Bridging the safety gap for vulnerable young workers using employment centres

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Bridging the safety gap for vulnerable young workers using employment centres

Final Report

F. Curtis Breslin^{1,2}, Matt Wood^{3,4}, Cameron Mustard^{1,2}

Hire Prospects© is a service that generates responses from youth online surveys. Hire Prospects© engages a range of hard-to-reach and mainstream young people. This service helps employer associations, government agencies, non-profits, and research organizations understand and engage youth. Hire Prospects© can be used for any social research need, in addition to employment or career related information.

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Executive Summary

Young people aged 15 to 24 years who are out of school (and especially those with less than a high school diploma) are at a particularly elevated risk of work injury. A recent Ontario Ministry of Labour action group made recommendations to improve safety preparation and reduce work injuries in this "high risk" subgroup of young workers. Because many of these youth use services at youth employment centres, the action group recommended the centres as a potential partner in these efforts.

To determine the optimal way to improve occupational health and safety (OHS) for this "high risk" subgroup of young workers who use employment centres, the following research questions were examined:

- What occupational hazards and injuries has this subgroup encountered, and how does their work and injury experience compare to Ontario youth in general?
- What work safety education and training has this subgroup received, from what sources, and what is their current knowledge of work safety?

Information on these issues was obtained by implementing an online survey in youth employment centres across Ontario, through a collaboration between the Institute for Work & Health and the Ontario Association of Youth Employment Centres (OAYEC).

The key findings were as follows:

- Among young people aged 16 to 24 years using youth employment centres, the rate of reporting a medically attended work injury is 14.45 per 100 FTEs.
- These young workers are exposed to several types of unsafe work conditions such as dust/particles, trip hazards and heavy lifting.
- These young workers do not always received workplace-specific training, and when they do, it is often video-based.
- Many young workers using youth employment centres are functioning in adult roles, with most or all of their income going to basic living expenses.

- Many of these youth are working in temporary jobs, and therefore are frequently "new workers."
- Work safety awareness efforts appear to have had an impact on general safety knowledge, though this general information does not replace workplace-specific training.
- Vulnerable young workers can be reached through youth employment centres.

Recommendations flowing from these findings are as follows:

- Workplace parties should place a priority on reducing unsafe work conditions such as trip/fall hazards, dust/air particles and heavy lifting.
- Employers should provide orientation and training in ways that maximize information and skill acquisition/retention about health and safety. Options may include closer supervision and one-to-one training on the job.
- Even though school-based and social marketing efforts have successfully disseminated some basic OHS knowledge to many vulnerable young workers, strengthening workplace-specific training is needed.
- Additional information on vulnerable young workers is required to tailor interventions appropriate for this group.

Overview

Vulnerable young workers

Increasing attention has focused on a subgroup of young workers in whom several demographic and workplace risk factors appear to converge - those young workers who transition fully into the labour market and are not in school. The prevalence of young people in the labour market and out of school is surprisingly high. According to the Ontario Ministry of Education, almost one third of high school students do not graduate with their age cohort (Ministry of Labour, 2007). This statistic needs to be interpreted carefully, however, since some portion of these youth may simply take an additional year to complete their diploma for a variety of reasons. In addition, about 50% of all Ontario high school students who completed their high school diploma went directly into the labour market.

These young workers, who are not participating in any schooling, appear to be overrepresented in occupational injury statistics. For example, an Ontario Ministry of Labour review of recent fatal and serious injuries indicates that early school leavers and those who enter the workforce immediately upon graduating from high school are disproportionately represented in these incidents (Ministry of Labour, 2007). In a representative sample of young Canadians, young workers had higher unadjusted rates of work injuries in cases where they had left school early (8.2 per 100 full-time equivalents [FTEs]) or had graduated and were working (5.1 per 100 FTEs) compared with workers in high school (3.1 per 100 FTEs) or those in post-secondary education (2.7 per 100 FTEs) (Breslin, 2008). These differences were partly but not entirely due to the fact that those out of school were more likely to be employed in physically demanding manual jobs. In addition, young people out of school reported a different work environment than young people in school as evidenced by decreased social support at work.

A common institutional response in Canada has been the dissemination of work safety education programs in high schools and colleges (Boychuk, 2005; Reed, Kidd, Westneat, & Rayens, 2001). One problem with school-based prevention efforts is

that, as noted above (Ministry of Labour, 2007), a substantial proportion of youth leave school early and join the work force. This raises the possibility that a key subgroup of young workers who are at substantial risk of a work injury may be inadequately covered by current prevention efforts.

A possible avenue for targeting prevention initiatives for this subgroup of young workers are labour market intermediaries such as youth employment centres. Labour market intermediaries are defined as agencies which are publicly funded to provide services which improve the functioning of the labour market without restriction to all persons or enterprises that are within the mandate of the agency. They are not membership organizations (e.g. Canadian Federation of Independent Business) or representative organizations (e.g. organized labour unions).

The focus of the present project is the Ontario association of 70 youth employment agencies who annually deliver employment matching services to approximately 42,000 people aged 15 to 24 years in Ontario. These youth employment centres are specifically funded to assist youth with low education levels who are out of school to find a job. In this role, youth employment agencies are well positioned to provide OHS information to this "high-risk" subgroup of young workers.

The Minister of Labour's action group on vulnerable workers under age 25 was formed to recommend non-regulatory approaches to preventing injuries among young workers out of school (Ministry of Labour, 2007). The group consisted of youth, youth culture experts, youth labour market experts, youth safety practitioners and business representatives. There were two recommendations from the action group report that specifically mentioned youth employment centres:

The government should consider providing workplace health and safety educational programs in locations where vulnerable, out-of-school youth will most likely frequent, such as the on-line Human Resources and Social Development Canada (HRSDC) job bank, youth employment centres, social services and community agencies, shelters, food banks and community centres.

The Ministry of Labour should consider ways to provide a youth-focused health and safety support system for those who need information about workplace health and safety or want to report an incident in their workplace, perhaps coordinating this with existing youth employment agencies and services or call centres, if possible, creating a single window for youth employment issues (Ministry of Labour, 2007).

These recommendations highlight a growing awareness that labour market intermediaries outside the current prevention system have the potential to be influential in the workplace with regard to occupational health and safety.

Rationale for research on vulnerable young workers

This project addressed the need to improve safety training among a "high risk" subgroup of young workers, 15- to 24-year-olds who are out of school, and especially those who have not completed high school. Specific information was needed on the unsafe work conditions faced by this vulnerable subgroup and on the safety preparation/training they had received, as this is considered a key aspect of reducing their risk of work injuries. This information could also support business owners who employ these youth to meet OHS obligations. To explore these issues, primary data collection was needed because current data sources such as compensation claims provide little information on the OHS experience and safety preparation of young people out of school. To target and tailor an initiative for this subgroup, we needed to know more about their work injury patterns, what safety training they typically received, where they received it from, and their current level of safety knowledge. This research project was also unique in that it collected the survey data through youth employment centres, an organization that is not currently integrated into the Ontario occupational health and safety system. Yet, this subgroup of youth frequently contacts youth employment services, putting them in a good position to provide support for safety issues to these young workers.

