

OCCUPATIONAL INJURIES AND DISEASES IN ALBERTA



Lost-Time and Disabling Injury Claims

Young Workers

2002 to 2006

Summer 2007



Alberta Employment, Immigration
and Industry

TABLE OF CONTENTS

Highlights	2
1. Introduction	5
2. Young Worker Summary	8
3. Demographics of Injured Workers.....	11
4. Industry Sector Analysis	19
5. Injury and Disease Analysis	25
6. Occupational Fatalities.....	34
References	37
Appendix A: Terms, Definitions and Formulas.....	38
Contact Information.....	41

HIGHLIGHTS

In 2006, young workers continued to be injured at a higher rate than other workers.

- In 2006, the Workers' Compensation Board (WCB) – Alberta accepted 7,287 lost-time claims and 15,088 disabling injury claims from workers aged 15 to 24, an increase of 1.6% and 11.6% from 2005.
- Young workers accounted for 19.9% of lost-time claims in 2006 and 23.4% of the disabling injury claims while comprising 17.6% of those in employment.
- By major industry sector, the Wholesale and Retail sector had the largest number of lost-time and disabling injury claims from young workers, followed by the Construction and Construction Trade Services sector. When taking account of the number of young workers in employment, the Manufacturing, Processing and Packaging sector and the Transportation, Communication and Utilities sector have higher frequencies of injury for young workers.
- By occupation group, the Trades helpers, construction and transportation labourers and related occupations group, had the highest proportion of lost-time claims and disabling injury claims at 16.6% and 18.1%. Young workers in this occupation group comprised 5.2% of those in employment in 2006.
- Contact with objects and equipment was the most common cause for lost-time claims and disabling injury claims. Sprains, strains and tears continued to be the leading nature of injury with the trunk and upper extremities being the most commonly injured body parts.
- In 2006, the median work days-lost was five, the same as in 2005, although two days fewer than the 2006 average for all workers of seven days. The average days lost remained unchanged in 2006 at 15 days-lost per claim, lower than the average for all workers, 23 days-lost.
- WCB accepted four occupational fatalities from young workers, representing 3.2% of all workplace fatalities accepted in Alberta.

Over the last five years ...

- From 2002 to 2006, there were 35,792 lost-time claims from workers aged 15 to 24, accounting for 20.1% of lost-time claims from all workers. The WCB accepted 41 fatalities from workers aged 15 to 24 from 2002 to 2006. The Construction and Construction Trade Services and Mining and Petroleum Development sectors had the most with 11 fatalities each.

Occupational Injuries and Diseases in Alberta – Young Workers 2002 to 2006

Employment, Immigration and Industry (EII) prepares this annual report to provide analysis of workplace health and safety to meet the demand from industry and safety associations, labour organizations, employers and workers for incorporating this information into their strategic plans for enhancing workplace health and safety. This includes:

- Descriptions of programs and initiatives undertaken by EII in pursuit of its workplace health and safety mission and goals;
- Analysis of provincial occupational injury and disease information against a national picture;
- Estimations of the risk of injury or disease at the provincial, industry sector and sub-sector level as well as general descriptions about the incidents and injured workers; and
- Analysis of workplace injury and disease literature in Alberta

The Occupational Injury and Diseases in Alberta reports present analysis of aggregate injury claim data to allow for the tracking of workplace health and safety performance over time. This is important for evaluating past and present performance, and in providing strategic information for the direction of workplace health and safety policy. The analysis contained in this report provides a comprehensive picture of workplace injuries in the province, allowing for a prevention focus to be made based on injury probabilities, rather than possibilities.

A few notes about this report:

- This report presents 2006 data beside 2005 data to help with comparisons. Additional historical data are presented where possible.
- Information presented in this report is based on incidents that occurred during 2006 and accepted as lost-time or modified-work claims by WCB as of March 31, 2007.
- About 80% of employed persons in Alberta are covered by WCB. This report focuses on all industry activity in Alberta covered by the WCB and by the provincial legislation for occupational health and safety. Most industry sectors are included but notable exceptions consist of the Government of Canada, and parts of the agriculture and finance sectors. Several professional groups (i.e. the teaching and medical professions) are also excluded as are some industries where WCB coverage is not compulsory.
- Injury claim rates based on a small number of person-years are too volatile to make valid comparisons over time. Therefore, claim rates are not calculated when there are fewer than 40 person-years. Duration rates are also volatile when based on a

small number of lost-time claims. Duration rates are not calculated when there are fewer than 30 lost-time claims.

- Estimates of year-on-year change for rates presented in this report are calculated using unrounded figures and may not match those produced from rounded figures. Percentages displayed in tables may also not sum to a hundred, due to rounding.
- Throughout the report, the lost-time claim rate is the number of lost-time claims per 100 person-years, the disabling injury rate is the number of disabling injury claims per 100 person-years and the duration rate is the number of days-lost per 100 person-years. Fatality rates are expressed as the number of fatalities per million person-years.
- Analyses by industry are based on WCB industry classification and aggregation. For more information, see the WCB premium rates manual, http://www.wcb.ab.ca/pdfs/07rate_manual.pdf.
- Analyses by occupation group are based on the 2001 National Occupation Classification (NOC). The NOC 2001 provides a standardized framework reflecting the Canadian labour market. For further information please see <http://www23.hrdc-drhc.gc.ca/2001/e/generic/welcome.shtml>
- Occupational injuries and diseases listed throughout this report are based on the Z795-03 Coding of Work Injury or Disease Information produced by the Canadian Standards Association (CSA) standards for categorizing occupational injury and disease. For further information see <http://www.csa-intl.org/onlinestore/GetCatalogDrillDown.asp>.
- Terms, definitions and formulas used throughout this report are described in Appendix A.

INTRODUCTION

Government of Alberta

The Government of Alberta Strategic Business Plan sets out the vision, long-term strategic plan, government priorities and three-year business plan that outlines the government's goals, strategies, and measures necessary to track results in the shorter term. The plan is built on the principles of fiscal discipline and achieving results for today and the future. Overall it is focused on key outcomes for Albertans: a better quality of life and a chance to share in the province's good fortune.

