

BOWDOIN COLLEGE PERSONAL PROTECTIVE EQUIPMENT PROGRAM

Purpose

This document meets the requirements outlined in OSHA Title 29 CFR 1910.132 through .138 (*Subpart I – Personal Protective Equipment*) for the development, implementation, and maintenance of a written hazard assessment and personal protective equipment (PPE) program. The purpose of the program is to provide information to employees of Bowdoin College regarding hazards in their workplace, and the proper use of PPE.

Scope

The PPE program applies to all employees who may be occupationally exposed to hazardous materials or conditions in the workplace (*Hazard Determination Table* attached), where engineering and work practice controls may not be adequate to prevent exceedances of the occupational health standards.

Program Components

1. **Program Administrator.** The Director of Environmental Health and Safety (EHS) will be the PPE program administrator.
2. **Hazard Determination.** Supervisors are responsible for reviewing their operations and job requirements to determine if employee PPE usage is necessary, and specifying requirements for each employee based on their assigned tasks. Hazards will be assessed according to the guidelines provided in 29 CFR 1910 Subpart I, Appendix B, and may include process, environmental, chemical, or mechanical materials or conditions capable of causing injury or impairment in the function of any part of the body through absorption, inhalation, or physical contact. Information from Safety Data Sheets (SDSs) may be used in making this determination where applicable, in coordination with EHS. Upon determination of an occupational hazard, the Supervisor will provide the employee with the appropriate PPE, specify work practices for the task and location, and conduct work area surveillance during the performance of the task.

All hazard assessments and PPE certifications will be documented using the form included in Attachment B. All completed forms will be placed on file by supervisors and copied to the EHS office.

3. **Equipment Selection.** PPE will be selected to address the specific hazards identified, based on type, materials, and intended use:
 - **29 CFR 1910.133 – Eye and Face Protection.** Safety glasses, goggles, or face shields will be provided as appropriate to the identified hazard; side shields (either incorporated into the design or detachable) are required where there is a hazard from flying objects. Designated employees who wear prescription lenses will be provided either with eye protection that will fit over the lenses without disturbing their proper position or safe use, or prescription PPE that replaces the lenses for work use.
 - **29 CFR 1910.134 – Respiratory Protection.** Refer to the *Bowdoin College Respiratory Protection Program*.

- **29 CFR 1910.135 – Head Protection.** Hard hats will be provided where there is a hazard from falling objects, overhead obstructions (OHO), or overhead electrical conductors.
- **29 CFR 1910.136 – Foot Protection.** Employees must wear protective (steel toe/shank, or STS) boots where there is a danger of falling or rolling objects, objects piercing the sole, or exposure to electrical hazards. An annual “boot allowance” will be provided at the discretion of the Departmental Director, to offset the employee’s expense in purchasing and maintaining the required footwear.
- **29 CFR 1910.137 – Electrical Protective Equipment.** EPE, including insulating blankets, matting, covers, line hose, gloves, and sleeves made of rubber or other insulating materials, shall be properly marked, proofed, inspected, and provided for use.
- **29 CFR 1910.138 – Hand Protection.** Gloves of appropriate type, size and materials shall be provided where there is a hazard from: skin absorption of hazardous substances; severe cuts, lacerations, abrasions, or punctures; chemical or thermal burns; or harmful temperature extremes.
- **29 CFR 1910.095 – Hearing Protection.** Refer to the *Bowdoin College Hearing Conservation Program*.

All PPE must meet the appropriate American National Standard Institute (ANSI) and/or National Institute for Occupational Safety and Health (NIOSH) standards based on the assessed hazard, and must not impair the employee’s ability to see, hear, communicate, or perform their task safely. OSHA also recognizes the equivalency of Canadian National Standards for safety equipment. EHS will coordinate the purchase of all PPE, either directly or through the individual Departments, to maintain uniformity of training and use.

4. **Employee Training.** EHS will coordinate and/or provide annual training for employees who are required to use PPE. Records of training will be kept by the EHS Office and Human Resources for 3 years. Training is mandatory for any employee prior to using any PPE, and shall include (at a minimum) the following components:

- The nature of the identified hazards, and consequences of improper PPE use;
- Available engineering and administrative controls, and the need for PPE;
- Reasons for the selection of a particular type of PPE;
- Capabilities and limitations of various PPE;
- Methods of donning, inspecting, checking fit, and operation of the PPE;
- Proper maintenance, cleaning, and storage of the PPE; and
- The general requirements of the OSHA PPE standard (29 CFR 1910.132).

Note that while temporary or seasonal employees are not required to participate in the comprehensive *Respiratory Protection* or *Hearing Conservation* programs, they are required to comply with any PPE requirements established by their Supervisor for that specific workplace, and will receive instruction in its use as part of their new employee orientation per the requirements of the College’s general safety program.

