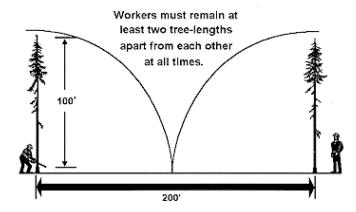
WAC 296-305-07016 Falling and equipment in forest lands.



- (1) The employer must assign work areas so that:
- (a) Trees cannot fall into an adjacent occupied work area;
- (b) The distance between work areas is at least two tree lengths of the trees being fell (see Figure 1: Distance Between Work Areas);
- (c) The distance between work areas reflects the degree of slope, the density of the growth, the height of the trees, the soil structure and other hazards reasonably anticipated at the worksite; and
- (d) A distance of more than two tree lengths is maintained between work areas on any slope where rolling or sliding of trees or logs is reasonably foreseeable.

Exception: This rule does not apply to a team of cutters working on the same tree.

- (2) Before falling or bucking, conditions such as, but not limited to, the wind, the lean of tree, dead limbs, and the location of other trees, must be evaluated by the cutter and precautions taken so a hazard is not created for an employee.
- (3) Employees must not approach a cutter closer than two tree lengths of trees being felled until the cutter has acknowledged that it is safe to do so.
- (4) A competent person, properly experienced in this type of work, must be placed in charge of falling and bucking operations. In-experienced workers must not be allowed to fall timber, buck logs or windfalls unless working under the direct supervision of an experienced cutter.
 - (5) Before an employee falls or bucks any tree:
 - (a) A sufficient work area must be swamped.
 - (b) The cutter must plan and clear an escape path.
- (i) The escape path must extend diagonally away from the expected felling line unless such an escape path poses a greater hazard than an alternate escape path.
- (ii) An escape path must be used as soon as the tree or snag is committed to fall, roll, or slide.
- (6) If a cutter has determined a tree cannot be safely fell, the work must stop until the cutter has conferred with a supervisor or an experienced cutter and determined the safest possible work method or procedure.
- (7) The person in charge of cutting crews must regularly inspect the work of the cutting crews and is responsible to ensure the work is performed in a proper and safe manner.
- (8) All cutters must carry or have in near proximity at all times:
 - (a) An axe or suitable tool for driving wedges.

- (b) A minimum of two wedges.
- (c) A first-aid kit.
- (9) Where felled trees are likely to roll and endanger workers, cutting must proceed from the bottom toward the top of the slope, and uphill from previously fell timber.
- (10) A cutter must not be placed on a hillside immediately below another cutter or below other operations where there is probable danger.
- (11) Cutters must be informed of the movement and location of other employees placed, passing, or approaching the vicinity of trees being fell.
 - (12) Trees must be fell into the open whenever conditions permit.
- (13) Domino falling of trees, including danger trees, is prohibited. Domino falling does not include the falling of a single danger tree by falling another single tree into it.
- (14) Undercuts large enough to safely guide trees and eliminate the possibility of splitting must be used on all trees over six inches diameter at breast height.
- (15) A cutter must place an adequate undercut and leave enough holding wood to ensure the tree will fall in the intended direction.
- (16) The two cuts that form the undercut must not cross where they meet.
- (17) The undercut must not be made while other workers are in an area into which the tree could fall.
 - (18) A backcut must be made in each tree being fell.
 - (a) The backcut must be as level as possible;
- (b) The backcut must leave enough hinge wood to hold the tree to the stump during most of its fall so that the hinge is able to guide the tree's fall in the intended direction; and
- (c) The backcut must be above the level of the horizontal facecut to provide an adequate platform to prevent kickback.
- (19) Trees with facecuts and/or backcuts must not be left standing unless all the following conditions are met:
 - (a) The cutter clearly marks the tree;
 - (b) Discontinues work in the hazardous area;
 - (c) Notifies all workers who might be endangered; and
- (d) Takes appropriate measures to ensure that the tree is safely fell before other work is undertaken in the hazardous area.
- (20) Undercuts and backcuts must be made at a height above the highest ground level to enable the cutter to safely begin the cut, control the tree, and have freedom of movement for a quick escape from a falling tree.
- (21) Lodged trees must be clearly marked and identified by a predetermined method and all persons in the area must be instructed not to pass or work within two tree lengths of the trees except to ground them.
- (22) On slopes over fifty percent grade, tree(s) must at least be quartered to a degree that prevents employees from being exposed to the possibility of sliding or rolling trees or logs.
- (23) Each danger tree must be carefully checked for signs of loose bark, broken branches and limbs, or other damage before they are fell or removed. Accessible loose bark and other damage that may create a hazard for an employee must be removed or held in place before falling or removing the tree. When a danger tree has elevated loose bark that cannot be removed, the buddy system must be used to watch for and give warning of falling bark or other hazards.

- (24) Danger trees that are unsafe to cut must be blown down with explosives or fell by other safe methods.
- (25) To avoid use of wedges, which might dislodge loose bark or other material, danger trees must be fell in the direction of lean unless other means (mechanical or dynamite) are used.
- (26) All bosses and supervisors must survey their assigned work area for danger trees and mitigate them prior to crews commencing work in that area.

Definition.

Danger trees. Any tree of any height, dead or alive, that presents a hazard to workers because of rot, root, stem or limb damage, lean, or any other observable condition created by natural process or man-made activity.

- (27) All fallers and faller bosses must be trained in the type of timber they will be falling prior to being assigned to a falling crew.
- (28) All dozers, tractors, and similar machines in use where limbs or brush may injure the operator must be guarded as follows:
- (a) Shear or deflector guards must be installed on each side of the vehicle at an angle leading forward and down from the top front edge of the canopy of the vehicle, which will tend to slide the brush or limbs up and over the top of the canopy.
- (b) Open mesh material with openings of a size that will reject the entrance of an object larger than one and three-quarter inches in diameter, must be extended forward as far as possible from the rear corners of the cab sides to give the maximum protection against obstacles, branches, etc., entering the cab area.
- (c) Deflectors must also be installed ahead of the operator to deflect whipping saplings and branches.
- (d) Deflectors must be located so as not to impede entrance to or exit from the compartment area.
- (e) The floor and lower portion of the cab must be completely enclosed with solid material, except at entrances, to prevent the operator from being injured by obstacles which otherwise could enter the cab compartment.
- (29) All dozers used on terrain that has sufficient slope or of such material as to hinder the movement of the dozer must have an attached winch or drum line that is in good working order. When such a situation is encountered, the dozer assistant must be knowledgeable in the operation of the dozer, winch or drum line operations, the hazards associated with winching or drum line operations, and line anchor selection.
- (30) Operators must operate and control their machines in a safe manner and avoid operations in areas where machine stability may not be maintained.
- (31) Employee work areas must be spaced and employee duties organized so the actions of one employee do not create a hazard for any other employee.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 18-22-116, § 296-305-07016, filed 11/6/18, effective 12/7/18. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and 29 C.F.R. 1910.156, Fire brigades. WSR 13-05-070, § 296-305-07016, filed 2/19/13, effective 1/1/14.]