FOREST SAFETY

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NEWS





Safety is **good** business

The BC forestry industry has undergone a significant cultural and safety transformation over the past 20 years and as a result, has seen a significant decline in work-related injuries and deaths.

While there is still more work to do, the forest industry has worked diligently in making dynamic and positive changes in safety. Forest sector stakeholders have demonstrated that when we work together, we can

achieve our collective goal of ensuring every forestry worker goes home safe, every day. With each passing year, industry has achieved new milestones in improved safety culture and performance.

The BC Forest Safety Council is proudly celebrating 20 years of service to the forest industry and to mark the occasion, we will be sharing stories and insights throughout 2024 in the upcoming issues of FSN that look back on industry and explore how safety practices have changed over the years.

Then and Now – BCFSC's Look Back on Safety in the Forestry Sector

Twenty years ago, the number of fatalities in the BC forest industry ballooned to 43 causing an outcry for serious changes to be made to save lives. A task force of forest industry leaders was appointed to develop an action plan to eliminate deaths and serious injuries in the BC forest industry. The task force outlined a comprehensive strategy using details from a 2004 report and developed the Forest Safety Accord. This accord incorporated a combination of legislation, education, safety performance and practices and shared responsibility as the roots of the commitment to improve safety in the forestry sector.

With the action plan set in place, the Forest Safety Task Force created the BC Forest Safety Council (BCFSC) to support BC's forest industry as the dedicated Health and Safety Association for forest harvesting. In 2014 and 2015, the Wood Pellet and Sawmill sectors made the decision to join BCFSC which provided additional opportunities to improve worker health and safety in BC's forest products manufacturing sector.

Since 2004, BCFSC has worked alongside dedicated industry advisory groups and subject matter experts to determine the cause of injuries and work-related deaths using injury statistics, incident investigations and industry feedback. Shared insights and collaboration between industry peers and the BCFSC have been the driving force in the crucial work we have all done to develop safety best practices, training and safety management systems that forestry companies and workers can implement in their daily routines to ensure they stay safe on the job.

There were four areas initially addressed by the BCFSC based on the task force's recommendations:

Develop Uniform Training and Certification Standards

All forestry workers must be skilled and competent professionals. Therefore, the Task Force recommends that uniform training and certification standards be developed that are recognized by all employers across the sector and

Welcome to the Spring 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@bcforestsafe.org or call 1-877-741-1060.

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include measures to support ongoing competence. It is also recommended that Faller and Bucker Certification be implemented as soon as possible and be followed by the certification of other appropriate forestry industry occupations. The Task Force recommends this process begin with the certification of supervisors and that all supervisors be recognized by the industry as skilled and experienced professionals.

The Outcome: New Faller Training and Certification, SAFE Companies Program, Professional Industry Driver Training Program, Forest Worker Essentials Program, Supervisor Training, Worker Assessment and Competency Training, Free Online Training, In-class and In-field training, Blended courses.

2. Make Health and Wellness Programs Available

The Task Force recommends that on-going health and wellness and



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support programs be more broadly available and recognized within the sector and not just within the larger companies. Such programs must effectively address current and emerging physical and mental conditioning issues (including fatigue, dehydration, etc.) that adversely affect health and safety. Support programs must be available to assist workers to deal with personal issues that can affect safety. Additionally, substance abuse must be recognized as an issue and mechanisms put in place to prevent substance abuse on the job. Employers and supervisors must have the tools to effectively address substance abuse issues when they are revealed.

The Outcome: Fatigue Management Research and Best Practices, Mental Health and Substance Abuse Resources, Communicable Disease Prevention Resources, Fit to Work Program, Silviculture Fit to Plant Program and Health Awareness Resources

3. Enhance Information Dissemination

The Task Force supports the recommendation of the IWA Task Force on BC Coastal Logging Occupational Health and Safety that "when a fatality occurs in the forest industry, public awareness be heightened by putting forward relevant, meaningful, constructive and considerate information to the media in a timely manner."

The Outcome: Safety Alerts, Fatality Alerts, Crew Talks, Industry Alerts (voluntary anonymous shared incident alerts), Forest Safety Newsletter, accessible website for both desktop and mobile devices and the FIRS App. (in development).

4. Provide Better Information

The Task Force recommends that industry and government agencies collaborate to ensure more timely distribution of information on investigations, deaths and serious injuries in the forest sector (without compromising their legal mandates)

The Outcome: Collaboration and information shares with WorkSafeBC and the BC Coroner's Office, the development of several industry advisory committees, free safety conferences and free safety resource materials.

These recommendations were just the tip of the iceberg. Despite the progress we've made, challenges persist, and constant vigilance is required when it comes to forestry safety.

With our sights set on the next twenty years, we must be willing to continuously adapt and stay ahead of emerging risks to ensure that safety measures keep pace. With our collaborative approach and the dedicated and unwavering commitment of industry leadership, industry advisory groups, BCFSC staff, and trainers, we will continue to drive safety forward in the forestry sector and ensure the well-being of its workers in the years to come. We have come a long way, but there's always more work to be done to see every forestry worker goes home safe - every day.

BCFSC Staff Stories

BCFSC's staff are committed to serving our members day in and day out. Some of the staff have been with BCFSC since



day one and we've invited them to share their stories.

Allison Thompson, Training Development Manager

I feel privileged to have worked alongside many colleagues that have been passionate about workplace safety. Here are some initiatives that stand out to me in my 16 years of working at BCFSC.

Not long after Ted Gramlich's death, the Coroners Service conducted a Death Review Panel for three 2008 Workplace Incidents involving Tree Fallers. The Coroner's report resulted in many recommendations coming to our organization and other agencies. I was tasked with supporting the

implementation of the recommendations that year! Efforts included more emphasis on elements of falling supervision and workload, focus on faller competency, human factors and much more. Looking back, I'm proud to say that some of this work paved the path for future improvements that led to what we offer today.

Sadly, years later our organization participated in Charles Englebert's Inquest. Among other things, I took away that there was a still a significant need for improved supervision with a particular gap in emergency response plans. We tried to implement what we could, and our work continued.

At some point later, efforts were made to help clarify the roles of BCFSC and WorkSafeBC and lay the foundation for our current Falling Programs.

Transitioning to our Training Team, I was fortunate to be involved with the early days of the competency standard development work and the Forest Worker Essentials Program. As part of the work along with some significant financial contributions from government, we were able to create a vast number of online courses. Countless hours have been put in by a dedicated team of BCFSC staff along with many industry subject matter experts to make this impressive resource available to Industry.

Thinking back over my 16 years, what I can say is it has been a process to get to where we are today. It takes time, and many meetings, to influence change! Our initiatives/projects have shaped our training content development. It's safe to say that we embrace the philosophy of continual improvement. We are always listening to what is needed and trying to develop and enhance programs that meet the needs of industry.

When you read the latest FSN Training History article, you will see that this organization has delivered close to 40,000 instances of training since our inception! It takes a dedicated team to get to those outstanding results and ensure quality training is delivered to our clients.

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Harvesting Safety



What's New

Here is the latest on what we have to offer since December 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 <u>Facebook</u>, <u>Instagram</u>, and LinkedIn.

NEW SAFE Companies Annual Audit

<u>Due Date</u> - SAFE Companies announces the **annual year-end audit date is moving to November 30th**. Visit the <u>SAFE</u> Companies Audit web page for more details.

New Video Release: Emergency Response Plan (ERP) Operator Extraction and Steep Slope Rescue Drill

 This video is the second in a series highlighting the importance of emergency response planning in forestry operations, particularly on steep slopes.

Online Training for Forest Supervisors –

BCFSC has six NEW, free, online Forest Supervisor training courses available for current and future harvesting and silviculture Forest Supervisors.

Video: Successful Return to Work

<u>Strategies</u> – WorkSafeBC presents successful return to work strategies addressing collaboration between employers and employees and early rehabilitation.

Operator Safety Training Fact Sheet -

The Wood Pellets Association of Canada (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.

<u>Training Calendar</u> – Our 2024 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.

<u>Safety Alerts</u> – 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 Winter Hazards
- <u>Industry Alert</u> Processor Chain Shot Incident
- Manufacturing Weekly Safety Alert
 Click on the link to see the latest
 - Click on the link to see the latest weekly alert

To subscribe to our safety alert emails – Click Here

Upcoming Industry Conferences

2024 Council of Forest Industries (COFI) Convention	Apr. 10 - 12	Vancouver, BC
8th Annual Indigenous Resource	Apr. 24 - 26	Nanaimo, BC
66th Annual Interior Logging (ILA) Conference and AGM	May 9 - 11	Kamloops, BC
2024 Interior Safety Conference	May 9	Kamloops, BC
2024 BC First Nations Forestry Conference	May 29-30	Penticton, BC
2024 Vancouver Island Safety Conference	Oct 26	Nanaimo, BC

Industry News

Get the latest on industry news from:

<u>WorkSafeBC Enews</u> – 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.

<u>Tree Frog Foresty News</u> – daily news with top stories and full news stories on the forest sector in North America and around the world.

Forest Enhancement Society of BC (FESBC) – FESBC shares news and information about BC forestry.

<u>Truck Loggers Association (TLA)</u> – a monthly newsletter and 1/4ly magazine (Truck Logger BC) offering stories from BC provincial forestry perspectives, information and updates.

<u>Interior Logging Association</u> – the ILA insider is a 1/4ly newsletter featuring timber harvesting news, information and updates throughout BC.

Western Forestry Contractors'

<u>Association</u> – The Cache - The Cache is an onlinse space to share wisdom, experience, information, tools and resources generated by the silviculture community.

