

BC Forest Industry Pilots Automated Load Securement System

The motion of throwing and securing log load wrappers can cause considerable stress on drivers' shoulders and overexertion-related musculoskeletal injuries are quite common among log truck operators. FPInnovations, in collaboration with the Load Securement Working Group (LSWG - a subcommittee of the Log Truck Technical Advisory Committee that focuses on initiatives that reduce the risk of injuries to log truck operators), is conducting a multi-phase research project looking to reduce or eliminate injuries due to securing loads. To eliminate the injuries related to load securement, industry is looking at automated load securement as a potential viable option. Exte, a manufacturing company based in Sweden currently produces an automated load securement system called the Com 90. This system is currently being utilized internationally but has never been tested in Canadian forestry operations. To address this Tolko, FPInnovations and the BC Forest Safety Council have initiated a pilot to test the Exte Com 90 within central BC.

Objectives of the pilot:

- Ensure Exte Com 90 meets BC regulatory requirements.
- Study implementation of the Exte Com 90 automated load securement system in a BC log hauling environment.
- Conduct an analysis of the effectiveness of the system, including overall improvements to safety, load securement, and cost to benefit ratio.
- Explore the possible adaptations of this system for log BC log hauling operations.

The Com 90 system includes:

- · Bunks with telescoping stakes.
- Lashing arms.
- · In-cab display.
- · System remote.
- Hydraulic components.





Safety specific aspects of the system include automatic lashing arms, in-cab system monitoring, constant load securement pressure, and remote-control options. The system has been designed to address multiple safety issues including risks to the driver of manual load securement activities to better containment of the load during transport.

These components were shipped from Sweden and received in Quesnel mid summer with the install being completed on the truck and new peerless quad axle trailer shortly thereafter. Hauling was initiated in late August and has been active ever since. As of October 4th, the system has been utilized to move 2500 tonnes of short wood over 60 separate trips which includes loads from the bush and mill transfers. So far, the system has worked well with overall performance meeting general expectations. The pilot is planned to run until the spring of 2025 at which time a full evaluation of the system and associated report will be released. In the meantime, wood will continue to be moved to ensure the system is fully tested in all operating conditions experienced within BC's northern interior. If you are interested in any further information related to the pilot, please contact transport@bcforestsafe.org.

Professional Log Truck Driver Mentorship – Funding Opportunities Still Exist!

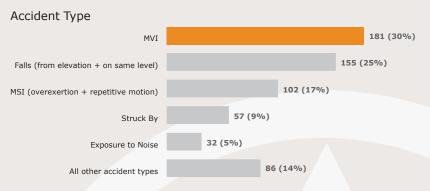
Injury rates for the log transportation sector continue to show significant improvements relative to historical numbers. This trend supported by the efforts of subject matter experts that comprise the Log Truck Technical Advisory Group (LTTAC), the Wood Fiber Hauling Safety Group (WFHSG) and the Trucking and Harvesting Advisory Group (TAG) is paying dividends. These groups, whose members include contractors, regulators, non-profits and licensees, have been instrumental in guiding the development of initiatives to reduce injuries and fatalities as well as supporting projects to improve the health and safety of log truck drivers.



One initiative that has had significant benefit has been the development of the <u>Professional Industry Driver Training Program (PID)</u>. The training focuses on the specialized skills, knowledge and attributes required of a Professional Log Truck Driver operating in the province of British Columbia and standardizes the level of training and assessments required of new drivers entering the industry.

However, despite the continued improvements, log transportation remains a leading contributor to accident claims within the forestry sector. The average age of current drivers continues to increase and operating conditions become more difficult with worksites farther away and in more challenging terrain. Despite current economic challenges facing the industry, continual training and mentorship of new log truck drivers is essential to sustain both the workforce and safety performance of the log transportation sector.

CU 732044 – Log Hauling Top 5 Accident Types



- MVI is the top accident type which accounts for 30% of all time-loss claims.
- Falls (from elevation + on same level) is the second biggest accident type which accounts for about 25% of all time-loss claims.

Therefore, the BC Forest Safety Council is offering funding opportunities targeting the mentorship of new, or experienced, class 1 drivers to the log transportation sector. Mentorship consists of a target of 160 hours of one-on-one training in which new drivers work under the direction and guidance of an experienced mentor driver. Candidates are identified by the potential employer and vetted for suitability through an interview and assessment process prior to acceptance into the program.

