

# Personal Protective Equipment

## Purpose and Scope

The Personal Protective Equipment (PPE) Program has been developed to provide the University community with the necessary information to identify work situations that require the use of PPE, the proper selection and use of PPE, and documentation of this information. This information is important to help ensure the safety and health of all WCU employees.

PPE will be selected and used to protect employees from the hazards and potential hazards that are likely to be encountered. PPE must be purchased and provided at no cost to the employee, including temporary and part-time staff.

Respiratory and hearing protection are covered under separate programs. Refer to the Respiratory Protection and Hearing Conservation Program.

PPE should not be used as a substitute for engineering, work practices, and/or administrative controls to protect employees from workplace hazards. PPE should be used in conjunction with permanent protective measures, such as engineered guards, substitution of less hazardous chemicals, and prudent work practices.

This program applies to all West Chester University employees who use PPE to control exposure to workplace hazards.

## Responsibilities

### Environmental Health and Safety

- Develop a written PPE program and review it on an annual basis.
- Conduct hazard assessments to ensure adequate protection of employees.
- Assist supervisors in the selection of appropriate PPE and provide recommendations for appropriate engineering controls.
- Provide or arrange for training on PPE for supervisors and employees.
- Wear appropriate PPE when visiting job sites as dictated by job hazard assessments.

### Department

- Demonstrate a commitment, both fiscal and managerial, towards the implementation of the PPE Program.
- Establish budget support for this program for individual departments.
- Ensure the Personal Protective Equipment Selection Guidelines are implemented and maintained within the department.
- Wear appropriate PPE when visiting job sites as directed by job hazard assessments

### Supervisor/Manager

- Contact EHS with questions about the type of PPE required for a task.
- Ensure employees attend training.
- Ensure retraining if:
  - Changes in the workplace render previous training obsolete

- Changes in the types of personal protective equipment to be used render previous training obsolete
- Document and maintain training records.
- Conduct or arrange for the appropriate selection and fitting of PPE.
- Supply the appropriate PPE to employees and ensure it is worn according to the training provided.
- Wear appropriate PPE when visiting job sites as dictated by job hazard assessments.
- Assure that the requirements of this program are observed with respect to hazard surveys, testing, training, and record keeping.

## Employees

- Report to the supervisor any operation or job for which they suspect that PPE may be needed.
- Attend PPE training as required by this program.
- Use PPE in accordance with instruction and training received as necessitated by job hazard assessments.
- Not use any PPE with deficiencies and report any deficiencies or malfunctions to a supervisor.
- Notify the supervisor of a noticeable change in health, or potential problem with the PPE.
- Conduct assigned tasks in a safe manner.

## Procedures

### Hazard Assessment

#### *The Hazard Assessment:*

An assessment of the workplace is used to determine if hazards are present, or are likely to be present, and necessitate the use of PPE. When conducting a hazard assessment, a task is identified, investigated and potential hazards determined. Potential hazards may be physical or health-related and a comprehensive hazard assessment includes the identification of hazards in both categories. Examples of physical hazards include moving objects, fluctuating temperatures, rolling, or pinching objects, electrical connections, and sharp edges. Examples of health hazards include overexposure to harmful dusts, chemicals, or radiation.

The workplace should be periodically reassessed for any changes in conditions, equipment or operating procedures that could affect occupational hazards. This periodic reassessment should also include a review of injury and illness records to spot any trends or areas of concern and taking appropriate corrective action. The suitability of existing PPE, including an evaluation of its condition and age, should be included in the reassessment.

The hazard assessment may be conducted on an individual employee, performing a single task, or a group of employees if all the employees perform an identical task. The assessment should include direct observation and conclude in written documentation.

#### *Hazard Assessment Documentation:*

The Job Hazard Assessment Form (Appendix B) assures that potential workplace hazards necessitating PPE use have been identified and the PPE selected is appropriate for those hazards and the affected employees. Where hazards are present, affected employees must be informed concerning PPE selection decisions. Supervisors are responsible for ensuring that hazard assessments are performed and documented. EHS can be contacted to perform this assessment. Completed assessment forms should be maintained within the department.

The completed assessment form must identify the following.

