The future of safe work: Competency-based assessment & training to best meet due diligence

The BC Forest Safety Council (BCFSC)’s Director of Training and Program Development, Gerard Messier, provided an update at the 2019 TLA Convention and Trade Show on the competency-based assessment and training model being developed at the request of industry by the BCFSC.

He said 2019 was the year of beginning to implement. The preceding three years had been dedicated to the development of competencies for 40 forestry occupations; and the development of assessor tools for those occupations; the development of new yarning, faller and log hauling learning materials; and the development of assessor and train the trainer materials.

Competencies for a single occupation is the first step in a long process of developing ready to deliver training for that occupation.

**Step 1:** Develop competencies for an occupation and test the competencies in field. These are developed by industry-identified subject matter experts — people with proven achievements in optimal performance in each of the occupations.

**Step 2:** Develop assessment tools for that occupation (used to determine if someone is competent to do that work) and test the assessment tools in field. There are two types of assessment: competency conversations used to assess knowledge and practical assessments used to assess skills and attributes.

**Timeline**

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<th>Competency</th>
<th>Training and assessment materials being tested now in-field by contractors</th>
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<td>Yarding competency materials</td>
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<td>Log hauling training and assessor materials</td>
<td>Successfully piloted in 2018; final training and assessor training materials due in second half of 2019</td>
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<td>Mechanized harvesting</td>
<td>Field testing of materials planned for 2019</td>
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<td>Road building</td>
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<td>Falling</td>
<td>Final review by a sub-committee of the Falling Technical Advisory Committee; then submission to WorkSafeBC for approval to roll-out to industry in 2020.</td>
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Welcome to the April 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.
Safety topics filled first day of Western Forestry Contractor’s Association (WFCA) 2019 Conference and Trade Show

To find links to view all the safety presentations at this year’s WFCA Conference, please see: https://wfca.ca/wfca-annual-conference-tradeshow/conference-2019/

For quick access to individual safety or safety-related presentations, see below:

1. **Emergency Response Drills – Preparing Forestry Crews for the Unexpected** by Jordan Tesluk, BC Forestry Safety Advocate:
   https://www.dropbox.com/s/ulq77rx7o85h64g/Safety%20Drills%20for%20Silviculture%20and%20Seasonal%20Operators.pptx?dl=0

2. **TEAAM – Technical Evacuation Advanced Aero Medical** by Miles Randell, TEAAM founder and ALS Paramedic at BC Ambulance Service:
   https://www.dropbox.com/sh/y6qh9yug4pqyhmv/AABu5TgahDRF0zHaQVv33UXa?dl=0

3. **Marine Transportation Safety Update** by Temo Scheiber, member of the Marine Forest Safety Advisory Group:

   https://www.dropbox.com/s/t1w7hrlm2j7jfz7s/Why%20Report%20WFC%202019%20in%20Victoria.pptm?dl=0

5. **Premier of a new video for tree planters, and new direction in injury prevention and management** by Mike McAlonan and Jared Lalik of Total Physio:
   https://www.dropbox.com/sh/49hc4tn2e50dtsr/APIaZJu5Km-7N0XzR_aoPGfna?dl=0

6. **Plenary Panel Presentations on The Landscape, Communities and People: Adapting to Natural Disasters in BC as the “New Normal”**. Presentations by Dr. Paul Hessburg Sr., USDA Forest Service, Research Landscape Ecologist; Bob Simpson, Mayor of Quesnel; and Dr. Robin Cox, Royal Roads University:
   https://www.dropbox.com/sh/9ctt1c97anw6w8x/AACrGkUS8XHJqQwZFQy_14Ysa?dl=0

7. **Sexual Harassment and the Live-Where-You-Work Environment** by Robin McCullough, Chair, BC SAFE Forestry Program Strategic Advisory Committee:

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### Defining Competency

1. **Knowledge**: Theories, facts, procedures, applied to a task... Must be acquired.

2. **Attributes**: Characteristic or quality possessed or nurtured within a person... Must be expressed.

3. **Skill**: Doing something well... Must be practiced.

One of the slides explaining how competency is defined.
Day one of the WFCA’s 2019 Convention and Trade Show included kicking off the event with an open meeting of the BC SAFE Forestry Program Strategic Advisory Committee (SAC). Conference attendees were able to sit in and observe the meeting proceedings, and ask committee members questions.

SAFE Companies’ Regional Safety Advisor, Terry Chow, and Quality Assurance Supervisor, Martin Ridgway, talked with many forestry and silviculture contractors during the one-day trade show. The trade show is a firm favourite for the volume of booth traffic and the many safety discussions held with attendees.

Forestry safety advocate, Jordan Tesluk, wraps up his presentation on Emergency Response Drills – Preparing Forestry Crews for the Unexpected, as a group of audience volunteers carry out “an injured worker” for further treatment.

