

FOREST SAFETY NEWS

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2023 Wildfire Season Shatters All Previous Records

BC is in the midst of one of its worst wildfire seasons to date. As of August 29th, 2023, about 16,000 square kms have burned from over 1,700 fires across the province. Currently about 4,000 firefighters, including many BC forestry contractors, in the province are fighting roughly 409 fires including 191 that are considered out of control and 12 wildfires “of note” that are highly visible or pose a threat to communities and residents.

At a July briefing about the BC fire season, Bowinn Ma, Minister of Emergency Management and Climate Readiness said, “We are anticipating continued extreme fire behaviour, and all of us need to do our part to prevent the situation from getting any worse, no matter where you are in the province”.

But BC is not alone. The federal government is forecasting a “marathon” wildfire season across much of Canada extending well into September as a combination of unusual heat, dry lightning and drought continues to fuel major outbreaks across BC, the Prairies, Northwest Territories and Ontario.

To support the safety of our communities and all of those out working on wildfires, we all need to do our part and ensure we

are not creating additional fire issues on the landscape. We need to prevent human caused wildfires by paying close attention to restrictions and danger class requirements, reporting fires when we see them and ensuring our forestry operations are prepared in the event that a fire starts.

Although officials can’t predict how next year’s fire season will unfold, fire agencies and scientists are warning that tougher and longer fire seasons are ahead. Larger, more aggressive fires are simply reality.

To understand why there has been an increase in fire behaviour in 2023, the BC Wildfire Service released a **video featuring fire behaviour specialist Ben Boghean** who explains some of the underlying conditions that have contributed to the fire behaviour and fire growth that we’ve witnessed so far this year.

BC Wildfire Service has some very valuable videos on their YouTube channel to help explain how wildfires are fought, information on upcoming weather events and updates on current fires burning across the province. **Subscribe to BC Wildfire Service’s YouTube channel** and stay informed on the current state of wildfires across the province.

Welcome to the Fall edition of Forest Safety News, covering news about safety topics in forestry. This is YOUR safety newsletter. We look forward to your input and feedback! Email the editor at editor@bcforestsafesafe.org or call 1-877-741-1060.

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BC Wildfire Service and WorkSafeBC have many sources where you can find news and information on the current wildfire situation, learn about evacuation orders and find information on prevention and preparedness. Visit, follow, download or subscribe to the following:

- Visit BC Wildfire Service’s website
- Download BC Wildfire Service’s FREE Mobile App available in the App Store or Google Play.
- Follow BC Wildfire Service on Facebook and Twitter
- Subscribe to BC Wildfire Service’s YouTube Channel
- Download WorkSafeBC’s Wildfire Resources - [Wildfires: Keeping workers safe](#), [Wildfire Smoke FAQ’s](#), [Wildfire evacuation planning](#) 🌲

BC Fire Centre Activity

Fire Centre	Total Fires
All of BC	409
Cariboo	21
Coastal	82
Kamloops	44
Northwest	72
Prince George	130
Southeast	60



What's New

Here is the latest on what we have to offer since June 2023. Find direct links to safety alerts, industry-specific resources, industry information and more to download and/or share with employees, industry and safety peers. And make sure to follow us on social media to stay up-to-date with the latest news. Follow us on [Facebook](#), [Instagram](#), [LinkedIn](#) and [Twitter](#).

Vancouver Island Safety Conference (VISC) – Saturday, October 28th, 2023 at the Nanaimo Conference Centre. This year's theme is *Navigating the Future During Complex Times*. [Register before September 15th](#) and you'll be entered to win a BCFSC Stanfield shirt and toque.

Leadership in Safety Award Nominations – nominations for leaders in forestry safety. Recognize an individual, crew, team, division, contractor, company, etc. for their commitment to safety in the workplace. Nominations for the Cary White Lifetime Achievement Award, Forest Safety MSP and Manufacturing MVP are now open. Email your nomination to info@bcforestsafesafe.org.

BCFSC Annual Report and Ombudsperson Report – the 2022 BCFSC Annual Report and Ombudsperson Report is now available on our website. Read them online or download a copy.

Wood Pellets Association of Canada (WPAC) Operator Safety Training Fact Sheet – WPAC and BCFSC have launched an industry-wide initiative that delivers a comprehensive digital e-learning safety training program for plant operators and supervisors across companies.

Training Calendar – Our 2023 Fall Training Calendar is now fully loaded and offers both in-classroom and online courses. We also provide requested training bringing courses directly to your preferred location at a convenient time that works for you.

Safety Alerts – Alerts provide timely information on incidents and issues which cause, or result in, serious or fatal injuries. The alerts we send by email and post on our website are intended to raise awareness and educate industry so we can learn from each other's experience and effort. Here are the latest alerts from BCFSC and industry.

- **BCFSC Safety Alert of the Month** – Innovative Safety Equipment for Field Crews
- **Industry Alert** – Work Safely Around Powerlines
- **Manufacturing Weekly Safety Alert** – Click on the link to see the latest weekly alert

To subscribe to our safety alert emails – [Click Here](#)

WorkSafeBC Bulletin - Plan for and Prevent Wildlife Encounters: Encounters with bears and other animals in wilderness settings have led to serious injuries and deaths in BC. This WorkSafeBC bulletin provides information to help you plan safe work in wilderness areas.

Upcoming Industry Conferences

Wood Pellets Association of Canada (WPAC) AGM & Conference – Sept. 19 – 20, 2023 in Ottawa, ON. For more information on registration and conference details, [visit their website](#).

BC Safety Committee Conference – October 4th, 2023 in Langley, BC. For more information or to register, [visit their website](#).

Industry Links

Shift Into Winter – winter is coming! Make sure you know when you need to install your winter tires and find out more about driving in winter road conditions.

Road Safety at Work – visit Road Safety at Work for resources, webinars, workshops and news relating to road safety for you and your employees.

WorkSafeBC Announcements – check here for the latest information on WorkSafeBC policy and regulation updates, resource development, risk advisories and more.

WorkSafeBC Enews – subscribe to Insight; WorkSafeBC's policy, regulation and research division e-Newsletter, Health and Safety Enews, Young Worker Enews and more.

WorkSafe Magazine – WorkSafeBC publishes *WorkSafe Magazine* six times a year to inform, inspire and provide practical tips on a range of topical occupational health and safety matters. It's free to [subscribe](#) and available online. 📄



Bear and Wildlife Encounters

Bear and wildlife encounters are becoming more of a risk for workers in the field. A recent bear encounter with a tree planter in Northeastern BC has caused concern as wildfires are pushing the wildlife into smaller pockets of viable feed areas increasing the potential for hazardous wildlife encounters in forestry worksites.

As we move into fall with berry season upon us and salmon season on the horizon, wildlife will become naturally more active as they prepare for winter. Their search for food and shelter is an overpowering motivator to be out and about and get into whatever they can if given the opportunity. This inherently increases the risk of human encounters that may have the potential to become life threatening if not managed properly to ensure a safe outcome.

For us, this means an increased risk of finding out these animals have taken up residence around our homes or near our workplaces which can become a serious problem for us and them.

WorkSafeBC has developed a new wildlife encounter resource that outlines how employers, supervisors and contractors can protect workers from the risks of wildlife encounters. This resource can help employers and licensees plan safe work in wilderness areas by explaining their responsibilities and the steps they can take to manage the risk of dangerous encounters through a health and safety program that considers hazardous wildlife.

We all have a shared responsibility in forestry to keep workers and wildlife safe by understanding that we are working in their backyard.



We must plan and prepare for potential encounters and thoroughly review Emergency Response Plans to ensure effective and adequate plans are in place, especially evacuation procedures should an incident occur.

Working with caution and awareness knowing that you are not alone in the bush will help keep us all safe. 🐻

Wet Roads, Foggy Conditions and Kids in the Classroom

By Michele Fry, BCFSC Communications Director

I don't know about you, but I have a hard time imagining that in the very near future our skies will be dark and grey, our roads will be wet and slippery, and we'll be driving in inclement weather conditions. With dry, hot conditions still upon us, I'm not really wondering where my umbrella is at the moment, I'm still slathering on the sunscreen. But this is BC, and cold, wet, snowy conditions will soon be the topic of conversation in the grocery line-up.

So even though we're running the air conditioning in our cars at full blast right now, we'll soon have to transition from AC to defrost mode. So, let's take a moment to remind ourselves what's on the horizon and what we need to do prepare ourselves for the inevitable change in the forecast.

BACK TO SCHOOL: Next week, the kids are heading back to the classroom. This means more pedestrian traffic, changes to speed zones and school buses on the roads. A good rule of thumb is to expect the unexpected and keep a look out for kids darting from cars, cycling or walking

to school and getting on and off buses. Remember slow down, be cautious and pay extra attention in school zones.

