**Topic 129: From Head to Foot**

**Introduction:** What is PPE? PPE means “personal protective equipment.” It refers to what a worker wears for protection against a hazard. The original PPE was body armor: protective clothing that deflected arrows, spears, lances, and swords. Modern PPE has evolved to protect workers against a variety of workplace hazards. Workers use personal protective equipment in activities ranging from construction to office work. PPE describes a seemingly endless list of products intended to protect workers against an equally long list of hazards. However, there is no single definition that completely describes what PPE is or what PPE does. Here are a few examples of PPE definitions:

- **Any type of shield,** barrier, restraint, or equipment applied to or worn by an individual for protection against exposure to a hazardous object, substance, condition, or environment
- **Specialized clothing** or equipment worn by a worker for protection against a hazard
- **Clothing and accessories** designed to create a barrier against workplace hazards
- **Anything** that a worker can wear, carry, or use for protection against a work-related hazard
- **Devices and garments** that protect workers from hazards

Not surprisingly, you’ll find PPE designed and marketed to guard workers against any conceivable hazard. Despite its widespread use, personal protective equipment is frequently misused. PPE offers appropriate protection for some tasks and no protection for others. Properly used, PPE protects workers against a hazard (or hazards) but it does not eliminate a hazard. If the equipment fails or is inappropriate for a particular task, the user risks exposure. Appropriate protection depends upon selecting, wearing, and using PPE properly; employers and employees share responsibility for these tasks. The following are the most common categories and types of PPE available:

- **Eye and face protection** — Safety glasses, goggles, face shields, welding helmets
- **Head protection** — Protective helmets such as hardhats
- **Hearing protection** — Single-use earplugs, molded ear plugs, or earmuffs
- **Respiratory protection** — Air-purifying respirators, atmosphere-supplying respirators, combination respirators, and dust masks
- **Foot and leg protection** — Metatarsal guards, toe guards, foot and shin guards, steel-toed boots, safety shoes/boots, and leggings
- **Hand and arm** — Durable work gloves, fabric/coated fabric protection gloves, chemical/liquid resistant gloves, and insulating rubber gloves
- **Torso protection** — Chemical protective clothing (CPC), Flame/heat resistant clothing, cooling vests, surgical gowns, aprons, and full body suits
- **Full protection** — Full-body harnesses and body belts (only when used as part of a positioning system that limits falls to two feet)
- **Musculoskeletal** — Back belts, joint braces, and other devices designed to prevent overexertion-type injuries
- **Bodywear** — Personal flotation devices (PFDs) such as life jackets and vests

It is the employer’s responsibility to survey the workplace and conduct a hazard assessment to identify hazards and determine if employees need personal protective equipment. Hazard assessments should be re-evaluated whenever there are changes in the workplace.

The traditional approach — to controlling hazards advocates PPE only when engineering controls and administrative controls are not feasible. In theory, engineering controls are the most effective defense against hazards and administrative controls are the next choice. But there are environments, processes, operations, and tasks for which PPE may be appropriate. These include mobile jobs, frequently changing production processes, and temporary jobs. When engineering controls are too expensive to implement, and administrative controls are not possible, PPE may be the only reasonable control method. However, work environments change and PPE appropriate in the workplace now may not be appropriate in the future.

Training — To know how to use PPE, workers must be trained. The type and scope of training depends on the type of PPE workers use. Whether they are wearing hardhats or fully encapsulating suits, workers must know how PPE protects them and when it will not protect them. Training includes:

- **What PPE is necessary**
- **When PPE must be worn**
- **How to put on, adjust, wear, and remove PPE**
- **The limitations** of different PPE types
- **Proper care** of maintenance, and useful life of PPE
- **When to replace** worn-out PPE
- **How to discard** contaminated PPE

**Conclusion:** OSHA standards require employers to assess the workplace to determine if hazards are present or likely to be present that necessitate the use of personal protective equipment. “Employers must provide workers with appropriate PPE and require them to use and maintain it in a sanitary and reliable condition when there is reasonable probability that an injury or illness can occur, based on the hazards.” Employees must in turn follow the safety rules and procedures in place and wear all appropriate PPE. In a hazardous environment or operation, the correct application and use of PPE reduce the incidence of injuries or exposure in the workplace. Follow these safety tips for PPE use.

**Work Site Review**

Work-Site Hazards and Safety Suggestions:

Personnel Safety Violations:

**Employee Signatures:**

(My signature attests and verifies my understanding and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

[Employee signatures]

**Foreman/Supervisor’s Signature:**

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.