Workshops at the 2019 WFCA Convention and Trade Show with Total Physio included opportunities to learn how to use taping for rib and upper back pain as well as arms, thumbs and wrists. Videos and downloadable printed summaries are available via the WFCA (https://wfca.ca/) and Total Physio (www.totalphysio.ca) websites and on the BC Forest Safety Council’s YouTube channel: https://www.youtube.com/user/BCForestSafety. The latest video for tree planters to prevent upper back and neck injuries is called “Don’t do the chicken” and was premiered at the conference: https://www.youtube.com/watch?v=a-TOOf6u9Wo.
Free EHS Analytics Safety App and Dashboard demonstrated at the 2019 WFCA Convention and Trade Show

The BC Forest Safety Council (BCFSC), in conjunction with the BC SAFE Forestry Program Strategic Advisory Committee (SAC), has embarked on a new initiative to provide forestry and silviculture employers with an advanced electronic safety reporting system. If successful, the project will be extended to other subsectors in forestry if there is demand.

The new system, currently available to SAC member companies, will make documenting and reporting easier, and provide employers with tools for viewing their safety performance and benchmarking it against their peers in the rest of their sector.

This project originated late in 2017 when the SAC, representing a cross-section of forestry silviculture employers and forestry contractors in BC, discussed the absence in the sector of meaningful data to proactively and accurately assess leading indicators of injuries and close call incidents that could assist employers in better preventing these occurrences.

As a result, SAC initiated the project with the BCFSC and technology provider, EHS Analytics, to develop a member-driven solution which is a mobile and web-based technology platform that captures and coordinates safety records and activities for users and provides simple and informative ways of assessing performance through a visual dashboard.

The early adopters in silviculture who helped shape and test the app are pleased with the results, its ease of use, privacy and security features.

The system includes electronic reporting forms which streamline and enhance the often frustrating and challenging process associated with multiple and duplicated safety paperwork. As well, the set of analytical “dashboards” provide charts and data summaries to illustrate and explain what is occurring within a company’s operations.

Access to EHS Analytics is paid for by the BCFSC, and employers may use one or both parts of the system as follows:

1. They can use the mobile app and web-based forms to record all their injury, incident, and close call records. The system provides industry tailored forms that can be completed online or offline. The mobile app can be installed on most smart phones or tablets. The web-app can be accessed online for laptops or mobile devices as well. The forms automatically synchronise with a cloud database across all your devices and provide updated reporting summaries for rapid management review. Completed incidents can easily be reported via email to other parties as needed such as a licensee, and information can be automatically transferred into a WorkSafeBC Form 7 report and submitted electronically as/ if needed.

2. For those employers with their own existing reporting systems, use of EHS Forms is not required. Employers can connect their existing systems to EHS and automatically sync records to a cloud database and gain access to the full suite of analytical tools and dashboards. There are many firms in the forestry industry already linked to the EHS Analytics system this way. EHS Analytics is compatible with most leading safety management systems.

All employers, whether using the EHS Analytics Forms or those who link existing systems to EHS Analytics can use the dashboard and its full suite of tools. EHS Analytics users are able to instantly view and analyze incident report data for their own company and, should they choose to, share and compare their activity with a pool of data based on peers in their sector. Employers that generate only a small number of reports are able to view their incidents and close calls as part of a larger field of data.

As employers take steps to improve their safety programs, solid data analysis will be increasingly valuable for assessing the success of their initiatives. The use of electronic reporting tools is swiftly becoming the norm in forestry and other sectors, and more industries are moving towards collaborative data-sharing systems that help them learn from each other’s experiences.

Forest Safety News will provide a follow-up later this year to share how many forestry and silviculture firms have signed up and what their experience has been. If you are in another forestry sub sector and are interested in learning more for a future pilot, please contact Cherie Whelan at CWhelan@bcforestsafe.org or call toll-free 1-877-741-1060.

New federal drone regulation effective June 2019

By Martin Ridgway, Supervisor, Quality Assurance

Drones have become increasingly popular for forestry-related business purposes. They can be used to assist in activities such as surveying remote areas quickly and in log yards for inventory management. However, if you are using a drone for business purposes (or research), even if it’s your drone and it’s the same one you fly for fun, you must get specific permission from Transport Canada.

After June 30, 2019 for most drones between 250g and 25kg in weight (total weight, including any cameras or other devices), you will need to:


- Pay for and pass the online Transport Canada Small Basic Exam https://gart.tc.gc.ca/secure/UASIMS-SGISASP/eng/take-exam/service of 35 multiple choice questions. You will have 90 minutes to complete the exam. A score of 65% or higher is considered a pass. You will have unlimited attempts but have to wait 24 hours between attempts. When you pass, you will get a Pilot Certificate – Basic Operations. The exam is available now.

