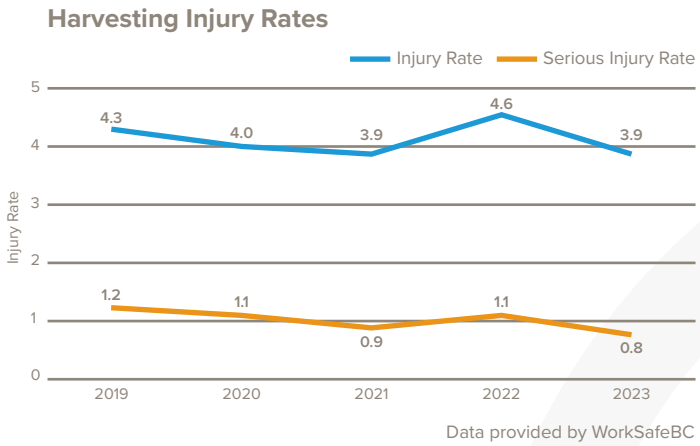
Trucking and Harvesting Advisory Group (TAG)

The Trucking Advisory Group (TAG) was established in 2013, bringing industry representatives together to support much needed improvements in log hauling safety. TAG members include representatives from BC's major forest licensees, forest industry contractor associations, such as the Truck Loggers Association (TLA) and Interior Logging Association (ILA), the Log Truck Technical Advisory Committee (LTTAC), log hauling contractors and the BC Forest Safety Council.

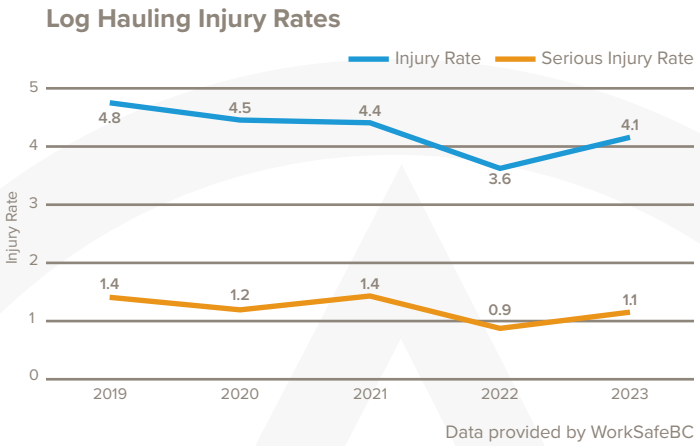
Despite TAG's continued work and successes in the log hauling sector, members identified there was a significant level of serious injuries and fatalities within the other areas of forest development such as harvesting and silviculture. So in the spring of 2016, TAG expanded its scope to include timber harvesting and renamed itself the "The Trucking and Harvesting Advisory Group".

To support and promote safety improvements, TAG has developed numerous resources including industry best practices, operational objectives, incident data, videos, posters, technical reports, and safe work procedures. The group also focuses on direct engagement with forest industry workers, contractors, and regulatory agencies to raise more awareness.

Thanks to its continuous efforts, TAG has seen great success in reduced safety incidents in both log hauling and harvesting, achieving historically low injury rates over consecutive years.



Data provided by WorkSafeBC



Data provided by WorkSafeBC

Despite its successes, TAG recognizes that there is still significant work to be done to further reduce and eliminate injuries and fatalities within the log hauling and harvesting sectors. To help guide these objectives, the group develops and approves an annual workplan. The 2024 workplan has identified log load securement, log truck driver training, emergency response planning, log trailer molly's, and engagement with contractors and provincial regulators as key priorities.

TAG is committed to continuing its work to improve worker safety within the forest industry now and in the foreseeable future. For further information, please visit the Trucking and Harvesting Advisory Group (TAG) web page on the BCFSC website or contact BCFSC Transportation Safety at Transport@bcfortestsafe.org or call us at 250-562-3215.

