

PPE: Safety Footwear Requirements Under OHS Laws



Workers' feet are vulnerable to many types of injuries on the job. For example, they can be crushed, punctured or doused with hazardous substances. Foot injuries are fairly common. In fact, the number of workplace foot injuries in 2007 was around 12,000, according to the Association of Workers' Compensation Boards of Canada's report, *National Work Injury, Disease and Fatality Statistics (2007)*. Because many of the hazards that threaten workers' feet can't be eliminated or engineered away, the primary line of defence is safety footwear.

We'll explain what the OHS laws say about safety footwear and how to comply with those requirements. We'll also tell you about an updated Canadian Standards Association (CSA) safety footwear standard. And there's a chart at the end of the article that tells you the safety footwear requirements across Canada.

PPE ASSESSMENT CHECKLIST: Download a PPE Hazard Assessment Checklist.

WHAT THE LAW SAYS

The OHS regulations in every jurisdiction spell out requirements for safety footwear, typically in the general PPE section. They usually address the need for safety footwear in one of two ways:

Require safety footwear when foot hazards exist. In seven jurisdictions' Fed, NB, NS, ON, PE, QC and YT'workers are required to wear safety footwear (or non-slip footwear) when they're exposed to:

- General hazards that could injure their feet; or
- Specified hazards, such as wet floors, electric shock and corrosive chemicals.

Require workers to have footwear appropriate for the hazards present. Five jurisdictions' AB, BC, MB, NL and SK'don't generally spell out when workers must wear safety footwear. Instead, they simply say that workers must wear footwear that's appropriate for the hazards associated with the work being done or the

workplace. However, a few of these jurisdictions single out circumstances in which safety footwear is needed, such as when workers must walk on logs or round timbers (BC), when workers' feet are endangered by hot, corrosive or toxic substances (MB) and when workers' feet are at risk from a heavy or falling object or workers could step on something sharp (SK).

NT and NU use both approaches. They require workers to wear footwear appropriate to the hazards of the workplace. They also require the wearing of *safety* footwear at a construction site, logging site or any workplace where workers' feet could be injured by: a) crushing, cutting, penetration, burning or other similar hazards; or b) exposure to hot, corrosive, poisonous or other dangerous substances.

Some jurisdictions also require workers to wear safety footwear in certain workplaces, such as construction or logging sites. And others have specific safety footwear requirements for certain jobs, such as firefighters and loggers, and certain tasks, such as using a chainsaw or working in an excavation.

CSA Footwear Standard

On Dec. 22, 2009, the CSA released an updated version of its standard on safety footwear, CAN/CSA Z-195-09 *Protective Footwear*. (A related standard, Z195.1-02 *Guideline on Selection, Care and Use of Protective Footwear* hasn't been updated yet.) Standards like the CSA's are voluntary. So companies aren't obligated to comply with them unless the OHS law specifically adopts that standard. And except for ON and SK, every Canadian jurisdiction has adopted the CSA Z-195 standard. That is, they require safety footwear to comply with this standard.

The updated standard is so new that no OHS regulation has specifically adopted this version (most use the 2002 edition). However, some jurisdictions, such as NL and PE, have adopted the CSA safety footwear standard without specifying a particular version. So the updated version has essentially been adopted in those provinces. In addition, the OHS regulations in jurisdictions such as MB, NL and NS state that if an item has to comply with a certain standard, it must comply with the most recent edition of that standard in existence when the item was made. And in NT and NU, the OHS regulations state that safety footwear must comply with Z-195 'as amended from time to time.' Thus, the 2009 version of Z-195 essentially applies in these jurisdictions, too. As for the rest of Canada, it's likely that if these jurisdictions incorporated a prior version of Z-195 into their regulations, they'll eventually get around to incorporating the updated version.

And although compliance with Z-195-09 is still voluntary in ON and SK, companies in those provinces would be wise to comply with it anyway. *Explanation:* Courts are likely to view the standard as a best practice, especially given its adoption throughout the rest of Canada. In addition, neither ON nor SK have detailed safety footwear standards in their OHS regulations. So companies in those jurisdictions have to get their guidance on safety footwear from somewhere and Z-195-09 is arguably the best source.

Z-195-09 covers:

- Design requirements for safety footwear;
- Performance requirements;
- Test methods for ensuring compliance with the above requirements; and

- Marking and labelling of safety footwear so users know which types of safety footwear should be used in which circumstances.

HOW TO COMPLY

To ensure that your company complies with safety footwear requirements, safety coordinators should do the following:

Step #1: Conduct Safety Footwear Risk Assessment

You first need to determine whether safety footwear is needed by any workers in your workplace. No matter what approach a jurisdiction takes in its OHS regulations, they all require you to be aware of and protect workers from the hazards in the workplace that could endanger their feet. So conduct a risk assessment to determine whether such hazards are present. The OHS regulations in BC and NL spell out the factors that must be considered in the risk assessment, including:

- Slipping;
- Uneven terrain;
- Abrasion;
- Ankle protection;
- Foot support;
- Crushing potential;
- Temperature extremes;
- Corrosive substances;
- Puncture hazards;
- Electrical shock; and
- Any other recognizable hazard.

If you're located in another jurisdiction, this list of factors still provides a good baseline to use in your foot hazard risk assessment.

