

Working Safely with Chainsaws

Chainsaws are efficient and productive portable power tools used in many industries. They are also potentially dangerous if not used correctly and carefully. Proper operation and maintenance greatly reduce the risk for injury when using chainsaws.

Work Area Safety

- Ensure the area is marked and that there are no people in the immediate area. Other workers should be twice as far as the height of the trees being felled.
- Identify and clear any obstacles that may interfere with stable footing, cutting, or impede retreat/movement paths.
- Identify electrical lines in and near the work area.
- Identify “hangers” and “widow-makers”—branches that may dislodge and fall into the work area from above.

Before Starting the Chainsaw

- Check controls, chain tension and all bolts and handles to ensure they are functioning properly and adjusted according to the manufacturer’s instructions.
- Ensure the chainsaw engine is the appropriate size for the project.
- Fuel the saw at least 10 feet away from ignition sources.
- Check the fuel container to ensure it:
 - Is metal or plastic.
 - Does not exceed 5 gallons in capacity.
 - Is approved by the Underwriters Laboratory, FM Approvals (FM), or the Department of Transportation (DOT).
- Ensure electric chainsaws are tested and certified by a Nationally Recognized Testing Laboratory (NRTL). Extension cords shall be sized according to the chainsaw manufacturer’s instructions.
- Check that all safety devices are working properly.
- Do not operate a chainsaw that is damaged or has disengaged safety devices.
- Look for nails, spikes, or other metal objects prior to cutting.

- Clear away dirt, debris, small tree limbs, and rocks from the chainsaw’s path.
- Never work alone.
- Use proper personal protective equipment (PPE).

Operating the Chainsaw

- Always follow the manufacturer’s instructions for chainsaw operation and maintenance.
- Start the saw on the ground or another firm support with the brake engaged.
- Keep both hands on the handles and maintain secure footing.
- Plan where the object will fall; ensure that the fall area is free of hazards; and avoid felling an object into other objects.
- Plan the cut; watch for objects under tension; use extreme care to bring objects safely to the ground.
- Be prepared for kickback; avoid cutting in the kickback zone and use saws that reduce kickback danger (chain brakes, low kickback chains, guide bars, etc.).
- Do not cut directly overhead.
- Shut off or release throttle prior to retreating.
- Shut off or engage the chain brake whenever the saw is carried more than 50 feet or across hazardous terrain.
- Take breaks as needed as fatigue increases the risk for accident and injury.

Operate Within Your Skill Level

- Accidents can happen when chainsaw operators perform tasks that are beyond their capabilities or training level. Higher risk operations may include:
 - Trees on unstable ground or steep slopes.
 - Trees with a heavy lean.
 - Trees with stem or root rot.
 - Trees known to split.
 - Operating a chainsaw above shoulder height or above ground level, such as from a ladder or tree.

Personal Protective Equipment Requirements

Proper personal protective equipment (PPE) can prevent or lessen the severity of injuries to workers using chain saws. Employers must ensure that PPE is in good working condition prior to starting work.

- Employers must provide and ensure workers properly use PPE, including:
 - Head protection, such as a hard hat
 - Hearing protection sufficient to reduce noise exposure to 90 decibels or less
 - Eye/Face Protection such as safety glasses.
 - Appropriate protective footwear per OSHA standards.
 - Leg protection such as work pants or chaps.
 - Work gloves.
 - Fall protection as necessary.
- PPE should be used in conjunction with engineering and administrative controls whenever possible.

Training

Employers of workers using chainsaws must ensure that their employees are able to perform tasks safely. If using chainsaws, training and job hazard analyses should assist workers in anticipating and avoiding job-related injuries. Train workers about:

- Specific work procedures, practices and requirements, including general and specific safety and health hazard recognition, prevention, and control.
- How to safely perform assigned work tasks.
- The specific hazards and controls associated with each task.
- How to safely use, operate, and maintain tools, machines and vehicles which workers may use or encounter on the work site.
- Applicable OSHA standards, such as those for logging, PPE, bloodborne pathogens and medical services and first aid.

Workers' Rights

Workers have the right to:

- Working conditions that do not pose a risk of serious harm.
- Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the OSHA standards that apply to their workplace.
- Review records of work-related injuries and illnesses.
- File a complaint asking OSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA's rules. OSHA will keep all identities confidential.
- Exercise their rights under the law without retaliation, including reporting an injury or raising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.

For additional information, see OSHA's Workers page (www.osha.gov/workers).

How to Contact OSHA

Under the Occupational Safety and Health Act of 1970, employers are responsible for providing safe and healthful workplaces for their employees. OSHA's role is to ensure these conditions for America's working men and women by setting and enforcing standards, and providing training, education and assistance. For more information, visit www.osha.gov or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: 1-877-889-5627.



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