School Zones – The school zone speed limit is 30 km/hr between 8am – 5pm on school days unless otherwise posted. Slow down, be cautious and pay extra attention in school zones.

School Buses - Over 110,000 children ride the bus every school day from September to June throughout BC. Drivers need to remember the rules when it comes to school buses. Be patient, be courteous and respect the rules of the road.

SLOW DOWN - STOP - KNOW THE LAW

- Every time someone doesn't stop for the bus, a child's life is at risk. In BC, drivers are legally obligated to come to a complete stop when approaching a school bus with its red lights flashing whether approaching from the front or rear. Vehicles may not proceed until the school bus moves



on or the driver turns off the lights or pulls in the stop sign.

- If approaching from the front, stop at a safe distance to let children cross the road. Don't move until the lights stop flashing and the bus moves forward.
- All school buses must stop at all railway crossings, so be prepared to stop yourself. The bus does not use its flashing red lights for this, so exercise caution.

School Crosswalks – With school back in session, pedestrian traffic on the roads will increase. In BC, almost 20% of all pedestrian accidents involve children under 15 and about 60% of those

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accidents occur during peak school hours in the morning, noon and late afternoon. We all need to remember that children have a different mindset when it comes to understanding cars and the rules of the road. Young children may:

- Assume cars can stop instantly
- Think if they can see a car, the driver can see them
- Have difficulty judging speed and distance
- Have a field of vision one-third narrower than an adults
- Have difficulty figuring out the direction of sounds
- Be easily distracted, lost in thought, listening to headphones or impulsive
- Have no sense of danger
- Cannot perceive complicated traffic situations
- Overestimate their knowledge and physical strength and speed

Refresh your knowledge on crosswalk rules and regulations. Stay extra vigilant at school crosswalks, yield to all pedestrians at marked crosswalks whether in or out of school zones and wait for as long as it takes for all pedestrians to reach the curb on the other side. If there is a crossing guard, follow their directions.

Foggy / Wet Weather Conditions

It may be hard to envision when it's still hot outside, but no matter what part of the province you live in, fall will bring rain, fog and wind before winter kicks in with snow and icy conditions. Wet roads and reduced visibility will affect the way your vehicle handles so be extra cautious when the rain starts up again.

Driving in Rain - As extended dry spells in BC are now commonplace, substances like oil, grease, rubber & tar form a layer of build up on road surfaces. Inevitably, when the rain starts to fall, this build-up rises to the surface and causes the roads to become very slippery.

But regardless of wet roads after dry spells or continuous rainy/wet conditions, wet roads are directly associated with higher accident rates. Take a look at some of these valuable safety tips to help keep you safe while driving on wet roads.

- Double check your vehicle's equipment - check your windshield wipers. Are they properly installed? Are the blades worn? Do you have the right type to drive in rain and snow? Is your wiper fluid topped-up? Have you checked your tire pressure? Do you have the right tires? Do they have good traction?
- Slow down, maintain a safe distance and avoid heavy braking.
- Turn on your headlights – even in misty or light rain conditions.
- Watch out for standing water – driving through standing water and puddles can not only cause hydroplaning but also hazardous water cascades to passing vehicles that can cause startling windshield blindness.
- Ventilate your car – rain causes humidity levels to rise which can result in foggy interior windows. Set your vehicle's temperature control systems to maximize air flow and position the vents to reduce and eliminate foggy windows.
- Maintain a safe following and braking distance.
- Look AND listen for any hazards up ahead.
- Stay alert and reduce distractions by turning off your cell phone.
- Keep your mirrors and windows dry and clean to maximize visibility.
- Watch your speed and don't pass if its not necessary.
- Pull off the road to a safe location if conditions become unsafe. Put on your emergency flashers, keep your low-beam headlights on and wait for the conditions to improve.

Driving in Fog – Fog can make driving difficult and dangerous even for a seasoned pro behind the wheel. Driving in foggy conditions requires extra special care and attention. Remember that everyone is having trouble seeing so play it extra safe and follow these safety tips:

- Consider delaying your trip if possible until driving conditions improve.
- If you are on the road, slow down gradually and drive at a speed that suits the conditions. Avoid sudden stops and keep a sharp eye out for brake lights in front of you and headlights behind you by checking your mirrors.
- Make sure the vehicle's full lighting system is on:
 - Use your low-beam headlights.
 - If you have fog lights, use them in addition to your low beams.
 - Don't use your high beams – they bounce back at you, which makes it even harder to see.
- Be patient and remain calm.
- Use pavement markings to help guide you using the right edge of the road as a guide, rather than the centre line.

Shift Into Winter

The **Shift Into Winter Campaign** is coming up quickly. As the days get darker earlier, we need to keep in mind that October, November, and December are the most dangerous driving months with almost 30% of all work-related motor-vehicle incidents resulting in injury and time-loss claims occurring during these three months.

October 1st marks the day when we need to dust off those winter tires and get them installed on our vehicles. As a reminder, here are the Winter Tire Regulations:

- BC provincial law requires vehicles to use winter tires from October 1st through April 30th on most highways. The requirement ends March 31st for select highways not travelling through mountain passes or high snowfall areas.
- Drivers are responsible for understanding the conditions on roads they regularly drive, and for equipping their vehicle for those conditions.
- Ensure you're following the rules wherever you drive, check the routes you'll be driving before the October 1st deadline and obey the instructions on roadside signs.

Learn more about winter driving safety by visiting the **Shift Into Winter website** and find out about designated winter tire and chain routes, winter tire regulations and the responsibilities of employers and employees who drive for work. 🚗

VISC is Coming Up October 28th, 2023 – Register Early and You Could Win!

The **2023 Vancouver Island Safety Conference (VISC)** is coming up on Saturday, October 28th in Nanaimo at the Vancouver Island Conference Centre.

This **FREE** full-day, in-person conference is open to all BC forestry workers and features forestry-related safety topics focussing around this year's theme - *Navigating the Future During Complex Times*.

VISC features a variety of engaging speakers, a trade show with targeted forestry-related safety products and services as well as:

- Refreshments and lunch for conference attendees
- 50/50 draw
- A silent auction with proceeds to KidSport Nanaimo
- Door prizes and more

This year's keynote speakers include leadership and safety expert, Allan J. Moore, Leadership Training and Human Development Expert, Alison Granger-Brown, Leadership Trainer and Human Development Expert and Steve Donahue, Author and Narrative Expert.



Allan J. Moore
Leadership and Safety Expert



Alison Granger-Brown
Leadership Training and Human
Development Expert



Steve Donahue
Author and Narrative Expert

Early Bird Registration

Register before September 15th and you could win a BCFSC Stanfield shirt and toque.
Register online today to save your spot.

Online registration

VISC registration closes October 13th, 2023

VISC supports the Nanaimo Loaves & Fishes Community Foodbank.
In lieu of a conference fee, conference attendees can bring a non-perishable food item or cash donation.

If you have questions regarding registration or sponsorship,
contact the VISC steering committee by email training@bcforestsafe.org or call 1-877-741-1060.📞

Leadership in Safety Awards Nominations

Leadership in Safety celebrates individual safety achievements in forestry. Award recipients are showcased during the VISC Conference which returns this year on Saturday, October 28th in Nanaimo.

We invite you to **nominate a leader in forestry safety**. Your nomination can be an individual, crew, team, division, contractor, company, supplier, consultant, trainer, etc. that deserves to be recognized for outstanding safety leadership or achievements. There are three award categories for Leadership Safety.

1. Cary White Memorial Lifetime Achievement Award

This special award is presented to someone who has demonstrated an unwavering commitment to improving

safety awareness, expanding safety knowledge, developing safety skills at ground level and building a lasting culture of safety among BC's forestry workers.

2. Forest Safety Most Valuable Player (MVP)

This award recognizes an individual or group that has made a notable contribution to forest harvesting safety within their operation or company.

3. Manufacturing Safety Most Valuable Player (MVP)

This award recognizes an individual or group that has made a notable contribution to wood products manufacturing safety within their operation or company.

Simply email us your nomination to info@bcforestsafesafe.org. Within your email, include:

- Nominee's name (first and last)
- Nominee's Job Title
- Nominee's location and employer
- Nomination Category (Cary White Award or MVP)
- A description of the reason for the nomination (please provide as much detail as possible)
- Your name and email address

Deadline for nominations is September 26th, 2023. 📅

Get Ready for Changes to Workplace Health and Safety Requirements Coming Into Effect in 2024

2024 is only a few months away and WorkSafeBC has some significant changes regarding workplace health and safety requirements.

