

Some Canadian Facts on Workplace Safety

Art Deane's Speaking Notes at Work and Learning Network Seminar: "Workplace Safety: Innovative Practices and Strategies for Critical Safety Thinking" on March 29, 2012 at the University of Alberta.



Predictable and Preventable Deaths

Fatalities in the workplace result from both accidents and occupational diseases so both health and safety issues are important to understand and grasp the severity of the present situation in Canada. In Canada (2012 population of 34.7 million¹) the Association of Worker's Compensation Boards of Canada indicates:

In 2008 there were approximately three occupational fatalities each day of the year.²

In the time period of 1993 to 2005 the work-related deaths rose from 758 in 1993 to 1,097 in 2005. The number of deaths was up 45 % between 1993 and 2005. It is matter of grave concern for many Canadian citizens that overall the number of workplace deaths has been rising over the last two decades.³

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.⁴

In 2008, approximately one worker out of every 13,805 workers covered by provincial or territorial compensation systems died from an occupational injury.⁵

Canada has a **National Day of Morning** every April 28 which commemorates workers whose lives were lost or injured in our workplaces across our country in the previous year.

The numbers are staggering. In 2010, 1014 workplace deaths were recorded in Canada – an increased from 939 the previous year. This represents more than 2.78 deaths every single day.*

In the eighteen year period from 1993 to 2010, 16,143 people lost their lives due to work-related causes (an average of 897 [Canadian] deaths per year).⁶

**Fatalities accepted in 2010 according to "Number of Fatalities, by Jurisdiction 1993-2010" summary table, statistics from the Association of workers Compensation Boards of Canada*

This does not include the many workers who are not covered by workers compensation and who do not appear in WCB data bases.

For example in 2010 Alberta had 22 deaths on Alberta farms and these deaths are not counted under Alberta Worker's compensation death statistics as these deaths are not compensated deaths since agricultural workers farmers and ranchers do not fall under the Alberta Workers Compensation system.⁷ Further to this example the following period from 1993 to 2009, many deaths from occupational disease such as asbestosis were not included in the Canadian statistics compiled by the Association of Worker Compensation Boards of Canada.

The point is that our deaths are actually significantly higher than our traditional sources of data show.

The ILO (International Labor Organization) workplace fatality database shows the in 2003 Canada had the fifth highest incidence of workplace fatalities out of 29 OECD (Organization for Economic and Co-operative Development) 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.⁸

In 2005, according to the Centre for the Study of Living standards there were 1,097 workplace fatalities in Canada. In addition to this fact, where you do your job, seems to be a factor. Of those killed across Canada in 2005, the highest, on the job death rate was in the Territories, with 27.4 deaths per 100,000 workers—four times the 2005 Canadian national average or 6.8 deaths per 100,000 workers. So according to the study, the following is the ranking of workplace fatalities by jurisdictions in Canada:

1. The Territories (NT, NU, YT) – 27.4 deaths per 100,000 workers
2. Newfoundland & Labrador – 11.7 deaths per 100,000 workers
3. British Columbia – 8.9 deaths per 100,000 workers
4. Alberta – 8.0 deaths per 100,000 workers
5. Ontario – 6.5 deaths per 100,000 workers
6. Nova Scotia – 6.1 deaths per 100,000 workers
7. Quebec – 6.0 deaths per 100,000 workers
8. Saskatchewan – 5.6 deaths per 100,000 workers
9. Manitoba – 4.5 deaths per 100,000, workers
10. New Brunswick – 3.4 deaths per 100,000 workers
11. Prince Edward Island – 1.5 deaths per 100,000 workers⁹

This data represents a Canada wide average of 6.8 deaths per 100,000

If Canada is compared with other countries you will find we are not doing very well. For example in 2003 Canada had 6.1 workplace deaths per 100,000 workers among a group of 29 developed countries. Using the factor of deaths/100,000 workers we were only safer on average than Korea (29 deaths), Turkey (20.6 deaths), Mexico (12.0 deaths), Portugal (8.7 deaths) and then Canada with 6.1 deaths per 100,000 workers.¹⁰ All four of these countries are at a significantly lower level of development than Canada.¹¹ Of the 29 developed countries 24 had significantly lower workplace deaths rates than Canada. It is a simple truth that Canada is a dangerous country for work people!

