

## **NORTHERN KENTUCKY UNIVERSITY**

POLICY LINK: **OCCUPATIONAL SAFETY POLICY**

ISSUE DATE: **11/02/2018**

REVISED DATE:

TITLE: **PERSONAL PROTECTIVE EQUIPMENT PROCEDURE**

### **OBJECTIVE AND PURPOSE**

The objective of this procedure is to maximize the protection of individuals from workplace hazards. In many cases, risks can be eliminated or mitigated by the use of Personal Protective Equipment (PPE). All PPE must meet American National Standards Institute (ANSI) standards when required by Kentucky Administrative Regulations (803KAR2:308) or in accordance with the programs developed by Northern Kentucky University (NKU). Although individual units are free to go above and beyond the requirements of this document, compliance with this policy will ensure that a minimal level of protection is provided to all workers. This procedure is administered under the authority of University Occupational Safety Policy.

### **DEFINITIONS**

**Administrative Controls** - Methods of controlling employee exposure to hazards by means of operating procedures or work scheduling.

**Audiogram** - Hearing test

**Biological Hazard**- Living organisms that can cause infectious diseases and allergies.

**Chemical Hazard** - Gases, vapors, liquids, fumes, or dusts that can result in poisoning, lung disease, skin irritation, or damage to other parts of the body.

**Contamination** - The presence of an unwanted material that may cause injury or illness to an exposed employee.

**Damaged** - Change to PPE through event, wear-and-tear, and/or age which reduces its ability to provide the level of protection required under the governing ANSI or ASTM standards.

**Employee** - Any faculty member, staff member, or student who receives compensation from Northern Kentucky University for a job performance.

**Engineering Controls** - Methods of controlling employee exposure to hazards by modifying the source or reducing the quantity of contaminant released into the work environment.

**Hazard Assessment** - An evaluation of hazards in the workplace.

**Impact** - Workplace hazards resulting from flying fragments, objects, sand, dirt, etc.

**Job Hazard Assessment** - An assessment of hazards in the workplace, evaluating the nature of the hazard, the probability of an accident or exposure, and the consequences of the event.

**Personal Protective Equipment** - Devices worn by the worker to protect against hazards in the work environment. Examples are gloves, safety shoes, safety eye wear, hard hats, hearing protectors, and respirators.

**Physical Hazard** - A chemical for which there is scientifically valid evidence that it is a combustible liquid, compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive), or water reactive.

**Standard Threshold Shift (STS)** - A change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.

**Time Weighted Average (TWA)** - Average exposure over a specified period of time

## **RULES AND PROCEDURES**

### **General**

All departments shall assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE). If such hazards are present, or likely to be present, the department shall select, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment; communicate selection decisions to each affected employee; and, select PPE that properly fits each affected employee. The department shall submit the compiled information to Safety and Emergency Management. Safety and Emergency Management will review the information and conduct follow-up investigations as necessary. Safety and Emergency Management will maintain written job hazard assessments in compliance with Kentucky Administrative Regulations.

PPE devices alone shall not be relied on to provide protection against hazards, but shall be used in conjunction with guards, engineering controls, administrative controls, and sound safety practices.

Safety programs that provide for specialized protective equipment remain in effect and their requirements must still be complied with even if they are not specifically linked or mentioned in this policy.

The following factors shall be considered when selecting PPE:

- Chemical Hazards
- Physical Hazards
- Environmental Conditions
- Task Requirements
- Potential for PPE Failure
- Maintenance Requirements
- Interferences
- PPE Durability
- Duration of Use
- Regulatory Requirements/Certification
- User's Size and Physical Abilities (for fit, comfort and individual needs)
- User Acceptance

Northern Kentucky University is not required by regulation to provide personal items, such as safety shoes, prescription safety glasses, and cold-weather outer wear, unless the use of such items is restricted to use only while on the job at Northern Kentucky University.

Appropriate PPE will be selected by the department. Assistance from Safety and Emergency Management is available, if requested. Safety and Emergency Management has the authority to ensure the PPE selected is appropriate.

The department may purchase the selected PPE from any vendor, in compliance with NKU procurement processes.

When an employee separates from Northern Kentucky University, any Northern Kentucky University purchased PPE shall be returned, unless otherwise granted permission by the department chair/director or designee.

If an employee reports for work without required PPE, the employee shall not be allowed to perform the work that requires PPE until the PPE has been secured. Failure to have appropriate PPE when necessary can subject the employee to progressive disciplinary action.

### **Maintenance Schedules**

PPE shall be inspected, cleaned, and maintained by employees at regular intervals and as recommended by the manufacturer so it can be discarded, changed, and/or decontaminated as deemed necessary. Excluded from this requirement would be PPE that is laundered and maintained under contract with an outside vendor. At a minimum, all PPE shall be discarded when it has become irreversibly contaminated, damaged, or has other integrity problems.

It is important to ensure that contaminated PPE which cannot be decontaminated is disposed of in a manner that protects employees from exposure to hazards while ensuring compliance with appropriate regulations.

Disposable PPE shall be disposed of properly after use in accordance with governing programs for the contaminants being handled and shall not be re-used.

