

# FOREST SAFETY

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# NEWS



## Positive Progress and Distractions in Times of Uncertainty

By Rob Moonen

The only constant is change is an accurate way to describe BC's forest sector. And while change can be uncomfortable for many of us, our industry has a long and successful history of responding to change and doing it well.

In 2004, the Forest Safety Task Force, consisting of appointed Forest Industry Leaders, developed a report and action plan to eliminate deaths and serious injuries in BC's forest industry. This report set out the recommendations of the task force and an action plan that, if effectively implemented, would fundamentally change how health and safety was treated by the forest industry in BC. The task force ultimately concluded that focus cannot simply be placed on reducing the number of deaths and serious injuries in the sector. To succeed, fundamental attitudes and behaviours about safety needed to change.

Almost twenty years later, while there is still more work to do, the journey the forest industry has been engaged in has been one of dynamic and positive change. 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.

2023 has been a very challenging year with the wildfires which contributed to a number of tragic events. In 2023 year-to-date (YTD), there have been eight work-related deaths, including the four wildland firefighters who perished in a motor vehicle incident (MVI) on Highway 1 near Walhachin.

We extend our heartfelt condolences to

the families, friends and colleagues of the deceased and our sympathies to all those affected.

In times of uncertainty and tragedy, it's difficult not to get distracted from our daily work activities. The past few years have presented the forest industry with some unique challenges. From forest policy changes and uncertainty, asset closures, curtailments, permit delays, to extreme weather events.

These challenges have put additional pressure on all forestry workers and can cause high-production pressure and a rush to get the work done once workers are back on the block. As we move into the fall and winter, consider the following points to ensure that production pressures and increased activity are effectively managed to ensure safe operations:

- It is tempting to work as much and as fast as possible when work is available; however, don't take shortcuts. Although shortcuts can lead to temporary benefits, they also greatly increase the risk of a serious incident, or worse.
- After long shutdowns, the pressures to "get 'er done" can be heavy. Companies want to get roads built, timber fallen and logs to market and workers want to get a decent paycheque in the bank. Other phases that follow behind you may want you to keep working so they can keep working. When it starts blowing, snowing and raining hard, those pressures can influence decisions around weather-related shutdowns that should be based on worker safety. It is important to maintain your shutdown criteria. Money problems can be very real but are not worth risking your safety or the safety of your fellow workers.

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

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- Increased pressure and additional work can be physically and mentally tiring. Monitor yourself and others around you for signs of fatigue. Be self-aware and think critically about the decisions you are making. Stress and fatigue can lead to poor decision making, potentially leading to safety issues. Be aware and adjust your work as required.
- Stress and uncertainty can also cause mental health concerns. People can turn to drugs and alcohol to help cope or self-medicate. Be aware and have tools and resources available to help you and your workers deal with these issues before they become bigger problems. There are resources available on [BCFSC's Mental Health Resource Page](#).
- Work with your team of workers, suppliers, subcontractors and clients. Communicate the challenges you face so they are aware and use their knowledge and experience to come up with potential solutions. This may alleviate some of the pressure and help to focus on safe operations.

As an industry, we've demonstrated that when we work together, we can accomplish great things. Let's ensure that we continue to focus on what's in our control to meet our collective goal of **ensuring every forestry worker goes home safe. Every day.** 🌲



## What's New

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

**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.

**WorkSafeBC First Aid Amendment Update** – To assist organizations in preparing for the proposed requirements, WorkSafeBC has added further guidance to the background on the occupational first aid regulatory changes coming into effect November 1, 2024.

**Video: Human Factors Workshop: Systems Approach to Preventing Struck by Incidents** – Learn more about preventing incidents between mobile equipment and workers on foot.

**Training Calendar** – Our 2023-2024 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.



**Safety Alerts** – Alerts provide timely information on incidents and issues which cause, or result in, serious or fatal injuries and 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** – Flying Safely Over Water
- **Industry Alert** – UTV Shock Mount Failure
- **Manufacturing Weekly Safety Alert** – Click on the link to see the latest weekly alert

**To subscribe to our Safety Alert emails – [Click Here](#)**

## Upcoming Industry Conferences

**BC Natural Resources Forum** – January 16 – 18, 2024 in Prince George BC. For more information or to register, visit the website.

**79th Annual Truck Loggers Association (TLA) Convention** – January 17-19, 2024 in Vancouver, BC. For more information or to register, visit the website.

**Western Forestry Contractors Association Conference & Trade Show** – January 31 - February 2, 2024 in Victoria, BC. For more information or to register, visit the website.

**Forest Professionals of BC 2024 Conference & AGM** – February 8 – 10, 2024 in Kelowna, BC. For more information or to register, visit the website.

## Industry Links

**Shift Into Winter** – winter is here. Make sure you know what your responsibilities are as an employer and employee when it comes to driving in winter road conditions.



*Happy Holidays*  
**BC Forest Safety**

Extending you our very best for a **safe, healthy and happy holiday season.**

**BCFSC Holiday Office Hours**

Monday, Dec 25	CLOSED
Tuesday, Dec 26	CLOSED
Wednesday, Dec 27	8am – 4:30pm
Thursday, Dec 28	8am – 4:30pm
Friday, Dec 29	8am – 4:30pm
Monday, Jan 1	CLOSED
Tuesday, Jan 2	Regular hours resume

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

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

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

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

# 2024 BC Forestry Conferences & Events

Start planning for 2024 and register for these upcoming forestry-related conferences. 📅

Conference / Event	Dates	Location	Information & Registration
21st Annual BC Natural Resources Forum	Jan. 16 - 18	Prince George, BC	<a href="http://www.bcnaturalresourcesforum.com">www.bcnaturalresourcesforum.com</a>
79th Annual Truck Loggers Association (TLA) Convention	Jan. 17 - 19	Vancouver, BC	<a href="http://www.tla.ca">www.tla.ca</a>
2024 Western Forestry Contractors Association Conference & Trade Show	Jan. 31 - Feb 2	Victoria, BC	<a href="http://www.wfca.ca">www.wfca.ca</a>
2024 Forest Professionals of BC Conference & AGM	Feb 8 – 10	Kelowna, BC	<a href="https://evoque.swoogo.com/FPBC2024">https://evoque.swoogo.com/FPBC2024</a>
2024 Council of Forest Industries (COFI) Convention	Apr. 10 - 12	Vancouver, BC	<a href="http://www.cofi.org">www.cofi.org</a>
8th Annual Indigenous Resource	Apr. 24 - 26	Nanaimo, BC	<a href="http://www.bciroc.ca">www.bciroc.ca</a>
2024 Interior Logging (ILA) Conference and AGM	May 9 - 11	Kamloops, BC	<a href="http://www.interiorlogging.org">www.interiorlogging.org</a>
2024 Interior Safety Conference	May 10	Kamloops, BC	<a href="http://www.bcforestsafe.org/news-events/safety-conferences/">www.bcforestsafe.org/news-events/safety-conferences/</a>
2024 Vancouver Island Safety Conference	Oct 26	Nanaimo, BC	<a href="http://www.bcforestsafe.org/news-events/safety-conferences/">www.bcforestsafe.org/news-events/safety-conferences/</a>

## BCFSC to Establish a Special Industry Operating Fund to Support Research and Development

BCFSC is committed to fostering a culture of safety and innovation in the forest industry. As part of its 2023-2025 Strategic Plan, the BCFSC will launch a Research, Development and Opportunity Fund to support initiatives that address current and emerging safety challenges and opportunities in the forest sector. This fund will provide financial assistance to industry researchers and partners who propose practical and feasible solutions for improving occupational health and safety in forestry operations. It will also encourage collaboration

and knowledge sharing among stakeholders, as well as alignment with OHS regulations.

The funding will support projects that involve developing, testing, evaluating, or implementing new or improved products, processes, technologies, and best practices that enhance safety in the forest industry. Some examples of potential research topics include personal protective equipment (PPE) or improved safety designs; technological advancement studies and prototype designs; analytical studies and concept

validation; field studies and efficacy or safety trials; and best practices and guidelines for safe work procedures.

BCFSC will be accepting applications for research grants in 2024. BCFSC will prioritize approvals based on the significance of the emerging issue and proposed research projects that demonstrate innovation, impact, feasibility and scalability. Visit our website for updated information on the application process. 📄

# Workforce Development Funding Programs to Support Skills Training

WorkBC has two workforce development programs that offer funding opportunities to help build skills training intended to overcome employment barriers and workforce shortages.

**The Community Workforce Response Grant (CWRG)** provides funding to communities and sectors province-wide to help address immediate and emerging labor market needs through targeted skills training projects.

The funding focuses on sectors for cohort-based, short-term (less than 52 weeks) projects and fully funds training costs up to \$10,000 per participant as well as services and support to help participants overcome training and employment barriers. Visit the Workforce Shortages Stream Criteria for eligibility requirements.

**The BC Employer Training Grant (ETG)** provides funding to small, medium and large enterprises to support skills training for workers including prospective new hires. The

program is intended to help British Columbians access the skills training required to adapt to the labour market's changing job requirements, while also encouraging employer involvement in skills training. The ETG helps employers pay for training, that provides workers with increased job security and growth opportunities. Employers can receive 80% of the cost of training up to \$10,000 per employee, with a maximum annual amount per employer of \$300,000. For more details, see the Eligibility Criteria on the WorkBC website. 🌱

## Forestry Professionals Gain Valuable Safety Insights at the 2023 Vancouver Island Conference

The 2023 Vancouver Island Safety Conference was held on Saturday, October 28th in Nanaimo, BC. More than 290 forestry professionals from different sectors attended the free, full-day event with the theme of “Navigating the Future During Complex Times”.

