

Occupational Health and Safety in
Newfoundland Forestry – A Pilot Study

Report on Research Findings

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INTRODUCTION

Sectoral Occupational Health and Safety (OHS) Committees were established in Newfoundland and Labrador several years ago with the support of the Workplace Health and Safety Compensation Commission. These committees were established to address chronic OHS issues, specifically for sectors that had histories of high injury rates and compensation costs. While the current Forestry Sectoral Council remain committed to developing strategies towards lowering accident and injury rates, it has been recognized that more activity has to be directed towards this continuing concern.

Recently the SafetyNet Research Consortium (www.safetynet.mun.ca) has decided to focus some of their research resources to assist the Forestry Sectoral Council in developing a strategy to address the OHS issues in the forestry sector. Some related field work has been conducted under the auspices of SafetyNet during the past two summers by a University of New Brunswick (UNB) Forest Engineering undergraduate student and a UNB Kinesiology graduate student. This work aimed both at collecting primary information on the perceptions of risks associated with logging and the working conditions in the sector. Results and general conclusions from the pilot research conducted in the summers of 2004 and 2005 will be reported in this document.

STAKEHOLDER INTERVIEWS

In 2004, a Forest Engineering student made a total of 77 contacts with individuals working for the NL Forest Service, the Workplace Health and Safety Compensation Commission, the Occupational Health and Safety Inspection Services (Department of Government Services), NL Department of Labour, safety managers in forestry

companies, as well as forest harvesting and silviculture contractors that work on both Crown and private land. In-depth individual interviewing of many of these stakeholders served as an excellent method for gaining the trust of participants, with the added benefit of providing an ample basis for snowballing techniques.

In the summer of 2005, 34 self-administered surveys were distributed to logging workers in Western and Central Newfoundland. The survey gathered some information about the workers' perception of risk (POR) while at work, working habits when not employed as a logger, the accident reporting process, and about ways to improve the questionnaire. The anonymous survey was delivered mostly to the work-site or to respondents' homes. An attempt was made to distribute the surveys to large and small, unionized and non-unionized companies. As suspected, the larger operations allowed much easier access. Department of Natural Resources officials already known to the research team facilitated on-site contacts, as these officials had no OHS enforcement role that would directly compromise our association with them in the eyes of workers or employers, they were sympathetic to our project, and were frequently on-site. Through the process of distributing the surveys, we became aware of the issues and challenges related to accessing different groups of loggers. Sixteen out of the 34 surveys were completed and returned.

FINDINGS

Working Environment

The total NL harvest in 2004 was 2.4 million CuM (1chord = 2CuM) (NL Department of Natural Resources, 2004). Machine harvesting accounted for 1,800,000

CuM and manual harvesting accounted for 600,000 CuM. (NL Department of Natural Resources, 2004). Sixty two percent of wood cut on Crown land is harvested manually using a chain saw and/or skidder whereas only 15% of cutting on private company land is manual (NL Department of Natural Resources, 2004). Most of the loggers surveyed work for logging contractors on company leased land. Manual harvesting, the primary harvesting method for three out of the 16 surveyed loggers, is a very high risk operation, and is responsible for 60% of all operational injuries (Navarro et al., 2004).

Newfoundland has two large pulp and paper mills with high wood demands. Kruger Inc. is the owner of Corner Brook Pulp and Paper Limited. Abitibi Consolidated operated two mills in Newfoundland until recently: a smaller mill in Stephenville and a larger mill in Grand Falls. The Stephenville operation, recently shut down, had one paper machine and did not have timber rights in Newfoundland. Harvesting data for these mills were obtained from corporate websites.

