

Working safely with tractors

Since 2009, there have been 145 equipment and machinery-related serious injuries on B.C. farms and ranches — 11 of them fatal.

The agriculture industry can be a hazardous workplace for young and seasoned workers alike. In the interests of protecting you, your workers, and your family members from such an injury, you'll find the answers below to a few frequently asked questions about tractor and power take-off (PTO) safety.

Why should I be concerned about machinery and equipment safety?

Injuries and fatalities caused by machinery and equipment can occur at any age or level of experience. In order to ensure your safety, your workers' safety, and the safety of your family members, you'll need to understand the risks associated with operating machinery and equipment on farms and ranches.

What is considered a workplace hazard? And, how do hazards affect my farm or ranch?

A workplace hazard is an object, location, or condition that may expose a person to occupational injury or disease. For instance, tractors — a common sight on a farm or ranch — can potentially put you at risk of injury.

To help you identify hazards and reduce risks at your workplace, use the agriculture equipment and machine safety checklist at worksafebc.com/agriculture.

Whether you're an employer or a worker, this checklist will help you review your health and safety responsibilities while operating equipment and machinery.



When it comes to tractors, what hazards should I be aware of?

Every year, farmers and ranchers are seriously injured or killed when their tractors roll over without roll-over protective structures (ROPS).

PTOs are another common hazard that you might find on a farm or ranch. The fast-spinning external shaft can entangle clothing or body parts, which can result in serious injury or death.

The key to safety for you and those around you is to identify and control tractor and PTO hazards.

How can I work safely with PTOs?

- Ensure that everyone who operates tractors with PTOs is familiar with all machine operations and controls.
- Ensure all shields and guards are maintained and in place and safety labels are on the equipment.
- Inspect driveline guards to ensure they have not become stuck to the shaft.
- Use the driveline recommended for your machine and ensure it is securely locked onto the tractor.
- Stop the tractor engine and disengage the PTO while performing maintenance or attending to any issue related to a pulled implement on the machine (e.g., clogged baler).
- Don't use shortcuts to get around the equipment, such as moving within the space where the PTO is connected to the tractor.

How can I work safely with tractors?

- Read and understand the operator's manual.
- Check to ensure the tractor is in good working condition before you operate it.
- Always make sure all PTO shields and guards are in place and in good condition.
- Ensure the roll-over protective structures are up and always wear your seatbelt.
- Ensure brakes are in good condition, working well in both directions (forward and reverse), and properly locked for high speeds.
- Drive at a safe speed and know the terrain slopes and conditions.
- Ensure all loads are properly secured, including large bales and objects being raised above the head level of the operator.
- Turn on level ground whenever possible, and avoid soft shoulders.
- Turn off your tractor, and ensure the parking brake is on and operating effectively before you dismount.
- When operating a tractor with a front-end loader, keep the bucket low when travelling and turning. Never leave the tractor seat with the bucket raised.

For more information on how to work safely with tractors, use the agriculture equipment and machine safety checklist at worksafebc.com/agriculture.

Why should I use roll-over protective structures (ROPS)?

Whether you're a farmer, rancher, or hobby tractor operator, using ROPS in combination with a seatbelt can save your life.

Under the Occupational Health and Safety Regulation, all tractors require ROPS.

Are there situations when a tractor can be used without ROPS?

There are three situations where a tractor can be used without ROPS on farm land. In each situation, you need to first conduct a risk assessment and the result of the assessment must confirm a low risk of a roll-over. Here are situations where a tractor can be used without ROPS:

- The tractor was manufactured before January 1, 1985.
- There is an implement on the tractor that doesn't allow for ROPS.
- You're operating a low-profile tractor and there is low overhead clearance — such as an orchard. In this case, once you leave the area of low overhead clearance, you will need to put your ROPS in the up position.

The Farm and Ranch Safety and Health Association (FARSHA) can help with conducting a tractor roll-over risk assessment and provide additional resources to assist you.

Where can I find more information?

Additional safety resources, equipment and maintenance guides and tractor roll-over videos are available at worksafebc.com/agriculture.

If you have any questions about tractor or PTO safety, or about any other workplace health and safety matters, contact your local WorkSafeBC occupational prevention officer through our prevention line at 1.888.621.7233.

FARSHA offers materials, on-site consultations, and a tractor operator safety course. For further information, contact your regional FARSHA safety consultant, phone 1.877.533.1789, or visit FARSHA's website at farsha.bc.ca.