Predictable and Preventable Injuries

As indicated previously an average of three people a day (365 days in a year) die in a Canadian workplace and in addition nearly one million are injured at work every year in Canada.

In 2008 one Canadian worker out of every 46 workers covered by provincial or territorial compensation systems was injured severely enough to miss at least one day of work.¹²

In Canada, over the period 1996 to 2008, an average of slightly less than one million occupational injury claims have been reported each year by provincial or territorial WCBs.¹³

Over the 1996 to 2008 period, compensation payments to injured workers, after adjusting for inflation, have generally shown an increasing trend.”¹⁴

Generally speaking each year in Canada approximately one million people are injured and thousands more become sick or diseased by their work. It is important to recognize that a single number represents a resident of Canada who may be part of your family, a neighbor, a work colleague, a member of one of your community groups, etc. Each single number is or was a living, breathing, and caring human being. When reading human statistics, this is so important to remember!

Youth

Young, new and inexperienced workers with their new roles and responsibilities are at a disadvantaged when it comes to worksite hazards. Being unconscious of the hazards or lacking the competency to manage the risks from their associated duties and surrounding work environment increases their potential and severity of incidents and injuries.¹⁵

Statistically, young people and new hires are more at risk of injury on the job. Among injured workers under the age of 25, more than 50% of them were hurt in the first six months on the job. Nearly 20% of the injuries and fatalities happen during the first month on the job.¹⁶

Many of these younger workers have not yet fully developed their ability to evaluate the conditions, actions, and events that could potentially cause them harm. Neuroscientists are learning that the part of the brain involved with making sound judgments and controlling emotions is the last part of the brain to mature.¹⁷ Few workplace safety programs address the special learning needs of younger workers. *SafeThink* places an emphasis on a critical thinking strategy that young workers need to learn and use to identify potential hazards both on and off the job. Youth in middle schools, junior high school and senior high can learn the *SafeThink* structured critical thinking strategy to keep themselves safe in school workplaces like school career and technology and laboratories, work experience placements, on the playground, in sports and on ranches and family farms where rural youth regularly work across Canada. According to an article, “*Setting an Agenda for Advancing Your Worker safety in the U.S. and Canada*,” of *Public Health Reports* in their May/June 2012 issue there are 17.6 million workers

under age 25 employed when the two countries are combined together. In 2010, nearly 3 million of these workers were Canadian youth employed in the age range of 15 to 24. These youth need a comprehensive safety strategy that **actively engages their minds** in working to keep themselves safe at home, on the farm, in the workplace, and in their leisure time activities. This article includes significant other data that indicates youth are particularly in need of safety in the workplace. Our own work experience coordinators and teachers in our Alberta school districts are often lacking in knowledge of how to teach a structured critical thinking strategy that enables youth learn **to identify and predict hazardous situations** in the workplace where they are placed as part of their school program.

The Dollars

From 1996 to 2008 compensation payments by Workers Compensation Boards (WCBs) to injured workers, after inflation adjustments, have gradually trended upwards.¹⁸

*In 2008, the WCBs paid \$7.67 billion in benefit payments, or an average of approximately \$24,845 per each new compensated (accepted) time-loss injury or fatality.*¹⁹

*“In addition, the WCBs paid \$2.03 billion in health care and vocational rehabilitation payments in 2008. Including these costs, the total direct annual costs of occupation injuries and fatalities to the Canadian economy were approximately \$9.7 billion in 2008.”*²⁰

*Factoring in direct and indirect costs, the total costs of occupational injuries to Canadian economy, can now be estimated to be more than \$19 billion annually.*²¹