Effective January 1st, 2024, Return to Work Obligations: Duty to Cooperate and Duty to Maintain Employment will come into effect. The Workers Compensation Amendment Act (No. 2), 2022 (Bill 41) amended the Workers Compensation Act to add a duty to cooperate and a duty to maintain employment meaning an employer and injured worker will be required to co-operate with each other and with WorkSafeBC to facilitate the worker's return to their pre-injury job, a comparable job or other suitable work.

Employers with 20 or more workers will also have a duty under the Workers Compensation Act to maintain employment, by providing accommodation of injured workers, up to the point of undue hardship.

These new provisions will come into force January 1st, 2024. Feedback on these new provisions will be accepted until September 1st, 2023.

As of November 1st, 2024, employers will need to meet new minimum first aid requirements set out in the OHS Regulation. The changes are detailed on WorkSafeBC's website: Part 3 –Minimum Levels of First Aid. We advise all employers to familiarize themselves with these upcoming changes well before the November 1st, 2024 deadline sets in.

Visit WorkSafeBC's First Aid Requirements webpage to learn more about these pending changes. 📄

WorkSafeBC Average Base Rate will Remain Unchanged in 2024

WorkSafeBC has announced the preliminary average base rate for 2024 will remain unchanged at 1.55% of employers' assessable payroll. Consistent with WorkSafeBC's goal of keeping rates stable, this will be the seventh consecutive year the average base rate has remained at this level.

WorkSafeBC has developed a background document that explains how premium rates for employers are determined with some key facts about premium rates.

Learn more about WorkSafeBC's 2024 preliminary rates by visiting their website. 📄

WorkSafeBC Public Hearings and Consultations

Current Consultations

Proposed policies regarding duty to cooperate and duty to maintain employment

Proposed policy amendments regarding chronic pain

Proposed amendments to mental disorder policy

Consultation Deadline

September 1, 2023

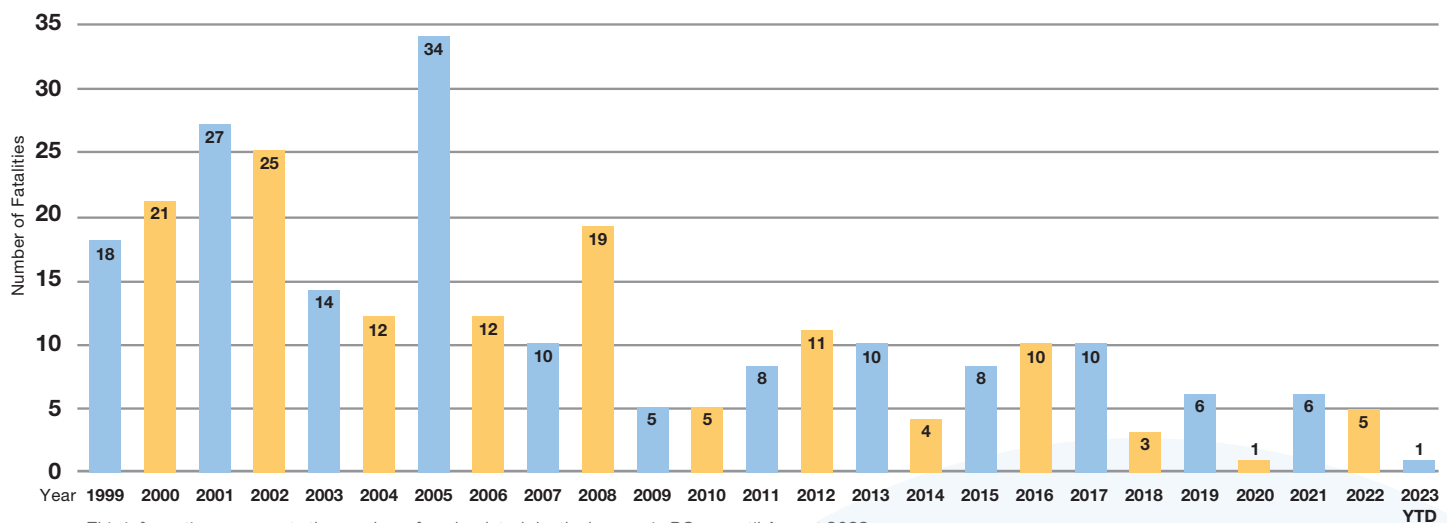
October 6, 2023

October 6, 2023



For 2023 year-to-date, there has been one work-related death in the BC forestry industry.

WSBC Accepted Harvesting Work-related Death Claims



This information represents the number of work-related deaths by year in BC, up until August 2023.

For 2023 year-to-date, there has been one work-related death in the BC forestry industry. We extend our deepest condolences to the families and friends of the deceased and our sympathies to all those affected by these tragic incidents.

FATALITIES

Injury: Fatal

Location: Northern BC

Date of Incident: 2023-Jul

On July 28th, 2023, a wildland firefighter was fatally injured while working on a wildfire north of Fort St. John. Media reports indicate the Utility Task Vehicle (UTV) the worker was riding on rolled over a sharp embankment on a gravel road.

[Read the BCFSC Fatality Alert.](#)

Recent work-related incidents reported to WorkSafeBC

The following sample of work-related incidents recently reported to WorkSafeBC may help prevent similar incidents in your workplace.

HARVESTING

Injury: Multiple injuries

Core Activity: Tree planting or cone picking

Location: Northern BC

Date of Incident: 2023-Jul

While planting trees at a remote cutblock, a young worker was attacked by a bear. The worker was transported to the hospital by helicopter.

Injury: Multiple injuries

Core Activity: Manual tree falling and bucking

Location: Vancouver Island/Coastal BC

Date of Incident: 2023-Jun

A faller was removing a dangerous tree at a wildfire site, using several pusher trees. The faller was using the final pusher tree when the dangerous tree fell back and struck them.

Injury: Fracture in lower body

Core Activity: Ground skidding or log loading / Integrated forest management

Location: Vancouver Island/Coastal BC

Date of Incident: 2023-Jun

A worker was walking on a log deck when a log shifted. The worker lost their balance and fell on top of the log. A second log then rolled onto the worker, pinning them. Another worker found the injured worker and called for assistance on the radio.

Injury: Multiple fractures, possible injury to head

Core Activity: Integrated forest management

Location: Interior B.C.

Date of Incident: 2023-May

A worker was performing maintenance on a self-loading logging truck at a remote shop location when they fell from the ladder used to access the operator station for the self-loader. The worker fell from a height of about 6 feet.

Injury: Lacerated arm

Core Activity: Manual tree falling and bucking / Integrated forest management / Helicopter logging

Location: Vancouver Island/Coastal BC

Date of Incident: 2023-Apr

A faller was falling trees in a heli-logging setting. While cutting underbrush along a steep, slippery slope, the faller lost their footing and fell, contacting the saw chain. First aid was provided at the incident scene before the faller was transported to hospital by helicopter.

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MANUFACTURING

Injury: Close call

Core Activity: Sawmill

Location: Northern BC

Date of Incident: 2023-May

A sawmill worker reported smoke coming from the shavings bins. This was followed by two deflagration events that occurred simultaneously inside the shavings bins. The fire department attended the site and extinguished the fire.

Injury: Exposure to carbon monoxide (3 workers)

Injury: Close call

Core Activity: Sawmill

Location: Northern BC

Date of Incident: 2023-Apr

A power generation unit was shut down for an oil leak in the convection section. The immediate area was then evacuated. During the cool-down, an expansion joint deteriorated, and a fire was discovered within the ducting. The fire department attended and extinguished the fire. No injuries were reported.

Injury: Injuries to fingers

Core Activity: Sawmill

Location: Vancouver Island/Coastal BC

Date of Incident: 2023-Apr

A worker was feeding an edger when one hand was caught between a running roller and a sprocket.

TRANSPORTATION

Injury: Fractures (Two workers)

Core Activity: Log hauling, Integrated forest management

Location: Vancouver Island/Coastal BC

Date of Incident: 2023-Jul

A crew cab and an empty off-highway log transporter (fat truck) collided head on while travelling on a resource road. The driver of the log transporter was not injured. The two workers in the crew cab were both injured.

Injury: Injuries to leg

Core Activity: Log towing

Location: BC

Date of Incident: 2023-Jun

As a young worker was securing a log tow to an anchoring buoy, they slipped and fell into the water. One of their legs was caught between the boom stick and the bundle of logs being pushed by the tug.

Injury: Multiple fractures

Core Activity: Log hauling / Integrated forest management

Location: Vancouver Island/Coastal BC

Date of Incident: 2023-Jun

A log transporter was dumping a load of logs at a dryland sort yard. When the stakes were tripped, the rear stake on the trailer did not release. A worker at the sort yard tried to release the stake. When they pulled the securing pin on the trailer, the load shifted, pinning the worker between loader fork and the trailer wheel.

