, and dust.
  - Welding goggles, eyecup type, filter lenses. Ideal for protection from glare, sparks, and welding flash.
  - Chipping goggles, eyecup type, clear safety lenses. Protect against hot sparks and nuisance dust.
- **Face Shield** -- Plastic or mesh window. Designed to protect the whole face; must be supplemented with safety glasses.

- **Welding Helmet** -- Stationary window or lift-front window. Protection from welding, soldering, and brazing. Must be supplemented with safety glasses.

### **Off-the-job eye protection**

Four out of ten accidents that cause blindness happen at home. Off-the-job eye injuries happen because of:

- Do-it-yourself work on cars and homes.
- Cooking accidents.
- Chemical splashes from pesticides, fertilizers, drain cleaners, and cleaning sprays.
- Sports injuries while playing tennis, racquetball, baseball, etc.
- Yard work – cutting grass, trimming trees/bushes, and using a weed wacker.

### **Wear the right protection for the job you are doing**

- Choose sunglasses that offer protection from the sun's ultraviolet rays.
- Wear eye protection while doing repair jobs and working with chemicals at home.
- Wear eye protection when playing ball sports.
- Wear eye protection over contact lenses and prescription eyeglasses.

### **What to do in case of an emergency**

#### **Chemical Splash**

- Don't squeeze eyes shut. Hold them open with thumb and index finger.
- Flood eyes with cool, clean water for 15-20 minutes.
- Get medical help as soon as possible. If you can, have the chemical container and its label available for evaluation.
- Don't use another chemical to neutralize the spilled chemical.

#### **Flying Particles**

- Don't try to remove anything embedded in the eye. You could cause further damage.
- Don't pull or squeeze the eye.
- Cover both eyes to prevent movement.
- Get medical help as soon as possible.

#### **Radiation Injuries, Burns**

- If the eyes are exposed to intense heat, flames, lasers or arc welding radiation, apply ice packs to relieve the pain.
- Get medical attention as soon as possible.

### **Blows to the Eyes**

- Apply ice packs to control swelling and relieve the pain.
- Cover both eyes to prevent movement.
- Get medical attention as soon as possible.

### **Eyestrain**

- Glare, poor lighting and long periods spent at video display terminals (VDT) can cause eye fatigue, soreness, and headaches.
- Improve the job-site lighting.
- Give eyes adequate rest.