Canada’s budget deficit for 2011 was \$29.6 billion.²²

To illustrate a point, starting to solve our national injury problem would make a huge contribution toward paying our present national budget deficit. Over a period of 20 years, not counting for inflation, our cost for injuries is \$380,000,000,000 billion dollars (\$19 billion x 20 years=\$380 billion). Can you imagine the impact of contributing this over time to the education of our youth, or the elimination of poverty and homelessness in Canada? Can you imagine other positive financial effects on our Canadian Society, like lower taxes, if we became more competent through our thinking at **identifying and predicting hazardous situations** thus significantly reducing injuries? And of course the huge intangible cost of family and personal grief, sorrow, and sadness that comes with each WCB compensated injury or death is difficult to measure in a meaningful way. And of course all of the injuries and deaths not included nor covered by WCBs are missing from the picture illustrated here!

If we in Canada master the capability of significantly reducing the present statistics of predictable and preventable deaths and injuries that present a huge human tragedy in Canada, we will have a gift to share with the world that is second to none!

Some Alberta Facts

Predictable and Preventable Deaths and Injuries in Alberta

Information compiled by the Alberta Centre for Injury Control and Research (ACICR), School of Public Health at the University of Alberta illustrates the significant number of preventable deaths and injuries in Alberta for two years—2006 and 2008.

Table 1

2006		
Alberta Predictable and Preventable Deaths and Injuries from Hazardous Situations		
Deaths	Hospital Admissions Resulting from Injuries	Emergency Department Visits Resulting from Injuries
1,727	51,280	433,129

Moving two years forward the ACICR data shows:

Table 2

2008		
Alberta Predictable and Preventable Deaths and Injuries from Hazardous Situations		
Deaths	Hospital Admissions Resulting from Injuries	Emergency Department Visits Resulting from Injuries
1,777	52,400	436,935

Note the upward trend illustrated between Table 1 (2006) and Table 2 (2008) in all three categories. From 2006 to 2008 the number of predictable and preventable deaths rose by 50 persons. Hospital admissions resulting from injuries rose by 1,120 persons and emergency department visits resulting from injuries rose by 3,806 persons. The total increase in all three areas adds up to 4,976 persons—a number approximately equal to the population of Vermilion, Alberta!

Now some might say there was increased economic activity and we should therefore expect a rise in the number of persons injured and killed. But I ask, “Should we accept the idea that increased economic activity will automatically result in more injuries and deaths?” Why should economic activity be a justification for injuries and death? Why do we continue to accept predictable and preventable deaths and injuries as an acceptable outcome of our busy lives? Why don’t we “think our way out of” our high injury and death rates?

A 10-Year Projection

To get a longer-term view and a stronger sense of the continuing future problem, we can project these Alberta numbers over a 10-year period (2008 to 2018). By multiplying the 2008 numbers from Table 2 by ten years we see the following scenario (10 year period):

Table 3 - **Projection**

2008 to 2018 (10-year period we are living in)		
Alberta Predictable and Preventable Deaths and Injuries from Hazardous Situations		
Deaths	Hospital Admissions Resulting from Injuries	Emergency Department Visits Resulting from Injuries
17,770	524,000	4,369,350

Do we want to continue to accept this number of deaths (17,770) and hospital admission resulting from injuries (524,000) over the 10-year time period (2008-2018)?

Given this number of deaths in a 10-year period, we are killing all the people in three Alberta communities every ten years. Let's use the populations of Peace River (6,315), Devon (6,534) and Coaldale (6,943), problem. Using the Devon and Coaldale as a of these three Alberta every ten years. Imagine residents of three Alberta Peace River every 10 years! hospital emergency from injuries (4,369,350) equivalent to four cities the Edmonton or Calgary! will pay for these predictable injuries through our health and our own personal family immeasurable sorrow and will experience as a result of 17,770 deaths and 524,000 injuries requiring hospital admission! Imagine the billions in lost revenue to our Federal, Provincial and Municipal governments from fatal injuries, not to mention the huge costs we as taxpayers will pay each year to support the recovery of the injured! With our human and financial resources we have the capability to change this elephant size problem. The problem is like the elephant in the room that no one wants to talk about! I believe we can think our way out of this problem.