The conference featured three keynote speakers, two of whom shared their stories and insights from Africa and one on the federal and provincial prison system. Allan Moore, a seasoned environment, health and safety expert, told us how he survived being charged by elephants in Africa and what it taught him about safety leadership styles. Dr. Alison Granger-Brown, a former prison therapist, explained how our body and brain react to stress and how we can listen to our intuition and signals to stay safe. Steve Donahue, a bestselling author and motivational speaker, entertained us with his adventures in the Sahara Desert and how he learned to not only embrace change but to invest in it.

The conference also included presentations from Roger Harris, who discussed the evolution of the safety mindset in forestry and encouraged us all to celebrate our successes and not dwell on the statistics; Joe Scibilia, from ZoneSafe, introduced some new technologies for mobile equipment / pedestrian interface safety; and Tim Stinson of Stinson Aerial, who demonstrated the use and regulation of drones in forestry.

On behalf of the VISC Steering Committee, we would like to thank all the volunteers and sponsors who made this free conference and networking event possible. For more details on the presentations, read the VISC 2023 Wrap-up that will be available on December 15, 2023. 🌱



# BCFSC Celebrates Leadership in Forestry Safety with the 2023 Leadership in Safety Awards

The 2023 Leadership in Safety Awards were presented at the Vancouver Island Safety Conference on Saturday, October 28, 2023. The awards celebrate safety achievements in the forest industry by recognizing individuals for their contributions and their outstanding commitment in supporting safety in the workplace. Nominations are invited from anyone in the industry who knows someone – an individual, crew, contractor, company, supplier, consultant, etc. – who deserves to be recognized for their outstanding safety achievements. Someone who has made, or continues to make, a difference in supporting our shared goal to see every worker return home safely at the end of the day.

This year's awards were presented to three well-deserved individuals who have shown outstanding commitment to forestry safety throughout the course of their careers.

The 2023 Cary White Memorial Lifetime Achievement Award for Commitment to Safety Excellence was presented to Roger Harris, the BC Forest Safety Ombudsperson who will be retiring from his position at the end of 2023. The Most Valuable Player Award in Forestry was presented to Mercer Forestry's safety advocate, Sandy Higgins and Patrick McDonald from Canfor's Kootenay operations received the Most Valuable Player Award for Wood Products Manufacturing.

## ROGER HARRIS - 2023 Cary White Memorial Lifetime Achievement Award Forest Safety

Roger Harris has served as the BC Forest Safety Ombudsperson for 17 years. In this role, he was responsible for investigating safety concerns and providing recommendations for improvement to industry stakeholders, including employers, workers and regulatory bodies. Roger's extensive experience in forestry, gave him a 360-degree view and an objective perspective of BC forestry with a full understanding of the inherent safety and operational risks that both workers and employers face.

During his tenure as BC Forest Safety Ombudsperson, Roger produced in-depth reports on key safety issues relating to forestry safety, including Phase Integration, SAFE Companies, Recruitment, Training and Certification for Worker Safety, Resource Road Safety and more. Roger will be retiring from this role in December 2023.

## SANDRA HIGGINS - 2023 MVP Award Harvesting

Sandy's lifelong career in forestry began when logging operations were mostly manual, and the industry was extremely high risk. She has shared stories when it was considered normal to take immense risks just to bring home a paycheck, when the motto was "in for the money, out for

your life". When the BC Forest Safety Council introduced the SAFE Companies program and industry started to see a shift in safety culture, Sandy witnessed the cultural shift first-hand. She knew from experience it was not going to be without its challenges, yet at the same time, it was the best part of her career.

Sandy is the Safety Coordinator at Mercer Forestry Services located in Lumby, BC. Her industry experience and her commitment to safety are at the core of Mercer's "Safety First" forestry operations. Sandy firmly believes in this number one value and personally holds safety to the highest standard by leading by example. She is well respected among staff, customers and industry and she clearly and consistently demonstrates strong safety leadership in the organization.

## PATRICK McDONALD - 2023 MVP Award Wood Products Manufacturing

Patrick McDonald has over 15 years of experience working as a safety professional in Canada. He is considered an innovator and leader in wood products manufacturing safety in BC and specializes in developing worker and operational safety solutions. Time and time again, Patrick has demonstrated his forward-thinking creativity in various projects including his most recent hand-safety initiative that focusses on the prevention of hand injuries. For this project, he collaborated with a leading glove supplier to design and implement gloves that are task-specific to wood products manufacturing and shared the project outcome with the BC sawmill industry and across Canada through the cross-country safety share with Workplace Safety North (Ontario).

To learn more about BCFSC's Leadership in Safety Awards, visit the [BCFSC website](#). 📄



## BC First Nations Forestry Council's Opportunity Register

The Opportunity Register (OR) being developed by the BC First Nations Forestry Council is an online tool to support individual First Nations pursuing opportunities in the forestry sector. The tool aims to create strategic connections between Nations, industry, government, and funding sources, to support successful business partnerships by identifying, connecting, supporting, and tracking First Nation's interests in the forestry sector.

The platform will improve assurance, efficiency and effectiveness of registered opportunities. First Nations wishing to use the OR will be able to log onto a system and register their forest sector related opportunities. Relevant information related to the opportunity will be requested (to allow for faster progression of the opportunity registered).

Once the tool is up and running, the goal will be focused on matching each

First Nation opportunity with relevant businesses, SMEs, and/or financial providers.

In addition, forest sector related business, subject matter experts (SMEs) and/or funding resources looking to partner with or support First Nations in their opportunities will also take part in adding their relevant opportunities the register.

For more information on the Opportunity Register, contact [robert@forestrycouncil.ca](mailto:robert@forestrycouncil.ca) or [fill out the short questionnaire](#). 📄

## WorkSafeBC Reminder: Workplace Health and Safety Requirements Come into Effect in 2024

Effective January 1, 2024, Return to Work Obligations: Duty to Cooperate and Duty to Maintain Employment will come into effect. The provincial government has made amendments to the Workers Compensation Act Bill 41: Amendments to the Workers Compensation Act that affect return to work policies.

### What the new legislation means for employers and workers

The duty to cooperate applies to both workers and employers, and to claims with injury dates going back up to two years.

- Employers will be required to make suitable work available to workers in a timely and safe manner following their injury or illness. They will also be required to make necessary changes to accommodate a worker's abilities to perform new or modified duties.
- Workers will be required to cooperate with their employer to identify suitable modified job duties and not unreasonably refuse that work when it's made available to them.

The **duty to maintain employment** applies only to some employers and to claims with injury dates going back up to six months. If an employer regularly employs 20 or more

workers and has employed a worker for at least one year prior to their injury, they will have an obligation to maintain that worker's employment.

### Return to work benefits both employers and workers

Supporting workers in their recovery at work following an injury is good for both workers and employers. By helping them stay on the job as they recover, employers retain skilled workers and reduce both their recruitment and training costs.

For workers, being able to perform some duties while they recover keeps them connected with their workplace, co-workers, and regular routines, and can prevent long-lasting disability.

To learn more about how you can help your workers return to work safely and the duty to cooperate and maintain employment visit [WorkSafeBC's website](#).

### WorkSafeBC Update to First Aid Regulations

WorkSafeBC's amendments to Part 3 of the Occupational Health and Safety (OHS) Regulation, relating to first aid take effect November 1, 2024.

To assist in preparing for the proposed requirements, WorkSafeBC has added further guidance to the backgrounder on the occupational first aid regulatory changes.

The updates include information relating to:

1. Guidance on "less-accessible" workplaces
2. Alignment with the CSA standards
3. Emergency transportation

For detailed information, see [Backgrounder: Occupational first aid regulatory changes on the WorkSafeBC website](#).

**Hand Hygiene: How to Reduce the Spread of Germs** - WorkSafeBC has released a new video on how to sanitize your hands to help maintain good hand hygiene.