Load Securement Project - Phase Two & Three Updates

In 2021, the Load Securement Working Group (a subcommittee of the BC Forest Safety Council Log Truck Technical Advisory Committee - LTTAC) initiated a multi-year project to explore potential solutions that could help reduce or eliminate the risk of musculoskeletal injuries associated with the traditional motion of throwing and securing log load wrappers.

Results of phase two of the Load Securement Project, where the top six alternative methods and tools identified were ranked based on Movement Risk Score (MRS) reduction and ease of use were published in the September 2023 BCFSC Forest Safety Newsletter.

The Phase Two Report prepared by FPInnovations contains a set of Contractor Toolboxes for each of the top six alternative methods. The toolboxes are resources that employers and drivers can use to address the risk of injury from load securement activities based on their operational needs and preferences. Each toolbox includes descriptions for use, musculoskeletal injury (MSI) risk reduction measures, time requirements for use, estimated costs, safe work procedures, risk exposure, risk controls and other implementation resources. The complete set of toolbox resources are available for download from the BCFSC Website:

ContractorToolboxA_ImprovedThrowingMethodC.pdf (bcforestsafe.org)

ContractorToolboxB_UnderhandThrowUsingLeadRope.pdf (bcforestsafe.org)

ContractorToolboxC_ThrowAssistUsingaPole.pdf (bcforestsafe.org)

ContractorToolboxD_RotatorSaver.pdf (bcforestsafe.org)

ContractorToolboxE_LightweightWrappersOrTiedowns.pdf (bcforestsafe.org)

ContractorToolboxF_ElevatedPlatform.pdf (bcforestsafe.org)

To further enhance the effectiveness of the toolbox resources, videos demonstrating proper technique for four of the alternative methods have also been developed. The videos are available on the BC Forest Safety Council - YouTube Channel and were first introduced to the BC Forest Sector in the June 2024 BCFSC Forest Safety Newsletter. Links to the individual videos can also be found on the BCFSC website:

Toolbox A - Improved Throwing Method Demonstration Video

Toolbox B - Underhand Throw Using Lead Rope Demonstration Video

Toolbox C - Throw Assist Using A Pole Demonstration Video

Toolbox F - Elevated Platform Demonstration Video

Phase three of the project is underway with pilot programs of auto load securement systems (ExTe Com 90 - Remote Controlled Load Securing and RaptorSafe - Auto Tensioning System) to field test in a variety of BC weather conditions over multiple seasons. Reports and results of the pilot program outcomes will be produced and published in the spring/summer of 2025.

Rainfall Events – Operational Management and Safety Considerations

Climate change and seemingly more frequent extreme weather events are affecting the safety and performance of forest infrastructure and operations in diverse and unexpected ways. In some cases, the results include increased safety risks for road users, structure failure rates and maintenance costs. Tenure holders need to understand how climate change, and rainfall events in particular, can affect the safety of their forest operations, and what they can do to prepare for, and respond to those events.

For purposes of this guide, rainfall events are defined as:

- extremely high rainfall in a 24-hour period,
- sustained rainfall in a 3-day period,
- antecedent rainfall followed by a heavy rain event,
- rain on snow, and,
- rapid snowmelt

Climate change may bring increased stream peak flows and flashiness. Heavy rains can carry debris which plugs and/or damages stream crossing structures (bridges and culverts). Ditches may be overwhelmed during rain events resulting in backed up culverts, compromised ditch-blocks, and water pooling on roads. Road washouts can occur quickly and may surprise drivers. Soil next to bridges and culverts may be eroded by heavy rains and high stream flows. Be cautious and assess crossings from a safe distance before driving over them. Travelling in the dark during heavy rain events is not recommended. Limited visibility can result in not being able to spot washouts in time to stop safely.

Tenure holders need to anticipate current and forecasted changes in temperature and precipitation and the implications these changes may have on resource road infrastructure and management. This information is necessary to identify and adapt methods to plan, build, maintain and deactivate resource roads so they are resilient to climate change. Will climate in your area be getting hotter, drier, wetter? How will you need to adjust your management activities?