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Step #2: Ensure Proper Safety Footwear Is Used

If you determine that some or all of your workers are exposed to hazards that could injure their feet, you'll need to figure out the type of safety footwear that's appropriate to protect your workers' feet from those hazards. For example, you may need safety footwear that protects workers' toes or metatarsals (the top of the foot). As explained above, every jurisdiction except ON and SK requires safety footwear to comply with the Z195 standard. This standard uses a marking system to identify safety footwear that's approved for protecting workers from specified hazards:

- **Green triangle:** sole puncture protection with a Grade 1 protective toe;
- **Yellow triangle:** sole puncture protection and Grade 2 protective toe;
- **White rectangle with orange omega symbol:** soles that provide electric shock resistance;
- **Yellow rectangle with green letters 'SD' and grounding symbol:** soles that dissipate static;
- **Red rectangle with black letter 'C' and grounding symbol:** soles that are electrically conductive; and
- **White label with green fir tree symbol:** provide protection when using

chainsaws.

In addition, safety footwear is marked with an 'internal protection code' that indicates:

- The level of toe protection;
- Presence of puncture-resistant sole;
- Presence of metatarsal protection;
- Type of electrical protection; and
- Presence of chainsaw protection.

So make sure that workers are wearing the safety footwear appropriate for the hazards to their feet.

Insider Says: Who's actually required to provide safety footwear 'the employer or the worker' It depends on the jurisdiction. For example, in Alberta, the worker pays for and provides his own safety footwear, while employers in Québec must pay for and provide safety footwear for their workers. But regardless of who pays for and provides safety footwear, it's the *employer's* duty to ensure that workers wear appropriate safety footwear for the workplace.

Step #3: Ensure Footwear Is Properly Maintained

It's critical that workers properly maintain their safety footwear to ensure that it adequately protects their feet. So require workers to regularly clean their safety footwear and inspect it for damage, defects or regular wear-and-tear. Safety footwear that no longer provides adequate protection must be replaced.

THE BOTTOM LINE

As anyone who's ever stubbed their toe knows, foot injuries can be extremely painful.

And because workers are often on their feet for large parts of the day, foot injuries can sideline a worker for a long time. So by ensuring that workers wear appropriate safety footwear, you'll help protect their feet from injury and reduce the lost-work time from foot injuries.

SAFETY FOOTWEAR REQUIREMENTS

According to the OHS law in your jurisdiction, workers must generally wear safety and/or non-slip footwear:

FEDERAL: a) Where there's a hazard of a foot injury or electric shock through footwear [*Canada OHS Regs.*, Sec. 12.5(1)]; and b) where there's a hazard of slipping [Sec. 12.5(2)].

ALBERTA: That's appropriate for the hazards associated with the work being performed and the work site [*OHS Code 2009*, Sec. 233(1)].

BRITISH COLUMBIA: a) That's of a design, construction and material appropriate to the protection required [*OHS Reg.*, Sec. 8.22(1)]; b) if a workplace has slippery surfaces [Sec. 8.23(1)]; and c) if workers are required to walk on logs, poles, pilings or other round timbers [Sec. 8.23(2)].

MANITOBA: a) When workers' feet may be endangered by a hot, corrosive or toxic substance [*Workplace Health and Safety Reg.*, Sec. 6.12(1)(b)]; and b) that's appropriate for the risk associated with the workplace and work [Sec. 612(2)(a)].

NEW BRUNSWICK: a) On a project site [*OHS Regs.*, Sec. 41(1)]; b) where a worker's exposed to a hazard that may injure his foot [Sec. 41(2)]; and c) where a floor is wet because of the work process and the slipping hazard isn't eliminated by matting or grating [Sec. 102(7)].

NEWFOUNDLAND/LABRADOR: That's of a design, construction and material appropriate to the protection required [*OHS Regs. 2009*, Sec. 80(1)].

NORTHWEST TERRITORIES/NUNAVUT: a) That's appropriate to the hazards associated with the work site [*General Safety Regs.*, Sec. 41]; and b) at a construction site, logging site or a worksite where there's a risk of injury to the feet from: 1) crushing, cutting, penetration, burning or other similar hazards; or 2) exposure to hot, corrosive, poisonous or other dangerous substances [Sec. 42].

NOVA SCOTIA: a) Where a worker's exposed to a hazard that may injure his foot [*Occupational Safety General Regs.*, Secs. 12(1)]; and b) where a floor, stairway, passageway or similar walking surface is slippery and devices such as matting and grating don't prevent slipping [Sec. 139(2)].

ONTARIO: a) When a worker is exposed to the hazard of a foot injury [*Industrial Establishments Reg.*, Sec. 82]; and b) on a construction project [*Construction Projects Reg.*, Sec. 23].

PRINCE EDWARD ISLAND: a) On a project site or at any place of employment where workers are exposed to a hazard that could injure the foot [*OHS General Regs.*, Sec. 45.15]; b) where a worker is required to work on a wet floor [Sec. 5.1(h)]; c) in an excavation or trench [Sec. 12.3(b)]; d) on a logging worksite [Sec. 41.6(a)]; and e) when operating a chainsaw [Sec. 41.8].

QUÉBEC: When exposed to foot injuries caused a) by perforation; b) by electric shock; c) by an accumulation of electrostatic charges; d) by the falling of heavy, burning or sharp objects; e) by contact with molten metal; f) by contact with dangerous substances in a liquid state and at intense temperatures; g) by contact with dangerous corrosive substances; and h) during other dangerous tasks [*Regulation respecting Occupational Health and Safety*, Sec. 344]

SASKATCHEWAN: a) That's appropriate to the risks associated with the worker's place of employment and occupation [*OHS Regs.*, Sec. 96(1)(a)]; and b) when worker is at risk from a heavy or falling object or may step on a sharp object [Sec. 96(1)(b)].

YUKON: a) Where there's a risk of injury to the feet [*OHS Regs.*, Sec. 1.08(c)]; b) where the walking surface is slippery [Sec. 1.13(d)]; and c) when walking on poles, pilings, logs or other round timbers [Sec. 1.13(e)].