

*Sample Lesson Plan
Construction Training Program (10-hour)*

Topic: Personal Protective Equipment (PPE)

Overview

OSHA requires employers to protect their employees from workplace hazards through the use of engineering or work practice controls. When these controls are not feasible or do not provide sufficient protection, the use of personal protective equipment (PPE) is required.

Employers are required to assess the workplace to determine if hazards are present, or are likely to be present, which necessitates the use of PPE. If employees use PPE, employers must establish general procedures, called a *PPE program*, to give employees necessary protective equipment and to train them to use it properly. The program should explain when to use PPE and how to select, maintain and evaluate it.

Step 1: Planning the Lesson

• **Instructional Materials.**

1. PowerPoint presentation.
2. Instructor notes.
3. Other materials.

• **Instructional Objectives.**

1. Complete the required topics for the OSHA 10-hour course.
2. Complete the following optional topics:
 - a.
 - b.
 - c.
3. Present *Personal Protective Equipment (PPE)* to [number] participants.
4. Incorporate active participation in each lesson.
5. Provide a quiz or short evaluation at the end of the course.
6. Ensure feedback from participants at various points in the training.

• **Guest Speakers/Presenters and Topics/Responsibilities.**

Step 2: Presenting the Lesson

• **Lesson Introduction.**

Introductory remarks or transition from previous lesson.

• **Learning Objectives/Outcomes.**

Upon completion of the lesson, participants will be able to:

1. Describe the two primary means of protecting employees from workplace hazards, prior to considering personal protective equipment (PPE).

- **Learning Objectives/Outcomes. (Continued)**

Possible responses.

- Engineering Controls. Physically change the machine or work environment to prevent employee exposure to a potential hazard.
 - Isolate the process
 - Enclose the process
 - Substitute less harmful material
 - Change the process
 - Consider design specifications
- Work Practice Controls. Remove employees from exposure to the potential hazard.
 - Use of wet methods to suppress dust
 - Personal hygiene
 - Housekeeping and maintenance
 - Job rotation of workers

2. List at least four of the seven items that should be covered during PPE training.

Possible responses.

- Why training is necessary.
- How the PPE will protect the wearer
- What the PPE's limitations are
- When and how to wear the PPE
- How to identify signs of wear
- How to clean and disinfect the PPE
- What the useful life of the PPE is, and how to dispose of unusable equipment

3. Identify at least three elements of an appropriate PPE program.

Possible responses.

- The employer uses engineering and work practice controls to eliminate or reduce hazards before using PPE.
- The employer assesses the workplace for hazards.
- The employer selects appropriate PPE to protect employees from hazards that cannot be eliminated.
- Employees are informed about why the PPE is necessary and when it must be worn.
- Employees are trained in proper use and care of the PPE.
- Employees are required to wear PPE as protection from identified and likely hazards in their work area.

4. Match the PPE described in this lesson to at least one hazard for which it is appropriate protection.

Possible responses.

<u>PPE</u>	<u>Hazard</u>
Safety goggles/glasses (eye protection)	flying particles, dust, sawdust, corrosives or intense light
Face shields (face protection)	dust, splashes or sprays of hazardous liquid
Welding shields (face protection)	radiant light, flying sparks, spatters, slag chips
Hard hats/helmets (head protection)	injury from impact, falling objects, flying objects, electrical shock or burns (if helmet is insulated)
Safety shoes (feet protection)	hot, wet or slippery surfaces; heavy objects falling or rolling against the foot; exposure to nails or molten materials (e.g. paving materials or metals)
Gloves and sleeves (hand and arm protection)	burns, bruises, abrasions, cuts, punctures, fractures, amputations, chemical exposure
Vests, coveralls, body suits, aprons (body protection)	intense heat, splash of hot metals or liquids, impact from tools or machinery, cuts, hazardous chemicals

- **Planned Activities, Discussion, or Participant Interaction**

Step 3: Evaluating Student Learning and Instruction

- **Lesson Evaluation and Comments.**

References

OSHA Standard: 29 CFR 1926 Subpart E (1926.95 to 1926.107)

- www.osha-slc.gov/OshStd_toc/OSHA_Std_toc_1926_SUBPART_E.html

OSHA Publications

- www.osha-slc.gov/OshDoc/Additional.html
- 3077 Personal Protective Equipment
- 3080 Hand and Power Tools
- 3151 Assessing the Need for Personal Protective Equipment: A Guide for Small Business Employers

OSHA References/Resources

- Construction Safety and Health Outreach Program
 - www.osha-slc.gov/doc/outreachtraining/htmlfiles/subparte.html
- Electronic Library of Construction Occupational Safety and Health - Physical Hazards - Noise
 - www.cdc.gov/niosh/elcosh/docs/hazard/safety.html
- OSHA Technical Links - Construction: Laser Hazards
 - www.osha-slc.gov/SLTC/constructionlaserhazards/index.html
- OSHA Technical Links - Construction: Personal Protective Equipment
 - www.osha-slc.gov/SLTC/constructionppe/index.html