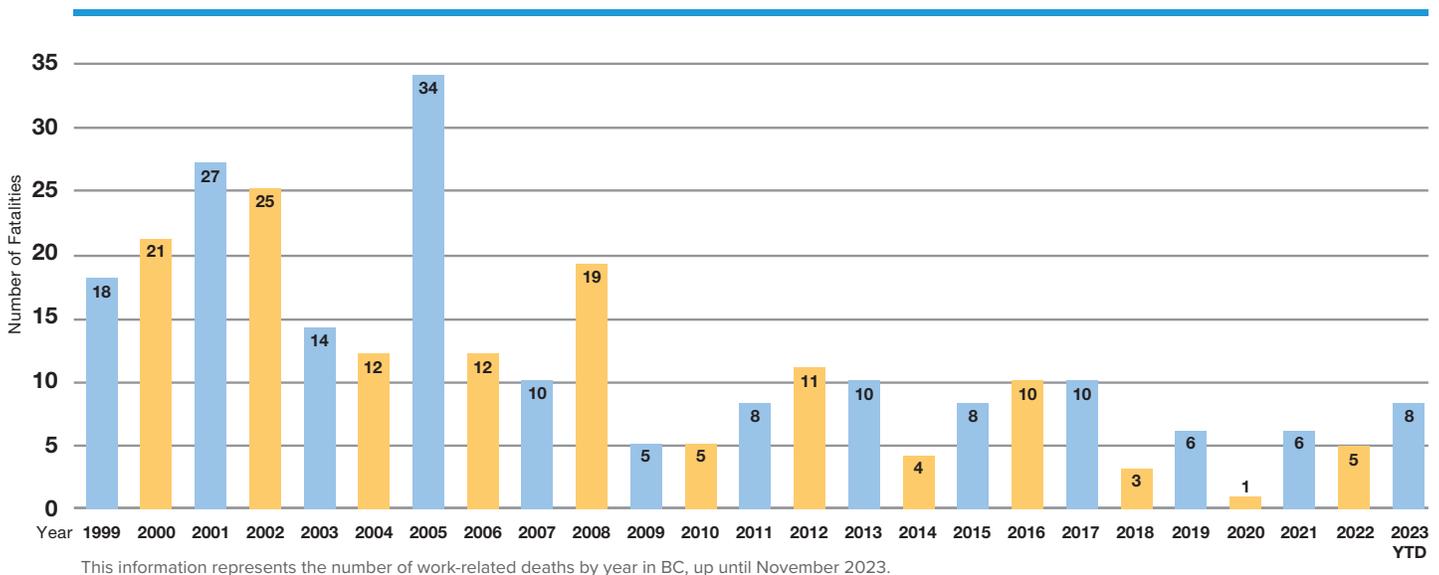
**Slips, Trips and Falls are BC's Costliest Workplace Incidents** - Each year, approximately 20% of workplace injuries are related to slips, trips, and falls. In the past six years, almost 41,000 workers in BC suffered slip-trip-and-fall injuries, including fractures, sprains, and dislocations. During the winter months, icy and wet conditions contribute to an 11% increase in injuries due to slips, trips, and falls.

On average, slip-trip-and-fall injuries cost BC businesses 440,000 lost workdays and more than \$148 million in claim costs each year.

[Read more](#) from WorkSafeBC on how you can help manage the risk of slips, trips and falls in your workplace. 📄



## WSBC Accepted Harvesting Work-related Death Claims



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

### FATALITIES

**Injury:** Fatal  
**Core Activity:** Resource Road Bridge Maintenance  
**Location:** Interior BC  
**Date of Incident:** 2023-Sept  
 On September 29th, a worker was performing bridge replacement work when they were struck by a section of a birch tree that fell from above them. The worker succumbed to their injuries.

[Read the BCFSC Fatality Alert](#)

**Injury:** Fatal  
**Core Activity:** Air Transportation (Helicopter)  
**Location:** Northern BC  
**Date of Incident:** 2023-Sept  
 On September 26th, a Bell 206L helicopter was transporting a forestry crew to a remote location and went down near Purden Ski Hill, east of Prince George. The pilot and one passenger were fatally injured in the crash; the other four workers were transported to hospital.

[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:** Fractured leg  
**Core Activity:** Integrated Forest Management  
**Location:** Lower Mainland  
**Date of Incident:** 2023-Oct  
 A worker jumped off of a platform about two 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.

**Injury:** Close Call  
**Core Activity:** Integrated Forest Management  
**Location:** Interior BC  
**Date of Incident:** 2023-Sept  
 A worker was operating a feller-buncher when the machine flopped over. The worker exited the cab through the escape hatch in the roof. A short time later the buncher caught fire. The fire suppression system was activated but did not extinguish the fire. The operator was not injured.

**Injury:** Multiple fractures  
**Core Activity:** Manual tree falling and bucking / Land clearing  
**Location:** Vancouver Island/Coastal BC  
**Date of Incident:** 2023-Sept  
 A faller was falling a leaning alder tree, about 12 inches in diameter. The tree barberchaired (its trunk split), causing part of the tree to detach and strike the faller.

#### MANUFACTURING

**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.

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# Work-Related Deaths & Injuries

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**Injury:** Close Call

**Core Activity:** Pressed wood product manufacture

**Location:** Northern BC

**Date of Incident:** 2023-Aug

After a wood pellet production plant dryer had been shut down in preparation for maintenance, a worker reported an orange glow coming from the burner shack/dilution zone. Workers investigated and saw a fire on the roof of the burner shack. They used hoses to extinguish the fire.

**Injury:** Suspected fracture

**Core Activity:** Sawmill

**Location:** Lower Mainland

**Date of Incident:** 2023-Jul

A worker was clearing a jammed cant (partially processed log) when a second, in-feeding cant contacted the first cant. One of the worker's feet was caught between the first cant and the outfeed chain drives.

**Injury:** Close Call

**Core Activity:** Sawmill

**Location:** Vancouver Island/Coastal BC

**Date of Incident:** 2023-Jul

At a cedar mill, a fire began in a kiln and spread, fully engulfing the structure. The mill was not in operation. Fire departments extinguished the fire.

**Injury:** Close Call

**Core Activity:** Pressed wood product manufacture

**Location:** Northern BC

**Date of Incident:** 2023-Jul

A fire was detected in the wood pellet cooling bin downstream of a pelletter machine. The fire was extinguished using a fire hose. No injuries were reported.

**Injury:** Close Call

**Core Activity:** Pressed wood product manufacture

**Location:** Northern BC

**Date of Incident:** 2023-Jun

A worker reported smoke and fire coming from a plenum fed by a hammer mill. The employer's emergency response process was initiated, and the fire was extinguished. After reviewing video footage, the employer determined there had been a deflagration event inside the hammer mill and plenum.

## TRANSPORTATION

**Injury:** Fractures (Two workers)

**Core Activity:** Log hauling, Integrated forest management

**Location:** Vancouver Island/Coastal BC

**Date of Incident:** 2023-Jul

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

**Injury:** Injuries including concussion, fractures, strain, and pain (19 workers)

**Core Activity:** Commercial bus operations / Industrial camp operations

**Location:** Northern BC

**Date of Incident:** 2023-Jun

A bus transporting workers to a camp location was travelling on a resource road. Recent rainfall had softened the shoulder of the road. As the bus traversed a corner, it left the road, entered a ditch, and rolled onto the passenger side. Crews from a nearby project responded with emergency transport vehicles (ETVs); ambulances also attended the site. Nineteen workers, including four young workers, were injured.

## FORESTRY GENERAL

**Injury:** Injuries to upper body (1 worker)

**Core Activity:** Wildfire suppression

**Location:** Interior BC

**Date of Incident:** 2023-Aug

A worker was repositioning a truck when the vehicle became stuck on a fire guard. While the worker was trying to free the vehicle, fire activity intensified and crossed the guard. The worker was forced to flee on foot but was not injured.

**Injury:** Injuries to upper body (1 worker)

**Core Activity:** Forest fire fighting

**Location:** Northern BC

**Date of Incident:** 2023-Aug

Wildland firefighters were travelling in a vehicle along an overgrown forestry road. A young worker was sitting in the rear passenger-side seat with the window down. A tree branch brushed along the side of the vehicle and sprang into the rear passenger section, striking the worker.

**Injury:** Concussion

**Core Activity:** Wildfire suppression

**Location:** Interior BC

**Date of Incident:** 2023-Jul

A firefighter was hosing a small fire when they were struck by a falling spruce tree. 🚨



## Annual Audit Requirements

The deadline to submit your SAFE Certification 2023 annual audit is quickly approaching. To avoid having to prepare your audit and organizing the accompanying documents over the Christmas holiday, we highly recommend submitting your audit sooner rather than later to avoid a last-minute rush and possibly overlooking important information.

Maintenance audits should cover the previous 12 months, regardless of when your last audit was conducted and are due no later than December 31, 2023. Recertification audits are due on your certificate expiry unless you have been approved for an extension.

**Here are some tips to help you refresh your memory on audit submission to help you save valuable time:**

1. Review the BCFSC YouTube Video on "How to Prepare and Audit"

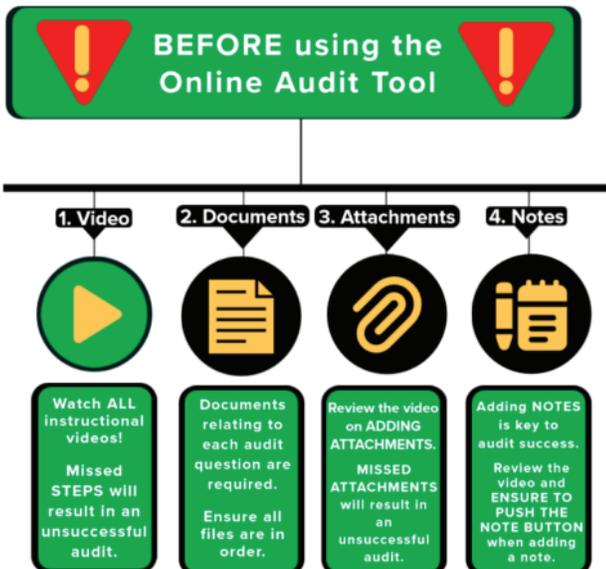
2. Determine the type of Audit you will be submitting. IOO (one owner, one office support), SEBASE (6-19 workers)/ISEBASE (2-5 workers), BASE (20+ workers)
3. Download the Audit Support Forms and Resources required for your audit type from the BCFSC website
4. Send your audit electronically using the following options:
  - Upload via our website (for files 8MB or larger)
  - Email (files less than 8MB) to [audits@bcforestsafesafe.org](mailto:audits@bcforestsafesafe.org)
  - Use the BCFSC ONLINE AUDIT TOOL (OAT) (85MB max per file) which allows you to file and save your audit reporting forms and answers online. *\*Remember the full audit tool must be fully completed and submitted with all annual audits. This includes the*

*two-page Company Profile, the Corrective Action Log (CAL) from last year's audit review letter and a completed Training Log with all workers listed who worked for your company in the current audit reporting year.*

We recommend electronic submission to ensure a timely review, but you can also fax your audit to 250-741-1068. If a paper audit is your only option, submit by courier or tracked delivery service to the BCFSC Nanaimo office or drop off to the BCFSC Nanaimo Office from 8:30am – 4:30pm, Monday to Friday (please note our holiday hours to ensure there is someone in the office to receive your audit).