- The workplace and employee (group) evaluated
- The date of the assessment
- The person certifying the assessment has been performed
- The hazards found
- The selected PPE

#### *Hazard Assessment Implementation:*

Persons working with or near hazards will refer to hazard assessment documentation for PPE requirements specific to that jobsite and don the appropriate PPE. When entering a task or location, observers/supervisors should also wear the PPE indicated for that location/job/task appropriate to the level of involvement at the job site.

#### *PPE Selection Guidelines*

For each hazard identified, PPE must be selected that will protect the employee by creating a barrier against identified hazards. PPE must be selected to protect against any hazard that is present or likely to be present. Managers/Supervisors and Employees should become familiar with the potential hazards, the type of protective equipment that is available, and the level of protection that is provided by that equipment. The PPE Worksheet will assist in this process (Appendix C).

The PPE selected must fit the employee it is intended to protect; employees should have the correct size of protective equipment. Whenever possible, adjustable PPE should be procured. PPE that fits properly and is comfortable will more likely be worn by employees. Damaged or defective protective equipment must be taken out of service immediately to be repaired or replaced and employees must be provided with proper equipment in the interim.

PPE in the categories listed below must meet current cited American National Standards Institute (ANSI) standards. Existing PPE stocks must meet the ANSI standard in effect at the time of its manufacture or provide protection equivalent to PPE manufactured according to ANSI criteria.

OSHA requires PPE to meet the following ANSI standards.

- Eye and Face Protection: ANSI Z87.1-1989, 2003, or 2010.
- Head Protection: ANSI Z89.1-1997, 2003, or 2009.
- Foot Protection: ANSI Z41.1-1999.

For hand protection, there is no ANSI standard for gloves, but OSHA recommends that selection be based upon the tasks to be performed and the performance and construction characteristics of the glove material. For protection against chemicals, glove selection must be based on the chemicals encountered, the chemical resistance and the physical properties of the glove material. Contact EHS for assistance with glove selection for protection against chemicals.

The ANSI standards determine the material criteria by which PPE is manufactured. For guidance on selection of the proper PPE for a particular application, use published selection references, such as the National Institute for Occupational Safety and Health (NIOSH) selection guides found at: <http://www.cdc.gov/niosh/ppe/>

## Eye and Face Protection

Employees must be aware that safety eyewear does not eliminate all hazards to their eyes and face. To reduce the possibility of injury, protective equipment must be properly selected and maintained in a clean and functional condition.

### *General Requirements:*

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.

There are five general classes of eye and face protection:

- Safety Glasses
- Face shields
- Goggles
- Laser safety eyewear
- Welding helmets.

The type of protection required shall be determined by the type and degree of the hazard and shall comply with ANSI Standards Z87.1-1989(R-1998), Z87.1-2003, or Z87.1-2010 "American National Standard for Occupational and Educational Eye and Face Protection".

All eye and face protection shall be distinctly marked to facilitate identification of the manufacturer and must meet the following minimum requirements:

- Provide adequate protection against the hazards for which they are designed
- safe design and construction for the work to be performed
- reasonably comfortable when worn under the designated conditions
- Fit snugly without interfering with the movements or vision of the wearer
- durable.
- capable of being disinfected; and
- easily cleanable

Safety glasses, goggles, face shields, welding masks and/or other face protection will be provided at the employee's department's expense in all the following situations:

- The job hazard assessment indicated the need for safety eye protection.
- Upon the start of employment for employees working in an eye-risk job; and
- When the safety eyewear of a qualifying employee becomes damaged or lost due to their use on the job.

It is the employer's responsibility to provide the required PPE free of charge to employees. Non-prescription safety eyewear may be obtained through the employee's department, or an employee may purchase non-prescription safety eyewear commercially so long as it meets the requirements noted above. NOTE: If an employee chooses to purchase safety eyewear they will not be reimbursed.

## Training

Training must be provided for employees who are required to wear PPE. Retraining must also be provided when there is reason to believe that any previously trained employee does not have the understanding and skill to use PPE properly. Circumstances where such retraining is required include changes in the workplace that render prior training obsolete and changes in the types of PPE used.

Training is available in two phases. Online general PPE training is provided through EHS for all employees who wear PPE. Site specific PPE training will be conducted by departments and documented with the PPE Training Documentation Form (Appendix D). EHS can be contacted to assist with site specific training.

