



Keeping Washington loggers safe.

Logger Safety Initiative Quarterly Training

Why am I receiving this LSI Safety Training Packet?

LSI participants are required to annually attend approved LSI Employer Logger Safety program training. There are two parts to the required training: Formal Training and Safety Training (see the attached LSI Training Requirements for more details). This packet satisfies one of the four required Safety Trainings. The LSI employer must ensure that all workers receive four LSI required trainings per year.

How do I provide the training to my employees?

LSI Employers and supervisors, if delegated, and all employees engaged in manual logging operations must participate in at least four (4) LSI trainings on an annual basis. If you have employees that do ground operations, even if only occasionally, review the "In the Clear Rigging" safety training (found on our website) materials in detail and discuss the scenarios with employees.

What documentation is required?

LSI employers will document that the training took place as part of their safety minutes. Be sure staff has signed the safety meeting sign-in sheet. The completion of the training will be assessed at the annual DOSH LSI Consultation.

Quarterly 3 2020 Logging Safety Training: Machine-Assisted Cutting Practices

While machine-assisted falling is a complex process, it can be safely accomplished with proper planning and clear communication with the operator. This common practice isn't specifically covered in the Logger Safety Initiative's accident prevention program, but the same general principles of cutting and machine operation should be followed.

When is it best to use this method? When falling certain danger trees,* while cutting in close proximity to roads or residential areas, clearing more space on small landings, falling some heavy leaners, or when a large or challenging tree needs to fall in a specific direction.

During the layout phase look for trees that need to be cut with machine assistance. Mark these trees, communicate their location to the crew, and establish a good plan to fall them, especially if they are danger trees. Use caution when cutting after hand fallers, feller bunchers, log loaders or processors have gone through. They can leave new dangers including partially cut trees, hangers and limbs, or may have brushed up around the base of the trees. The same is true during the road building process. Be aware that machines may toss trees, root wads, and brush into the timber, leaving man-made dangers. It's best to walk the area before logging begins to note these hazards.

After the decision is made to use a machine to assist in the cutting process, make your plan. Consider the location, weather conditions, location in proximity to a worksite or roads, other logging activities that may be in the area, type of tree, communication method, and any potential hazards located around the tree itself. After your plan is fully established, have a meeting with the entire crew so they are briefed on the situation and when you plan to drop the tree.

Industry Incident

Accidents or fatalities can still happen, even when preventative measures are taken by using machine-assisted cutting. Below is an overview of a fatality in the industry. It's imperative that proper planning and assessment of the subject tree and neighboring trees happens prior to cutting.

A timber cutter with many years of experience was working with an operator pushing trees over as he cut them. The timber faller had made his back cut and the operator was helping to push the tree because of its back lean. As the cutter was leaving the danger zone to go behind another tree for safety, a branch from the falling tree hit a neighboring tree. The neighboring tree's branch came down and fatally struck the cutter.



Logger Safety Initiative Accident Prevention Program Tips

Cutting Operations Accident Prevention Program:

- 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.
- While manual falling is in progress, all logging machines must be operated at least two tree lengths away from trees being manually fell. **Exception:** *This provision does not apply to logging machines performing tree pulling operations or logging machines called upon by the cutter to ground hazard trees. All cutters must be notified of the logging machines entrance into the falling area and all falling within two tree lengths of the logging machine must stop.*
- A flagperson(s) must be assigned on roads where hazardous conditions are created from falling trees. Where there is no through traffic, such as a dead end road, warning signs or barricades may be used instead of flagperson(s).
- Wear appropriate PPE: High visibility hard hats, hearing protection, eye protections, leg protection, hand and foot protection, and highly visible clothing.

Logging Operations Accident Prevention Program:

- Be careful when falling trees and snags. Avoid sudden machine operation that could cause the tree/snag to break off and fall on your machine (or cutter as it relates to this training).
- Use warning signs and flaggers or block road if falling timber can reach a road.
- Wear appropriate PPE: Foot protection, hand protection, eye protection when exposed to flying particles, hearing protection, and high visibility hard hats.



*Machine removes limbs before cutting



*Face cutting with boom high in the tree



*Back cutting and looking up to assess progress



*Cutter safely in the clear while machine pushes tree

Please note this cutter was wearing inside chaps during this demonstration.

Business Management Best Practices - Directly from the Industry

Communication, knowing your operator, and approaching the tree with a plan is very important when pushing or pulling a tree. Don't work fast, work smart and understand your role in the operation. See below for best practices collected from the industry.

A cutter with over 24 years of experience gave his advice and recommendations on machine-assisted cutting practices.

A logger with nearly 40 years of experience provided insight for machine operations while cutting.

Develop your plan first:

- 1) Do a thorough evaluation of the tree to develop the appropriate plan first and foremost.
 - Identify the tree's natural lean to ensure it falls where you need it to go.
 - Is it a danger tree?
 - Are there hazards in and around the tree area? If yes, how will you handle them?
- 2) Layout an access map of the job and layout plan.
 - Where you will start?
 - Where you would like to finish up?
- 3) Consider other issues such as weather conditions, power lines, logging or cutting operations in the area, and public access roads while planning.
- 4) Either have an experienced faller cut the tree or have the guidance of an experienced cutter and operator assisting in the procedure.
- 5) Use your company's agreed upon method of communication.
 - Agree on the communication type before approaching the tree. Whether you use radios or hand signals, use what you are both familiar with.
 - Keep in constant contact with each other.
- 6) Decide when the operator will push the tree. Before or during the cutting?
- 7) If necessary, make sure any roads are properly blocked off with ribbons, signs and flaggers if needed.

The cutter stressed the importance of communicating your plan with the entire crew during your morning safety meeting. Ensure the entire crew knows where and when you will be falling the tree.

Before and while you're cutting:

- 8) Before you start cutting, abate any obvious hazards.
- 9) Double check your communications. Make sure you are on the proper channel and have fresh batteries if you are using radios for communicating.
- 10) Always carry the proper tools and wear appropriate PPE.
- 11) Brush-out the area around the tree well.



- 12) Ask the operator to strip the tree of low-hanging branches and limbs prior to cutting to remove potential hazards.
- 13) Make sure the cutter's escape path is cleared out.
- 14) When the operator is in place, and right before cutting, have a quick verbal briefing with each other.
- 15) The operator's boom should be in the tree as high as possible allowing for maximum leverage.
- 16) Always stay in direct sight of each other (cutter and operator).
- 17) When cutting, leave enough holding wood.
- 18) Don't work fast, pay attention to detail and do the job right.
- 19) Secure the trees with wedges and allow the cutter to get in the clear before pushing.
- 20) Allow the machine to do the rest of the work by pushing it in the right direction.
- 21) Get and stay in the clear while the machine works.