

CHAINSAW SAFETY:

Always Use Your Personal Protective Equipment (PPE)

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Operating a chainsaw is inherently dangerous.

The chain moves at 55-60 miles per hour, or about 88 feet per second. The teeth on the chain are designed not to cut but to remove material. Accidental contact with chainsaws often results in serious injuries to operators.

Cuts are not the only hazard a saw user must avoid. Saw operators are often struck by falling limbs and trunks as the tree moves and shifts while it's cut. Operators fall off ladders and out of trees, or they trip as they move through brush over uneven ground. Even when the tree is on the ground, danger lurks in wood under tension. Spring poles snap and logs roll unexpectedly.

A chainsaw operator has three lines of defense: education, good technique, and personal protective equipment (PPE). When the first two fail, PPE can save your life. The Occupational Safety and Health Administration (OSHA) requires that saw operators wear head protection, eye protection, hearing protection, chainsaw chaps or pants, and suitable footwear.

HEAD PROTECTION



A protective hard hat should be worn whenever you are working in an area where it's possible that falling objects could cause injury to the head. For tree fellers, that means a hard hat should be worn immediately upon exiting the truck. Branches fall, saws spit objects out of trees, and climbers drop things. Saw operators are often hit on the side and top of the head and would benefit from a helmet with side protection and a chin strap. A safe helmet has the manufacturer's name or identification, the date of manufacture, the type and class of helmet, the head size, and "ANSI Z89.1" stamped on the inside. The ANSI number means that the helmet has met all of the safety requirements provided by the American National Standards Institute.

Hard hats wear out. Examine the hat before use. Replace it if there are dents, penetrations, plastic chip flakes, discolorations, or a chalky appearance. Look at the liner. If it's worn or broken, replace it immediately. Even if the hat looks good, it should be replaced every three to five years or at the manufacturer's recommendation.

EYE PROTECTION



The face and eyes are soft targets for flying debris ripped out by a chainsaw. While a face guard with a mesh screen protects the face, it isn't enough to protect eyes from injury. Neither are eyeglasses or sunglasses. Flying objects can shatter the lenses of regular eyewear, adding plastic or glass to the list of potential projectiles.

Select eye protection that resists fogging and has UV protection. Look for the ANSI rating of Z87.1. It will be stamped on all approved eyewear. There are safety glasses and goggles that fit over prescription eyewear. Alternatively, consider customized prescription safety eyewear. Eyewear can be made to your vision prescription, even if you wear bifocals.

HEARING PROTECTION

Chainsaw operators need hearing protection. Noise is measured in units called decibels (dB). A conversation is about 60 dB, a vacuum cleaner is about 70 dB, a lawn mower is about 90 dB, and a chainsaw is about 110 dB. Hearing protection is required when 85 dB is exceeded. To be effective, hearing protection must be worn consistently. Pick a style that works for you and use it.

All hearing protection has a noise reduction rating (NRR). The NRR is the decibel reduction provided by hearing protection. A saw operator needs an NRR of 25 dB to reduce the noise below 85 dB.

Don't overprotect. Select hearing protectors that provide adequate but not excessive protection. It is important to hear other people, trees cracking, other warning signals, and important machine sounds while operating a chainsaw.

LEG PROTECTION

The Centers for Disease Control reports, "Each year, approximately 36,000 people are treated in hospital emergency departments for injuries from using chain saws." For this reason, OSHA requires that chainsaw operators use chainsaw chaps or pants.

Chainsaw chaps and pants are made with layers of tightly packed plastic fibers. When the chaps or pants are cut with a chainsaw, these strong fibers do not break. Instead, they get pulled up into the chain and jam up the turning wheel sprockets. This stops the chainsaw within one rotation.

When using chaps, fasten all the buckles and keep them snug. They should cover the full length of the thigh to two inches below the top of the boot. Chainsaw pants have one advantage over chaps—they tend to stay on your body rather than in the back of the truck. You will have them on when you need them.

Take time to thoroughly read and understand the manufacturer's care and use instructions. Chaps and pants must be washed. They aren't effective dirty (the layers stick together and don't pull out as they should). Read the care guidelines and follow them.

Replace chaps or pants if they are cut. Even a very small cut will shift the plastic fiber layers, leaving them ineffective.

FOOTWEAR

Boots with a composite or steel toe and a nonslip sole are a safe choice. Tree climbers may prefer lighter footwear. Be sure to break new boots in before working in them.

HAND PROTECTION

Gloves are not required, but it is a good idea to use gloves whenever handling a chainsaw. Gloves can dampen the vibration from the saw and protect from minor cuts.

HIGH-VISIBILITY SAFETY VEST

If your work site is exposed to moving traffic, you are required to wear a high visibility safety vest. It is also a good idea to wear it when working in the woods during hunting season.

Properly worn PPE saves lives every day. When handling a chainsaw, unexpected hazards are the norm. Your PPE will protect you from sudden dangers you can't escape.

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