- Have your Pilot Certificate – Basic Operations and proof of drone registration when you fly

- Follow the rules of your Pilot Certificate

- Ensure no one other than you is within 30m/100ft horizontally of the drone when in flight. This includes people in vehicles or on a road.

- If you want to fly within 30m / 100ft of any other person, you will also need to pass a flight review with a flight reviewer (i.e. a practical competency test at a drone flight school) after passing the Small Advanced Exam and have the Pilot Certificate – Advanced Operations with you when you fly.


WorkSafeBC has a Critical Incident Response Program available to all employers and workers

At a recent meeting with a forestry stakeholder group a question was raised around what services are available to workers who witness a traumatizing event such as a serious workplace incident. One program that is available to workers and employers is WorkSafeBC’s Critical Incident Response Program. Other programs may include participation in Employee Assistance Programs either directly or through a contractor, licensee or association. The BC Forest Safety Council can also provide contact information for trauma counsellors and has in the past assisted small contractors and IOOs to access such services when they have had no other resources available to them.

WorkSafeBC’s critical incident response program is open to all BC workers and employers who have witnessed or responded to a critical incident in the workplace, such as a fatal or serious injury. The ideal timing to access the service is between 24 and 72 hours of an event, but no later than three weeks after an event. Participants are able to access trauma counselling services from a qualified mental health professional located in the employer’s or worker’s community. Providers are registered counsellors, social workers and psychologists who have specialized training to work with anyone who has been through a traumatic incident. If a local provider is not available, one can be brought in from another area.

Although exceptions may occur, the service provider is contracted by WorkSafeBC to provide short-term support in the form of a critical incident intervention, which is separate from the more extended treatment that may be necessary for some individuals.

If employers want to know more about these services, they may call WorkSafeBC at 1-888-922-3700, seven days a week between 9 am and 11 pm to speak with program staff.


Seminars in Cranbrook and Castlegar signal wrap up of Construction-Initiated Slides Working Group

A sample of a road construction-initiated slide.

Continuing to increase awareness and knowledge on how best to prevent construction-initiated slides, the Construction Initiated Slides Working Group (CISWG) held two seminars for professionals on March 6 and 7 in Cranbrook and Castlegar respectively.

The seminars are the final activity of the CISWG as it has completed its mandate to develop, share, promote and train forestry workers and professionals who are best positioned to help prevent future construction-initiated slides in BC’s forest industry.

Slides initiated by road construction have been a persistent issue in industry and can be very serious with considerable human, environmental and operational costs associated with them.

CISWG, a working sub-group of the Coast Harvesting Advisory Group (CHAG), worked from 2014 to early 2019 on the issue by first examining landslides, their frequency and causes related to road construction activities, and how best to increase awareness about the issue and develop resources that can help prevent similar incidents in the future.

Key objectives included enhancing safety through improved awareness and knowledge with regards to field indicators relating to potential slope instability, road construction plans / maps / designs, road management practices, road construction techniques as well as operational initiatives that improve worker safety on sites impacted by road construction.

To address these objectives the CISWG developed the following resources:

- CIS awareness/training package for road construction crews and supervisors, (PowerPoint and webinar)
- CIS awareness/training package for forestry personnel involved in the planning, and development of resource roads (PowerPoint and webinar)
- CIS testimonial video
- A series of CIS awareness posters and
- CIS safety articles and bulletins.

Please see all the tools that were developed here: https://www.bcforestsafe.org/CISWG.

If you have questions, please contact Dustin Meierhofer at meierhofer@bcforestsafe.org or call toll-free 1-877-741-1060.

SAFETY IS GOOD BUSINESS

2019 update on WorkSafeBC’s Harvesting High Risk Strategy

By Tom Pawlowski, Manager, Primary Resources, Industry and Labour Services, WorkSafeBC

WorkSafeBC is already more than a year into its 2018-2020 Forestry High Risk Strategy so it’s timely to check in on where the strategy is at and look for any discernible trends and findings coming out of the inspectional activities. It’s also good for industry to get a pulse check on its safety and compliance record, see where the main problems exist, and know what to anticipate when a WorkSafeBC officer’s vehicle pulls up to a cutblock.

WorkSafeBC’s High Risk Strategies identify and target industries and employers with a high risk of serious workplace injury and high injury rates. Overall the injury rates across all industries in BC are the lowest they’ve been historically, at 2.2 time-loss claims per 100 people in the workforce. So while we’re seeing continuous improvement in safety trends, some industries demonstrate higher level of risk and much higher injury rates. For example, while the forestry sector injury dipped to 4.7 in 2017 (2018 statistics will be available in July), it is still more than twice the provincial average.

