

Yale University

Personal Protective Equipment Policy

Yale University (University) is committed to providing a safe and healthy place of employment, education and research. In the course of University activities, individuals may encounter a potentially hazardous material, condition or process. When engineering and administrative controls (e.g., work practices) are not sufficient to fully protect an individual from a hazard, personal protective equipment (PPE) may be required. The University will provide and make readily available all required PPE.¹ The safety requirements of some work environments also limit personal attire.

The purpose of this Policy is to set forth requirements, consistent with federal and state regulations and University policies, for the use of PPE during University activities. In addition to the requirements of this Policy, there are situations where PPE is addressed by other University safety policies, procedures and programs (see Supplementary Guidance and References, below).

APPLICABILITY

This Policy applies to all faculty, staff, students, affiliates and visitors where PPE is required based on their job duties, other activities, potential exposures or work environment. This Policy does not preclude the addition of more stringent PPE requirements for a specific activities or work environment.

BACKGROUND

The federal Occupational Safety and Health Administration (OSHA) has established a specific set of PPE standards in Parts 1910 (General Industry) and 1926 (Construction) of Title 29 of the *Code of Federal Regulations* (CFR). These standards address PPE selection, inspection, donning and maintenance. Additional standards that address PPE include the National Electrical Code (e.g., NEC 70E), the CDC/NIH *Biosafety in Microbiological and Biomedical Laboratories*, standards of the State of Connecticut Department of Public Health, and the Nuclear Regulatory Commission's Standards for Protection Against Radiation (10 CFR 20). The University requires all faculty, staff, students, affiliates and visitors to adhere to these standards.

DEFINITIONS

Administrative Control: An administrative (work practice) control is a change in the way the activity is conducted or a procedure is performed that reduces the likelihood of exposure to a hazardous material, condition or process. Examples include written safety policies, procedures, rules, schedules and training which reduce the duration, frequency and severity of exposure to a hazardous material, condition or process.

Engineering Control: An engineering control is the redesign, replacement or application of equipment to an activity or work environment to reduce or eliminate exposure to a hazardous material, condition or process.

¹ Exception: An undergraduate student enrolled in a laboratory course is required to purchase his or her laboratory coat. Unless it becomes contaminated, s/he is responsible for the care and maintenance of the laboratory coat by following the manufacturer's instructions.

Medical Surveillance: Medical surveillance is the evaluation of an individual's health in the work environment in relation to his or her potential exposures to hazardous materials, conditions or processes. Medical surveillance also includes an evaluation of the individual's ability to wear required PPE.

Personal Protective Equipment (PPE): PPE is equipment worn to minimize exposure to a hazardous material, condition or process. Examples of PPE include lab coats, hardhats, safety shoes, gloves, safety glasses, goggles, hearing protectors, respirators, fall and electrical protection devices, and other such devices meant to protect an individual from exposure to a hazardous material, condition or process.

PPE Hazard Assessment: A PPE hazard assessment is the evaluation of the personal protective equipment requirements for a specific activity or work environment, so that the individual is protected from exposure to a hazardous material, condition or process.

RESPONSIBILITIES

Office of Environmental Health and Safety (EHS) Responsibilities:

- Develop and update PPE policies, procedures and guidance;
- Provide general safety training;
- Require adherence to this Policy;
- Identify activities, work environments and potential exposures where a PPE hazard assessment is required;
- Review and approve requirements and completed PPE hazard assessments as needed or upon request;
- Address PPE exception requests; and
- Provide guidance on the selection and use of PPE and training as necessary.

Principal Investigator (PI), Manager, Supervisor and Instructor Responsibilities:

PIs, managers, supervisors and instructors are primarily responsible for the safety of the faculty, staff, students, affiliates and visitors who perform activities under their direction. These responsibilities include:

- Perform, document and certify PPE hazard assessments for their staff, students, affiliates and visitors when they first enter a work environment, begin an activity or are potentially exposed to a hazardous material, condition or process;
- Review and update these assessments when a new hazardous material, condition or process is introduced into the work environment;²
- Ensure that staff, students, affiliates and visitors are aware of hazardous materials, conditions or processes in their work environment and
- Ensure that staff, students, affiliates and visitors receive applicable PPE information and training prior to exposure to those hazards;
- Provide additional safety training specific to their activities and work environment;
- Supply required PPE at no cost to affected staff and students;¹

² For laboratories, this assessment is done by completing the laboratory PPE hazard assessment tool, accessible via <http://ehs.yale.edu/pppe>. EHS can provide PPE hazard assessment forms and tools for other work environments.

- Communicate, monitor and enforce minimum PPE standards, as well as the use of PPE specified by the PPE hazard assessment, work environment or activity performed; and
- Notify EHS of materials, conditions or processes that may require individuals to wear additional or different types of PPE.

Faculty, Staff, Student, Affiliate and Visitor Responsibilities:

- Follow the administrative controls (e.g., safety procedures) outlined in this and other documents;
- Participate in safety and PPE training sessions;
- Work with your PI, manager, supervisor or instructor to determine if changes to PPE are required;
- Wear specified personal attire, as required;
- Care for and use PPE as required; and
- Notify your PI, manager, supervisor or instructor of any contaminated, worn out, defective, cut or otherwise damaged PPE.