To determine the optimal way to improve occupational health and safety for young workers who use employment centres, we sought to answer the following research questions:

- What occupational hazards and injuries have youth at employment centres encountered, and how does their work and injury experience compare to Ontario youth in general?
- What work safety education and training have youth at employment centres received, from what sources, and what is their current knowledge of occupational health and safety?

Methods

Participants

Participants were recruited from the youth employment centres through the Hire Prospects Youth Survey Outreach System, a department of the Ontario Association of Youth Employment Centres (OAYEC). Youth recruited through the employment centres met the following criteria:

- 16 to 24 years of age
- have worked at a job or business at any time in the past 12 months (including part-time jobs, seasonal work, contract work, self-employment, babysitting and any other paid work)

In all 2,142 respondents completed the survey. Of these, 256 respondents completed too few survey items, and were deleted from the subsequent analyses, leaving a total of 1,886 respondents.

Recruitment

To recruit survey sites, Hire Prospects Youth Survey Outreach System staff described the study to the 70 employment centres in Ontario. Survey staff provided additional information and support for the employment centre staff, in centres agreeing to participate, to set up the internet survey for respondents and to provide the respondents' honorarium, with its attendant bookkeeping.

To recruit participants, employment centre staff asked young people who were currently using the centre and who met the inclusion criteria whether they would be interested in participating in a 20-minute survey regarding work and safety. For those who expressed interest, the staff provided informed consent and the participant completed the internet-based survey. Participants were given \$10 for their time.

Measures

The internet-based survey collected information in the following domains (for more details, see Appendix A):

- demographics (e.g. age, gender)
- characteristics of main job in past 12 months (e.g. industry, hours worked)
- work injury occurrence and nature of injury
- unsafe work conditions encountered
- nature of safety training
- extent of safety knowledge

Results

Table 1 shows the characteristics of the survey respondents, all of whom reported working for pay in the past 12 months. Slightly more than 40% of this sample of young workers was female, and 50% of respondents were currently attending school. The majority of respondents (47%) were 16 to 18 years old, while 33% were 19 to 21 years old, and 20% were 22 to 24 years old. Below we summarize and present key information from the survey. Additional results of all survey items are shown in Appendix B.

More than 50% of respondents had completed some high school and 37% had completed a high school diploma as their highest degree, diploma or certificate (see Figure 1). Our sample of young workers included 40% from south- western Ontario, which includes London and Windsor; a quarter of respondents from eastern Ontario, such as Kingston and Ottawa; and 19% and 16% from northern (i.e. Sudbury and Thunder Bay) and central Ontario (i.e. Greater Toronto Area), respectively (see Figure 2).

Self-reported reading skills in English were reported as follows: less than 1% felt they could not read in English, 6% had fair reading skills, 28% with good and 65% with excellent reading skills in English. Some respondents felt all (17%) or most of their income (35%) went to basic living expenses, such as food and shelter.

Most young workers in this survey held jobs in the accommodation and food services industry (29%), followed by retail (19%) and construction (14%) (see Figure 3). A regional variation was seen in employment by industry, where 34% of youth in southwestern Ontario held jobs in the accommodation and food services industry, compared with only 20% of those in central Ontario. Furthermore, 8% of respondents in southwestern Ontario were employed in the manufacturing industry compared with 4% of those in central Ontario, while 22% of those in central Ontario held retail jobs compared with only 18% and 16% in northern Ontario and southwestern Ontario, respectively.

About 21% of youth reported usually working 36-40 hours per week, while 13% worked 16-20 hours a week (see Figure 4). However, the majority of all young workers (57%) considered their job non-permanent in some way, such as holding a seasonal, temporary, contract or casual job. In the past 12 months, over a quarter of our sample had worked less than two months, more than 20% had worked 2 to 4 months, and 16% had worked 10 months or more (see Figure 5).

Among our sample, 11.7% experienced a work injury that limited their activities (excluding repetitive strain injuries) in the past 12 months. Of these respondents, 33% were injured more than two times and 4.3% sustained a work injury which required medical attention from a health-care professional within 48 hours of injury. The types of injuries which occurred most frequently included cuts, punctures or other open wounds (28%); burns, scalds or chemical burns (26%); scrapes, bruises or blisters (15%); and sprains or strains (15%) (see Figure 6). We also found that 6.4% of our sample reported a repetitive strain injury which occurred from activity at work in the last 12 months. When we calculated the full- time equivalence (FTE) of hours worked within our sample, we found that the rate of RSI injuries was 21.2 per 100 FTE, the rate of non-RSI injuries was 39 per 100 FTE and the rate of medically attended injuries was 14.5 per 100 FTE.

Of those youth who reported working at more than one job in the last 12 months, 17.1% experienced some kind of injury (non-RSI and/or RSI) compared with 12.7% who worked at only one job. Young workers who held permanent jobs had a higher percentage of injury compared with those working in non-permanent jobs (see Table 2). Also, injured young workers were slightly more likely to report receiving some kind of safety training compared with uninjured young workers (16.4 to 12.7 % respectively). This may reflect the fact that those in more hazardous jobs were more likely to receive safety training.

Figure 7 presents the different types of work injury rates per 100 FTEs. Non-RSI work injuries that led to only activity limitations showed the highest rates across the groups (between 32 to 53 per 100 FTEs). Consistent with previous research, young workers currently in post-secondary school had the lowest medically treated non-RSI work injury rate (see Figure 7). However, in this survey, youth currently in high school had medically attended injury rates comparable to than those who did not complete high school.

When asked which unsafe work conditions they had encountered in the past 12 months, most youth reported dust, particles or hazardous materials (39%), and slippery or uneven work floors and surfaces (38%). Other unsafe work conditions reported were lifting, pushing or pulling heavy loads or objects (36%), loud noise (34%), sharp objects (32%), or hot objects (28%) (see Figure 8). Several cases of regional variations in unsafe work conditions were seen. In northern Ontario, 26% of respondents had encountered hazardous chemicals, fumes or vapours, compared with only 14% of those in central Ontario. In another case, 42% of those in southwestern Ontario encountered slippery or uneven work floors or surfaces (e.g. holes, tripping hazards) compared with only 27% in central Ontario (see Figure 9).

In total, 66% of respondents had received some kind of safety training while working in the past 12 months. Their training was likely to include information on how to use equipment safely (48%), use of protective equipment (46%), where to get help in unsafe situations (44%) and report hazards (44%), and how to properly identify and handle toxic chemicals (43%). Finally, when asked how safety training was delivered, most youth said by watching a videotape (44%) compared with less than 30% who watched someone else demonstrate the job.