Industry Links

<u>Shift Into Winter</u> – Winter tires are still required until March 31st, and in some areas even longer. Check DriveBC or <u>Road Safety at Work</u> for information.

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.

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2024 Areas of Focus for the Planned Inspectional Initiatives from WorkSafeBC

WorkSafeBC's Planned Inspectional Initiatives (previously known as Highrisk Strategies and Industry Initiatives) support employers' management of risks by examining and promoting occupational health and safety basics and specific areas of high risk for industries such as forestry.

These initiatives are reviewed annually to make any necessary adjustments and ensure employers and workers continue to focus their efforts on key areas of hazard identification, risk assessment and implementing the appropriate controls specific to on-site activities.

For 2024, many of these initiatives will continue to emphasize <u>risk</u> management basics, in addition to specific risks for a particular industry. They target and refine identified risks based on data analysis, stakeholder engagement and input from advisory groups.

Forestry Planned Inspectional Initiative

For forestry operations, WorkSafeBC has developed specific Forestry Planned Inspectional Initiatives that addresses preventative workplace safety in forestry operations. The intent of the initiatives is to execute impactful inspections focused on the risks that drive the serious injury rate and the time-loss claims rate.

The identified risks are linked to highrisk work activities that typically fall into five areas of operations:

- 1. Manual tree falling
- 2. Log transportation
- 3. Cable yarding
- Mechanized harvesting (primary focus will be on steep slope and tethered/winchassist operations)
- 5. Silviculture

Other operations such as shake block cutting and dry land sorting will also be examined on a regional basis due to the increasing injury rates in these operations.

Visit WorkSafeBC's Forestry Planned Inspectional Initiatives webpage and read more about WorkSafeBC's goals, the primary areas of focus, what you can do to better understand the safety issues and find downloadable resources including Steep Slope Logging, Site Inspections for Manual Falling Operations and Layout Planning for Faller Safety.



Proposed Amendments to Policy on Activity-related Soft Tissue Disorders of the Limbs

WorkSafeBC's Policy, Regulation and Research Department (PRRD) is proposing amendments to policy concerning activity-related soft tissue disorders (ASTDs) of the limbs. The proposed amendments are intended to address two ASTD projects in the PRRD's current workplan:

- ASTDs CPR Recommendations #36–37
- Establishing Work Causation for ASTDs of the Limbs

The proposed amendments clarify policy on the issue of whether an ASTD is due to the nature of the worker's employment and are informed by recommendations from two external reviews:

- Paul Petrie's 2018 compensation policy review (CPR), Restoring the Balance: A Worker-Centred Approach to Workers' Compensation Policy
- Janet Patterson's New Directions: Report of the WCB Review 2019

Feedback can be provided until 4:30pm on Friday, April 26, 2024. Find out more about the <u>proposed amendments</u> and read the discussion paper activity-related soft tissue disorders of the limbs. •



Mental Health Strategy

<u>WorkSafeBC's Mental Health Strategy</u> is a comprehensive plan that focusses on an overall approach to workplace psychological health and safety. The strategy defines the terms used when talking about psychological health and safety and provides the framework that will be followed by WorkSafeBC over the next few years.

Many of the plans outlined in the strategy will be shaped through active engagement with WorkSafeBC stakeholders. Every opportunity will be taken to hear the concerns and needs of workers and employers with an aim to raise awareness, educate and provide resources and tools to help assess and address psychological risks in BC workplaces.

While many factors outside the workplace can affect psychological health and safety, the Mental Health Strategy addresses factors within the control, responsibility or influence of the workplace. There are three key principles identified for employers for building a strong health and safety culture:

- 1. Show leadership commitment.
- 2. Develop supportive managers and supervisors.
- 3. Ensure worker participation.

WorkSafeBC's vision is to lead the way in creating psychologically safe and healthy workplaces with a culture of care and recovery. Regular updates, resources and tools will be made available for employers, managements, supervisors and employees alike. For more information, visit WorkSafeBC's Mental Health Strategies webpage.

Applications Now Being Accepted for the BCFSC Special Research, Development and Opportunity Fund Operating Fund

The BC Forest Safety Council (BCFSC) has developed a special Research, Development and Opportunity Fund (RDO) to support initiatives that address current and emerging safety challenges and opportunities in the forest sector.

The fund is set at \$100,000 with application funding limits not exceeding \$30,000, however, the balance of the account is dependent on current approved projects and the availability of unrestricted reserves at year end.

BCFSC is now accepting applications for 2024 research grants and will prioritize approvals based on the significance of the emerging issue and proposed research projects that demonstrate innovation, impact, feasibility and scalability.

All applications will be reviewed by the CEO who will make the decision on whether to submit the application for further approval. Once a project is approved by the CEO, it will be distributed to the BCFSC Program Committee for consideration.

All requests for project funding will be required to complete the Research, Development and Opportunity Application.

Visit our dedicated <u>RDO webpage</u> to access more information including the submission requirements and application form.

WorkSafeBC Consultations

Current Consultations

Proposed amendments to policy on activity-related soft tissue disorders of the limbs

Consultation Deadline: April 26, 2024

Proposed amendments to policy on average earnings in Chapter 9 of the RS&CM

Consultation Deadline: June 28, 2024

Save the Date for the Interior Safety Conference

Thursday, May 9th, 2024 in Kamloops, BC

The Interior Safety Conference (ISC) is an annual event that brings together professionals from the BC forest sector to discuss safety-related issues and explore ways to improve safety practices in the industry. This year's conference is taking place on Thursday, May 9th, 2024 at the Coast Kamloops Conference Centre, in Kamloops, BC.

The ISC is held in partnership with the Interior Logging Association (ILA)
Conference which is celebrating it's 66th Annual AGM and Convention from May 9 – 11 in Kamloops, BC.

The ISC is FREE for anyone who works in any phase of the forest industry from harvesting to wood products manufacturing. It features forestry-related safety topics with speakers, industry experts, and relevant safety information

EARLY BIRD REGISTRATION: Register before April 1, 2024 and be automatically entered to win a BCFSC Stanfield and Toque. Spaces are limited so register early.

For sponsorship opportunities, contact Tammy Carruthers at tcarruthers@bcforestsafe.org or by phone at 1-877-741-1060.

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Membership with the BC Forest Safety Council (BCFSC)

All companies who pay for their BCFSC contribution through a special assessment collected by WorkSafeBC, can apply to become BCFSC members. By becoming a member, you can nominate Board Members and vote for nominated Board Members to fill vacant roles.

To be eligible for BCFSC membership, companies must belong to one of the following WorkSafeBC Classification Units (CU's):

Rate Group	Classification Unit	Description
DR	703002	Brushing and Weeding or Tree Thinning or Spacing
DR	703003	Cable or Hi-Lead Logging
DR	703004	Dry Land Sort
DR	703005	Forest Fire Fighting
DR	703006	Ground Skidding, Horse Logging, or Log Loading
DR	703008	Integrated Forest Management
DR	703009	Log Booming or Marine Log Salvage
DR	703011	Log Processing
DR	703012	Logging Road Construction or Maintenance
DR	703013	Manual Tree Falling and Bucking
DR	703014	Mechanized Tree Falling
DR	703015	Shake Block Cutting
12	703016	Tree Planting and Cone Picking
DR	703019	Helicopter Logging
17	732044	Log Hauling
IS	714022	Sawmill
09	714019	Pressed Board Manufacture (Wood Pellets and MDF)

Becoming a BCFSC member does not involve any additional effort on your part unless you choose to become more involved.

Board members will be nominated and elected by BCFSC members for two-year terms. Efforts will be made to ensure Board members are qualified to serve on the BCFSC Board of Directors by representing industry sectors and/or having industry skills and experience needed to participate on the Board.

As a BCFSC member in good standing, you will be entitled to attend, speak and vote at the Annual General Meeting, elect the Directors and serve on Board Committees. To apply for membership, email us at: membership@bcforestsafe.org membership@bcforestsafe.org



Spring is Here but Winter Tires are Still Required

Don't be fooled by the arrival of spring. Spring temperatures and weather conditions can change quickly and dry conditions can turn into wet, slick or snowy roads in mere minutes. Until March 31, you still need winter tires or chains on some highways. And in some mountainous areas, you'll need them until April 30.

Look for signs

<u>Designated BC highways requiring winter tires or chains</u> are marked with signs. Although some BC roads don't require winter tires, winter tires are still best for safety when temperatures regularly fall below 7C.



If you drive for work, be sure to include weather conditions in your pre-trip inspection and take precautions to prepare yourself and your vehicle for changing road conditions. Road Safety at Work offers a comprehensive list of Safe Driving tips and resources for drivers as well as employers and supervisors.

Safe Winter Driving

Employer and Supervisor Tools

Commercial Drivers

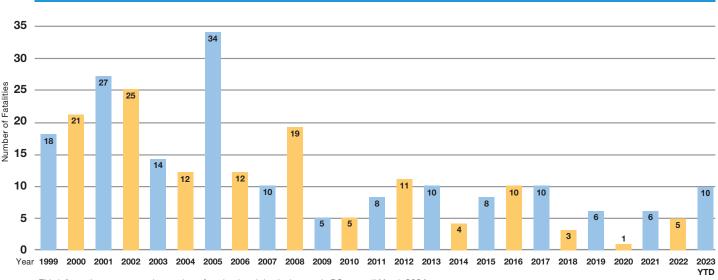
What Workers Need to Know

Shift Into Winter – Winter Driving Safety Alliance



Work-Related Deaths & Injuries

WSBC Accepted Harvesting Work-related Death Claims



This information represents the number of work-related deaths by year in BC, up until March 2024.

