

infocus

Current workplace research – a supplement to at work

This Issue

For Policy-makers

Securing a safe and healthy future:
The road to injury prevention for
Ontario's young workers

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The supplement:

Every issue of the Institute's *At Work* newsletter is accompanied by *Infocus*, which highlights specific issues or research findings as they relate to our stakeholders.

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SECURING A SAFE AND HEALTHY FUTURE: THE ROAD TO INJURY PREVENTION FOR ONTARIO'S YOUNG WORKERS

Last year in Ontario, eight young people who headed off to their jobs never returned home to their families. They weren't runaways or the victims of a violent crime—each was killed in what was likely a preventable workplace accident.

Since the beginning of 2000, more than 40 young people under the age of 24 have lost their lives on the job. Last year, more than 50,000 young workers filed injury claims with the Ontario Workplace Safety & Insurance Board (WSIB). Just over 15,000 of them were injured severely enough that they had to take time off work.

"The sheer number of young people injured at work each year has made it a public health concern in North America and in Europe," says Dr. Curtis Breslin, Scientist at the Institute for Work & Health. The level of concern is evident in the growing number of initiatives, educational programs, web sites and social marketing campaigns that focus on young workers. Many agencies, like the Ontario Ministry of Labour and the WSIB, have also made youth injury prevention a focus of their current business plans.

"There is consistent evidence and a recognition that young workers are a high risk group—in fact, they are at greater risk for workplace injury than adults," says Breslin. "The social and economic

consequences of these injuries are potentially huge because young people could experience more years of disability than an adult if an injury results in permanent impairment."

In the United States, 15 to 26 per cent of adolescent workers (15- to 19-year olds) who have been injured report ongoing medical problems arising from their work injuries. In addition to the personal consequences, the long-term costs to healthcare and compensation programs are significant. In one study of teens in the U.S., researchers estimated youth injury costs \$5 billion each year.¹

An American survey revealed that 80 per cent of teens work part time in their last two years of high school. In Ontario, about 325,000 high school students worked part time in 2001. With work a fact of life for so many young people, how do we keep them safe?

Currently, there is a focus on education and consciousness-raising strategies directed at young workers, employers, parents and teachers to improve workplace safety for teens. Some experts caution, however, that educational approaches have many limitations, particularly if they are provided alone, without engineering, environmental, and legislative approaches.

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“Young people are often temporary workers, which may reduce an employer’s incentive to invest in improving work safety for youth. We need to make sure that the legislation and enforcement are there that will motivate employers who hire young people to provide a safe workplace,” says Breslin. “This may be particularly challenging because so many young people work in small businesses.” Some studies have shown that small businesses may require unique approaches to health and safety because they lack the resources and expertise of bigger organizations.

Young workers at elevated risk for injury

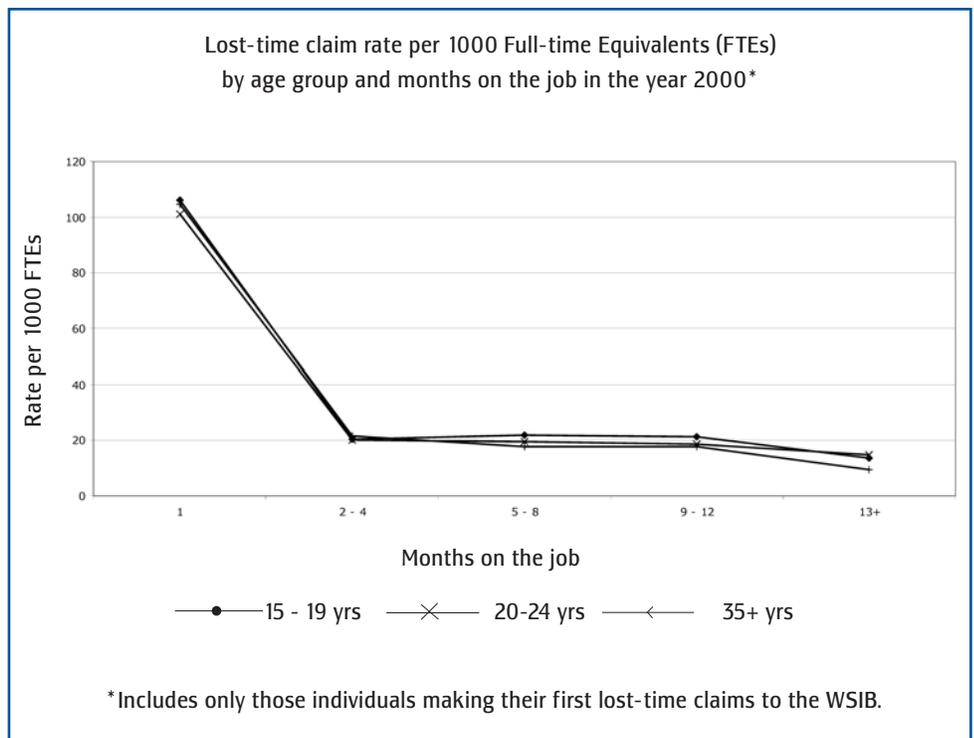
The increased risk of workplace injury for young people is as much as twice that of adults when one accounts for the fact that youth tend to work fewer hours than adults.

