


















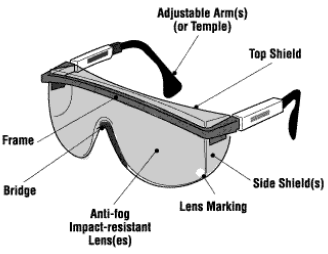











This document is to be used as a supplement to the UIC Laboratory Hazard Assessment Tool in the selection of appropriate PPE. PPE application should be based on a risk assessment, which includes evaluation of the hazard and the procedures used, in consultation with the supervisor and the Environmental Health and Safety Office (EHSO).

Applicable PPE	Specific type (example)	Characteristics	Applications
Light latex, vinyl or nitrile gloves	Disposable latex gloves 	Powdered or un-powdered	Working with biological hazards (known or potentially known infectious materials including work with animals)
	Disposable nitrile gloves 	Puncture, abrasion resistant, protection from splash hazards	Working with biological hazards and chemical splash hazards
	Disposable vinyl gloves 	Economical, durable, similar to latex	Working with biological hazards
Light chemical resistant gloves	Natural rubber latex 	Chemical resistant, liquid-proof	Working with small volumes of corrosive liquids, organic solvents, flammable organic compounds
Light to heavy chemical resistant gloves	Nitrile gloves 	Chemical resistant, good puncture, cut, and abrasion resistance	Apparatus under pressure, air or water reactive chemicals
Heavy chemical resistant gloves	Butyl gloves 	High permeation resistance to most chemicals	Large volumes of organic solvents, small to large volumes of dangerous solvents, acutely toxic or hazardous materials
	Viton® II gloves 	High permeation resistance to most chemicals	Same as butyl gloves, plus hazardous material spills

Applicable PPE	Specific type (example)	Characteristics	Applications
Heavy chemical resistant gloves (cont.)	Butyl/Silver Shield gloves and apron 	Extra chemical and mechanical protection	Same as butyl and Viton II gloves, added mechanical protection, hazardous material spills
	Terrycloth autoclave gloves 	Heat resistant	Working with hot liquids and equipment, open flames, water bath, oil bath
Insulated gloves	Cryogen gloves 	Water resistant or water proof, protection against ultra-cold temperatures	Cryogenic liquids handling
	Wire mesh gloves 	Cut resistant	Working with live animals
Chemical resistant apron	Rubber-coated wash apron 	Chemical splash protection, good abrasion resistance	Working with apparatus under pressure, air or water reactive chemicals, large volumes of corrosive liquids
	Neoprene apron and sleeves 	Chemical resistant, tear resistant; splash protection	Water or air reactive chemicals, large volumes of corrosive liquids, small to large volumes of acutely toxic corrosives

Applicable PPE	Specific type (example)	Characteristics	Applications
Lab Coats	Knee length lab coats 	Protects skin and clothing from dirt, inks, non-hazardous chemicals, biohazards without aerosol exposure	General use; Chemical, Biological, Radiation, and Physical Hazards
	Flame resistant lab coat 	Flame resistant (e.g. Nomex or flame-resistant cotton)	Working with water or air reactive chemicals, large volumes of organic solvents, potentially explosive chemicals
Gowns	Disposable gowns 	Clothing and skin protection	Working with biohazards
	Tyvek gowns 	High tear resistance, protection from particulates	Working with biohazards with potential for exposure to airborne transmissible disease
Cap	Bouffant caps 	Economical protection for hygienic work environments; protection from dirt, dust	Working with biohazards, especially in animal facilities
Shoe Cover	Disposable shoe covers 	Protection from dirt, dust; maintenance of hygienic work environments. Adjustable fit, non-skid soles	Working with biohazards, especially in animal facilities

Applicable PPE	Specific type (example)	Characteristics	Applications
Safety glasses		Polycarbonate lens, side shields for eye protection; meets ANSI and OSHA specifications	Working with chemical, biological, radiation, physical hazards; laboratory work
Goggles	<p>Tight fitting goggles</p> 	Tight fitting, protects eyes from impact, spray, paint, chemicals, flying chips, dust particles; polycarbonate lens, indirect ventilation, meets ANSI and OSHA specifications	Working with large volumes of corrosive liquids, small to large volumes of acutely toxic corrosives; working with large volumes of organic solvents, acutely toxic or hazardous chemicals, apparatus under pressure, air or water reactive chemicals
	<p>Laser Goggles</p> 	Appropriately shaded goggles; optical density based on beam parameters	Working with Class 3 or Class 4 lasers
Face shield		Chemical resistant face shield	For use with mild acids, caustics, aromatic hydrocarbons, methylene chloride; splash hazard; air or water reactive or potentially explosive chemicals
Safety shield		Acrylic, weighted shield, three sided, benchtop shield, frosted edges	Protects from chemical splash, beta radiation, exposure to bloodborne pathogens

Applicable PPE	Specific type (example)	Characteristics	Applications
Respirators	<p style="text-align: center;">Surgical masks</p> 	Used for bacterial filtration	Working with live animals; working with infectious material with potential aerosol exposure
	<p style="text-align: center;">N-95</p> 	Protects against dusts, fumes, mists, microorganisms	Working with live animals or infectious materials with known airborne transmissible disease; dusty environments
	<p style="text-align: center;">Half face</p> 	Air purifying respirator protects against variety of particulates, vapors, dust, mists, fumes; depends on filter cartridge used	Working with live animals or infectious materials with known airborne transmissible disease; dusty environments; chemical vapors; particulates
	<p style="text-align: center;">Full face</p> 	Same as half- face, but with greater protection factor, and greater protection of eyes and face; depends on filter cartridge used	Working with live animals or infectious materials with known airborne transmissible disease; dusty environments; chemical vapors; particulates
	<p style="text-align: center;">PAPR</p> 	Air supplying respirator; delivers steady supply of filtered air with loose fitting hoods	Working in BSL – 3 environments; working in dusty environments; chemical vapors, particulates; used when full- face or half –face respirator doesn't fit individual