Injury: Fatal (3 non-workers); Undetermined injuries (1 worker, 2 non-workers)

Core Activity: Log hauling

Location: Interior BC

Date of Incident: 2023-Jun

A logging truck was travelling on a highway when it experienced a mechanical failure. It crossed the centre line and collided with an oncoming passenger vehicle. Another passenger vehicle went into a ditch when it swerved to avoid the collision.

FORESTRY GENERAL

Injury: Fatal (1 worker); Burns (2 workers)

Core Activity: Wildfire suppression

Location: Interior BC

Date of Incident: 2023-Jul

A firefighter (young worker) was struck and fatally injured by a burning tree that fell unexpectedly during initial attack operations for a small spot-fire caused by lightning. Two other workers sustained burns in their efforts to free the worker from beneath the tree.

Injury: Undetermined

Core Activity: Wildfire suppression

Location: Northern BC

Date of Incident: 2023-May

A new worker was participating in their employer's fitness training session, a 6-kilometre morning run. During the run, the worker collapsed. The worker was transported to hospital by ambulance.

Injury: Smoke inhalation (2 workers)

Core Activity: Wildfire suppression

Location: Interior BC

Date of Incident: 2023-Apr

A crew of 16 forest firefighters was working to suppress a grass fire in a rural area when a number of structures became involved and consumed by the fire. During the fire, propane tanks were observed to have exploded and workers were exposed to smoke from the burning structure and surrounding debris. Two workers (both young workers) subsequently reported to first aid and were transported to medical aid. 🚑



BASE Auditor Virtual Meetings

SAFE Companies will be conducting BASE auditor virtual meetings for internal auditors, external auditors, student auditors and staff to discuss SAFE and COR updates and answer your questions.

For those unable to attend the live sessions, BCFSC will record the sessions and post them on BCFSC's Learning Centre. Participants who attend the live sessions or enroll for the recorded sessions after they are posted, will receive a two hour credit towards auditor refresher training.

Sessions:

- Tuesday, September 12, 1:00pm – 3:00pm
- Thursday, September 14, 9:00am – 11:00am
- Thursday, September 14, 6:30pm – 8:30pm

Contact SAFE Companies via email at safeco@bcforestsafe.org safe with further questions or to submit advance questions for the sessions. 🌲

OHS Magazine Spotlights SAFE Certified Company Co-owner, Sig Kemmler

Sig Kemmler, 2011 recipient of BCFSC's Cary White Memorial Lifetime Achievement Leadership in Safety Award and managing partner of Integrated Operations Group Inc was recently featured in the Summer 2023 Edition of OHS Magazine.

Sig has an outstanding reputation as a forestry safety professional with decades of experience as the ground-based logging manager and faller and camp supervisor for Integrated Operations Group Inc. The company is based out of Duncan and Campbell River on Vancouver Island and have been SAFE and SEBASE Certified since 2015.

BCFSC SAFE Companies Safety Advisor, Terry Chow, visited their operation and float camp in Effingham Inlet this past May. Sid toured Terry through one of their cut blocks and stated Sid's crew and operations have a very good safety program and noted the OHS Magazine article is a good example of Sid's commitment to his crew's and operation's safety.

The OHS Magazine cover story "Heavy Logging, light risks: Keeping workers safe in high-risk environments means

treating them like humans" written by Senior Editor, Todd Humber, features a one-on-one interview with Sig Kemmler and provides his first-hand perspective on the importance of communication in high-risk forestry operations when various activities are occurring at the same time, also known as, Phase Congestion. It also speaks to managing human reactions during a

condition of upset' and provides some very real examples of simple behaviors and possible scenarios that could have potential for disaster when people aren't thinking clearly or become complacent.

Read Sid's article and many other valuable features in the Summer 2023 issue of OHS Magazine. 🌲





The spring session of New Faller Training took place in Elk Bay from April 27 – May 29, 2023. Thank you to Ironside Contracting Ltd., specifically Gord Thompson (owner), Matt Nelson (site foreman) and the entire logging crew for supplying the timber and their ongoing support of the program. 🌲

Documentation Updates on BCFSC Website

Please visit the [BCFSC website to review all updated documentation](#) and ensure you have the most up-to-date forms. 📄

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Seeing the Forest for the Trees

By David Adshead, BCFSC
Falling Safety Advisor

Beautiful British Columbia is world renowned for its incredible wilderness landscape, mountains, rivers, lakes and forests. It's a great place to live, work and play.

Our forests are regionally diverse - from coastal and interior rainforests, dry belt pine and fir forest and higher elevation spruce and balsam, old growth and new growth - they all have one thing in common ... trees!

Whether working or playing, it is essential to be aware of a forest's potential hazards and what can put you at risk, specifically as it relates to the trees.

What makes a tree hazardous?

A dangerous tree is any tree (regardless of its size) that is hazardous to people or facilities because of:

- It's location or "lean"
- Physical damage
- Overhead hazards
- Deterioration of limbs, stems or root system
- A combination of the above






Truth be told, any tree has potential to be a hazard in certain circumstances. Weather, the environment and the condition of a tree can all render it a danger tree.

Answering the age-old question "If a tree falls in the forest, does anyone hear?" ... only if someone is near enough to hear. The same applies to the danger it may pose. If no one is near it, then even if it falls, it isn't a danger to anyone. Spend enough time in a forest and you will witness a tree fall over on its own. It's a natural part of the forest's cycle.

How do you determine if a tree is a hazard?

Use the **Recognize**, **Evaluate**, and **Control** method, commonly referred to as **REC**.

	Recognize the Hazard	From a distance, observe as much of the stand of trees as possible, focusing on any individual trees that show signs of defect. The more time spent exposed to a potential hazard tree, a more detailed assessment is required. Remember, not all dead trees are danger trees and not all green trees are safe trees.
	Evaluate the Situation/ Hazard	Perform a 360° assessment of the tree, looking for lean and defects to determine if it is a danger. Consider the effect weather and environment have on the tree and the time spent within its danger zone. Moving through the forest means very little time spent exposed to a danger tree, however the risk would go up if the wind was blowing or if a person remained stationary for a longer period in the danger zone. Are you walking by it or pitching your tent under it?
	Control the Hazard	Determine the best ways to reduce the risk the danger trees pose. The best solution is elimination - either eliminate the hazards around you or remove yourself from around the hazards. A qualified person could fall the tree, use alternate falling methods, or create a defined no-work zone around the tree that keeps people out of the danger zone of the hazard.

Continued on page 12...

For recreational users enjoying the forest, be situationally aware by keeping your head up and looking around. Pay attention to weather conditions and how they may affect the area. Hiking or walking is considered a low-risk activity when the time spent exposed to any single danger tree is minimal but the risk increases with temperature changes, rain, wind and snow, or if the stand has a high number of danger trees due to root rot, bug kill or recent fire damage.

Always keep in mind the risk goes up with extended exposure so when you stop in a forested area, take a moment to look around and spot any trees that can strike you if they fall over. Walk around them and look for defects or signs of weakness. If you identify any danger trees, relocate to a different area so you are no longer in the strike zone - at minimum 1.5 tree lengths away from the potential hazard.

In my humble opinion, working in the forest is arguably the best! Fresh air, incredible sights, sounds and ... trees! Before forestry work begins, the Worker's Compensation Act and Occupational Health & Safety Regulation require that a qualified person perform a site hazard assessment. The **REC** process should be applied to any identified hazards and information communicated to all workers prior to work commencing. In a forest environment, this includes a tree assessment to determine if any trees affecting the work area are danger trees.

Appropriate controls must be applied to reduce the risk danger trees pose to workers and, where feasible, the danger tree must be felled. Fallers need to have an appropriate plan that prioritizes the removal of an identified danger tree into an open area as soon as it is safe to do so. To overcome a falling difficulty, the plan can include using Qualified Assistance. If the tree is unsafe to fall, then alternate falling methods may be used.

What if the danger tree can't be felled?

There may be several reasons a danger tree cannot be felled. One of the most important, is not having a qualified person available to fall the tree. A faller may assess the tree and determine whether an adequate opening is present, if the tree is controllable, or if there is an appropriate escape route. If any of these are questionable then the tree can be deemed unsafe to fall. In these instances, the only course of action is to create a defined *no-work zone* around the danger tree to keep workers out of the danger zone of the tree. A *no-work zone* has to be physically marked, typically with yellow *no-work zone* ribbon to mark the danger zone boundary. The size and shape of the *no-work zone* depends on the size and lean of the hazard, the terrain the hazard is located on, weather conditions and the surrounding timber. The hazard and *no-work zone* need to be documented, marked on the map and shared with any workers who may be affected by the danger tree hazard.



