Chain saws are powerful devices designed to cut wood only. They provide great efficiency when used safely and are properly maintained. In the hands of someone who is inexperienced, untrained, tired or impatient, chain saws can kill.

At an operating chain speed of 80 km (50 mi) per hour, it takes less than one revolution of the chain to sever a person’s thigh. Kick-backs can maim and permanently disfigure a person in a second. Chain saws are unforgiving and operators must be well trained in their use. Professionals who work with chain saws on a full-time basis, such as fallers and buckers, understand their craft and their tools.

In ranching, chain saws are used occasionally by people with various levels of skill and experience. This can be dangerous.

**Protective Gear**

Because it’s not possible to completely eliminate the hazards of a chain saw, you must wear protective gear, even for small jobs. In an accident, this gear can reduce the severity of an injury. It may even save a life. All personal protective equipment should be in good condition and include:

* Face shield
* Leg protectors (chain saw chaps or pants)
* Chain saw gloves
* Ear plugs or ear muffs
* Steel-toed safety boots
* Hard hat

**Preparing to use a Chain Saw**

* Employees who use chain saws must be trained in the safe use and maintenance of chain saws.
* Read the owner's manual carefully. Even an experienced operator must understand all the features or limitations of an unfamiliar saw.
* Review pertinent health and safety legislation before operating a chain saw.
* Operate, adjust and maintain saws according to the manufacturers' directions and the CSA Standard. Such directions and standards describe safety requirements for the design of chain saws and include recommendations on how to use chain saws safely.
* Operate the chain saw in well-ventilated areas only.
* Ask questions if you have any doubts about doing the work safely.

**Operating a Chain saw**

When operating a chain saw, don’t work alone or away from immediate First Aid response.

Never operate a chain saw when fatigued. If you’re not concentrating on your work, you can be a danger to yourself and others.

Plan the cut before felling or bucking a tree. You should know where the tree is going to fall and where the escape path is if something goes wrong.

Check carefully for nails or wire that may be embedded in the wood. Running into metal will cause a violent kickback of the saw.

Find good footing, and don’t stand on logs, branches or rocks that might suddenly move when you are cutting. Keep both feet firmly positioned when operating a chain saw.

Always grip the saw firmly with both hands and never cut with the tip of the chain saw blade. Cutting with the tip is the leading cause of kickbacks.

Check the saw frequently. If the chain is slack or dull, stop what you are doing and fix it.

**Dos & Don’ts**

* Know the location of the persons working with you at all times.
* Use the correct saw. The weight, power and bar length should all be suitable for the job.
* Maintain full power throughout each cut.
* Ensure that the chain does not move when the chain saw is idling.
* Keep your saw clean, free of sawdust, dirt and oil.
* Wear safety gloves or mitts when sharpening the chain.
* Do not start a chain saw when it is resting against any part of your body.
* Do not stand directly behind the saw.
* Do not leave a saw running unattended.
* Do not carry a chain saw while it is running.
* Avoid contact with the muffler. Serious skin burns may result.

**Refueling the chain saw**

* Keep the gas and oil in a safe place away from fires, children and other possible hazards.
* Turn off the chain saw before refueling or doing any maintenance.
* When re-fueling a chain saw, always have a B or ABC fire extinguisher close at hand.
* Do not refuel a chain saw within 3 m (10 ft) of a fuel storage container.
* Follow manufacturer's directions for oil/gas mixture to be used.
* Use only safety containers for storing and dispensing fuel that have been approved by standards like the CSA International B376-M1980 (R1992) (R1998) titled "Portable Containers for Gasoline and Other Petroleum Fuels" or by agencies like Underwriters' Laboratories (UL or ULC [Canada]).
* Do not refuel a running or hot saw.
* It is best to use a funnel or spout for pouring. Wipe off any spills.
* Mix fuel in a well-ventilated area.
* Keep a well-maintained fire extinguisher nearby.
* Do not smoke or allow any ignition sources while refueling.

**Remember**

Avoid horseplay and overconfidence. Never operate a chainsaw while distracted or fatigued. No matter how many times you have used a chain saw, never forget that it can kill or injure you in a split second. Every time you pick up the saw, treat it with the greatest care and respect. A chain saw can be the most useful tool on the ranch—or the most dangerous.