

Northwestern

Personal Protective Equipment

Environmental Health and Safety

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## I. Purpose

This program establishes guidelines for minimizing exposure to hazards and mitigating the risk of occupational diseases, injury, and fatality through the use of personal protective equipment (PPE). PPE is not a substitute for more effective control methods (i.e., elimination, substitution, engineering, administrative), and its use will be considered only when other means of protection are not adequate or feasible; PPE must only be used in conjunction with other controls, unless no other means of hazard control exist.

## II. Scope

Northwestern requires all faculty, staff, students, visitors, and volunteers to use appropriate PPE when deemed necessary through the completion of a PPE Hazard Assessment.

## III. Responsibilities

### A. Environmental Health and Safety (EHS)

- i. Update the Personal Protective Equipment Program, as needed.
- ii. Revise the PPE Hazard Assessments, as needed.
- iii. Assist departments and supervisors in conducting PPE Hazard Assessments.
- iv. Provide technical support and consultation for departments and employees regarding the selection of appropriate PPE.

### B. Department Supervisors

- i. Consult with EHS for the selection of appropriate PPE.
- ii. Perform PPE Hazard Assessments of each work area/task to identify and control physical and health hazards.
- iii. Identify and provide appropriate PPE for employees.
- iv. Train employees in the use and care of their PPE.
- v. Maintain PPE, including replacing worn and damaged PPE.
- vi. Ensure employees wear PPE when hazards are present.
- vii. Notify EHS when changes have occurred in the process, chemical, or equipment used that may change PPE needs.

### C. Employees

- i. Comply with this program.
- ii. Attend PPE training.
- iii. Properly care for, clean, maintain, and wear PPE.
- iv. Inform your supervisor of the need to repair or replace PPE.

## IV. PPE Use

PPE will be provided and used in the following circumstances:

- A. Where it has been determined that substitution, engineering, and/or administrative controls do not reduce exposure to a safe level.
- B. Where development or installation of engineering controls are pending.
- C. Where PPE is necessary to protect the health and safety of employees.
- D. During short-term, non-routine operations where engineering controls are not practical.
- E. During emergency situations (i.e., spills, ventilation malfunctions, and other damage-control activities).

## V. PPE Hazard Assessment Certification

- A. In addition to appropriate clothing for specific tasks, PPE may be necessary as well. When selecting PPE to wear, ensure it is appropriate for all potential hazards. A PPE Hazard Assessment is an evaluation of the workplace to help determine potential hazards employees could be exposed to and what PPE is needed for protection. If a Job Hazard Analysis (JHA) has been completed or is planned and it will cover PPE requirements, the JHA can serve as the PPE Hazard Assessment.
- B. Supervisors, in consultation with EHS, must complete the PPE Hazard Assessment (see **Appendix 1**). This assessment must be verified through written certification that identifies:
  - i. The workplace/area evaluated,
  - ii. The person certifying the evaluation has been performed,
  - iii. The date of the hazard assessment, and
  - iv. The documented hazard assessment.
- C. Anytime new PPE is introduced, including from a new manufacturer or a different model; there has been an accident; or a supervisor or employee requests, the PPE Hazard Assessment must be reviewed and updated.

## VI. Selection of PPE

- A. Selection of PPE should be made in consultation with EHS after a PPE Hazard Assessment has been completed.
- B. PPE must provide protection against the hazards for which they are selected; Departments and Supervisors should consider the following when selecting PPE:
  - i. Chemical hazards,
  - ii. Physical hazards,
  - iii. Task requirements,
  - iv. Potential for PPE failure,
  - v. Maintenance requirements,
  - vi. Interferences,
  - vii. PPE durability,
  - viii. PPE availability (i.e., what is already in-stock and what can be procured),
  - ix. Regulatory requirements/certification (i.e., NIOSH, ANSI), and
  - x. User's size and physical abilities for fit, comfort, and individual needs.

## VII. Procurement of PPE

- A. Departments are responsible for purchasing PPE for their employees, visitors, and volunteers.
- B. Standard PPE (e.g., regular safety glasses, gloves, earplugs) will be provided at no cost, including replacement PPE resulting from regular use.
- C. There are multiple options for obtaining pre-approved PPE (i.e., vending machines, iBuyNU Marketplace); if PPE other than what is identified in the Hazard Assessments and pre-approved is needed, contact EHS to discuss the options.
- D. Programs for personal/specialty PPE (i.e., prescription safety glasses, safety footwear) are available for some departments; talk to your Supervisor for details.

- E. Departments are not required to purchase everyday clothing, skin creams, or items used solely for protection from weather (i.e., long-sleeve shirts, pants, street shoes, winter apparel, rain gear, sunscreen).
- F. PPE that is provided by employees must meet the requirements of this program, including proper cleaning and maintenance; departments are not required to reimburse employees if they provide their own PPE.