Corner Brook Pulp and Paper Limited has a land base of 2,061,674 hectares with 928,524 hectares that are productive. There is approximately 0.36% (7,500 hectares) of the total area cut each year (Corner Brook Pulp and Paper Limited, 2005). The pulp and paper mill directly employs over 1500 employees, with more than 800 of those being woodlands employees. The company owns and operates traditional logging equipment, mechanical harvesters, and cable yarding systems. The traditional equipment is limited to 30% slopes or less, the mechanical harvesters are limited to 50% slopes or less, and the cable yarding system can cut wood in slopes greater than 50% slope. Corner Brook Pulp and Paper Limited purchased two cable yarding systems in 1998 (Corner Brook Pulp and

Paper Limited, 2005). This system fells and trims trees manually, and then chokers are used to hook the trees to the main haul line where they are yarded to the roadside.

Corner Brook Pulp and Paper Limited woodlands division created a safety incentive program in 1997 with a goal ‘to recognize employees for working lost time injury free and to promote health and safety on the job’ (Corner Brook Pulp and Paper Limited, 2005). Employees receive magnets with a certain number of points printed on them when they reach the required number of safe working hours. The points work similar to Club Z or Air Miles points in which employees can use their points to purchase merchandise from the catalogue. The catalogue includes such items as GPS units, tool kits, electronics, and clothing.

This incentive program along with stricter safety procedures has decreased the number of lost-time injuries. In 2002, there was one reported lost-time injury in 750,000 working hours and in 2003, there were three reported lost-time injuries in 816,000 working hours (Corner Brook Pulp and Paper Limited, 2005). Corner Brook Pulp and Paper Limited often report near misses as well as injuries and are doing much more than required by law for taking responsibility for safety (Workplace Health and Safety Compensation Commission, 2005).

Abitibi Consolidated Incorporated operations in Grand Falls-Windsor has two paper machines and limited Newfoundland timber rights. For this reason, much of Abitibi’s pulpwood is brought in by boat from off the island. Grand Falls has five unionized logging contractors operating in Newfoundland, each with approximately 30 to 60 employees. Two of the five contractors live in camps and the other three contractors commute to work daily but are located in or near Grand Falls. Each contractor is

required to have a field office where supplies are kept. These five contractors are 93% mechanized, using mechanical harvesters. There are approximately 40 workers operating chainsaws for cutting and trimming wood within these five contractors (Abitibi Consolidated Incorporated, 2005).

Abitibi does not offer a safety incentive program; however, they do offer safety awards. In 2004, Abitibi workers claimed three lost-time injuries in 500,000 working hours before September of 2005, there has been one lost-time injury reported (Abitibi Consolidated Incorporated, 2005). Abitibi are also doing a good job with safety and are on par with all legal safety requirements (Workplace Health and Safety Compensation Commission, 2005).

Private contractors in Newfoundland range in size and activity level. Private contractors can sell their wood to the local mills as pulpwood, to a local sawmill, or as fuel wood. Both Corner Brook Pulp and Paper Limited and Abitibi Consolidated Incorporated buy wood from private contractors. These contractors, however, are not unionized and are not required to obey the same rules as those directly employed by the mills. A cutting permit is required for those cutting on crown land. The process for acquiring a permit is neither difficult nor time consuming. Many of these contractors cannot afford to buy or maintain expensive equipment like the unionized contractors; therefore, many of these contractors seem to use chainsaws for the cutting and use skidders and porters for transporting the wood from the cutting location to the loading location.

According to the 2001 Canadian Census, Newfoundland and Labrador had a total of 2,495 logging workers, with workers over the age of 55 years accounting for 12% of

the workforce. Women account for almost 10% of the logging industry (Government of Newfoundland and Labrador, 2006). Eighty percent of surveyed loggers reported the age range of their crew being between 40 and 65 years old.

According to surveys filled out in the summer of 2005, 60% of loggers work for a contractor, with an average crew size of 17 (range: 2 - 60). These loggers worked an average of 9 hours per day and 45 weeks per year. July and August were worked by all surveyed loggers while April and May were worked by less than half.

Perceptions of Risk

Two thirds of the surveyed loggers believe logging operations have gotten safer in the past 10 years and the other third believe safety is about the same as 10 years ago.