Who can assess trees and decide if they are safe or dangerous?

The Wildlife Danger Tree Assessor course (WDTAC) provides valuable instruction on assessing dangerous trees and evaluating wildlife habitat value in forestry, (non-urban) parks and wildland fire situations. The course is recognized as the current "standard of care" (*the best available and accepted standards and practices*) in BC by the Ministry of Forests, Ministry of Environment and WorkSafeBC, this includes three modules:

1. Parks and Recreation Sites
2. Wildland Fire Safety
3. Forest Activities (e.g., harvesting, silviculture, resource roads, oil & gas)

BC forests are a vital resource and provide amazing benefits to us all. From providing renewable fibre, climate health, wildlife ecologies and a place for us to work and play, it is essential for all of us to see the forest for the trees as every tree should be appreciated and respected for what it is and the story it has to tell. If you're in the forest, look for the story, as it may just save your life.

Additional resources:

[Introduction to Dangerous Trees on Forestry Worksites Training](#)

[Dangerous Tree Blasting for Certified Fallers](#)

[Wildlife Danger Tree Assessor Course](#) 



Phase Two of the Log Load Securement Project Completed

The motion of throwing and securing log load wrappers can cause significant stress on the shoulders of log truck drivers and overexertion-related musculoskeletal injuries are quite common. Shoulder injuries can have a significant impact on drivers including absence from work, increased financial costs and possible disability. **Sections 4.46 to 4.53 of BC's Occupational Health and Safety Regulations** outlines the requirements for taking steps to prevent musculoskeletal injuries in the workplace. FPIInnovations, in collaboration with the Load Securement Working Group (a subcommittee of the Log Truck Technical Advisory Committee), conducted an informational review (Shetty 2021) and surveyed employers to get ideas on how to reduce or eliminate the risk of injury associated with log load securement. These activities led to the identification of both simple and more complex solutions to be investigated in phase two of the log load securement project in order to determine their potential for reducing or eliminating injuries related to throwing wrappers while meeting operational requirements of log hauling operations in BC.

The objectives of the project were:

- To evaluate alternative load securement tools and practices to quantify benefits related to safety.
- To identify operational considerations, procedures, and costs, and
- To develop key information and resources related to operational implementation.

The tools and methods evaluated included:

- Improved/alternative throwing methods
- Light weight wrappers
- Tiedowns
- Throw assist tools
- Elevated Platforms, and
- Loader Assist Tools



Traditional log wrapper throws produce a high risk of MSI and were used as a baseline for the study. The top six alternative methods and tools were ranked based on Movement Risk Score reduction and ease of use.

Ranking of alternative methods & tools

Rank	Tools	MRS reduction (Compared to baseline)	Ease of use
1	Platform underhand throw	71-76%	Excellent
2	JB Slinger	67%	Excellent
3	Jo's easy wrap	76%	Good
4	RotatorSaver	57 - 69%	Good
5	Improved throwing method	50%	Excellent
6	Light weight wrappers	36-67%	Good

The results of the log load securement study revealed a number of alternative tools and methods when compared to the traditional load securement methods that can be used to help lower MSI risks specifically for throwing wrappers. Read more about the results of the Log Load Securement Project report, by visiting the [FPIInnovations website](#). 🌲



Making Safety Part of Good Community Relationships

One of the best features of BC woodlots and community forest areas is their ability to give the public opportunities to see and interact with local small-scale forest management. Indeed, the stated purposes of most such tenures include contributing to the achievement of a range of objectives, values and priorities held by the community, and flowing to the people who live there.

What that looks like *on-the-ground* depends on the tenure, the licence holder and the community. The list can be lengthy: firewood cutting, mountain biking, snowmobiling, cross-country skiing, access to fishing, hunting and gathering opportunities, and more. Most often, those activities occur right on the licence area. But sometimes, building and maintaining good relationships with neighbours includes activities that occur outside the licence area.

In all cases, safety is a top priority that licence holders should keep in mind. When those activities occur on the tenure area, the licence holder has, at a minimum, safety accountabilities as the site owner. Even when legal duties are ambiguous, upholding community interests includes the social responsibility to do what you can to minimize the risk of anyone getting hurt.

Consider firewood cutting. Given the number of firewood cutters you see on your licence area and the wide variety of *skills* and approaches they have, you might be thinking that it is only a matter of time before something bad happens. It's probably impossible to stop firewood cutters from going into your tenure area, so that's not a viable way of preventing those incidents. You probably don't want to try to "police" them, partially because doing so incurs other legal duties. But the due diligence voice in your head still tells you that there's something you can do to reduce the likelihood of anyone getting hurt.

Maybe you can implement a *permit* process that obliges the holder to have proper gear and training. Or maybe in the long run, it's cheaper, easier and safer to just buck up a bunch of firewood and deliver it to a central location. That way, you are the only one handling a chain saw or processor, you'll save road maintenance dollars and reduce fire risks. Plus, your house log deck remains intact.

Perhaps you want to give back to your community by helping a local teen gain exposure to career opportunities in forestry. Whether it's building trails, planting seedlings or running a piece of equipment, even if they are not your employee, you don't want that teen to be hurt before they start their career. So, you take the time to explain and show them how it's done - properly. You tell them about hazards they might encounter, and how to avoid or overcome them. When you think they're ready, you have them give it a try. Before you turn them loose, both of you are confident they can do the job without risk of incident. And even though you might not technically be their *supervisor* you stick around and watch them, just in case.

Whether its legally hard-wired safety responsibilities, a matter of due diligence or just your own desire to make sure none of your neighbours suffers an injury, building and maintaining good community relationships includes proactively thinking about what could possibly go wrong, considering the spectrum of ways to reduce risks and choosing actions that lead to safe outcomes.

Additional resources

[Know Your Responsibilities - Owner](#)

[Know Your Responsibilities - Board of Directors](#)

[Know Your Responsibilities - Summary](#) 🌲



Electronic Logging Devices Are Now in Effect

BC's regulations on electronic logging devices (ELDs) for commercial vehicle operators kicked in August 1, 2023.

In February 2023, BC announced that ELDs would be a regulated safety tool to help increase safety and reduce the risks associated with driver fatigue. BC carriers were given six months to install the devices throughout their fleets and complete driver and dispatcher training.

The provincial shift followed federal ELD regulations, which Transport Canada established for the inter-provincial trucking sector in 2021. Enforcement of those regulations began in January 2023.

ELDs automatically track drivers' time behind the wheel such as driving time, rest periods, and duty status and will replace the manual recording process. They will help reduce the likelihood of driving while tired and help ensure drivers comply with the allowable hours of service (HOS) and regulated daily driving time. ELDs also improve driver hour management and help the trucking industry by reducing paperwork and associated costs.

Some of the benefits of ELD's include:

- **Enhanced Accuracy:** ELDs provide precise and reliable data, eliminating errors and inaccuracies commonly associated with paper logbooks. This promotes transparency and eliminates potential violations or penalties resulting from faulty record-keeping.
- **Automated Compliance:** ELDs streamline the recording and tracking of drivers' HOS, simplifying compliance with federal and



provincial regulations. This reduces administrative burdens and minimizes the likelihood of human errors.

- **Improved Efficiency:** ELDs offer various features that simplify fleet management processes. They can track vehicle location, monitor engine diagnostics, and facilitate real-time communication between drivers and dispatchers. These capabilities optimize routing, improve operational efficiency, and enhance customer service.
- **Safety Benefits:** By accurately monitoring drivers' HOS, ELDs contribute to the prevention of fatigue-related accidents. They ensure that drivers obtain sufficient rest and comply with regulations designed to combat drowsy driving.

Requirements for Compliance:

To adhere to the BC provincial ELD mandate, ELDs must be certified and listed on the CVSE's approved devices list. Carriers must verify their ELD's compliance with the necessary technical specifications. Visit Transport Canada's website for a list of [approved ELD devices](#). 🌐



DUST SAFETY SCIENCE

Dust Safety Science, Episode 230:
Part 1 | Building a Culture of Safety with
Bill Laturus: Lessons for Companies

In this episode of the Dust Safety Science podcast, Bill Laturus, BCFSC's Senior Safety Advisor, Manufacturing Safety, talks about building a culture of safety. Episode 230 is Part 1 of a two-part series that includes a discussion about how companies and end-users at the operations level can define a culture of safety by "having workers who are

actively involved in doing the right thing at the right time, without needing explicit instructions."

Dust Safety Science, Episode 230:
Part 2 | Building a Culture of Safety
with Bill Laturus: Lessons for Industry
Associations

The second episode in the two-part series focusses on Lessons for Industry Associations. In this discussion, Bill explores the significance of safety culture within associations and industry

support groups and the evolution of safety culture in British Columbia. He also provides insights on initiating the process of cultivating safety culture within a company or industry and examines the collaborative approach required to effectively engage with regulators and other stakeholders.

