

Securing loads

Explain dangers

If a load isn't properly secured on your vehicle, it can severely injure you during loading and unloading.

Risk factors for operators when securing loads include the following:

- Overexertion injuries
- Being struck by parts of the load
- Slips and falls—either when working at heights or from the ground due to ice, snow, and rain.

Here are two examples of actual workplace incidents:

- 1. Strapping loads** - A flatbed driver was strapping a load of steel from the side of a flat-bed truck. While pulling and turning the strap wheel, the driver felt a sudden pain in his right shoulder—a musculoskeletal injury. This injury required therapy and days off work.
- 2. Unstrapping loads** - A worker was killed by a falling pipe when unloading a transport trailer. The worker was in the process of unstrapping the load when three high-density polyethylene pipes, weighing about 500 kg each, rolled off the top tier. Although the pipes were resting on dunnage, it failed to secure the load once the strap was removed.

If a load isn't properly secured, it can cause major problems during transportation. Studies have found that up to 25% of unsafe highway incidents were caused by cargo not secured properly on trucks and vehicles.

Identify controls

There are many methods and materials available to secure loads and cargo on vehicles and intermodal containers. These methods can include:

- Strapping (steel, polyester, nylon, and polypropylene)
- Fasteners (nails and bolts)
- Dunnage
- Lashing (ropes, cables, wires, and chains).

To prevent injuries, follow proper work practices to secure loads.

- Workers and independent operators should be trained to recognize the danger to themselves and the public from materials becoming dislodged.
- All loads must be secured to comply with Ontario's *Highway Traffic Act* (s. 111) and the *National Safety Code Cargo Securement Standard*.
- Workers should wear comfortable boots with anti-slip resistance.
- When placing straps over loads, tie a rope with a ball to the end of the strap. Make sure that no one is near the other side of the trailer. If someone is helping you on the other side, tell them to stand far back. Then, throw the ball over the load and pull the strap over on the other side.
- Use telescoping tools to help you pull straps down from the top of the load.
- Use a power strap winder or drill-attached strap winder to save your wrist from repetitive strain and forceful exertion.
- Consider installing geared or powered winches.
- Use a properly designed winch bar. When tightening or loosening winches, always maintain a firm grip on the winch bar. Never release a winch bar without checking the pawl to ensure that it is fully engaged between the ratchet teeth. Releasing a winch bar without the pawl being properly engaged can cause serious injury to the user or bystanders. Never use cheater bars with the winch bars.
- Loading and unloading may also involve equipment such as lift trucks or cranes. Drivers should not operate this equipment unless they are competent to do so based on their training, experience, and knowledge of occupational health and safety legislation.

Demonstrate

Ask the crew to describe any problems they have had with securing loads.