

PPE SELECTION CONSIDERATIONS

Respiratory Protection is needed

When there is:

Use and exposure to toxic materials, which are not used in an exhausted enclosure.

Breaking of a toxic or corrosive gas connection (regardless of local exhaust ventilation).

Need for SCBA use in emergency response.

Contact EHSC to determine if respiratory protection is needed, the proper type of respiratory protection, and to arrange for medical exams and training (all required by OSHA law)

Hearing Protection is needed

When there is:

A high noise level in employee work areas.

A need to raise your voice at distances of six feet and less.

A high noise level in areas, which may be entered by employees only occasionally.

Providing hearing protection to employees is not sufficient. Training and audiograms are also required. Contact EHSC at 515-6862 to determine noise levels and the need for corrective actions.

Body Protection is needed

When there is:

Potential for splash.

Potential for fire.

Potential for toxic dust contamination (i. e. pesticides).

Use "Tyvek" or equivalent (don't take contaminated clothing home)

Incidental handling of chemicals in the facility.

Hot sparks.

Changing of containers of pyrophoric liquids/gases.

Full faceshield, Nomex gloves & lab coat

Pouring hazardous liquids from greater than one-pint containers in fume hoods.

Pouring high hazard liquids any quantity. (Class 4 hazard due to skin absorption e. g. Phenol, HF)

Chemical apron sleeves

Pouring or mixing pesticides.

Chemical apron sleeves (Read pesticide Label)

Face Protection is needed

When there is:

Potential for explosion/implosion.

Potential for corrosive chemical splash

Potential for flash fire.

Consult attached Eye & Face Protection Literature.

Eye Protection is needed

When there is:

Intense heat

Impact

Consult attached Eye & Face Protection Literature.

Chemicals

Consult attached Eye & Face Protection Literature. When reactions have the potential for explosion, lower the fume hood sash and wear a full face shield with neck protection.

Intense light

Laser

Use appropriate laser goggles.

Keep spare goggles for visitors.

Cover hands/arms when making beam adjustments (light gloves and long sleeves) when using UV lasers.

Welding, Burning and Brazing

Consult attached Eye & Face Protection Literature.

Visible

Use polycarbonate safety glasses. (May need tinting)

Ultraviolet

Use polycarbonate safety glasses or full face protection.

Infrared

Use polycarbonate safety glasses. Reassess for heat applications.

Maintenance work, stored energy, steam, pressurized chemical lines

Use safety glasses, faceshields and follow proper procedures.

Electrical Repairs (follow procedures)

Replacing fuses.

Hot Repairs

Use safety glasses or faceshields.

Hand Protection is needed

When there is:

Abrasion

Puncture

High Temperature

Low Temperature

Electrical

Use appropriate PPE for high voltage maintenance according to your electrical safety training.

Chemical

Choose the appropriate number from the matrix below for your hazard-frequency condition. The corresponding recommendations to the matrix numbers are listed below the chart.

	Frequency		
	None	Periodic	Routine
Uses with low hazard chemicals / Class 1	A	A	B
Uses with moderate hazard chemicals / Class 2	B	B	C
Uses with high hazard chemicals / Class 3 or 4	C	C	D

- A. Use glove, which provides dexterity (choice of material is not important).
- B. Use glove, which provides dexterity needed (consider permeation and degradation rating of glove against chemical). Gloves rated F fair are minimally acceptable.
- C. Use glove protection against chemical as primary consideration. Gloves which are rated as G (good) for 8 hours are minimally acceptable.
- D. Use glove protection against chemical as primary consideration. Gloves which are rated as E (excellent) for 8 hours are minimally acceptable. Seek methods to reduce chemical contact time with glove.

Never immerse gloves in chemical baths - Gloves should be used to provide splash protection only to the greatest extent possible.