Personal protective equipment, or PPE, is designed to protect workers from serious workplace injuries or illnesses resulting from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards.

**Precautions:**

- Type E (20,000 volts), G (2,200 volts), and C (conductive) **hard hats** can protect your workers from head impact, penetration injuries, and electrical injuries such as those caused by falling or flying objects, fixed objects, or contact with electrical conductors.
- In addition to **foot guards** and **safety shoes**, leggings (e.g., leather, aluminized rayon, or other appropriate material) are to be worn to protect workers from hazards such as falling or rolling objects, sharp objects, wet and slippery surfaces, molten metals, hot surfaces, and electrical hazards.
- Besides **safety glasses** and **goggles**, personal protective equipment such as special helmets or shields, glasses with side shields, and face shields are to be worn to protect workers from the hazards of flying fragments, large chips, hot sparks, optical radiation, splashes from molten metals, as well as objects, particles, sand, dirt, mists, dusts, and glare.
- Wearing **earplugs** or **earmuffs** can help prevent damage to hearing. Exposure to high noise levels can cause irreversible hearing loss or impairment as well as physical and psychological stress. Earplugs made from foam, waxed cotton, or fiberglass wool are self-forming and usually fit well. Clean earplugs regularly, and replace those you cannot clean. Workers are to attend hearing protection training and assure appropriate hearing protection for the level of noise they are being exposed to. A professional may be needed to fit your workers individually for molded or preformed earplugs.
- **Engineering controls** are not feasible, workers must use appropriate **respirators** to protect against adverse health effects caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors. Required respirators must be NIOSH-approved and medical evaluation and training must be provided before use.
- Workers exposed to harmful substances through skin absorption, severe cuts or lacerations, severe abrasions, chemical burns, thermal burns, and harmful temperature extremes are to wear appropriate hand protection related to the exposed hazards.