For 2024 year-to-date, there have been no work-related deaths in the BC forestry industry.

FATALITIES (October 2023 – December 2023)

Injury: Fatal

Core Activity: Forestry/Trucking Location: Vancouver Island / Coastal BC

Date of Incident: 2023-Dec

A log transport truck operator was removing wrappers from a loaded log transport truck. A log from the top of the load fell, striking and fatally injuring the operator.

Read the BCFSC Fatality Alert

Injury: Fatal

Core Activity: Log booming or marine log

salvage / Pile driving Location: Lower Mainland Date of Incident: 2023-Oct

A worker was operating a tugboat, heading to a marina. The vessel sank and the worker was found deceased. The incident is under investigation by the Transportation Safety Board.

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: Manual tree falling and

bucking

Location: Interior BC

Date of Incident: 2023-Dec

A faller was struck by a dead poplar tree after falling a green spruce tree.

Injury: Fractured leg

Core Activity: Manual tree falling and bucking / Integrated forest management Location: Vancouver Island/Coastal BC

Date of Incident: 2023-Dec

A worker was falling a dangerous tree. An adjacent live tree affected the tree being felled, which struck the worker.

Injury: Fractures in upper body
Core Activity: Manual tree falling and

bucking

Location: Vancouver Island / Coastal BC

Date of Incident: 2023-Dec

A faller felled a hemlock tree (33 inches in diameter) that had a Douglas fir snag leaning into it. As the hemlock fell, the snag struck the faller. The faller walked out to the crew vehicle and the employer transported the faller to a waiting ambulance.

Injury: Burns

Core Activity: Integrated Forest

Management

Location: Northern BC **Date of Incident:** 2023-Dec

A worker was inside a portable bunkhouse trailer when a propane gas stove used for cooking ignited into a fireball.

Injury: Fractured Leg Core Activity: Forestry Location: Lower Mainland Date of Incident: 2023-Oct

A worker jumped off a platform about 2 feet higher than a paved pedestrian walkway. As the worker landed, they stumbled and fell into a forklift pathway. The worker was struck by the load being moved by a forklift.

Injury: Close Call

Core Activity: Integrated Forest

Management
Location: Interior BC
Date of Incident: 2023-Sept

A log dump crane was shock loaded while dumping a load of logs, resulting in four guy lines failing and collapse of the main mast

and hoist spar.

MANUFACTURING

Injury: Amputation injury to finger

Core Activity: Sawmill
Location: Interior BC
Date of Incident: 2023-Oct

A worker was operating a 4-inch edger system when one of their hands contacted the nip point of the "live fence" chain system's partially guarded end sprocket.

Injury: Close call
Core Activity: Sawmill
Location: Interior BC
Date of Incident: 2023-Oct

A fire occurred in a sump area at a sawmill. The fire department attended and put out the fire. No workers were injured but some structural damage occurred.

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Injury: Close call

Core Activity: Wood pellet manufacture

Location: Northern, BC **Date of Incident:** 2023-Sept

A baghouse abort gate tripped during production, which forced a plant shutdown. While restarting the plant, a worker noticed a fire in a metering bin and extinguished it with a water hose. Smouldering was detected in the associated cooling bin and deluge systems were automatically activated.

TRANSPORTATION

Injury: Fractures, bruising **Core Activity:** Forestry, Trucking

Location: Interior BC **Date of Incident:** 2023-Dec

A loaded highway log transporter with chains on was descending a snow-covered resource road when it lost traction. The vehicle went off the edge of the road, down a 45-foot bank.

Injury: Multiple injuries **Core Activity:** Integrated Forest

Management
Location: Interior BC
Date of Incident: 2023-Nov

The operator of a log loader was hoe chucking (moving logs) on a 50% slope. The loader rolled about 25 metres downhill.

Injury: Undetermined injuries (2 workers)

Core Activity: Integrated forest

management

Location: Interior BC

Date of Incident: 2023-Dec

Two workers were driving on a public roadway, travelling to work at a logging operation. Their vehicle encountered ice

and rolled over an embankment.

MARCH 2024 FOREST SAFETY NEWS



SAFE Companies

Year-end Audit Due Date Changing to Nov 30th



There will be a significant change to the SAFE Companies program taking place in 2024 impacting employers that normally submit audits in December. All other employers with audit due dates between January and November will not be impacted by this change.

In consultation with the SAFE Companies Advisory Committee and BCFSC Program Committee, the year-end audit due date is being changed to November 30th. This means that all audits normally submitted in December will need to be completed (last day of data collection for BASE)

This new date will benefit employers and BCFSC by:

- 1. Providing employers that normally submit an audit in December with additional time to achieve a successful audit result and be eligible for the COR incentive.
- 2. Reducing pressure on external auditors to complete audits in December.
- 3. Allowing BCFSC staff to schedule site visits earlier in the year which will benefit injury reduction with workers.
- 4. Alleviating the significant audit review surge in January and February providing BCFSC staff with an opportunity to focus on preparing the COR incentive forecast for WorkSafeBC.

2024 will be a transition year as employers and auditors adjust to accommodate the November 30th due date. New Certifications or vital Re-certifications to reacquire SAFE Certification in December will continue to be accepted. For more details, visit our website.

First Aid Assessments -What is Considered a Hospital

Updated OHS First Aid Regulations are coming. Until that time though, forestry companies are still required to meet the First Aid Assessment that are currently in place. When it comes to the current regulations, one of the most common questions we get when it comes to First Aid Assessments is "What is considered a hospital?" when referencing the less than 20 vs. more than 20 surface travel minutes to the hospital.

For forestry companies that work in smaller communities, it can be tough to determine if a local health clinic is a suitable alternative to the closest medical emergency centre should an incident

In an effort to provide clarity, we asked an Occupational Safety Officer at WorkSafeBC to explain the Occupational First Aid guideline when it comes to hospital designations and this is what he had to say:

"Beyond the references to a hospital on the guidelines (listed in Part 3 of the OHS Regulations), the only way the "hospital" designation can be ascertained is by contacting your emergency service provider (i.e. 911) who would make the emergency ambulance call out to your exact location. They will determine who and where the emergency transport is sent based upon the patient's needs." In almost all cases, health clinics in most locations do not meet the immediate standard of care required for emergency situations. This is why the emergency service provider may opt to go directly to a designate hospital and, with instruction from the designated hospital, commence treatment on route in preparation for release to the designated hospital ER.

At the hospital, they know the patient will receive the appropriate care

the health clinic assessment and second transfer is eliminated entirely, saving precious time in providing the emergency care necessary." **Guidelines** -Part 3 - Occupational First Aid

immediately upon arrival. Whereas

at a health clinic, they may or may not be able to assist in the same

level of care due to lack appropriate medically trained staff on hand and/or an immediately available emergency

physician or surgeon, or a lack of a

capable of handling the emergency

fully-equipped trauma care facility

or emergency surgery needs of

the patient. A hospital provides

one-stop care, whereas a health

clinic may require the patient to be

transferred to hospital following their

going directly to a designated hospital,

initial assessment for additional and

required emergency treatment. By

The definition of "hospital" for the purpose of the assessment is "a hospital or diagnostic and treatment centre that has an emergency department or resuscitation area and a physician on duty, or immediately available on call, during the hours when workers might need these services."

Facilities with the designation hospital, health care centre, clinic, diagnostic and treatment centre, first aid post,

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SAFE Companies

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and diagnostic facility offer different levels of patient care and various hours of operation. Some of these facilities have B.C. Ambulance bypass protocols in place. Bypass protocols are put in place if the local clinics or hospitals are unable to receive trauma patients during certain hours. The same "bypass" rules may apply to accepting the employer's emergency transportation vehicle or industrial ambulance.

As a result of the hours of service at the nearest treatment facility, it may be that the hospital for the day shift is closer than the hospital available for the night shift, and therefore a different table with different required first aid services would be used for the different shifts.

To determine what an organization needs to accurately submit the first aid requirements, BCFSC has provided some tips to help ascertain the requirements:

- Research your local emergency room.
 If you live in areas throughout the province that have limited access to medical services, document alternative options.
- Contact the local clinic or treatment centre to determine if they have the following:
 - An emergency department or resuscitation area
 - Medical staff and physicians on duty or immediately available oncall
 - Open during the employer's working hours

- Contact the emergency service provider to determine where an injured worker would be taken if called out.
- 4. If the company transports an injured worker, can the local health clinic accommodate the treatment required? Use a severe injury as a marker for assessment of the medical services a health clinic or volunteer services can provide.

The bottom line is, when an emergency arises at your worksite, each employer must ensure the emergency planning meets the OHS Regulation and SAFE Companies Audit requirements. Feel free to reach out to us to help you prepare for your emergency planning options.



SAFE Companies Audit Requirements for Worker Assessments and Site Inspections

By Mike Sexton, SAFE Companies Manager

Changes in operations and work crews throughout the year can affect SAFE Certification for many forestry operations. Many companies will switch the type of forestry work they conduct in a single year going from tree planting to wildfire service to road building and site excavation and yarding.

No matter what type of work is being conducted, forestry operations are considered high-risk and regular worker assessments and site inspections are necessary to meet OHS regulations especially if an operation takes on new crew members, works on a new site or adds something new to an existing site.

Worker assessments

Worker assessments are an important part of a safe and successful forestry operation and are a requirement for SAFE certification. They help to verify that each worker has the necessary knowledge, skills and attributes to perform their job safely and productively. Worker assessments need to be documented and the level of risk determines how often they should be done.

