Self-reported Work Patterns and Work-related Injuries among High School Students in British Columbia

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INTRODUCTION

• The purpose of this study was to conduct a survey of high school students in British Columbia to describe self-reported patterns of work and to calculate work-related injury rates.

• Lost-time workers’ compensation claim data indicate an increased risk of injury among young workers. Claims indicators likely provide an incomplete picture of work injuries among youth. The use of additional data sources, such as surveys, can address the following issues:
  • Youth sensitive estimates of exposure time at work for a transient workforce
  • Underreporting of injuries to compensation systems by inexperienced and vulnerable workers
  • Work-related injuries with health and work consequences beyond those resulting in compensated lost-time

METHODS

• Cross sectional survey of Grade 10 and 11 students, administered in the fall of 2001 and the spring of 2002.

• Random, stratified sample of schools in three districts of British Columbia: East Vancouver (4 schools), West Vancouver (2 schools) and Prince George (7 schools).

• Students reported on work for pay in the past 12 months, types of work (e.g. retail, food), work-related injuries (e.g. burns, sprains) and injury consequences (medical attention, work/school absence).

• Exposure time at work was estimated by summing the product of self-reported weeks of work and hours per week for both the school year and the summer.

• Injury rates (injuries/100 full time employees) were calculated using injuries resulting in both medical attention and absence from work/school.

RESULTS – WORK PATTERNS

Types of Work Reported by Students*:

• Child Care: 42.7%
• Food Services: 26.5%
• Retail: 21.1%
• Office/Clerical: 16.3%
• Parks & Recreation: 15.8%
• Construction: 11.2%
• Factory: 7.8%
• Odd Jobs: 7.5%
• Farming and Related: 7.0%
• Arts and Entertainment: 5.7%
• News Media: 5.6%
• Other: 2.3%

*Students report multiple jobs per year

STUDY POPULATION

---|---|---|---|---
Mean Age | 15.7 years | 15.7 years | 15.8 years | 15.8 years
% Female | 50.6% | 50.6% | 44.0% | 38.0%
% Grade 10 (vs. Grade 11) | 49.3% | 44.1% | 40.3% | 44.0%
Region | Prince George: 26.3% | 35.8% | 41.1% | 56.0%
East Vancouver: 50.0% | 41.5% | 44.5% | 30.0%
West Vancouver: 23.7% | 22.7% | 13.4% | 14.0%

Medical Attention and Work/School Absence

RESULTS – WORK-RELATED INJURIES

Types of Injuries Reported by Students*:

• Cuts: 65.5%
• Bruises/contusions: 49.6%
• Burns: 45.3%
• Strains and sprains: 24.3%
• Back injury: 18.1%
• Bites: 11.1%
• Head Injury: 7.4%
• Fractures/dislocations: 4.0%
• Other: 7.6%

* Students report multiple injuries per year

DISCUSSION

• The self-reported rate of 19.7 injuries per 100 FTEs for the survey population (ages 14-18 years) compares to the BC provincial claim rate of 3.6 claims per 100 FTEs (ages 15-24 years) for the same year.

• Differences between the survey injury rate and the provincial claims rate may be as a result of the survey capturing informal worksites not covered by the compensation system (e.g. farms) and all injuries regardless of compensation status; and the use of broader definitions of medical attention and absence from work/school.

• The survey provided an opportunity to estimate youth-sensitive measures of work hours for calculating injury rates, as opposed to estimates of FTEs using total payroll and average industry salaries for calculating claim rates.

• The survey provided a useful tool for broader surveillance and research into exposure time at work, and the prevalence of workplace injuries among youth.

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