



# Toolbox Talks

## Personal Protective Equipment (PPE) Part 1

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.

### Foot Protection:

- Foot protection means guarding your toes, ankles, & feet from injury. Believe it or not, your feet have 26 bones for support & 38 joints for movement in each foot. Feet also have blood vessels, ligaments, muscles, & nerves, which is why it hurts when you stub your toe or drop something on your foot. Your feet are a critical part of your body that you use everyday &, in some cases, enable you to do your job effectively.
- Protective footwear worn in the workplace is designed to protect the foot from physical hazards such as falling objects, stepping on sharp objects, heat & cold, wet & slippery surfaces, or exposure to corrosive chemicals.
- There are two major categories of work-related foot injuries. The first category includes foot injuries from punctures, crushing, sprains, & lacerations. They account for 10 percent of all reported disabling injuries. The second group of injuries includes those resulting from slips, trips, & falls. They account for 15 percent of all reported disabling injuries. Slips & falls do not always result in a foot injury but lack of attention to foot safety plays an important role in their occurrence.
- What should workers know when buying footwear for work? Good footwear should have the following qualities:
  - The inner side of the shoe must be straight from the heel to the end of the big toe.
  - The shoe must grip the heel firmly.
  - The forepart must allow freedom of movement for the toes.
  - The shoe must have a fastening across the instep to prevent the foot from slipping when walking.
  - The shoe must have a low, wide-based heel; flat shoes are recommended.
- People buying footwear for work should take the following advice:
  - Do not expect that footwear that is too tight will stretch with wear.
  - Have both feet measured when buying shoes. Feet normally differ in size.
  - Buy shoes to fit the bigger foot.
  - Buy shoes late in the afternoon when feet are likely to be swollen to their maximum size.
  - Consider purchasing shock-absorbing insoles when a job requires walking or standing on hard floors.

### Eye & Face Protection:

- Every day an estimated 1,000 eye injuries occur in American workplaces. No matter where we work, flying particles, dusts, splashes or flying objects are apt to expose us to potential eye injury. Fortunately, we can protect against these hazards by using the appropriate protective eyewear for our jobs.
- Eye Protection Can Include:
  - Safety Glasses
  - Safety Goggles
  - Face Shields
  - Prescription Glasses with Safety Lenses
  - Welding Helmets
- Each eye protectant has a different use depending on whatever conditions exist for your particular job site. It is very important to make sure that your eye wear fits correctly.
- Remember that proper ventilation & sprays can help reduce fogging.
- Safety glasses or face shields should be worn any time work operations can cause foreign objects to get in the eye. For example: during welding, soldering, cutting, grinding, nailing, or when working with concrete &/or harmful chemicals or exposed to flying particles.
- Safety glasses or face shields should be worn when exposed to any electrical hazards, including working on energized electrical systems.
- Eye & face protectors should be selected based on anticipated hazards.

### Eye Protection Tips:

- To prevent scratching the lens, take care when setting your eye protection down or putting them away for the day.
- Replace the lens or get new glasses when scratches on the lens become noticeable.
- Clean eye protection regularly at the eye protection cleaning station, if available, or use water & a soft absorbent towel such as a paper towel. Don't use your shirt or a rag that collects & holds dirt, it will scratch the lens.



# Toolbox Talks

## Personal Protective Equipment (PPE) Part 2

### Head Protection:

- Hard hats are commonly used in many types of workplaces to protect employees from head trauma caused by falling objects, striking their head against an object, or electrical hazards. The hard hat is a piece of personal protective equipment designed to individually protect an employee when all other methods of protection cannot. Often, its use has been required on many work sites since all hazards cannot be eliminated.
- **Select the Right Hardhat for the Job:** All three classes of hardhats protect the head against injury from moving or fixed objects, but only Class E & Class G hardhats also protect against electrical hazards. If your task involves the potential risk for electrocution through head contact with electrical conductors, check the label inside your hardhat.
  - **Class E** (electrical) provides the greatest protection against electrocution, as it is rated to protect against exposure to high-voltage electrical conductors, to a maximum of 20,000 volts.
  - **Class G** (general), the most common type of hardhat, has been tested to provide protection against low-voltage conductors, to a maximum of 2,200 volts.
  - **Class C** (conductive) hardhats provide no electrical protection.
- **Don't Mess With Your Hard Hat! Do Not:**
  - Place metallic stickers on the shell of a non-conducting hardhat
  - Drill a hole into the shell of a non-conducting hardhat
  - Install a winter liner containing a metal zipper or studs into a non-conducting hardhat
  - Wear earmuffs containing metal when using a non-conducting hardhat
  - Use paint, paint thinner, or certain cleaning products on a non-conducting hardhat (instead, wash the hardhat with soap & water)

### Hearing Protection:

- Use earplugs/earmuffs in high noise work areas where chainsaws or heavy equipment are used.
- Clean or replace earplugs regularly.

All information found on [www.safetytoolboxtalks.com](http://www.safetytoolboxtalks.com) & [OSHA.gov](http://OSHA.gov)

### Hand Protection:

- Gloves should fit snugly.
- Workers should wear the right gloves for the job.
- Examples:
  - Heavy-duty rubber gloves for concrete work
  - Welding gloves for welding
  - Insulated gloves & sleeves for when exposed to electrical hazards

### True Story:

The father of “the great one” might never have taught his son right from wrong if he hadn’t been wearing a hardhat 35 years ago. Walter Gretzky, father of hockey great Wayne Gretzky, was working for Bell Telephone in Ontario when a manhole cover hit him in the head. Luckily he was wearing a hardhat, but he still suffered head injuries & deafness in one ear. Walter Gretzky, 68, gave the keynote address at the recent launch of North America Occupational Safety & Health Week in Vancouver, BC. Gretzky said if he had not been wearing head protection that day in 1961, he wouldn’t be alive today. Wear your head protection – it could be THAT important.

### Employer PPE Responsibilities:

- Provide all equipment necessary for employees to adequately perform their jobs
- Require all employees to use necessary Personal Protective Equipment
- Train workers on how to do the following:
  - Use protective equipment properly
  - Be aware of when PPE is necessary
  - Know what kind of protective equipment is necessary
  - Understand the limitations of PPE in protecting workers from injury
  - Put on, adjust, wear, & take off PPE
  - Maintain protective equipment properly

See section 1.10 entitled "Safety" in the DMT Employee Handbook Revision 5 for lists of PPE DMT is & is not responsible for supplying, Electrical Safety PPE Requirements, & DMT OSHA Training Requirements.