

Appendix C Eye Protection

Summary: Find out how to protect your eyes from on-the-job injury.

Safety glasses and other forms of eye protection can save your eyesight in the event of an accident. According to a survey by the Bureau of Labor and Statistics, three out of five workers who suffered eye injury on the job were not wearing eye protection.

The glasses pictured at right illustrate the benefits of protective eyewear. A researcher was wearing them when a severe chemical reaction caused a flask to explode, spraying glass shards through the lab. The glasses took the brunt of the impact, sparing his eyes.



The primary causes of eye injuries are flying particles and contact with chemicals. Employees most likely to encounter such hazards include:

- Laboratory researchers
- Mechanics and shop workers
- Carpenters
- Plumbers
- Groundskeepers
- Custodial workers

To be effective, eyewear must be appropriate for the work. Different types of eyewear guard against different types of hazards, including impact, splash, and various forms of radiation. Choose from the following kinds of eyewear according to the hazards in your workplace:

- **Safety glasses with side shields** have glass, plastic, or polycarbonate lenses that are stronger than regular glasses and designed to resist impact. The side shields guard against flying particles and sparks that may go around or under regular glasses.
- **Splash goggles** completely surround the eyes and seal to the face. They are recommended for work with large volumes of chemicals or machinery that creates a cloud of dust or particles. Goggles are often vented, which prevents fogged lenses.
- **Face shields** cover the entire face and should be used in extremely hazardous situations (including exposure to UV-B or UV-C ultraviolet light). Shields may feature plastic windows, glass inserts, or wire screens to provide different kinds of protection.
- **Welding helmets** shield the eyes and face from optical radiation and impact.
- **Laser-protective eyewear** is often required when aligning or using lasers. Each type should be clearly labeled with the optical density value and wavelength range.
- **Special-purpose lenses** protect wearers who perform visual tasks that require unusual filtering of light.

Proper maintenance and fit are essential, no matter what kind of eyewear your work requires. Poorly fitting eyewear does not provide adequate protection. Scratched and dirty lenses reduce vision, cause glare, and may contribute to accidents.