

# Risk factors: Ladders

Although a ladder is not intended to be used as a work platform, there are situations where it is the safest means of getting the work done. In those instances, a risk assessment must be performed and any hazards associated with the ladder work must be assessed and controlled. These are five work situations that can increase your chances of falling from a ladder. Take them into consideration when doing your risk assessment.

## 1. Reaching to the side

If you reach to the side so that your body goes past the ladder's side rails, your weight can tip the ladder and cause it to fall. Keep your upper body aligned within the side rails. Tie off the ladder at the top and bottom. Never overreach.

## 2. Handling bulky or heavy material overhead

If you're standing on a ladder doing overhead work—particularly if the work involves bulky or heavy material (such as drywall)—you're risking a fall. Your shoulder and arm muscles fatigue more quickly than your back and leg muscles. This could cause you to drop what you're handling. Also, you should have at least one hand free to stabilize yourself on a ladder. For this kind of activity, find an alternative to working from a ladder.

## 3. Using a lot of force

When you do things such as pull wire bundles with high resistance or swing a sledgehammer, you're applying a lot of force at one time. If you're on a ladder, the reaction force on your body can throw you and the ladder off balance. Avoid doing this kind of work from a ladder—it's just too risky. Look for an alternative.

## 4. Applying a constant force

When you're applying a constant force on something—such as a drill—your centre of gravity often shifts because you start to rely on the tool

as one of your points of support. When you “lean into” a drill, you get accustomed to it and forget that you're counting on the drill for support. But, what happens when the drill bit reaches the end of the material and suddenly slides through? You'll be thrown off balance. If you're on a ladder when this happens, you can tip and fall. Avoid doing this kind of constant-force work from a ladder if you can't maintain three-point contact.

## 5. Experiencing muscle fatigue

Tasks that require continued or repeated reaching or handling heavy material can fatigue your muscles. When your muscles are tired, you have less control over your balance, and it's harder to recover your stability if you're thrown off. Take adequate breaks to rest and replenish your fluids.

For more information on ladder safety, visit [ihsa.ca](http://ihsa.ca). Our website offers a bounty of information on fall prevention and ladder safety as well as a range of products, many of which are available at no cost.



Tie off ladder at the top and bottom.



Avoid doing constant-force work from a ladder if you can't maintain three-point contact.

## Download the *Ladder Use in Construction Guidelines*

Workers on construction sites continue to fall from ladders and become critically injured or killed. The Provincial Labour-Management Health and Safety Committee (PLMHSC) has prepared a guideline on safe ladder use in construction to assist workplace parties in understanding their obligations under the *Occupational Health and Safety Act* (OHSA) and its regulations.

The Ministry of Labour views the guideline as a recommended set of industry best practices that may be used as part of an employer's health and safety program. To view the guideline, visit [ihsa.ca/pdfs/topics/ladders.pdf](http://ihsa.ca/pdfs/topics/ladders.pdf)