Part of a supervisor's duty is to ensure workers are capable of doing their work safely and to check work practices carefully and thoroughly during inspections. New and young workers require more frequent assessments to make sure they are fully aware of the risks to themselves and others. Long term employees can also develop complacency and poor habits, so they need inspections too. Their inspections may not be as urgent, but they are just as important and should not be ignored or missed.

Take a look at the OHSR 3.5 General Requirement to fully understand the regulations relating to regular inspections:

OHSR 3.5 General Requirement

Every employer must ensure regular inspections are made of

all workplaces, including buildings, structures, grounds, excavations, tools, equipment, machinery and work methods and practices, at intervals that will prevent the development of unsafe working conditions.

Site Inspections

The OHSR 3.5 regulation states workplaces must also be regularly inspected. The SAFE Companies audit recommends every 30 days, but again, this is based on risk. If there is a change to the work or site, another inspection should be completed to identify any new hazards that need to be documented, communicated and mitigated.

If you are wondering if you are meeting your SAFE Certification requirements for Worker Assessment and/or Site Inspections, contact SAFE Companies and we can walk you through it.

MARCH 2024 FOREST SAFETY NEWS







Looking Back to See What's Ahead

By David Adshead, BCFSC Falling Safety Advisor

Welcome to a new year. This year marks a few milestones in the forest industry's progress in improving worker safety. Looking back at significant catalysts for change, the steps taken along the path chart our progress and identify the next steps toward the goal of every worker going home safe, every day.

The following statement is an excerpt from a Workers' Compensation Board letter from 1926 voicing concern for the human toll the forest industry workers and their families were experiencing.

"Almost everything depends upon the individual carefulness of the workmen himself and those working around him. Rules, regulations, safety devices and posted warnings are all useless unless every man is careful to see that they are enforced, unless every man is careful to watch for danger and careful to warn others of danger.

Preach safe practices and practice the doctrine of safety. It pays."

Although the words are dated, the message is just as relevant today as it was nearly a century ago and the reality of working in the forest industry remains the same. "Worker safety is successful through the thoughts and actions of every individual worker". This quote comes from a letter attached to a 2004 report tabled by the Forest Safety Task Force, a panel of industry experts assembled with the mandate to address the unacceptable level of serious injuries and fatalities in the forest industry. Formed in July 2003, the Forest Safety Task Force identified several vital items that changed how the industry functions. I encourage you to take a look at the Task Force Report, including the 1926 letter on the BCFSC website.

From the Forest Safety Task Force recommendations, 2004 saw the formation of the forest industry's very own health and safety association, the

BC Forest Safety Council (BCFSC), whose role was to bring the BC Forest Safety Accord to life. The organization, led by a council of industry stakeholders, began implementing many of the Task Force recommendations by administrating the SAFE Companies program, the BC Faller Training Standard and Faller Certification. The BCFSC became the hub for forest industry training, education, communication, and support, guided by the needs of the industry. There was a heavy emphasis on faller safety as that job was and is still considered a very high-risk occupation and suffers the highest injury and fatality rates of all the forest industry occupations by a wide margin.

2012 saw the creation of a five-day BCFSC Falling Supervisor course and the further development of the Certified Falling Supervisor program to improve and standardize faller supervision. There are now 177 BCFSC Certified Falling Supervisors. In 2023, the Falling Supervisor course was updated to align with the current needs of industry and was piloted as a hybrid course. Incorporating a risk-based approach, the new course involves twelve hours of online learning to preload participants with the concepts before they attend four days of in person learning, consisting of two classroom and two field days.

From 2004 to 2014, 229 people completed the New Faller Training program administered by the BCFSC. During that time, a second administrator of the BC Faller Training Standard was approved to deliver training and certification of fallers for the oil and gas industry. 2015 to 2023 saw another 138 candidates complete the 30-day New Faller Training course. Interest in this course continues to grow year after year.

As a result of the <u>Deloitte Report</u> recommendations, work began in 2015 on updating and modularization of the BC Faller Training Standard. After years

of work by industry subject matter experts from the forest industry, oil and gas sector, and the BC Wildfire Service, a modularized competency-based New Faller Training course was piloted in 2018. The BCFSC continues to work with WorkSafeBC to have these updates approved, including the addition of safe work procedures identified by industry.

2021-2022 saw a shift in faller supervision to a risk-based approach. WorkSafeBC engaged with industry to produce a set of videos, including the powerful <u>Champions of Change</u>, that highlight the importance of faller supervision and related challenges. BCFSC continues to provide advocacy to falling supervisors on risk-based supervision and develop resources to support the falling supervisors in their day-to-day responsibilities.

2024 will see continued efforts to support faller safety in the forest industry. BCFSC and the Falling Technical Advisory Committee will be working to produce info flips for falling supervisors that align with a risk-based approach to faller supervision. The info flips will provide guidance in roles and responsibilities of a supervisor, the safe operating procedures for managing fallers and helpful best practice tips aimed at supporting falling supervisors.

How do all these things make working in the forest safer?

In providing effective safe work procedures, training and information to forest industry workers, the goal is to make it easy for workers to do the right thing. Like the statement in the 1926 Workers' Compensation Board letter states, safety is only achieved through individual worker's thoughts and actions. Up to date procedures, effective training, and communication of information provides workers with the skills and knowledge to make informed decisions that enable them to work safely and effectively.

Making it easy for people to make the right decisions and go home safe every day, that is what success looks like! With that, I wish you all success in 2024 and beyond.

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Falling Safety Advisor Activities

2023 was a challenging year in the forest industry. At the beginning of the year, accumulated snowpacks across the province and in particular Vancouver Island, limited the amount of falling activity. Before we knew it, May was here and brought with it increased temperatures and drought-like conditions that limited industry's ability to work. Despite these challenges, BCFSC's Falling Safety Advisors were busy with industry engagement. Below are the activities as of December 31, 2023.

- · 19 Faller Certifications
- · 2 CFS Quality Assurance Visits
- 3 Falling Supervisor Certifications
- 179 Faller Visits
- 10 Trainer Quality Assurance Visits
- 14 Trainer & Trainee Quality Assurance Visits
- 10 Company Reviews 🐠

Roger Harris Retires from FTAC and the BCFSC Ombudsperson Role

During the September meeting of FTAC, Roger Harris announced his retirement at the end of the year as the BCFSC Ombudsperson and dedicated FTAC member. FTAC members congratulated Roger on his retirement and shared their appreciation for how approachable and honest Roger had been over the years.

Roger addressed the group stating: "My fondest memories in life are the times I spent falling, without a shadow of a doubt. My proudest memories are the body of work that I have produced sitting in this position since 2006. Thank you for the opportunity to do all that." The Ombudsperson Annual Reports and Safety Review and Reports can be found on the BCFSC website.

Some of Roger's best phrases over the years were "Put the cat in with the chickens" or rather stir things up and "Putting a button on Jello" with regards to the difficulty in a situation.

On behalf of FTAC and the BC Forest Safety Council, we wish Roger all the best in his future endeavours and welcome him back to a meeting anytime!



FTAC members surround Roger Harris at the September 15th meeting.

Qualified Faller Trainer Course

BCFSC had the opportunity to hold a second Qualified Faller Trainer (QFT) in 2023. The course took place from December 11-16, 2023, in the Parksville area.

Five BCFSC Certified fallers took part in the six day course. The QFT course is designed to prepare BCFSC Certified fallers to instruct the 30-day New Faller Training course, following the BC Faller Training Standard.

BCFSC would like to thank Sam Stanko and Mosaic Forest Management for their ongoing support in providing timber for BCFSC training programs.



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New Video Release: <u>Emergency Response Plan (ERP) Operator</u> <u>Extraction and Steep Slope Rescue Drill</u>

Is your company adequately prepared for an emergency? OHSR regulations stipulate that employers are legally responsible to ensure they are. Responsibilities include effective planning, preparation, and adequate employee training for anticipated emergencies relevant to your operation. Forestry operations are increasingly located in remote locations where emergency services take longer to access. It is therefore critical that ERP's are reviewed and practiced regularly to ensure they are current, and all employees understand them.

WorkSafeBC's 2024 Planned Inspection Initiatives for Forestry Operations includes a focus on high-risk activities associated with equipment rollover due to the loss of stability in steep slope mechanical harvesting. As part of the initiative, WorkSafe officers will "examine emergency response planning (ERP) as a critical component of the risk management efforts" Forestry Planned Inspectional Initiative - WorkSafeBC.

Steep slope emergency response planning continues to be a key area of focus for the BC forest industry as well. The objective for industry members is to increase general awareness, development and execution of ERP's within the contractor community. The December 2023 issue of the Forest Safety Newsletter (FSN) introduced the second of a three-part video series focusing on elements fundamental to emergency response planning and execution for steep slope harvesting



operations. The latest video in the series, <u>Emergency Response Plan</u> (ERP) Operator Extraction and Steep <u>Slope Rescue Drill</u>, is now available on the BCFSC YouTube Channel.

This new video demonstrates challenges crews will encounter to reach a worker that requires medical assistance while inside the cab of a piece of equipment. The importance of regularly practicing emergency procedures to verify their effectiveness, recognize potential deficiencies and ensure employees are adequately prepared are all highlighted as key learnings. In addition, the video identifies tools and equipment crews should consider taking to the scene to ensure they are prepared for any scenario they may encounter. Companies throughout the industry will benefit from reviewing the video to help enhance their own procedures.

BCFSC would like to acknowledge the following individuals and organizations for their participation in the project.