Approximately half still consider forestry to be dangerous work with a high risk of accident or injury. ***The equipment most commonly considered to be the most dangerous was the chainsaw, with night-time use of the processor/harvester ranked second.***

Unlike some complaints encountered in direct management and supervisory interviews in 2004, all respondents reported satisfaction with their safety equipment.

The survey allowed loggers to select or add from a list the health and safety issues they believe needed attention. ***Pressure to produce and improvising repairs in the bush were the most commonly selected health and safety concerns, followed by heat exhaustion and long hours. Other issues commonly selected from the list included workplace noise, exhaust fumes, and overexertion of older workers. The long commute to the worksite was added to the list of health and safety issues.*** Approximately half of those surveyed traveled over 100km to their worksite (max. 250km) with commuting

time ranging from 30 minutes to 4 hours. Other health and safety issues that were added to the list include retirement issues, working the night shift, Newfoundland terrain, mechanical harvesters, driving vehicles that they are not qualified to drive as well as too much supervision.

Emergency Procedures

In an emergency situation, most of the surveyed loggers agree that it is common practice to use a cell phone or a radio to call for help and then to drive to meet the ambulance when the situation allows the person to be moved. One person reported that a company helicopter would be sent to the worksite in an emergency situation. All but one surveyed logger reported that there is always someone available at a worksite with first aid training and 87% reported that they are personally trained in first aid.

Safety Training in Forestry

In the survey, loggers were asked to select ways they thought they learned about safety. The most popular answer was formal training followed by learning from the supervisor, learning from the crew, trial and error, safety drills on the job, and learning from their father. Almost all respondents said they would attend safety training if it was made available. Approximately equal numbers report that a new person on the job is briefed on safety up front; or that he is briefed only when a problem arises. It seems obvious that many of those surveyed do not avail themselves of existing formal educational and safety training programs.

There are two mechanized forest harvester simulators in operation at the College of the North Atlantic, Bay St. George Campus. They are used to train and re-train

loggers employed by Corner Brook Pulp and Paper Limited and Abitibi Consolidated (College of the North Atlantic, 2005).

Abitibi Consolidated has their own safety coordinator whose job is dedicated solely to health and safety and prevention of injuries. The safety coordinator is responsible for the training and re-training of operators. The training program for woodlands consists of a one week in-house classroom training session, followed by a one week training session on the mechanical harvester simulators and then six weeks of on the job training. They also offer in-house first aid and WHMIS training to employees (Abitibi Consolidated Incorporated, 2005).

Workplace Accident Reporting

Newfoundland and Labrador has two accident reporting forms: one for the employer and one for the employee. Interpretations of the two forms sometimes lead to confusion when classifying an accident and often requires the WHSCC to further investigate. Both New Brunswick's WHSCC and Nova Scotia's WCB have one form which must have mutual agreement, and be signed off by both parties, before being submitted.

The national workplace coding system is the Canadian Standard Industrial Code (SIC). Newfoundland is an exception, using the Newfoundland and Labrador Industrial Code (NIC). Both codes group industries and employers by category and sub-categories according to type, such as mining, forestry, and fishing. These are in turn broken down to more specific units such as open-pit mining, contractor logging, and in-shore fishing. The

NIC makes detailed comparative analysis of accident data with other provinces more difficult (Pike, 2004).

The large majority of injury claims are made early in the spring months, when many of the loggers we surveyed are on break so it is assumed that there is either a larger workload due to fewer workers or rougher terrain at that time of year. Greater than half of WHSCC forestry-related claims are for traumatic wounds and back injuries. The average lost work time is 13 weeks (Navarro et al., 2004). Current WHSCC statistics can be found at <http://www.whscc.nf.ca/pubs/pdf/industry%20fact%20sheets/Forestry.pdf>.

The creation of a system which can report and document "near-misses" and "workplace-identified risk factors" would be an effective tool for reducing accidents and injuries. Research shows the ratio of "near-misses" to actual accidents is on the order of 10 to 1, (Heinrich, 1959: "The Accident Iceberg Model"), creating a powerful incentive to investigate and change workplace practices and systems, and to design-out the potential for an accident to take place. Both New Brunswick's WHSCC and Nova Scotia's Workers Compensation Board (WCB) are currently working toward introducing such a system to forest operations.

