



Young Workers

STAND TALL!
Talk. Ask. Learn. Live.

Let's Talk



Portable Ladder Safety

What is a portable ladder?

A ladder is used to gain access to a different elevation. Portable ladders can be moved or carried. They consist of side rails joined at intervals by steps, rungs, or cleats. The most common portable ladders are:

- **Extension ladder** – Two sections overlap and lock to adjust ladder length. It is not self-supporting (leans against a structure or wall).
- **Step ladder** - Self-supporting with a hinged A-frame back, fixed height and flat steps.

Types of Injuries

Falls from ladders are the most common hazard and can result in serious injuries (fractures, concussions and dislocation) or death. Other injuries include strains and sprains, including back injuries, due to overreaching, moving, lifting or carrying ladders. Workers can be electrocuted when ladders or tools come into contact with a live power source.

Frequency

Three (3) workers are killed every week and more than 50 workers are injured daily in ladder related incidents.* Ladder requirements are in OSHA's top 10 most cited violations. **

*2017 American Ladder Institute

**Fiscal years 2018, 2017, 2016

Injury Examples

- A farm worker was fatally electrocuted when the 17 foot aluminum ladder he was using in an orchard contacted an overhead power line.
- An employee, working alone, was carrying bulky, heavy items up an 8 foot stepladder. He leaned outside the rails to reach an overhead storage space 11.5 feet above the floor. The ladder became unstable and tipped to the side. He fell, struck his head on the concrete floor and died.

Working Safely On Ladders

- **Use** ladders only for their intended purpose.
- **Choose** the correct ladder, height, load capacity.
- **Inspect** ladders before use for defects.
- **Set-up** ladders level, on a firm surface.
- **Extension ladders** - lock clamps; 4:1 ratio; block base; tie off at top; extend 3 feet.
- **Step ladders** – fully open, lock spreaders.
✓ **NEVER** use closed or partially open.
- **Maintain 3 points of contact at all times!**
✓ **Do not** carry items when climbing.
- **Do not** overreach. Stay centered between rails.
- **Always** face the ladder when on it.
- **Do not** use the top step, top cap or bucket shelf.
- **Stay 10 feet** from overhead power lines.
- **Do not** use in high winds or storms.
- **Wear** proper footwear.

Let's Talk about Our Worksite

1. Do we know how to properly inspect ladders before using them? How can we assure inspections are done before each use?
2. How can we check to ensure the extension ladder or step ladder is properly set-up?
3. How can we **Stand TALL** when working on ladders to prevent falls and other injuries?





Ladder Safety

Additional Resources

- A variety of training resources including videos, fact sheets, infographics and more - https://www.laddersafetymonth.com/Portals/0/ALI_320583-18_19NLSM_flyer1%5B1%5D.pdf
- NIOSH ladder safety phone app helps select the right ladder, measure the set-up angle, and more. Download the app at <https://www.cdc.gov/niosh/docs/2017-129/pdfs/2017-129.pdf>
NIOSH ladder resources including infographic, factsheets, Q&A, and postcard are available at <https://www.cdc.gov/niosh/topics/falls/mobileapp.html>
- The American Ladder Institute provides information and resources about ladders: <https://www.americanladderinstitute.org/>
- OSHA has a variety of ladder safety resources at <https://www.osha.gov/pls/publications/publication.athruz?pType=Industry&pID=463>
 - ✓ Portable Ladder Safety QuickCard https://www.osha.gov/Publications/portable_ladder_qc.html
 - ✓ Trestle Ladder Safety Fact Sheet <https://www.osha.gov/Publications/OSHA3728.pdf>
 - ✓ Stepladder Fact Sheet <https://www.osha.gov/Publications/OSHA3662.pdf>
 - ✓ Ladder E-tool for construction industry (applies to general industry as well) <https://www.osha.gov/SLTC/etools/construction/falls/4ladders.html>
- Ladder Storage Fact Sheet. Although for Canada it is easy to follow, general guidelines https://www.ccohs.ca/oshanswers/safety_haz/ladders/storage.html
- This ladder safety fact sheet provides a handy chart for extension ladder overlap requirements, information of ladder storage and more. <http://elcosh.org/document/1976/d000170/ladder-safety.html>
- Although designed for the construction industry <http://elcosh.org/index.php> and <https://www.cpwr.com/> provide a variety of good resources including tool box talks, pictures, videos, fact sheets and more.



Ladder Fast Facts

Did You Know?

Most ladder falls happen between 6 feet and 10 feet off the ground.



2 Most Common Ladder Accidents

- **Missing the last step when climbing down**
- **Over reaching**



Do not let go of the ladder until feet are firmly on the ground.