5. **Inspection and Maintenance.** PPE and their components will be inspected regularly by the employee and/or their Supervisor, and disposed, repaired, or replaced according to manufacturer's specifications. Non-disposable PPE will be cleaned and maintained by the employee to whom it was issued or last used it, as needed.

Program Review

This written program will be audited by EHS at least annually, by reviewing the status of employee PPE usage and annual training. Supervisors of employees who are required to wear PPE shall inform EHS of any changes in PPE usage or needs, and subsequent changes to the workplace hazard assessment will be documented as required by 29 CFR 1910.132.d.2.

Attachments

Attachment A- *PPE Hazard Determination Table*

Attachment B- *Hazard Assessment and PPE Certification Form*

Revision History: 11/05/2012, 03/29/2021

PPE HAZARD DETERMINATION TABLE

DEPARTMENT / WORKPLACE	IDENTIFIED HAZARDS	PPE ISSUED
FM / Heating Plant	Noise, power tools, heavy equipment, hazardous chemicals, oily particulates, welding vapors, heat, OHO	Ear plugs/muffs, work gloves, safety glasses, welding shields, nitrile gloves, STS, hardhats
FM / Motor Pool	Noise, power tools, oily particulates, automotive products, vehicles, welding vapors	Ear plugs, work gloves, safety glasses, welding shields, STS, dust masks
FM / Carpentry-Paint Shop	Noise, power tools, bench tools, dusts, paints and solvents, heavy equipment	Ear plugs, work gloves, safety glasses, dust masks or respirator, nitrile gloves, STS
FM / Mechanical Services	Noise, power tools, hazardous chemicals, electrical equipment, heavy equipment	Ear plugs, work gloves, safety glasses, EPE, STS, respirators
FM / Buildings & Grounds	Noise, power tools, heavy equipment, pesticides, dust	Ear plugs/muffs, work gloves, safety glasses, dust masks, STS, nitrile gloves
FM / Housekeeping	Cleaning chemicals, hand tools, heavy equipment	Nitrile gloves, safety glasses, work gloves, STS
FM / Warehouse	Heavy equipment, chemicals	Nitrile gloves, work gloves, safety glasses, STS
FM / Set-ups and Moves	Heavy equipment, chemicals, biohazard materials, dust	Work gloves, safety glasses nitrile gloves, dust masks, STS
DS / Food Preparation	Biohazard materials, sharp tools, cleaning chemicals, wet floor conditions	Nitrile gloves, safety glasses, dust masks, non-slip shoes
Student / Health Services	Biohazard materials, sharps, chemicals	Nitrile gloves, safety glasses

Academic / Sciences, Museum	Biohazard materials, sharps, chemicals, noise, power tools, bench tools, dusts, paints and solvents	Ear plugs, work gloves, safety glasses, dust masks or respirator, nitrile gloves
Athletics / Trainers	Biohazard materials, sharps, chemicals	Nitrile gloves, safety glasses

Personal Protective Equipment (PPE) Hazard Assessment Instructions

Based on the hierarchy of controls, PPE is the last resort. Personal protective equipment alone should not be relied upon to provide protection against hazards but should be used in conjunction with engineering controls, administrative controls, and procedural controls.

This document addresses eye, face, head, hand, foot, torso, respiratory, noise, and fall protection. It will serve as the Personal Protective Equipment (PPE) Certificate documentation required to satisfy the federal requirements of the Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1920.132 Subpart I- Personal Protective Equipment.

General Guidelines:

The PPE Hazard Assessment can be done for an area, a job category, of an individual by selecting and filling in the appropriate box. The assigned evaluator shall include their name, department/division being assessed and the date. Completed assessments must be accessible to employees and inspectors and updated when needed.

PPE Hazard Assessment Instructions:

Step 1: Inform Affected Employees of the Process:

Affected employees from each work area that is being 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 PPE currently being used.

Step 2 Review the 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 (organized by the body part). Further descriptions can be provided in the adjacent box. Considerations should be given to the following basic hazard categories.

1. Impact (falling/flying objects)
2. Penetration (sharp objects piercing foot/hand)
3. Compression (roll-over of pinching objects)
4. Chemical exposure (inhalation, ingestion, skin contact, eye contact or injection)

5. Temperature extremes (heat and cold)
6. Dust/Flying debris (grinding, chipping, sanding etc)
7. Fall (slip/trip, scaffolds elevated work)
8. Radiation (non-ionizing: UV/IR Light, welding, brazing, cutting, furnaces, etc)
9. Noise (mechanical rooms, machines, cage washing, jackhammers, etc)
10. Electrical (shock, short circuit, arcing, static)

Step 4: Select PPE:

After considering and/or planning for other controls, select the PPE which 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 the EHS Office.

Step 5: Make Document Accessible:




Once completed sign and dated, store the form either electronically or as a hard copy in a location easily accessible to employees and inspectors. A copy must be sent to the EHS Office.

