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# SafetyTalk

## **Fall Protection**

## What's the hazard?

Most fall injuries occur when people become comfortable with heights and complacent with safety procedures. Falls can happen quickly and surprise you, even if you have worked at heights for most of your life.

## How do I know if I am at risk?

A fall hazard exists in a work area where you are working above:

- an unsafe surface
- water
- an open tank
- a pit containing hazardous material

## What Precautions can be taken?

You are required to have fall protection in place when working at a height of 3 m or more or where a fall hazard exists.

On many sites, guardrails are a common and convenient means of fall protection. Where guardrails cannot be used, another means of fall protection must be used to prevent a fall.

Two basic types of fall protection are travel restraint and a fall arrest system. Both involve wearing a full body harness.

#### Travel Restraint

A travel restraint system keeps you from getting too close to an unprotected edge. The lifeline and lanyard are adjusted to let you reach the edge but not fall over it. See Figure 1.





Figure 1: Travel Restraint

## **Fall Arrest System**

A fall arrest system prevents a falling worker from hitting the ground or any object below. It consists of a full body harness attached to a lanyard and typically an energy absorber. The lanyard and energy absorber is attached to an adequate anchor point or to a rope grab on an adequately anchored lifeline. See Figure 2.

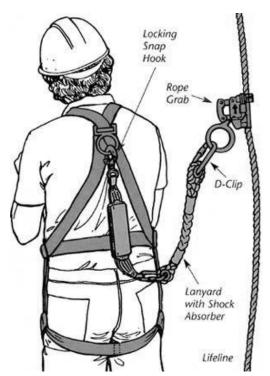


Figure 2: Fall Arrest System

## **Full Body Harness Fitting**

- Your full body harness must be properly fitted. It should be snug but comfortable.
- Adjust the chest strap so that it is snug and located near the middle of the chest.
- Adjust the leg straps so that a fist can fit snugly between the strap and leg.
- Adjust the shoulder straps so that the back D-ring rests between the shoulder blades.

## Inspecting the Fall Arrest System

You must complete an inspection of your fall arrest system prior to each use. If you find anything wrong during your inspection, do not use the equipment, and be sure to remove it from service:

#### Harness

- Inspect hardware and straps to ensure that they are intact and undamaged.
- Check that moving parts work freely through their full range of motion.
- Check that webbing is free of burns, cuts, frayed material and signs of chemical damage.

## Lanyard

- Make sure the lanyard fastens securely to the D-ring on the harness.
- Inspect the lanyard for fraying, kinking, and loose or broken stitching.
- Look for rust, cracks, and damage to the lanyard hardware.
- Inspect energy-absorbing lanyards regularly. Look for stress or tearing on the cover jacket of the energy absorber.

#### Lifeline

- Inspect fibre rope lifelines for fraying, burns, kinking, cuts, and signs of wear and tear.
- Check the rope grab for damage, rust or sharp edges, signs of wear or metal fatigue, and moving parts that don't work smoothly.
- Check retractable lifelines by pulling out the line and jerking it suddenly. The braking action should be immediate and tight.

#### **Fall Protection Plan**

A written fall protection plan must be written that is specific to each worksite. Knowing the specific fall hazards at the worksite, and putting the proper controls in place to prevent these hazards, is the key to staying safe and decreasing the number of fall-related incidents.

## **Discussion Topics**

- What work tasks will we be doing that could result in fall injuries at this worksite?
- What fall protection methods can we use to prevent falls while performing these work tasks?
- What are the procedures at this worksite for rescuing a fallen worker?
- Periodically remind each other to inspect, put on, adjust and properly wear your fullbody harnesses.