If at any point you run into difficulty, a BCFSC Safety Advisor is available to help Monday through Friday from 8am – 5pm. Call us at 1-877-741-1060 or email [safecompanies@bcforestsafesafe.org](mailto:safecompanies@bcforestsafesafe.org) to arrange assistance. 📞

## Tricks and Tips for Using the Online Audit Tool (OAT) Successfully



### Technology Tips:

- Audits can ONLY be submitted with our OAT Tool using a computer with a stable, high-speed internet connection and web browser (i.e., Firefox, Goggle Chrome, Edge, etc.). OAT cannot be used with a mobile phone or tablet.
- Your internet connection must have sufficient broadband to support high-speed video streaming otherwise it won't be enough bandwidth to submit an audit using OAT.
- OAT is a web-based document submission tool. It is not compatible with Word doc commands.
- The maximum file size for document submissions is 85MB. You will have to ensure the total size of all scanned documents in your final audit submission does not exceed 85MB.

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### OAT Instructions:

BCFSC has developed ten short videos on how to use OAT successfully. We highly recommend taking the time to watch these videos before using OAT to submit your annual audit.

[Learn how to use OAT](#) by visiting our webpage. On this page, you will find our OAT introduction video, [downloadable common questions on How to Use OAT](#) and OAT instruction videos.

### Audit Reporting Requirements & Tips:

For those who have submitted a paper audit in the past, you will notice questions from the paper audit tool are the same questions as the online audit tool. IOO's need to answer 12 questions for 14 points and Small Employers (SEBASE and ISEBASE) will need to answer 22 questions for 24 points.

There are two different options to successfully answer audit questions. It is important to remember to watch the videos and learn how to enter and save a comment/note and/or how to attach and save a document to each question.

- Option 1. Type out the answer in a note in the field/box available in each question.
- Option 2. Attach a document that corresponds to the question's reporting request. For example, submit an Emergency Response Plan (ERP) document.

### Audit Examples:

SEBASE/ISEBASE audit Question 9a) Asks you to list the Safe Work Procedures (SWP) you use daily in your operations. You could type out the whole list of your SWP into the field box OR you could attach a digital document with all SWP listed on it. (i.e., a scan of the Table of Contents from your OH&S Program where the SWP is already listed.) Questions 5, 9a, 13, and 14 are answered right on the audit tool and Questions 15-22 must ALL have one box ticked off in each question, declaring if they apply to this current audit reporting.

IOO audit Questions 2, 3, 5, 8, and 9 are answered right on the audit tool and Questions 10-13 must ALL have one box ticked off in each question, declaring if they apply to this current audit reporting year.

### Double Check Before You Send:

Your audit is ready to submit when all fields are populated. Before you submit your OAT, save a copy of the documents and responses to all questions. Once the OAT is submitted, you will no longer have access to modify or change anything in your submission.

Once you submit your annual audit online, you will receive a confirmation from BCFSC acknowledging receipt of your audit. 📧

# Create, Report and Submit Reports Using the BCFSC FIRS App

At the 2023 Vancouver Island Safety Conference, BCFSC unveiled the second phase of the BCFSC FIRS App.

The BCFSC FIRS App is a FREE forms management mobile application for SAFE certified members that is currently under development by EHS Analytics to help streamline and reduce the amount of safety-related paperwork and administrative work required in the field. The online forms portal will support the record keeping requirements for small employers and assist in building and maintaining SAFE Company Certification. The BCFSC FIRS system includes a mobile app, a web app and an administrative dashboard. For a full explanation of how the FIRS App will help support your record keeping administration requirements, visit our dedicated FIRS webpage.

“Our team had a great culture surrounding incident reporting, this was enhanced greatly by the addition of the FIRS App. With the addition of FIRS, reporting became as easy as telling someone in person.”

Continued on page 11...



Continued from page 10...

The second phase of the FIRS App allows contractors to use FIRS to create, report and submit reports for:

- Injuries
- Near Misses
- Hazards
- Wildlife Encounters
- Harassment
- Property Damage



Reports can be created using the App even if your device is offline. Once you are back online, the information will be automatically submitted into your reporting queue.

The first stage of the FIRS App was introduced in 2023. It allows companies to submit and track incident reporting by submitting answers to five simple questions and uploading supporting photos and/or documents into the record. It also includes a Supervisor's Queue allowing supervisors, safety professionals, and company owners to review submitted records and extract important information from the report such as the severity or nature of a reported injury.

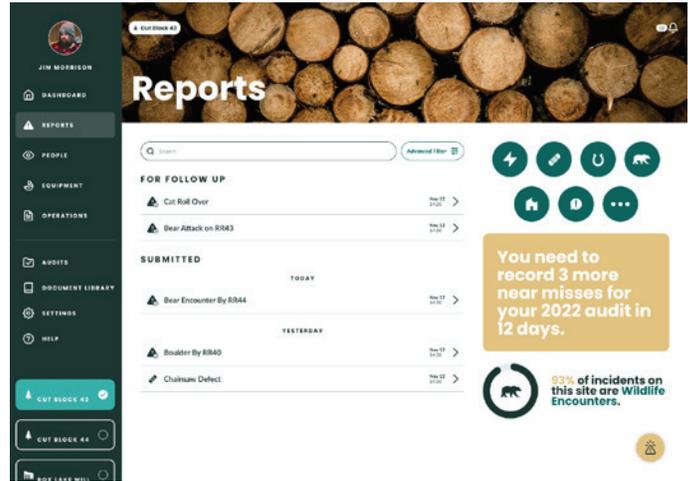
The latest version of the BCFSC FIRS App can be downloaded for Android and iOS devices. Go to the App store on your device and search for BCFSC FIRS to download the FREE App.

The first phase of the FIRS App called BCFSC Quick Add is separate from the current BCFSC FIRS App. Existing QUICK ADD users will need to download the new version of the BCFSC FIRS App. You can use your existing login credentials to access the new BCFSC FIRS App.

*Please note: BCFSC Quick Add will transition into the new version but will exist temporarily until the transition is complete. Supervisor Queue/EHS forms will be slowly removed over time as we transition to the BCFSC FIRS web app where all forms and records will eventually be stored.*

**For new users** - you will require a FIRS account. For security purposes, BCFSC will need to confirm your SAFE Certified Company first by emailing your registration request to [FIRS@bcforestsage.org](mailto:FIRS@bcforestsage.org). Registrations will be reviewed by BCFSC and once approved, your account will be established. An invitation email will be sent to your inbox where you can then set up your FIRS account with your registration details.

"FIRS is used by all age demographics within our company proving its ease of use and importance to our team"



## How to sign up:

1. Register for the BCFSC FIRS App. Once you have been verified as a SAFE Certified Company, you will receive an email inviting you to create an account with EHS Analytics. You will set up a username (email), and password and you can use the same credentials to access your BCFSC web app, mobile app and dashboard.
2. The Mobile App works both online and offline to make your reporting easier on the field. You can create reports for Harassment/Violence, Injuries, Hazards, Wildlife Encounters, Property Damage and Near Misses.
3. The Dashboard will allow you to manage your web and mobile apps. You can manage users, user permissions, add project sites, add people and view reports.
4. The Web App will allow you to see and review reports submitted from the mobile app. You can also review and edit reports submitted through the mobile app, create tasks and corrective actions and submit and keep track of reports.

For Existing Users of the BCFSC Quick Add, download the newest version of the BCFSC FIRS App.

1. Simply go to the App Store on your mobile device and search for "BCFSC FIRS" to download the new app.
2. You can log into the newest version of the "BCFSC FIRS" app by entering your existing credentials (username and password).
3. Historical data and old reports submitted through the "BCFSC Quick Add" will be visible in the [EHS Dashboard](#).
4. New reports submitted through the "BCFSC FIRS" app will be visible in the [BCFSC FIRS web app](#).

New features will be added to the app throughout 2024.

"Using FIRS to increase the amount of data measured allows us to draw conclusions and identify trends" 🌲



## Qualified Faller Trainer Course

BCFSC held a Qualified Faller Trainer (QFT) course from September 18-23, 2023, in the Parksville area. Six BCFSC Certified fallers attended the QFT course which is designed to prepare experienced fallers to instruct the BC Faller Training Standard program in a one-on-one setting to new and existing fallers.

BCFSC would like to thank Sam Stanko and Mosaic Forest Management for providing the timber site.

For more information on the QFT course, visit the [BCFSC website](#) to find out more. 🌲



Co-instructor John Jacobsen, shown above, demonstrates basic chainsaw training while the QFT participants observe.

## New Faller Training

The fall session of BCFSC's New Faller Training (NFT) was underway from September 28 – October 30, 2023. Three NFT candidates participated, working towards meeting the required course outcomes to accomplish their new faller training requirements.

Thank you again to Sam Stanko and Mosaic Forest Management for providing the timber site for this course. 🌲



Lead Trainer John Jacobsen leads the trainees through a discussion on a falling scenario.



