

## Transportation Safety





#### Emergency Response Planning – Air Transportation Planning and Practice Drill's

By Dorian Dereshkevich, Manager, Transportation and Northern Safety

The BC Forest Safety Council (BCFSC) recently released the third installment in a video series focusing on Emergency Response Planning (ERP) requirements specific to the forest sector. This two-part release highlights planning requirements and demonstrates practice drill scenarios when air transportation (helicopter) is the principle means of transporting an injured worker as part of a workplace ERP.

The ERP video series was initiated in part to increase awareness of the recent changes to Part 3 of WorkSafeBC's Occupational Health and Safety (OHS) Regulation that came into effective November 1. 2024. WorkSafeBC states that the primary purpose of the changes was to "strengthen the current requirements in Schedule 3-A, with a focus on high-risk remote industries". The amendments introduced new workplace characteristics that must be considered when completing a first aid assessment. These characteristics are key to determining the workplace class, which subsequently aids in the establishment of minimum levels of first aid supplies, facilities, attendants and emergency transportation.

Many forestry workplaces are highrisk, remote and less accessible and consequently air transportation will often be the primary, or only, method for transporting an injured worker in a critical emergency situation. Section 3.17.1 of the OHS regulations detail the requirements that must be met when air transportation is utilized. Some key considerations are:

 a) before the start of work activities, arrangements must be made with an air service to ensure that:

- i. an appropriate aircraft is reasonably available during operations, and
- ii. there is at least one stretcher in the aircraft, or at the workplace, that is compatible with the aircraft.
- the employer must determine the availability of appropriate aircraft before the start of each workday,
- d) the air service provider must notify the employer if an appropriate aircraft ceases to be available.

The new videos emphasize important items that need to be considered to successfully execute an air rescue. To produce the videos, BCFSC partnered with TEAAM (Technical Evacuation Advanced Aero Medical) Aeromedical which specializes in Helicopter Emergency Medical Services (HEMS). When TEAAM responds to a call they request eight critical pieces of information to ensure a quick response time and successful mission.

- Location of patient in standing timber, on landing etc.
- 2. GPS coordinates for worksite.
- Geography of location steep, rocky etc.
- 4. Mechanism of injury or illness.
- 5. Weight of patient.
- 6. Any known hazards other aircraft or drones working in the area etc.
- 7. Industrial operations blasting, overhead yarding (cables) etc.
- 8. Markings used to identify the site flagging, or landing site etc.



Incorporating critical items like these will aid in the development of an effective ERP. Practice drills reinforce roles and responsibilities for crew members, identify weaknesses in the plan, and allow for implementation of improvements. Remember; relying on 911 is not an effective rescue plan. You need to be prepared for all scenarios and always have a backup plan. What will you do if you can't fly your worker out?

The two new videos can be found on the BCFSC YouTube channel, and we encourage you to watch both parts and share them amongst your industry peers.

ERP – Air Medivac Procedures Part 1: Planning Requirements

ERP – Air Medivac Procedures Part 2: Practice Drills

For more information regarding this initiative, please contact the BC Forest Safety Council Transportation Department at <a href="mailto:transport.admin@">transport.admin@</a> bcforestsafe.org or 250-562-3215.

#### **Additional Resource Links:**

Regulatory-changes-backgrounderoccupational-first-aid-pdf-en (1).pdf

WorkSafeBC-OHS\_Regulation-Part-03-Section:3.17

WorkSafeBC-Bulletin-Air\_Evac.-In-Forestry-Operations-2017

Emergency Response Planning: 12 Tips for an Effective Emergency Response Plan | WorkSafeBC

First aid requirements - WorkSafeBC

First aid assessment | WorkSafeBC

New videos: Workplace first aid requirements | WorkSafeBC (

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# Trinder Automated Log Load Securement

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. Automated load securement is one of the ways to reduce stress on the drivers' body during the load securement process. There are several systems developed in other parts of the world, but some of these have not been fully tested or been utilized within the Canadian forest sector. Of these systems, Trinder Engineers automated log load securement system is of particular interest to BC log hauling operations, due to its current use within New Zealand's log hauling sector and lower cost compared to other existing automated systems.

