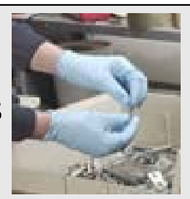
Hand Protection

Gloves should be selected for each procedure to provide protection from the hazards. In some circumstances there may be several hazards and glove selection may involve different gloves for different steps of the procedure and/or several layers of gloves may be needed to address all hazards. For example, when injecting radioactive materials into a research animal one may need a layer of disposable gloves for protection from the radioactive liquid augmented with a metal mesh glove for protection from animal bites.

PPE	Specific Type	Characteristics	Applications
Disposable Gloves	Disposable latex gloves 	Powdered or un-powdered; some chemical resistance-consult glove resistance chart; incidental chemical contact only	Working with biological hazards (known or potentially infectious materials including work with animals)
	Disposable vinyl gloves 	Economical and thin	Working with biological hazards, NOT for chemical handling
	Disposable nitrile gloves 	Some chemical resistance-consult glove resistance chart; incidental chemical contact only	Working with biological hazards and chemical hazards of small quantity
Leather Gloves		Protect and comfort hands from moderate temperatures, sharp objects, damage by friction	Handling sharp objects and metal, field work, welding
Wire Mesh Gloves		Cut resistant	Working with sharp instruments or live animals

Hand Protection

PPE	Specific Type	Characteristics	Applications
Chemical Resistant Gloves	Natural rubber latex 	Good resistance to biological or water-based materials, poor organic solvent resistance – consult glove resistance chart	Working with small volumes of aqueous-based low hazard chemicals
	Nitrile gloves 	Chemical resistant for incidental contact – consult glove resistance chart	Working with larger volumes of chemicals
	Butyl gloves 	Generally good chemical resistance to many chemicals – consult glove resistance chart	Working with larger volumes of chemicals, hazardous material spills
	Viton II gloves 	Generally good chemical resistance to many chemicals – consult glove resistance chart	Working with larger volumes of chemicals, hazardous material spills
	Silver shield gloves 	Generally good chemical resistance to many chemicals – consult glove resistance chart, may need overglove for manual dexterity	Working with larger volumes of chemicals, hazardous material spills, good resistance to methylene chloride (dichloromethane)

Hand Protection

PPE	Specific Type	Characteristics	Applications
Insulated Gloves	Terrycloth autoclave gloves 	Heat resistant	Working with hot equipment
	Nomex flight gloves 	Heat resistant, possible overglove choice	Some pyrophorics handling, worn as overglove
	Cryogen gloves 	Water resistant protection against ultra-cold temperatures	Cryogenics handling
Electrical Safety Gloves		Insulated voltage-rated rubber, gauntlet length, leather gloves worn over	Electrical safety applications with higher hazard/risk or unknown