To achieve these outcomes, government has set out five priorities, which are to:

- Govern with integrity and transparency;
- Manage growth pressures;
- Improve Albertans' quality of life;
- Build a stronger Alberta; and
- Provide safe and secure communities.

The Ministry of Employment, Immigration and Industry's business plan fully supports the government's vision of a vibrant and prosperous province.

Role of Alberta Employment, Immigration and Industry

The Ministry of Employment, Immigration and Industry includes the Department of Employment, Immigration and Industry (EII), the Alberta Economic Development Authority (AEDA), the Alberta Labour Relations Board, Appeals Commission for Alberta Workers' Compensation, Northern Alberta Development Council (NADC) and the Workers' Compensation Board – Alberta (WCB). The Ministry's major responsibilities include:

- Promoting initiatives to attract investment in Alberta, and improve company capacity, competency, competitiveness, innovation and productivity;
- Strengthening industry, regional and rural economic development to increase connectivity and economic and social capacity;
- Ensuring Albertans have fair, safe and healthy work environments;
- Advancing women's equality in areas such as the prevention of violence and Aboriginal women's issues;
- Attracting and retaining international immigrants (including temporary foreign

workers and foreign students) and inter-provincial migrants to Alberta;

- Helping Albertans to acquire the knowledge, skills, and resources needed to participate in current and future job opportunities;
- Providing financial and health benefits, child support services and employment training support to Albertans in need; and
- Marketing Alberta as the best place to live, work and do business.

EII strategic priorities, core businesses, goals, and strategies support seven of the ten goals in the Government of Alberta Strategic Business Plan. Two key government priorities are Building a Stronger Alberta and Managing Growth Pressures. Sustainable economic growth is the foundation to support these priorities.

Sustainable economic growth

EII promotes safe, healthy and productive workplaces, as well as fair, equitable and stable labour relations to ensure a fair, safe and healthy work environment for Alberta's workers. Work is central to people's lives, to the stability of families and societies. People want work that provides them with an acceptable standard of living. It is important that workers enter an environment where their health and safety is protected, where they are treated with respect and they are compensated fairly for the job they are doing. This will result in an attractive workplace that will further the position of Alberta employers to be competitive in the global economy (see Note 1.1). Alongside the human cost of occupational injuries and diseases and the impact on families and society, the economic costs are numerous.

In 2006, direct compensation payments for occupational injury and disease by WCB totaled \$877 million.¹ These costs are ultimately paid by employers through premium payments, and impact the costs of running a business as well as the final cost of delivering products and services. Further costs associated with occupational injuries and diseases would include the material damage to equipment and premises, the additional cost of hiring staff to cover for injured workers, and the lost productivity resulting from the absence. Additional impacts of poor health and safety for employers include higher absenteeism and the lower morale of employees, loss of skilled experienced employees, loss of the company's investment in training, and difficulty recruiting high-quality employees due to the loss of image and custom (particularly in the case of subcontractors to larger companies) all leading to losses in productivity and underutilization of production (see Note 1.2).

Note 1.1
Research by the International Institute for Management Development and the World Economic Forum suggests that the safest-working countries also have the best competitiveness ratings (International Labour Organization, *Safety in Numbers – pointers to a global safety culture at work, 2003*).

¹ See the Workers Compensation Board Alberta 2006 Annual Report: Working Progress
http://www.wcb.ab.ca/pdfs/2006AR/WCB_2006_Annual_Report.pdf

Other costs borne by the economy and society, due in part to work-related injuries and diseases include early retirements, unemployment and poorer households. The International Labour Organization (ILO) estimates that in high-income countries, around 40% of all retirements (before

statutory age) are caused by disability. This is equivalent to around 14% of the lifetime working capacity of the employed labour force.² Occupational injuries and diseases also affect unemployment and household income levels. Workers with an impairment of capacity can reduce their re-employability and impact household income. Workplace injuries and diseases typically reduce the overall earnings of households and in certain cases, family members have to give up jobs in order to care for an injured worker.

Sustainable economic growth creates the prosperity needed to sustain quality of life and ensures a higher standard of living. Sustainable economic performance can be achieved if growth pressures are properly addressed. The economy can also only be sustained if Alberta has the right people with the right skills at the right time to do the work.

Note 1.2

The International Labour Organization (ILO) estimates that approximately 4% of Gross Domestic Product is lost due to occupational injuries and diseases (ILO, *Safety in Numbers – pointers to a global safety culture at work*, 2003).

² See the International Labour Organization report: Safety in numbers – pointers for a global safety culture at work http://www.ilo.org/public/english/protection/safework/worldday/report_eng.pdf

YOUNG WORKERS SUMMARY

In 2006, the Workers' Compensation Board (WCB) – Alberta accepted 7,287 lost-time claims and 15,088 disabling injury claims from young workers.

In 2006, the Workers' Compensation Board (WCB) – Alberta accepted 7,287 lost-time claims and 15,088 disabling injury claims from young workers (those aged 15 to 24), an increase of 1.6% and 11.6% from 2005.

A lost-time claim is a claim submitted to the WCB for an occupational injury or disease that causes a worker to have time away from work, beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function (for example, hearing loss claims).

Table 2.1

Provincial and Young Workers Injury Figures – Alberta: 2006

	All Workers	Young Workers	% of Young Worker Claims
Lost-time claims	36,701	7,287	19.9%
Modified-work claims	41,390	10,420	25.2%
Lost-time claims involving modified-work	13,566	2,619	19.3%
Disabling injury claims	64,525	15,088	23.4%
Days lost (LTC)	844,508	110,449	13.1%
Compensation payments (LTC)	\$202,598,539	\$24,821,048	12.3%

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

A modified-work claim is submitted for an occupational injury or disease where workers have their normal work duties altered enabling them to remain working without losing time from work. Included in the figures are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease, and cases where workers were provided modified duties prior to time lost because of an injury or disease.

