

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in place, and failing to provide information, instruction and supervision to workers with respect to safe routes — were withdrawn.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

