

Personal Protective Equipment

Texas Department of Insurance
Division of Workers' Compensation
Safety Education and Training Programs

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Goal

This publication provides guidelines to assist in the selection of personal protective equipment (PPE).

Objective

Participants will be able to explain the purpose and process of assessing hazards to determine selection of proper PPE.

Introduction

The Occupational Safety and Health Administration requires employers to assess the workplace to determine if hazards require the use of personal protective equipment. Employers must select and require the use of suitable PPE to protect workers from hazards or potential hazards. Based on a hazard assessment or a job safety analysis, the employer can select the PPE that best protects employees. If the employee owns the PPE the employer is still responsible for ensuring the adequacy, proper maintenance, and sanitation of the equipment.

Background

PPE cannot be used as a permanent substitute for engineering, work practice or administrative controls since its use is subject to lapses. PPE must be used if other types of controls cannot provide adequate protection. PPE includes all clothing, footwear, eye, respiratory, and hearing protection as well as any other items designed to create a barrier against specific workplace hazards. Employers must perform written evaluation of PPE to ensure that it meets the required level of protection. When this evaluation process has been perfected it should be established as a written standard operating procedure.

Selecting the proper sizes of protective equipment is important since the equipment cannot be altered. If the equipment is causing discomfort, the employee will be more likely to remove it. Discomfort can be a result of poor fit or poor selection for work conditions. The employer must make sure that the equipment is properly fitted to the worker and suited to the workplace. For example, earmuffs for hearing protection can be uncomfortable



in hot climates. Earplugs of equal protective value could be more comfortable and more readily worn by the employees. Offering alternate types of gear can lead to better compliance. Using PPE requires hazard awareness and training. Employers and workers must understand the equipment's purpose and its limitations. Workers must be aware that the equipment doesn't eliminate hazards. If the equipment fails, injury or exposure may result. To reduce the possibility of failure, equipment must be properly fitted and then maintained in clean and serviceable condition.

Hazard Assessment

Employers may assess hazards in several ways. One method is to use the existing job safety analysis to identify hazards and determine if PPE is required. (Refer to our Safety Training Publication *Job Safety Analysis*.) If a job safety analysis is not available, use the following steps:

- a. Conduct a walk-through of the area to identify sources of hazards to workers. Consider basic hazard categories such as fall, struck, caught, contact, and routes of entry for hazardous substances.
- b. Observe hazard sources; motion, extreme temperatures, chemical sources and states, harmful dust, strong light radiation, falling or sharp objects, pinch points, electrical sources, workplace layout and location of work stations to determine possible exposure.
- c. Organize the collected data to prepare for analysis of the hazards.
- d. Review each hazard and determine the type, level of risk, and seriousness of potential injury in the area.
- e. Determine what PPE is available and what protection it offers. Select protective equipment that ensures a level of protection greater than the minimum required to protect workers from the hazards.
- f. Consider comfort and fit carefully. Poorly fitted PPE will not provide the necessary protection and will either give the worker a false sense of security or keep the worker from using it.
- g. Reappraise PPE regularly to determine if the equipment provides adequate protection. Seek worker input on any selected PPE. Reassess the workplace situation as necessary by identifying and evaluating new equipment and processes, and reviewing accident records.

Using PPE sometimes impairs a worker's movements or ability to perform some tasks. The employer needs to take this into consideration and make the necessary allowances when PPE interferes with vision, hearing, tactile sensation, or the ability to breathe.

The employer must certify in writing that the hazard assessment has been conducted and is complete. The certification should include detailed statements that identify the work area assessed, the date the assessment was conducted, the name of the individual performing the assessment, and a declaration statement of the PPE hazard assessment. Examples of declarative statements include phrases such as, *"This is to account for the quality of the hazard assessment and the adequacy of the selected personal protective equipment"* or *"I, (certifying individual's name), certify to the best of my knowledge the selected personal protective equipment is adequate."*

Training

According to 29 Code of Federal Regulations, Part 1910.132, the employer shall provide training to each employee who is required by this section to use PPE. Each such employee shall be trained to know at least the following:

- (i) When PPE is necessary
- (ii) What PPE is necessary
- (iii) How to properly put on, take off, adjust, and wear PPE
- (iv) The limitations of the PPE and,
- (v) The proper care, maintenance, useful life and disposal of the PPE.

Workers must demonstrate that they understand and have the ability to use the selected PPE properly before being allowed to perform work requiring its use. If the worker cannot demonstrate an understanding or lacks skills to use the equipment, the employer shall retrain the worker. Retraining will be required whenever changing workplace conditions affect the type of PPE used and render previous training obsolete.

Once training is accomplished, the employer shall verify that each affected employee has received and understood the required training. Minimum requirements for documentation should include the printed name, employee number, and signature of each worker; the date of training; the subject of the certification; and the name and qualifications of the trainer.

Conclusion

PPE can be effective only if the equipment is based on the job safety analysis or hazard assessment. Also, PPE is only effective when properly selected, workers are trained in its use, the equipment is correctly tested and maintained, and the equipment is properly worn. The best protection comes from an interested management and a workforce committed to sound, safe work practices.

Review Questions

1. If employees own their personal protective equipment, the employer is still responsible for the effectiveness of that equipment. True False
2. Employers must conduct in written evaluations of possible hazards that might be found in the workplace. True False
3. Comfort and fit of personal protective equipment should be considered very carefully to obtain maximum protection and employee use compliance. True False
4. When a hazard assessment is completed, the employer must prepare a written certification document declaring that the assessment was conducted. True False
5. If a worker cannot demonstrate that he or she has the ability to use personal protective equipment provided by their employer, the employer must retrain them. True False

1. True 2. True 3. True 4. True 5. True

Resources

The Texas Department of Insurance, Division of Workers' Compensation (TDI/DWC) Resource Center offers a workers' health and safety video tape library. Call (512) 804-4620 for more information or visit our web site at www.tdi.state.tx.us.

Disclaimer: Information contained in this training program is considered accurate at time of publication.