The trainees meet with Quality Control from Mosaic Forest Management, discussing bucking cards and considerations when bucking to increase the value of the timber.

# Falling Technical Advisory Committee (FTAC)

At the September 15th FTAC Meeting, Mike Kay, an Advanced Care Paramedic Instructor, gave a presentation on Emergency Response Planning, with a focus on critical intervention. Mike is the principal owner of Kay's Consulting which provides instruction and mentoring to up and coming Paramedics. He has over 40 years' experience as an advanced care and critical trauma paramedic.

Before retiring from a long-standing career with the BC Ambulance service and starting his consulting company, Mike was also an instructor at the Paramedic Academy of the Justice

Institute of BC (JIBC) for twenty-five years. He was also the medical instructor at the Canadian Forces Base in Comox for the Department of National Defence (DND), Search and Rescue (SAR) Technicians for eighteen years and is a certified instructor for Advanced Care Paramedicine (ACP), Primary Care Paramedicine (PCP), International Trauma Life Support (ITLS), and Airway Interventions and Management in Emergencies (AIME) courses.

Mike is renowned throughout the province for this dedication to emergency services. He was presented with the Commander 2 Canadian Air Division Generals Coin in 2018 in recognition of his service and has taught more than 20 cohorts of SAR Tech learners. The training he has provided has allowed this exclusive group to confidently perform lifesaving medical interventions in some of the worst conditions for medical rescue missions.

During Mike's presentation to FTAC, he identified three key things to consider when dealing with an emergency:

## 1. Keep the patient warm.

- An individual's survival rate can increase by 33% if their body temperature is maintained.
- Mike suggested using a Ready-Heat™ blanket or similar, and to limit fluids given to the patient.

## 2. Mitigate the injury.

- Take reasonable steps to ensure critical injuries are treated before moving the patient. (ie. minimize a bleed by using direct pressure or using a tourniquet if needed.)

## 3. Move the patient.

- Get the patient moving as quickly as possible and transported to the nearest medical facility.

Mike indicated that by doing these three things, the survivability rate of the patient increases by 70%! He also noted it is vital to know the local resources available to you in your area including Helicopter Evacuation Services (HEMS) and Search and Rescue when creating your ERP. He also suggested it is useful to keep a tourniquet on your person and having a SKED™ stretcher system as a basic rescue system that can be easily packed onto a forestry worksite. This system is a versatile, compact, and durable emergency rescue stretcher providing outstanding patient protection and security in any situation.

If you would like more information on how to contact Mike regarding training opportunities, please reach out to [BCFSC Falling Department](#). 📞





## FSN – Establishment of NEW Access Management Working Group

It is estimated that there are approximately 719,000 kilometers of roads in BC, of which 92% (661,500km) are unpaved. Resource roads (Forest Service Roads and road permit access roads etc.) comprise most of the unpaved roads with an estimate of over 620,000 km. These roads are a vital part of the province’s transportation infrastructure and continue to grow annually at a projected average rate of +/- 10,000 km.

making roads difficult to travel safely as well as complicating evacuation procedures of an injured worker in an emergency. Conversely, when excessive deactivation measures are completed, it can create extremely hazardous conditions for crews due to removal of certified crossing structures and creation of deep cross-ditches which are hazardous to navigate.

In March of 2023, the BC SAFE Forestry Program completed a survey of its members to assess the frequency and extent of access hazards that silviculture contractors face in their worksites due to road deactivation, rehabilitation, or closure after harvesting. The primary objective of the survey was to make recommendations to reduce these hazards and improve safety and productivity for silviculture crews. The survey focused on access conditions respondents experienced over the last five-year period and addressed all access scenarios except for those restricted to the use of helicopters.

The survey respondents provided a range of enhanced emergency response planning measures they felt were required to ensure timely and safe emergency transportation, including providing radios to every worker, air transport arrangements, modifying the worksite, bringing in additional first aid resources, and refusal of completing unsafe work. Many respondents identified the importance of having an Emergency Response Plan (ERP) in place that considers access management and procedures for air medivac as being critically important to ensuring worker safety in these situations. The table below summarizes the responses to survey questions.

*Continued on page 15...*

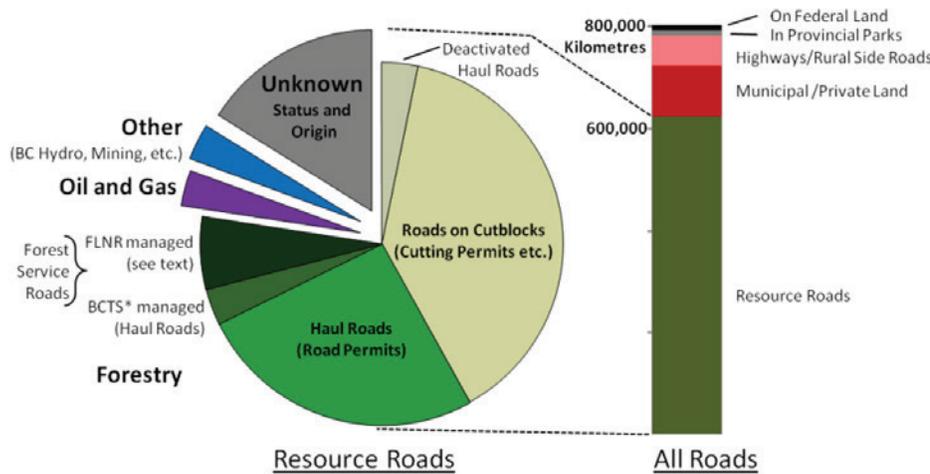


Figure 1. Estimates of road length in BC by responsibility (Source: FPB SR/49)

Resource roads are most often used by industrial traffic involved in large scale forestry, oil and gas, mining, and agriculture for accessing and managing British Columbia’s vast natural resources. They are also critically important to smaller commercial users such as hunting and fishing lodges, recreational users and are a critical link for providing access to essential services for residents of remote communities.

If not properly designed, constructed, maintained, and deactivated, resource roads have the potential to adversely contribute to landscape alteration and can negatively impact visual quality, biological diversity through habitat loss and fragmentation as well water quality through erosion and sedimentation. Numerous different pieces of legislation administer responsibilities for managing resource roads in BC (*Forest Act, Forest & Range Practices Act, Forest Planning and Practices Regulation etc.*). Industrial users that hold an agreement with the provincial government are obliged to follow this often-complex suite of laws which can sometimes conflict with each other regarding achieving government objectives and values such as maintaining all-weather roads to provide safe access to conduct obligatory contractual operations vs. deactivating roads to limit access and ensure environmental values are protected.

These conflicting objectives can often also result in extremely hazardous conditions for forestry crews accessing worksites once primary harvesting activities are complete. A lack of regular maintenance and/or implementation of adequate deactivation measures can lead to erosion and landslide events

BC SAFE Forestry Program Road Deactivation Hazard Survey Results:			
Survey Question	# of Respondents	Yes Responses	No Responses
Did your company experience injuries, property damage, or near misses involving crews and/or vehicles while operating in worksites with roads that had been deactivated, rehabilitated, or closed after harvesting?	36	86.11%	13.89%
Were the access issues known to you prior to arriving for work on the block e.g., where they described in the viewing package?	36	38.89%	61.11%
Did the access conditions change between viewing and commencing work?	34	52.94%	47.06%
Do you consider these access situations you have encountered a hazard to your workers?	36	94.44%	5.56%
Do you think these access problems could have been avoided by different planning on the part of your clients?	36	91.67%	8.33%

Figure 2: 2023 BC SAFE Forestry Program Road Deactivation Hazard Survey Results

In response to these concerns, the BC SAFE Forestry Program and BC Forest Safety Council are working towards the establishment of an Access Management Working Group. The focus of this new working group will be to develop standards and procedures for industry to implement when completing road deactivation activities. These standards will provide guidance on technical specifications required to ensure worker safety when deactivating roads while still ensuring that environmental objectives are maintained.

Anyone interested in participating in this initiative and becoming a member of the working group are encouraged to contact John Betts, Executive Director Western Forestry Contractors' Association at [info@wfca.ca](mailto:info@wfca.ca) or Dorian Dereshkevich, Manager Transportation and Northern Safety at [ddereshkevich@bcforestsafesafe.org](mailto:ddereshkevich@bcforestsafesafe.org). 📍

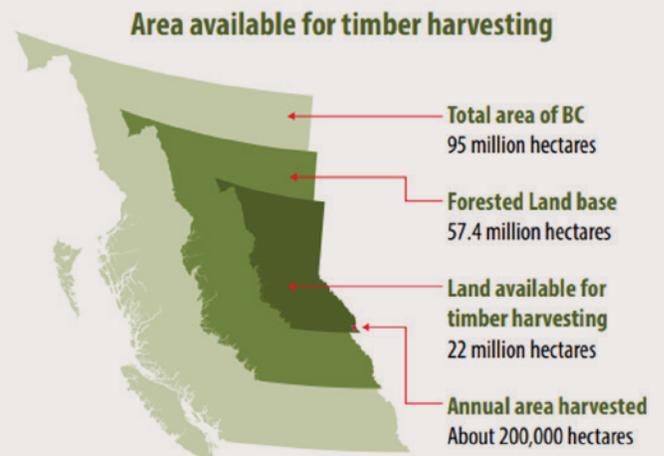
# ERP: Operator Extraction and Steep Slope Rescue Drill Safety Video

Access to economical timber throughout British Columbia has never been more challenging. The mid-term and long-term supply have been impacted by factors such as bark beetle infestations and large-scale wildfires throughout the interior. Increased focus on non-timber forest values such as preserving wildlife habitat and managing community watersheds has placed additional constraints on the amount of area available within the Timber Harvesting Land base (THLB).