Step 6: Revise Protocol:




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



Step 7: Reassess the workplace as necessary by identifying and evaluating:

1. New equipment and processes.
2. Injury incident records.
3. Suitability of previously selected PPE.

This document will assess: (select one)	A worksite	Specify location:	
	A single employee's job description	Name of employee:	
		Position Title:	
	A job description for a class of employees	Position Titles:	
Location:			
Your Name:		Department/Division:	
		Date:	
	EYE HAZARDS: <i>Tasks that can cause eye injury include: working with chemicals or acids; UV lights; chipping, sanding, or grinding; welding; furnace operations; and metal and wood working</i>		
	Check the appropriate box for each hazard:	Description of hazard(s):	Required PPE
	<input type="checkbox"/> Chemical Exposure		
	<input type="checkbox"/> High Heat/Cold		
	<input type="checkbox"/> Dust/Flying Debris		
	<input type="checkbox"/> Impact		
	<input type="checkbox"/> UV/IR Radiation		
<input type="checkbox"/> Other:			
	HEAD/NECK/FACE HAZARDS: <i>Tasks that can cause head/neck/face injury include: working below others who are using tools or materials that could fall, working on energized electrical equipment or utilities, and working in trenches or confined spaces.</i>		
	Check the appropriate box for each hazard:	Description of hazard(s):	Required PPE
	<input type="checkbox"/> Chemical Exposure		
	<input type="checkbox"/> Dust/Flying Debris		
	<input type="checkbox"/> Impact		
	<input type="checkbox"/> UV/IR Radiation		
	<input type="checkbox"/> Electrical Shock		
<input type="checkbox"/> Other:			
	FOOT HAZARDS: <i>Tasks that can cause foot injury include: exposure to chemicals or acids, welding or cutting, materials handling, renovation or construction, and electrical work.</i>		
	Check the appropriate box for each hazard:	Description of hazard(s):	Required PPE
	<input type="checkbox"/> Chemical Exposure		

	High Heat/cold	
	Impact/compression	
	Electrical	
	Puncture	
	Slippery/Wet Surfaces	
	Other:	

	HAND HAZARDS: <i>Hand injury can be caused by: work with chemicals or acids, exposure to cut or abrasion hazards (for example, during demolition, renovation, woodworking, or food service preparation, work with very hot or cold objects or materials, and exposure to sharps.</i>		
	Check the appropriate box for each hazard:	Description of hazard(s):	Required PPE
	<input type="checkbox"/> Chemical Exposure		
	<input type="checkbox"/> High Heat/Cold		
	<input type="checkbox"/> UV/IR Radiation		
	<input type="checkbox"/> Electrical Shock		
	<input type="checkbox"/> Puncture		
	<input type="checkbox"/> Cuts/Abrasion		
<input type="checkbox"/> Other:			
	BODY HAZARDS: <i>Injury of the body (torso, arms, or legs) can occur during: exposure to chemicals, acids, or other hazardous materials; abrasive blasting; welding, cutting, or brazing; sanding, or grinding; use of chainsaws or similar equipment: and work around electrical arcs.</i>		
	Check the appropriate box for each hazard:	Description of hazard(s):	Required PPE
	<input type="checkbox"/> Chemical Exposure		
	<input type="checkbox"/> High Heat/Cold		
	<input type="checkbox"/> Impact/Compression		
	<input type="checkbox"/> Electrical Arc		
	<input type="checkbox"/> Cuts/Abrasion		
	<input type="checkbox"/> Other:		
	FALL HAZARDS: <i>Personnel may be exposed to fall hazards when performing work on a surface with an unprotected side or edge that is 4 feet or more above a lower level, or 10 feet or more on scaffolds. Fall protection may also be required when using vehicle man lifts, elevated platforms, tree trimming, performing work on poles, roofs, or fixed ladders.</i>		

	Check the appropriate box for each hazard:	Description hazard s):	Required PPE
	Fall hazard		
	NOISE HAZARDS: <i>Personnel may be exposed to noise hazards when working in mechanical rooms; machining: grinding; sanding; cage washing; dish washing; working around pneumatic equipment, grounds equipment, generators, chillers, motors, saws, jackhammers, or similar equipment.</i>		
	Check the appropriate box for each hazard:	Description of hazard(s):	Required PPE
	Noise hazard		
	RESPIRATORY HAZARDS: <i>Personnel may be exposed to respiratory hazards that require the use of respirators: during emergency response. when using certain chemicals outside of a chemical fume hood; when working with hazardous powders; when entering fume hood plenums, when working with animals; when applying paints or chemicals in confined spaces; when welding, cutting, or brazing on certain metals: and when disturbing asbestos, lead, silica, or other particulate hazards.</i>		
	Check the appropriate box or each hazard:	Description of hazard(s):	Required PPE
	Chemical exposure		
	Particulate exposure		
Other:			
I certify that the above hazard assessment was performed to the best of my knowledge and ability, based on the hazards present on this date. _____(signature)			