



MANUAL TIMBER FELLING HAZARD RECOGNITION

Reviewed May 12, 2004

Manual timber felling is recognized as the most hazardous job in logging. Many logging operations employ workers to fell timber with chain saws. Proper training, planning, felling techniques, chain saw maintenance, personal protective equipment, and common sense will not only promote safe operation but will enhance the quality of the wood produced. Remember, no tree is worth an employee's being injured, maimed, or killed.

A timber feller must operate at a high level of safety awareness at all times. Hazard recognition is critical for avoiding accidents. The following list includes hazard recognition steps chain saw operators can take to reduce their risk of injury during timber felling operations.

1. **Prior to starting the logging job**, conduct a "walk through" of the timber tract to assess timber stand conditions and terrain. Make written notes about potential hazards and keep them available for reference. Develop a felling plan.
2. **Prior to beginning work each day**, review the timber tract map and the logging plan for the timber felling work areas with the crew foreman and other workers.
3. **Be aware of daily weather conditions**. Be alert for any unsafe sudden weather changes and threatening conditions such as high winds, snow, ice severe thunderstorms, hail, and lightning.
4. **Carefully assess each tree** in the felling work area using the following steps prior to cutting the tree:
 - a. Ensure that other employees and machines are at least two tree lengths' distance from the felling site.
 - b. Look for brush, limbs, vines, nearby small trees, or obstructions which may interfere with felling. Clear away all obstructions. Choose and clear a retreat path.
 - c. Check each tree to be felled for lean, limbs, crook, stem defects, lodged limbs, vines bridging adjoining trees, embedded wire and nails, and other hazards. Note the wind direction.
 - d. Check surrounding trees for dead and lodged limbs and determine if any trees may interfere with the falling tree or catch and "hang" it.
 - e. After the tree is grounded, look up for hanging limbs and broken tops which may fall, and look down and around for "spring poles" and other danger trees.
 - f. Promptly remove hung trees with a machine or using procedures which minimize employee exposure. If the tree must be left for removal later, mark it with "killer tree" flagging.

The safety of every timber feller must be the top priority. Recognition of existing hazards and the hazards created during felling will significantly reduce the risks of injuries.

Important Note: Safety requirements about chain saw operation, felling techniques, and personal protective equipment can be found in the OSHA Logging Standard ([OSHA Act 29 CFR 1910.266](#)). Additional chain saw safety information is available from chain saw manufacturers. For information on ordering FRA's [OSHA Logging Safety Video](#) (95-A-15), inquire at fra@forestresources.org.

Please follow equipment manufacturers' recommendations for safe operation and maintenance procedures.