Each employee should be given the opportunity to demonstrate an understanding of the PPE training as well as the ability to properly wear and use PPE before being allowed to perform work requiring the use of the PPE.

*Reviewed: May, 2022*

## *Appendix A: The Hazard Assessment*

The hazard assessment should begin with a walk-through survey of the facility to develop a list of potential hazards in the following basic hazard categories.

- Impact
- Penetration
- Compression (roll-over)
- Chemical
- Heat/cold
- Harmful dust
- Light (optical) radiation
- Biologic

In addition to noting the basic layout of the facility and reviewing any history of occupational illnesses or injuries, things to look for during the walk-through survey include the following.

- Sources of electricity
- Sources of motion such as machines or processes where movement may exist that could result in an impact between personnel and equipment
- Sources of high temperatures that could result in burns, eye injuries or fire
- Types of chemicals used in the workplace
- Sources of harmful dusts
- Sources of light radiation, such as welding, brazing, cutting, furnaces, heat treating, high intensity lights, etc.
- The potential for falling or dropping objects
- Sharp objects that could poke, cut, stab or puncture
- Biologic hazards such as blood or other potentially infected material

## Appendix B: Job Hazard Assessment Form

Job Title:		Job Location:		Reviewer:	Date:
					Unit/Dept:
Task:					
Training Requirements:					
1.					
1	2	3	4		
Basic Job Steps	Potential Hazards	Hazard Control	PPE Requirements		
What is done	Potential for injury/illness	Safe procedures to avoid hazards	See PPE Worksheet for assistance		

## Appendix B: Job Hazard Assessment Form

Job Title:			Unit/Dept:
Job Location:			
Workplace/Task Assessed:			
Date(s):		Hazards Assessed By:	
<b>EYE HAZARDS?</b>	<b>YES</b>	<b>NO</b>	<b>REQUIRED PPE - EYES</b>
Frontal & side impact			
Electrical arc			
Molten metal			
Chemical splash			
Injurious light/heat radiation			
Suspended particles			
Extreme hot/cold splash			
Other:			
Other:			
Required Eye PPE might include glasses, goggles, laser safety glasses, welding shields, helmets, etc.			
<b>FACE HAZARDS?</b>	<b>YES</b>	<b>NO</b>	<b>REQUIRED PPE - FACE</b>
Projectile impact			
Chemical splash			
Hot/cold splash			
Electrical arc			
Injurious heat radiation			
Other:			
Other:			
Required Face PPE might include face shields, helmets, etc.			
<b>FOOT HAZARDS?</b>	<b>YES</b>	<b>NO</b>	<b>REQUIRED PPE - FOOT</b>
Falling objects			
Rolling objects			
Electrical contact			
Sole puncture			
Slippery surface			
Other:			
Other:			
Required Foot PPE might include safety footwear, etc.			
<b>HAND HAZARDS?</b>	<b>YES</b>	<b>NO</b>	<b>REQUIRED PPE - HAND</b>
Barrier			
Bump contact			
Chemical burns			
Electrical contact			



Extreme heat/cold			
Blood/Infectious material			
Electricity			
Other:			
Other:			
Required Hand PPE might include gloves (various types), protective sleeves, long-sleeved shirts, etc.			
RESPIRATORY HAZARDS?	YES	NO	REQUIRED PPE - RESPIRATORY
Dust or particulate			
Toxic gas/vapor			
Pesticides			
Other:			
Other:			
Required Respiratory PPE might include dust mask, ½ mask, full mask, PAPR, SCBA, etc.			
HEAD HAZARDS?	YES	NO	REQUIRED PPE - HEAD
Overhead beams			
Overhead pipes			
Insulating blanket			
Exposed electricals			
Falling objects			
Machine parts			
Other:			
Other:			
Required Head PPE might include protective helmets (various types), etc.			
HEARING HAZARDS?	YES	NO	REQUIRED PPE - HEAD
Loud noises/environment			
Noisy machines/tools			
Landscaping equipment			
Other:			
Other:			
Required Hearing PPE might include ear plugs, ear muffs, etc.			
OTHER HAZARDS?	YES	NO	REQUIRED PPE - OTHER
Thermal burns			
Extreme heat/cold			
Height on scaffolding			
Traffic control			
Required Other Hazards PPE might include flame retardant clothing, high visibility clothing, fall arrest equipment, etc.			