

along a haulage road at St. Lawrence Cement, owned by Milton Quarry in Milton, Ontario, on her way to the dispatch station. She was passing a line of parked trucks when, her view obstructed, the van ran head-on into a fuel delivery truck travelling downhill in the opposite direction.

The worker's upper teeth were knocked out and she suffered a fractured jaw, nose and orbital bone, a broken heel, and multiple bruises and contusions to her legs and upper body, says an agreed statement filed with the courts. She was in surgery for 12 hours after the crash and has since had facial reconstruction. The worker has been on medical leave for more than two years.

Ontario's Ministry of Labour (MOL) reports that the road, closed to public traffic, was used by gravel haulage trucks and incoming workers. Thirty-nine trucks had been parked alongside the road at the time of the accident.

St. Lawrence Cement, operating as Dufferin Aggregates, pleaded guilty to one breach of Ontario's *Occupational Health and Safety Act*, says Crown counsel Stephen Mason. The company failed to provide flashing lights, flares, reflectors, lamps or a traffic control worker to ensure safe traffic flow, contrary to the *Regulations for Mines and Mining Plants*.

Other charges — including failing to keep the haulage road in good condition, failing to take the reasonable precaution of having a traffic control plan in place, and failing to provide information, instruction and supervision to workers with respect to safe routes — were withdrawn.

Mason reports that, prior to the accident, maintenance employees had complained to management about the hazard of passing the line of trucks. Officials for St. Lawrence Cement responded by directing workers to use an alternate route, although not all did. "The employer should have either made sure that all employees used a safer alternate route, or made provision for safely passing the parked trucks on this road," Mason says.

Graham Boyd, director of human resources for St. Lawrence Cement, says officials believed sufficient safeguards were in place.

"No Passing" signs and warning signs with flashing lights have since been posted, solid yellow centre lines have been painted on the roadway to reinforce that passing is not allowed, and the "truck safety policy" has been amended and a "quarry entrance policy" developed to reflect that passing is prohibited.

Fergus Kerr, director of the Mining and Aggregate Sector of the Workplace Safety and Insurance Board, and a member of the Mines and Aggregates Safety and Health Association, says one problem with enforcing rules is that most haulage trucks are independently operated. "If the truck's on quarry property, and its work is associated with operations of the quarry, the owner is liable under the [OH&S Act]. But the amount of control they can realistically exercise is difficult," Kerr says.

*Lydia Dumyn is a writer in Toronto.*

## Youngsters loaded down with back pain potential

*By Trisha Richards*

**H**omework can be a real pain in the... back.

That's why the Ontario Chiropractic Association (OCA) is looking to lighten the load with a province-wide educational initiative to help elementary school students understand the funda-

mentals of good backpack health. Developed by the Queen's University Ergonomic Research Group, the new cross-curricular resource kit is funded by the OCA and is part of its three-year-old program, "Pack It Light. Wear It Right." The initiative is designed to meet Ontario curriculum needs and is a good match for grade five students.

Beyond avoiding pain — now — it is hoped the knowledge gained early on will make a lasting difference in back health and prevent damage that could prove even more painful in future.

Back injuries have stubbornly retained the top spot for lost-time claims in Ontario over the last decade, ranging from about 29 to 31 per cent of the total. Figures from the Workplace Safety and Insurance Board show that lost-time claims for injuries of the back (including spine, spinal column and neck) numbered 29,298 in 2001, 28,264 in 2002 and 27,236 in 2003.

It's not much of a stretch to believe that back care awareness could be beneficial to children who will eventually enter the work force. "Hauling heavy backpacks on a continual basis can cause stress to the growing spinal column, which could lead to a lifetime of pain and health problems," says a back-grounder from the OCA.

Studies have shown that lower back pain — the leading cause of workplace disability — affects as much as 85 per cent of the working population at least once in their lives, says information from Toronto-based Institute for Work and Health.

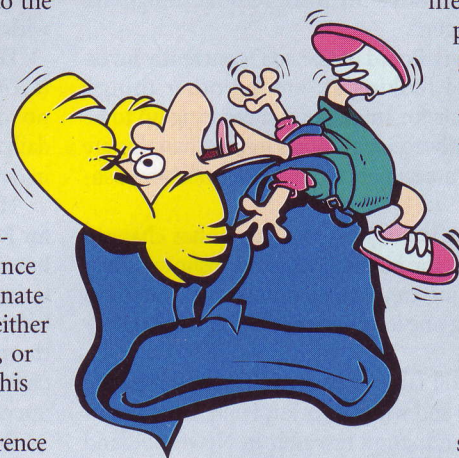
"Children can suffer serious and lasting effects from wearing a poorly designed or overloaded backpack or carrying too much weight for their growing spinal columns," OCA president Dr. Dean Wright says in a statement. "Recent biomechanical literature reveals that carrying a backpack weighing more than 10 to 15 per cent of a child's body weight can lead to serious back and neck pain, changes in posture and gait, and potential irritation and injury of the spine, joints and muscles," the statement says.

Additional concerns include numbness in the arms, soft-tissue injuries and strains that don't go away. Before their teen years, Dr. Wright adds, "50 per cent of children will experience significant lower back pain. They'll have limitations when they go about their daily activities."

Dr. Igor Steiman, a chiropractic clinical specialist and a faculty member of the Canadian Memorial Chiropractic College, says, however, that the negatives can be reversed. Because the muscles, joints and discs are affected — not the bones — Dr. Steiman says the damage "shouldn't be permanent."