PPE HAZARD ASSESSMENT AND SELECTION

OSHA requires the University to identify and evaluate potentially hazardous materials, conditions and processes that may require control measures, including the use of PPE. If an exposure to a hazardous material, condition or process exists that cannot be avoided or eliminated through administrative or engineering controls, the PI, manager, supervisor or instructor must select, provide and make available proper PPE to the exposed individuals. PPE purchased for use on campus must comply with applicable American National Standards Institute (ANSI) standards for that type of device. Documents and tables listed as Supplementary Guidance and References, below, describe the hazards addressed by each type of PPE, as well as the PPE requirements for common activities. This table gives examples of different types of PPE and the hazards for which they offer protection:

Body Part	Example of PPE	Examples of Hazard
Feet	Safety shoes	Crushing injury
Eyes	Safety glasses Goggles	Human blood Biological pathogens Particles Lacrimating vapors Chemical splash
Face	Face shield	Impact from flying particulates (e.g., wood chips)
Ears	Ear plugs or muffs	Loud noise from machinery
Head	Hard hat	Contact from falling object
Body (torso)	Lab coat Rubber apron Leather apron	Chemical splash Burn from molten metal work
Hands	Gloves (chemical-resistant/ cut resistant/insulated)	Contact with chemicals Cuts from sharps Contact with hot or cold objects Animal bites or scratches
Respiratory system	Respirator	Particles, vapors, gases or allergens

TRAINING REQUIREMENTS

Individuals required to wear PPE must participate in training in the proper selection, use, care and limitations of PPE before performing any activities requiring its use. An individual's specific training requirements are based on their activities, work environment, potential exposures to hazardous materials, conditions or processes. This training is provided via several methods, including instructor-led sessions, computer-based training courses, written programs or by local supervisors and teachers.

In many cases, an individual's PPE training requirements are assigned via the University's Training Management System (TMS) assessment, and PPE training is documented in TMS.

MEDICAL SURVEILLANCE REQUIREMENTS

Prior to wearing certain types of PPE, such as respiratory protection, medical surveillance may be required. This medical surveillance program is managed by the Employee Health Office. Further information can be found at <http://yalehealth.yale.edu/employeehealth>.

CARE AND USE OF PPE

Individuals who use PPE must properly fit, inspect, use, clean, maintain and store their PPE. EHS can provide assistance for all of these steps.

Fitting: PPE is available in different sizes (or is adjustable) to accommodate different individuals and uses. Users must choose or adjust their PPE so that it is appropriately sized to provide maximum protection, and to facilitate their ability to safely perform the activity.

Inspection: Users must inspect PPE before and after each use, following the manufacturer's instructions. Any PPE that is damaged, worn out, defective or otherwise no longer provides effective protection must be removed from service for repair or replacement.

Use: Users must use appropriate PPE whenever it is required. Any PPE found to be worn out, defective, cut or otherwise damaged must be immediately replaced. Immediately discontinue using contaminated PPE. Contaminated uniforms and lab coats must be decontaminated prior to laundering. If contaminated, other re-usable PPE must be decontaminated prior to reuse. Disposable PPE must never be reused.

Maintenance and Storage: Users must keep their PPE clean and properly maintained. Cleaning is particularly important for eye and face protection because dirty or fogged lenses can impair vision. After each use, reusable PPE must be cleaned and maintained according to the manufacturers' instructions. Generally, reusable PPE can be cleaned with mild soap/detergent and water after use, and air dried. PPE should be stored in a cabinet, locker or other location away from sources of potential contamination or sharp/heavy objects that could deform or otherwise cause damage.

COMPLIANCE

When indicated by the work environment, a PPE hazard assessment or other procedure, consistent use of appropriate PPE is required. In many cases, wearing a uniform or specified personal attire is also required. No activity may be conducted if the required personal attire is not worn, or the required PPE is not available and used. Failure to comply with these requirements can be grounds

for disciplinary action, as can failure to enforce PPE and personal attire requirements. PIs, managers and supervisors can contact their HR Generalist for help in addressing noncompliance. EHS has the authority to take necessary actions to enforce compliance with this Policy and to address unsafe conditions, including stopping an activity or shutting down a laboratory or other facility if necessary.

SUPPLEMENTARY GUIDANCE AND REFERENCES

Personal Protective Equipment Assessment Tables/Tools for:

[Dining Halls](#)

[Facilities](#)

[Laboratories](#)

[Handling Chemicals in Clinical Areas](#)

[Shops](#)

[Yale Animal Resource Center](#)

[Procedure: Selection and Use of Personal Protective Equipment and Attire in Laboratories](#)

[Gradations of Risk Table for Biosafety Levels](#)

[Noise and Hearing Conservation Program](#)

[Respiratory Protection Program](#)

[Fall Protection Program](#)

[Electrical Protection Program](#)

[Chemical Hygiene Plan](#)

[Biosafety Manual](#)

[*Biosafety in Microbiological and Biomedical Laboratories*, Centers for Disease Control and Prevention \(CDC\) and the National Institute of Health \(NIH\)](#)