Of those youth who held jobs in the accommodation and food services industry, the following reported that they had received training on: how to deal with angry customers (44%), what to do in case of robbery (41%), and what do to in cases of sexual harassment (37%). For the retail industry, the corresponding levels of training on dealing with angry customers, robbery and sexual harassment were 48%, 53% and 44% respectively.

We asked respondents to report all sources outside of work from which they had ever received information about safety at work (see Figure 10). Most youth received information from school only (36%), and another 30% said they had received information from school and media. Only 14% of respondents reported not receiving any information from school or media.

Our survey included an occupational health and safety quiz to measure our respondents' knowledge of common OHS facts. Results showed that the youth in our sample had generally high scores. Several questions had correct response rates of 96% to 99%, including questions on whether health and safety training should take place before the start of the job, and whether an employee has a right to participate in workplace health and safety. The question with the fewest correct answers (66%) asked respondents what they would do if they saw a health and safety hazard. We also found that youth who had received information about work safety from school and media consistently scored better on all quiz questions than those who reported not receiving any information from school or media. For instance, 75% of those with safety information correctly answered the question on what to do if they saw a health and safety hazard, compared with only 55% of those who did not recall receiving any safety information. In Figure 11, we can see the overall guiz scores of respondents by education status. Those currently in high school and those who did not finish high school scored the lowest, compared with those who completed high school and were not currently in school, and those currently in post-secondary school.

Discussion

This survey assessed the work, training and injury experiences of 16- to 24-year-olds using youth employment centres. Consistent with previous research on teenage and young adult workers in general, young people using employment centres held jobs in a variety of industries, but most commonly in the service sector. Also, temporary jobs were typical in this age range. Further, the work injury rates of these vulnerable youth did appear to be elevated compared to injury statistics of older workers (Breslin, 2008). Also, similar to previous young worker research, the most common types of work injuries were cuts, burns, scrapes and sprains/strains (National Research Council, 1998). It was also notable that among the young workers who were injured in the past year, one-third reported having sustained more than one work injury.

We found that many youth who have dropped out of high school, or are not attending post-secondary institutions used youth employment centres. This young worker sample did not conform to stereotypical notions of young worker demographic characteristics. In our sample, almost 20% did NOT fall into the category "single, never married." Combined with the fact that more than half of respondents said that most or all of their income was used to meet basic living expenses, this suggests that a substantial portion of these young workers have in several ways transitioned into adult roles. The survey also found that these young workers were encountering a range of unsafe work conditions associated with risk of acute trauma, chronic soft-tissue injury and occupational disease.

About two-thirds of our sample reported receiving safety training while working in the past 12 months. This figure is much higher than the percentage of Canadian young workers who reported safety training in a previous study (Smith & Mustard, 2007). Only 20% of young workers 15 to 24 years old in this previous study reported receiving safety training in their first year on the job during the period between 1999 to 2003. Different definitions of safety training and changes over time in providing safety training may help explain this discrepancy.

It was also reported that often safety training consisted of being shown a video. A review of research on OHS training methods indicates that the more interactive and engaging the method (e.g. more hands-on than lecture), the greater the knowledge acquisition and safety performance and the fewer negative safety outcomes (Burke et al., 2006).

Young workers in this sample who recalled having received work safety information through the media or school answered more safety knowledge items correctly than those respondents who did not. This suggests that work safety awareness efforts appear to have had an impact on general safety knowledge, though this general information does not replace workplace-specific training.

Strengths and Limitations

A strength of this survey is that we recruited a large sample of young workers from youth employment centres across Ontario. This sample includes many youth who have low education levels, a group that appears to be at elevated injury risk.

Another strength is the level of detail about these young workers' OHS experiences, including unsafe working conditions and safety knowledge. Nevertheless these findings must be viewed in light of certain limitations. First, the study design was not intended to obtain a representative sample of youth using employment centres. Accordingly, certain regions in Ontario were overrepresented in our sample (i.e. southwestern Ontario). Second, although many of the survey items were drawn from previously used surveys (especially from Statistics Canada's Canadian Community Health Survey), other items such as the safety knowledge questionnaires were developed for this survey, and so no psychometric data are available for these items.

Recommendations

Recommendations flowing from these findings are as follows:

- Employers should place a priority on reducing unsafe work conditions such as trip/fall hazards, dust/air particles and heavy lifting.
- Employers should improve orientation and training in ways that maximize information and skill acquisition/retention of health and safety. Options may include emphasizing closer supervision and one-to-one training on the job, and less reliance on only using video training.
- Further integration of youth employment centres into Ontario occupational health and safety system should be considered, especially with regards to initiatives directed at young workers.
- Even though school-based and social marketing efforts have successfully disseminated some basic OHS knowledge to many vulnerable young workers, efforts to strengthen workplace-specific training are needed.
- Additional information on vulnerable young workers is required to tailor interventions appropriate for this group.

References

Boychuk, S. (2005). 2005/06: National government/WCB young worker health and safety initiatives/programs inventory. Toronto, ON: Ministry of Labour.

Breslin, F.C. (2008). Educational status and work injury among young people: Refining the targeting of prevention resources. Canadian Journal of Public Health, 99, 121-124.

Burke, M.J., Sarpy, S.A., Smith-Crowe, K., Chan-Serafin, S., Islam, G., & Salvador, R. (2006). The relative effectiveness of worker safety and health training methods. American Journal of Public Health, 96, 315-324.

Ministry of Labour (2007). Minister's action group on vulnerable workers under the age of 25. Toronto, ON: Ministry of Labour.

National Research Council (1998). Protecting youth at work: Health, safety, and development of working children and adolescents in the United States. Washington, DC: National Academy Press.

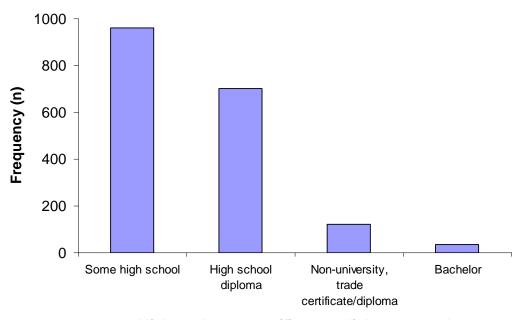
Reed, D., Kidd, P., Westneat, S., & Rayens, M. (2001). Agricultural disability awareness and risk education (AgDARE) for high school students. Injury Prevention, 7, i59-i63.

Smith, P.M. & Mustard, C.A. (2007). How many employees received safety training during their first year of a new job? Injury Prevention, 13, 37-41.