To listen to more Dust Safety Science podcast episodes or to subscribe to the weekly Combustible Dust E-Newsletter, visit the Dust Safety Science website. 🎧

WorkSafeBC – Proposed Amendments to OHS Regulation Part 6, Substance Specific Requirements | Combustible Dusts

The proposed amendments to the OHS Regulation Part 6, Substance Specific Requirements relating to Combustible Dusts will include the requirement for a 'qualified person' to be consulted in many parts of the new regulation activities.

The BC Forest Products Manufacturing industry including the Manufacturing Advisory Group (MAG) and Wood Pellets Association of Canada provided valuable feedback to the proposed Combustible Dust Regulations during the public consultation period which

ended June 22, 2023. The regulation review and revisions for Combustible Dust was a significant undertaking by WorkSafeBC. After many years of review and revisions, the final regulation went from one (1) sentence in OHSR 5.81 to 33 sections in OHSRs 6.133 to 6.167.

Forest Products Manufacturing operations are encouraged to become familiar with the proposed regulations and start making plans to address any gaps they may identify. BCFSC will continue to update and provide

industry with additional resources to assist operations with the proposed regulations. [Review the consultation document on the proposed OHS amendments by visiting the WorkSafeBC website.](#)

For questions about the new OHS Regulations for Combustible Dust, contact Bill Laturus, BCFSC Senior Safety Advisor, Manufacturing Safety at Blaturus@bcforestsafe.org or call 778-268-0653. 📞

Steven Mueller Takes on a New Role with WorkSafeBC

BCFSC would like to congratulate Steven Mueller on his new position as Manager, Prevention Field Services (Prince George region) with WorkSafeBC.

Steve is a Canadian Registered Safety Professional (CRSP®) and worked at the BCFSC from 2006 until 2010 in various leadership roles. Early in the BCFSCs history, Steve was interim Director of SAFE Companies and was instrumental in the initial development of the SAFE Companies audit tools and audit process. He then took on the role of Director, Forest Worker Development and oversaw the development and management of many pivotal forest safety courses including:

- Individual Owner Operator
- Small Employer
- BASE Internal/External Auditor
- Basic Incident Investigation
- Forest Supervisor
- Falling Supervisor
- Basic Chainsaw Operator
- New Faller Training

When Steve left BCFSC in 2010 to start his own audit company, he continued working with BCFSC as a contracted training course instructor. His passion for safety training and his advocacy and knowledge made him a popular instructor who generated a lot of positive feedback.

In 2015, Steve started working for Pinnacle Renewable Energy and was part of their bold solution for safety culture change. Steve witnessed first-hand the beneficial results of developing a collaborative working relationship between WorkSafeBC and industry. As a result of this partnership, Pinnacle saw a dramatic improvement in safety performance, crew morale, and operations productivity. Pinnacle leadership and frontline operations staff fully embraced “owning safety” as a core value and the foundation for an industry-leading and award-winning safety culture.

Steve is now the Manager, Prevention Field Services at WorkSafeBC and continues to make a difference through collaborative relationships between WorkSafeBC and industry. 🌱

WPAC Interactive Online Operator Safety Training

Plant Operators supervise the operation of an industrial plant and play a key role in ensuring the safety of plant workers. Plant operations like pellet manufacturing plants, production plants, processing plants, power plants, gas plants, oil fields, smelters, mines, mills, refineries and other industrial facilities including those that handle combustible dust such as wood pellets, chemical products and food and beverage processing all fall under the umbrella of Plant Operations.

Part of a Plant Operator's duties are to:

- Know the risks in their operations and how to control them.
- Understand how human factors can affect safety.
- Have awareness of current legislation and regulations and standards.

- Understand what constitutes an upset condition.
- Understand how to incorporate process safety management.
- Understand and identify combustible dust and combustible gas hazards in the operation.

A well-trained Plant Operator can make all the difference to the success of an organization. The Wood Pellet Association of Canada is now offering FREE Operator Safety Training resources to help train Plant Operators in safe operation strategies.

The training was designed to ensure the safe operation of pellet manufacturing facilities. The content was developed with senior plant operators and subject matter experts from BC and Nova Scotia, focussing

on combustible dust, human factors, hazard analysis, process safety management, upset conditions and plant operation. The collaboration resulted in a state-of-the art online learning platform that includes videos, industry resources and built-in knowledge assessments for plant operators and supervisors and was developed with support from the BC Forest Safety Council and WPAC with funding provided by WorkSafeBC.

Although the platform was designed for pellet plants, these free training modules are available to the broader wood products sector and other industries that handle combustible dust, such as chemical products and food and beverage processing.

To start your FREE online training, visit www.wpaclearning.com and get started right away.

Additional Resources:

[Online Learning Platform](#)

[Factsheet](#) 🌱

WorkSafeBC Site Visit Builds on Long-History of Collaboration

By: Gordon Murray, Executive Director, Wood Pellet Association of Canada

The Wood Pellet Association of Canada (WPAC) and Drax Group, a WPAC member, recently toured Todd McDonald, WorkSafeBC's new Head of Prevention Services around Drax's pellet plant in Williams Lake.

WorkSafeBC is committed to fostering the improvement of occupational health and safety in workplaces and communities. One way they do this, is by partnering with employers and workers in BC. Todd's recent visit on July 25th is a great example of this commitment and was an excellent opportunity for the pellet sector to highlight our commitment to safety, continuous improvement and strong partnerships.

Todd took on the role of Head of Prevention Services in December 2022. He has been a member of WorkSafeBC's executive team for many years, most recently as Chief Planning Officer. This was Todd's first visit to a pellet plant which was led by Plant Manager, Ian Tencarre. Ian escorted Todd and his colleagues Steve Mueller, Manager, Prevention Field Services and Mike Tasker, Occupational Safety Officer around the plant showing them some of the major achievements the pellet sector has implemented in safety improvement initiatives.

WPAC and its members have a long history of working together to make the industry safer. This collaboration has led to identifying and exploring new ways to improve safety and implementing those learnings along the way. WorkSafeBC has provided funding, input and guidance

over the years to WPAC, the safety committee and to the individual plants resulting in positive changes to WPAC's safety culture — something Mike said he has observed over the past nine years.

I was impressed by Todd's interest in ensuring an optimum balance between experienced and new workers, and that new workers would be adequately trained and mentored. The tour was also an opportunity for Drax to demonstrate their commitment to implementing process safety and to ensuring a highly trained stable and experienced team.

During the tour, we reflected on some of our major achievements such as critical control management implementation, inherently safer design research project and the great work of our belt dryer safety working group. We also brought Todd and his team up-to-speed on our current initiatives such as the operator training program including the e-learning platform, process safety management implementation and combustible gas bowtie report and roll-out.

We value our relationship with WorkSafeBC and their support of our safety initiatives. While we keep them up to date via meetings and communications, there's no replacement for boots-on-the-ground opportunities at the plants to meet the people and see safety in action. A huge thanks to Liezl van Wyk, VP Northern Operations at Drax and her team for their support and participation. 🙌



WPAC and Drax recently had the pleasure of touring Todd McDonald, WorkSafeBC's new Head of Prevention Services and his team around Drax's Williams Lake pellet plant.

Left to right: Ian Tencarre, Plant Manager, Drax; Jason Stockall, HSE Director Northern Operations Drax; Todd McDonald, Head of Prevention, WorkSafeBC; Fahimeh Yazdan Panah, Director of Research and Technical Development, WPAC; Gordon Murray, Executive Director, WPAC; Mike Tasker, Occupational Safety Officer, WorkSafeBC; Steve Mueller, Manager, Prevention Field Services, WorkSafeBC; Liezl van Wyk, VP Northern Operations, Drax; David Brideau, Mobile Equipment Manager, Drax. Missing from photo: Tony Kim, GM Northern Operations, Drax, who took the photo.



Join WPAC in Ottawa for their Annual AGM & Conference

The Wood Pellet Association of Canada Conference and AGM is Canada's largest gathering of the Canadian wood pellet industry.

Each year, the event attracts hundreds of wood pellet, biomass and bioenergy professionals from across the country, as well the U.S., Europe and Asia, to discuss the issues that are having an impact on the industry here in Canada.

Join the Wood Pellet Association of Canada (WPAC) at their annual AGM and conference in Ottawa from September 19 - 20, 2023. This year's conference will highlight how biomass has moved from niche to mainstream: from Canada to Europe, to Asia, India and beyond. They'll examine trends and technology and review the latest safety procedures and resources. Experts will share the limitless opportunities for wood pellets through innovation and policy change and will explore the next generation of biofuels.

Who should attend?

