



Danger by the numbers

Compared to all workers in all industries across the province of Ontario, logging workers have the highest percentage of all lost-time injuries due to contact with objects or equipment. This speaks not only to the dangerous equipment and high exposure to workplace hazards, but also the need for Ontario forestry workers to stay vigilant and maintain a strong safety culture.

- Logging workers have the highest percentage of injuries from contact with objects and equipment – the highest of all workers in the province!
- 39 per cent – or four in ten – lost-time logging injuries are the result of being struck by an object such as a tree or contact with moving equipment.
- Sometimes the difference between an injury and a fatality is only inches.

Special Forestry Hazard Alert Bulletin: Beware the danger zone Several incidents recently reported

Recently, there have been several close call incidents reported in logging operations throughout Ontario. In late fall, a chipper operator and a mechanic narrowly missed being hit by a flying piece of metal.

About a week later, a worker and maintenance contractor were getting ready to repair a delimber when the boom suddenly dropped, pinning a worker's legs.

The following month, two workers were killed while hooking up chains to pull a logging tractor-trailer out of a ditch. An excavator, turned sideways to tow the truck, slid down a slight incline and pinned the workers between the vehicles.

With two severe incidents and two fatalities occurring within an eight-week span, workers need to be very concerned about complacency.

Please post the enclosed hazard alerts, view the "Safe Towing Procedures" video, and encourage discussion about these incidents in your workplace.

HAZARD ALERT!

Only a visual check can ensure all moving parts have stopped

Using a safety checklist can help ward off complacency with dangerous machinery

WHAT HAPPENED?

A chipper operator finished loading the last truck of the shift and did some cleanup with the boom around the throat of the machine. He positioned the boom for shutdown and states he disengaged the clutch by using the toggle switch in the operator's cab, turned off all flails, in-feed, bark pusher, etc. A few minutes later, he exited the cab to do knives and other service work with a mechanic.

He undid the hood latch of the chipper wheel and stepped away about three feet. The mechanic, who was standing next to the fuel tank, saw him back away clear of the hood and took this as the signal to open the hood, as had been their practice. As soon as the mechanic touched the lever to raise the hood, a paddle struck it tearing the hood from the hinge. It was thrown into the water tank cradle then down across the catwalk where it severed the cable railing, until finally coming to a stop on the ground some 20 feet away from the chipper.

The operator had been standing only inches away, directly behind the water tank cradle. He heard the wheel contact the hood, but doesn't remember seeing it travel past him. He rushed back to the cab and pushed the emergency stop button, remaining there until the wheel was stopped. The chipper operator and mechanic then made sure neither was hurt, and made a call via radio phone to the supervisor to report the incident.



WHY DID IT HAPPEN?

The chipper operator was accustomed to a switch that worked and the wheel had usually stopped turning by the time he exited the cab and got down to it. The operator did not visually check to see if the wheel was motionless before unlatching the hood; nor did he feel any vibration or hear any noise to indicate the wheel was active. There was no clear communication between the operator and the mechanic.

HOW COULD IT HAVE BEEN PREVENTED?

The operator must visually check that the wheel has stopped before unlatching the hood. Checking visually to make sure the wheel has stopped is the only guaranteed way to ensure zero energy, as stipulated in the "changing knives" portion of the chipper safe work procedures.

Crews need to practice clear communication, and around this dangerous machinery, a written safety checklist can help prevent complacency.

HAZARD ALERT!

Support heavy machinery attachments when servicing - even when the power's off

Hydraulics can fail - even in zero energy state

WHAT HAPPENED?

A worker and a maintenance contractor were in the process of changing a broken topper knife on a delimeter. The machine was placed on level ground, booms extended slightly, mobile grab arms closed, and mobile head left in a raised position. The ignition was turned off, key removed, hydraulic shut-off arm raised, and the master switch was closed and locks applied.

The maintenance contractor went for tools as the worker stood in front of the mobile head facing the machine. The boom suddenly dropped, the angle moving it forward toward the worker, knocking him over and pinning his legs under the mobile head.

WHY DID IT HAPPEN?

Although the equipment power was shut off, the attachment had not been blocked or supported - in case of mechanical failure - to ensure that no movement could happen, i.e. a zero energy state.

HOW COULD IT HAVE BEEN PREVENTED?

If an attachment can't be lowered to the ground it must be blocked or supported to achieve a zero energy state. As well, in the case of a delimeter, a chain attaching the mobile head to the stationary head must be applied. Use extreme caution when working around logging machinery.

For more information, please visit workplacesafetynorth.ca.



Danger Zone Safety Talk

When working around logging machinery, follow company communication and zero energy procedures at all times

Background Information

Why is the danger zone an issue?

- ❑ 39 per cent of logging injuries relate to contact with objects like trees or coming into contact with moving equipment – that is the highest percentage of workers in the province!
- ❑ Most of these incidents occur within the danger zone of harvesting equipment or environmental hazards.
- ❑ Most of these incidents occur because the machinery is not in a zero energy state.
- ❑ Most of these incidents occur due to workplace communication practices not being followed.
- ❑ Some of these incidents occur due to complacency.
- ❑ Always follow company procedures when entering the danger zone of any piece of equipment.
- ❑ Never enter the danger zone of harvesting equipment without ensuring contact with the operator and ensuring the equipment is at a zero energy state.

Presentation Guide

- ❑ Review the enclosed individual hazard alerts with the group.
- ❑ View WSN YouTube video “Safe Towing Procedures” www.youtube.com/watch?v=I9IN_30St8I
- ❑ Discuss your company policies and procedures with regard to working in a machinery danger zone.
- ❑ Discuss how your company prevents non-compliance and complacency.
- ❑ Discuss how your company can continue to improve in this particular area.

Always look out for each other and speak up about safety!

What is a safety talk?

A safety talk is a brief meeting held on a regular basis with workers and their supervisors to discuss problems and concerns about health and safety. All safety talks involve an informal presentation on a specific subject by a person chosen to lead the session; followed by a group discussion of the topic, how it fits into your workplace, and what it means to the people who work there.

About WSN: Workplace Safety North has a long and proud history of serving the occupational health and safety training needs of the Ontario forest products industry dating back 100 years. As your non-profit safety expert, WSN provides industry-specific consulting, training, industrial hygiene and ergonomic services to assist organizations in improving and expanding health and safety programs.

Free Resources

Visit workplacesafetynorth.ca to access hazard alerts, articles, presentations, research, videos, and subscribe to the monthly *Every Worker* newsletter to receive the latest news and developments in forestry sector workplace safety.

Safe Workplace Ontario (SWO) certification program is a voluntary audit process where forestry firms can continuously monitor and improve health and safety programs and procedures. SWO can assist in assessing your current health and safety program to current legislated standards.

Small Company Health and Safety Program Manual is a free resource that sets out sample health and safety policies and procedures for small companies. Free download available at www.workplacesafetynorth.ca/resources/small-company-health-and-safety-program-manual.