Modifying an injured workers duties, can be beneficial for both an employer and an employee. For the employer, the financial cost of an absent worker can be high and returning an injured employee to work as soon as it is medically possible is important for properly managing compensation, disability claims and productivity levels. For the

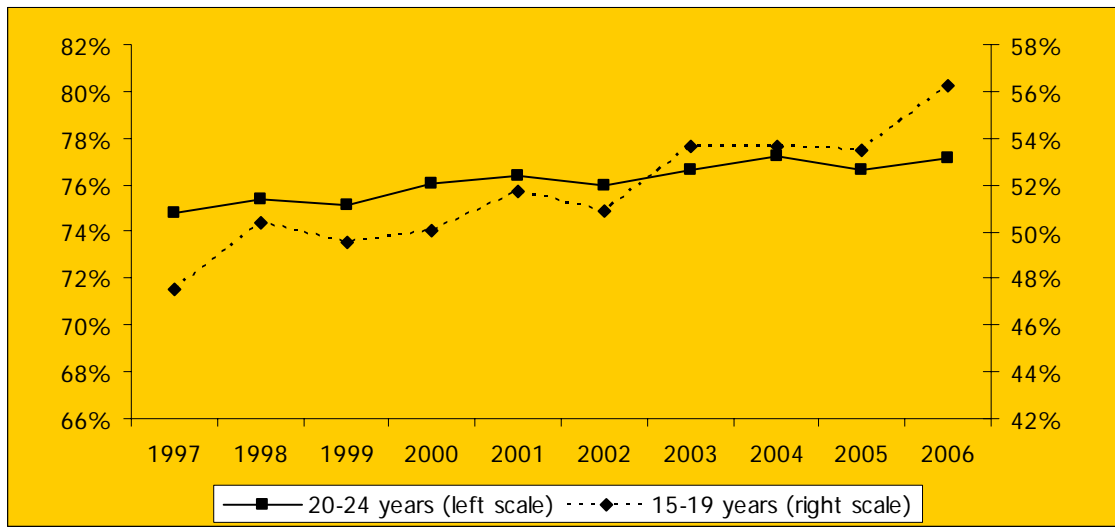
employee, returning to work as soon as medically possible is beneficial both physically and psychologically, and is linked to quicker recovery rates and promotion of self-esteem. Long absences from the workplace are also linked to falls in labour market attachment.

The number of disabling injury claims combines both the lost-time and modified-work concepts and produces an overall figure where an occupational injury or disease disables a worker causing either time-lost from work or for their normal work duties to be modified.

In 2006, Alberta had the highest proportion of young workers (in its working age population) of all provinces in Canada. It also had the lowest unemployment rate for young workers, the highest employment rate and the highest participation rate.

Over the last ten years, the employment rate for workers aged 15 to 24 has increased from 61.1% in 1997 to 67.2% in 2006, a result of increasing rates for both workers aged 15 to 19 and workers aged 20 to 24 (see Chart 2.1).

Chart 2.1
Employment Rates for Young Workers - Alberta: 1997-2006



Data Source: Statistics Canada Labour Force Survey (2006 Historical Review), Prepared by Data Development and Evaluation

Over the last ten years, young people aged 15 to 19, comprised approximately 50% of the population aged 15 to 24, and approximately 40% of those in employment aged 15 to 24. The employment rate for workers aged 15 to 19 increased due to growth in the numbers in employment being greater than the growth in the population. The number of 15 to 19 year olds in employment grew by 38.6% between 1997 and 2006, whereas the population grew by 17.1%. Workers aged 20 to 24, experienced growth of 34.6% in employment between 1997 and 2006, compared to population growth of 30.6%.

Young workers typically have lower education attainment and a higher likelihood of participating in part-time employment than workers of other ages. Just over a third of young workers were employed in part-time positions, compared to 16.1% for all workers.

In 2006, 30.9% of young workers were high school graduates, and 22.6% had completed post-secondary education. For all workers, 23.6% of those employed were high school graduates and 53.5% of Alberta's working population had completed post-secondary levels of education³.

³ Statistics Canada Labour Force Survey (2006 Historical Review). For more information on young workers in the labour market, see Alberta Labour Force Profiles <http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/2660.html>

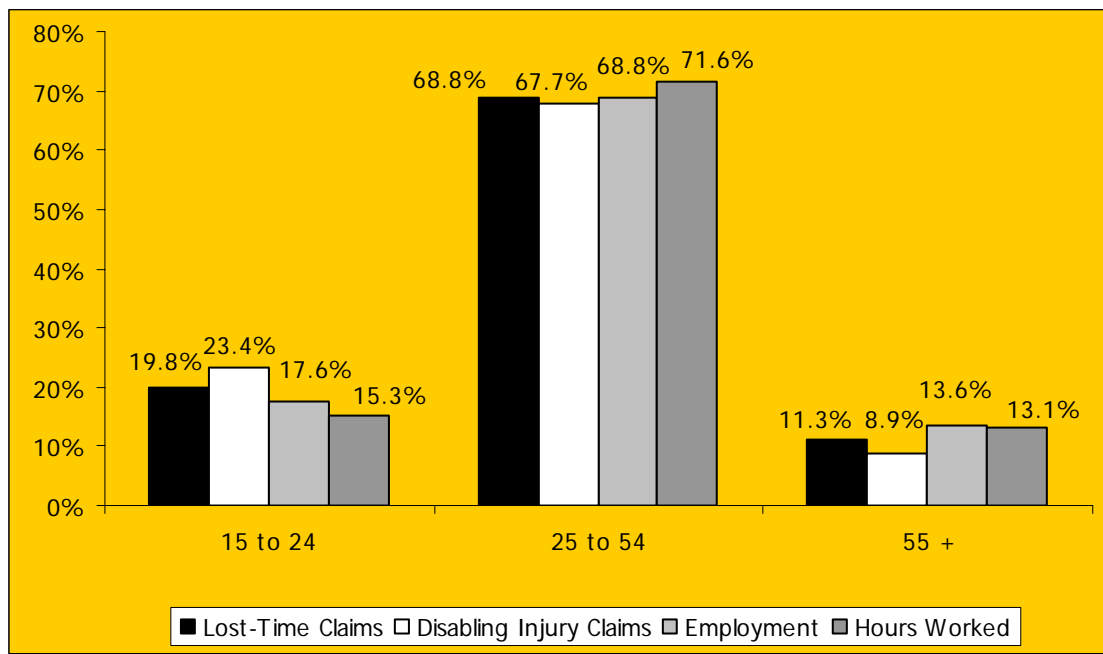
DEMOGRAPHICS OF INJURED WORKERS

In 2006, young workers represented 17.6% of those employed in Alberta and accounted for 19.9% of lost-time claims and 23.4% of disabling injury claims.