Alberta to illustrate the population of Peace River, basis nearly all of the people communities would be killed killing nearly all the communities the size of Imagine that we will have department visits resulting that are approximately size of metropolitan Imagine the huge cost we and preventable deaths and care, social support systems support systems! Imagine the sadness that family members

References

¹ Canada's Population clock on March 28, 2012 showed the current projected population of Canada at 34,668,144 people. Retrieved January 4, 2012 from <http://www.statcan.gc.ca/ig-gi/pop-ca-eng.htm>

² Human Resources and Skill development Canada. *Occupational Injuries and Diseases in Canada, 1996-2008: Injury Rates and Cost to the Economy*. Retrieved March 22, 2012, from http://www.hrsdc.gc.ca/eng/labour/publications/health_safety/oidc/page02shtml#highlights

³ Centre for the Study of Living Standards. *Five Deaths a day: Workplace Fatalities in Canada, 1993-2005*. Ottawa, Ontario. Retrieved January 4, 2012 from <http://www.csls.ca/reports/csls2006-04-E.pdf>

⁴ *ibid*

⁵ Human Resources and Skill development Canada. *Occupational Injuries and Diseases in Canada, 1996-2008: Injury Rates and Cost to the Economy*. Retrieved March 22, 2012, from http://www.hrsdc.gc.ca/eng/labour/publications/health_safety/oidc/page02shtml#highlights

⁶ Canadian Centre for Occupational Health and Safety. *National Day of Morning – April 28*. Retrieved February 8, 2012 from <http://www.ccohs.ca/events/mourning/>

⁷ Government of Alberta, Alberta Agriculture and Rural Development Department. *2010 Farm Related Fatalities*. Retrieved January 12, 2012 from [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/aet13526](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/aet13526)

⁸ Centre for the Study of Living Standards. *Five Deaths a day: Workplace Fatalities in Canada, 1993-2005*. Ottawa, Ontario. Retrieved January 4, 2012 from <http://www.csls.ca/reports/csls2006-04-E.pdf>

⁹ Kanetix Insurance. Retrieved January 4, 2012 from http://www.Kanetix.ca/ic_life_info_life_articles_27

¹⁰ *ibid*.

¹¹ Centre for the Study of Living Standards. *Five Deaths a day: Workplace Fatalities in Canada, 1993-2005*. Ottawa, Ontario. Retrieved January 4, 2012 from <http://www.csls.ca/reports/csls2006-04-E.pdf>

¹² Human Resources and Skill development Canada. *Occupational Injuries and Diseases in Canada, 1996-2008: Injury Rates and Cost to the Economy*. Retrieved March 22, 2012, from http://www.hrsdc.gc.ca/eng/labour/publications/health_safety/oidc/page02shtml#highlights

¹³ *ibid*.

¹⁴ *ibid.*

¹⁵ ENFORM, The safety association for Canada's upstream oil and gas industry. *Risk management of Young, New, and Inexperienced Workers*. Retrieved February 7, 2012 from http://ww2.enform.ca/safety_resources/companies/resourcesandtools/greenhands.aspx

¹⁶ *ibid.*

¹⁷ Giedd, J.N.; Blumenthal, J.; Jeffries, N.O.; Castellanos, F.X.; Liu, H.; Sijdenbos, A., *Brain development during childhood and adolescence: a longitudinal MRI study*. *Nature Neuroscience*, 1999, 2, 861 – 863.

¹⁸ Human Resources and Skill development Canada. *Occupational Injuries and Diseases in Canada, 1996-2008: Injury Rates and Cost to the Economy*. Retrieved March 22, 2012, from http://www.hrsdc.gc.ca/eng/labour/publications/health_safety/oidc/page02shtml#highlights

¹⁹ *ibid.*

²⁰ *ibid*

²¹ *ibid*

²² 2011 Canadian Federal Budget. Retrieved February 9, 2012 from http://www.en.wikipedia.org/wiki/2011_canadian_federal_budget

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