

UF Chemical Hygiene Plan

Personal Protective Equipment

General

This section addresses eye, face, head, hand and foot protection. Separate programs exist for respiratory and hearing protection.

Employees will be provided personal protective equipment (PPE) and will use them whenever doing so will reduce the likelihood of an injury and/or illness. PPE is not a substitute for engineering or administrative controls, or good work practices, but should be used in conjunction with these controls.

Responsibilities

PIs have the primary responsibility for implementation of the PPE Program in their work area. This includes:

- Conducting a hazard assessment in their work area.
- Determining what type of PPE is required.
- Ordering the necessary equipment.
- Ensuring the employees are trained on the proper use, care and cleaning of PPE.
- Ensuring the employees are wearing the PPE.
- Seeking assistance from EH&S to evaluate hazards.
- Maintaining records on hazard assessments.
- Replacing defective or damaged equipment immediately.

Employees have the primary responsibility for wearing and cleaning the assigned PPE in accordance with the training received.

Departments have the primary responsibility for purchasing PPE for employees.

Environmental Health and Safety (EH&S) has the primary responsibility for the development, implementation and administration of the PPE Program. This includes:

- Assisting in conducting hazard assessments.
- Providing training and technical assistance to supervisors on the proper use, care, and cleaning of approved PPE.
- Providing guidance to the supervisor for the selection and purchase of approved PPE.

Hazard Assessment and PPE Selection

PIs will conduct a walk-through survey of each work area to identify potential hazards. Each survey will be documented using the Hazard Assessment Form (Appendix E-Section 1). A guideline for filling out the assessment follows the actual form. The hazard assessment should be dated and signed as the written certification and maintained for inspection and training with the department. Additional assistance may be obtained by calling EH&S at 2-1591.

Protective Devices

All PPE will be appropriate for the work to be performed and maintained in a clean condition. Equipment must meet American National Standards Institute (ANSI) standards. Gloves must be selected based on style, size and performance characteristics of the glove in relation to the hazards encountered.

Training

Employees who wear PPE shall be trained in the following:

- Which PPE is necessary
- When PPE is necessary
- How to properly adjust and wear their PPE
- The limitations of the PPE
- The proper care, decontamination and maintenance of PPE
- The proper disposal of the PPE

Training will be provided prior to the employee working in an area requiring the use of PPE. Additional training is needed when:

- Changes in the employee's job duties require different PPE.
- Changes in the style or type of PPE used renders the previous training obsolete.
- An event has occurred which indicates the affected employee has not retained the training on the proper use of the PPE.
- The employee is observed incorrectly using the assigned PPE.

A training certificate will be kept for each employee. The certificate will contain the name of the employee trained, date of training and identify the PPE covered in the training. Appendix E (Section 2) contains a certification form. These certificates should be kept in the employee's training file.

Eye and Face Protection

Employees must use appropriate eye or face protection when exposed to hazards from flying particles, liquid chemicals, acids or caustics, chemical gases or vapors, or injurious light radiation. Eyewear shall comply with ANSI Z87.1 as indicated by labels on the PPE. When there is a hazard from flying objects, side protectors meeting ANSI standards must be used. Those employees wearing prescription glasses need to wear approved safety glasses that incorporate the prescription into the glasses or wear goggles over the prescription glasses.

Visitors, contractors, or others passing through an identified eye hazard area need to wear appropriate eyewear also. An ample supply of visitor safety glasses should be available for use.

Occupational Foot Protection

Employees working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole shall wear protective footwear. All safety footwear shall comply with ANSI Z41-1991.