Trinder Engineers, a New Zealand general engineering company who manufacture heavy vehicle trailers, has developed the WASP automated load securement system for the New Zealand market that is retrofittable to existing bunks. The WASP consists of three elements:

- Wrapper thrower An automated device with a custom stake is fitted to each bolster for throwing the wrapper over the load. The thrower consists of a pneumatic actuator, 1.8 m arm and hook.
- Auto tensioner An auto-tension device which engages with the wrapper to secure the load, maintain constant tension, reduces load slippage, and the time to secure the load.
- Load monitoring A load management sensor which measures the tension in the wrappers and confirms the load is secure and alerts the driver to any faults, both initially and in transit.

In order to evaluate the system within BC log hauling operations a pilot was initiated in the spring of 2025. The pilot will evaluate the existing solid stake system as well as a redesigned retrofittable system for folding stakes. The redesigned system is critical as many truck and trailer configurations in BC use folding stakes to be within legal height when piggy backing the trailer. The project is being conducted in two stages with stage 1 focussed on the existing wrapper thrower which is expected to be completed by late summer 2025. Stage two will proceed in the fall of 2025 and include the folding stake wrapper thrower, auto tensioning system and load monitoring system. Phase 2 is expected to be completed in the spring of 2026 with the project report being released shortly thereafter.



Figure 1. Trinder wrapper thrower (1.8 m arm with hook at the end)

If you are interested in more information please contact BCFSC Transportation Safety at <a href="mailto:transport.admin@bcforestsafe.org">transport.admin@bcforestsafe.org</a> or call 250-562-3215.





Woodlot Licence & Community Forest Agreement Safety Committee

## **Post Wildfire Operational Safety**

As we head into fall, many areas in British Columbia are still feeling the effects of previous years' wildfires. These fires have changed the landscape and created new hazards and safety risks to many forests in British Columbia. These new hazards affect all phases of forestry from planning to post harvesting. Some of these hazards include unstable trees and ground, poor air quality, increased blowdown and lingering hot spots.

The Woodlot License & Community Forest Agreement Safety Committee has developed the following list of considerations when operating in wildfire-affected areas.



Phase	Additional Considerations
Planning Phase	<ul> <li>Develop wind protocol to address blowdown hazards</li> <li>Guide the development of harvest plans (and tree retention potential), consider undertaking a field review to assess general tree stability</li> <li>Keep up to date on potential new restrictions, regulatory changes</li> <li>Give extra consideration to slope stability, assess steep slopes that may have been compromised/unstable ground</li> <li>Use extra caution during bid tours and all assessments as hazards are unknown</li> <li>Consider clear cuts vs partial cuts to decrease the chance of reoccurring fires and/or blowdown</li> <li>Determine potential access issues due to damaged roads/bridges/culverts</li> <li>Determine the scale and intensity of the fire and if its fully out</li> <li>Identify a refuge area for field crews to address risk during wind events</li> <li>Consider widening road right of ways to remove trees that will be hazardous during operation</li> </ul>
Development Phase	<ul> <li>Develop wind protocol to address blowdown hazards</li> <li>Conduct a recce to determine if plans are viable &amp; identify hazards</li> <li>Use extra caution during general hazard assessment/ overall site assessment as hazards are unknown i.e. ground stability</li> <li>Determine appropriate natural drainage as organics and infrastructure (i.e. culverts) may have been destroyed/damaged during the fires</li> </ul>
Harvesting Phase	<ul> <li>Develop wind protocol to address blowdown hazards</li> <li>Remove danger trees concurrent with harvesting. Trees planned for retention must meet Wildlife/Danger Tree Assessment Protocol</li> <li>Consider development of an air quality protocol to address ash and debris as well as hot spots still producing smoke</li> <li>Limit hand falling as unstable trees and ground could affect safety</li> <li>Assess ground stability due to compromised root bed and soils</li> <li>Machine operators should use extra due diligence when navigating around trees due to potential instability</li> </ul>
Post Harvesting Phase	<ul> <li>Develop wind protocol to address blowdown hazards</li> <li>Consider development of an air quality protocol to address ash and debris as well as hot spots still producing smoke</li> <li>Subsequent operations such as site prep, planting, brushing and spacing should be preceded by the removal of any dangerous trees. Trees planned for retention must meet Wildlife/Danger Tree Assessment Protocol</li> </ul>