

9.0 CHAPTER 9 – PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE) is used to protect personnel from contact with biohazardous materials. Appropriate clothing may also protect the experiment from contamination. PPE must be provided without cost to personnel. The following PPE is recommended for regular use.

9.1 Laboratory

9.1.1 Face Protection

Goggles or safety glasses with solid side shields in combination with masks or chin-length face shields, or other splatter guards, are required for anticipated splashes, sprays or splatters of biohazardous materials. EH&S recommends the use of safety glasses at all times in the laboratory. Application or removal of contact lenses is not permitted in the laboratory setting where hazards may be present.

9.1.2 Clothing

Laboratory clothing includes: laboratory coats, smocks, and gowns. Long-sleeved garments should be used to minimize the contamination of skin or street clothes. In circumstances where it is anticipated that splashes may occur, the garment must be resistant to liquid penetration to protect clothing from contamination. If the garment is not disposable, it must be capable of withstanding sterilization in the event it becomes contaminated. Additional criteria for selecting clothing are: comfort, appearance, closure types and location, antistatic properties and durability. Protective clothing must be removed and left in the laboratory before leaving for non-laboratory areas. Disposables should be available for visitors and maintenance and service workers in the event they are required. All protective clothing should be either discarded in the laboratory or laundered by the facility. Personnel must not launder laboratory clothing at home.

9.2.3 Gloves

Gloves must be selected based on the hazards involved and the activity to be conducted. Gloves must be worn when working with biohazards, toxics and other physically hazardous agents. Temperature resistant gloves must be worn when handling hot material (i.e. working with autoclaves), liquid nitrogen or dry ice. Delicate work requiring a high degree of precision dictates the use of thin walled gloves. Protection from contact with toxic or corrosive chemicals may also be required.

When working with hazardous materials, the lower sleeve and the cuff of the laboratory garment should be overlapped by the glove. A long sleeved glove or disposable arm-shield may be worn for further protection of the garment.

In some instances double gloving may be appropriate. If a spill occurs, hands will be protected after the contaminated outer gloves are removed. Gloves must be disposed of when contaminated, removed when work with biohazardous materials is completed and not worn outside the laboratory. Disposable gloves must not be washed or reused.

9.1.4 Respirators

In certain instances, additional respiratory protection may be required. Respirator selection is based on the hazard and the protection factor required. Respirators, including N-95 filtering facepieces must be carefully fitted to the individual and fit tested before confidence can be had in the respirator providing protection. Personnel who require respiratory protection must contact EH&S for assistance in selection of equipment, training in proper usage and enrollment in the UCSB Respiratory Protection Program.

WHICH MASK SHOULD I USE?

SURGICAL MASK



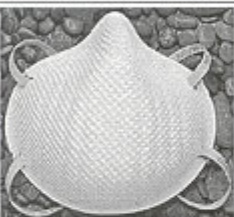
Appropriate for use:

- To protect animals from humans
- To protect a patient from droplets from personnel
- For use during surgery

Inappropriate for use:

- To protect personnel from infectious or hazardous agents

N95 RESPIRATOR: Must be cleared by EH&S*



Appropriate for use:

- To protect personnel from most infectious agents
- To protect personnel from animal allergens

Inappropriate for use with:

- Hazardous Chemicals
- Volatile organics such as formaldehyde or carcinogens

CARTRIDGE RESPIRATOR: Must be cleared by EH&S*



Appropriate for use:

- To protect against chemical exposures
- Volatile organics such as formaldehyde or carcinogens
- To protect personnel from most infectious agents
- Will be provided if necessary, after a risk assessment from EH&S

*For N-95 or cartridge respirator use, personnel must have clearance for respiratory protection including:

- Medical Evaluation Form
- Fit testing
- Training

If you have questions regarding the following please contact:

Allergens or Medical Health History: 824-8024

Infectious agents: 824-9888

Respiratory Protection: 824-4817

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