Head Protection

All employees must wear a hard hat when there is a danger from impact and/or penetration from falling objects in any work location. Where there is a possibility of hitting the head on protruding objects or pipes, a bump hat may be worn

Hand Protection

Employees must use appropriate hand protection when exposed to hazards from skin absorption of harmful substances, severe cuts or lacerations, abrasions, punctures, chemical burns, or temperature extremes. A careful evaluation of the hazard must be made due to the enormous variety of gloves on the market. Glove selection will be based on performance characteristics of the gloves, conditions, duration of use, and hazards present. One type of glove will not work in all situations. No glove will protect the wearer from all hazards. Even if a glove will protect the wearer, it will not last forever and must be changed regularly, as chemicals eventually permeate all glove materials.

In selecting gloves for use against chemicals, the exact chemicals encountered need to be determined. Labels and MSDSs can provide this information. Recommended glove types are often listed in the section for PPE on the MSDS. A manufacturer's glove selection guide or compatibility chart must be consulted when selecting gloves. EH&S can assist in determining the specific type of glove material that should be worn for particular chemicals. Links to glove compatibility charts can be found at <http://www.ehs.ufl.edu/Lab/CHP/gloves.htm>

Latex gloves should be avoided due to the possibility of latex allergies. Studies have revealed that 8 to 12 percent of health-care workers regularly exposed to latex are sensitized. The National Institute for Occupational Safety and Health (NIOSH) recommends the selection of products that reduce the risk of allergic reactions. For general laboratory use, disposable nitrile gloves are an excellent latex substitute. In addition to reducing the risk of sensitization, nitrile gloves offer superior chemical resistance over latex to many chemical substances.

Once gloves are removed, hands should be washed thoroughly. Gloves should not be worn out of the lab or when shared lab equipment is handled.

Additional PPE

Guidelines for the selection and use of respirators and hearing protectors are available from those specific UF policies. Cool vests and cooling scarves may be indicated for those jobs in hot environments. This includes outdoor jobs in the summer such as grounds and agricultural positions.

Cleaning and Maintenance

It is the employee's responsibility to ensure their PPE is clean and properly maintained. Cleaning is particularly important for eye and face protection where dirty or fogged lenses could impair vision. PPE should be inspected, cleaned and maintained at regular intervals as instructed by the supervisor.

It is also important to ensure that contaminated PPE, which cannot be decontaminated, is disposed of in a manner that protects employees from exposure to hazards.

Appendix E (Section 1) of the UF Chemical Hygiene Plan
PPE Certification of Hazard Assessment

Dept:	Area:	Job Classification/Task:
HAZARDS (Circle Hazards)	Describe Specific Hazards	Identify Type of PPE Required for the Hazards
Eye Hazard Impact Penetration Dust Chemical Radiation Heat Bioaerosols Projectiles		
Head Hazard Burn Electric Shock Impact Penetration Chemical Overhead loads Overhead beams	Describe Specific Hazards	PPE Required
Foot Hazard Chemical Impact Electrical Sharp Objects (puncture risk) Wet Conditions Construction	Describe Specific Hazards	PPE Required
Hand Hazard Burn Electric Shock Impact Penetration Chemical Sharp Edges Biological Agents	Describe Specific Hazards	PPE Required
Other Safety/Health Hazards	Describe Specific Hazards	
Falls Guarding Heat Electrical Storage Lockout Noise Respiratory Clothing		

I, _____, conducted the above evaluation of the identified work area on _____

Printed Name

Date

Signature

Appendix E (Section 2) of the UF Chemical Hygiene Plan
Personal Protective Equipment Training Certification

_____, has received and demonstrated
 Printed Name of Employee

understanding of the PPE training given by _____.
 Name of Trainer

 Signature of Trainer

 Date

The following personal protective equipment are available and have been assigned for use	
Check applicable boxes	Identify specific assigned PPE
<input type="checkbox"/> Eye and Face Protection	
<input type="checkbox"/> Head Protection	
<input type="checkbox"/> Foot Protection	
<input type="checkbox"/> Hand Protection	
<input type="checkbox"/> Respiratory Protection	
<input type="checkbox"/> Hearing Protection	
<input type="checkbox"/> Other Protection	

 Employee Signature

 Date