

# Personal Protective Equipment Program Revision 1 September 2019

# **Table of Contents**

1.0	Purpose
2.0	Scope
3.0	References
4.0	General
5.0	Definitions
6.0	Responsibilities
7.0	Procedures
8.0	Training
9.0	Eye and Face Protection
10.0	Head Protection
11.0	Foot Protection
12.0	Arm and Hand Protection
13.0	Ear Protection
14.0	Protective Clothing
15.0	High Visibility – Traffic Areas
16.0	Blood Borne Pathogens Protection.

#### 1.0 PURPOSE

1.1. This procedure provides the requirements for the selection and use of personal protective equipment (PPE) to provide employees with eye, face, head, arm, hand, body, foot, and ear protection. Respiratory protection and fall protection are separate procedures.

#### 2.0 SCOPE

2.1. This procedure applies to all BRISTOL COMMUNITY COLLEGE personnel and subcontractors working on projects or in offices where PPE requirements are applicable.

#### 3.0 References

- 3.1. Title 29, Code of Federal Regulations, Parts 1910 and 1926, Occupational Safety and Health Administration (OSHA), U.S. Department of Labor.
- 3.2. American National Standards Institute (ANSI) Z87.1-2003, Practice for Occupational and Educational Eye and Face Protection.
- 3.3. American National Standards Institute (ANSI) Z89.1-2003 Protective Headwear for Industrial Workers.
- 3.4. American National Standards Institute (ANSI) Z41, ASTM F2413, Personal Protection-Protective Footwear.
- 3.5. NFPA 70E

#### 4.0 General

- 4.1. The safety and well-being of all employees shall receive first considerationthroughout all phases of work. PPE shall be easily obtainable byemployees. It is the responsibility of every employee to use appropriatePPE to ensure incident-free work.
- 4.2. Personal protective equipment shall not be used as a substitute forengineering, work practice, and/or administrative controls. PPE shall beused in conjunction with these controls to ensure employee safety andhealth among all BRISTOL COMMUNITY COLLEGE operations. PPE includes all clothing or other workaccessories designed to create a barrier against work place hazards. Employees must be made aware that PPE does not eliminate the hazard. If PPE fails, exposure will occur.

#### 5.0 Definitions

5.1. None

#### 6.0 Responsibilities

All managers are responsible for implementing and enforcing thisprocedure.

#### 7.0 Procedures

- 7.1. General Requirements
  - 7.1.A. Protective equipment, including PPE for eyes, face, head, and extremities, protective clothing, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical

irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

- 7.1.B. BRISTOL COMMUNITY COLLEGE shall furnish required Personal Protective Equipment.
  - 7.1.B.1. Any employee owned or provided PPE must be maintained in a clean, sanitary condition. It must also be in a sufficient condition to provide adequate protection to the employee as it was originally intended by the manufacturer and meet applicable ANSI and OSHA regulatory requirements.
  - 7.1.B.2. Any employee owned PPE that does not meet BRISTOL COMMUNITY COLLEGE's expectation for sanitary or protection requirements will be immediately removed by the employee and replaced by BRISTOL COMMUNITY COLLEGE with an adequate replacement.
  - 7.1.B.3. BRISTOL COMMUNITY COLLEGE reserves the right to inspect any and all employee owned PPE.
  - 7.1.C. Subcontractors are required to furnish their employees with all required PPE.
  - 7.1.D. All PPE shall be of safe design and construction for the work to be performed.
  - 7.1.E. Defective and damaged PPE shall not be used.
  - 7.1.F. PPE shall not be used for any purpose other than employee protection.
- 7.2. Pre Job Briefing and Hazard Assessment
  - 7.2.A. BRISTOL COMMUNITY COLLEGE shall assess each workplace to determine if hazards are present, or are likely to be present, which would necessitate the use of PPE. If such hazards are present, or likely to be present, BRISTOL COMMUNITY COLLEGE shall:
  - 7.2.B. 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.
  - 7.2.C. Communicate selection decisions to each affected employee.
  - 7.2.D. Select PPE that properly fits each affected employee.
    - 7.2.D.1 Appendix A provides compliance assistance to implement requirements for a hazard assessment and the selection of PPE. Personal Protective Equipment
  - 7.2.E. BRISTOL COMMUNITY COLLEGE shall verify workplace hazard assessments have been performed through a written certification. The certification shall identify the workplace evaluated; the person certifying the evaluation; and the date(s) of the hazard assessment. Appendix A provides a sample Hazard Assessment form.

