

Fall protection

Explain dangers

Suspension systems on swingstages, work cages, and bosun's chairs can fail. If you are not using a fall arrest system, you can fall, suffering injury or death.

Identify controls

The basic rule is simple: there must be two independent means of support for workers using suspended access equipment.

Two Independent Means of Support

One independent means of support for each worker is the **suspension system** holding up the stage, cage, or chair.

The second independent means of support is the **fall-arrest system**.

This consists of

- full body safety harness
- lanyard
- rope grab
- lifeline
- lifeline anchor.

If the suspension system fails, the worker will be saved by the fall-arrest system.

In some cases, the second independent means of support can be another complete suspension system. On a swingstage, for instance, there would be four outrigger beams instead of two, four suspension lines instead of two, and so on. If one suspension system fails, the other will take over. This arrangement is used on a tiered stage.

But even with two complete suspension systems you must still wear a full body harness and lanyard. In this case you would tie off to a stirrup on the stage or to a line secured to both stirrups.

Demonstrate

Fall-Arrest Inspection

[This part of the talk should include hands-on inspection of equipment.]

Fall-arrest equipment is your last line of defence. Make sure it works.

Your **harness** must have a label identifying the CSA (Canadian Standards Association) standard to which it complies.

Check the harness for

- cuts, burns, and signs of chemical damage
- loose or broken stitching
- frayed web material

- D-ring and keeper pads showing signs of distortion, damage, or undue wear
- grommets and buckles showing damage, distortion, and sharp edges

The lanyard must be securely attached to the harness D-ring by a locking snaphook or other approved means.

Your **lanyard** and **shock-absorber** must be free of fraying, kinking, and loose or broken threads. The

hardware should not be deformed, rusty, cracked, or unduly worn. All moving parts must move freely and easily through their full range of movement.

Make sure your **rope grab** is working, matches the type of lifeline you are using, and has no damaged parts or sharp edges that could cut the lifeline.

Your lanyard must be attached to the rope grab with a locking snaphook to keep it from accidentally coming out.

Your **lifeline** should be free of damage, wear, and decay. It must be protected from rubbing and scraping where it passes over corners or edges.