Breslin’s own work has shown that in Ontario:

- adolescents (15- to 19-year-olds) and young adults (19- to 24-year-olds) are more likely than adults to sustain an injury on the job that causes them to take time off work

- young males have about twice the risk of injury than young females
- a small proportion of young workers sustain permanent impairments, though less frequently than adults
- strains and sprains are the leading cause of injury for all age groups
- 79 per cent of lost-time claims for adolescents working in the service industry were teens working in retail, hotels, and food and beverage services
- young adults and adolescents working in the goods-producing industry (especially manufacturing) have markedly higher rates of injury than adults, 41.80 - 47.15 per 1,000 full-time equivalents (FTEs) compared to 35.32/1,000 FTEs
- all workers, regardless of age, have five to seven times the risk of injury in the first month on the job (see graph below).

It appears that the high risk of injury in the first month, combined with the fact that there are proportionally more young workers in short-term jobs, is likely contributing to the elevated claim rates for young workers. In 2000, 25 per cent of adolescents reported having been at their job for one month, compared to only 1.2 per cent of adults.



Youth injury rates vary across provinces

Comparing the rate of workplace injury across provinces is difficult. Each province has its own mix of industries and sectors and unique compensation policies with different definitions of injury, methods of calculating risk, and procedures for reporting injuries. However, emerging work from Breslin and his team is shedding some light on interprovincial differences for young workers.

The Canadian Community Health Survey, administered by Statistics Canada, asked a representative sample of Canadians whether they had reported an occupational injury in the past year and if they had sought medical attention. Compared to other provinces, Ontario had the lowest rates of young worker injury, with rates of 30 to 50 per cent lower than other jurisdictions. Saskatchewan had the highest rates, which were more than double those of Ontario. The discrepancy between young and adult workers also varied between provinces, ranging from 1.5 to 2.5 times the risk for young workers compared to older workers (over 25 years old).

“The difference between the provinces may partially be attributed to the different types of jobs young people hold in those provinces. Saskatchewan is largely agriculture-based, whereas Ontario tends to have more young people working in the service industry,” says Breslin.

Multiple layers of determinants of youth injury

The types of jobs youth hold, inexperience, the lack of training and supervision, and developmental factors all have been suggested as reasons behind the elevated injury rates of young workers.

“Along with these unique factors, what you do and how long you’ve been doing it are central factors influencing the risk of injury, just as with adult workers,” explains Breslin.

Surveys and studies of claims rates have shown that anyone who works in unskilled, manual or physically demanding jobs appear to have higher injury rates. When you look at where our young people are working and what types of jobs they’re doing, the elevated rates are not all that surprising. In North America, young workers are concentrated in service industry jobs. In the food service industry, youth are exposed to many hazards that lead to cuts and burns. In retail business, fall hazards are common.

Gender differences in injury rates may be partly attributed to the nature of work. Nearly equal numbers of young men and women are employed, but males tend to work in more hazardous and physically demanding jobs. Young women are more likely to have sales and administrative jobs.

Another factor that appears to contribute to higher risk of injury is inexperience. “Our study of Ontario lost-time claims suggests that at any age, it is the first month in particular that poses the highest risk of injury,” says Breslin.

With summer and seasonal jobs in high demand once school is out, short-term jobs are quite common. Frequent job changes are also common among youth. One survey of Canadian teens found that nearly half of them had worked in their current job for less than six months. Changing jobs frequently means the young person is “new on the job” for a longer period of time. The effect of inexperience is compounded by the fact that a staggering 89 per cent of Ontario youth say they have never received any occupational health and safety training at work.²

These individual and job factors do not take place in a vacuum. A firm’s culture can have pervasive effects in an organization, shaping supervisor-employee relationships, affecting the way work is organized and scheduled, and influencing its orientation toward safety. Evidence of the critical role that firm policy and practices play in safety comes from workers’ compensation records in

Injury rates among 15- to 24-year-olds per 100 FTEs* by province (2000-2001)

Province	Rate/100 FTEs 15-24 yr olds	Rate/100 FTEs 25+ yr olds
Atlantic provinces	6.3	3.7
Quebec	6.9	3.8
Ontario	4.3	2.9
Manitoba	7.1	3.2
Saskatchewan	9.7	3.8
Alberta	6.2	4.1
British Columbia	6.3	3.9
Total	5.8	3.5

*Note: One FTE (full-time equivalent) is equal to 2,000 hours of work

Source: Statistics Canada, Canadian Community Health Survey from work in progress at the Institute for Work & Health.