Table 1: Characteristics of youth employment centre survey respondents (n=1,886)

Characteristics	Total	
	n	%
Gender		
Female	790	42%
Male	1078	57%
Age		
16 – 18	888	47%
19 – 21	613	33%
22 – 24	380	20%
Currently attending school		
Yes	899	50%
No	948	48
Marital status		
Single	1523	81%
Living common-law	251	13%
Married	42	2%

Figure 1: Survey respondents by highest degree, certificate, or diploma earned (n=1,886)



Highest degree, certificate or diploma earned

Figure 2: Survey respondents by region of Ontario (n=1,886)

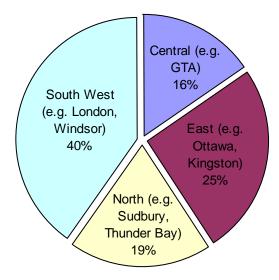


Figure 3: Survey respondents' main job in past 12 months by industry (not showing all categories) (n=1,886)

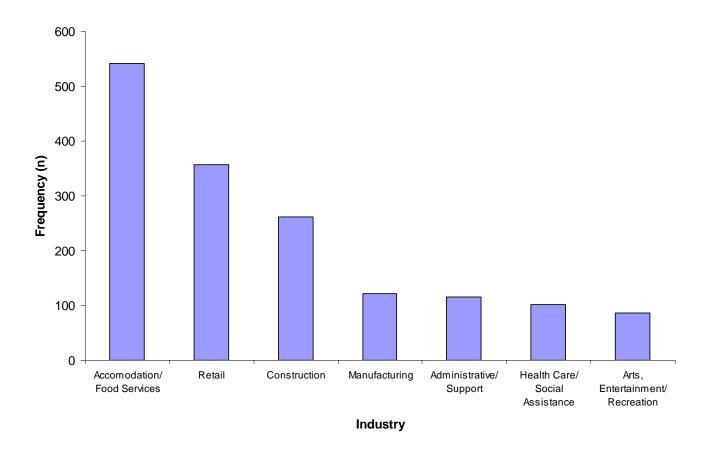


Figure 4: Survey respondents' main job in past 12 months by usual hours worked per week (n=1,886)

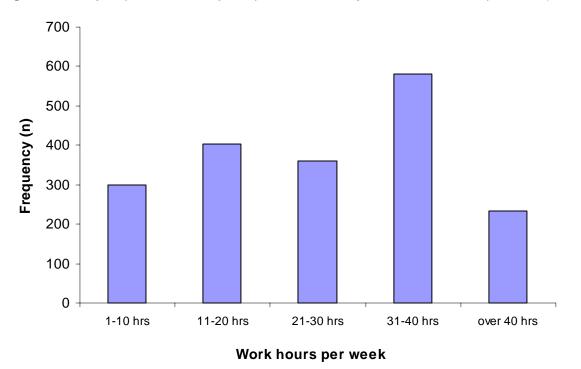


Figure 5: Survey respondents' main job by number of months worked in past 12 months (n=1,886)

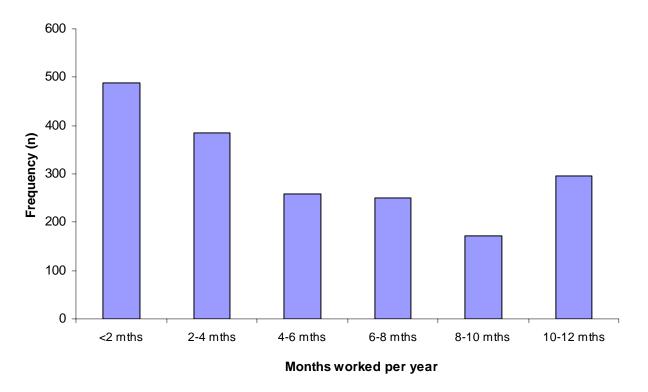


Figure 6: Survey respondents' work injury (non-RSI) experience in past 12 months by type of injury (n=221)

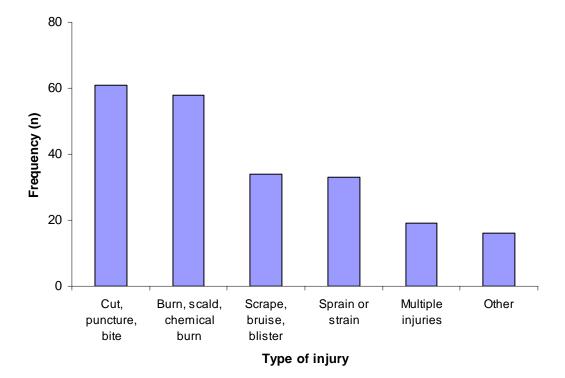


Table 2: Work characteristics of survey respondents who experienced any injury (non-RSI and/or RSI) (n=285)

	% injured
Survey variables	(combined non-RSI and/or RSI)
Worked at one job	12.7
Worked at more than one job	17.1
Main job was permanent	19.0
Main job was non-permanent	12.5
Received some kind of safety training	16.4
Received no safety training	12.7

Figure 7: Work injury rates per 100 full time equivalents (FTE) by educational status (n=285)

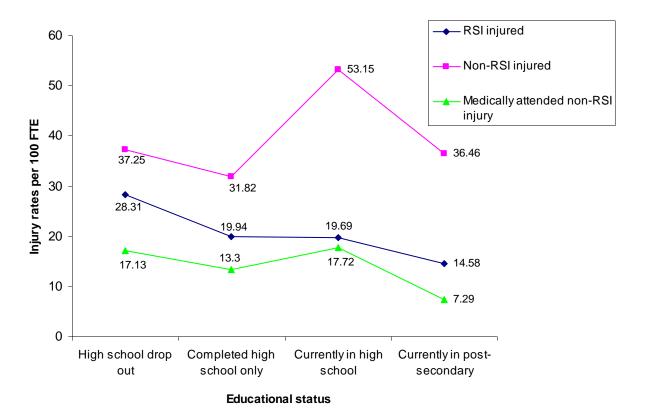


Figure 8: Survey respondents' work experience in past 12 months by unsafe work conditions encountered (not showing all categories) (n=1,886)

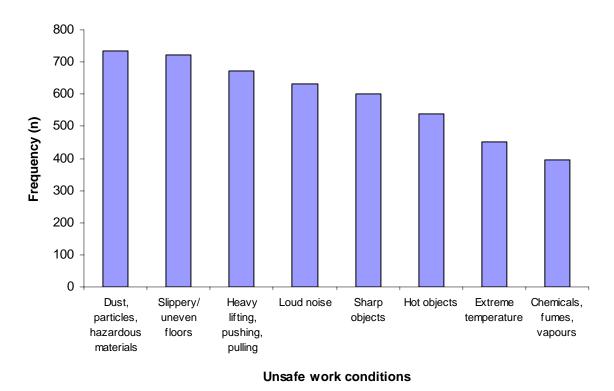


Figure 9: Survey respondents' work experience in past 12 months by unsafe work conditions encountered and region of Ontario (not showing all categories) (n=1,886)

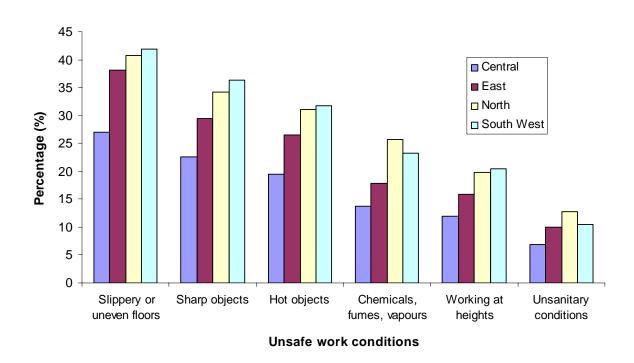


Figure 10: Survey respondents' exposure to occupational health and safety information by source (n=1,886)