Compared to older workers, young workers have a higher likelihood of getting injured. In 2006, young workers accounted for 17.6% of those employed in Alberta and accounted for 19.8% of the total lost-time claims and 23.4% of disabling injury claims. In contrast, workers aged 55 and older represented 13.6% of those employed, had 11.3% of the total lost-time claims and 8.9% of disabling injury claims (see Chart 3.1). The average age of a WCB claimant in 2006 is 38 compared to the average age for those in employment of 39.

Chart 3.1

Proportion of Injury Claims, Employment and Hours Worked by Selected Age⁴ Groups – Alberta: 2006



Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation; Statistics Canada's Labour Force Survey (2006 Historical Review)

⁴ Workers under the age of 15 have been excluded from this analysis. The Labour Force Survey only covers the population above the age of 15.

Young workers also accounted for 15.3% of the total actual hours worked in the province. Looking at actual hours worked can be a better indicator of the exposure to workplace hazards for more marginal groups in employment, due to differing levels of part-time employment in various industries. It indicates a higher frequency of injury for young workers compared to other age groups than employment counts would suggest.

In 2006, there were 2,256 lost-time claims and 4,419 disabling injury claims from young workers aged 15 to 19 (see Table 3.1). The increase in lost-time claims in 2006 for this age group was negligible, although disabling injury claims grew by 9.5% from 2005.

For workers aged 20 to 24, the number of lost-time claims increased by 2.2% from 4,921 to 5,031 in 2006. The number of disabling injury claims increased by 12.6% from 9,479 in 2005, to 10,669.

Estimates of injury and disease severity are calculated using information on the number of days-lost from work. In 2006, the median days lost due to injuries or diseases for young workers was five days, two days fewer than the provincial median days lost of seven. The average days lost remained unchanged in 2006, at 15 days-lost per claim, lower than the average for all workers, 23 days-lost.

Note 3.1
In a national study completed by the Institute for Work and Health (IWH) young workers were often found to accept workplace injuries as “part of the job” because they were frequent and minor. They determined that this perspective is, for the most part, the result of young workers perceived inability to improve or alter their working conditions.

“Rather than seeing young workers as having faulty or distorted perceptions of risk, we suggest that, by virtue of their subordinate position young workers have little choice but to accept certain injuries as part of the job” (Breslin et al., 2006).

Table 3.1
 Proportion of Lost-Time Claims, Disabling injury claims and Employment by Age Group – Alberta: 2006

Age	2005				2006			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
Under 15 Years	25	0.1%	28	<0.1%	27	0.1%	40	0.1%
15 - 19 Years	2,252	6.4%	4,036	7.0%	2,256	6.1%	4,419	6.8%
20 - 24 Years	4,921	13.9%	9,479	16.4%	5,031	13.7%	10,669	16.5%
25 - 34 Years	8,291	23.4%	14,796	25.5%	8,520	23.2%	16,463	25.5%
35 - 44 Years	8,649	24.4%	13,566	23.4%	8,726	23.8%	14,702	22.8%
45 - 54 Years	7,498	21.1%	10,945	18.9%	7,998	21.8%	12,501	19.4%
55+ Years	3,823	10.8%	5,080	8.8%	4,143	11.3%	5,731	8.9%
Unspecified	1	N/A	1,215	N/A	0	N/A	0	N/A
Total	35,460	100.0%	59,145	100.0%	36,701	100.0%	64,525	100.0%

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation; Statistics Canada’s Labour Force Survey (2006 Historical Review)

From 2002 to 2006, there were 35,792 lost-time claims from young workers aged 15 to 24. More than two-thirds of these claims were from workers aged 20 to 24. Workers aged 15 to 19 years accounted for 31.4% of the total claims from young workers.

Gender

More claims from young workers were from men than women. In 2006, 71.5% of lost-time claims and 76.7% of disabling injury claims involved men, who accounted for 51.4% of those in employment in this age-group. In contrast, Women accounted for 28.5% of lost-time claims, 23.3% of disabling injury claims and 48.6% of those employed (see Chart 3.2). For workers of all ages, men accounted for 66.9% of lost-time claims, 72.3% of disabling injury claims and 54.7% of those in employment in 2006, while women accounted for 33.1% of lost-time claims, 27.7% of disabling injury claims and 45.3% of employment.

Note 3.2

Focus group research completed by the IWH found that employers and workers responded differently to injuries and conditions on the workplace relative to their gender.

Researchers found women in their study often found their complaints “delegitimized”, or dismissed, by their employers. In contrast, the IWH found men “stifled”, or muted, their injuries in order to advance their positions at work (Breslin et al., 2006).

There is a greater difference in injuries across genders in young workers than there is with workers of all ages. This is likely the result of the different types of work women and men perform and the gender delineated attitudes and roles they bring to the workplace (see Notes 3.1 and 3.2).

