

The Last Line of Defense: Personal Protection Equipment

In sports, we often say that defense wins championships. Coaches design strategies and plays to neutralize their opponents but when all else fails a designated player serves as the last line of defense. Whether goalkeepers on the ice and soccer fields or safeties in football, the team relies on them to make the stop when all else fails. We use a similar process when addressing workplace hazards. First, we try engineering or design to eliminate hazards. If that does not work, we create safety policies and rules to protect us. Personal Protective Equipment is the last line of defense.

Hard Hats:

- Required when there is an overhead potential for impact, electrical shock, falling or flying objects.
- Type 1 hardhats protects that top of the head, typically found on construction projects.
- Type 2 hardhats protect the top and sides of the head.
- Different classes of hardhat include E, C and G. In addition
 to impact protection, classes E (20kV) and G (2kV) provide some electrical protection. Class C hard hats provide no electrical protection.

Gloves:

- Protects hands from cuts, punctures, burn, chemical exposure and abrasions.
- Designed for the specific hazards including chemical resistance, puncture resistance, cut resistance, water resistance, protection from cold or hot temperatures and general use.

Foot Protection:

Safety toed shoes- Protects your toes from impact and crushing.

- Shoes come in various styles, boots or sneakers, use steel or a "composite" material for impact protection.
- Metatarsal guards- Protects the foot's top, extending from the toe to the ankle area.

Eye and Face Protection:

- Safety glasses-Must have side shields and impact protection.
- Safety goggles-Enclosed eye protection that provides impact protection while protecting from splashing liquids or debris that can bypass safety glasses.
- Face shields-Protects face from flying debris and materials.
- Welding Helmets-Uses tinted lenses to protect vision in addition to total face protection.

Respiratory Protection:

- Dust mask: Provides protection from nuisance dusts or odors.
- N95 Filtering Face piece respirator: Filters dust particles including silica.
- Half mask respirators: Use interchangeable filters to protect from harmful dusts, fumes, and mists.
- Full-face respirators: Can be attached to filters or supplies oxygen in hazardous atmospheres.

REMEMBER:

- Always inspect your equipment for any defects or damages, replace damaged equipment.
- Only use approved equipment, listed on packaging or the equipment itself.
- The American National Standards Institute (ANSI) approves Personal Protective Equipment.
- The National Institute of Safety and Health (NIOSH) approves respiratory protection.
- Store equipment according to the manufacturer's recommendations.
- Per OSHA requires employers to provide necessary safety equipment except safety toed shoes and prescription safety glasses.

Discuss types of PPE used for daily tasks, proper inspection, when to replace and where to find necessary PPE.