



Chainsaw Safety Training Program



Goal

This program aims to teach you how to use chainsaws safely in logging, construction, and farming. By following these guidelines, you can reduce the risk of chainsaw accidents.

Objective

After this training, you will be able to:

- Name common causes of chainsaw accidents.
- Understand chainsaw kickback and how to prevent it.
- List the protective equipment needed when using a chainsaw.
- Describe general chainsaw safety rules.
- Know the regulations for chainsaw use by people under 16.

Understanding Chainsaw Risks

Chainsaws are powerful tools used for tasks such as cutting trees, clearing land, and preparing firewood. While chainsaws are efficient, they pose dangers if not used properly. Some common chainsaw accidents are caused by:

- **Chainsaw kickback.**
The sudden, upward motion of the chainsaw's guide bar during use.
- **Touching the moving blade.**
Reaching across or holding on to work near the moving blade.
- **Losing control of the saw.**
Often caused by the loss of footing.
- **Cutting at or above the waist level.**
Cutting above the waist decreases your control over the saw.

- **Carrying a running chainsaw while climbing.**

Turn off the chainsaw and carry it using a lanyard or slip knot from a climber's line.

- **Getting hit by falling branches or flying wood chips.**

Chainsaw use requires clearing debris and preparing the area.

- **Receiving burns.**

Hot chainsaw parts can result in serious burns.

- **Eye protection.**

Goggles, face shields, or safety glasses with side shields should be worn to prevent eye injuries from flying wood chips, twigs, and sawdust.

- **Hearing protection.**

Ear muffs or earplugs are required to protect from hearing damage from continual noise from operating the saw.

- **Steel-toed boots.**

Safety boots with slip-resistant soles help protect from accidental contact with the moving saw blade and prevent slips in wet weather or rough terrain.

- **Hair restraint.**

Secure long hair under a hat to prevent entanglement.

Safety Gear

To stay safe, always wear:

- **Protective clothing.**

Wear well-fitted clothes without dangling strings, loose belt ends, or anything that could become entangled in the chainsaw.

- **Leg and thigh protection.**

Cut-resistant materials, such as ballistic nylon, are required by OSHA to be worn by loggers on their legs and thighs.

- **Hand protection.**

Wear heavy-duty worker's gloves for protection when using a chainsaw.

- **Hard hats.**

A properly fitted hard hat is needed to protect the head from falling tree limbs, branches, or other materials.

General Chainsaw Safety

Many chainsaw injuries occur because operators fail to follow recommended operating procedures. The best way to avoid chainsaw accidents is to read the owner's manual carefully. After you have read and understood the owner's manual, follow these safety rules:



Before and after each use.

- **Check for loose or broken parts.**
Look for damage to the bar such as nicks, dents, or bends. Repair or replace the guide if necessary.
- **Keep the saw chain sharp.**
Ensure the chain is sharp and at the proper tension.
- **Fill the fuel tank in an open area while the engine is cool.**
Sparks from an already hot engine can create a fire hazard. Fuel at least 10 feet away from where you will be working. Properly clean any spills.
- **Make sure the chain does not move when the engine is idling.**
Adjust the idle of the saw if necessary.

When cutting.

- **Avoid cutting large trees on bad weather days.**
Use extreme caution in weather conditions such as wind, rain, and snow. Wind may cause a tree to fall in an unplanned direction and wet surfaces can create poor footing.
- **Clear the area and create an escape path.**
Always clear an escape path 45 degrees to the rear of the tree fall line.
- **Remove dead limbs that could fall.**
Any broken or dead limbs should be removed before cutting the tree.
- **Be cautious of trees that could split or spring when cut.**
Check for trees with large crotches that can split or cause the tree to fall either

way. Also, look for trees with tension that could cause them to spring when cut. Cut spring poles or branches from the underside.

Preventing kickback.

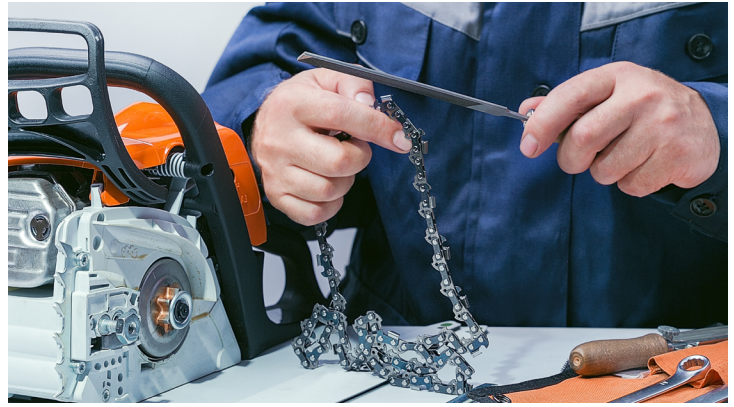
Kickback occurs when the upper chain or the chain at the nose of the guide bar grabs into the wood or other obstruction, causing the force of the engine to push (or kick) the saw back toward the operator. This action can cause even an experienced operator to lose control of the saw and come into direct body contact with the moving saw blade. If you attempt to make cuts with the tip of the chainsaw or if the tip of the saw comes in contact with a hidden limb in front of the saw cut, the saw will be forced in an upward arc back toward you. To prevent this:

- **Hold the saw firmly with both hands.**
Grasp the forward handle of the saw with the left hand, palm down. Wrap your fingers around the handlebar, keeping it between your index finger and thumb. Firmly grasp the rear handle with the right hand.
- **Never stand directly in the back of a cut.**
Stand to one side of the cut. When cutting limbs from a felled tree (limbing), stand on the opposite side of the trunk from the cut.
- **Cut with the bottom part of the chain.**
Saw only with the bottom part of the chain, with the work against the saw or saw bumper. Never cut with the nose or tip of the chainsaw.
- **Avoid cutting limbs at or above mid-chest height.**
Cutting below waist level allows you more control of the saw.

Age Restrictions

The U.S. Department of Labor forbids people under 16 from:

- Operating, adjusting, or cleaning a chainsaw.
- Working with timber that has a butt diameter of over 6 inches.



Review Questions

1. Safe operation of a chainsaw would include which of the following items?
 - a. Checking your equipment before and after each use.
 - b. Reading the owner's manual and knowing your equipment.
 - c. Having the required personal protective equipment.
 - d. All of the above.
2. The majority of all chainsaw injuries occur because operators fail to follow recommended operating procedures.

True or False

3. What causes kickback on a chainsaw?
 - a. Cutting with the bottom of the saw blade.
 - b. Cutting with a sharp chainsaw at high speed.
 - c. Cutting with the "nose" or tip of the chain bar.
 - d. All of the above.
4. The safest position to stand in when cutting a felled tree is on the opposite side of the tree from the cut.

True or False

5. Fuel tanks may be filled anywhere around the area of operation.

True or False

Review Question Answers: 1. d; 2. true; 3. c; 4. true; 5. false



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