Table 3.2

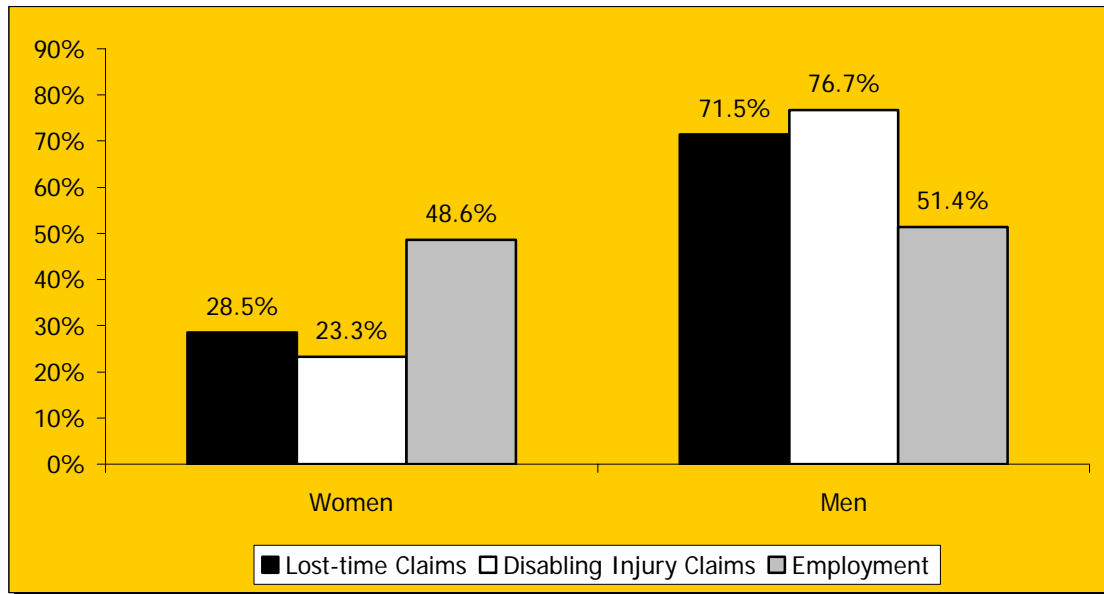
Lost-Time Claims and Disabling Injury Claims by Gender - Young Workers, Alberta: 2006

Gender	2005				2006			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
Women	2,088	29.7%	3,247	24.5%	2,035	28.5%	3,454	23.3%
Men	4,932	70.3%	10,026	75.5%	5,098	71.5%	11,379	76.7%
Unspecified	154	N/A	242	N/A	154	N/A	255	N/A
Total	7,174	100.0%	13,515	100.0%	7,287	100.0%	15,088	100.0%

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

Chart 3.2

Lost-Time Claims and Disabling Injury Claims by Gender - Young Workers, Alberta: 2006



Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation; Statistics Canada's Labour Force Survey (2006 Historical Review)

Occupation

In 2006, young workers employed in the Trades helpers, construction, and transportation labourers and related occupations group⁵ had the highest proportion of lost-time claims and disabling injury claims at 16.6% and 18.1% respectively. They also represented 5.2% of all young workers in employment⁶. In contrast, 14.5% of workers were employed in the Sales and service occupations group, yet they only represented 11.6% of lost-time claims and 8.8% of disabling injury claims (see Table 3.3 and Chart 3.3).

Table 3.3
Lost-Time Claims, Disabling Injury Claims and Employment by
Select Occupation Group - Young Workers, Alberta: 2006

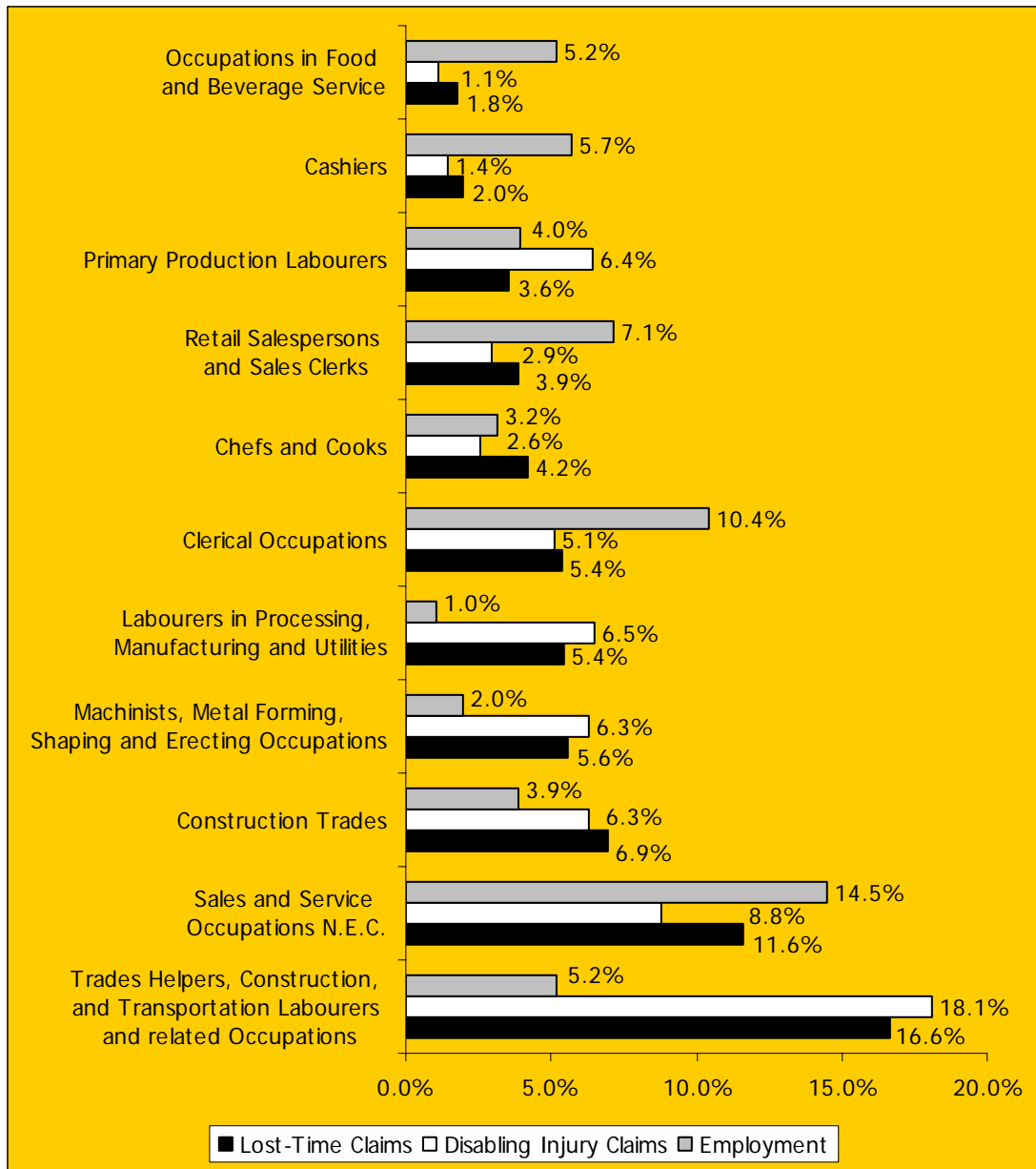
Occupation	Lost-Time Claims	Disabling Injury Claims	Employment
Trades Helpers, Construction, and Transportation Labourers and related Occupations	16.6%	18.1%	5.2%
Sales & Service Occupations N.E.C.	11.6%	8.8%	14.5%
Construction Trades	6.9%	6.3%	3.9%
Machinists, Metal Forming, Shaping and Erecting Occupations	5.6%	6.3%	2.0%
Labourers in Processing, Manufacturing and Utilities	5.4%	6.5%	1.0%
Clerical Occupations	5.4%	5.1%	10.4%
Chefs and Cooks	4.2%	2.6%	3.2%
Retail Salespersons and Sales Clerks	3.9%	2.9%	7.1%
Primary Production Labourers	3.6%	6.4%	4.0%
Transportation Equipment Operators and Related Workers, Excluding Labourers	3.5%	3.0%	2.2%
Mechanics	3.2%	2.8%	2.3%
Machine Operators in Manufacturing	2.1%	3.0%	1.0%
Other Trades N.E.C.	2.0%	1.6%	1.0%
Cashiers	2.0%	1.4%	5.7%
Occupations in Food and Beverage Service	1.8%	1.1%	5.2%
All Other Occupations	22.4%	24.0%	31.4%
Total Claims	7,287	15,088	328,300

