

Rescue from Height

Falls from elevation have resulted in up to 6% of all work-related deaths and up to 54 % of work-related injuries annually. Proper planning, supervision, training, and use of a fall protection plan can reduce or eliminate this risk on your worksite.

<https://www.worksafebc.com/en/resources/health-safety/articles/falls-from-a-height>

Nearly every worksite has the potential for a fall whether it's from a ladder, truck, or scaffold. A fall is usually the result of a combination of hazards like:

- Working at heights without proper fall protection
- Not following safe work procedures
- Slippery or uneven surfaces
- Overexertion

The most effective way to reduce the risk of a fall is to eliminate the need to work at elevation. If that's not possible, there are four main controls to reduce the risk. These will be unique to each worksite and work environment and may include:

- Guardrails - Where fall hazards cannot be eliminated, permanent or temporary guardrails or handrails form a protective barrier around an opening or edge to prevent a fall to a lower level.

Fall Restraint - After eliminating fall hazards and installing guardrails, a fall restraint system is the next level in the fall protection hierarchy. Fall restraint systems prevent you from falling through either travel restriction or work positioning. With travel restriction, workers are attached to a fixed-length line that prevents them from travelling to close to an opening or edge.

Fall Arrest - When it's not possible or practical to use a fall restraint system, the next line of protection is fall arrest. A fall arrest system (including a lanyard or lifeline, a harness, and, most importantly, an anchor) protects you after a fall by stopping you from hitting the surface below

- Safe Work Procedures- An example of a safe work procedure (SWP) would be to use three points of contact when climbing onto or down from equipment. Either always have two feet and one hand or two hands and one foot on the equipment. Use the safety features designed by the manufacturer for climbing,

Rescue from Height

The Occupational Health and Safety Regulation (OH&S) 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 a serious injury.

The employer is required to have a written fall protection plan prior to using a personal fall protection system for any work with a potential fall hazard of 7.5 m (25 ft.) or more.

Rescue from Height

The employer is required to have a rescue plan in place, which ensures that a worker can be safely retrieved when suspended at height (i.e. A worker falls, suffers from heat or physical exhaustion, sudden health emergency, struck by overhead hazard, etc.)

Employers should ensure that fall protection plans are completed and recorded to address site specific conditions:

- Potential fall hazards on the job
- Types of fall protection systems to be used
- Instructions/training for workers on how to safely use the equipment
- Instructions on how to rescue a worker who has fallen and cannot initiate a self-rescue
- that the fall protection plans are compliant with the OH&S Regulation.



See attached WABC written site-specific fall protection form.

Do not wait for or rely entirely on emergency services, as it is not their duty to rescue a worker at height. There should never be a delay in the rescue from height plan being initiated, as it is critical for the worker's wellbeing. You must act quickly.

The signs and symptoms of suspension trauma (orthostatic intolerance) can start in 2 - 3 minutes and include:

- a. Faintness
- b. Nausea
- c. Breathlessness
- d. Dizziness
- e. Sweating
- f. Paleness
- g. Hot flushes
- h. Skin tone may appear grey in colour
- i. Loss of vision

The onset of suspension trauma can be slowed significantly if the worker can stand in a suspension relief straps or loop on the end of a rope.

The rescue plan provides information about the type and location of equipment that are vital in the rescue process. A trained, competent, and qualified person(s) must carry out rescues. This is somebody who has sufficient training, experience, and knowledge to assist accurately. The rescuer should have the skills and knowledge to:

- Inspect, anchor, assemble, and use fall protection and rescue equipment safely.
- Recognise fall hazards.
- Implement fall hazard control methods.
- Conduct fall protection and rescue procedures.
- Inspect equipment and systems before use.

Rescue from Height

The types of rescue from height plans a company may require are:

Self Rescue

These procedures are to be followed if the worker has selected the proper fall arrest equipment, installed it properly, is using it properly and has not been injured they should, in most cases, be able to self rescue.

Assisted Self Rescue

These procedures are to be followed if self rescue is not possible, an assisted self rescue will be performed by using a winching system.

Fully Assisted Rescue

These procedures are to be followed if the workers is injured and is unable to attach themselves to the rescue system:

Ladder Rescue

These procedures are to be followed if a ladder can be safely set up and the suspended worker can be safely reached by a rescuer on the ladder.

Aerial Lift Rescue

These procedures are to be followed if an aerial lift is readily available and can be safely used to reach the suspended worker. This rescue procedure can only be used if one of the rescuers is qualified to operate the aerial lift or a qualified operator is available to work with the rescuer.

Follow the steps listed below when a worker is suspended by their fall arrest harness:

1. The site supervisor or the employee in charge of the rescue team takes charge of the situation.
2. Determine the safest type of rescue given existing conditions so that the rescue team can initiate a rescue as quickly as possible.
3. The worker in charge of the rescue alerts other workers of the fact that an emergency exists and all work in the area should stop.
4. CALL for addition help from other workers trained in rescue procedures if required.
5. All workers in the vicinity of the incident must stop working immediately.
6. Attempt to communicate with the worker that has fallen to determine their condition and whether they can self rescue or participate in an assisted rescue.
7. Ask all non - rescue related workers leave the area.
8. Record the time (best estimate) when the worker fell, and the time when they were rescued. The difference is the length of time the worker was suspended.
9. Monitor the worker's condition constantly.
10. The worker in charge of the rescue quickly evaluates the situation to identify any further hazards that have developed because of the accident.
11. Identify a safe landing area (i.e. work platform, ground, floor level).
12. Identify any hazards in or near the landing area that must be dealt with.
13. Implement the rescue from height plan designated for this workspace, prior to work commencing.

Rescue from Height

14. When necessary, ensure a worker is designated to meet emergency response personnel (police, EHS, fire, etc.) and ensure that they are brought quickly and safely to the site of the incident.

Although the actual rescue from height procedures may differ depending on the incident, what remains consistent with them all is, after the rescue from height plan has been successfully executed:

- Immediately collect all the fall arrest equipment used by the worker and tag the equipment as DO NOT USE.
- Document all the items used as well as the workers name, the date and time of the fall and the job being performed when the fall occurred.
- Give all fall arrest equipment and documentation to the worker's supervisor or manager to have them inspected for defects and / or damage by an approved manufacturer or other approved agent, or professional engineer.



QR Code provided: <https://www.worksafebc.com/en/resources/health-safety/toolbox-meeting-guides/written-site-specific-fall-protection-plan?lang=en>

Other forms available: <https://www.highspeedtraining.co.uk/hub/wp-content/uploads/2017/10/Working-at-Height-Recue-Plan.pdf>

<https://www.worksafenb.ca/docs/workatheightrescueplan.pdf>