## VIII. PPE Storage

PPE must be properly stored to protect against environmental conditions that might degrade or reduce the effectiveness of the equipment or result in contamination during storage. PPE that has a shelf-life limitation (e.g., respirator cartridges) must be checked periodically to ensure compliance with the expiration date.

## IX. PPE Cleaning and Maintenance

- A. All PPE must be maintained in a sanitary and serviceable condition, especially eye and face protection, which could impair vision if it is dirty or foggy. PPE that requires specialized service by the manufacturer must be serviced by qualified personnel.
- B. Employees who are issued PPE for their exclusive use must visually inspect their PPE for defects before each use.
- C. PPE subject to use by more than one individual, such as visitor PPE (i.e., safety glasses), must be cleaned by a department designate.
- D. PPE used only occasionally must be cleaned and disinfected by the last individual to use it. Where disinfection of PPE is not applicable (i.e., thermal gloves, leather gloves), it is recommended the user wash their hands or use hand sanitizer before and after use.
- E. PPE intended for emergency use must be cleaned, disinfected, and placed in an operable condition after each use by the last individual to use it. Such equipment must be inspected monthly to ensure it is in proper condition, and records of these inspections must be kept.

## X. Training

- A. Employees who are required to wear PPE must be trained on how to do the following:
  - i. Use PPE properly,
  - ii. Be aware of when PPE is necessary,
  - iii. Know what kind of PPE is necessary,
  - iv. Understand the limitations of PPE in protecting against injury,
  - v. Put on, adjust, wear, and take off PPE, and
  - vi. Care; maintain; and, after its useful life, dispose of PPE properly.
- B. Additional training is required whenever:
  - i. Workplace changes or changes in the types of PPE used render previous training obsolete,
  - ii. An employee is found to not comply with the above training requirements, or
  - iii. An employee is involved in a PPE-related accident.

## XI. Regulatory Authority and Related Information

Northwestern will comply with the Occupational Safety and Health Administration's (OSHA) standards and any other applicable codes and standards, including:

[OSHA 29 CFR 1910 Subpart I – Personal Protective Equipment](#)

[OSHA Publication 3151-12R – Personal Protective Equipment](#)

[OSHA Fact Sheet 3603 – Personal Protective Equipment](#)

[Northwestern's Hearing Conservation Program](#)

[Northwestern's Respiratory Protection Program](#)

## XII. Contact

For questions, contact Environmental Health and Safety at [ehs@northwestern.edu](mailto:ehs@northwestern.edu).

## Appendix 1 – PPE Hazard Assessment

Personal protective equipment must be provided and used when engineering controls, work practices, and administrative controls are not feasible or do not provide sufficient protection to prevent occupational diseases, injury, and fatalities. PPE alone should not be relied upon to provide protection against hazards, but should be used in conjunction with engineering controls, work practices, and administrative controls.

This assessment addresses eye, face, head, hand, foot, torso, respiratory, noise, and fall protection. It will serve as the Personal Protective Equipment Certification required to satisfy the federal requirements of the OSHA Standard, [29 CFR 1910.132 Subpart I – Personal Protective Equipment](#).

### General Guidelines

The PPE Hazard Assessment can be conducted for an area, job category, or individual by selecting and filling in the appropriate box. The assigned evaluator must include their name, department being assessed, and the date. Completed assessments must be accessible to employees, the EHS, and regulatory officials. Hazard assessments must be updated when processes, equipment, or materials used change the personal protective equipment needs.

### Instructions

#### Step 1: Inform Affected Employees of the Process

Affected employees from each work area assessed should be involved in the process. Discuss the reasons for the survey and the procedures being used for the assessment. Review the job procedures, potential hazards and the PPE currently in use.

#### Step 2: Review Data

Reports of work-related injuries or illnesses, near-miss events and reported safety concerns are sources of data that can provide helpful information for assessing hazards.

#### Step 3: Conduct a Walk-Through Survey

The purpose of the survey is to identify sources of hazards to employees. Observe the following: layout of the workplace, location of the employees, work operations, hazards, and places where PPE is currently used, including the device and reason for use. Using the form, check the type of hazard(s) present within each section, which is organized by body part. Further descriptions can be provided in the adjacent box. Consideration should be given to the following basic hazard categories:

- A. Impact (e.g., falling or flying objects)
- B. Penetration (e.g., sharp objects piercing a foot or hand)
- C. Compression (e.g., roll-over or pinching objects)
- D. Chemical exposure (e.g., inhalation, ingestion, skin contact, eye contact, or injection)
- E. Temperature extremes (e.g., heat, cold)
- F. Dust/flying debris (e.g., grinding, chipping, sanding)
- G. Fall (e.g., slip or trip, scaffolds, elevated work)
- H. Radiation (e.g., non-ionizing UV/IR/light, welding, brazing, cutting, furnaces)
- I. Noise (e.g., mechanical rooms, machines, cage washing, jackhammers)
- J. Electrical (e.g., shock, short-circuit, arcing, static)

**Step 4: Select PPE**

After considering and/or planning for other controls, select which PPE provides at least the minimum level of protection required to protect employees from the hazards. Using the form, note the appropriate PPE in the required PPE box. For help with proper PPE selection, contact EHS at [ehs@northwestern.edu](mailto:ehs@northwestern.edu).