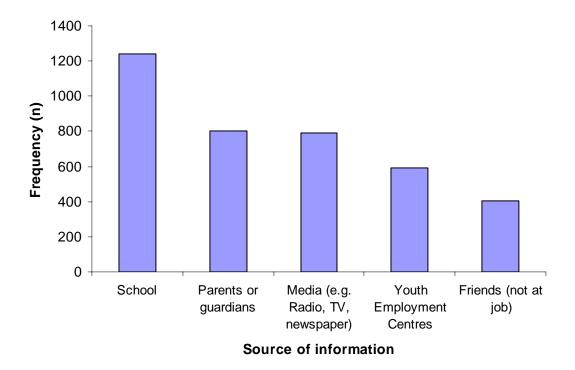
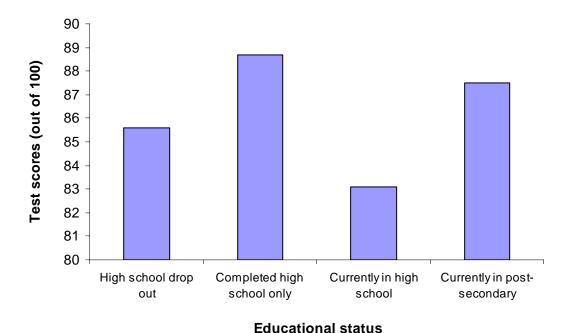


Figure 11: Survey respondents overall occupational health and safety quiz scores by educational status (n=1,886)



Bridging the Safety Gap is being conducted by Hire Prospects in partnership with the Institute for Work and Health.

The purpose of the survey is to gather your thoughts and experiences on safety in the workplace. This means asking you questions about the tools and equipment, information and assistance you have experienced on the job to prevent danger and hazards from occurring.

Workplace Safety is an important issue and we value your opinion. Leave yourself about 20 minutes to complete the survey. If you do not know the answer to a question, please leave it blank.

To complete this survey, you must be 16 to 24 years old and have worked for pay in the last 12 months.

The survey does not collect personal information about you! Your identity will be kept confidential. We will not use your name or any other information that identifies who you are on reports or written materials coming out of this session. We ask, also, that you keep the content of this survey confidential.

By participating in this survey, I agree that I understand that my participation is completely voluntary and that my decision either to participate or not to participate will be kept completely confidential to the limits of the law. I also understand that I can withdraw from the study at any time without explanation.

I further agree that any questions I may have asked about the study have been answered to my satisfaction. I have been assured that no information will be released or printed that would disclose my personal identity and that my responses will be completely confidential. Any risks or benefits that might arise out of my participation have also been explained to my satisfaction.

1. I have read the above instructions and agree to participate in the <i>Gap Survey.</i>	Bridging the Safety
□ Yes □ No	

Thank you for taking the time to complete this survey.

Your Place of Work!

Please answer these questions about jobs or employment which you have had during the past 12 months. If you are not currently employed, please answer these questions for the last paid job you held in the last 12 months.

- 1) Did you work at a job or a business at any time in the past 12 months? (Please include part-time jobs, seasonal work, contract work, self-employment, baby-sitting and any other paid work, regardless of the number of hours worked.)
 - Yes
 - No
- 2) Did you have more than one job or business in the past 12 months?
 - Yes
 - No

Note: Please complete regarding your main job in the last 12 months. If you work more than one job, please answer the following questions for the job where you worked the most total hours in the past 12 months – your "main" job.

- 3) What kind of business, industry or service were/are you working in?
 - Retail Trade (e.g. electronic, furniture, clothing stores, convenience stores, etc.)
 - Accommodation and Food Services (e.g. hotels, restaurants/bar, cafeteria, etc.)
 - Administrative and Support (e.g. office, front desk support, etc.)
 - Arts, Entertainment, and Recreation (e.g. sporting events, museums, casinos, performing arts, etc.)
 - Construction (e.g. building construction, renovations, road maintenance, etc.)
 - Manufacturing (e.g. food, apparel, computer, paper manufacturing, printing services, etc.)
 - Information (e.g. telecommunications, data entry, sound recording, etc.)
 - Finance and Insurance (e.g. banks, security, insurance or credit companies, etc.)
 - Real Estate and Rental and Leasing (e.g. apartments, condominium offices, leasing office, etc.)
 - Transportation and Warehousing (e.g. couriers, air, truck, transit services, etc.)
 - Educational Services (e.g. schools, colleges, tutoring business, etc.)
 - Health Care and Social Assistance (e.g. hospitals, clinics, nursing homes, etc.)
 - Agriculture, Forestry, Fishing and Hunting (e.g. animal and crop farming, logging, etc.)
 - Mining (e.g. oil and gas extraction, etc.)
 - Utilities (e.g. electric, gas, water plant, sewage, etc.)
 - Wholesale Trade (e.g. merchant wholesales, merchant pricing services, etc.)
 - Professional, Scientific, and Technical Services (e.g. engineering, laboratory services, etc.)
 - Management of Companies and Enterprises (e.g. consulting services, etc.)
 - Waste Management and Remediation Services (e.g. disposal services, recycling services, etc.)
 - Other Please specify:

Appendix A: Bridging the Safety Gap Employment Centre Survey

- 4) What kind of work were/are you doing?
 - Sales and Service position (e.g. retail salesperson, cashiers, cook, childcare, security, hotel clerk, etc.)
 - Processing, Manufacturing or Utilities position (e.g. machine operators, assembly line workers, utility worker, etc.)
 - Art, Culture, Recreation or Sport position (e.g. performers, amusement ride operators, etc.)
 - Business, Finance or Administrative position (e.g. banking clerk, secretary, etc.)
 - Trades, Transport or Equipment Operator and related position (e.g. construction worker, mechanic, metal forming, crane operator, etc.)
 - Health position (e.g. support services in health care, nursing, technical health services)
 - Social Science, Education, Government Service or Religion position (e.g. legal clerk, government workers, teacher assistant, church worker, etc.)
 - Management position (e.g. manager, supervisor, foreman, etc.)
 - Natural and Applied Science or related position (e.g. lab technician, park ranger, etc.)
 - Primary Industry position (e.g. farmer, miner, etc.)