#### 8.0 Training

- 8.1. BRISTOL COMMUNITY COLLEGE shall provide training to each employee who is required, by this procedure, to use PPE. Each employee shall be trained to know at least the following:
  - 8.1.A When PPE is necessary
  - 8.1.B What PPE is necessary.

- 8.1.C How to properly don, doff, adjust, and wear PPE.
- 8.1.D The limitations of the PPE.
- 8.1.E The proper care, maintenance, useful life and disposal of the PPE.
- 8.2. Each affected employee shall demonstrate an understanding of the training and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE.
- 8.3. When there is reason to believe that any affected employee who has already been trained does not have the understanding and skill required, the employee shall be retrained. Circumstances where retraining is required include, but are not limited to, the following:
  - 8.3.A Changes in the workplace, which renders previous training obsolete.
  - 8.3.B Changes in the type of PPE to be used which renders previous training obsolete.
  - 8.3.C Inadequacies in an affected employee's knowledge or use of

#### 9.0 Eye and Face Protection

- 9.1 Employees shall use appropriate eye or face protection when exposed toeye or face hazards for flying particles, molten metal, liquid chemicals, acidsor caustic liquids, chemical gases or vapors, or potentially injurious lightradiation.
- 9.2 Employees shall use eye protection that provides side protection whenthere is a hazard from flying objects. Detachable side protection (e.g., clip on or slide-on side shields): meeting the pertinent requirements of thisprocedure is acceptable.
  - 9.2.A All BRISTOL COMMUNITY COLLEGE and contractor employees, who are assigned to field projects or perform field related work activities, shall be provided with and required to wear basic eye protection (safety glasses with side shields) at all times while performing field tasks. The need for additional PPE will be addressed through hazard assessments and site safety and health plans.
- 9.3 Employees who wear prescription lenses while engaged in operations thatinvolve eye hazards shall wear eye protection that incorporates the prescription in its design, or shall wear eye protection that can be worn overthe prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses.
- 9.4 Eye and face PPE shall be distinctly marked to facilitate identification of the manufacturer.
- 9.5 Employees shall use equipment with filter lenses that have a shade numberappropriate for the work being performed for protection from injurious lightradiation.
  - Appendix C provides a listing of appropriate shade numbers forvarious operations.
- 9.6 Safety glasses that meet ANSI Z-87.1-2003 requirements must be worn atall times when on BRISTOL COMMUNITY COLLEGE projects.
- 9.7 Protective eye and face devices shall comply with ANSI Z87.1-2003, American National Standard Practice for Occupational and Educational Eyeand Face Protection.

#### 10.0 Head Protection

- 10.1 Employees shall wear protective helmets (hard hats) when working in areas where there is a potential for injury to the head from falling objects and when working near exposed electrical conductors which could contact the head.
- 10.3 Hard hats are grouped into three classes (C, E, and G)) and two types (1 and 2) according to how they meet various criteria for protection from impact, penetration, electrical conductivity, flammability and other safety hazards. Personal Protective Equipment Program 08/11/17 Page 6 of 7 Version 3.3 Safety First...No One Gets Hurt!
  - 10.3.A Type I for top protection or Type II for lateral impact protection. Both types are tested for impact attenuation and penetration resistance.

Type II helmet performance requirements include criteria for impact energy attenuation from impacts from the front, back and sides as well as the top; off-center penetration resistance, and chin strap retention.