Anyone involved, or interested in, the Canadian wood pellet industry, including current biomass industry executives, educators, researchers, government officials, logistics personnel and equipment manufacturers.

The WPAC Conference and AGM is your opportunity to learn about the most important issues from industry experts around the globe. For more information and to register, [visit the WPAC Conference website](#).

Taking Safety to New Levels: The Next 25 Years

Register for this full-day pre-conference safety workshop on September 18th at the National Arts Centre in Ottawa to discuss and explore ways to ensure that safety is keeping up with the pace of industry. The workshop will spotlight the enhanced adoption of process safety management (PSM), with a focus on two critical drivers: inherently safer design (ISD) and safety culture.

In this session, participants will identify key issues, trends and opportunities to strengthen safety across the wood pellet sector. Your insight will provide an important foundation for the sector's safety initiatives both short-term and for years to come.

The session will be facilitated by Dr. Paul Amyotte, P.Eng., Distinguished Research Professor and Professor of Chemical Engineering at Dalhousie University and supported by safety experts and leaders across the Canadian pellet sector. Participants will receive a certificate of completion for continuing education.

Registration fee: \$150 + tax and service charge 🇨🇦

New Report: Managing the Risk of Combustible Gas in Drum Dryers

By: Gordon Murray, WPAC and Bill Laturus, BCFSC

The Wood Pellet Association of Canada (WPAC) and the BC Forest Safety Council (BCFSC) have released a new report that summarizes the key actions plant operators can take to manage the risk of combustible gas in drum dryers.

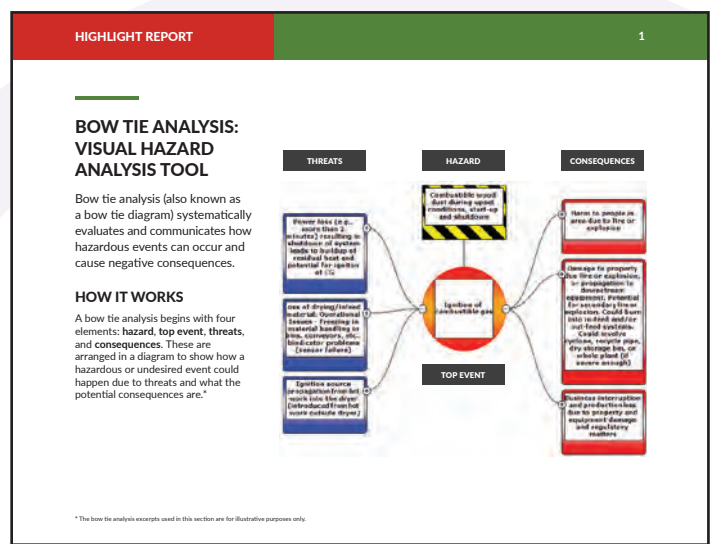
In wood pellet production, there is the potential for the formation and ignition of combustible gas, primarily in dryers and burners. Combustible gas, also known as synthesis gas or syngas, is a mixture of flammable hydrocarbons and volatiles (such as methane), carbon monoxide and hydrogen. Combustible gas is formed when biomass is heated in low-oxygen environments. It can accumulate in enclosed areas, like dryers, ducts, cyclones and piping. Ignition of combustible gas can lead to explosions that cause injuries, facility damage and production downtime.

The report, Combustible Gas Risk Reduction in Wood Pellet Production Drum Dryers, is a result of a bow tie analysis workshop conducted in collaboration with staff at Premium Pellet in Vanderhoof, BC and Kayleigh Rayner Brown, MASc, P.Eng. (Obex Risk Ltd.). Bow tie analysis is a hazard analysis tool that wood pellets and medium-density fibreboard manufacturers have previously used to evaluate combustible dust hazards.


Workshop participants emphasized the critical need for workers to better understand the hazardous scenarios that can arise during upset conditions, start-up, or shutdown, normal operation, and confined space entry activities. It's also important that critical safeguards, including emergency shutdown procedures, operator training, and confined space entry programs are in place and followed.

The report, available to pellet producers across Canada, reinforces the importance of sharing key learnings among the broader sector. It includes important information including:

- The highest-risk operations and activities,
- Conditions that present the risk of combustible gas ignition,
- Measures to ensure the reliability of critical preventative barriers,
- Actions for operations, and
- Bow tie analysis for each hazardous scenario.



Funding for the workshop and the report was provided by the Wood Pellet Association of Canada and the BC Forest Safety Council.

Learn more about combustible gas safety by accessing **WPAC's combustible gas resources** and register for WPAC's new Operator Training program which includes a learning module on combustible dust and gas. Register for this free program at www.wpaclearning.com. 

Kalesnikoff Lumber Mill Hosts a Tour in Nelson BC for the Manufacturing Advisory Group

The Manufacturing Advisory Group's (MAG) quarterly meetings are an excellent opportunity for MAG members to visit sawmill operations to see industry best practices in action. After each meeting, the group tours the host sawmill to get a first-hand look at how sawmill operations are managing and implementing safety in day-to-day operations and to how sawmill workers are utilizing safety in their daily roles.

This past June, MAG members toured the Kalesnikoff family lumber mill and mass timber plant located near Nelson, BC.

Many on the tour saw Kalesnikoff's value-added mass timber plant for the first time and observed innovative production techniques that highlighted elevated safety solutions and well-maintained plant facilities.

"Meeting in person at different host sawmills MAG members are gaining stronger relationships with one another and sharing safety." David Murray, Head of Corporate Human Resources, Safety, & Environment, Gorman Group

A big thank you to Kalesnikoff for sharing their on-site safety initiatives with the group and providing a behind-the-scenes look at their new mass timber plant. 🌲



BCFSC Manufacturing Advisory Group 2023



Assessment of Workers in Mechanized Harvesting Roles

Forestry companies using mechanized harvesting activities perform a delicate balance synchronizing productive equipment operations while simultaneously maintaining a safe working environment for all workers on site - whether in the cab or on the ground.

Worker assessments are pivotal to a safe and successful forestry operation. Professions such as feller buncher operator, skidder operator, processor operator, hydraulic log loader operator, forwarder operator and hoe chucker operator, as well as supervisors, rely on a solid understanding of the machine's capabilities to be able to recognize potential safety hazards to ensure safe operations.

Assessing skills, knowledge and experience will help identify any existing gaps that workers need to address to perform their work safely and productively to help ensure everyone on site gets home safe at the end of the day. The British Columbia Forest Safety Council (BCFSC) has developed a series of resources for worker assessments. These resources can be used to either enhance a company's existing assessment procedures or help forestry companies build assessment procedures from the ground up and ensure due diligence requirements are met for training and qualifying workers.

Throughout the assessment process, workers and supervisors can collaborate and evaluate a range of real-world on-site scenarios. The following is an example of how worker assessment resources can be used:

1. Supervisors can utilize BCFSC's equipment-specific assessment document to initiate a competency discussion with the worker.
2. Subsequently, supervisors conduct practical assessments by observing the worker's performance across various scenarios on the job site.
3. Supervisors can refer to the assessment document to determine if the worker has the skills, knowledge and experience to perform their duties safely.
4. If additional training is identified, supervisors and workers can work together to devise and implement a plan to upgrade the worker's knowledge and/or skills.

BCFSC also offers FREE online training resources to address any identified gaps in knowledge. BCFSC's [Online Learning Centre](#) provides an

extensive list of courses that include a record of completion to help both supervisors and workers track the progress of the identified gaps. BCFSC also has FREE downloadable resources to choose from for specific mechanized harvesting activities that can assist in on-the-job training and the development of a company's training library.

To learn more, visit BCFSC's [Worker Assessment and Training webpage](#). 🌲



Photo: Chris Cole, RPF, Peng



BCFSC Fall - Winter 2023 Training Schedule

BCFSC offers over 30 FREE [online](#) forest industry safety courses as well as in-person, blended (a hybrid of online and in-person) and requested training across BC.