O	ther –	Please	specify:	
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- 5) Is/was your main job permanent or non-permanent?
 - Permanent
 - Non-permanent (e.g. seasonal, temporary, term, contract, casual, etc.)
- 6) About how many hours a week do you usually work(ed) at your main job or business? If you usually work(ed) extra hours, paid or unpaid, please include these hours.
 - 1-5 hours/week
 - 6-10 hours/week
 - 11-15 hours/week
 - 16-20 hours/week
 - 21-25 hours/week
 - 26-30 hours/week
 - 31-35 hours/week
 - 36-40 hours/week
 - 41-60 hours/week
- 7) During the past 52 weeks (i.e. past year), how many weeks did you do any work at a job or a business? (Include paid vacation leave, paid maternity leave, and paid sick leave)
 - 1-4 weeks/year (i.e. 1 month or less)
 - 5-8 weeks/year (i.e. more than 1 month, up to 2 months)
 - 9-12 weeks/year (i.e. more than 2 months, up to 3 months)
 - 13-16 weeks/year (i.e. more than 3 months, up to 4 months)
 - 17-20 weeks/year (i.e. more than 4 months, up to 5 months)
 - 21-24 weeks/year (i.e. more than 5 months, up to 6 months)
 - 25-28 weeks/year (i.e. more than 6 months, up to 7 months)
 - 29-32 weeks/year (i.e. more than 7 months, up to 8 months)
 - 33-40 weeks/year (i.e. more than 8 months, up to 10 months)
 - 41-52 weeks/year (i.e. more than 10 months, up to 1 year)

Your Personal Experience with Safety!

Note: Please complete regarding your main job in the last 12 months. If you work more than one job, please answer the following questions for the job where you worked the most total hours in the past 12 months – your "main" job.

This next section deals with repetitive strain injuries. By this we mean pain or injury caused by overuse or by repeating the same movement frequently.

- 8) In the past 12 months, did you have any injuries due to repetitive stain which were serious enough to limit your normal activities?
 - Yes
 - No
- 9) What type of activity were you doing when you got this repetitive strain?
 - Sports of physical exercise (include school activities)
 - Leisure or hobby (include volunteering)
 - Working at a job or business (exclude travel to or from work)
 - Travel to or from work
 - Household chores, other unpaid work or education
 - Sleeping, eating, personal care
 - Other Please specify:

Now some questions about other injuries which occurred in the past 12 months, and were serious enough to limit your normal activities. (For example, a broken bone, a bad cut or burn, a sprain, or a poisoning.)

- 10) Not counting repetitive stain injuries, in the past 12 months, were you injured?
 - Yes
 - No
- 11) If yes, how many times were you injured?
 - 1-2 times
 - 3-4 times
 - over 5 times

Note: If you were injured more than once, please answer the following questions for the injury which was most severe.

- 12) What type of injury did you have? (For example, a broken bone or burn)
 - Multiple injuries
 - Broken or fractured bones
 - Burn, scald, chemical burn
 - Dislocation
 - Sprain or strain
 - Cut, puncture, animal or human bite (open wound)
 - Scrape, bruise, blister
 - Concussion or other brain injury
 - Poisoning
 - Injury to internal organs
 - Other Please specify: _____

Appendix A: Bridging the Safety Gap Employment Centre Survey

- 13) What type of activity were you doing when you were injured?
 - Sports of physical exercise (include school activities)
 - Leisure or hobby (include volunteering)
 - Working at a job or business (exclude travel to or from work)
 - Travel to or from work
 - Household chores, other unpaid work or education
 - Sleeping, eating, personal care
 - Other Please specify:
- 14) Did you receive any medical attention for the injury from a health professional in the 48 hours following the injury?
 - Yes
 - No
- 15) Did you miss one day or more of work because of the injury?
 - Yes
 - No
- 16) If yes, how many days of work did you miss?
 - 1-3 days
 - 4-6 days
 - over 1 week

Your Personal Experience with Unsafe Work Conditions!

Note: Please complete regarding your main job in the last 12 months. If you work more than one job, please answer the following questions for the job where you worked the most total hours in the past 12 months – your "main" job.

- 17) What unsafe work conditions have you encountered at your main job or business in the past 12 months? (Please check all that apply)
 - Dusts, particles, or hazardous materials
 - Hazardous chemicals, fumes, or vapours
 - Loud noises
 - Slippery or uneven work floors or surfaces (e.g. holes, tripping hazards)
 - Heavy equipment or potentially dangerous machinery
 - Working alone
 - Working at heights (e.g. ladder, scaffolding)
 - Sharp objects (e.g. food slicer, knives, power tools)
 - Hot objects (e.g. grill, coffeemaker/steamer, dishwasher, deep fryer)
 - Lifting, pushing or pulling heavy loads or objects
 - Extreme heat, or extreme cold
 - Poor ventilation
 - Unsanitary working conditions
 - Violence or harassment at the workplace (by employees/employer or customers)
 - Repetitive motions or procedures
 - Extended shifts, overtime, or work weeks

Workplace Safety Training!

Note: Please complete regarding your main job in the last 12 months. If you work more than one job, please answer the following questions for the job where you worked the most total hours in the past 12 months – your "main" job.

- 18) Have you gotten any kind of safety training while working in the last 12 months, either through video/written instructions, hands-on, or another way? (e.g. safety training might include WHMIS (Workplace Hazardous Materials Information System), how to use equipment safely, how to use personal protective equipment, how to handle aggressive customers, etc.)
 - Yes
 - No
- 19) If yes, how was most of your training done?
 - Watch a videotape
 - Get written instructions
 - Watch someone else demonstrate how to do the job
 - Other Please specify:
- 20) If yes, did your training include: (check all that apply)
 - How to use protective equipment (e.g. safety goggles)
 - How to use equipment safely (e.g. safety issues dealing with equipment)
 - How to properly identify and handle toxic chemicals (e.g. Workplace Hazardous Materials Information System (WHMIS))
 - Where to get help in unsafe situations
 - How to report hazards in the workplace
 - What to do in case of robbery
 - How to deal with an angry or drunk customer
 - What to do in case you are sexually harassed
- 21) Outside of work, have you ever received information, from any of the following sources, about safety at work? (check all that apply)
 - Media (i.e. Radio, TV, newspapers, magazines)
 - School
 - Parents or guardians
 - Friends not at job
 - Youth Employment Centres
 - Other Please specify:

Occupational Health and Safety Knowledge Quiz

Now some questions to check your current knowledge of occupational health and safety facts!