Based on the higher than average incidence of serious injuries and work-related deaths, WorkSafeBC’s High Risk Strategies focus prevention resources on four industry sectors: construction, forestry, health care, and manufacturing. Additionally, in 2019 WorkSafeBC has put forward 13 separate prevention initiatives that target specific risk areas, for example, crane operations, oil and gas, confined spaces, and asbestos, to name a few.
Forestry High Risk Strategy focuses prevention on five areas

The current three year Forestry High Risk Strategy aims to focus prevention efforts on five areas of operations that have the highest risk of injury as shown through claims statistics: manual tree falling, log transportation, cable yarding, mechanized harvesting, and silviculture. There is additional focus on adequacy of emergency response planning (ERP) in all operations being inspected. Hearing loss prevention and construction related roadside debris are also addressed by WorkSafeBC officers in their inspections as appropriate.

What controls do you have in place to prevent phase congestion at your workplace?

While proper planning and conducting of forestry operations has always been part of the inspectional lens, in 2019, WorkSafeBC officers are specifically looking for any indication of poor phase integration, which may result in phase congestion and the resulting increased risk to workers. Their focus is to see whether the employer, prime contractor, and the workers on the ground, understand how phase congestion increases the risk of serious injury and fatality, and whether critical controls to prevent phase congestion have been successfully implemented at the worksite.

Forestry inspection numbers in 2018 and 2019 YTD

Looking at last year, in 2018, WorkSafeBC conducted a total of 1995 workplace inspections under the Forestry High Risk Strategy, issuing 1374 orders, out of which 190 were associated with potentially high risk violations. There were also 50 warning letters sent to employers and 14 penalties for risk violations. There were also 50 warning letters sent to employers and 14 penalties for risk violations. For the 2019 update to the WorkSafeBC Manufacturing High Risk Strategy


In a letter out to industry, WorkSafeBC’s Prevention Field Services Director, Dan Strand, explained that officers would continue to perform inspections relating to safety-management systems, focusing on the serious injury and fire and explosion risks that are most prevalent with each employer or industry.

SAFETY IS GOOD BUSINESS

Top 10 OHSR sections cited in orders across all forestry operations

The top 10 OHSR sections cited in orders issued under the Forestry High Risk Strategy since the beginning of January 2018 to the end of February 2019 are listed in the table below.

| S.16.35 Securing tools and equipment inside mobile equipment | The operator must maintain the cab, floor and deck of mobile equipment free of material, tools or other objects which could create a tripping hazard, interfere with the operation of controls, or be a hazard to the operator or other occupants in the event of an accident. |
| S.7.8 Hearing tests | If workers are exposed to noise that exceeds noise exposure limits, then the employer must give the workers an initial hearing test as soon as practicable after employment starts, but not later than 6 months after the start of employment, and a re-test at least once every 12 months after the initial test. |
| S.316 Basic first aid requirements | The employer must provide for each workplace such equipment, supplies, facilities, first aid attendants and services as are adequate and appropriate for promptly rendering first aid to workers if they suffer an injury at work. |
| S.26.2 Planning and conducting a forestry operation | Every person who has knowledge and control of any particular activity in a forestry operation must ensure that the activity is both planned and conducted in a manner consistent with this Regulation and with safe work practices acceptable to the Board. |
| S.26.65 Cab guard inspection | The operator of a log transporter must inspect the cab guard before the start of operation on the shift and record the results of this inspection. |
| S.6.68 Log load binders | Each binder and attachment must have a breaking strength of at least 53 kN (12,000 lbs). |
| S.26.65 Cab guard | The cab guard of a log transporter must be permanently marked with the name and address of its manufacturer, the model number or serial number of the cab guard, and the rated capacity of the cab guard; alternatively, the operator must carry a letter signed by the manufacturer or a professional engineer, which accurately describes the cab guard and certifies its model number or serial number, along with its rated capacity. |
| S.3171 Air transportation | If air transportation is the primary or only method for transporting an injured worker, then before the start of operations in a workplace, arrangements must be made with an air service to ensure that an appropriate aircraft is reasonably available to the workplace during those operations. These arrangements must include procedures for the employer to determine the availability of appropriate aircraft before the start of each work day and for the air service to notify the employer if an appropriate aircraft ceases to be available. Further, a system must be provided that enables the pilot of the aircraft and the first aid attendant attending to an injured worker to communicate at all times when the aircraft is in transit to the location of the injured worker and during transport of the injured worker to medical treatment. |
| S.26.4 Notice of project | Not more than 30 days and not fewer than 24 hours before the start of work at a workplace, the owner for whom the work is being done must ensure that a notice of project is provided to the nearest WorkSafeBC office. |
| S.16.17 Escape from a cab | Mobile equipment with a single cab entrance door must have an alternate means of escape that is clearly marked both inside and outside the cab and which can be opened from both the inside and outside without the use of tools. |

So far this year (up to February 27, 2019) there were 239 forestry inspections, with 156 orders issued, one stop use order, 23 citation warnings, and two warning letters.