A key step is to create an accurate, up-to-date inventory and performance assessment of existing resource road infrastructure held under your tenure. Then, risk-rate those roads and develop a road inspection schedule based on risk (i.e., inspect high risk sections annually and after rain events). Document road and infrastructure condition and use this information to prioritize the form, timing, and location of maintenance activities to anticipate future maintenance needs. Consider engaging with a **Professional Geotechnical Engineer** to help identify high hazard areas and prescribe mitigative measures.

Tenure holders should review and record the number, location, and diameter of existing structures and re-evaluate the ability of current culverts and bridges to adequately pass or accommodate flood conditions and increased water flow, bedload, and debris. Ensure that water crossings on winter roads can accommodate flows from early thaws or from rain-on-snow events. Review current guidelines on cross-drain culvert placement (Section 3.6.4 Ministry of Forests Engineering Manual), spacing and sizing. Given predicted frequency of peak events, it may be necessary to increase the number and size of cross-drain culverts to accommodate higher flows and more debris and, thereby, reduce the likelihood of washouts.

Remove water crossing structures if a road is expected to be inactive for an extended period. If ongoing maintenance of the water crossing and drainage structures won't or can't be regularly done, consider removing all or some of the structures to reduce maintenance issues and prevent road washouts.

Rainfall events are often accompanied by strong winds that increase windthrow risks and the hazards of danger tree failure. Soils are weaker when they are saturated and combined with strong winds, leave trees within

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cutblocks, or along road right of ways more susceptible to blowdown. Operations in areas with leave trees should be curtailed during extreme rain and wind events.

Legacy roads are those roads on the land that are not permitted and generally not maintained. They may have been constructed several decades ago and have never been deactivated. They may have drainage structures that are no longer functional, especially during peak rainfall events. Consequently, these roads may be at a higher risk of failing in extreme rain events. As a tenure holder, it's in your best interest to be aware of any legacy roads when developing a nearby area and determining whether any intervention is required to prevent a potential failure. Again, using the services of a **Professional Geotechnical Engineer** may be necessary.

Discourage the use of **plastic culverts** in wildfire prone areas. If plastic pipes are used, install non-flammable segments on the ends of the pipe.

Optimize the number and spacing of roads (often measured as **road density**) to ensure that the least amount of road is constructed and maintained to support the required economic, recreational, and community/wildfire access activities in the area. Minimize your liabilities - if you no longer need a road, stabilize/deactivate it so you minimize the likelihood that it will be a problem during peak events.

Budget for summer and winter **road maintenance** activities to better manage risk.

- Seed erodible ditches and side slopes. Ensure that erosion resistant materials and slope stabilization methods are implemented in and around cross drain culverts.
- In landslide prone areas, implement enhanced erosion and stabilization techniques, such as armoring and vegetating slopes, and, especially, the toes of slopes.
- Reduce the erosive capacity of roadside ditch water through the effective use of diversion ditches to move the water away from the road. Ensure the use of adequately sized ditch blocks in ditches to direct ditch water into cross drains and prevent its concentration.
- Inspect deactivated roads from time-to-time to ensure they are functioning as expected.
- Be familiar with hauling regulations, allowable truck weights and truck haul configurations. Regulations such as spring haul restriction periods and winter weight premiums can be important factors when planning heavy vehicle hauls and management of the resource road infrastructure during certain periods of the year.

Tenure holders need to consider the implications of climate change and extreme weather events on safety within their forestry operations, from initial planning and design to implementation and maintenance. Extreme events are more likely in the years ahead. This article by no means covers every scenario but is intended to encourage tenure holders consider how climate change will impact their operations and the safety of all road users.

Links:

Climate Vulnerability Forest Management Tool (arcgis.com)

Research Report (gov.bc.ca)

Microsoft Word - 19-214 MFNRORD Southern Engineering Gp Wet Weather Shutdown Criteria - FINAL.docx (gov.bc.ca)

Climate change adaptation for resource roads - Province of British Columbia (gov.bc.ca)

FOR Engineering Manual - Province of British Columbia (gov.bc.ca)

List of Automated Snow Weather Stations - Province of British Columbia (gov.bc.ca)

Data - AQUARIUS WebPortal (gov.bc.ca)

The Rise of Aggressive Driving and How to Avoid It

Aggressive driving has become a significant concern on roads across the country. Actions such as running red lights, excessive speeding, tailgating and erratic lane changes are significant concerns that not only endanger the driver but also pose a serious threat to others. If we can learn to understand the contributing factors in the rise in aggressive driving and learn how to avoid it, perhaps we can help make our roads safer for everyone.