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation; Statistics Canada, Labour Force Survey (Microdata Files)

⁵ Occupations were coded following the National Occupational Classification for Statistics 2001. See page 2 for further information.

⁶ Statistics Canada Labour Force Survey (2006 Historical Review).

Chart 3.3
Lost-Time Claims, Disabling Injury Claims and Employment by Selected Occupation Groups - Young Workers, Alberta: 2006



Data Source: 2006 WCB Data; Statistics Canada, Labour Force Survey (Microdata Files), Prepared by Data Development and Evaluation.

Disabling Injury Claims by Month of Injury

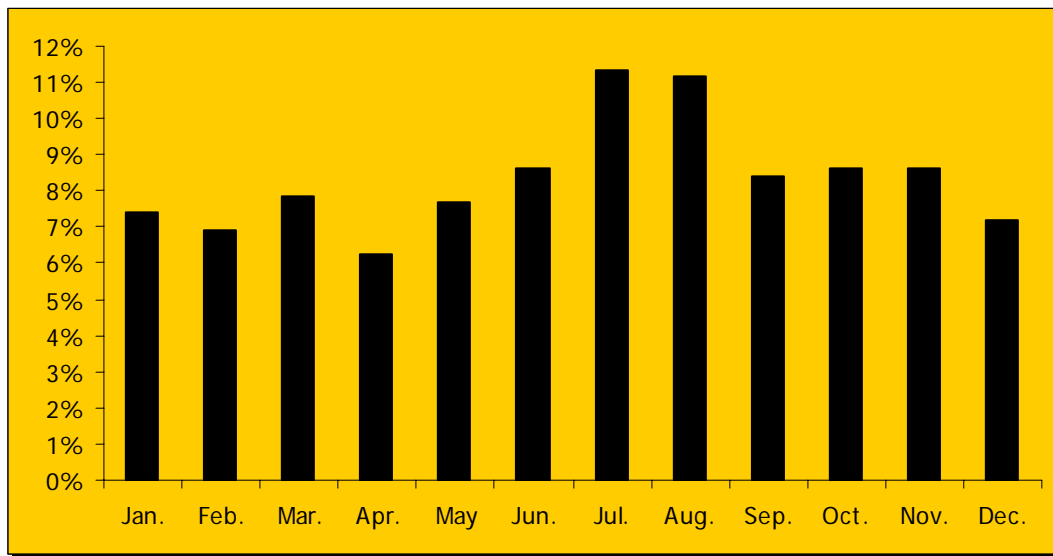
Lost-time claims from workers aged 15 to 24 were approximately evenly distributed in twelve months between 2004 and 2006. There was a slight increase in the number of injuries occurring to young workers during the summer months.

Workers aged 15-19, experience a greater rise in claims through the summer months with July and August accounting for 11.4% and 11.1% of claims respectively. For workers aged 20-24, claims only increase to 9.1% and 9.3% for July and August (see Charts 3.4a and 3.4b). A partial explanation for this is the increased proportion of young workers employed during the summer months. In 2006, young workers accounted for approximately 19% of total employment in both July and August, while young workers typically average about 17% of total employment in other months.⁷ Workers aged 25 years and over do not share this trend in employment or claims.

Chart 3.4a

Proportion of Disabling Injury Claims by Month of Injury - Young Workers, Alberta: 2004 - 2006

15-19 Years:



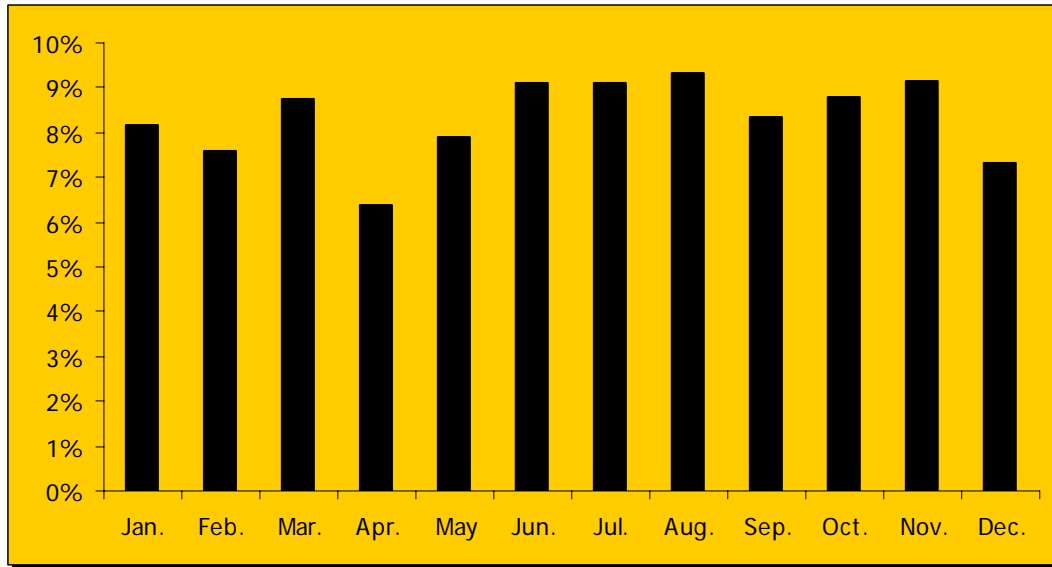
Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

⁷ Data source: Statistics Canada's Labour Force Survey (2006 Historical Review).

Chart 3.4b

Proportion of Disabling Injury Claims by Month of Injury - Young Workers, Alberta: 2004 - 2006

20-24 Years:



Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

INDUSTRY SECTOR ANALYSIS

In 2006, four major industry sectors accounted for 80.6% of the lost-time claims from young workers.

Major Industry Sector Analysis

In 2006, there were 1,960 lost-time claims from young workers in the Retail and Wholesale sector (see Table 4.1), representing 26.9% of all lost-time claims. This was followed by the Construction and Construction Trade Services sector with 1,500, the Business, Personal and Professional Services sector with 1,218, and the Manufacturing, Processing and Packaging sector with 1,193. These sectors accounted for 20.6%, 16.4% and 16.7% of all lost-time claims from young workers respectively.

Table 4.1

Lost-Time Claims and Disabling Injury Claims by Major Industry Sector - Young Workers, Alberta: 2006

Major Industry Sector	15-19 Years		20-24 Years		Total (15-24 Years)	
	Lost-Time Claims	Disabling Injury Claims	Lost-Time Claims	Disabling Injury Claims	Lost-Time Claims	Disabling Injury Claims
Agriculture and Forestry	13	25	33	55	46	80
Business, Personal and Professional Services	483	659	735	1,029	1,218	1,688
Construction and Construction Trade Services	395	839	1,105	2,542	1,500	3,381
Manufacturing, Processing and Packaging	326	829	867	2,369	1,193	3,198
Mining and Petroleum Development	43	283	228	1,175	271	1,458
Public Administration, Education and Health Services	138	204	499	714	637	918
Transportation, Communication and Utilities	102	273	360	726	462	999
Wholesale and Retail	756	1,291	1,204	2,008	1,960	3,299
Unspecified	0	16	0	51	0	67
All Industries	2,256	4,419	5,031	10,669	7,287	15,088

* Agriculture in Alberta is largely exempt from mandatory WCB coverage. See note 4.1

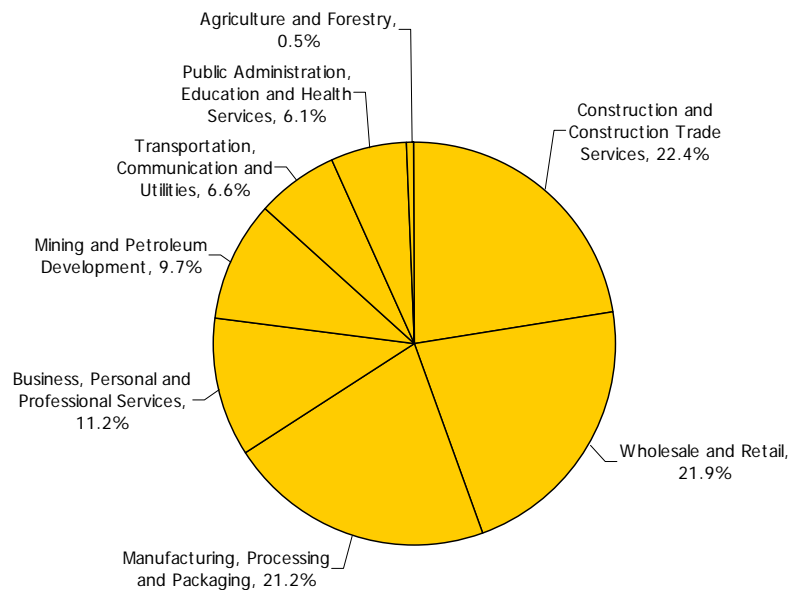
Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

For disabling injury claims a similar pattern exists. The same four industry sectors accounted for 76.7% of the disabling injury claims from young workers. The Construction and Trade Services sector had the largest number of disabling injury claims with 3,381 or 22.4%, followed by Wholesale and Retail sector, with 3,299, the Manufacturing, Processing and Packaging sector, 3,198 and the Business, Personal and Professional Services sector with 1,688 disabling injury claims from young workers (see

Table 4.1 and Chart 4.1). These three sectors accounted for 21.9%, 21.2%, and 11.2% of young worker disabling injury claims respectively.

Chart 4.1

Disabling Injury Claims by Industry Sector for Young Workers - Alberta: 2006



Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

* Agriculture in Alberta is largely exempt from mandatory WCB coverage. See note 4.1

The number of workers (or person-years figures) calculated in the Occupational Injuries and Diseases in Alberta Summary and Industry Sector reports allow for an analysis of the number of claims to be made with the number of workers in an industry, and are useful for looking at the frequency of injury claims. Person-year figures rely on certain financial information provided by employers to WCB (see Appendix A). As such, lost-time claims and disabling injury rates can only be produced at an industry level, and not for particular worker demographics, like age.