These factors, and several others, have required companies that hold timber harvesting tenures to shift their operations to areas with more challenging conditions, which results in increased safety risks to forest workers. This shift in operations has also resulted in the rapid adaptation and implementation of winch or traction-assist harvest systems. While exact numbers are not known, it is estimated that since the initial introduction of the winch-assist technology in approximately 2015, there are now over 100 systems working throughout British Columbia. These systems have been proven to help reduce safety risks by removing workers from the many hazards of manual work and placing them in protective cabs. However, placing more mechanized equipment onto steep slopes has also resulted in the introduction of new hazards that the industry must ensure it is adequately prepared for. The Trucking and Harvesting Advisory Group (TAG) identified steep slope emergency preparedness procedures as a key initiative to address for the period of 2022-2024.

In the fall of 2022, BCFSC, in partnership with industry members, initiated a three-part, multi-year project with a focus on documenting and introducing best practices for Steep Slope Emergency Preparedness within the timber harvesting sector. The first phase of the project was the production of an [Emergency Response Drill video](#) demonstrating tools and techniques to gain access to the cab of a piece of equipment that had all of the escape doors blocked or rendered inoperable in an upset condition.

A second video demonstrating techniques required to extract a worker from a cab and administering first aid in a steep slope harvesting scenario is planned for release in January 2024. During filming of the second video, the project participants highlighted several challenges they felt would have a significant impact upon how they proceeded during an actual safety incident but could not



be simulated in a drill scenario. The goal of the video is to prompt contractors to critically examine their own level of preparedness and complete similar drills with their crews. Once editing and final production is complete, the second Steep Slope Harvesting ERP video will be posted on all BCFSC media platforms. 🚧



## Rainfall Shutdown and Resumption Procedures

Forest tenure holders/Licensees must provide and maintain their land and premises used as a workplace in a manner that ensures the health and safety of workers. This includes direct employees as well as contractors who are working on their behalf.

One of the obligations is to ensure that there is effective rainfall shutdown and resumption procedures in place, not only on active work sites but also on the travel routes to and from these sites. This is particularly important given recent rain fall triggered landslide events within BC which have resulted in workers being injured or killed. These events are getting more common place, leading to increased importance for having these procedures in place.

Rainfall shutdown procedures are comprised of three parts:

- 1) Identification of areas of high risk to landslide. These are typically areas containing steep slopes where high rainfall events or rain on snow events could result in a landslide and put workers at risk. Knowing where these areas are relative to the work site as well as the direct routes traveled to and from work is critical.
- 2) Identification of when a locally significant rainfall event has occurred or is happening. This requires:
  - a. Representative local weather stations or rain gauges which identify rainfall accumulation hourly and over the past 24 to 48 hours.
  - b. On site rain gauges to measure rainfall either over night or during the day.
  - c. Worker awareness of what conditions are normal and what might represent abnormal or extreme conditions (i.e., very swollen rivers and streams).
- 4) Process for either calling workers off when it is unsafe to go to work or having them determine that current conditions are making it unsafe to remain at work. Having workers driving into an unsafe situation is as bad as having them remain on site when conditions are getting more hazardous.

Whether the procedures are in the hands of the licensee or the contractors working on their behalf, it is critical that areas that are high risk are identified and that there is a procedure in place to address the potential hazard.

The final component is having effective resumption procedures in place. Determining when it is safe to return to the work site can be as simple as waiting 24 hours post rain event or as involved as calculating when the soil water balance is appropriate. In addition, a best practice is to have a competent individual review the access and work site prior to crews returning to ensure their safety.

### Links

[Forest Stewardship - Province of British Columbia \(gov.bc.ca\) \(Search: Wet Weather\)](#) 



Photo: Presenters and sponsors of inaugural Combustible Dust Safety Forum, October 2023

In October, a group of industry safety professionals gathered in Vernon, BC for the inaugural Dust Safety Education Forum. The goal was to provide combustible dust safety education to participants from forest products manufacturing and other industries that have combustible dust hazards. In total, there were 40 participants from multiple industries throughout BC.

Each item on conference agenda was carefully selected to address the key areas of combustible dust safety and risk mitigation for operations when it comes to identifying, evaluating and implementing safety measures to reduce hazards. Conference attendees were also provided a rundown of the regulatory changes ranging from general requirements that focus on wood dust to very specific requirements for all sites that generate, produce or handle combustible dusts. The conference also included two workshops that focussed on practical solutions to identify inherently safer design improvements. In the end, the conference brought forward solutions to improve the culture at operations to support the significant changes industry is facing when it comes to combustible dust hazards.

The Conference Agenda included:

**Moderator and MC:** Dr. Chris Cloney, Dust Safety Science

**Keynote Speakers:**

Vernon Theriault, (Survivor Interview Westray Mine Incident)

Dr Rafael Chiuzi, Assistant Professor of Organizational

Behaviour University of Toronto (Nurturing Psychological Safety: Unveiling the Science of Human Error and Team Performance)

Mike Tasker & Rodney Scollard, WorkSafeBC (Review of Proposed Combustible Dust Regulations)

**Technical Presentations:**

Diane Cave, Element 6 (Dust Hazard Assessments)

Francis Petit, Vets Sheet Metal (Exploring Dust Collection Systems)

Dave Noble, Airplus Industrial (Securing Business Continuity, Suppression = Uptime)

**Panel Discussion: (How do the Proposed Changes to BC Regulations Impact Your Business)**

Bill Laturnus, Senior Safety Advisor, Manufacturing Safety, BC Forest Safety Council

Mike Tasker, WorkSafeBC

Lorne Davies, Specialist Safety Advisor, Manufacturing Safety Alliance of BC

**Bringing Safety to Life Workshops: (A Framework for Resilient Operations)**

Kayleigh Rayner Brown, Owner, Obex Risk Ltd.

Bill Laturnus, Senior Safety Advisor, Manufacturing Safety, BC Forest Safety Council 🌱

## Gorman Bros. Lumber Hosts a Tour in West Kelowna BC for the Manufacturing Advisory Group

This past September, MAG members held their 3rd quarterly meeting in West Kelowna. As part of each meeting, the group tours the host sawmill to get a first-hand look at how sawmill operations are managing and implementing safety in day-to-day operations and how sawmill workers are utilizing safety in their daily roles.

During their 3rd quarter meeting, the group toured the Gorman Bros. Lumber mill as part of their meeting site visit. During the mill tour, the group was shown the mobile equipment pedestrian barriers which included barrier walk-throughs (pedestrian chicanes) with solar-powered warning lights.

A big thank you to Gorman Bros. Lumber for sharing their on-site safety initiatives with the group and providing a behind-the-scenes look at their fine-quality lumber facility.

To learn more about [Mobile Equipment – Pedestrian Interface Safety](#), download MAG's free safety resources from the BCFSC website. 



## The Importance of Process Safety Management in Managing Combustible Dust: New Report

**Byline:** Kayleigh Rayner Brown, MASC, P.Eng. (Obex Risk Ltd.)

The Wood Pellet Association of Canada (WPAC), BC Forest Safety Council (BCFSC), Dalhousie University, and DustEx Research Ltd., along with Obex Risk Ltd. as project technical lead, recently completed a research project to look at the implementation of process safety management (PSM) using the CSA standard *Z767 Process Safety Management* as the framework.

Around the world, process safety management (PSM) is becoming central to worker safety and managing risk. It can help prevent fires and explosions to protect personnel, operations, and production. Safer operations are more profitable operations, and PSM contributes to reductions in costs related to maintenance, insurance, capital, and production.

It is also gaining traction here in Canada among various industries, governments and provincial regulators. It's the focus of the Canadian Standards Association's *Z767 Process Safety Management* standard, the proposed second edition of which was recently out for [review](#). CSA Z767 is an established Canadian standard for PSM developed by a technical committee comprised of subject matter experts across sectors including oil and gas, mining, regulatory authorities, emergency response, chemicals, and safety consulting.

For the pellet sector, much of our risk lies in combustible dust. The recommendation from [Integrating Process Safety Management into Canadian Wood Pellet Facilities that](#)

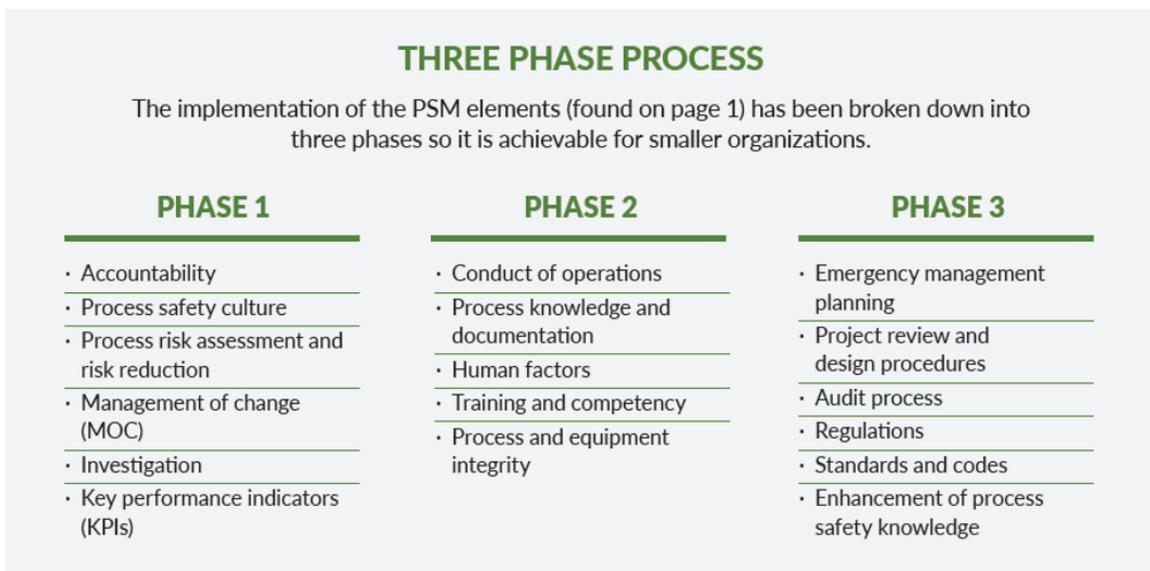
[Generate Combustible Wood Dust](#), was the industry proceed with PSM implementation through a strategic long-term plan. You can read our short [summary](#) which includes links to resources and easy-to-use tools you can begin using in your operation today.