- Pamela Austin Austin Safety Services
- Upper Similkameen Indian Band Logging Crew.
- Weyerhaeuser Company Limited

 Princeton Timberlands staff
 members.
- Trucking and Harvesting Advisory Group (TAG).
- Coast Harvesting Advisory Group (CHAG).
- Case Communications. @

Reducing Molly Failures Through Engineering

In recent years, molly (or lift strap) failures on log trailers have resulted in a growing number of dangerous close calls with potentially catastrophic consequences. These incidents have caused extensive equipment damage and could have easily resulted in serious injuries to the driver. Avoiding molly failures is largely dependant on regular inspections, maintenance and replacement as required. However, another opportunity to consider, is the durability of molly's though improved engineering. In 2023, the Trucking and Harvesting Advisory Group (TAG), in concert with the Log Truck Technical Advisory Committee (LTTAC), partnered with a BC trailer manufacturer to investigate opportunities to do just that. The process involved an evaluation of the types of molly's being used in BC log hauling operations as well as safety incidents, causation and trends directly related to molly failures. This work supported the decision to develop an updated design of both Quad and B-Train trailer molly's and assemblies. The new designs focus on enhancing durability by reducing bend angles, improving securement methods and increasing strength. In early 2023, the engineering process was complete, and the prototypes were being manufactured.



Molly failure, Dec 2023

In order to test these designs, two log hauling contractors in the central interior installed several units on B-Train and Quad trailers to complete field testing. The project is scheduled to run for 18 months and will give the contractors a full year to use and evaluate the new designs. A key part of the testing is to inspect the molly's after every load and document any damage, wear or fatigue in real time. This information is recorded and reported to ensure all relevant information is available to evaluate the overall performance of the molly's during and after the field trials. Although the project is only partially done, results to date have been very positive. After 6 months of use, one driver commented "the new molly is in great shape, if I had a regular one, I would have had to replace it by now". Once field testing is complete, a final inspection of the molly's and assemblies will be completed and a project report will be released to industry in late 2024. Despite the optimistic outlook for the new design's regular inspection, maintenance and replacement will still be the most effective way to avoid failures. However, it appears an engineered solution addressing the frequency of replacement is on the horizon.

Links:

BCFSC's Molly Lift Strap Safety Inspection Video

Inspection Criteria

TAG Molly Safety Bulletin @







Woodlot Licence & Community Forest Agreement Safety Committee

Rainfall Shutdown Procedures - Overview for Licensees

Hazardous geotechnical processes are more likely to occur under some environmental conditions than others. Specifically, many mass movement processes, such as landslides and debris flows, occur when the ground is unusually wet, and slope instability is elevated. As part of their duty to ensure worker safety, Licensees have responsibilities to make sure workers are aware of the risks and have a plan to respond. One might ask why a Rainfall Shutdown Procedure is necessary now, if one has not been needed in the past. In a world of changing weather, think of it as a seat belt. As a safe driver, you may have never needed it to save your life, but when the unexpected happens, you sure appreciate you have it. Having a simple process to monitor rainfall and to train crews in recognizing when conditions are changing for the worse can save lives.

Elements of a Rainfall Shutdown Procedure

An effective Rainfall Shutdown Procedure has several essential elements.

- Drainage Rate This is a measure of how fast water passes through the terrain in a region. It is specific to the area in which you are located and is the land base's response to typical rainfall levels. This should be available from the MoF for your area. See below link for a document with guidelines for rainfall amounts.
- 24-hour, 48-hour rainfall These reports on rainfall accumulations as measured by a weather station, typically an established MoF weather station but can be an airport, municipal or in-site station. The weather station data you use must be representative of the area where you are operating.
- Immediate Rainfall Rainfall measured with a rain gauge located at or near the operating location. Monitoring on-site changes to the local water balance helps crews make decisions to help ensure their safety.

- Soil Water Balance Based primarily on the volume of rainfall inputs and the drainage rate, this is a measure of the how much water is in the soil. Soil water balance is a key indicator of landslide risk. Sites with an elevated and increasing soil water balance have greater potential risk of slides.
- Hazards associated with access routes versus on-site hazards – Planners and workers need to be aware of the risks at their immediate worksite as well as along their travel routes. Even though a work site might be safe, roads into and out of the area can be at risk of being impacted by terrain instability.
- Triggers During and following peak rainfall events when the soil water balance is high, there are several triggers that can initiate slides. These include but are not limited to:
 - · Increasing soil water balance
 - Machinery on slopes during road building or harvesting
 - Blasting
 - · Wind generated tree action
 - Impounded water (blocked culverts)
 - High stream flow mobilizing bed loads
- Stream flow as an indicator Remind workers to check stream levels in their work areas. Particularly high stream flows and streams with a great deal of suspended material (colour) are often indicators of a system that is approaching its limit with regards to handling incoming water.

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Rain on snow - While immediate rainfall and soil water balance are helpful indicators of terrain stability hazards, workers must be aware of snow in and above their work area and access route. Rising freezing levels and rainon-snow can significantly increase stream flows and the risk of slides and debris flows. Workers should be aware of potential impacts if there is snow above them.

Post-Event Best Management Practices

Following a significant rainfall event, there are safety matters to address before workers re-start work. Typically, if none of the triggers above are present, it is usually safe to re-enter areas once the soil water balance is declining and it is at least 24 hours since the peaks in rainfall and soil water balance.

An effective Rainfall Shutdown Procedure includes a plan to resume work safely. Apply the following best management practices.

- Access Before resuming work, check the access route to verify there are no washed-out roads, slides or destabilized areas.
- 2. Drainage structures After major events, conduct a detailed inspection of drainage structures. Make sure they have not been compromised during high rainfall / stream flow. Failure to check structures can lead to ongoing / increasing damage and eventual loss of access.
- 3. Destabilized timber High rainfall accompanied by heavy winds can de-stabilize standing trees. Have a close look, especially at trees that are exposed or immediately beside road cut banks.

Summary

Each Licensee is not necessarily responsible to develop a Rainfall Shutdown Procedure for their crews, but they are responsible to ensure that an appropriate procedure is available, that it has been communicated to crews and that they follow it. Identification of site-specific hazards is an important responsibility. Failure to properly assess and mitigate hazards can lead to injury and death. In a world with changing climate conditions, it pays to be prepared even for issues which are uncommon.

Links:

- Wet weather safety shutdown landslide prone terrain definition
- Wet weather safety shutdown criteria harmonization
- · Wet weather safety shutdown field table
- Wet weather safety shutdown calculation spreadsheet

Manufacturing Safety

Return to Work Workshop

As part of Bill 41, the provincial government made amendments to the Workers Compensation Act that affect Return to Work. As of January 1, 2024, employers and workers have a legal duty to cooperate with each other and with WorkSafeBC in a worker's timely and safe Return to Work (RTW) following an injury, and certain employers will have an obligation to return injured workers to work in specific circumstances.

In an effort to help address the RTW issues wood products manufacturing operations may be having with their RTW programs, you are invited to attend a hands-on Return to Work (RTW) workshop. This informative workshop will be hosted by Elise Kobylanski and Teresa Cheung, RTW Client Services Managers with WorkSafeBC. The workshop will discuss the challenges with RTW programs in sawmill and pellet operations and help find solutions to implement RTW strategies in these settings. Workshop details are still being finalised and will be shared soon.



Workshop: Proposed Dates - April 22 or 23, 2024 Prince George, BC

To attend the workshop, please click the <u>registration link</u>.

Using QR Codes for Quick Access to Safety Materials

On January 21, Chris Cloney from Dust Safety Science hosted a podcast featuring Bill Laturnus, Senior Safety Advisor of manufacturing at <u>BC Forest Safety Council</u>. In the podcast, Bill discussed the use of QR codes in industrial applications and safety.

Bill spoke about how BCFSC uses QR codes to provide people with easy access resources by simply using their phone's camera to access information from the BCFSC website. Bill noted his team has developed a specific QR Code sheet that includes linkable codes to information on combustible dust and other key safety topics. Take a look for yourself and scan the QR Code to access the MAG/WPAC Communication/QR code sheet.



Dr. Chris Cloney, PEng, Managing Director and Lead Researcher at DustEx Research Ltd., has partnered with BCFSC on two WorkSafeBC research grants, "Innovation at Work".



MAG/WPAC QR Code



Podcast QR Code

Tolko Tour

Last November, MAG members held their fourth quarterly meeting at Tolko in Williams Lake, BC and invited MAG auditor Nicole Brandson to attend as their guest. As part of the meeting's agenda, the group visited the sawmill operation to observe single-point lockout in the sawmill. They also observed how the sawmill's safety measures were being implemented in day-to-day operations and how sawmill workers were incorporating safety into their daily roles.

A big thank you goes out to Tolko for sharing their on-site safety initiatives with the group and providing us with a behind-the-scenes look at their lumber facility. •



New Developments in Research Project Focussing on Inherently Safer Design (ISD) in Mobile Equipment (ME) Risk Reduction in BC Sawmills and Warehouse Operations

Mobile equipment (ME) in manufacturing facilities is a significant concern, with the risk of struck-by incidents causing injuries and fatalities, as well as the prevalence of musculoskeletal injuries (MSIs) to operators. This past year, progress has been made on a new research project that has been undertaken to explore how to reduce these hazards using inherently safer design (ISD). This work has been completed by a team of industry experts and academic researchers as part of the Applied Innovation research grant from WorkSafeBC. Read more about the project background in our June 2023 Issue of Forest Safety News.