If you are interested in learning more about this Professional Log Truck Driver Mentorship Training opportunity for your own company needs, please contact the BC Forest Safety Council Transportation Department at transport.admin@ bcforestsafe.org or 250-562-3215.





Woodlot Licence & Community Forest Agreement Safety Committee

Ensuring Worker Safety During Wind Events

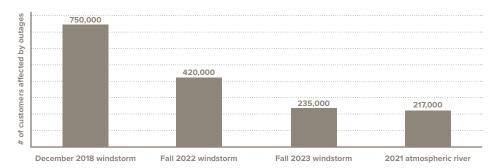
The frequency and magnitude of fall and winter storms characterized by heavy rainfall and high winds seem to be increasing. A recent BC Hydro survey finds that 3 in 5 British Columbians say the worst fall/winter storm they have ever experienced has been within the past 5 years. BC Hydro data shows that severe weather events in the last 3 to 5 years have led to some of the most damaging storms in BC Hydro's history.

BC's forest health aerial surveys show that the area of windthrown timber in 2021 (12,600+ ha) was 3 times the average over the last decade.

Wind events pose significant risks to people working on and traveling to and from woodlots and community forests. This bulletin provides licensees, managers and workers with guidance and resources they can use to plan and conduct operations that minimize risk of injury to workers during those events.

Understand the lay of the land

 It's impossible to predict exactly where big winds will touch down. But history and topography may provide clues. What have you and other locals experienced? Is there evidence of recent or historic windthrow in or around your tenure? Which stands, sites and topographical features are most



exposed to the usual flow of storm weather? Use that information to gain a macro-level sense of where risks are likely to be greatest.

Take advantage of proven tools

- BC researchers and foresters have developed high-quality windthrow risk assessment tools (see links to resources below). Use those tools to build a working-scale map showing relative windthrow risk.
- Use that knowledge to plan treatments (e.g., planting species, thinning density, harvest timing to limit canopy height differences) that can help reduce windthrow risk potential.

Be prepared

 Even if you haven't been able to apply those treatments, use assessment results to understand where you and your crew shouldn't be when there's a storm on the way.

- Identify (or build) muster areas where there's no risk of someone being struck by falling trees, or rocks dislodged by falling trees.
 Tell your crew about those areas.
 Identify them on the logging plan map.
- Equip vehicles with tools (e.g., power saw, tow strap) and train operators to deal with minor windthrow incidents that could prevent exit from an area.
- Avoid parking vehicles near hazardous trees or overhead hazards.
- As part of normal road inspections or when roads are re-activated, evaluate risks along routes crews will use to get to muster areas, and routes they will use if they must leave the area entirely. On both sides of those roads, identify and deal with trees that are at risk of toppling or breaking off in a storm.

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Plan work accordingly

- Find a weather resource that provides reliable forecasts. Check forecasts and alerts daily, especially during storm season. If a storm might be on the way, watch the weather and be ready to respond. Use a weather app with radar imagery that shows how storms are tracking.
- Your best plan may be to suspend all work or some work types until the storm has passed. For example, layout crews, hand-fallers and tree planters are at greater risk than people in ROPS-equipped machines.
- Another option may be to move crews from moderate and high-risk areas to low-risk areas (based on your risk assessment / inventory).
- At your pre-work meeting, explain the plan and make sure everyone is clear.
- If the plan is to evacuate crews if the storm picks up, remind them they need to leave the bush before they're at risk. As a rule of thumb, manual crews should leave the bush if they see or hear trees falling or tops/branches breaking off.
- Have reliable communications.
 If you decide it's safe to keep working, increase check-in frequency. If you suspend work, check to make sure everyone arrives safely at the muster area.

After the storm

- Assess the area to determine if the wind has de-stabilized trees or rocks. Remove those risks and/ or adjust your work plan before allowing crews to work in those areas. Crews working in windthrown areas must be properly trained and equipped for the higher risk work site conditions.
- Debrief after the event. What worked? What didn't? Use what you learn to be even better prepared for the next big wind event.

Resources

- Introduction to Dangerous Trees on Forestry Worksites – The BC Forest Safety Council
- UBC FRST 557 Forest Operations Module Lecture 5c Windthrow
- BCTS Windthrow Management Standard Operating Procedure
- Windthrow Management Manual for Coastal British Columbia
- <u>Silviculture and stand management training Module 5.3 Windthrow</u>
- BCFSC Safety Alert