**Step 5: Make the Document Accessible**

Once completed, signed, and dated, store the form either electronically or as a hard copy in a location easily accessible to employees, Risk Management, and regulatory officials.

**Step 6: Revise the Protocol**

Update departmental protocols with the new or modified PPE requirements, if applicable.

**Step 7: Reassess the Workplace, as Necessary**

Identify and evaluate:

- A. New equipment and processes,
- B. Accident records, and
- C. Suitability of previously selected PPE.




For questions, contact Environmental Health and Safety at [ehs@northwestern.edu](mailto:ehs@northwestern.edu).






PPE Hazard Assessment

Date:		During this assessment, the following activity was observed and/or discussed:	
Location:			
Department:		Specific job task:	
Dept. Supervisor:		Specific employee group:	
Assessor:		Specific employee:	



Below, list any specific hazards and the corresponding required PPE, if any:

<p><b>Eyes</b></p> 	<b>Check all that apply:</b>		<b>Description of the hazard(s):</b>	<b>Required PPE (if any):</b>
	Chemical:	<input type="checkbox"/>		
	High heat or cold:	<input type="checkbox"/>		
	Dust/flying debris:	<input type="checkbox"/>		
	Impact:	<input type="checkbox"/>		
	UV/IR radiation:	<input type="checkbox"/>		
	Other (specify):	<input type="checkbox"/>		
<p><b>Head/Neck/Face</b></p> 	<b>Check all that apply:</b>		<b>Description of the hazard(s):</b>	<b>Required PPE (if any):</b>
	Chemical:	<input type="checkbox"/>		
	High heat or cold:	<input type="checkbox"/>		
	Dust/flying debris:	<input type="checkbox"/>		
	Impact:	<input type="checkbox"/>		
	Electric shock:	<input type="checkbox"/>		
	Other (specify):	<input type="checkbox"/>		
<p><b>Feet</b></p> 	<b>Check all that apply:</b>		<b>Description of the hazard(s):</b>	<b>Required PPE (if any):</b>
	Chemical:	<input type="checkbox"/>		
	High heat or cold:	<input type="checkbox"/>		
	Impact/compression/puncture:	<input type="checkbox"/>		
	Electric shock:	<input type="checkbox"/>		
	Slippery/wet surface(s):	<input type="checkbox"/>		
	Other (specify):	<input type="checkbox"/>		

*Below, list any specific hazards and the corresponding required PPE, if any:*

<b>Hands</b>				
	<b>Check all that apply:</b>		<b>Description of the hazard(s):</b>	<b>Required PPE (if any):</b>
	Chemical:	<input type="checkbox"/>		
	High heat or cold:	<input type="checkbox"/>		
	UV/IR radiation:	<input type="checkbox"/>		
	Cut/abrasion/puncture:	<input type="checkbox"/>		
	Electric shock:	<input type="checkbox"/>		
	Other (specify):	<input type="checkbox"/>		
<b>Body</b>				
	<b>Check all that apply:</b>		<b>Description of the hazard(s):</b>	<b>Required PPE (if any):</b>
	Chemical:	<input type="checkbox"/>		
	High heat or cold:	<input type="checkbox"/>		
	Impact/compression:	<input type="checkbox"/>		
	Electrical/arc:	<input type="checkbox"/>		
	Cut/abrasion:	<input type="checkbox"/>		
	Other (specify):	<input type="checkbox"/>		
<b>Falls</b>				
	<b>Check all that apply:</b>		<b>Description of the hazard(s):</b>	<b>Required PPE (if any):</b>
	Roof:	<input type="checkbox"/>		
	Work platform:	<input type="checkbox"/>		
	Overhead equipment:	<input type="checkbox"/>		
	Ladder/scaffold:	<input type="checkbox"/>		
	Other (specify):	<input type="checkbox"/>		

*Below, list any specific hazards and the corresponding required PPE, if any:*

<p><b>Noise</b></p> 				
	<b>Check all that apply:</b>		<b>Description of the hazard(s):</b>	<b>Required PPE (if any):</b>
	Noise:	<input type="checkbox"/>		
	Other (specify):	<input type="checkbox"/>		
<p><b>Respiratory</b></p> 				
	<b>Check all that apply:</b>		<b>Description of the hazard(s):</b>	<b>Required PPE (if any):</b>
	Chemical:	<input type="checkbox"/>		
	Particulate:	<input type="checkbox"/>		
	Other (specify):	<input type="checkbox"/>		

**Notes:**

*Please sign below once the above form has been reviewed and agreed upon by both parties:*

<i>Department Supervisor:</i>		<i>Date:</i>	
<i>Environmental Health and Safety:</i>		<i>Date:</i>	