Dr. Ron G.K. Norman, a chiropractor at the Foot-Knee-Back Clinic in Ancaster, Ontario, adds that the extent of the damage "depends on the length of time of improper use of a backpack and one's muscular development pattern. The back doesn't necessarily become weaker *per se*. Rather, a muscular imbalance can develop, which can lead to weakness in the spinal stabilizing muscles, if chronic."

Serious back injuries are usually caused by repeated abuse, Dr. Wright says. And with the high number of back problems chiropractors see each year, he says, "we start to wonder how





many of these injuries could have been prevented.”

To avoid backpack-related pain in the first place, OCA offers tips that include the following:

- ensure the weight is evenly distributed in the backpack;
- pack the heaviest items closest to the body (strain is reduced if the weight is closer to the body's centre of gravity); and,
- pack the odd-shaped items on the outside so they do not dig into the back.

Trisha Richards is a writer in Toronto.

## Questions surface over vessel safety and size

By Donalee Moulton

When *Ryan's Commander* ran aground in rough seas last fall, it left two brothers dead and Ottawa scrambling to find out if federal regulations for inshore boat design are putting fishermen in danger.

The Transportation Safety Board of Canada is currently investigating the incident and looking at, among other things, whether or not requirements for small boats measuring up to 65 feet contributed to the deadly accident. Boats longer than this are classified as large craft and are subject to far stricter offshore fishing requirements.

Although the regulation is not new, the fishery has changed dramatically since it first hit the books. Today, the inshore fishery extends 200 miles and fishing crews are going much farther asea than ever before — making one long-distance trip instead of several shorter tours.

To increase catch and still fall within the rules, fishermen are building their boats higher and wider, says Ian Fong, coordinator for SafeCatch, which is conducting research in Newfoundland and Labrador on fishing vessel safety as part of the SafetyNet Community Alliance for Health Research. The result, notes Dag Friis, a professor in the engineering department at Memorial University in St. John's, is that boats are less stable.

In the wake of the shrimp dragger going aground near Cape Bonivista, the captain of the *Ryan's Commander* told reporters, “We had a 45-footer before. If we'd been in that, we would have come home. The difference is the 45-footer was 12 or 14 feet out of the water and the 65-footer was 26 feet out of the water.”

Many have voiced skepticism that the federal regulations will change. Indeed, the Atlantic regional director of communications for Transport Canada says the department has already conducted a collateral investigation. “We identified no immediate threat to safety,” says Maurice Landry. “It's premature at this time,” Landry adds, “to speculate on the cause of the accident.”

It may not, however, be premature to speculate on what will happen if the length requirement remains unchanged. “My fear,” Friis says, “is we're going to lose an awful lot more lives if we don't lose this silly regulation.”

Donalee Moulton is a writer in Halifax.

## Feds urged to get going on draft hours-of-service rules

By Angela Stelmakowich

The time is ripe to move forward with draft federal hours-of-service rules for commercial drivers and to strengthen compliance efforts through the mandatory use of onboard recording technology, trucking representatives say.

Proposed rules were given the green light by the Council of Ministers Responsible for Transportation and Highway Safety almost two years ago. Published in the *Canada Gazette* in February of 2003, draft changes to the *Commercial Vehicle Drivers Hours of Service Regulations* set a mandatory 36-hour rest period once a commercial operation has accumulated 70 hours of driving time. Other proposed changes included reducing maximum work hours to 14 over a 24-hour period (with up to 13 hours spent driving) from the current maximum of 16 hours, and requiring a minimum off-duty rest period of 10 hours compared with the current eight-hour period.

David Bradley, CEO of the Canadian Trucking Alliance (CTA), says in a statement that his organization “has no quarrel with proposed new restrictions on daily/weekly driving times and a 24 per cent increase in daily rest time as compared to the existing rules.”

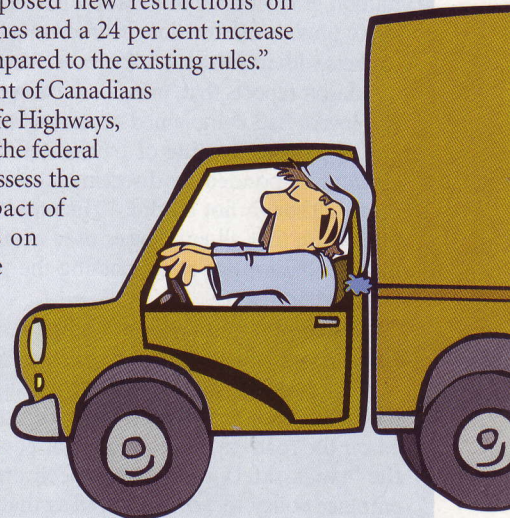
Harry Gow, president of Canadians for Responsible and Safe Highways, however, has called on the federal transport minister to assess the health and safety impact of the proposed changes on commercial vehicle operators.

But, the CTA points out, the current draft means that “a driver who is delayed while his truck is being unloaded, for example, would be required to subtract that time from his allowable total of 16 hours. CTA is concerned that this loss of productivity will cause some drivers to feel pressured to drive when they might otherwise rest in order to make up the time lost during delays.”

Electronic monitoring, for its part, should apply to all trucks governed by the *National Safety Code* and where a commercial drivers licence is required, the CTA adds.

Transport Canada, meanwhile, has issued a request for proposals on behalf of its partners in Alberta, Quebec and the United States to test a fatigue management program developed collaboratively over the past four years. Field testing is expected over the next two years, with a best practices manual to follow. **OH5**

Angela Stelmakowich is editor of OHS CANADA.



**In the December issue, we failed to note that the price for the new Biosystems MultiPro four-gas monitor starts at \$575 US. We apologize for the error.**

**biosystems**