Whether it’s on a construction site, at a loading dock, in a lumber yard, or in a building supply warehouse, the majority of workers who suffer critical injuries either fall or get struck by something (such as a vehicle, a piece of heavy equipment, or a tool).

In most cases, either falling or being struck by something leads to that unmistakable sound of cracking bone—fractures to arms, legs, heads, hips, and backs.

Not only are fractures a leading type of injury, they are also one of the most expensive types of workplace insurance claims.

According to statistics from the Workplace Safety and Insurance Board, truck drivers and loading-dock workers, homebuilders, and lumber-yard workers suffer the bulk of fractures experienced in IHSA’s industries.

Turn the page to find out how to reduce the risk of fractures on construction sites. In the next issue of Health & Safety Magazine, look for tips on reducing fractures in the trucking industry. The issue after that will focus on lumber yards and building supply yards.
Preventing fractures in construction

Eliminate falls

In Ontario construction, falls cause the majority of fractures. When workers fall and survive, they almost always have at least one broken bone.

The Construction Regulation (Section 26) specifies when you need to use some form of fall protection. To be safe, just remember this: wherever there is an open edge and a risk of falling, use fall protection.

Guardrails and floor opening covers

The best forms of fall protection are guardrails and opening covers because they protect everyone in the work area.

This is what a well-built wooden guardrail looks like. It must be able to withstand anything that could come up against it.

If there's a floor opening and you can't build a guardrail around it, use a strong opening cover. Secure it (e.g., nail it down) and then clearly mark it with a bright colour: DANGER. OPENING COVER. DO NOT REMOVE! DO NOT LOAD!

Personal fall protection

When you can't use guardrails or opening covers, you must use a travel-restraint or fall-arrest system. Go for travel-restraint first because, like guardrails, it will actually prevent you from falling in the first place. If that's not possible, use a fall-arrest system so that if you fall, you won't hit the ground.

Ladders

- Tie off the top and bottom of the ladder rather than have someone hold it.
- Always make sure your boots are dry and that the grips aren't worn out.
- Maintain 3-point contact at all times: one hand and two feet on the ladder or two hands and one foot.
- Don't carry anything while you climb up or down.
- Keep your body between the side rails of the ladder. Don't lean over to one side or the other. The ladder can tip if you reach out too far.
- Make sure your ladder is set up at a safe angle.
- Inspect ladders before each use. If it's defective, take it out of circulation. Get it repaired, or replace it.

Don't get hit

After falls, getting hit by something is the most common way to fracture a bone. To protect your workers from getting struck by vehicles or heavy equipment,
- plan a drive-through jobsite
- use trained signallers if you can’t avoid backing up
- put up barriers to keep walkways separate from the paths that trucks and other equipment use
- make sure everyone knows where driver blind spots are and how to stay out of them.

To prevent getting struck by objects,
- always secure loads when using cranes
- prevent other workers from accessing hoisting and unloading areas
- never lift a load over a work area
- before removing the straps or chains to unload a truck, make sure the load didn’t shift
- stack unloaded material on level ground in a stable pile (e.g., use blocking)
- don’t stack material too high
- avoid storing material near the edge of a roof
- if you have to store material on a roof or elevator, secure it so that wind can’t blow it off
- use guardrails—they prevent objects from falling the same way they prevent people from falling.

Use this information to give a few safety talks to your workers.
For more information on preventing falls and struck-by injuries, visit www.ihsa.ca