

## C-11. PERSONAL PROTECTIVE EQUIPMENT

### I. SCOPE

This program applies to all employees at NCI-Frederick who are required to utilize any form of personal protective equipment (PPE).

### II. PURPOSE

To outline NCI-Frederick policies and procedures for the provision and use of personal protective equipment (PPE) and assure compliance with OSHA regulations.

### III. DEFINITION

**Personal protective equipment** - Includes devices and clothing designed to be worn or used for the protection or safety of an individual while in potentially hazardous areas or performing potentially hazardous operations.

### IV. GENERAL

- A. To protect employees from potential hazards in the workplace, the employers will provide PPE appropriate to the task. The Environment, Health and Safety Program (EHS) will assess the workplace to identify potential hazards which necessitate the use of PPE and advise supervisors/employees on PPE required for an operation. However, each employer through its supervisors is responsible for obtaining the equipment and enforcing its use.
- B. PPE devices alone should not be relied on to provide protection against hazards, but should be used in conjunction with guards, engineering controls, and sound manufacturing practices.
- C.. Defective or damaged PPE shall not be used.

**V. RESPONSIBILITIES**

**A. Supervisor**

1. Ensures PPE is readily available to employees working in areas or performing operations that require PPE for protection.
2. Enforces the use of PPE when required to protect employee health and safety.
3. Ensures PPE is properly stored and maintained.

**B. Employees**

1. Use, maintain, and store PPE in accordance with this procedure and instructions provided by the supervisor or EHS.
2. Report all problems associated with PPE (i.e., damage, worn, or inadequate) to the supervisor or EHS.
3. Do not use damaged or defective PPE.

**C. Environment, Health and Safety Program (EHS)**

1. As needed, evaluates operations/work areas to determine PPE requirements.
2. Recommends PPE that conforms to applicable standards (i.e., American National Standards Institute, National Institute for Occupational Safety and Health, etc.).
3. Maintains records of hazard assessments performed to identify PPE requirements.
4. Provides information and training on PPE, including requirements, use, limitations, proper care, maintenance, useful life, and disposal.

## VI. GENERAL REQUIREMENTS FOR PPE

### A. Hazard Assessment

OSHA regulation 29 CFR 1910.132 requires an assessment of each work place to determine if hazards are present, or are likely to be present, for which the use of personal protective equipment is needed. EHS conducts worksite hazard assessments as a part of the worksite safety evaluation (inspection) process, and as a part of the protocol review process for animal study proposals, rDNA proposals, pathogen proposals, and work using radioisotopes. EHS also provides worksite evaluations of any operation at the request of any supervisor or employee.

### B. Training

Each employee who is required to use PPE is required to be trained and demonstrate the ability to use PPE properly. Training must cover when PPE is necessary, what PPE is necessary, how to don, doff, adjust, and wear PPE, limitations of the PPE, and proper care, maintenance, useful life, and disposal of the PPE. Retraining is required when changes in the work place or types of PPE to be used render previous training obsolete, or if inadequacies in an employee's knowledge or use of assigned PPE indicate that the employee has not retained the requisite understanding or skill.

## VII. EYE AND FACE PROTECTION PROGRAM

### A. Policy

Supervisors will provide protective eye wear and/or protective face shields to employees working in areas or performing tasks that present a potential for eye injury.

### B. Definitions and Performance Criteria

1. Eye protection equipment is used to prevent injury to the eyes from flying objects, hazardous chemicals, or injurious light rays. Such equipment includes safety glasses, chemical splash goggles, face shields, welding goggles, and welding face shields.

2. Safety glasses consist of prescription or non-prescription lenses in frames conforming to the latest version of the American National Standards Institute (ANSI) Z87.1.
3. Eye hazard operations are tasks that present a potential eye injury hazard. Eye protection should be worn during eye hazard operations, such as pouring or transferring hazardous liquids, grinding, and the use of impact or power tools.
4. Safety glasses with side shields should be worn whenever there is a risk of impact from flying particles.
5. Chemical splash goggles should be worn whenever the risk of hazardous liquid splash exists.
6. For severe splash risks, a face shield may be used in conjunction with chemical splash goggles.

C. Responsibilities

1. Supervisors
  - a. Identifies eye hazard areas and operations and solicits assistance from EHS, as necessary, to ensure selection of the proper type of eye protection.
  - b. Enforces the use of eye protection in eye hazard areas and while employees perform eye hazard operations.
  - c. Ensures that employees are provided with appropriate eye protection and that eye protection is available for visitors to eye hazard areas.
  - d. Ensures that all entrances into eye hazard areas are posted with a sign indicating a potential eye hazard with instructions on appropriate eye protection.
2. Employees
  - a. Use approved eye protection as required and provided for in this section.

3. Environment, Health and Safety Program (EHS)
  - a. Implements and administers the eye protection program.
  - b. Maintains technical data on eye protection to ensure it meets federal standards.
  - c. Assists supervisor in identifying eye hazard areas and operations and in selecting proper eye protection.

