

Job Name: \_\_\_\_\_ Job Site Location: \_\_\_\_\_

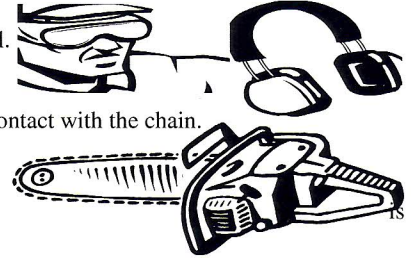
Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ Finish Time: \_\_\_\_\_ Foreman/Supervisor: \_\_\_\_\_

### Topic 190: Chain Saw Safety

**Introduction:** Chain saws have become an everyday tool for many individuals in a wide variety of workplaces. Once the tool of the professional logger, today more than 25 makes of chain saws are available in a wide variety of sizes and configurations. Contractors use them for cutting large timbers, crossties and landscaping ties as well as land clearing. However, in the hands of a careless, inexperienced, or tired operator, the chain saw can be very hazardous. Most accidents are caused when the operator comes in contact with the sharp moving chain. Injuries from a chain saw are often serious due to the jagged wound the high-speed cutting chain inflicts.

**The first, and possibly most important,** step to safely operating a chain saw is proper selection. Select a saw that fits your needs, is quiet, balanced, and equipped with safety features. Remember that these safety features do not take the place of proper training, safe operating practices, and common sense.

**Before operating the saw,** read and study the operator's manual. Even if you are an experienced operator, it is good practice to review the manual before each use. Make sure that all safety features on the saw are functional.



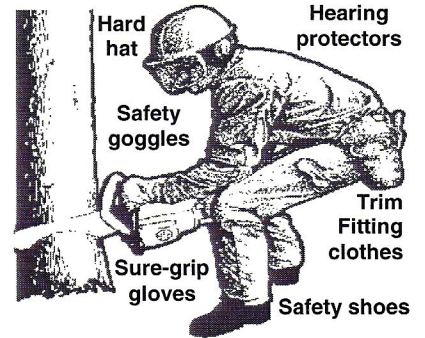
**Modern chain saw safety features include:**

- **Front hand guard** — A bar in front of the top handle designed to stop a slipping hand from coming in contact with the chain.
- **Chain brake (gasoline only)** — Designed to stop a moving chain in a fraction of a second if kickback occurs, reducing the chances of severe injury. May also function as a front hand guard.
- **Throttle trigger lockout** — Prevents the accidental opening of the throttle. The throttle trigger locked in the idling position when the lockout is not engaged by the proper hand grip on the handle.
- **Stop switch** — Should be located so that it can be activated easily by your right thumb without losing your grip on the saw.
- **Rear hand guard** — The lower part of the rear handle on the chain saw is designed to protect the hand from a broken or jumping chain.
- **Chain catcher** — Found on the bottom of the saw engine as far forward as possible. It is designed to catch a broken or jumping chain.
- **Vibration damping** — Rubber bushings between the handle, saw body, or on the engine mounts help reduce the operator's exposure to vibration.
- **Muffler** — Designed to decrease the noise level and direct hot exhaust gases away from the operator.
- **Spark arrester** — Keeps sparks from being ejected by the exhaust. The sparks occur when carbon deposits in the cylinder break loose and are ignited by the exhaust gases. Spark arresters are required in many areas.



**Personal Protective Equipment is an important consideration before proceeding with any chain saw operations:**

- **Clothing should be well-fitted** and free of dangling or ragged edges that could become entangled in the saw. The specialized protective clothing that is available is intended for occasional saw operators as well as professionals. This includes **protective chaps or leggings** that cover the area from the groin to about 2 inches above the ankles. Many of these chaps wrap around the leg and protect the calf area as well.
- **A properly fitted hard hat** protects your head from serious head injury from falling debris. Cracked or discolored hard hats should be discarded.
- **Eye and face protection** with side shields to prevent injury from flying wood chips, sawdust, or other debris.
- **Ear muffs or ear plugs** to protect your ears from the 90+ decibel noise level of modern saws. Combination sets of hard hats, muffs, and eye shields are available from many suppliers.
- **Gloves should be worn** to protect your hands from abrasions, splinters and cuts.
- **Boots with high tops** will protect your ankles in case of accidental contact with the moving saw chain. Steel toes will help protect your feet from injury from falling objects as well as from accidental contact with the moving chain. Safety boots/shoes should have a thick nonskid sole.



**Conclusion:** The nature of a chain saw's design makes this particular tool a health and safety hazard if operated in a careless manner. However, a sharp machine in good condition is safer and easier to operate than one that has been poorly maintained and is dull. When refueling the engine, use a funnel or a flexible nozzle to avoid spilling fuel on the engine and never smoke during this process. Follow these guidelines for safe chain saw operations.

### Work Site Review

Work-Site Hazards and Safety Suggestions: \_\_\_\_\_

Personnel Safety Violations: \_\_\_\_\_

**Employee Signatures:** \_\_\_\_\_ (My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

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These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.