

PERSONAL PROTECTION EQUIPMENT (PPE)

Many of the hazards we face on the job are so small, or happen so quickly, that often we don't see them coming. With some tasks those little potential injuries happen so often that we almost think of them as routine. If they happen routinely, then we need to protect ourselves routinely. One way we do that is with equipment specially designed to protect our bodies. It's called Personal Protective Equipment, or PPE.

HAZARD ASSESSMENT

OSHA requires that the employer determine what hazards in the workplace exist that may require PPE. Some hazards, such as faulty or inadequate equipment, can simply be removed from the work area. Others cannot. In that case the employer must provide appropriate PPE for the employees exposed to that hazard.

STORING PPE

PPE should be stored in a clean and dry container to prevent compromising the effectiveness of the equipment.



EYE AND FACE PROTECTION

You should always wear eye protection if you work around chemicals, gases, flying particles, molten metal, or radiation of any kind. Safety glasses should have side shields and comply with ANSIs (American National Standards Institute) Z87.1 standard. This assures that the glasses are a high quality and will resist considerable impact from flying objects. Don't be tempted to take short-cuts! There are safety glasses available in many stylish colors and shapes, and lenses with all sorts of tints and coatings. Keep them clean and they'll be serviceable for a long time.



If you wear glasses or contact lenses prescription safety glasses are available (it's not a good idea to wear contacts in environments where there are eye hazards). Over-the-Glass (OTG) safety glasses are also available.

If safety glasses alone are not adequate protection consider goggles. These completely cover the eyes to provide maximum protection. If you are working with corrosive chemicals wear a complete face shield in addition to your safety glasses. This way any accidental splashes will not burn the tender skin of your face. If you are working near radiant energy such as lasers, a welder's spark, or even a bright light or flame, use safety glasses with tinted lenses.

HEAD PROTECTION

Hard hats (also called helmets) must meet requirements including weight, flammability, and electrical insulation. They come in several types and classes. Class A helmets protect against impact and contact with low voltage conductors; Class B against impact and high voltage conductors; and Class C protects only against impact.



PROTECTING YOU FROM THE HAZARDS YOU CAN'T ALWAYS SEE

Type 1 helmets have a 1-1/4" brim all the way around the hat; and Type 2 helmets have only a brim in the front.

Which ever hard hat you choose, be sure that it is marked inside with the manufacturer's name, the ANSI approval designation Z89.1, and Class A, B, or C.

Clean your hardhat regularly. As you do, inspect it for signs of dents, cracks, deep scratches, or any other damage that might reduce its effectiveness. Do not cover your hardhat with stickers that make it impossible to check completely. Also, check that the headband is not cracked or torn anywhere.

HEARING PROTECTION

Hearing loss usually happens gradually, over a period of time, so we may not notice it right away. Those tissues do not regenerate and so hearing loss is permanent. That would be a terrible fate, and one that is easily prevented with simple precautions.

Hearing loss can begin to occur when the noise level around us reaches 85 decibels (dB) averaged over an eight hour period. A good rule of thumb is if you are standing at an arms length from a co-worker and you need to raise your voice significantly to talk to him, then you are pushing 85dB. (A home blender generates about 85dB of noise.)

If you work in an environment like that, or if you are experiencing signs of hearing loss, then it's time to take steps to protect your

hearing with ear plugs or earmuffs. Plugs are usually a very soft plastic or foam and insert right into the ear canal. They block sound waves from traveling down the canal to where they can do damage. Keep them clean and replace them as soon as they show any signs of wear. Muffs are heavier and bulkier, but easier to use and in some cases, more effective.



FOOT PROTECTION

Feet are vulnerable to injury from falling or rolling objects, sharp objects, molten metal, hot surfaces, and wet, slippery surfaces. These are all significant hazards and we should guard our

- Puncture resistant shoes have steel or plastic metatarsal arches, or "shanks" under the foot. They are good shoes to wear if you are exposed to sharp metal such as nails or metal scrap on the ground.
- Steel toed shoes should be worn when there is a danger of heavy falling or rolling objects.
- Slip resistant soles protect against slipping on wet surfaces or slopes such as pitched roofs.
- If your workplace has exposed electrical circuits or wires, you should wear non-conductive or "dielectric" shoes. On the other hand, if static build up is a problem where you work, as with electronic equipment, wear conductive shoes which allows static charge to be drained harmlessly into the to ground.
- Wear coated shoes or rubber overshoes if your feet are exposed to hazardous chemicals. Corrosive chemicals will destroy leather footwear very quickly.



HAND PROTECTION

Gloves are perhaps the most commonly used type of hand protection. They protect your entire hand and sometimes your wrists and forearms.

- Be sure to use the gloves that are right for your job.
- Gloves for chemicals or corrosives are made of rubber, neoprene or vinyl.
- Use leather gloves for work with sparks, rough and abrasive materials, scraping and extreme heat.
- Wear metal mesh or Kevlar gloves when working with saws and sharp edges.



QUIZ

1. What does PPE stand for?

2. Who requires that the employer determine what hazards in the workplace exist requiring PPE?
 - a. Parent Company
 - b. DOT
 - c. OSHA
3. It is important that safety glasses comply with ANSI standards to assure glasses are high quality.
 - a. True
 - b. False
4. Hard hats are categorized by:
 - a. Weight, Flammability, Electrical insulation
 - b. Flammability, Brim Size, Weight
 - c. Thickness, Electrical insulation, Brim Size
5. Hearing loss can begin to occur around 75dB averaged over an eight hour period.
 - a. True
 - b. False
6. You should wear _____ shoes if you are exposed to sharp metal such as nails on the ground.
 - a. Slip resistant shoes
 - b. Puncture resistant shoes
 - c. Steel toed shoes
7. You should wear _____ shoes when there is a danger of heavy falling or rolling objects.
 - a. Non-conductive shoes
 - b. Slip resistant shoes
 - c. Steel toed shoes
8. You should wear gloves made of rubber, neoprene or vinyl when working with _____.
 - a. Sharp metal scraps
 - b. Chemicals
 - c. Glass
9. Use leather gloves for work with extreme heat.
 - a. True
 - b. False
10. Wear latex gloves when working with saws and sharp edges.
 - a. True
 - b. False

When you have completed this quiz, turn it in to your supervisor.

Name: _____

Date: _____

ANSWERS

1. What does PPE stand for?
Personal Protection Equipment
2. Who requires that the employer determine what hazards in the workplace exist requiring PPE?
c. OSHA
3. It is important that safety glasses comply with ANSI standards to assure glasses are high quality.
a. True
4. Hard hats are categorized by:
a. Weight, Flammability, Electrical insulation
5. Hearing loss can begin to occur around 75dB averaged over an eight hour period.
b. False
6. You should wear _____ shoes if you are exposed to sharp metal such as nails on the ground.
b. Puncture resistant shoes
7. You should wear _____ shoes when there is a danger of heavy falling or rolling objects.
c. Steel toed shoes
8. You should wear gloves made of rubber, neoprene or vinyl when working with _____.
b. Chemicals
9. Use leather gloves for work with extreme heat.
a. True
10. Wear latex gloves when working with saws and sharp edges.
b. False



PROTECT YOURSELF AND STAY INJURY FREE



HEAD PROTECTION



EYE & FACE
PROTECTION



EAR PROTECTION



HAND PROTECTION



FOOT PROTECTION



PPE IS YOUR 1ST LINE OF DEFENSE

