

Harnessing safety

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With proper training and use, a full body harness can save you from a deadly fall.

The Occupational Health and Safety Regulation requires workers to use a fall protection system, where they could fall at least 3 m (10 ft.) or where a fall from a lesser height may result in serious injury. In addition, workers must be trained thoroughly in the safe use and limitations of personal fall protection equipment, including safety belts, harnesses, lanyards, and lifelines.

In choosing a fall protection system, you should first consider installing guardrails or barriers. They provide a high degree of protection once installed properly. However, if installing guardrails or barriers at a work site is not practical, you may need personal fall protection equipment such as a full body harness.

Once you've determined that a full body harness is the right equipment for the job, you still need to know how to select, fit, and inspect your harness to ensure it keeps you safe in case of a fall.

How it works

Your full body harness is connected by lanyards or lifelines to secure anchors, which prevents you from falling or protects you after you fall by stopping your descent before you hit the surface below.

The harness consists of straps passed over the shoulders, across the chest, and around the legs. In a fall, a full body

harness protects you more than a safety belt because it distributes the force of impact over a greater area of your body.

How to choose

Before selecting a harness, consider the risks presented by your job – choose appropriate fall protection for each type of hazard you're susceptible to. While there are various types of harnesses on the market (e.g. body belts, and seat- and chest-only harnesses), only a full body harness is considered adequate fall protection.

A full body harness designed to arrest falls should have:

- A back-mounted D-ring located between the shoulder blades
- A manufacturer's label with the following information:
 - Classification. Only a harness from group A is designed to arrest a fall. Use the right harness for the job.
 - Identification of manufacturer or vendor
 - Size (the words "size" or "grandeur" must appear on the label)
 - Date of manufacture (by year and month)
 - Model number
 - Designation "CSA Z259-10-06" (harnesses meeting CSA standard Z259-10-90 are also acceptable)

Ensure the harness fits you comfortably, without being loose. If it puts strain on any part of your body, you can get shoulder and back pads to reduce the pressure.

Inspect before use

Inspect your harness before each use, ensuring it's in good repair by looking for:

- Missing or unreadable markings or warnings, or missing parts
- Damage to buckles and metal parts, including cracks, sharp edges, distortion, corrosion, chemical damage, too much heating, and too much wear
- Defects in/damage to webbing, straps, and ropes like fraying, kinking, knotting, roping, broken/pulled stitches, abrasion, and excessive oiling, or sections that are too old, worn, or dirty
- Missing parts, signs of defects in/damage to, or improper working of mechanical parts and connectors

If the harness appears to need repair or maintenance, label it "Do not use" and remove it from service.

Never use gear that's been in a fall, unless it's been inspected and approved by the manufacturer or other authorized agency, or by a professional engineer.



Use it right

The first rule in proper use of a full body harness is to follow the manufacturer's directions. Your employer must keep these instructions in a safe place so you can review them yourself. For most full body harnesses, follow these general guidelines:

- ❑ Hold the harness by the back D-ring and shake it so all the straps fall into place
- ❑ Slip the straps over your shoulders so the D-ring is in the middle of your upper back
- ❑ Connect chest/waist straps and make sure they fit snugly across your chest
- ❑ Reach between your legs and connect one of the long straps to the buckle or closure on your thigh; repeat with the other strap
- ❑ After you connect both straps, pull them tight so the harness feels snug but lets you move freely

- ❑ Secure loose strap ends so they won't snag or cause you to trip
- ❑ Connect the D-ring to a secure anchor with a lanyard or lifeline
- ❑ Make sure your anchor point is approved for the way you'll use it (ask if you're unsure)

More information

This information has been taken from the WorkSafeBC booklet, *An Introduction to Personal Fall Protection* (www.worksafebc.com/publications/high_resolution_publications/assets/pdf/bk60.pdf).

Refer also to the Occupational Health and Safety Regulation, Part 11, Fall Protection (www2.worksafebc.com/publications/OHSRegulation/Part11.asp).