- 22) Your health and safety training should take place before you start the job.
 - True
 - False

Appendix A: Bridging the Safety Gap Employment Centre Survey

- 23) Young workers have fewer health and safety rights than other workers.
 - True
 - False
- 24) If you see a health and safety hazard you should:
 - Tell your boss
 - Report it to your worker health and safety representative or health and safety committee
 - Tell your union representative (if you have one)
 - Only a) and c)
 - All of the above
- 25) Employers have a duty to control workplace hazards by:
 - Eliminating the hazard
 - Putting up barriers between you and the hazard
 - Providing you with safety equipment
 - All of the above
- 26) Your boss can fire you for refusing to perform unsafe work
 - True
 - False
- 27) Which of the following is your employer's responsibility?
 - Training you properly in the safe use of chemicals and equipment
 - Maintaining a safe working environment
 - Taking action to correct unsafe working conditions immediately
 - Only a) and b)
 - All of the above
- 28) Turning off the power supply to a piece of equipment you're cleaning and putting a lock on a power supply is extremely important to:
 - Show that you are working hard
 - Prevent accidental start-up of machines and equipment
 - Maintain control of the work area
 - Prove your authority over the workplace
- 29) The first step to take when an injury occurs in the workplace is to make sure the area is safe for you and for the victim. The next thing to do is to get help for the injured worker.
 - True
 - False
- 30) When handling chemicals which of the following tasks should be done by the employee:
 - Properly wear assigned personal protective equipment
 - Know where to find the Material Safety Data Sheets (MSDS)
 - Check the MSDS when handling, storing, mixing or cleaning up spills
 - All of the above
- 31) An employee has the right to participate in workplace health and safety.
 - True
 - False

 32) Every employee needs training that includes how to respond in an emergency situation. True False
Tell Us About You!
Now some general background questions which help us compare the work experiences of young people in Ontario.
33) How old are you? 16-18 19-21 22-24 25-27
34) What city are you filling out this survey in?
35) Are you: Male Female
36) What language do you feel most comfortable communicating in? English French Italian Portuguese Polish Spanish Cantonese Mandarin German Greek Tagalog (Philippines) Russian Dutch Arabic Other – Please specify:
 37) How would you rate your current reading skills in English? Cannot read in English Fair Good Excellent
 38) Are you currently attending a school, college or university? Yes No

Appendix A: Bridging the Safety Gap Employment Centre Survey

- 39) What is the highest degree, certificate or diploma you have obtained?
 - No post-secondary degree, certificate or diploma
 - Trade certificate or diploma from a vocation school or apprenticeship training
 - Non-university certificate or diploma from a community college, CEGEP, school of nursing, etc.
 - University certificate below bachelor's level
 - Bachelor's degree
 - University degree or certificate above bachelor's degree
- 40) How much of your income goes to basic living expenses, such as food and shelter?
 - All of my income
 - Most of my income
 - Some of my income
 - None of my income
- 41) What is your current marital status?
 - Married
 - Living common-law
 - Widowed
 - Separated
 - Divorced
 - Single, never married

That's It! Please click the "Done" button to submit your survey. Thank you!

Table 1: Survey respondent characteristics		
	n	% ¹
Gender		
Female	790	41.9
Male	1078	57.2
Age		
16-18	888	47.1
19-21	613	32.5
22-24	380	20.2
Region		
Central	292	15.5
East	472	25.0
North	354	18.8
South West	751	39.8
Marital Status		
Married	42	2.2
Living common-law	251	13.3
Widowed	8	0.4
Separated	24	1.3
Divorced	4	0.2
Single, never married	1523	80.8
Currently attending school, college, university		
Yes	899	47.7
No	948	50.3
Highest degree, certificate or diploma obtained		
Some high school	959	50.9
High school diploma	703	37.3
Trade certificate or diploma from a vocation school or apprenticeship training	55	2.9
Non-university certificate or diploma from a community college, CEGEP, etc.	65	3.5
University certificate below bachelor's level	23	1.2
Bachelor's degree	37	2.0
University degree or certificate above bachelor's degree	12	0.6
	12	0.0
Amount of income going to basic living expenses	327	17.3
All of income	659	34.9
Most of income		
Some of income	555	29.4
None of income	313	16.6
Reading skills in English	0	0.0
Cannot read in English	3	0.2
Fair	104	5.5
Good	537	28.5
Excellent	1218	64.6
Language most comfortable communicating in		
English	1801	95.5
French	27	1.4
Other	58	3.1

¹Percentage out of total survey respondent number (n=1886)

Note: Some response categories are combined due to low cell sizes

Table 2: Job characteristics in last 12 months	n	% ¹
Business/industry	n	
Retail Trade (e.g. electronic, furniture, clothing stores, convenience stores, etc.)	357	18.9
Accommodation and Food Services (e.g. hotels, restaurants/bar, cafeteria, etc.)	541	28.7
Administrative and Support (e.g. office, front desk support, etc.)	115	6.1
Arts, Entertainment, Recreation (e.g. sporting events, museums, performing arts, etc.)	86	4.6
Construction (e.g. building construction, renovations, road maintenance, etc.)	262	13.9
Manufacturing (e.g. food, apparel, computer, paper, printing services, etc.)	122	6.5
Information (e.g. telecommunications, data entry, sound recording, etc.)	45	2.4
Transportation and Warehousing (e.g. couriers, air, truck, transit services, etc.)	48	2.6
Educational Services (e.g. schools, colleges, tutoring business, etc.)	30	1.6
Health Care and Social Assistance (e.g. hospitals, clinics, nursing homes, etc.)	101	5.4
Agriculture, Forestry, Fishing and Hunting (e.g. animal and crop farming, logging, etc.)	43	2.3
Mining (e.g. oil and gas extraction, etc.)	10	0.5
· · · · · · · · · · · · · · · · · · ·	19	1.0
Utilities (e.g. electric, gas, water plant, sewage, etc.)	19	1.0
Wholesale Trade (e.g. merchant wholesales, merchant pricing services, etc.)	19	0.7
Professional, Scientific, Technical Services (e.g. engineering, laboratory services, etc.)		
Waste Management and Remediation Services (e.g. disposal, recycling services, etc.)	20	1.0
Other	54	2.9
Type of work	4074	F7.0
Sales and Service (e.g. retail salesperson, cashiers, cook, childcare, hotel clerk, etc.)	1074	57.0
Processing, Manufacturing or Utilities (e.g. machine operators, assembly line workers, etc.)	190	10.1
Art, Culture, Recreation or Sport (e.g. performers, amusement ride operators, etc.)	56	3.0
Business, Finance or Administrative (e.g. banking clerk, secretary, etc.)	63	3.3
Trades, Transport, Equipment Operator (e.g. construction, mechanic, crane operator, etc.)	265	14.1
Health (e.g. support services in health care, nursing, technical health services)	23	1.2
Social Science, Education, Government, Religion (e.g. legal clerk, teacher assistant, etc.)	79	4.2
Management (e.g. manager, supervisor, foreman, etc.)	27	1.4
Primary Industry (e.g. farmer, miner, etc.)	43	2.3
Other	66	3.5
More than one job		
Yes	1034	55.0
No	845	45.0
Permanent or non-permanent*		
Permanent	767	40.7
Non-permanent (e.g. seasonal, temporary, term, contract, casual, etc.)	1079	57.2
Hours worked per week*		
1-5	119	6.3
6-10	181	9.6
11-15	167	8.9
16-20	236	12.5
21-25	191	10.1
26-30	169	9.0
31-35	184	9.8
36-40	396	21.0
41-60	234	12.4
Number of weeks worked in past year*		
1-4 (i.e. 1 month or less)	289	15.3
5-8 (i.e. more than 1 month, up to 2 months)	199	10.6
9-12 (i.e. more than 2 months, up to 3 months)	186	9.9
•		