Take a look at BCFSC's upcoming in-person training and enroll early to save your seat:

Course	2023 Course Dates	Location
Forest Supervisor Communication	September 21	Kamloops
Basic Incident Investigation	September 22	Prince George
Forest Supervisor Leadership and Professionalism	September 22	Kamloops
Falling Supervisor	September 26 - 29	Prince George
Basic Incident Investigation	September 29	Campbell River
Forest Supervisor Due Diligence	October 11 - 12	Vernon
Basic Incident Investigation	October 13	Vernon
Falling Supervisor	October 17 - 20	Nelson
Forest Supervisor Due Diligence	October 18-19	Cranbrook
Basic Incident Investigation	October 20	Cranbrook
Forest Supervisor Communication	October 25	Campbell River
Forest Supervisor Leadership and Professionalism	October 26	Campbell River
Falling Supervisor	October 31 - November 3	Campbell River
Forest Supervisor Due Diligence	November 16 - 17	Vernon
Falling Supervisor	November 21 - 24	Campbell River
Forest Supervisor Communication	November 23	Prince George
Forest Supervisor Leadership and Professionalism	November 24	Prince George
Forest Supervisor Due Diligence	November 30 - December 1	Prince George
Basic Incident Investigation	December 4	Campbell River
Resource Road Driver Program - visit the webpage for more information		
Basic Chainsaw Operator Training - visit the webpage for more information		

Visit the [BCFSC Course Catalogue](#) for more information on course content, enrolment or group training inquiries. 📞



Air Quality and Health: The Impacts of Poor Air Quality

Source: Northern Health

Exposure to air pollutants can have both immediate and long-term effects. Short-term exposure to elevated levels of particulate matter (PM) and ozone can trigger breathing problems, increase the severity and occurrences of asthma attacks, trigger heart attacks and cause eye, nose and throat irritation for those at risk. Children, the elderly, pregnant women and those with pre-existing heart and lung conditions are most at risk from the harmful effects of poor air quality.

Scientists believe that there are no safe levels of PM and ozone and being exposed to air pollution over the long-term (even at relatively low concentrations) can have even more significant and long-lasting health effects. These health effects can include damage to lung tissues and the development of heart and other lung diseases, including chronic bronchitis, emphysema, pneumonia, and lung cancer as well as death. Long-term exposure to air pollutants such as PM2.5 has also been linked to pre-term births, low birth weight babies and acute respiratory infections and middle ear infections in children.

Common questions about air quality:

What are the air pollutants of concern?

The most common air pollutants in are airborne liquid or solid particles, which are collectively referred to as particulate matter (PM). PM is usually classified into two categories: PM10 and PM2.5. PM10 are particles in the air that are less than 10 micrometers in diameter (about 1/7th the size of a human hair). A large portion of these “larger” particles are made up of pieces of pollen, road dust and wind-blown dust.

PM2.5 are particles that are less than 2.5 micrometers in diameter (about 1/25th the size of a human hair). These smaller particles usually originate from industrial processes or the burning of wood, fossil fuels or other material. Due to their smaller size, PM2.5 can be deeply inhaled into the lungs where they can have serious health effects much more so than their larger PM10 counterparts.

Other gaseous air pollutants, such as ground-level ozone, sulphur oxides, nitrogen oxides and carbon monoxide can also contribute to poor air quality and can also have serious health effects.

Where can I find information about air quality in my community?

The Ministry of Environment maintains a number of air quality monitoring stations throughout BC. The data collected at these monitoring locations can be viewed at the BC Air Quality website and is displayed in two formats:

[Monitor-specific current air quality readings](#)

[Air Quality Health Index \(AQHI\)](#)

What are air quality advisories and how are they triggered?

Air quality advisories are issued by the BC Ministry of Environment, in collaboration with health authorities across the province. Air quality advisories are issued when measured air pollution levels are above or close to certain levels which are based on established national or provincial air quality objectives. Air quality meteorologists assess the current air quality levels and forecasted weather conditions combined with their local knowledge of sources and air dispersion to determine if an advisory should be issued.

Air quality advisories try to provide the public information on:

- Which air pollutant has triggered the advisory and what the current air pollution concentrations are as well as how they may change in the future.
- The potential health effects.
- Tips for reducing personal unhealthy exposure to air pollution and ways to reduce negative health impacts.
- Mandatory and voluntary emission reduction actions to be taken. For instance, several communities prohibit street sweeping and/or wood burning during an air quality advisory and may ask industry and the public to take specific volunteer action to reduce their impact.

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Prince George Citizen - Hanna Petersen

What actions can you take to protect yourself from poor air quality?

There are a number of things you can do to protect yourself from the harmful effects of poor air quality. These can range from things that you can do on a day-to-day basis to specific actions you can take during air quality advisories and poor air quality episodes.

You can protect yourself from everyday exposure by:

- Trying to work, live and exercise away from local sources (such as traffic, industrial areas and smoky neighbourhoods) and avoid areas where air pollutants can accumulate. For instance, when considering where to live, work and exercise, try to choose a location more than 150 metres away from major roads and truck routes and try to avoid areas such as valley bottoms and “bowl” areas where pollutants can get trapped
- Exercising at times during the day when air pollutants tend to be lower. For instance, traffic related particulate matter emissions are usually higher during rush hour, particle matter resulting from wood smoke and industry is usually highest in the evening and at night and ozone concentrations are usually highest in the late afternoon
- Minimizing commuting times since air pollution concentrations in vehicles can be especially high
- Ensuring that your indoor air quality is clean by properly ventilating cooking spaces, reducing emissions from heating and eliminating tobacco smoke. Installing HEPA filters in forced air furnaces and using stand-alone air cleaners (which do not generate ozone) can also reduce the particulate concentrations inside your home
- Maintaining a healthy lifestyle by eating healthy and exercising regularly can also prevent health effects resulting from both, long and short-term exposure of air pollution

You can protect your health during air quality advisories and poor air quality episodes by:

- Seeking out air-conditioned spaces such as libraries and shopping malls to reduce your exposure from heat and PM.
- Those susceptible to the effects of air pollution (young children, the elderly, pregnant women and those with cardiac and respiratory disease or diabetes) should try limiting strenuous outdoor exercise during poor air quality episodes.
- Staying indoors may also help reduce exposure to outdoor air pollution, however that depends on the pollutant of concern and the air quality within your home. PM can easily get indoors and can have significant indoor sources (such as tobacco smoke, cooking, cleaning material, mold and fireplaces). Staying indoors during a PM air quality advisory may not always be advantageous if PM is elevated in your indoor space. If you do stay indoors during a PM advisory, make sure to close all windows and doors or seek out buildings with large indoor air volumes. Keep in mind, that staying indoors usually works well for ozone pollutants since ozone concentrations are usually lower within homes and outdoor ozone is quickly used up once it enters indoor environments.

What actions can you take to decrease your impact on air quality?

There are a number of actions you can take to make sure that you are not contributing to air pollution in your community.

1. Be fire smart – follow [BC Wildfire Services](#) prevention strategies to decrease human caused wildfire activity.
2. Reduce woodstove emissions:

If you are using an older non-certified wood stove, consider replacing it with a newer EPA certified woodstove which burns more efficiently and emits fewer pollutants into the air.

If you are using a woodstove, consider replacing it with a natural gas or pellet stove which emit fewer particulates.

Learn how to best use your wood stove and burn only dry seasoned wood.

Keep in mind that several community airshed management groups across the province offer Woodstove Exchange Programs (which provide cash-incentives to trade in your old woodstove) and Burn-it-Smart workshops on an intermittent basis.

3. Reduce vehicle emissions:

Choose alternative modes of transportation (such as buses, bikes, walking, carpooling, etc.) and minimize the time you spend in your car whenever possible.

Ensure that your vehicle is regularly maintained and has the optimum tire pressure.

Minimize excessive vehicle idling and encourage others to do the same.

When choosing a vehicle, consider fuel efficiency and ask about tailpipe emissions.

Try to avoid driving on shoulders or gravel patches to reduce the amount of dust you create.

4. Be informed and become a voice:

Support community and airshed management groups by becoming informed on local issues and volunteering your time during special air quality events and initiatives.

Promote a community culture of clean air (such as encouraging eco-driving or cleaner burning among friends and colleagues). Your voice can go a long way in cleaning up your airshed and helping make your community safe from air pollutants.

Air Quality Resources:

[Canadian Lung Association](#)

[The Weather Network: BC Air Quality Reports](#)

[BC Government Air Quality Advisories](#) 



Kid's Corner



Thanks to everyone who entered our June Colouring Contest. Congratulations to **Dawson**, age 5, whose name was picked from our random draw. Dawson wins the DRIVEN Toy Logging Truck and we will be sending a special gift to everyone else just for entering!



For our winter issue, colour the forestry worker or send us a picture of your own artwork to enter to win a DRIVEN Toy Logging Truck. Have your mom or dad, grandma or grandpa or guardian email us a photo of your artwork with your first name and age and we'll put your name into the draw.



How to Enter:

- Colour the picture or send us your own drawing.
- Have an adult take a picture of your artwork and email it with your name, age and your mom/dad's email address to editor@bcforestsafesafe.org
- Submit your entry by 4pm, Wednesday, November 1st, 2023.
- Kids aged 3 – 12 are eligible.
- All entries will be put into a random draw to win the toy logging truck. The winner will be contacted via their parent's email address and the winning entry will be featured in the December 2023 issue of the Forest Safety News. 🌲

ABOUT Forest Safety News

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