Highlights of the research to date include a series of innovative and collaborative workshops to evaluate ME hazards in October 2023. The project team successfully coordinated multidisciplinary, cross-industry workshops focussing on integrating ISD to reduce mobile equipment musculoskeletal injuries (MSI) and mobile equipment-pedestrian interface (ME-PI) incidents. These workshops involved approximately 20 participants and included supervisors, managers, safety directors and coordinators, and representatives from equipment suppliers.

Numerous ISD options were successfully identified, and participants placed a key focus on discussing and exploring how ISD principles could be considered. Various types of active and passive engineered equipment were also shared across the workshop attendees (which will be summarised in the final project report).

Preliminary findings of the workshops include:

- The need to increase the awareness of the hierarchy of controls,
- The need to formalize management of change (MOC) processes,
- Safety culture, as well as equipment and facilities procurement, are significant drivers for ME risk reduction, and

- Communication resources and tools are needed as part of knowledge transfer and exchange (KTE) for this research project.

Workshop attendees reported that the workshops were productive, they provided the opportunity for peer-to-peer learning, and attendees identified key takeaways that they can immediately consider in their operations; additional workshop outcomes will be detailed in the final report.

This workshop was an important research milestone for data collection. Next steps include the development of tools and resources for incorporating ISD into safety management systems (SMS) and identify opportunities for improvement with respect to senior leadership, management of change, facility and equipment procurement, incident investigation, risk assessment and business cases.

ISD Questionnaire

Management of Change (MOC)

- Are engineered controls generally regarded as preferred over administrative/procedural controls?
- · Is the hierarchy of controls and ISD options considered during management of change?
- Are operators involved or consulted when work processes are developed, when new mobile
 equipment is introduced, new materials being handled, facility changes (layout, additional
 changes, temporary building)?
- How are changes being handled with respect to seasonality, inventory, shipping changes?

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egrating Inherently Safer Design (ISD) for Mobile Equipment Risk Reduction

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ISD Questionnaire

Equipment Procurement

- This is one of the areas identified as a priority for further research how can we help operations more effectively select ISD equipment?
- · What is the lifecycle of the forklift? Who is leasing, who is buying?
- What innovations and technology changes are occurring with equipment to help with MSIs and MEPI? How can the awareness of this be raised? How does an industry or region encourage equipment manufacturers to innovate?

OB XRISK

ntegrating Inherently Safer Design (ISD) for Mobile Equipment Risk Reduction

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MARCH 2024 FOREST SAFETY NEWS

Manufacturing Safety

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The ISD research project will be completed in 2024 and promises to provide new perspectives on how facilities, processes and equipment can be changed to provide additional layers of protection for reducing mobile equipment risk.

The project research team is eagerly completing the remaining of the research project milestones. If you are interested in learning the outcomes of the research and how it impacts your facility, contact Kayleigh Rayner Brown, MASc, P.Eng. (Principal Investigator, kayleigh@obexrisk.com).

Ms. Kayleigh Rayner Brown, MASc, P.Eng., is Director of Obex Risk Ltd. in Halifax, Nova Scotia. She holds a Master of Applied Science (Dalhousie University) in chemical engineering, specializing in process safety, ISD, and hazard analysis. Kayleigh has played an integral role in enhancing process safety in wood pellet production as project technical lead in two

previously funded WorkSafeBC Innovation at Work projects. Kayleigh has previous key experience in hazard analysis workshop facilitation, ISD research, stakeholder engagement, and project management.

Dr. Paul Amyotte, P.Eng. a Professor of Chemical Engineering in the Department of Process Engineering and Applied Science at Dalhousie University. Dr. Amyotte is a recognized expert in the field of ISD and has an extensive record of authorship in ISD, process safety, and dust explosion research.

Mr. Bill Laturnus is a Senior Safety Advisor, Manufacturing at the British Columbia Forest Safety Council (BCFSC). Bill has extensive experience in sawmill operations, and as a proponent of ISD, supports the incorporation of practical applications of ISD at sawmill worksites. Bill has recently conducted key safety activities focusing on risk reduction of the mobile equipment-pedestrian interface with the Manufacturing Advisory Group (MAG). Bill also has 10 years of experience auditing SMSs in forest products manufacturing.

Ms. Jacqueline Morrison Morrison is a manager in OHS Consultation & Education Services at WorkSafeBC. Having worked in warehousing and transportation for many years and having served on several workplace road safety initiatives, she has a special interest in addressing the risk of mobile equipment and pedestrian struck-bys. The most effective way to control workplace risk is through safer design to eliminate, isolate or reduce the risk to workers. She is supporting the project by identifying participants for the workshops, sharing subject matter expertise and will support the communication of any learnings to industry, employers, and workers on how to control this risk more effectively through inherently safer design.

The project team gratefully acknowledges funding from WorkSafeBC under an Applied Innovation grant for the project "Integrating Inherently Safer Design for Mobile Equipment Risk Reduction." The views, findings, opinions, and conclusions expressed herein do not represent the views of WorkSafeBC.

Drum Dryers Symposium - Developing Best Practices for Safer Operations



Drum dryers present the risk of fires and explosions due to combustible dust, as well as conditions that can lead to the generation and accumulation of combustible gas. <u>Join us</u> for this online symposium as we explore best practices for safer operations of drum dryers.

The Wood Pellet Association of Canada is hosting the event in collaboration with the BC Forest Safety Council and media sponsor, Canadian Biomass. The event will be held Thursday, April 4, 2024, from 9:00 - 11:00am Pacific Time.

Across the Canadian wood pellet industry, both drum dryers and belt dryers are widely used, as well in other sectors, including panel board (oriented strand board (OSB), medium density fibreboard (MDF)), grain, and minerals. There have been past incidents involving drum dryers in the wood pellet sector from which we can all learn. The symposium will include presentations from producers and subject matter experts on learnings and experiences, the current state of and new approaches to drum dryer safety.

Previously, our industry successfully completed a collaborative initiative on <u>belt dryer safety</u>. Following on the success of that model, an outcome of the drum dryer symposium will be a proposed drum dryer working group. This working group will collaboratively take a closer look at trends, identify opportunities for improvement, and formulate recommendations. Resources will be created and shared to help support the continuous improvement of dryers and enhancement of the sector's safety culture.

We encourage personnel at wood pellet facilities that operate drum dryers to attend the event. This includes managers, supervisors, maintenance staff, safety coordinators and specialists, and engineers. Individuals who work in allied sectors, including suppliers of drying and heating equipment, insurance, and consultants, should also participate. Other industries that operate drum dryers are also welcome to attend.

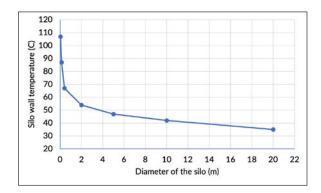
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Register for the symposium $\underline{\text{here}}!$

For more information contact me at gord@pellet.org.

Managing Silo Size and Humidity Key to Controlling Self-heating in Pellets

By Dr. Shahab Sokhansanj, Dr. Fahimeh Yazdan Panah and Dr. Jun Sian Lee Biomass & Bioenergy Research Group, Chemical & Biological Engineering, University of British Columbia

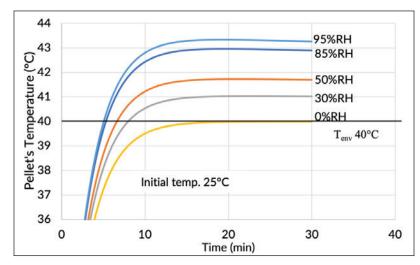


Very wide silos (large diameter) are prone to self-heat and combustion at a lower wall temperature. The curve in this graph can be used as a guide for safe storage. Having the silo wall vs. diameter of the silo above the curve will not be safe; the points below the curve are safe.

Self-heating is one of the leading causes of fire and explosion in storing wood pellets. According to the <u>2021 Combustible Dust Incident Report</u>, five fire and explosion events occurred in wood storage facilities in 2021, and most recently, in 2023, self-heating led to a fire in Japan's Yonago biomass-fired power generation plant.

These types of incidents are believed to be initiated by temperature rise caused by moisture adsorption and condensation. The temperature increase is then accelerated when an oxidizable material, such as woody biomass, reacts to produce heat, which accumulates to a temperature of ignition and combustion. Self-heating is dangerous because when it is not controlled, fire and explosion can occur in biomass storage facilities and cause damage to health and property.

Over the past 20 years, researchers at the Biomass & Bioenergy Research Group (BBRG) at the University of British Columbia have carried out self-heating research, in parallel with offgassing research. The research was funded by the Natural Sciences and Engineering Research Council of Canada (NSERC) and the members of the Wood Pellet Association of Canada (WPAC). Based on our research, we have developed six key steps pellet producers can take to prevent self-heating events:



Simulated temperature rise of wood pellets due to increase in relative humidity of air inside the silo set at 0, 30, 50, 85%, and 95% and at a constant temperature of 40°C. Source Dr. Jun Sian Lee UBC 2020.

- 1. Keep the pellets dry but not too dry. Dry pellets adsorb more moisture than moist pellets. We recommend a moisture content of 7-8%.
- Do not store warm pellets in temperatures hotter than 35°C.
 Warm pellets reach self-heating conditions substantially faster than cooler pellets.
- **3. Keep the pellets cool** using ventilation but limit humid air as it can carry additional moisture into the silo. A higher air flow rate for a short time is preferred. However, if self-heating is already present, the introduction of air to the silo must be ceased immediately.
- **4. Minimize loading broken and dust into the silo.** Field experiences have shown that filing a silo at stages may create dense layers along the column of pellets inside a tall silo.
- **5. Silo size is important.** Generally, more slender structures dissipate heat faster than wide storage structures. Concrete silos come in 5, 7, 9 m diameter. Steel grain bins can be up to 18 m. Recommended silo diameter is 10 m or less.
- 6. Screen pellets for reactivity using an instrument such as a Thermal Activity Monitor (TAM) which is available in BBRG's lab at UBC. The unique instrument is used to determine the reactivity of pellets and to screen pellets for off-gassing.