Logging wood for home heating (est. 200,000 CuM.) is not a recognized "occupation". These activities not included in WHSCC statistics and hence any workplace injuries are not compensable. Very few of the surveyed loggers were seasonal workers. Fuel wood was not the reason of work for any of those surveyed. Though none of them had ever taken time off from an accident caused by cutting fuel wood, two believe that cutting fuel wood is more dangerous than regular logging.

Worker Compensation Assessment System

The National Compensation Assessment Rating System (CARS) is based on a rate per \$100 of wages paid. The Newfoundland and Labrador CARS for logging is based on a rate per 100 cubic meters of wood cut (Pike, 2004). Hence, there may be an incentive to under-report the quantity cut in order to lower compensation payments. This system may also encourage the employment of a larger number of workers at a specific operation in order to complete cutting quickly, potentially adding to unsafe practices caused by a crowded worksite.

In 2004, compensation assessment rates in New Brunswick were \$5.64 and in Nova Scotia were \$9.49 for every \$100 of wood cut (Workplace Health and Safety Compensation Commission of New Brunswick, 2004; Workers' Compensation Board of Nova Scotia, 2004). Newfoundland assessment rates would be approximately \$10.10 for every \$100 of wood cut if converted from the current rating system (\$1.68/100CuM.) (Pike, 2004). It is postulated that this rate could be \$20 /\$100 if all wood cut were counted and all accidents reported (Pike, 2004). The Newfoundland compensation assessment rate for trucking wood is the same as for logging, which works out to be more than twice that of NB (\$4.36/\$100). Sawmilling operations in Newfoundland have a rate of \$15 for every \$100, also more than twice that of NB (\$6.13/\$100) (Pike, 2004).

Most of the surveyed loggers believe the people they know would report injuries or accidents to WHSCC; however, there were a small portion who knew someone that has considered not filing a WHSCC report when the situation arose. Some of the possible reasons for not filing a claim, in no particular order, were identified as: crews get rewarded for a clean safety record so reporting would spoil things for everybody at

work; some people feel it's better to get back on their own feet and get back to work; it's too much red tape and fuss to deal with the paperwork; the person would be worried about the reaction of other people at work; a lot of people would feel that it wouldn't look good at work if the boss's report and their own disagreed; most people don't like to make a big deal over an injury, unless it is really serious. Lots of people get hurt logging; the person might not know that they had to file a report; some people couldn't read the form and they would be embarrassed to ask for help; and people depend on each other in the woods: a person can't let the other guys down at work.

Enforcement

Less than 30% of the surveyed loggers recall seeing a WHSCC representative or OHS officers visiting their worksite, however 80% recalled seeing a forestry officer visiting their worksite at least once a year.

Current Health and Safety Regulations are not specific to the occupation of forestry. Silviculture, tree planting, tree spacing and pre-commercial thinning are not recognized as occupations in the Industry Classification and Table of Rates (Pike, 2004). The forest industry has no input into the implementation of, or changes to, health and safety regulations.

Enforcement of health and safety regulations is marginal, and workplace site visits are scattered. There are too few Inspectors, and of these, most have little or no forestry experience or training. There are no minimum standards for forest workers on Crown Land. The use of personal protective equipment (hard hats; steel-toed boots; eye and leg protection) is not universal. However, where large companies manage logging

operations on their private or leasehold limits, company-designated safety standards are enforced.

CONCLUSIONS

Raw materials procurement, despite the introduction of some automated processes, continues to have an unacceptably high accident and injury rate. The lack of formal health and safety training, regular worksite inspections and pressures to increase harvesting capacity are likely main causative factors in this regard. Recent provincially-based survey research has identified the need for sector-specific actions embracing the input and expertise of industry, government, safety professionals, healthcare providers and researchers.

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