



PPE Selection Guide by Task or Activity

	If your task/activity involves:	Use the following PPE:
Chemicals	solids of low or moderate toxicity	o Disposable gloves
	minimal amounts of liquids (less than 0.1 liters) with acute or chronic toxicity	o Safety glasses or goggles o Appropriate chemical-resistant gloves o Clothing covering to knees
	more than minimal amounts of liquids with acute or chronic toxicity (pure chemicals, mixtures or solutions)	o Safety glasses or goggles o Appropriate chemical-resistant gloves o Lab coat o Acid-resistant apron if more than 4 liters of highly corrosive chemicals used o Consider flame-resistant, e.g., Nomex, lab coat if more than 4 liters of flammable liquids used
	cryogenic liquids	o Safety glasses or goggles o Face shield required if handling cryovials stored in liquid phase o Insulated cryogenic gloves o Lab coat recommended
	potentially-explosive compounds	o Safety goggles o Face shield o Heavyweight gloves o Nomex or equivalent fire-resistant lab coat
	pyrophoric (air-reactive) solids or liquids	o Safety glasses or goggles o Face shield recommended o Nomex or equivalent fire-resistant gloves o Appropriate chemical resistant gloves o Nomex or equivalent fire-resistant lab coat
	particularly hazardous substances including carcinogens, reproductive toxins, and reagents of high acute toxicity	o Safety glasses or goggles o Appropriate chemical resistant gloves o Lab coat o Respirators as needed
Biological Materials	BL1 microorganisms or viruses	o Disposable gloves
	BL2 microorganisms, viruses, viral vectors, human materials or Old World primate materials	o Disposable gloves o Lab coat
	procedures outside of the Biosafety Cabinet without splatter guard when splashes or sprays are anticipated	o Safety glasses or goggles o Disposable gloves o Lab coat
Radiation	unsealed radioactive materials or waste	o Safety glasses if there is a splash potential or if 10 milliCuries or more of 32P is used o Nitrile or other appropriate gloves o Lab coat
	Class 3B or 4 laser	o Appropriate eye protection
	o and if UV laser	o Gloves o Lab coat
	laser(s) modified by optics	o Appropriate eye protection
	open ultraviolet light source	o Safety glasses or goggles with UV protection
	o and if face enters UV beam	o UV face shield
	o and if hand enters UV beam o and if body enters UV beam	o Gloves o Lab coat
Other Hazards	infrared-emitting equipment	o Appropriately-shaded goggles o Lab coat
	handling hot surfaces and objects such as autoclaved materials and heated glassware	o Heat-resistant gloves o Lab coat
	glassware under pressure or vacuum	o Safety glasses or goggles o Face shield recommended o Lab coat
	cutting and connecting glass tubing	o Safety glasses or goggles o Cut-resistant gloves
	sonicator or other loud equipment	o Ear plugs or ear muffs

Closed-toed shoes that cover the entire foot should be worn when working in a laboratory.

More guidance available [online](#).