

Safety Tips for Chain Saw Use and Tree Cutting

by Tim Ard, Forest Applications Training, Inc.

Road maintenance sometimes requires road crews to cut down a tree or remove an overhead limb that poses a danger to the traveling public. A municipality's road crew can learn to cut down a tree,

> but the utmost care should be taken when using the chain saw and tackling the tree.

Experience makes the best teacher, and you want your tree cutting experiences to be good ones. Remember, safety should always be the top priority. Here are some tips for safely cutting down a tree:

Know the Chain Saw

First, get to know the chain saw and become familiar with how it feels and sounds when it's operating efficiently. Read the equipment operator's manual and know what the tool is designed to do and what safety issues should be reviewed before operation begins.

Be sure the chain saw is properly sharpened and tensioned. A dull saw chain means more work—pushing and often pulling on a saw to get the task accomplished. Workers fatigue, their productivity is reduced, and most importantly safety is compromised. Take a few minutes to check your saw chain before heading to work. It should be sharp and in prime condition to get the job done.

Workers should also check to see how the saw is running. You want to make sure the saw will work most efficiently to complete a task. If the saw runs away, won't idle without the chain turning, or constantly dies every time it's moved or the throttle is depressed, it's time to get the saw adjusted or repaired.

Don't Forget the Personal Protective Equipment

As with every job, a chainsaw operator must wear the proper safety gear to ensure his or her personal safety. With this in mind, always wear safety goggles, a hard hat, earplugs and closed, protective shoes when handling a chain saw and cutting wood. Non-slip gloves are also recommended.

Learn How to Sight

Saw operators should learn how to use the felling sights on the chainsaw. This line 90 degrees perpendicular to the guide bar should be used to place the tree, given your side-lean calculation and the

Fo

A chainsaw operator should wear safety goggles, a hard hat, earplugs, and closed-toe shoes.



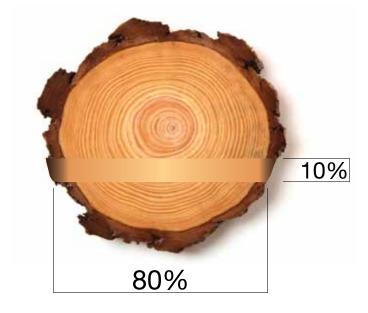
400 North Street, 6th Floor Harrisburg, PA 17120 1-800-FOR-LTAP • FAX (717) 783-9152 www.ltap.state.pa.us strength of the hinge, where you want it. Much as you would with a rifle sight, you stand behind the sight line to aim the tree's fall. Aim the tree toward the target/lay area before you start the face notch cut. In reality, you perform the aiming of the sight during the cutting of the face notch, or you will likely end up sending the tree or limb in the wrong direction.

The sighting doesn't take away the importance of planning the forward-to-back lean either. The sighting and hinge techniques can be used whether you're working on the ground, in the tree, or from a bucket position.

Keep the Wood Hinge Attached

Holding wood, or the hinge as it's called in the industry, is the remaining wood fiber that attaches the stump to the falling stem when a tree is cut. The hinge provides the cutter extra reaction time and control in a variety of sawing scenarios. It can be used in felling, in bucking (cutting up a fallen tree), or when removing limbs.

Oftentimes, saw operators think the hinge should not be left and that they should stay with the tree until all fiber is cut and the tree or limb reaches the ground. This action puts the operator in jeopardy. Many incidents, fatalities, and injuries occur when saw operators cut the hinge off and stay with the tree too long as it falls. It should also be noted that the hinge can't work if the notch is not cut properly or it has a bypassed corner.



The hinge's width should be about 1/10 of the tree's diameter and its length about 8/10 of the tree's diameter.

Plan an Escape Route

Cutters often think they have addressed escape routes, or planned retreat paths, by simply cleaning debris around a tree. Unfortunately, too many saw operators stop there and forget to actually plan their steps before beginning the felling or working the cuts. Operators must have a clear plan in their head of what they are going to do once the cut has been made and the felling either goes as anticipated or goes wrong.

More than merely cleaning brush, a well-developed planned retreat path means deciding on the position you plan to be in as soon as the tree or limb starts to move. Injuries and fatalities are often caused because saw operators or onlookers are not far enough away from the stump of the tree when the tree or its limbs are falling. Plan your retreat path thoroughly—clear debris and remove low-level braches, prepare an escape path opposite the direction of the fall and at a 45-degree angle, and then use it.

To prevent getting a tree hung up on an obstacle as it falls, make sure the area is clear of potential hazards, including overhead wires and other obstacles, especially in the fall direction of the tree.

STORMS, HURRICANES, AND ONGOING TREE

MAINTENANCE are all reasons that a road crew must cut down a tree or a limb. Every day, somewhere, someone finds a chain saw to be the tool of choice to handle the task of cutting some type of wood material. If your crew is going to use a chain saw, it is important to understand the equipment and train with it so that crew members are properly prepared and kept safe. If you ever have any doubts about cutting down a tree, consult with a professional tree feller.