13-16 (i.e. more than 3 months, up to 4 months)	198	10.5
17-20 (i.e. more than 4 months, up to 5 months)	120	6.4
21-24 (i.e. more than 5 months, up to 6 months)	139	7.4
25-28 (i.e. more than 6 months, up to 7 months)	127	6.7
29-32 (i.e. more than 7 months, up to 8 months)	124	6.6
33-40 (i.e. more than 8 months, up to 10 months)	171	9.1
41-52 (i.e. more than 10 months, up to 1 year)	296	15.7

¹Percentage out of total survey respondent number (n=1886)

	n	%
Injuries due to RSI		
Yes	301	16.0
No	1580	83.8
Type of activity causing RSI injury		
Sports or physical activity (include school activities)	93	4.9
Leisure or hobby (include volunteering)	18	1.0
Working at a job or business (exclude travel to or from work)	120	6.4
Travel to or from work	11	0.6
Household chores, other unpaid work or education	22	1.2
Sleeping, eating, personal care	17	0.9
Other	20	1.1
Non-RSI injuries		
Yes	467	24.8
No	1367	72.5
Type of activity causing non-RSI injury		
Sports or physical activity (include school activities)	116	6.2
Leisure or hobby (include volunteering)	35	1.9
Working at a job or business (exclude travel to or from work)	221	11.7
Travel to or from work	14	0.7
Household chores, other unpaid work or education	23	1.2
Sleeping, eating, personal care	15	0.8
Other	33	1.8
Number of times injured*		
1-2 times	149	67.4
3-4 times	53	24.0
Over 5 times	19	8.6
Type of injury*		
Multiple injuries	19	8.6
Broken or fractured bones	6	2.7
Burn, scald, chemical burn	58	26.2
Dislocation	4	1.8
Sprain or strain	33	14.9
Cut, puncture, animal or human bite (open wound)	61	27.6
Scrape, bruise, blister	34	15.4
Concussion or other brain injury	4	1.8
Poisoning	2	0.9

^{*}Reported for "main" job at which they worked the most total hours in past 12 months (if holding more than one job)

Received medical attention for injury from health professional within 48 hours*		
Yes	82	37.1
No	138	62.4
Miss one or more days of work due to injury*		
Yes	70	31.7
No	150	67.9
Number of work days missed due to injury*		
1-3	41	18.6
4-6	10	4.5
Over 1 week	19	8.6

¹Percentage out of total survey respondent number (n=1886)

Table 4: Survey respondent's personal experience with unsafe work conditions in last 12 months %¹ n Unsafe work conditions encountered 734 38.9 Dusts, particles, or hazardous materials 394 20.9 Hazardous chemicals, fumes, or vapours Loud noises 633 33.6 722 38.3 Slippery or uneven work floors or surfaces (e.g. holes, tripping hazards) 386 20.5 Heavy equipment or potentially dangerous machinery 547 29.0 Working alone Working at heights (e.g. ladder, scaffolding) 336 17.8 602 31.9 Sharp objects (e.g. food slicer, knives, power tools) Hot objects (e.g. grill, coffeemaker/steamer, dishwasher, deep fryer) 537 28.5 671 35.6 Lifting, pushing or pulling heavy loads or objects Extreme heat, or extreme cold 451 23.9 294 15.6 Poor ventilation Unsanitary working conditions 192 10.2 Violence or harassment at the workplace (by employees/employer or customers) 229 12.1 Repetitive motions or procedures 452 24.0

423

22.4

Extended shifts, overtime, or work weeks

	n	%
Any kind of safety training		
Yes	1247	66.1
No	638	33.8
low was training done? (subset of those who received training n=1247)		
Watch a videotape	544	28.8
Get written instructions	192	10.2
Watch someone else demonstrate how to do the job	367	19.5
Other	144	7.6

^{*}Results shown are only for non-RSI injuries due to working at a job or business (n=221)

¹Percentage out of total survey respondent number (n=1886)

What did training include?		
How to use protective equipment (e.g. safety goggles)	859	45.6
How to use equipment safely (e.g. safety issues dealing with equipment)	911	48.3
How to properly identify and handle toxic chemicals (e.g. WHMIS)	820	43.5
Where to get help in unsafe situations	835	44.3
How to report hazards in the workplace	828	43.9
What to do in case of robbery	399	21.2
How to deal with an angry or drunk customer	449	23.8
What to do in case you are sexually harassed	417	22.1
Source of safety information from outside of work		
Media (i.e. Radio, TV, newspapers, magazines)	789	41.8
School	1240	65.8
Parents or guardians	800	42.4
Friends not at job	403	21.4
Youth Employment Centres	591	31.3
Other	45	2.4

¹Percentage out of total survey respondent number (n=1886)

Fable 6: Survey's Occupational Health and Safety Knowledge Quiz results		1 ـ ـ ـ
	n	% ¹
Your health and safety training should take place before you start the job		
True	1857	98.5
False	28	1.5
Young workers have fewer health and safety rights than other workers		
True	212	11.2
False	1672	88.7
f you see a health and safety hazard you should:		
Tell your boss	374	19.8
Report it to your worker health and safety representative or health and safety committee	123	6.5
Tell your union representative (if you have one)	15	0.8
Only a) and c)	121	6.4
All of the above	1246	66.1
Employers have a duty to control workplace hazards by:		
Eliminating the hazard	141	7.5
Putting up barriers between you and the hazard	46	2.4
Providing you with safety equipment	154	8.2
All of the above	1527	81.0
Your boss can fire you for refusing to perform unsafe work		
True	327	17.3
False	1542	81.8
Which of the following is your employer's responsibility?		
Training you properly in the safe use of chemicals and equipment	97	5.1
Maintaining a safe working environment	69	3.7
Taking action to correct unsafe working conditions immediately	34	1.8
Only a) and b)	140	7.4
All of the above	1542	81.8

Turning off the power supply to a piece of equipment you're cleaning and putting a		
lock on a power supply is extremely important to:		
Show that you are working hard	76	4.0
Prevent accidental start-up of machines and equipment	1573	83.4
Maintain control of the work area	184	9.8
Prove your authority over the workplace	38	2.0
The first step to take when an injury occurs in the workplace is to make sure the area is		
safe for you and for the victim. The next thing to do is to get help for the injured		
worker.		
True	1610	85.4
False	260	13.8
When handling chemicals which of the following tasks should be done by the		
employee:		
Properly wear assigned personal protective equipment	130	6.9
Know where to find the Material Safety Data Sheets (MSDS)	68	3.6
Check the MSDS when handling, storing, mixing or cleaning up spills	45	2.4
All of the above	1633	86.6
An employee has the right to participate in workplace health and safety.		
True	1829	97.0
False	44	2.3
Every employee needs training that includes how to respond in an emergency		
situation.		
True	1814	96.2
False	66	3.5

¹Percentage out of total survey respondent number (n=1886)