

Personal Protective Equipment

29 CFR 1910.132

Protecting employees from work place hazards

References

- OSHA CFR 29 1910.132 – OSHA CFR 29 1910.137
- Company Personal Protective Equipment Plan

Objectives

- Understand the requirements for a company PPE program.
- Understand the basic requirements for PPE.
- Conducting hazard analysis.

Personal Protection Equipment

- When hazards are present in the work place, the employer must ensure that proper personal protective equipment is used by employees.



If employees provide their own PPE, it is the responsibility of the employer to ensure it is adequate.

When is PPE Required?

- PPE is required when:
 - The work environment or work processes present a hazard to the body.
 - During work where employees may come in contact with hazardous chemicals, irritants, or radiation.
 - Employer is unable to prevent exposure or potential exposure by using work practice controls, engineering controls, or administrative controls.



- The employer must assess the workplace to determine if hazards, or likely hazards, are present that necessitate the use of PPE.

The JHA and PPE Assessment must be certified by management. They must be completed for each job task.

Administrative and Engineering Controls

- An employer must try to eliminate a hazard with administrative or engineering controls.
- If the hazard cannot be eliminated, then PPE can be assigned as a protective barrier.



Adding handrails to an elevated platform to eliminate the need for fall protection PPE is an example of engineering controls.

Training Requirements

- Employees must be trained on:
 - 1) When PPE is required
 - 2) What PPE is required
 - 3) How to properly don, doff, adjust and wear PPE.
 - 4) Limitations of PPE
 - 5) Maintenance, care, useful life and proper disposal of PPE.



Each person must demonstrate understanding of these concepts. Employees should be periodically evaluated and retrained if necessary.

Eye and Face Protection

- Each employee must use appropriate eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.
- The eye and face protection must offer protection from the sides. Detachable side protectors are allowed.



Eye protection must be rated to
ANSI Z87.1-1989

Head Protection

- The employer must ensure that each affected employee wears a protective helmet when working in areas where there is a potential for injury to the head from falling objects.
- The employer must ensure that a protective helmet designed to reduce electrical shock hazard is worn by each affected employee when near exposed electrical conductors that could contact the head. These helmets are usually marked with an "E."



Protective helmets must comply with the ANSI Z89.1-1986 standard.

Hand Protection

- Employers must select and require employees to use hand protection when employees' hands are exposed to hazards such as:
 - skin absorption of harmful substances
 - severe cuts or lacerations
 - severe abrasions
 - punctures
 - chemical burns
 - thermal burns
 - harmful temperature extremes



The employer must select and provide adequate hand protection for employees.

Foot Protection

- The employer must ensure that each affected employee uses protective footwear when working in areas where there is a danger of foot injuries due to:
 - Falling or rolling objects
 - Objects piercing the sole
 - Employee's feet are exposed to electrical hazards.



Safety shoes must be compliant with ANSI Z41-1991 standards.

Respirators

- Respirators shall be provided by the employer when such equipment is necessary to protect the health of the employee from exposure to harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors.
- Employers should consult an industrial hygienist for proper evaluation of a workplace for hazards that may require use of respirators.



Respirator Program

- Companies who utilize respirators as PPE must have:
 - **A written program, which includes:**
 - Procedures for selecting respirators for use in the workplace
 - Medical evaluations of employees required to use respirators
 - Fit testing procedures for tight-fitting respirators
 - Procedures for proper use of respirators in routine and reasonably foreseeable emergency situations
 - Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators
 - Procedures for regularly evaluating the effectiveness of the program.
 - **A designated program administrator, who is adequately trained to the task of running a respirator program.**

Respirator Evaluation

- The employer must select a NIOSH approved respirator that provides protection from the hazards presented in the work place.
- The employer must perform an evaluation to ensure this respirator is adequate to the task.
- Employees must complete a medical evaluation and a fit test prior to being allowed to wear a respirator in a hazardous environment.



Employees must be trained and fit tested by the program administrator or a certified respirator expert.

Personal Protective Equipment Plan

- The company has drafted a personal protective equipment plan.
- This plan is available to employees at:

Sample Personal Protective Equipment (PPE) Plan

I. Purpose.

The Personal Protective Equipment Plan provides direction to managers, supervisors, and employees about their responsibilities in the selection, use, care and disposal of personal protective equipment.

II. General

Personal protective equipment and devices should be used only when it is impossible or impractical to eliminate a hazard or control it at its source through engineering design.

Wearing personal protective equipment does not eliminate the hazardous condition.

Every effort will be made to first eliminate the hazardous condition through engineering and/or administrative control strategies. If it is not possible or feasible to eliminate hazardous conditions, personal protective equipment will be used to establish a barrier between the exposed employee and the hazard to reduce the probability and severity of an injury.

III. Responsibility and accountability.

- A. Managers are responsible to ensure supervisors conduct worksite/task analyses to identify hazardous conditions that may or may not be eliminated through engineering or administrative controls. In those tasks that expose employees to hazardous conditions which cannot be eliminated through engineering or

Questions?