

Iowa Farmer Today

No matter the ladder, keep safety in mind

By Brandi Janssen

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Always maintain three points of contact (two hands and a foot or two feet and a hand) when using a ladder.

Photo courtesy Central States Center for Agricultural Safety and Health

When people think about farm-related injuries, there are several dramatic examples that immediately come to mind: grain bin engulfments, tractor rollovers or deadly manure gas exposure.

Although these events may have fatal results, they are actually not the most common cause of serious injury or deaths on farms. Instead, one of the most likely causes of serious, even fatal, injury is something we have all probably experienced — a fall.

In 2017, the Census for Occupational Fatal Injury (CFOI) reported falls as a cause of occupational death at a higher rate than at any point in its 26 years of data collection. Falls represented 17% of total worker deaths during 2017.

A person will likely not survive a fall from 30 feet or more, but even falling from 6 feet can result in a fatal injury or permanent disability. Thus, in general industry, workers are required to have fall protection beginning at a working height of 4 feet. In construction the standard is 6 feet.

One reason falls can cause such serious injury is they can affect every part of the body. Unlike incidents where a person is struck or entangled by machinery, a fall can cause broken bones, vital organ damage and head injuries.

On a farm, someone may work at heights more often than they realize. Think of time spent on top of a seeder or grain wagon, repairing a hoop house or greenhouse roof, going up a bin or silo, or even climbing in and out of a combine. Any of these activities puts you at risk for a fall that could cause a serious injury.

Using ladders safely is a key part of overall fall prevention. According to Industrial Safety & Hygiene News, there are about a half million falls from ladders annually. Ninety-seven percent of these occur at home or on farms. No matter whether you're using a step ladder, an

extension ladder or the ladder up to a bin or piece of equipment, there are some basic safety precautions that will help keep you safe.

First, make sure you have the right ladder for the job. Think about the load the ladder will need to sustain, and choose a ladder that can handle at least four times that amount. This is called the “duty rating.” A Light Duty, type III, will hold 200 pounds; a IAA Special Duty will hold 375 pounds. These ratings are the same for either extension or step ladders.

Scout out the work area to find a firm, level surface to place the ladder and make sure any doors nearby are secured to avoid a collision with the ladder when they’re opened.

Don’t forget to check for overhead hazards like power lines whenever you’re using a portable ladder.

Clean the ladder steps and keep your body in the center of the ladder when climbing up and down.

Set extension ladders at the proper angle. The bottom of the ladder should be one-quarter of the ladder’s working length away from the wall. If you are using the ladder to access an elevated work space, extend the top of the ladder above that height or secure it at its top. When using step ladders, double check that the spreader hinges are in good repair and that they are fully extended and locked when the ladder is set up.

Do not stand on the top step or cap.

Fixed ladders on bins and silos have their own safety requirements. Any fixed ladder taller than 20 feet should be equipped with a protective cage. When siting new bins, make sure there is adequate

space between them to climb safely without having to lean to one side or reach awkwardly.

Fixed ladders should also be inaccessible to children or any other unauthorized users with a ladder lock out system.

One of the most important ladder safety tips is to maintain three points of contact at all times when ascending or descending. This means keep two feet and a hand, or one hand and a foot, in contact with the ladder.

Maintaining three points of contact also requires you to use a towline, tool belt or an assistant to hold any tools you'll need; this way, your hands are free for safe climbing.

Three points of contact is important no matter what type of ladder you're using. When coming out of a combine, you should take the time to turn around and descend backwards, rather than treating the ladder like a set of stairs.

Older adults are at increased risk for falls — both at-height and same-level falls. You should consult with your doctor if you have health factors that increase your risk of falling, such as advancing age or a chronic medical condition.

Fall prevention should be part of an overall farm safety strategy. University of Iowa researchers are currently working on a study about safety on Iowa's farms, including fall prevention. Contact them at 855-204-4693 or isrc-research@uiowa.edu to learn more.

On farms, working at height is a frequent activity, observe some basic ladder safety trips to save you from a nasty fall.

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