



April 2021

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.

WASHINGTON STATE LOGGER SAFETY INITIATIVE

Keeping Washington loggers safe.

Quarterly Logging Training: Slips, Trips and Falls

April 2021

Slips, trips and falls continue to be one of the leading causes of work place injuries. Working in Washington State forests means working on steep, uneven and slippery terrain. A slip, trip, or fall has the potential for serious injury, resulting in time loss from work. Current data kept by the Washington State Department of Labor and Industries indicates that slips, trips, and falls account for an approximate average of twenty-five percent of all logging injuries and account for an average of fourteen percent of the total claims costs.

Potential for exposure can be found in any environment or working assignment. Falls could be to the same or lower levels, slips and trips could be from physical objects on the walking surface or wet muddy conditions. With applicable hazard evaluation of the environment and type of work assignment, many of the slip, trip and fall hazards can be prevented or controlled.

Personal Protective Equipment (PPE)

The first line of defense in preventing slips, trips and falls is using appropriate footwear for the work assignment. Proper footwear should be snug to provide foot and ankle support, which helps prevent the foot from moving and increases transmitting conditions between the surfaces and the foot. No matter the type of sole, a loose fit hinders the wearers ability to navigate with security and confidence. Using heavy use traction/lug soles maintained in good condition help with secure footing, as does keeping a full count of sharp calks on each boot.

Equipment

Adding and maintaining nonskid material onto bare metal surfaces, helps prevent slips and falls regardless of the type of sole. Non-skid surface could be peel and stick, expanded metal or wood planking. Installing nonskid material in elevated work locations where persons stand including adequate hand grabs or handrails can help prevent slips and falls. In efforts to help alleviate slips and falls, the operator shall keep steps and all walking and work surfaces free from oil, mud, grease, snow, ice or other debris.

Maintaining access devices of proper height and strength including non-skid surfaces will reduce slip and fall incidences. One common problematic area is adding an additional step to create an easier access to



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the yarder. It is preferable that the employer provides a portable compact self-supporting ladder or an adjustable hang on ladder. If the setup of the current jobsite is requiring an additional step or ladder, please check the regulations listed in the applicable WAC to ensure the setup is compliant with current standards. Note: regulations may also require some additional training with the use of ladders. *(Please contact a DOSH LSI Consultation if you would like assistance with the training requirements regarding the use of ladders or contact James Smith at (360) 355-5768 for assistance).*

Landing

Working on the landing has the potential to dull calks more repeatedly as the workers are typically walking on rock surfaces more frequently than others on the crew. Therefore, Chasers may need to replace their calks more often, though, they spend the majority of their time on the landing their job duty still may require them to walk and or step on logs. Ensure the crew and chaser evaluates the landing to ensure any additional rigging and/or unused lines are not left lying around the landing. When possible keep limbs and slash out from around the chute and machines where people walk. Coordinate between the yarder engineer and the chaser to allow enough time between intervals to allow the chaser enough time to clear loose branches and other debris. If there are large, ruts left from, machines on the landing ask the shovel operator to smooth out the ruts to provide stable travel paths. If the shovel operator is using short logs as piling to help support log decks, ensure the holes left behind are filled in once the piling is removed.



Slips, trips, and falls can also result from improper use of access devices. When using access egress devices use them the same way going down as you did going up. Anyone attempting to egress a piece of machinery by going down face first is subject to a fall, which could lead to serious injuries.

In the brush

In the brush evaluating and picking a travel path should accomplish two things; getting to the turn as safely and as quickly as possible. Picking a good route also, helps reduce fatigue, which can contribute to

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slips, trips and falls. Hand running the end of a drop line down a slope or log is a fast way to get over the brush and down slope but exposes crewmembers to a slip, trip, and fall hazard. Some drop lines will bite in occasionally. A bite in the line will create a back wrap or jerk back and bring the puller to a screeching halt, which can result in lost footing and a fall.

Rigging crews have always kept a good word for a rigging slinger who picked turns that left a walk log or two for the next turn. Picking turns that leave a walk log beats bulling through the vine maple and brush. Moreover, the ability to pick good travel paths and using them accordingly to conditions will help reduce your slips, trips and fall incidents and they are very handy when encountering that unexpected hornets' nest.

Bark Slippage

Commonly known by many generations of loggers, spring brings running sap and slipping bark. Conifer trees only actively grow in the spring of each year. During the spring to early summer months, the cambium layer of the tree is dividing and rapidly creating new wood growth. This process results in a soft, slippery layer beneath the bark. This allows the bark to peel away from the log very easily and creates an unwelcoming environment for loggers when attempting to walk on the logs during this time of the year. Recognize that this process is not limited to the stem and effects all parts of the tree including the branches of the tree. Typically, by the end of summer to early fall the cambium layer of the tree has dried up and the bark tightens (*for additional information on "how trees grow" see the illustration below*).

It is especially important in the spring to keep calks sharp to help maintain traction during this transitional period.

Diameter growth

Between the wood and bark is a thin layer of dividing meristematic cells called the vascular cambium. The cambium divides producing new wood towards the inside and bark on the outside. These new cells increase the diameter of the trunk and branches. The new wood cells, called xylem, carry water and minerals up from the roots to the leaves. The old wood in the middle is the heartwood. Heartwood, while dead, supports the weight of the tree. The inner bark cells, called phloem, carry sugars and other materials to the growth and storage locations of the tree.



