



Personal Protection Equipment (PPE)



PPE is the last line of defense from potential exposures and is highly dependent on the user to properly assess, don, and maintain. This document is intended to provide information to assist with the fitting, determining when PPE is necessary, what PPE is appropriate, and when to replace.

PPE Requirements

Required PPE to enter a lab: Long pants (or equivalent) and closed toed shoes

Required PPE to handle hazardous materials: Eye protection, lab coat, and gloves

Eye protection

Should fit properly over the eyes or prescription glasses, be comfortable, and not restrict vision or movement

Safety glasses: protect from small splashes and impact, minimum required when working with hazardous materials

Safety goggles: more protection from splashes and can be used for impact hazards.

Face shield: protects whole face from splashes and UV light, should be worn with safety glasses or goggles for impact hazards

Decontaminate immediately upon exposure and replace if vision is impaired.



Body Protection

Should fit properly to be comfortable when fully buttoned and sleeves should not allow for any bare skin between the end of the sleeve and any gloves without rolling the sleeve.

Barrier Lab Coats/ Gowns: protects against bloodborne pathogens and other infectious agents

Poly Blend Lab Coats: protects against lab scale of common reagents and small amounts of flammables

Fire Resistant Lab Coats: protects against lab scale use of flammables, when working with open flames, and small quantities of pyrophorics

Splash Apron: protects against splashes when handling larger volumes or extremely hazardous chemicals (hydrofluoric acid, t-butyl lithium, piranha solution).

Full body protection/ Chemical Suit (e.g. Tyvek®): typically worn for chemical or biological spill response, contact Office of Research Safety if you believe your work requires chemical suits.

Launder with a department approved vendor or dispose as hazardous waste if contaminated. Replace if significantly worn (holes, buttons missing, etc.) or contaminated.



Hand Protection

Should fit properly to be comfortable and allow for appropriate dexterity

Latex Gloves: protect against aqueous solutions, bloodborne pathogens and other infectious agents.

Does not work well with many chemicals like organic solvents

Nitrile Gloves: protects against many common chemicals and biohazards. Does not work with chlorinated or aromatic solvents.

Chemical Resistant Gloves: examples include neoprene, butyl rubber, PVC, and laminate film.

Cryogen Gloves: protects against frostbite from the extreme cold of cryogenics

Heat Resistant Gloves: protects against burns from hot objects

Disposable gloves should be disposed immediately after contamination or if any tears and holes are suspected. Reusable gloves should be decontaminated if exposed and replaced if holes develop..



For more information on chemical compatibility for gloves contact the glove manufacturer or see below:

http://www.ansellpro.com/download/Ansell_8thEditionChemicalResistanceGuide.pdf

<http://www.kcproductselector.com/gloves.aspx>

<http://www.mapa-pro.com/>

Information provided by the Office of Research Safety. For questions please e-mail researchsafety@uchicago.edu