D. Eye Protection Issuance/Replacement

1. Employees who are assigned to eye hazard areas or who as a regular part of their job perform eye hazard operations are eligible to obtain prescription safety glasses at the expense of their employers.
2. The area supervisor and EHS determine the need for and type of eye protection required.
3. Eye protection devices are issued as followed:
  - a. Prescription safety glasses through on-site vendor.
  - b. Goggles, face shields, non-prescription safety glasses, and visitor safety glasses through the area supervisor.
  - c. Laser safety eye wear through the supervisor after consultation with EHS.
4. Prescription safety glasses are provided by the employee's cost center as follows:
  - a. Supervisor submits completed "Request for Safety Eyewear" form to EHS identifying the employee for whom prescription safety glasses are required.
  - b. Once the request is signed by both the employee's supervisor and the EHS, the employee is authorized to order from the on-site vendor the desired style of safety glass

frames and lenses. Cost for employee requested options (i.e., not specified on the prescription) must be paid by the employee.

- c. The employee is responsible for providing the vendor a current corrective vision prescription. The fee for the services of this physician and any fitting fees must be paid by the employee. In general, safety glasses may be ordered from a prescription no more than 2 years old.
- d. Employer-furnished prescription safety glasses damaged by occupational wear will be repaired or replaced at the employee's cost center expense.

## VIII. HEAD PROTECTION

### A. Policy

Employees working in an area where there is a potential for injury to the head from falling or stationary objects, including working below other employees who are using tools and materials which could fall, will be provided and shall be required to wear protective helmets.

### B. Definitions and Performance Criteria

Protective helmets that conform to the latest version of ANSI Z89.1 are designed to provide protection from impact and penetration hazard caused by falling objects. Some helmets also provide protection from electrical shock and burns.

### C. Responsibilities

#### 1. Supervisor

Identifies tasks requiring head protection and, when required, enforces use of safety helmets.

#### 2. Employees

Wear safety helmets, as instructed by the supervisor.

3. Environment, Health and Safety Program

Assists the supervisor in identifying tasks that pose a potential for head injury from falling objects.

**IX. FOOT PROTECTION**

A. Policy

Employees shall use protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards.

B. Definitions and Performance Criteria

Safety shoes shall conform to the latest version of ANSI Z41. The inner lining of safety footwear is stamped with the ANSI Z41 identification mark.

C. Responsibilities

1. Supervisor

Identifies tasks requiring foot protection and, when required, enforces its use.

2. Employees

Wear appropriate foot protection, as instructed by the supervisor.

3. Environment, Health and Safety Program

a. Implements and administers the foot protection program.

b. Assists the supervisor in identifying tasks that pose a potential foot injury hazard.

D. Foot Protection Issuance/Replacement

1. In areas where foot protection is required, the employer will provide safety shoes to the employee. The EHS should be contacted to

obtain the safety shoe vendor schedule, or to find out the current maximum dollar allowance for safety shoes. A completed and authorized Safety Footwear Request Form **must** be presented at time of order.

2. Any amount in excess of the maximum dollar allowance shall be the responsibility of the employee.
3. Lost or stolen safety shoes will be replaced at employee expense.
4. Worn or damaged safety shoes will be replaced in accordance with the division's policy.

## X. **HAND PROTECTION**

### A. Policy

Employees whose hands are exposed to hazards such as skin absorption of harmful substances, cuts or lacerations, abrasions, punctures, chemical burns, thermal burns, harmful temperature extremes, and biohazardous materials will be provided and required to wear appropriate hand protection.

### B. Definitions and Performance Criteria

1. The selection of appropriate hand protection is based on the performance characteristics of the various types of glove material, the duration of use, and the hazards associated with the task to be performed.
2. For gloves used to protect against chemicals, test data for breakthrough times should be obtained to determine how long the glove can be used and if it can be reused. For use with mixtures, a glove should be selected on the basis of the chemical component with the shortest breakthrough time.
3. The use of gloves made of latex rubber is discouraged due to the possibility of sensitization (allergy) to allergenic components of latex.



C. Responsibilities

1. Supervisors

Identifies tasks requiring hand protection, and when required, enforces proper use of protective gloves.

2. Employees

a. Wear protective gloves, as instructed by the supervisor.

b. Report any difficulties with wearing the required hand protection devices to the supervisor.

c. Discard gloves whenever contamination is suspected.

3. Environment, Health and Safety Program Officer

a. Assist the supervisor in identifying tasks for which hand protection is required and in selecting appropriate glove material(s) for the hazard(s) identified.

b. Selecting appropriate glove material(s) for the hazard(s) identified.

XI. **RESPIRATORY PROTECTIVE EQUIPMENT**

See Section C-11 Respiratory Protection Program.

XII. **HEARING PROTECTION**

See Section C-9 Hearing Conservation Program.

XIII. **REFERENCES**

29 CFR 1910.132-138 - Personal Protective Equipment