Eye Protection

Mindfulness Minute: Incorporate safety into your workflow by considering the equipment you use to protect yourself from hazards.

Personal protective equipment (PPE) is the last line of defense between you and a hazard. Eye protection can protect the wearer against chemical and biological agents, dust or mist, vapors, splashes of liquids, flying objects, impact or explosions, light radiation, or lasers. Conduct a risk assessment before selecting the appropriate eye protection for your general lab use or for a specific procedure or agent. Conducting a risk assessment can also help you determine steps that can be taken to mitigate the risk of a hazard before relying on PPE. There are many different types of eye and face protection, and it is important that you use the right one for each situation. Different types of eye protection are not always interchangeable, and your eyes may not be protected by face protection alone.

Safety glasses, goggles, prescription eyeglasses, and face shields are **not** interchangeable! Prescription eyeglasses are not PPE!

Safety glasses are designed to protect against moderate impact and flying objects. They are required to have side shields and shatterproof lenses. Safety glasses do **not** protect against splashes, vapors, airborne particles, or all impacts. They can also become dislodged easily. Don't use metal framed safety glasses during electrical work.

Protection from splashes provided by regular glasses, safety glasses, goggles, and face shields.

Goggles are tight-fitting eye protection that shield the eyes and area around the eyes. Some goggles can fit over prescription glasses. Take the time to find a pair of goggles that fits comfortably with your prescription glasses while maintaining a good seal. There are two kinds of goggles: impact and splash proof. Impact goggles provide more protection against flying objects than safety glasses, but, like safety glasses, do not protect against splashes, vapors, or airborne particles. Splash goggles protect against liquid splashes, dust, mist, vapors, or airborne particles. Close the vents on splash goggles to completely protect the eyes from splashes and vapors. Goggles can fog up, so be prepared for fogging, and have a plan in place to allow for safe venting or airing out of the goggles if necessary.

Impact vs. Splash-Proof

Laser safety glasses/goggles protect against the intense light produced by lasers. Laser safety glasses/goggles are not interchangeable for one another, as they are often made to protect only against specific wavelengths of laser light. Contact EHS-Radiation Safety for more information about lasers.

Face shields can be worn over primary eye protection to offer additional protection to the face from hazards like flying particles, splash, and UV radiation. When welding, wear specific welding face shields or helmets to protect against intense light and flying sparks. Remember that face shields are **not** a substitute for eye protection.

Take care of your eye protection! Clean and disinfect communal eye protection after each use. Store eye protection where it will not become contaminated, dirty, or damaged/scratched.

Eye protection that is dirty, scratched, or damaged should be cleaned, repaired, or replaced. Equipment in this condition may not work as intended, and people are unlikely to use eye protection in poor condition.