Each of the PSM elements described by CSA Z767 are present in the operations, but there are opportunities to develop formal documentation to fully implement each of the 16 PSM elements and close gaps to continuously improve the safety of operations.

*Continued on page 20...*

PROCESS SAFETY MANAGEMENT ELEMENTS			
PROCESS SAFETY LEADERSHIP	UNDERSTANDING HAZARDS AND RISKS	RISK MANAGEMENT	REVIEW AND IMPROVEMENT
Accountability	Process knowledge and documentation	Training and competency	Investigation
Regulations, codes, and standards	Project review and design procedures	Management of change	Audits process
Process safety culture	Process risk assessment and risk reduction	Process and equipment integrity	Enhancement of process safety knowledge
Conduct of operations – senior management responsibility	Human factors	Emergency management planning	Key performance indicators

Overall, we found PSM element implementation can be broken down into phases 1, 2 and 3 to provide a pathway for implementation that is achievable for smaller organizations. Phase 1 focuses implementation efforts on high-priority elements that present the most potential to provide systemic changes in organizations and manage risk.



Numerous implementation tools have been collected and developed, including PSM gap analysis worksheets, industry best practices, informative factsheets, and an implementation strategy.

The outcomes of this project serve as a foundational framework for the wood pellet industry, as well as other small-to-medium operations in high-hazard industries, to implement PSM. This project was funded through a WorkSafeBC Innovation at Work grant (now Applied Innovation).

To support the ongoing development of the CSA Z767 standard from the perspective of the wood products manufacturing industry, Kayleigh Rayner Brown, MASC, P.Eng. (Obex Risk Ltd.), Bill Laturnus (BC Forest Safety Council), Gordon Murray (WPAC) and Fahimeh Yazdan Panah (WPAC) have joined the technical committee.

Operations are encouraged to contact Gordon Murray ([gord@pellet.org](mailto:gord@pellet.org)) with questions about the vision and goals for PSM implementation. 🌱



# BCFSC Launches Six New Free Online Forest Supervisor Courses

BCFSC's library of FREE online training courses has recently expanded with the addition of six NEW Forest Supervisor courses. These new courses provide current and future harvesting and silviculture Forest Supervisors with training options to help them enhance their supervisor knowledge and build-up their support skills in team leadership and other areas of supervisor expertise to ensure there is open dialogue with a focus on safety.

The online courses can be accessed anytime by participants who have a computer, tablet or mobile device with a reliable internet connection. The new online courses include:

- [Basics of Due Diligence – Forest Supervisor](#)
- [Basics of Effective Communication – Forest Supervisor](#)
- [Basics of Leadership and Professionalism – Forest Supervisor](#)
- [Cornerstones of Effective Safety Supervision – Forest Supervisor](#)
- [Hazard Identification, Inspection and Investigation – Forest Supervisor](#)
- [Orientation, Training and Skills Development – Forest Supervisor](#)

## Who should enroll in online forest supervisor training?

This training is suitable for individuals who:

- are unable to attend in-person courses
- prefer online learning
- have completed our in-person supervisor courses and are looking to refresh their knowledge



## The value of in-person training

Although online learning is an appropriate training delivery option for some participants, in-person training remains an excellent delivery option. In-person training offers:

- instruction from experienced, hands-on instructors who can answer questions and discuss industry safety issues and provide first-hand knowledge of how to achieve positive outcomes
- valuable interaction and collaboration with industry peers through group activities
- printed reference materials to keep on hand, make notes in or photocopy for worker distribution or display
- scheduled courses available in numerous regional locations
- opportunity for groups to train together at their desired location through BCFSC's requested training delivery model

Visit BCFSC's [Course Catalogue](#) to view all our BC forestry training options. 🌲



## Worker Assessment and Training for Yarding Occupations

The yarding operation phase of forestry is inherently high-risk. Steep ground, debris, weather and heavy equipment all working in proximity to site workers and other equipment can create many potential hazards.

Tower Operators, Grapple Yarder Operators, Hook Tenders, Landing/Utility Persons, Chokerpersons and Rigging Slingers are all common occupations in yarding and require well-trained, knowledgeable and experienced operators to be able to safely work together on a worksite.

Working on a yarding crew not only requires excellent communication and coordination but it also requires teamwork and trust. Employers must ensure operators are qualified and competent to use mechanized harvesting equipment before they start work using a specific type of machine. The BC Forest Safety Council (BCFSC) can help employers meet these requirements. We offer free one-on-one assessment tools and training for yarding operators. These tools can be used to evaluate and confirm there are no gaps in worker knowledge or skills and make sure work is performed safely and productively. Consider using BCFSC Assessment materials for:

- Workers new to the job who would benefit from the guidance and experience they gain.
- Experienced workers and equipment operators who can demonstrate their skills and knowledge against an industry-developed standard.

BCFSC suggests a step-by-step process to using these free assessment tools for yarding occupations:

**Step 1.** Supervisor uses the specific assessment document to guide a competency conversation with the worker / operator.

**Step 2.** Supervisor conducts a practical assessment to evaluate the operator in a variety of work situations to confirm they can consistently perform the skill components of their job in a safe and effective manner.

**Step 3.** Supervisor completes the process by either signing off on the worker's competency or developing and implementing a gap training plan.

Once an assessment is completed, employers or supervisors can determine if further training is required. BCFSC offers FREE training for yarding operators through

the [BCFSC Online Learning Centre](#). This additional training can help fill identified knowledge gaps and provide participants with a Record of Completion to help confirm training has been fulfilled. For employers who already have an existing on-the job training program, BCFSC also offers free downloadable Yarding Operations [Learning Resources](#) to help develop or complement their existing program.

BCFSC has a full complement of Worker Assessments and Training for many harvesting activities outside of yarding as well. Take advantage of these resources to help you build a comprehensive worker assessment and training program for your company. Learn more by visiting [BCFSC's worker assessment and training webpage](#). 📄



# Requested Training

Are you interested in attending BCFSC training, but find the in-class sessions don't fit your schedule or location? You're not alone. This year alone, BCFSC has delivered 12 employer- requested training sessions to 136 forestry workers.

We offer several in-person courses that we can deliver at your site whenever it suits your schedule. Contact us and we can arrange for training at your location for:

[Basic Incident Investigation](#)

[Due Diligence for Forest Supervisors](#)

[Communication for Forest Supervisors](#)

[Leadership & Professionalism for Forest Supervisors](#)

[Joint Health & Safety Committee](#)

[Falling Supervisor](#)

[Other Training By Request](#)

## The benefits of Requested Training include:

- ✓ **Convenience** – minimize disruptions to your operations by hosting BCFSC in-person training at your specified time and location.
- ✓ **Cost savings** – BCFSC can provide no obligation quotes and our courses are based on cost recovery. Depending on group size and location, requested training may end up costing you less than comparable scheduled sessions, especially if travel is required.
- ✓ **Customized course content** – BCFSC's experienced instructors can work with you to incorporate your company's own safety management forms and other documentation to enhance the training delivery.
- ✓ **Inclusive Learning** – In-person training offers a learning environment that brings workers together by fostering workplace discussions and collaboration to improve your company's safety culture.

**Kevin Gayfer**, RPF, with Arrow Transportation Systems Inc. commented on his experience with four days of Forest Supervisor Training course at their Kamloops site.

*"BCFSC was able to customize the courses to be more relevant to our specific industry, which was helpful to ensure productive conversation and delivery. The course format and instructor were excellent and feedback from all the attendees was positive. We had a wide range of roles represented including truck drivers, equipment operators, tugboat operators, safety and management. We would definitely use requested training again."*

**Steven Orchiston**, Western Forest Products Inc. Stillwater Div. regarding Forest Supervisor Due Diligence training hosted on site in Powell River, BC:

*"WFP sponsored the training for our contractors to further enhance the level of supervision in our operations and to encourage the development of new supervisors. The entire group was appreciative of the opportunity to participate locally. All the feedback received was positive, and participants have expressed interest in further courses."*

To learn more about how Requested Training can benefit your operations, contact us at [training@bcforests.org](mailto:training@bcforests.org). 🌲



## Here's What Happens to Your Body When You Get Hurt – And What You Can Do About It

By Dr. Delia Roberts

Whether it's a bruise, bump or break, pretty much everyone gets injured at some point. And when it does happen it can bring you to a halt, or at least slow you down. Injuries get in the way of everything from daily activities to earning a living. But if you understand what's going on in the injured area, you can shorten recovery time and even help prevent long-term pain and disability.

