Ladder Safety

Use of ladders was associated with an estimated 161,940 injuries treated in hospital emergency departments. The legs and feet were injured most often and the most common injury to them were strains and sprains. Fractures were the most common injury type, usually involving the arms and hands. Sprains and strains were the most common injury to the lower body area; contusions and abrasions for the upper body area including shoulders and neck; lacerations and abrasions to the head and face. 


When Should You Use a Ladder?

When you want to reach a higher work area, think about the best equipment to use. While a ladder or stepladder is commonly used, it may not always be the best option. If you answer yes to one of the following questions, consider using something other than a ladder (such as a scissor lift).

- Will I have to hold heavy items while on the ladder?
- Is the elevated area high enough that it would require a long ladder that can be unstable?
- Will I be working from this height for a long time?
- Do I have to stand on the ladder sideways in order to do this work?

SELECTION:

When choosing a portable ladder, consider:

- **Type** (step ladder, straight or extension ladders)
- **Length** (convenient height without reaching)
- **Strength** (determine the weight and stress the ladder has to bear)
- **Material** (wood is non-conductive, heavy, and rots; metal is light, weather-resistant, but conducts electricity; and fiberglass is light, long-lasting, non-conductive, and has good traction.)

- Inspect all ladders before using them. Look for loose, broken, or missing parts, slippery rungs, skid-resistant features, movable parts, and ample oil on metal bearings. Don’t use damaged ladders. Instead have the ladders repaired or destroyed.

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SAFE USE:
A few precautions for safe ladder use include the following:

• Do not use metal ladders near electrical lines.
• Don’t tie ladders together.
• Place the ladder on stable and level ground. DO NOT place it on an uneven surface.
• Place a straight or extension ladder at an angle so that the ladder’s base is about one foot out for every four feet of ladder working length (support point to base).
• Face the ladder and use both hands to grip the side rails when climbing or descending. Maintain three points of contact with the ladder at all times.
• Don’t carry tools up a ladder—hoist tools up to you or wear a tool belt.
• Do not stand on the top two steps of a stepladder or the top four rungs of a straight ladder.
• If your belt buckle goes outside of the side rails, you are reaching too far. Do not lean away from the ladder to carry out your task. Always keep your weight centered between the side rails.
• Use the right ladder for the job. For example, ensure the ladder is high enough for you to reach your work area without having to stand on the top rung.
• When using ladders to access another level, secure and extend the ladder at least 3 feet above the landing point to provide a safe handhold.

• The base of the ladder should be secured.
• Wear proper footwear (e.g., non-slip flat shoes).
• Ensure that the ladder is fully extended before starting work.
• Prevent passersby from walking under or near ladders in use by using barriers (e.g., cones) or getting your coworker to act as a lookout.
• Do not use ladders near doorways. If you need to use a ladder near a doorway, make sure that the door is locked.

CARE AND MAINTENANCE:
Here are a few pointers on your ladder care and maintenance:

• Before using a ladder, check it carefully to ensure there are no visible defects and that it is in good working condition. Check the ladder according to the manufacturer’s instructions.
• Avoid makeshift portable ladder repairs.
• Do not try to straighten or use a bent ladder.
• Do not use the ladder if it is missing a step.
• Do not use the ladder if the spreader bars do not have a locking device or mechanism.
• Maintain and store the ladder according to the manufacturer’s instructions.
• Always have a qualified person perform repairs.
• Store ladders in areas with good ventilation, no tripping hazards, no nearby sources of heat or moisture, and in an area that lends itself to safe withdrawal of any ladders you need.

Check out our course list online for a variety of safety trainings provided across the state at www.ndsc.org

The North Dakota Safety Council is a private non-profit organization supported through grants, donations, memberships and training.