



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

By Dr. Delia Roberts

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

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

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

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

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

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

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

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

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

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



 **BC Forest Safety**
Safety is good business

HEALTH AWARENESS: MAINTAIN YOUR VISION & HEARING

LOOK OUT

-  YOUR EYES ARE YOUR WINDOW TO THE WORLD. TAKE CARE OF THEM AND THEY WILL TAKE CARE OF YOU.
-  WHEN DID YOU LAST HAVE AN EYE EXAM? GET THEM CHECKED EVERY TWO YEARS.
-  PROTECT YOUR EYES: ALWAYS WEAR YOUR EYE PROTECTION AND HELP AVOID DAMAGE TO YOUR VISION.
-  AN INCREASE IN BLACK OR GREY SPOTS OR FLASHES OF LIGHT CAN SIGNAL A SERIOUS PROBLEM.

SOUND ADVICE

-  EXPOSURE TO PROLONGED NOISE CAN CAUSE IRREVERSIBLE HEARING DAMAGE.
-  FORESTRY IS ONE OF THE HIGHEST INDUSTRIES FOR WORK-RELATED HEARING LOSS.
-  PREVENTION IS THE KEY: WEAR YOUR HEARING PROTECTION NO MATTER WHAT AGE YOU ARE.
-  GET YOUR HEARING CHECKED ANNUALLY.

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