In BC, aggressive driving is defined as "an individual committing a combination of moving traffic offences so as to endanger other persons or property". RCMP throughout the province have reported aggressive driving enforcement has seen a significant increase in recent years in both urban and rural areas. According to RoadSafetyBC, aggressive driving was one of the most common factors in police-reported crashes and injuries over a ten-year period.

There are several factors that can contribute to aggressive driving which you may be able to personally relate to.

Traffic Congestion: As the province becomes more populated, the number of vehicles on the road increases. Congestion can cause frustration and impatience among drivers, prompting aggressive behaviors such as weaving through traffic and speeding.

Anonymity: This sense of anonymity by being inside a vehicle, can lead to behaviors that drivers might not exhibit in face-to-face interactions. This anonymity can make drivers feel detached and less accountable for their actions.

Running late: Many people have busy schedules and may resort to speeding to make up for lost time or other aggressive maneuvers such as displaced anger or annoyance.

A lot of us have been exposed to or have even displayed aggressive driving behaviors which include a variety of behaviors, such as *speeding, tailgating running red lights or stop signs, weaving in and out of traffic, cutting off other drivers, honking, flashing lights, or gesturing rudely, yelling or swearing at other drivers, threatening or assaulting other drivers.

There are proven preventive measures to help us avoid becoming a victim of aggressive driving and to help mitigate our own impact when we feel stressed out while driving. Practice driving techniques that require a combination of self-awareness, patience and proactive strategies. Here are some tips to help you stay calm and safe on the road:

How to Avoid Aggressive Driving

1. **Plan Ahead:** Allow extra time for your trips to account for potential delays. This can help reduce the stress and urgency that can often lead to aggressive driving.
2. **Stay Calm and in Control:** Keep your emotions in check while driving. If you find yourself getting frustrated, take deep breaths and remind yourself that arriving safely is more important than arriving quickly.

   Remember you can't control others, but you can control your own actions. You won't get there any faster if you drive erratically and may put yourself and others at risk by letting your emotions get the better of you.
3. **Practice Polite Driving Habits:** Avoid behaviors that can provoke other drivers, such as tailgating, cutting off other vehicles and using high beam headlights unnecessarily. Always signal your intentions and merge politely.
4. **Avoid Confrontation:** If another driver is aggressive, do not engage with them. Avoid making eye contact, gesturing or responding to their behavior. Instead, focus on your own driving and let them pass.
5. **Use Your Horn Sparingly:** Reserve your horn for emergency situations. Excessive honking can escalate tensions and provoke aggressive responses from other drivers.
6. **Create Space:** Maintain a safe distance from other vehicles, especially those displaying aggressive behavior. This gives you more time to react and reduces the likelihood of a collision.
7. **Report Aggressive Drivers:** If you encounter a dangerous driver, note their license plate number and report them to the authorities instead of confronting them.
8. **Stay Focused:** Avoid distractions such as using your phone, eating, or adjusting the radio while driving. Staying focused on the road helps you react more effectively to potential hazards.
9. **Listen to Soothing Music:** Playing calming music can help reduce stress and keep you relaxed while driving.
10. **Understand Traffic Patterns:** Familiarize yourself with common traffic patterns and peak hours in your area. This can help you plan your trips better and avoid congested routes.

By adopting these strategies, you can significantly reduce the likelihood of engaging in or being affected by aggressive driving. Remember, the goal is to arrive safely, not to compete with other drivers on the road.

Resources:

RoadSafetyBC has resources aimed at curbing the dangers of aggressive driving.

DriveSmartBC has information related to aggressive driving.

** This article contains content derived from AI generated data.*