

Five Deaths a Day: Workplace Fatalities in Canada, 1993-2005

Executive Summary

According to data collected by the Association of Workers' Compensation Boards of Canada, 1,097 workplace fatalities were recorded in Canada in 2005, up 45 per cent from 758 in 1993 and 18 per cent from 958 in 2004. As Canadians work on average 230 days per year, this means that there were nearly five work-related deaths per working day in this country. Workplace fatalities, unlike death in general, are in principle avoidable. Thus any workplace death should be unacceptable. It is therefore a matter of grave concern that the number of workplace fatalities in this country is increasing, not falling.

The objective of this study is to provide a detailed analysis of the characteristics of persons who die on the job and the reasons they die, and to gain a better understanding of developments over time in this key indicator of job quality and labour market well-being.

The study is divided into four main sections. The first section provides a comprehensive examination of workplace fatalities in Canada over the 1993-2005 period, looking at the absolute number and rates of fatalities by jurisdiction, gender, age group, industry, occupation, event, nature of injury, and source of injury. The second section of the study provides an international perspective on workplace fatalities by presenting workplace fatality estimates for OECD countries from the ILO data and comparing Canada-US workplace fatality estimates. The third section discusses determinants of workplace fatality trends in Canada in the context of the failure of the workplace fatality rate to continue to decline since the mid-1990s. The fourth and final section briefly explores the role of asbestos in workplace fatalities in Canada.

Incidence of Workplace Fatalities by Workforce Characteristics

The chances of a worker dying from a workplace-related accident or disease in Canada vary greatly by industry, occupation, gender, and age group. They also vary by province. The key features of the incidence of workplace fatalities by the characteristics of the workforce were the following:

- The most dangerous industry in which to work over the 1996-2005 period was mining, quarrying and oil wells (49.9 per 100,000 workers or one out of 2,000); followed by logging and forestry (42.9 per 100,000 per workers or one out of 2,300); fishing and trapping (35.6 fatalities per 100,000 workers or one out of every 2,800 workers), agriculture (28.1 fatalities per 100,000 workers or one out every 3,600 workers) and construction (20.6 per 100,000 workers or one out of 4,900). Finance and insurance was the least dangerous industry, with only 0.2 fatalities per 100,000 workers or one death for every 500,000 workers.

- Like industries, workplace fatalities are highly concentrated in certain occupations. Over the 1996-2005 period, occupations unique to primary occupations had the highest fatality rate at 19.5 per 100,000 workers, followed by trades, transport and equipment operators and related occupations (19.0 per 100,000 workers), and occupations unique to processing, manufacturing, and utilities (10.2). All other major group occupations had a fatality rate less than 4 per 100,000.
- Men are much more likely to die on the job than women. In 2005, the incidence of workplace death was 30 times higher among men than women: 12.4 deaths per 100,000 workers versus 0.4 deaths.
- Older workers are much more likely to experience a workplace-related fatality than a younger worker. In 2005, the incidence rate rises from 1.8 deaths per 100,000 workers for the 15-19 years age group to 18.1 deaths per 100,000 workers for the 60-64 age group.
- The jurisdiction with the highest fatality rate was the Territories at 27.4 deaths per 100,000 workers in 2005, four times the national average. At nearly double the national average, Newfoundland in 2005 had, by far, the highest rate of workplace fatalities of all ten provinces, with 11.7 deaths per 100,000 workers. This situation also prevailed over the 1993-2005 period.
- Workplace fatalities arise from both accidents and occupational diseases. In 2005, out of the 1,097 workplace fatalities 491 (44.8 per cent) were from accidents and 557 (50.8 per cent) from occupational diseases. Asbestos-related deaths alone accounted for about 340 deaths in 2005, 61 per cent of deaths from occupational diseases and 31 per cent of total workplace fatalities.

International Comparisons of the Rate of Workplace Fatalities

The ILO Workplace Fatality database shows that in 2003 Canada had the fifth highest incidence of workplace fatalities out of 29 OECD countries. Only Korea, Mexico, Portugal, and Turkey had workplace fatality higher rates and all four countries are at a much lower level of development than Canada.

Unfortunately, definitions of workplace fatalities differ from country to country and the ILO makes no attempt to standardize the data. For example, some countries exclude deaths from traffic accidents while on the job and deaths from occupational diseases in estimates of workplace fatalities. This means that the ILO statistics should be used with caution. Nevertheless, even if one fully adjusted for definitional differences, it is very unlikely that Canada would emerge as a low workplace fatality country relative to its peers.

According to national data sources, in 2005 the worker fatality rate in the United States was 4.0 per 100,000 workers, well below the 6.8 rate for Canada. But unlike Canada, the United States excludes workplace fatalities from occupational diseases in its definition of workplace fatalities. If one compares only the workplace fatality rate from accidents, it appears that the United States in 2005 had a higher rate than Canada: 4.0 versus 3.0 per 100,000 workers (or 3.6 per 100,000 workers if an adjustment is made for fatalities for non-insured agricultural workers).

Trends in the Rate of Workplace Fatalities in Canada

In 2005, the incidence of workplace fatalities in Canada was 6.8 per 100,000 workers, up from 5.9 per 100,000 in 1993. This rate represents one death for every 15,000 workers. This upward trend is disturbing.

The rise in the incidence rate was almost entirely driven by the increased workplace fatality rate from occupational disease, up from 1.5 to 3.4 per 100,000 between 1996 and 2005 (pre-1996 data are not available). The increased fatality rate from asbestos, up from 0.4 per 100,000 workers in 1996 to 2.1 in 2005 accounted for the lion's share of the increased incidence from occupational disease.

The incidence of workplace fatalities from accidents rose from 2.9 to 3.0 per 100,000 workers in 1996-2005. This development lies in contrast to a decline in the fatality rate from accidents in the 1976-1993 period in Canada and a fall in the in almost all other OECD countries over the 1993-2003 period..

This rise in the incidence rate of workplace-related deaths from occupational disease was driven by the 65 years and over age group. Work-related deaths from occupational disease in this age group rose 172 per cent from 95 in 1996 to 258 in 2004 (data for 2005 are currently unavailable), and accounted for 72 per cent of the rise in the total number of workplace deaths.

Between 1976 and 1996 the share of the workforce in high-risk industries fell significantly as the relative importance of goods sector employment fell. Since 1996, this trend has been reversed as the proportion of workers in high-risk industries has actually increased with the boom in employment growth in the construction industry. This development has contributed to the increase in the workplace fatality rate in Canada between 1996 and 2005.

Conclusion

Two key messages emerge from this study. First, despite the problems associated with the definition and measurement of workplace fatalities, the number and rate of workplace fatalities in Canada, even from accidents, is unacceptably high. Second, insufficient progress is being made in reducing the number and rate of workplace fatalities. Canada can do much better.