

examinetics

Occupational Health Pathfinder

Personal protective equipment (PPE)

Pathfinder: number 008

Issue date: 10/13/2008

Overview

Employees can be exposed to a number of potential hazards in the workplace such as chemicals, temperature extremes, excessive noise, falling objects and sharp edges. Under the General Duty Clause Section 5(a)(1) of the OSH Act, employers are required to ensure that their workers are safe from harm in their work and at their place of employment and take the necessary precautions to prevent accidents from happening. OSHA recommends that preventative measures should occur at the source of the hazard such as engineering controls (eg. changing a machine), improving working practices (eg. training and educating employees) or administrative controls (eg. work scheduling).

Protecting your employees

Personal protective equipment (PPE) refers to any equipment provided to employees that protects them against direct contact with a known hazard. For employees working in extremes of temperature and with harmful chemicals, hand protecting gloves and, where appropriate, full body suits should be worn. These items are made with specialist materials appropriate for the hazard. For example, noise reducers such as earmuffs should be worn by those working in areas of extreme noise or those exposed to noise over long periods of time (eg operating machinery); hard hats should be worn by workers exposed to falling objects, electrical conductors or fixed objects; to avoid facial injuries or damage to the eyes from dangerous chemicals, sparks, flying objects or chippings a full face shield or goggles should be worn; leg shields and safety boots provide protection against sparks, electrical hazards, molten metals and slippery surfaces; a respirator must be worn by employees working with harmful sprays, dusts, vapors or volatile chemicals. For more information, read the excellent booklet entitled 'Assessing the need for Personal Protective Equipment – a guide for small business employers' by OSHA given under the 'Business Owner Briefing' link in the adjacent panel.

Regulatory issues

The OSHA standard 'PPE Title 29, Code of Federal Regulations [CFR] 1910.132' requires employers, after undertaking a 'hazard assessment' of the workplace, to implement an effective PPE program. The program should outline the measures that will be taken to try to control the hazard at its source (eg engineering administrative or work practice controls). Once those options have been exhausted, the relevant PPE should be identified for those still exposed to any hazards. Employees should also be provided with training and education in relation to the need for PPE and how to use PPE effectively.

KEY POINT SUMMARY:

- Employees are exposed to a number of potential hazards in the workplace such as chemicals, temperature extremes, excessive noise and falling objects
- OSHA recommends preventing a hazard at the source of the problem, eg by improving working practices (employee training or education)
- Personal protective equipment (PPE) protects an employee against a direct hazard eg gloves to prevent chemical or extreme temperature contact or earmuffs for workers exposed to extreme noise or noise over long periods of time
- Employers should be aware of the OSHA standard 'PPE Title 29, Code of Federal Regulations [CFR] 1910.132 and should implement a PPE program
- The program should include training and educating employees on the requirement and use of PPE in the workplace and how to use PPE correctly

FIND OUT MORE...

OSHA website

www.osha.gov/SLTC/personalprotectiveequipment/index.html

National Institute for Occupational Safety and Health

www.cdc.gov/niosh/nppt/topics/protecting/

Business Owner Briefing

Assessing the need for Personal Protective Equipment – a guide for small business employers (OSHA)

www.setonresourcecenter.com/safety/publications/PPE/osha3151.pdf

Medical Director Review

Effects of thermal environment and chemical protective clothing on work tolerance, physiological responses, and subjective ratings.

<http://www.ncbi.nlm.nih.gov/pubmed/1860463?dopt=Abstract>

IMPORTANT NOTICE

Pathfinder documents are for general guidance only - always consult your healthcare professional. No responsibility can be taken by Examinetics, Inc. for any use made of the information provided in this Pathfinder resource.