### Getting Inflammation Right

When the stresses exerted on any structure exceed the strength of the materials damage begins to occur. Whether it's a catastrophic failure (like a ligament rupture or bone breaking) or a frequent small overload (like a repetitive muscle strain or tendon/joint irritation), damaged cells release chemical messengers that initiate the processes we call inflammation. The result is an increase in blood flow to deliver needed nutrients and remove wastes, and the blood vessels themselves become leaky so that white blood cells and larger molecules can enter and exit the area. The white blood cells work to digest away damaged tissues and kill any invading bacteria or viruses that might have entered through a wound. Meanwhile, the flow of fluid (that also causes swelling) washes away wastes and delivers building blocks to rebuild new structures.

Getting the level of inflammation right is important for fast and effective healing. Too much and normal tissues located near the injured cells can be damaged while the white blood cells clear out the area and swelling raises the pressure within the tissue. But too little inflammation and you don't get the signals and materials for healing to begin. Thus, the old standard of ice and anti-inflammatory drugs to reduce inflammation immediately following an injury might not be the best approach, because they block the same signals that get the whole healing process going. Other medications like acetaminophen are also effective at reducing pain without the danger of impairing healing, or the risks of addiction that occur with opiate based pain medications. They might be a better choice

if you need pain management *in the first few days* following an injury. After four days or so when inflammation is well under way, switching to ibuprofen or naproxen, along with ice and elevation, can limit excessive swelling and control excess inflammation.

### Rest / Immobilization

In the case of a broken bone or a tear in muscle tendon or ligament, it's important that the damaged bits are lined up and/or still connected, which is why broken bones, and full tears often require surgery with some kind of fixation like a plate and screws, cast, or brace. Unfortunately, while this period of rest is needed to form a scaffold for the tissue to knit together, there are also some real negative effects to immobilization. This is why if at all possible, every effort should be made to maintain even a small amount of movement.

When a joint or muscle is prevented from moving there is a near immediate loss of muscle. As a tissue, muscle makes up a huge store of protein that is expensive in energy and material to maintain. Under normal use there is a constant turnover within muscle, but a balance is maintained between the amount of muscle being broken down to release protein, and the amount of new tissue being made to renew the structure. Following an injury, when the muscle isn't being used, protein breakdown accelerates while synthesis is reduced, resulting in a net loss. Most of the change in muscle mass occurs within the first two weeks of immobilization – but thankfully, there are ways to fool your body into thinking that the muscle still needed. These techniques won't stop the loss of muscle and other tissues completely, but they will save enough to make rebuilding after the injury heals much easier.

### The Role of Nerves and Muscle Contractions

Many scientists consider the two-way communication between nerve and muscle to be the most important for maintaining muscle mass. Even if you can't move the muscle to lift or carry a weight, if you can

get the muscle to contract or even just get the nerves to fire there is less loss of muscle<sup>3</sup>. An easy way to encourage an injured muscle to activate/wake up is to tap it with your fingers while contracting/tightening the muscle. You don't need to move the limb, just tighten the muscle. The sensation of touching the muscle helps it respond to the nerve signal. Completing just 10 contractions per day has been shown to help reduce the loss of quad muscle following immobilization of the leg.

Another approach is to use the kind of muscle stimulator that physiotherapists use. These devices send a small electrical charge into the muscle that mimics the actions of nerves, so can help get the muscle contracting - and in return, the contracting muscle maintains nerve function. Keeping the nerve active also seems to help recovery for another reason. Following an injury, the nerves to the injured area are inhibited, perhaps to reduce movement and thereby protect the injured area<sup>4</sup>. Keeping the nerve active during the immobilization period can thus improve recovery in two ways; first, some nerve stimulation helps keep the balance of muscle turnover more favorable for maintaining muscle mass; and second, it helps to keep the nerve from being as severely inhibited, so normal movement is restored faster.

If you can't contract the muscles of the injured area at all, even just imagining the movement while doing the action on the other side of the body can help maintain muscle mass. Watching the moving limb (use a mirror) while doing this helps. Surprisingly, your brain can convert this image and movement of the other side of your body into a nerve impulse in the injured area.

More recently, blood flow restriction has also been used to preserve muscle in athletes following an injury. A pressurized cuff is used to prevent blood from exiting the injured muscle while performing gentle contractions. Doing so causes waste products to build up in the injured tissue, which provide the chemical signals that the muscle is being used and needs to be maintained. This technique should only be used if supervised as it can easily overshoot and harm the muscle.

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## Movement Preserves Other Tissues Besides Muscle

Besides the loss of muscle, other tissues also lose capacity when immobilized. Tendons, ligaments and cartilage thin and become less elastic. If there have been tears in the tendons or ligaments, gentle movement helps newly formed collagen fibers to be laid down in an organized fashion during healing. Without movement collagen tends to form scars that are not as strong. Fat pads provide cushioning in joints and places like the bottom of the feet. They can also thin out when unweighted, as all these tissues require mechanical load to signal that they are needed and should be maintained. Any small amount of movement that can be tolerated while not loading the broken bone or torn tissue too much will help prevent some of this loss. Once weight bearing is resumed, all these tissues will need to be built back up to withstand normal forces, so there's a real advantage to preserving as much function as possible.

Some examples of this type of approach would be to do gentle range of motion work in the injured area, as well as strength training several times a week for the parts of the body that are not immobilized; upper body and core workouts for a leg or foot injury; or leg and core workouts for an upper body injury, and easy limb workouts for a core injury. With a bit of creativity it is possible to exercise uninjured muscles and joints without unduly loading the area that is healing. A kinesiologist or physiotherapist can help design a progressive program that is creative and fun, and will radically speed up recovery.



Just like any other muscle, the heart requires exercise to stay healthy. Maintaining some form of activity that can raise heart rate and breathing is also important because this alone will improve healing by speeding up the delivery of nutrients, removal of wastes, and encouraging good sleep patterns. But when movement is limited by an injury it can be difficult to find ways to limit how much fitness is lost. While walking is possible for upper body injuries, it doesn't work when a leg or foot is in the non-weight bearing stage of recovery. There are specialized devices that are like a stationary bike for your arms, but they aren't something you'll find at the local gym. Instead, a sling can be set up to support the injured leg on a stationary bicycle to allow for one-legged cycling using the good leg. And once any wounds have closed, water based workouts are great ways to get your heart and lungs working while body weight is supported.

## Good Nutrition and Hydration is Essential

Another way to speed up healing is to make sure that the body has a good supply of energy, nutrients and materials needed to repair the damaged tissues. Without the load of normal daily activities the demand for energy may go down during the immobilization period, but healing tissues need vitamins, minerals and the building blocks for proteins and other tissues. This means that some attention needs to be paid to the diet, choosing higher protein and nutrient dense foods. Fruits and vegetables provide vitamins and minerals, dairy products the calcium needed for bone healing. In Canada, milk is fortified with vitamin D, but if you limit milk intake and are not getting sun exposure while the injury is healing, consider a vitamin D supplement in order to ensure that the calcium in your diet is absorbed. Animal products are good sources of protein, but you can also meet your protein needs with a vegan or vegetarian diet. Consider exploring some new plant based recipes if your injury has kept you from work and you have some extra time available.

Staying hydrated is also important for an injury to heal well. It may feel less obvious when immobility prevents you from working hard physically, but your body is still processing all the chemical reactions required to build new tissues. It may also be less convenient to stay hydrated when it's hard to get up and down to refill a water bottle or visit the washroom – but having a reason to move around is helpful in itself as it gets the blood circulating and helps prevent all your muscles and joints from stiffening up.

## Smoking and Alcohol will Impair Healing

Other critical behaviors that can truly cause problems with healing are smoking and alcohol consumption. Both have been shown to lead to longer healing times, more frequent infections and increased complications following surgery including non-union of bone fractures and the failure of wounds to close. Both are also very addictive, and it is a real challenge to break the habit of their use. However, if you have suffered a serious injury, getting some help to stop smoking and reduce your alcohol consumption can go a long way to getting you back to health, work and all the activities that you love. In fact, it's essential for successful recovery.

## Get Enough Rest

Finally, put making sure to get a minimum of eight hours of sleep on your list of must do items while recovering from an injury. Healing takes a lot of work, cells are rebuilding, and new proteins and other structures are being built. Get enough rest to make sure that your body has the best chance of completing this important work as quickly as possible.

Following an injury that requires immobilization, all the routines of a normal life are changed. It's easy to get disappointed, bored or bitter, and worried about whether you'll be able to regain strength and mobility. But there are things that you can do to help speed up healing, and making the choice to take an active role in your health can go a long way to keeping the challenges of an injury from turning life sour. Take the time to get some help through your primary care provider, including working with a knowledgeable movement specialist and looking after your mental and emotional health and you'll turn your injury into growth. 🍏



Thanks to everyone who entered our September Colouring Contest. Congratulations to **Winslow, age 8**, whose name was picked from our random draw. Winslow wins the DRIVEN Toy Logging Truck and we will be sending a special gift to everyone else just for entering!

For our winter issue, find the difference on the skier and then colour it 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](mailto:editor@bcforestsafe.org)
- Submit your entry by 4pm, Thursday, Feb. 1, 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 March 2024 issue of the Forest Safety News. 🌲



## Find 10 differences

### ABOUT Forest Safety News

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