

Eye and Face Protection

General Information:

Protecting the eyes and face from hazards is extremely important considering all the organs and soft tissue in the area. For example, a projectile to the eye not only damages the eye, but potentially the ligaments and muscles that move it, and in some cases the brain. Furthermore, lacerations to the face can damage muscle tissue and leave life-long scars.

Always make sure PPE is properly rated for the job, fits properly, and doesn't obstruct your view. Safety glasses/goggles need to have the ANSI Z87.1 rating stamped on them to be approved for use in shops and laboratories on campus.

- Causes of Eye and Face Injuries:
- Splashes from harmful liquid chemicals such as acids or cleaning solutions
- Flying debris, chips, and dust from grinding and windy conditions
- Flying projectiles from objects colliding, falling, or being dumped
- Loose straps, cords or banding that breaks or snaps under extreme tension

Extreme heat and light radiation from exposure to flames, welding, or torches

Types of Personal Protective Equipment:

- **Safety Goggles:** Enclose the area around the eyes to provide the highest protection against airborne particles, flying projectiles and splash hazards.



Directly vented –
Protect against flying particulates,
but NOT chemical hazards



Indirectly vented/Non-vented –
Protect against flying particulates
and chemical splash hazards

- **Safety Glasses with Side Shields:** Provide protection against airborne particles and flying projectiles. Safety glasses are made of impact resistant material, and many are available with UV protection &/or tinted lenses. Safety glasses are appropriate when working with chemicals that do not pose a splash risk and are not strong corrosives.



- **Prescription Safety Glasses:** Standard prescription glasses are not made to protect you from eye hazards. To be protected, wear safety glasses that fit over top of your prescription (below left) or have Prescription Safety Glasses made for you (below right).



- **Weld Masks, Dark Shields, and Torch Glasses:** protect the eyes and face from flying sparks, flash burns, and the intense light that occur during welding, torching and brazing operations. It is important to match the type and tint of the shade to the welding performed.



- **Face Shields:** protect the face from grinding debris, flying projectiles, radiant heat, and chemical splashes. Face shields should be used in conjunction with eye protection to be fully protected.



Discussion Topics:

- What causes eye and face hazards in your work area?
- What behaviors cause a person not to wear required PPE?
- How do you get eye and face protection?
- When is eye and face protection required?