Self-heating is not limited to just the wood pellet sector. This research can also provide important information for other products such as coal and agricultural biomass like straw and grass.

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To find out more about our work, contact Shahab Sokhansanj via email at Shahab.Sokhansanj@ubc.ca. •

WPAC's Continued Commitment to Safety Reflected in 2024 WPAC Safety Committee Workplan

By Julie Griffiths



The Wood Pellet Association of Canada (WPAC) places the highest priority on the health & safety of employees and treating forest workers fairly. It's in our sustainability statement and in our 2024 Safety Committee Workplan. It is also reflected in our common understanding that the best way to achieve our safety goals is through a focus on strategic initiatives, effective communications, and sharing new developments and learnings in our industry for both continuous improvement and overcoming challenges.

Since 2014, WPAC's Safety Committee has set out an annual workplan to undertake strategic initiatives that reflect the needs of members and emerging trends. This workplan is responsive, as well as proactive, to enhance the safety of the sector and continue to foster a strong safety culture. Last year was an outstanding year for the pellet sector and advancing safety, made possible through collaboration and partnerships. Achievements and outcomes included:

Launch of <u>Plant Operator Training</u>
 <u>Program</u> in May 2023. This is
 completed with support of a
 WorkSafeBC Small Initiatives grant.

- Completion of <u>process safety</u> <u>management (PSM) research</u> <u>project</u> in collaboration with Dalhousie University, BC Forest Safety Council (BCFSC), Dust Safety Science, and Obex Risk Ltd, through a WorkSafeBC grant. This project expands on the Critical Control Management project.
- Conducted a bow tie analysis on combustible gas in drum dryers in collaboration with Premium Pellet and created a summary report outlining how combustible gas can form and key actions to prevent this from occurring.
- Hosted the <u>Wood Pellet and</u>
 <u>Bioenergy Safety Summit</u> in Prince
 George on Nov. 15-16, which
 included a WorkSafeBC Human
 Factors and Process Industries
 workshop.
- Provided a <u>safety workshop</u> before the WPAC AGM in Ottawa on Sept. 18, 2023, led by Dr. Paul Amyotte, P.Eng.
- Co-hosted two other <u>Human Factors</u> and <u>Process Industries workshops</u> with WorkSafeBC in Kelowna and Prince George.

This year's outlook

WPAC members continue to provide their time and expertise to collaborate as a collective industry and undertake an ambitious Safety Committee Workplan for 2024. Key initiatives include:

Process Safety Management (PSM):
Build on the PSM research project
to enhance the adoption of process
safety elements through a proposed,
sector-wide PSM implementation
initiative. There is a significant business
case for PSM, and this proactive
approach positions the industry well
in the evolving landscape of PSM
regulations.

Mobile Equipment Safety: Conduct a bow tie analysis customized for wood pellet operations to improve safety of workers, including pedestrian awareness, site layout, equipment and procedures.

Improve Drum Dryer Safety: Participate in a symposium and form a working group to improve rotary drum dryer safety.

Respond to New WorkSafeBC Combustible Dust Regulations: Provide tools and action plans to identify and close gaps to align with new WorkSafeBC regulations. This also supports operations outside BC should regulations change in other jurisdictions.

Host Industry-wide Safety Summit: Timeline, agenda and speakers to be confirmed.

Read the full 2024 WPAC Safety Committee Workplan here.

WPAC's safety committee works in close cooperation with WorkSafeBC and the BCFSC. The committee welcomes new members. If you are interested, please contact Gord Murray by phone at (250) 837-8821 or email gord@pellet.org.

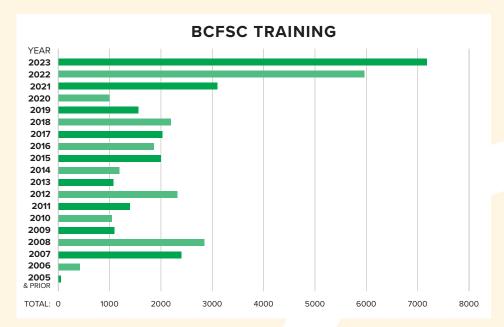
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Celebrating 20 Years of Training Excellence

This year marks the 20th anniversary of the BC Forest Safety Council (BCFSC), the health and safety association for the forest industry in BC.

BCFSC has been working with industry over these past two decades to help create a skilled and safe workforce, where safety is integrated into every activity and operational process. There are now approximately 60 different training courses for forestry workers including faller training, supervisor training, incident investigation, resource road driver training and many other general forest industry courses. Over the last 20 years, 40,000 participants have engaged in training opportunities to BC forestry workers.



BCFSC's training programs have been developed with industry to support our collective efforts in creating awareness and improving the skills and knowledge of forestry workers from tree planters, hand-fallers, operators in mechanized harvesting, forest supervisors and wood products manufacturing workers. These efforts have contributed significantly to the reduction of injuries and fatalities. Some of the notable highlights include:

- Over 4,400 participants have taken the Forest Supervisor in-person courses, where they learned how to be better leaders and mentors in safety.
- In response to COVID, the BCFSC online learning centre launched in 2021 delivering training to more than 14,000 registered participants in various courses including supervisor basics, forestry occupations, SAFE Companies training, wood products manufacturing and other general forestry courses.
- Competency-based standards, training materials and assessment tools
 were developed with industry subject-matter experts for evaluating specific
 harvesting occupations such as yarding, heavy-equipment operators, log-truck
 drivers, etc. These tools ensure forestry workers have the knowledge, skills
 and qualifications to do their job safely and productively.

 A multitude of free webinars and workshops have been hosted that cover a wide range of topics that are relevant to the forest sector workforce and made available ondemand through BCFSC's website and YouTube channel to those who were unable to attend in person.

BCFSC training programs will continue to evolve and adapt to the changing needs and challenges of the forest industry and its workers. And we will continue to strive to remain a leader in safety training for forestry workers in the years ahead.

Our goals and vision of the future of BCFSC's training include:

- Developing and delivering new courses and programs that address the emerging issues and opportunities in the forest industry, such as diversity and inclusion, climate change hazards and new technology.
- Continuing to collaborate and communicate with forest industry stakeholders to identify and respond to their training needs and feedback.
- Expanding the online learning centre, offering more courses and resources that are relevant, convenient, and flexible for forestry workers.
- Enhancing existing access to our training through mobile devices such as smart phones and tablets.
- Updating and revising existing courses to reflect the latest research, regulations, and technologies in the forest industry.

We would love to hear from you to discuss our training programs or provide feedback on the future of BCFSC training. Reach out to us at training@bcforestsafe.org.



Multi-employer Work Sites: Who's in Charge?

Forestry worksites are busy and dynamic environments. It's not unusual for multiple employers and contractors to be working on one worksite at the same time and involved in various sequential activities such as harvesting, road construction, silviculture and fire management. The importance of understanding and managing the complexity of a worksite while various activities are being undertaken requires a thorough understanding of who is responsible for both operational and safety management.

According to the Workers
Compensation Act, the owner of a
forestry worksite has possession or
control of the workplace. The worksite
owner, typically a licensee or tenure
holder, has a duty to ensure the
activities of every employer and worker
are coordinated, and that the health
and safety of all persons on site is
protected.

Prime Contractor duties:

If an owner hires more than one contractor to conduct forestry operations, they must assign prime contractor duties to a qualified contractor or other party through

a written agreement. The prime contractor is responsible for the coordination of health and safety activities for all employers and workers at the worksite. Without a designated prime contractor, the worksite owner is the prime contractor by default.

Prime contractors must have established processes that comply with the Workers Compensation Act and OHS Regulations such as:

- » conducting risk assessments
- » developing safe work procedures
- » providing training and supervision
- » monitoring and inspecting work practices
- » reporting and investigating incidents
- » implementing corrective actions.

The prime contractor must also communicate and consult with any other contractors (i.e. contractors hired by the worksite owner or the prime contractor to perform specific tasks or activities such as log harvesters, log haulers, and road builders, aka ... subcontractors), workers, and the health and safety committee (or worksite rep) to ensure all are aware of their roles

and responsibilities, the hazards and risks, and the established safe work procedures and controls.

Sub-Contractor duties

Sub-contractors working on-site also have a duty to ensure the health and safety of their own workers and to cooperate with the owner and the prime contractor in coordinating health and safety activities at the worksite. Sub-contractors must also comply with regulatory requirements listed above.

By fulfilling their respective responsibilities, a worksite owner, prime contractor and sub-contractors are safeguarding workers and the surrounding environment. This helps foster a positive and proactive safety culture with the ultimate goal of ensuring everyone goes home safely after a day on the job, wherever that may be.

To help you plan for worksite safety, access these resources and checklists available on the BCFSC website.

Prime Contractor Resources

Contractor Forms and Checklists

Site Planning and Hazard Assessments





BCFSC Resources: Helping Workers and Companies Improve On-The-Job Safety

BC Forest Safety Council (BCFSC) works with industry partners, employers, workers and regulators to develop and deliver safety programs, training and resources to meet the needs and challenges of the forest industry. The BCFSC website is a great resource for anyone wanting to learn more about the BC forest industry's safety standards.

