



## Reduce farm injuries with the hierarchy of hazard controls

### Byline: Canadian Agricultural Safety Association

Anyone who has spent time on a farm knows all too well the safety risks that come with farming.

From machinery and confined spaces to chemicals and respiratory problems, there are countless hazards every day for those who live and work on the farm. But while hazards are a reality on farms across the country, there are ways to control them to prevent injuries and maintain productivity.

It's important to note that before you can control any hazard, you must first identify it. A risk assessment is the best way to identify hazards on the farm and assess the degree of risk they pose to workers, residents, and visitors. A risk assessment will also ensure that hazards are addressed based on priority.

After you've identified and assessed hazards on the farm, next up is to use the "hierarchy of hazard controls," which is a process for controlling exposure to hazards by identifying the most effective and practical options.

There are five levels of hazard controls, ranging in order of effectiveness from most to least.

### Elimination

It's no surprise that elimination is the hands-down best way to control a hazard. For example, removing clutter and debris on the ground eliminates tripping hazards.

Though it's the most effective way to address hazards, elimination has limitations since it's not always a realistic course of action.

### Substitution



If a hazard can't be completely removed, the next best step is to substitute it with something safer. For example, substituting scaffolding in place of a ladder to reduce the hazard of falling or swapping noxious chemicals for less toxic alternatives.

**Engineering Controls**

If you cannot remove a hazard or substitute it with something safer, the next option is engineering controls. Engineering controls involve designing or modifying facilities to remove or minimize exposure to a hazard before it comes in contact with a person. Engineering controls can be a reliable means of controlling exposure to hazards so long as the controls are designed, implemented, used, and maintained properly.

Examples of engineering controls include installing guardrails to prevent falls, using mechanical lifts instead of manual lifting, and using soundproof barriers to reduce noise levels.

**Administrative Controls**

Unlike the previous controls that deal with the source of a hazard, administrative controls focus on changing how people behave and work around hazards. This involves developing practices and procedures to ensure that the way work is done minimizes exposure to a hazard. Implementing or enhancing training and education, using warning signs, developing safe work practices, and preventative maintenance are examples of administrative controls.

While administrative controls offer practical injury prevention measures, this control method ranks lower than elimination, substitution, and engineering controls because it does not explicitly remove or reduce the hazard. For that reason, administrative controls should be used in combination with other measures whenever possible.

**Personal Protective Equipment**

Last up is personal protective equipment (PPE), which should be your last resort after you have exhausted all other methods. That's because although PPE is the easiest



control to put in place, it's also the least effective. So, if you use PPE, always make sure that it's used in conjunction with other control methods.

Keep in mind that PPE is only effective in reducing a hazard's harmful effects if worn and used correctly. This means ensuring that PPE fits a worker properly and that workers are trained on how to use and maintain it. And regardless of which type of PPE is used, it's crucial to have an effective PPE program in place.

Once you've implemented a chosen control, it's important to not just "set it and forget it." Instead, monitor the hazard and control method to ensure exposure to the hazard is reduced or eliminated.

Remember that prevention is key when it comes to farm safety. Taking the time to identify hazards, implement controls, and monitor effectiveness will help put you on a path for a safer and more productive farm.

For more information on farm safety, visit [agsafetyweek.ca](https://agsafetyweek.ca).

For more than a decade, CASA has been raising awareness about the importance of safety on Canadian farms through Canadian Agricultural Safety Week, which takes place every year during the third week of March. In 2023, CASW is presented in partnership with key partners Farm Credit Canada and Decisive Farming by TELUS Agriculture. Other sponsors include CN, Canadian Canola Growers Association, Syngenta, and Fertilizer Canada.