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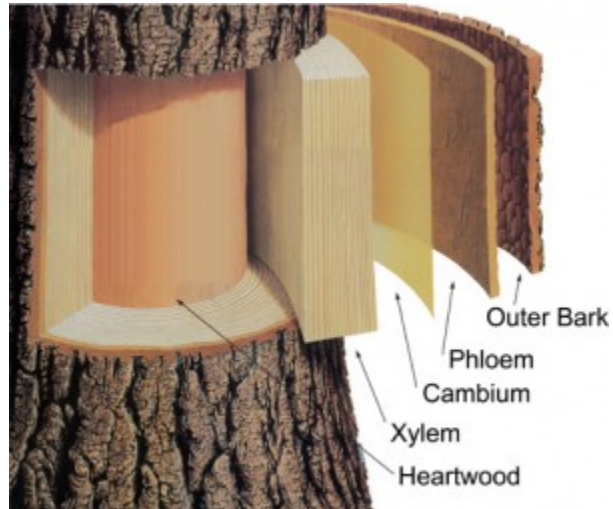


Image 1. Illustration of a tree's diameter growth.

New layers of wood are added each year between the bark and the previous year's wood. These are called growth or annual rings and may be used to age a tree. Annual rings vary in size and thickness according to the season that they are formed. Cells that are produced in the spring are larger with thinner cell walls. These are the light-colored rings, and the wood is called "early" or "spring" wood. Cells produced in the summer are smaller, and this "late" or "summer" wood has a higher density and darker color.

Safety Alert of THE MONTH

March 2019

PLEASE PASS THIS ON TO PEOPLE AND ORGANIZATIONS IN BC'S FOREST INDUSTRY

Slips, Trips and Falls

Working in BC's forests means working in uneven and slippery terrain. A slip, trip or fall has the potential for serious injury; resulting in lost time from work, a trip to hospital or the end to your favourite after work activity.

Recent incidents reported to WorkSafeBC include:

Injury: Fractured vertebrae

The operator of a log loader fell while stepping onto the log loader's track. The operator landed on the asphalt surface below. The operator was treated on site by a Level 3 first aid attendant, and then was transported to hospital by ETV.

Injury: Soft-tissue injuries, bruising

In bad weather, a young worker climbed a bow ladder on a log barge in a remote heli-water-drop forestry operation. The worker fell off the ladder and landed on boom sticks about 10 feet (3 m) below. The worker received first aid on site, and then was transported to hospital by helicopter.

Understanding Slips, Trips and Falls

Slips, trips and falls are the second most common injury on forest industry worksites. These incidents can have serious consequences such as long-term damage to our bodies and negatively affecting our ability to make a living.

- Slips happen with poor traction on the walking surface whether caused by uneven footing, moisture including ice or snow or greasy / oily spills.
- Trips occur when you catch your foot on an object and lose your balance, and are generally caused by uneven walking surfaces, poor lighting or housekeeping and obstructed views.
- A fall can happen from height or from the same level, whether climbing in and out of a truck or piece of equipment or stepping off slash or debris.



Safety Alert of THE MONTH

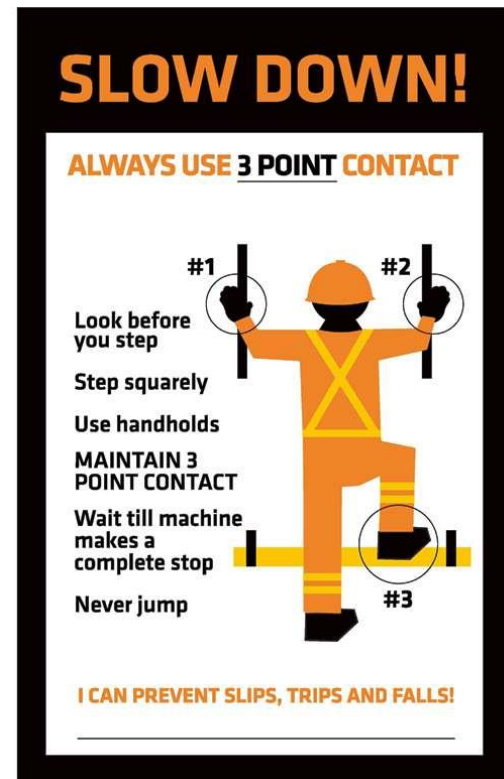
PLEASE PASS THIS ON TO PEOPLE AND ORGANIZATIONS IN BC'S FOREST INDUSTRY

Recommended Preventative Actions

- **Report and Eliminate Hazards** - Once you identify the hazards that exist on the job site and assess the risk to workers, it's easier to address them.

For example: Report missing or damaged handholds and steps so they can be repaired. Consider adding high traction surfaces to steps or other areas that can get slippery. Inspect footwear for adequate tread and traction and replace when worn.

- **3 Point Contact** - Always have three secure points of contact when mounting or dismounting a vehicle or equipment. Put tools, phones and other objects on the floor/seat before you climb into the cab so that both hands are free for 3 point contact.
- **Be Physically Prepared** - Working in forestry is physically demanding. Walking through the bush, driving or operating equipment for long hours all exert strain on the body. Injury prevention starts with being physically fit, well nourished, hydrated and rested.
- **Train Workers About The Hazards** - Set up your crews to successfully avoid slip, trip and fall injuries. Make sure they fully understand the hazards and how to avoid injury.



Additional Resources

Three Point Contact Posters and Stickers: These posters and stickers (see above) are available for free. Visit this link to see how to order: <http://www.bcforestsafe.org/node/2485>

Slips, Trips & Falls Injury Prevention Resource Package: Includes tips and techniques to educate yourself and your workers, improve your safety management system and inspire practical solutions for preventing slips, trips and falls in your operations. Visit this link for details: <http://www.bcforestsafe.org/node/2142>



Logging Safety Training

Attendance Roster

Date: _____ Subject: _____ Location: _____

Trainer: _____ Trainer title: _____

NAME (PLEASE PRINT)	SIGNATURE	COMPANY	JOB TITLE

Safety training attendance roster reviewed by _____ date _____