- 10.4 Class E hard hats (electrical) are tested to withstand 20,000 volts;
- 10.5 Class G hard hats (general) helmets are tested at 2200 volts;
- 10.6 Class C hard hats (conductive) provide no electrical protection.
- 10.7 Type 1 hard hats have a full brim.
- 10.8 Type 2 hard hats have no brim but may include a peak.
- 10.9 Supplementary hard hat equipment includes winter liners, sweat bands, chin straps, and cloth caps.
- 10.10 When using a face shield, welding hood or sandblasting hood, the type which combines with a hard hat shall be used.
- 10.11 Hard hats shall not be modified.
- 10.12 Hard hats shall be adjusted to fit properly and be worn correctly, bill to the front (unless welding). The hat shall be squared off straight and not cocked at an angle or perched on the back of the head. If worn correctly, the hard hat protects in the following ways:
- 10.13 The hard hat shell is the basic impact protection against falling and flying objects and bumping into objects.
- 10.14 The curved shell allows an object to ricochet or slide off, reducing the force of impact.
- 10.15 The space maintained between the shell and the head (minimum of 1 1/4 in.) above the suspension, minimizes the shock and prevents the shell from striking the head solidly upon impact.
- 10.16 The space between the suspension and the shell (sufficient for ventilation), on the side of the hat, softens the effect of lateral blows.
- 10.17 The peak and brim protect the face and the outwardly curved bottom edge affords protection to the ears and the nape of the neck.
- 10.18 Hair shall be protected against being caught in moving machinery, subjected to sparks or snagging on objects. Long hair shall be protected by compacting it into the hard hat shell or by use of a hair net or ties so that it is not loose or tuck up inside the collar of the shirt.
- 10.19 The use of hard hats in radiation areas shall be sufficient to adequately protect personnel. A limited number of hard hats shall be kept in a radiation work area for general use.

#### 11.0 Foot Protection

- 11.1 Employees shall wear protective footwear (safety shoes) when working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards. There are five main types of protective footwear, each focusing on a specific type of hazard:
  - 11.1.A Metatarsal footwear.
  - 11.1.B Conductive footwear.
  - 11.1.C Electrical hazard footwear.
  - 11.1.D Sole puncture resistant footwear.
  - 11.1.E Static dissipative footwear.
- 11.5 Protective footwear shall comply with ANSI Z41-ASTM F2413, American National Standard for Personal Protection Protective Footwear.

#### 12.0 Arm and Hand Protection

- 12.1 BRISTOL COMMUNITY COLLEGE shall select and require employees to use appropriate arm and hand protection (gloves) when employees' arms and 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.
- 12.2 The selection of appropriate arm and hand protection shall be based on an evaluation of the performance characteristics of the arm and hand protection relative to the task(s) to be performed, conditions present, duration of use and hazards and potential hazards identified.
- 12.3 Specific requirements for Electrical Arm and Hand protection will be addressed through the PPE hazard assessment and NFPA 70E-2009 requirements.

#### 13.0 Ear Protection

13.1 Ear protection devices are addressed in the Hearing Conservation Program.

#### 14.0 Protective Clothing

- 14.1 The personal work clothes of employees shall fit their work assignments and be in adequate condition.
- 14.2 Many hazards can threaten the torso; heat, splashes from hot metals and liquids, impacts, cuts, acids, and radiation. A variety of protective clothing is available; vest, jackets, aprons, coveralls, and full body suits.
- 14.3 Arc Rated (AR) clothing and personal protective equipment (PPE) shall be used based on incident energy exposure associated with the specific job task. In lieu of performing the flash hazard analysis, the use of PPE can be determined by using the latest version of NFPA 70E.
- 14.4 Long pants shall be worn by all field employees to prevent sunburn, rashes, abrasions, and insect bites and to afford some protection against flying particles and accidental spills

#### 15.0 High Visibility – Traffic Areas

15.1 Fluorescent vests, belts, or gloves shall be worn when directing traffic and forequipment signaling.

#### 16.0 Blood Borne Pathogens Protection

16.1 When there is occupational exposure to blood borne pathogens, appropriate PPE such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection, and mouthpieces, resuscitation bags, pocket masks, or other ventilation devices shall be provided. PPE shall be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through to or reach the employees work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

## **Personal Protective Equipment**

The following equipment is required in this work area:	
The following commons is required in this work areas	
The following equipment is required in this work area.	