BCFSC resources can help enhance the skills and knowledge required to perform a job safely as well as foster a positive and proactive workplace safety culture. There is also a significant number of research reports and best practises expertise compiled by BCFSC and its industry partners, who are committed to making the forest industry safer for everyone.

The BCFSC website offers a wealth of information, tools and materials that cover various topics relating to forest safety. Visit the <u>resources webpage</u> and browse through the featured resources and the latest updates or search for specific topics using the user-friendly search function and find resources by topic, type or sector.

The following list highlights just some of the available resources. Click on the links and go directly to website resource section:

- <u>Audit Support:</u> This section provides forms and templates to help you prepare and conduct safety audits for your company or workplace.
- <u>Crew Talks:</u> This section offers short and engaging safety talks that you can use to start your meetings, shifts, or safety discussions.
- <u>Emergency Response Planning:</u> This section helps you develop and implement effective emergency response plans and prepare for various scenarios and situations.
- <u>Incident Reporting:</u> This section explains how to access BCFSC support for managing a serious incident investigation and templates for incident reporting and investigation.
- <u>Safety Tips & Tools:</u> This section provides practical and useful tips and tools to help you improve your safety awareness and performance.
- <u>Worker Assessments:</u> This section helps you assess the competency and knowledge of your workers in different roles and tasks.

Whether you are a worker, supervisor, employer or auditor, you will find resources to suit your needs and interests. We encourage all companies and workers to access the valuable and relevant resources BCFSC has to offer. Visit our website today!

And for the latest BCFSC updates and news on forest safety, follow the BCFSC on Facebook, LinkedIn, Instagram and YouTube.



Health and Wellness





Understanding Human Factors — The Key to Long-term Success in Forestry

By Dr. Delia Roberts

This year is the 20th anniversary of the BC Forest Safety Council. In an industry that has faced many challenges, BCFSC's approach to safety has been groundbreaking (pun intended). In 2004, one in five treeplanters would suffer an injury that would prevent them from continuing to work. On average there were ten fatal accidents in BC forestry every year. Risk-taking was considered part of the job and everyone believed the best way to achieve high production levels was to keep workers on shift for as long as possible. Fatigue levels were not considered a factor in operational procedures.

Fast forward to 2024 and BCFSC and industry stakeholders are still seeking innovative approaches to improving worker health and safety in the forest industry. Educational programs form a cornerstone, but in addition to skills, equipment and enhanced safety awareness. The forest industry has been involved in what was the first, and what remains today, as one of the world's leading integrated health and safety programs. These days it's classified as the human factor, but what BCFSC and industry were first to recognize is that both physical and mental fitness play a huge role in how people do their jobs. To make good safety decisions and engage in tasks in a safe and efficient manner, people need the physical and mental energy and focus to perform their work according to the best practices and skills that they have learned. To this end, these efforts have helped to develop and provide access to the Fit to Work programs; Fit to Plant, Fit to Drive and Fit to Log.

These programs are unique because they are specific to the types of physical loads experienced while working at different jobs in forestry, but they also take into account the environmental, cultural and lifestyle pressures experienced within the industry. We know this because they are based on measurements of workload and the physiological and biochemical responses to work on site, on the blocks, in mills and on the roads throughout BC. These programs provide realistic suggestions on how to manage fatigue through building physical fitness in the off-season, structuring food intake to stabilize blood sugar and supply adequate energy and nutrition to the body and nervous system, engage in good hydration practices to contend with variable environmental temperatures, and provide protective strategies that are easy to apply for joints that are at risk during specific work task movement patterns - all within the scheduling, access and lifestyles of the different types of forestry workers here in BC. And we know that these programs work because with the assistance of the BCFSC, we have monitored the impact on injury rates, well-being and health of those who use these programs.

Looking after the physical and mental health of an individual person is quite a different approach to safety from the more widely used process-based focus. Both are important, but recognizing that no piece of personal protective equipment, rule or piece of equipment will keep a worker safe unless they are on top of their game has been an important step forward. Furthermore, these programs have

continued to evolve with the creation of new educational tools and updates through ongoing consultation with industry. This process is one of the most powerful aspects of the way that BCFSC has developed programs, and allows for the implementation of new supports and tools that suit the needs of the people they are meant to serve.

Provision of ongoing educational opportunities by BCFSC has been the key to ensuring safety programs engage workers. A quick glance through the list of BCFSC courses, webinars and workshops, online training and certification programs shows the wealth and breadth of available information for both novice and incumbent workers. By including health and wellness as part of safety procedures when training new workers, as well as continually providing ongoing resources for returning crew, the culture has shifted from production-takes-all to an understanding of how important it is for workers to manage fatigue, health, and lifestyle adequately. Twenty years ago, work schedules were based on production numbers, not the time needed for physical and mental recovery. To suggest that scale hours be adjusted to better accommodate circadian rhythms was out of the question. And yet today, work/rest schedules are genuinely supported in terms of allowing time for physical and mental recovery, understanding that it is needed to sustain long-term employment in forestry operations.

If we look at WorkSafeBC statistics for the forestry sector, the improved safety culture is reflected in slowly declining injury rates. The number

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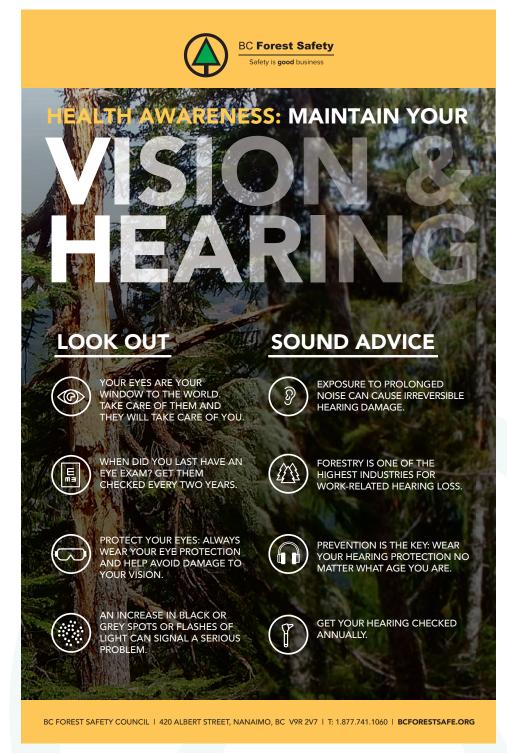
Health and Wellness

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of deaths and serious injuries has improved over the last 20 years but still remain unacceptably high. The average rates per 10,000 forestry workers are still more than double than all-industry numbers. And yet, real change has taken place. Twenty years ago the idea of having an on-site physiotherapist, able to treat small injuries in a timely and cost-efficient manner was unheard of, and there was no such thing as a stretching break. Planters did not stop to eat or drink, in spite of burning 3000-5000 calories in a day, and asking for healthy snacks to be available at scales or in mills would have been considered impossible. But the need became abundantly clear when statistics showed almost 50% of equipment operators and log haulers had type II diabetes, fallers were chronically dehydrated and hypoglycemic, and support for mental health issues was non-existent.

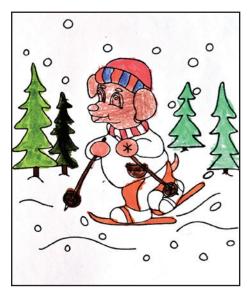
Clearly, in spite of these improvements and a decline in the number of injuries, the forest industry still has a long way to go. Workers are still getting hurt, and tragically there were still ten deaths in 2023. We cannot accept this as the status quo. Safe companies are healthy, and healthy companies are good for everyone. So as we move forward into 2024, BCFSC and industry stakeholders will continue its mission to promote safety as a focal point. New regulations try to drive safety forward by enforcement, but we all need to remember that safety begins. first and foremost, by looking after ourselves. It is only when we are able to be constantly vigilant that we can be aware of mitigating risk levels and make good safety decisions.

Read more about building a healthy lifestyle within the constraints of your job by checking out the <u>Health Awareness</u> and <u>Fit to Work programs</u> on the BCFSC website. You'll find easy-to-apply information on diet and nutrition, hydration, addressing joint pain, reducing fatigue, addressing mental health issues and more.



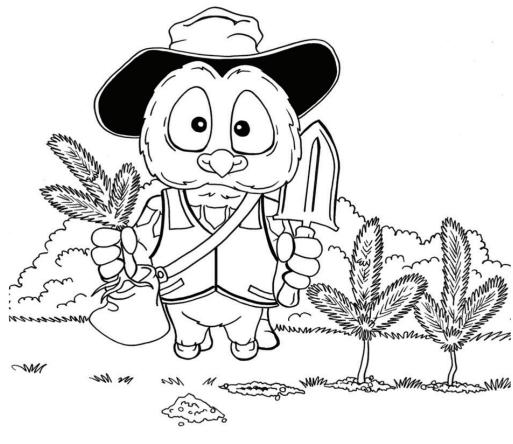


Thanks to everyone who entered our December Colouring Contest.
Congratulations to **Nathan, age 11**, whose name was picked from our random draw.
Nathan wins the DRIVEN Toy Logging Truck and we will be sending a special gift to everyone else just for entering!



For our spring issue, colour Tree Planter Ollie from Ollie's Woodlot Adventures courtesy of the Federation of British Columbia Woodlot Associations (FBCWA) or send us a picture of your own artwork and 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@bcforestsafe.org
- Submit your entry by 4pm, Friday, May 3, 2024.
- 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 June 2024 issue of the Forest Safety News.

ABOUT Forest Safety News

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