Michigan that showed a 10-fold difference in claim rates between the best and worst performers in any given industry.³

“How strong safety cultures are in the workplaces where youth are over-represented, such as food services, grocery stores, and small businesses, is an important question and a potential target of intervention,” adds Breslin.

Government policies and practices also affect youth’s work experiences. Minimum age restrictions designed to protect young workers from holding hazardous jobs vary considerably from province to province. Enforcement of occupational health and safety regulations, while not specifically related to youth, also varies by province.

“Stepping up the enforcement and ensuring compliance with even these existing, general health and safety regulations would improve young workers’ safety by raising the bar on what constitutes a safe and healthy workplace,” says Breslin. “Legislation that makes it easier to hold supervisors and employers liable for negligence in the workplace may also be a powerful incentive.”

It's also important to remember that young workers and all new workers, while they may have been told their rights, are at the bottom of the hierarchy in an organization. They may be less likely to question safety practices in the workplace or a lack of training, or ask questions for fear of losing their job. Peer pressure influences behaviour at any age, as new workers try to "fit in" with their colleagues.

Questioning the role of developmental factors

Many have suggested that physical and cognitive development predispose young people to injury. Clearly, when the musculoskeletal system has not fully matured, this may lead to ergonomic mismatches when an adolescent uses equipment that was designed for an adult.

The role of cognitive development is much more difficult to determine. Studies of risk perception show that both youth and adults tend to be optimistic in terms of avoiding harm. Do young people "learn" from their experience as fast as adults? The answer appears to be yes. "We find that as youth gain work experience, their claim rate drops as fast as adults who have been on the job for a similar time frame," says Breslin.

If developmental factors were a major factor, adolescent claim rates would likely be higher than those of young adults because the young adults are farther along in their development. However, the young adult claim rates are comparable and sometimes higher than rates for adolescents. "We may sometimes misidentify inexperience issues as developmental issues," notes Breslin. "This is an important distinction because attributing injuries to immaturity is stigmatizing and takes the focus away from things employers and governments can do to make jobs less hazardous for youth."

Nevertheless, developmental factors may play a larger role in work injuries among pre-teens in particular workplaces, such as those on family farms. Also,

learning materials still need to be tailored so that they are understandable and relevant to youth.

Current initiatives are just a start

There are many initiatives currently under way across Canada that are aimed at increasing safety on the job and preventing injury in young workers. Many programs, like the WSIB's social marketing campaign and the LifeQuilt initiative are designed to raise awareness among young people, their parents and their employers.

Other initiatives aim to increase knowledge of hazards, rights, responsibilities and availability of resources through the education system. Several health and safety elements, delivered by classroom teachers, are targeted at students in Grades nine through 12. They feature resources developed by the Ministry of Labour, the WSIB and the Ministry of Education. In addition, many of Ontario's health and safety associations, such as the Ontario Service Safety Alliance and the Industrial Accident Prevention Association, offer training programs or tools targeted specifically at employers who hire young people.

"These programs are a good first step," says Breslin. "But we have to be careful that these programs don't push aside the need for employers to make an 'investment' in their young workers and provide them with the tools, learning experience and environment that puts safety ahead of productivity."

Research is currently pointing to three areas to address youth injury in the workplace—examining how quickly youth overcome their lack of work experience, cross-provincial differences, and improving capacity to monitor young workers' health.

"We need to ensure job and safety training are implemented throughout all industries, and early," says Breslin. "Training provided early on may reduce the chance of injury associated with the high-risk

period at the beginning of the job. Since our studies have shown that the first month is the riskiest for all new workers, programs should be targeted during that time frame to ensure maximum impact."

That's where provincial and federal government agencies need to play a role, to require training and ensure that the requirement is enforced. "I believe the cases in Ontario against employers who have demonstrated negligence in the injury or death of young workers send an important signal about what is due diligence in a workplace that employs youth," says Breslin.

He also suggests that plans should be developed to monitor work-related injuries and the hazards to which young workers are exposed.

"It is great that this vulnerable worker group is receiving increased attention. However, the way to make a lasting impact is to provide a multi-level approach to work safety that addresses the known risk factors and then evaluate that approach at the provincial level to ensure it's making a difference."

Selected young worker safety links

<http://job-one.ccohs.ca>
www.ccohs.ca/youngworkers
www.livesafeworksmart.net
www.passporttosafety.com
www.worksmartontario.gov.on.ca
www.youngworker.ca
www.youngworkerquilt.ca

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