Task	Eye Protection	Ear Plugs or Ear Muffs		Feet	Apron	Respirator	ANSI Hi-Vis clothing	Hard Hat	Fall Protection	Other
For example: Chainsaw operations	X Safety glasses with faceshield	Х	X	X		24dl /r				X—Kevlar Chaps
For example: Electroplating operations	X goggles		X nitrile	X	Х					
		Ta:		8	· · · · · · · · · · · · · · · · · · ·	3		18		
					ů.	8	ÿ.			
		i i	i i			3				
		i i		4						

This certifies that the workplace has been evaluated for hazards in	n order to determine if personal protective equipment is required
Signature of person conducting the assessment:	Date:

This summary is an optional format intended to help communicate PPE requirements to employees. Each employer may develop their own format. You may add PPE icons that apply to your worksite. A certification statement is required. Based on workplace hazards, other programs, such as a Respirator Program, Hazard Communication, or Hearing Conservation Program, may also be required.

# CERTIFICATION OF HAZARD ASESSMENT FOR SELECTION OF PPE

<u>Purpose</u>: Employers are required to evaluate hazards in the workplace to determine if Personal Protective Equipment (PPE) is required. This optional worksheet can be used by employers to assist the evaluation process. Employers may use their own format. However, the employer must be able to certify that a hazard assessment has been conducted, through a certification statement. The statement is provided at the end of this worksheet.

<b>Work Area Evaluated:</b>	

Can tasks in this work area affect the following?	Examples of Hazards	PPE REQUIRED (check all that apply)		
Eyes and Face	<ul> <li>Dust</li> <li>Projectiles</li> <li>Twigs, stray objects</li> <li>Chemicals</li> <li>Blood</li> <li>Other</li> </ul>	<ul> <li>Safety glasses with side shields</li> <li>Splash proof goggle</li> <li>Faceshield</li> <li>Other</li> </ul>		
Hands	<ul> <li>Tools</li> <li>Chemicals</li> <li>Splinters</li> <li>Poison ivy</li> <li>Sharp objects</li> <li>Cold / Heat</li> <li>Blood</li> <li>Other</li> </ul>	<ul> <li>Canvas gloves</li> <li>Chemical resistant gloves</li> <li>Healthcare gloves</li> <li>Food prep gloves</li> <li>Cut-resistant gloves</li> <li>Heat resistant gloves</li> <li>Cryogenic gloves</li> <li>Other:</li> </ul>		
	<ul> <li>Impact</li> <li>Compression by heavy objects</li> <li>Sharp objects</li> <li>Slippery area</li> <li>Chemical</li> <li>Heat / Cold</li> <li>Other</li> </ul>	<ul> <li>Closed toe shoe</li> <li>Closed toe boot</li> <li>Safety toe shoe</li> <li>Safety toe boot</li> <li>Chemical resistant overboot</li> <li>Slip resistant closed toe shoe</li> <li>Other</li> </ul>		
Feet				

Can tasks in this work area affect the following?	Examples of Hazards	PPE REQUIRED (check all that apply)		
Head	<ul> <li>Falling objects</li> <li>Working underneath scaffolding or other activity</li> <li>Other</li> </ul>	○ Hardhat		
Hearing	<ul> <li>Noise at or above 85 decibels</li> <li>Other</li> </ul>	<ul> <li>Ear plugs</li> <li>Ear muffs</li> <li>Both plugs and muffs at same time (ie. Noise is above 100 decibels)</li> </ul>		
Hearing				
Torso	<ul> <li>Chemical splash</li> <li>Chemical dust</li> <li>Laceration</li> <li>Heat</li> <li>Cold</li> <li>Abrasion</li> <li>Other</li> </ul>	<ul> <li>Long-sleeve shirt</li> <li>Long pants</li> <li>Kevlar chaps</li> <li>Cotton coverall</li> <li>Fire resistant coverall</li> <li>Tyvek coverall</li> <li>Chemical resistant coverall</li> <li>Other</li> </ul>		
	<ul> <li>Fall from height</li> <li>Work in bucket truck</li> <li>Roofing</li> <li>Other</li> </ul>	<ul><li>Full body harness</li><li>Lanyard</li><li>Anchor point</li></ul>		
Fall Protection				

### **Certification**:

This certifies that the workplace has been evaluated for hazards to detern	nine if personal protective
equipment is required.	
Name of Workplace:	
Name of person certifying evaluation:	
Signature:	Date: