



**CONSTRUCTION SAFETY
EDUCATION PROGRAM
#1**

PROTECTIVE FOOTWEAR



This education program provides a guideline for the proper footwear to be worn in the construction industry. It is intended to give contractors and workers practical information relating to safety footwear.

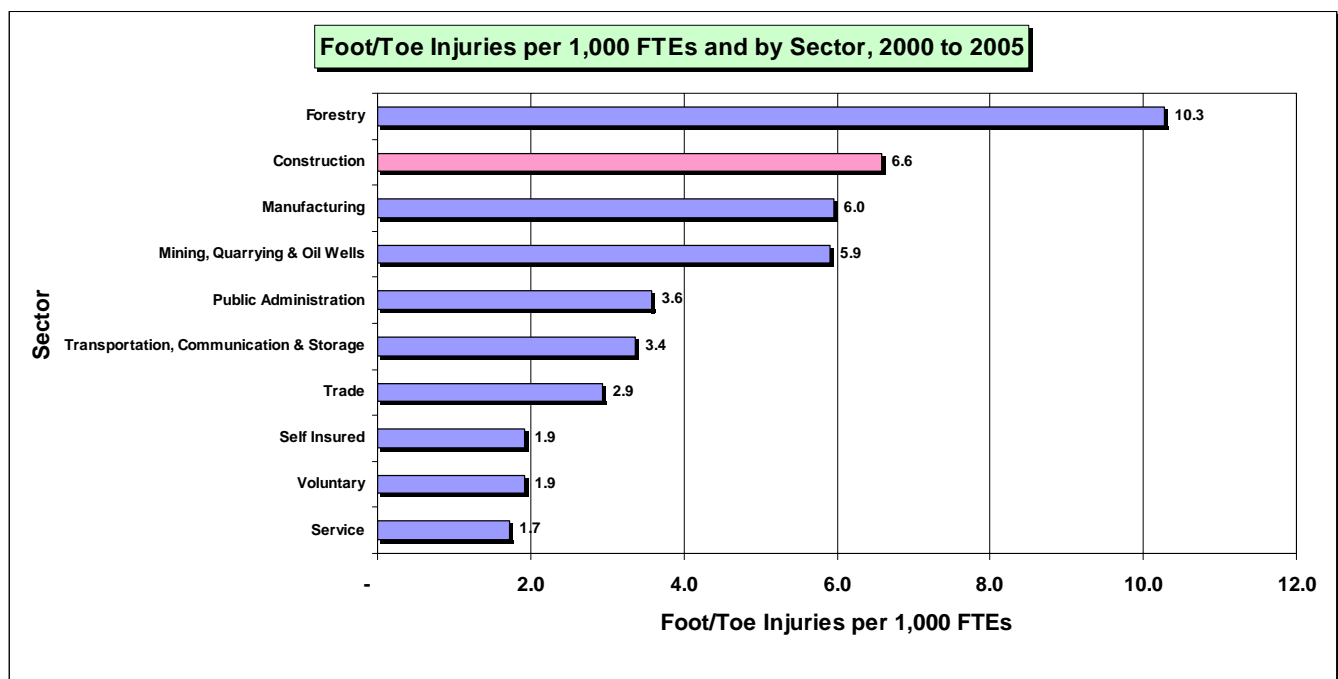
This education program contains general information. For specific regulatory requirements, please consult the appropriate Workplace Safety Health Act & Regulation adopted under the Workplace Safety and Health Act, the Canadian Standards Association (CSA) Standards, and any applicable Manitoba Guidelines.



PROTECTIVE FOOTWEAR

- Safety footwear is designed to protect feet against a wide variety of injuries such as puncture wounds to the sole, fractures or contusions to the toes or metatarsal area as well as strains and sprains of the ankles.
- The need to wear proper safety footwear on construction sites is evidenced by the following chart, which shows the percentage distribution of the various foot injuries in major sectors of Canadian industry.

PERCENTAGE DISTRIBUTION OF FOOT INJURIES

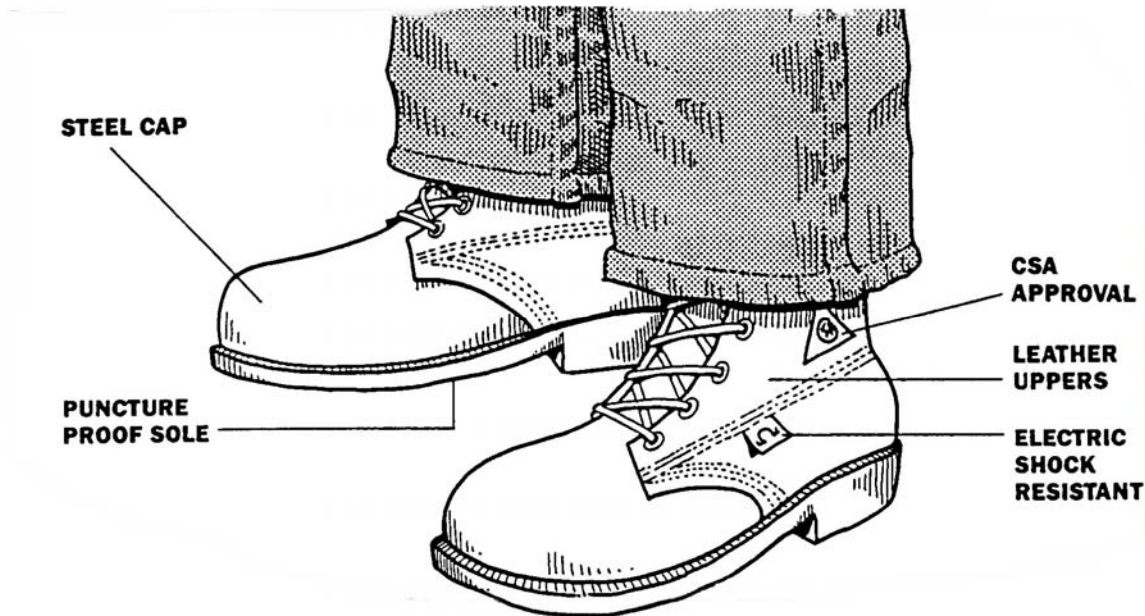


Source: 2000 to 2005 Annual Injury Statistics Database, WCB Manitoba

In 2005, Manitoba construction workers recorded over 71 disabling injuries to the feet.

- The Workplace Safety Health Act & Regulation requires workers on construction projects to **wear** safety footwear which conforms to certain requirements in the Workplace Safety Health Act & Regulation.
- The Workplace Safety Health Act & Regulation specifies that the footwear must be **CSA approved. Grade 1** type of boot with a **heavy duty** steel toe cap capable of withstanding an impact of 93 foot pounds.







PROTECTIVE FOOTWEAR



- Grade 1 footwear meeting these requirements is easily identified by a **green** triangle bearing the CSA label. This is usually seen on the right boot.
- Workplace Safety Health Act & Regulation also stipulates that workers must supply and wear acceptable safety footwear as required for the safe performance of their duties. Some firms have programs or policies in effect which subsidize employee purchases of safety footwear to some degree.
- As per section 6.12 (1) of MR217, the Employer must provide a worker with:
 - a) Outer foot guards that provide metatarsal protection, when there is a substantial risk of a crushing injury to the workers foot.
 - b) Protective footwear, when the workers feet may be endangered by a hot, corrosive or toxic substance.
- Employers are responsible to provide training, inspection, and enforcement respecting the requirements of the Workplace Safety Health Act & Regulation made under it. By ensuring you are properly equipped your employer is meeting this requirement.

- In accordance with the Workplace Safety Health Act & Regulation, steel erectors engaged in the connection of structural skeletal components and workers installing of roof finishing materials may be permitted to use soft soled slip resistant protective footwear without puncture proof plates in softest toecaps only upon consultation with safety representatives.
- It should be noted that running shoes, sneakers and other dress, casual, or recreational safety footwear **do not** meet the Grade 1 requirements and are therefore **not** acceptable for use on construction sites in Manitoba. Safety footwear must be worn on site.
- The following table “Selection of Safety Footwear” should be consulted as a guide to help ensure that you select the correct footwear for the type of work you do.