Note: Inspect PPE before each use for tears, punctures, holes, cuts, cracks, embedded foreign objects, and texture changes (e.g., swelling, softening, hardening, becoming sticky, or inelastic).

### **Specific PPE Requirements**

#### **Eye and Face Protection**

Suitable eye or face protection shall be provided where there is a potential for injury to the eyes or face from flying particles, molten metal, liquid chemicals, acids, or caustic liquids, chemical gases or vapors, potentially injurious light radiation, or a combination of these. Eye and face protection shall comply with ANSI standards Z87.1.

#### **Respiratory Protection**

In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering, work

practices, and administrative control measures (for example, enclosure or confinement of the operation, general and local ventilation and substitution of less toxic materials). When effective engineering, work practices, and administrative controls are not feasible, or while they are being instituted, appropriate respirators shall be used.

Respirators shall be provided when such equipment is necessary to protect the health of the employee. The respirator shall be applicable and suitable for the purpose intended.

Safety and Emergency Management has developed a Respiratory Protection Program which includes all the requirements for respirator use. Use of respirators shall be in accordance with the NKU Respiratory Protection Program.

#### **Foot Protection**

Foot protection shall be worn when there is a potential for injury to the feet from falling or rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards. Foot protection shall comply with ASTM F2413-18.

#### **Hearing Protection**

Hearing protection devices shall be made available to all employees exposed to an 8-hour TWA of 85 dB or greater at no cost to the employees and shall be replaced as necessary. Types of hearing protection include formable and preformed ear plugs, canal caps, and ear muffs.

Hearing protection devices shall be worn by any employee who is exposed to an 8-hour TWA of 85 dB or greater, and who has not yet had a baseline audiogram or has experienced a standard threshold shift. Employees shall be given the opportunity to select their hearing protection from a variety of suitable hearing protection devices.

#### **Hand Protection**

Appropriate hand protection is required when hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes.

The type of hand protection used shall be based on the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards or potential hazards identified.

#### **Torso Protection**

Torso protection shall be provided when there is a potential for bodily injury (e.g., legs, arms, back, chest) from cuts and radiation; temperature extremes; hot splashes from molten metals and other hot liquids; potential impacts from tools, machinery and materials; and hazardous chemicals.

Employees who face possible bodily injury of any kind that cannot be eliminated through engineering, work practice or administrative controls, shall wear appropriate body protection while performing their jobs.

Body protection includes laboratory coats, coveralls, vests, jackets, aprons, surgical gowns and full body suits.

## **Head Protection**

Head protection shall be worn in areas where there is a potential for injury to the head from impact, flying or falling objects, or electrical shock.

Protective helmets shall comply with ANSI Standards Z89.1-1997, "American National Standard for Personnel Protection-Protective Headwear for Industrial Workers-Requirements", Z89.1-2003, and Z89.1-2009, "American National Standard for Personnel Protection-Protective Headwear for Industrial Head Protection." Helmets for protection against electrical shock shall comply with ANSI Z89.2-1971.

## **RESPONSIBILITIES**

### **Safety and Emergency Management**

Safety and Emergency Management is responsible for procedure development, review, and compliance with all applicable federal and state regulations. Safety and Emergency Management will coordinate training as needed. Safety and Emergency Management staff are authorized to halt any unsafe work practice that is not in accordance with this or any other NKU safety policy or procedure.

### **Chair/Director**

It is the responsibility of the chair/director to comply with applicable environmental, health and safety laws and regulations, University policies and procedures, and accepted safe work practices. Chairs/directors shall ensure that their employees receive required training prior to beginning work and annual/refresher training as needed. The chair/director is also responsible for maintaining their employee training records.

Specific to this procedure, chairs/directors are responsible for:

- Conducting specific job hazard assessments to determine hazards which necessitate the use of PPE and providing documentation to Safety and Emergency Management;
- Advising employees as to the required PPE for their job tasks;
- Providing proper PPE as required;
- Ensuring PPE is available;
- Ensuring PPE is being used by each affected employee during all job tasks which require such protection;
- Ensuring employees are properly trained on the use of the PPE;
- Documenting purchase and distribution of all PPE;
- Contacting Safety and Emergency Management when a hazard or process has changed with may render previously used PPE ineffective; and
- Ensuring defective or damaged PPE is removed from use.

Chairs and directors may delegate the details of program implementation to appropriate personnel within their authority. The ultimate responsibility, however, for ensuring implementation of these programs at the academic department/administrative department level remains with the chairs/directors.

### **Employee**

Employees are responsible for:

- Inspecting all PPE prior to each use;
- Wearing PPE as intended by the manufacturer;
- Participating in mandatory PPE training;

- Notifying their supervisor when new PPE is necessary or of defective or damaged PPE; and
- Notifying their supervisor of any changes which might impact the type of PPE they utilize.

## **TRAINING**

Departments shall ensure adequate training for each employee prior to performing work related to this procedure. Documentation shall be maintained for each employee. Additional information on training and documentation requirements can be found in corresponding regulations. For additional assistance contact Safety and Emergency Management.

*For additional information, forms, training, and other resources visit [inside.nku.edu/safety](https://inside.nku.edu/safety).*

**Documentation of Updates and Changes: May 2024**