



# 5-minute safety talk

## Watch Your Step: Protect Your Feet From a Foul Fate

While injuries to the lower extremities rarely result in death, they can cripple. According to the National Safety Council, U.S. workers report thousands of disabling toe and foot injuries annually. Most of these mishaps occur when objects fall on unprotected feet.

Other parts of the body have fatty cushions or thick muscle layers, the foot's intricate network of 26 bones has little natural protection. Man-made foot protection must take over where nature left off.

In the modern industrial setting there are too many opportunities to become a victim of a foot injury such as from falling or rolling objects. Even if your organization requires protective footwear, it's usually the supervisor who enforces those requirements. Supervisors need to set an example by wearing protective footwear themselves and urge their workers to do the same.

### Size up footwear requirements

The U.S. Occupational Safety and Health Administration's personal protective equipment standard requires that employers identify and assess workplace hazards. Then they must select appropriate protective gear — including footwear — for the hazards they find and train workers in the use and upkeep of equipment.

### When does OSHA require foot protection?

If the job involves any of the following criteria, your workers need foot protection:

- Can feet be hurt by falling or rolling objects?
- Might sharp objects pierce footwear?
- Can molten metals or hot surfaces burn workers' feet?
- Are workers in danger of slipping on wet surfaces?

Such jobs might include shipping or receiving clerk, stock clerk, carpenter, machinist, metal worker, press operator, welder, laborer, freight handler, gardener, logger or warehouse worker.

OSHA's PPE standard incorporates performance standards for protective footwear contained in the American National Standards Institute publication Z41-1999. The standard covers six forms of protection:

1. Metatarsal protective (Mt)
2. Conductive footwear (Cd)
3. Three levels of impact (I) and compression (C) protection for toes
4. Electrical-hazard footwear (EH)
5. Puncture-resistant soles (PR)
6. Static-dissipative footwear (SD)

### Step out in style

A surprisingly large array of styles and materials meet the ANSI standard. In addition to traditional high-topped shoes or rubber boots, some protective footwear resemble athletic shoes, men's dress shoes, loafers, cowboy boots and women's low-heeled pumps.

Not every shoe is right for every job. The ANSI footwear committee has been developing a solution guide that helps users select features and material appropriate for a variety of circumstances.

Protective footwear can cost more than a hundred dollars a pair. Some employers will foot part of the bill. Check with your employer to see what their policy is. An employer might even pay the full cost to custom-make protective footwear for employees who have orthopedic problems.

### Does the shoe fit the job?

You can choose the proper protective footwear by taking a good look at your work atmosphere. What hazards are workers' feet exposed to?

- If you have a physically demanding job, consider high-topped shoes for better ankle support and protection.
- Is protecting your toes enough? Metatarsal guards protect the area between the toes and the ankle from the impact of falling objects.
- Avoid synthetic leather or nylon safety shoes if you work around molten metal or hot surfaces. Man-made materials melt in contact with high heat. Leather is also preferential because it "breathes," allowing moisture to escape.
- If the work area is wet, buy waterproof protective footwear instead of shoes.
- Get a good fit. Ill-fitting footwear can lead to aching backs, calluses, swollen feet and other problems.
- Check with your employer for suggested foot-protection dealers. Protective footwear that meets the ANSI standard must have a permanently affixed label. Besides listing ANSI Z41 1999, it will note male or female and designate protective features with letters.

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