Protective Footwear Markings

Outside labels	Location	Criteria	Intended application
	The label appears at ankle height on the tongue of the right shoe.	Green triangle indicates sole puncture protection with a Grade 1 protective toe to withstand impacts up to 125 joules.	For any industrial environment, especially that of construction, where sharp objects (such as nails) are present; heavy work environments.
	The label appears at ankle height on the tongue of the right shoe.	Yellow triangle indicates sole puncture protection with a Grade 2 protective toe to withstand impacts up to 90 joules.	For light industrial work environments requiring puncture protection as well as toe protection.
	The label appears at ankle height or on the tongue of the right shoe.	White rectangle with orange Greek letter omega indicates soles that provide resistance to electric shock.	For any industrial environment where accidental contact with live electrical conductors can occur. Warning: Electrical shock resistance deteriorates with wear and in a wet environment.
	The label appears at ankle height or on the tongue of the right shoe.	Yellow rectangle with green “SD” and grounding symbol indicates soles are static-dissipative.	For any industrial environment where a static discharge can create a hazard for workers or equipment.
	The label appears at ankle height on the tongue of the right shoe.	Red rectangle with black “C” and grounding symbol indicates soles are electrically conductive.	For any industrial environment where low-power electrical charges may create a hazard for workers or equipment.
	The label appears at ankle height on the tongue of the right shoe.	White label with green fir tree symbol indicates chainsaw protective footwear.	For forestry workers and others exposed to hand-held chainsaws or other cutting tools.

Note: The ® symbol indicates the preferred positioning for the registered identifying logo or mark of the certifying agency.

Inside Protection Code:

A 5-place alphanumeric code indicates the protection offered by the footwear:

1	P	M	E	X
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Position 1 indicates the level of toe protection (1 for Grade 1, or 2 for Grade 2, 0 if not).

Position 2 indicates the presence of a puncture-resistant sole (P if present, 0 if not).

Position 3 indicates that metatarsal protection is provided (M if present, 0 if not).

Position 4 indicates the type of electrical protection (E if shock resistant, S if static dissipative, C if conductive, 0 if no electrical protection).

Position 5 indicates that the footwear is chainsaw protective (X if chainsaw protective, 0 if not).

- Safety footwear is readily available at many retail outlets as well as from specialty companies several of which provide professional mobile service on call or on a regular scheduled basis to your workplace or project site.
- The professional sales consultants employed by these specialty companies are trained to ensure that the footwear you select fits you properly and maximizes its utility by matching sole construction etc., with the environment in which it will be used.
- Protective equipment alone will not prevent all construction incidents; however it does reduce the severity of most foot type incidents and helps to prevent needless tragedy.

PROTECTIVE FOOTWEAR CHECKLIST

- Regardless of where you choose to purchase your safety footwear, remember to:
 - Select footwear that is both CSA approved and which meets the requirements of the Workplace Safety Health Act & Regulation.
 - Choose footwear according to the hazard at your workplace.
 - Consider fit and comfort, always try on and walk in new footwear before purchasing and using it.
 - Maintain your safety footwear in good condition and inspect it regularly for damage.
 - Repair or replace worn or defective footwear as required; badly damaged footwear is as much a hazard as no safety footwear at all in some cases.

PROTECTIVE FOOTWEAR REVIEW QUESTIONS

NAME: _____

DATE: _____

PART 1: FILL IN THE BLANKS WITH THE CORRECT ANSWERS

- 1) The Workplace Safety Health Act & Regulation requires protective footwear to be provided by the _____.
- 2) Generally in construction, CSA approved Grade ____ footwear is required.
- 3) CSA Grade 1 footwear which meets the Workplace Safety Health Act & Regulation requirements is identified by a _____ triangle bearing the CSA label which is permanently attached or sewn onto the boot.
- 4) Regular inspection of safety footwear is the responsibility of both _____ & _____.

PART 2: ANSWER TRUE OR FALSE TO EACH OF THE FOLLOWING

- T / F 1) Safety footwear should be maintained in good condition and inspected regularly for damage?
- T / F 2) Badly damaged safety footwear is as much of a safety hazard as no safety footwear at all and should be repaired or replaced immediately?
- T / F 3) Proper protective equipment reduces the severity of most everyday type incidents at work and at home and should therefore be worn at all times it is required?
- T / F 4) The Workplace Safety Health Act & Regulation does not allow any exemptions respecting the wearing of safety footwear?