The Labour Force Survey however, does allow for employment information to be broken down by age, and can be applied to the injury claim data. Differences in

coverage and industry classifications exist between the Labour Force Survey and the WCB industry classification, although it is useful for highlighting sectors where the data indicates a higher risk or frequency of injury.

Table 4.3 presents the proportion of WCB lost-time and disabling injury claims from young workers compared to the proportion young workers in each industry sector⁸. Charts 4.2 and 4.3 apply the proportion of young workers in employment for each major sector to the WCB person-years (worker) figures, allowing for an estimation of injury frequency for young workers compared to other workers in an industry or sector.

Note 4.1

Agriculture in Alberta is largely exempt from mandatory WCB coverage and figures are based on WCB covered employers.

The Alberta Associates of Safe Rural Environments reported 1148 incidents on farm sites requiring medical attention in 2006. Of these 14% were inflicted on persons under the age of 18 (FAMS: 2006 Farm Injury Report, 2007).

Table 4.2

Proportion of Lost-Time Claims, Disabling Injury Claims and Employment by Major Industry Sector – Young Workers (15-24 years), Alberta: 2005 and 2006

Major Industry Sector	Lost-Time Claims	Disabling Injury Claims	Employment
Agriculture and Forestry	14.3%	19.7%	12.7%
Business, Personal and Professional Services	28.2%	29.4%	21.6%
Construction and Construction Trade Services	23.7%	25.6%	18.3%
Manufacturing, Processing and Packaging	18.5%	22.0%	12.4%
Mining and Petroleum Development	26.1%	33.4%	15.9%
Public Administration, Education and Health Services	9.3%	10.4%	11.6%
Transportation, Communication and Utilities	11.9%	17.0%	8.4%
Wholesale and Retail	26.1%	29.2%	27.8%
All Industries	19.9%	23.4%	17.6%

Data Source: 2006 WCB Data, Statistics Canada's Labour Force Survey (2006 Historical Review), Prepared by Data Development and Evaluation

Workers aged 15 to 24 accounted for 26.1% of lost-time claims, 29.2% of disabling injury claims in the Wholesale and Retail sector, while accounting for a similar amount

⁸ The Labour Force Survey uses a different industry classification to WCB, although there are similarities in structure. Proportions (of totals) have been used to evaluate information generated from both sources. See appendix A for further information.

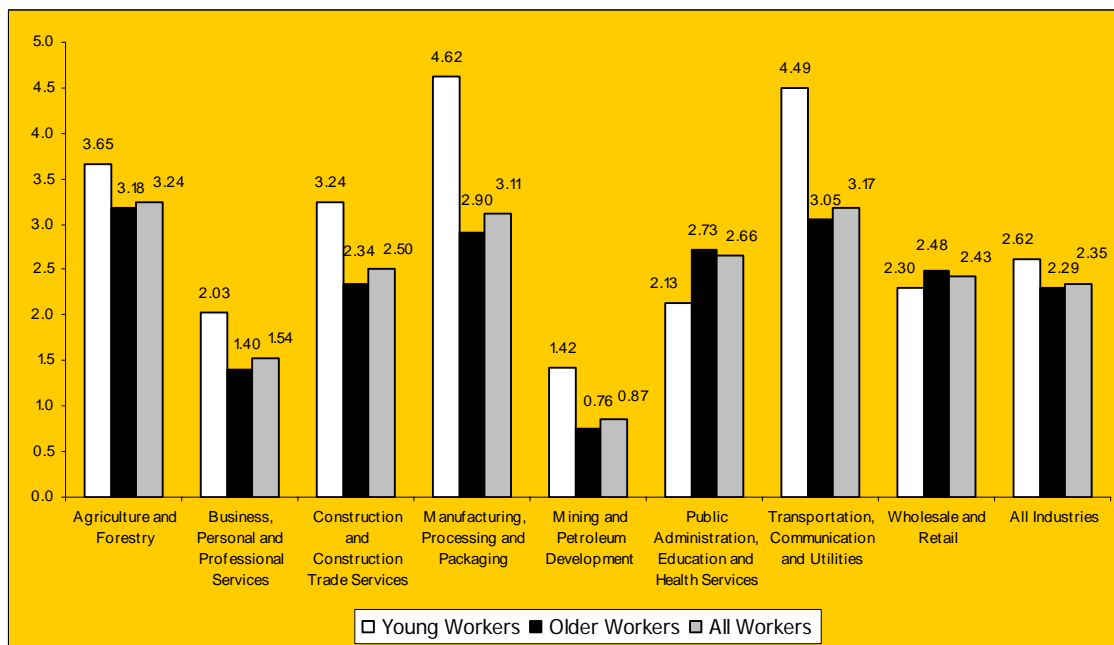
of young workers in employment, 27.8%. For the Construction and Construction Trade Services sector, young workers accounted for 23.7% and 25.6% of lost-time and disabling injury claims and 18.3% of young workers in employment. The Business, Personal and Professional Services sector accounted for 28.2% and 29.4% of the lost-time and disabling injury claims and 21.6% of young workers in employment. And, the Manufacturing, Processing and Packaging sector accounted for 18.5% and 22.0% of the lost-time and disabling injury claims and 12.4% of young workers in employment (see Table 4.3).

Estimating injury claim frequency rates by applying Labour Force Survey information to the WCB person-year figures, indicates that although the Wholesale and Retail Sector had the highest volume of lost-time claims and second highest amount of disabling injury claims, the frequency of injury is less than the Construction and Construction Trade Services, Manufacturing, Processing and Packaging, and the Business, Personal and Professional Services sectors.

Charts 4.2 and 4.3 present the estimated lost-time and disabling injury frequency rates for young workers compared to older workers (those aged above 25) and compared to the frequency rates for all workers.

Chart 4.2

Estimated* Lost-Time Injury Frequencies for Young Workers – Alberta 2006



*Lost-time injury frequencies for young workers (those under 25 years) and older workers (those aged 25 and over) are calculated by applying the number of injury claims from young workers to a proportion of WCB person-years (worker) figures. The proportion is determined using information available from the Labour Force Survey on young workers employed in a particular industry sector.

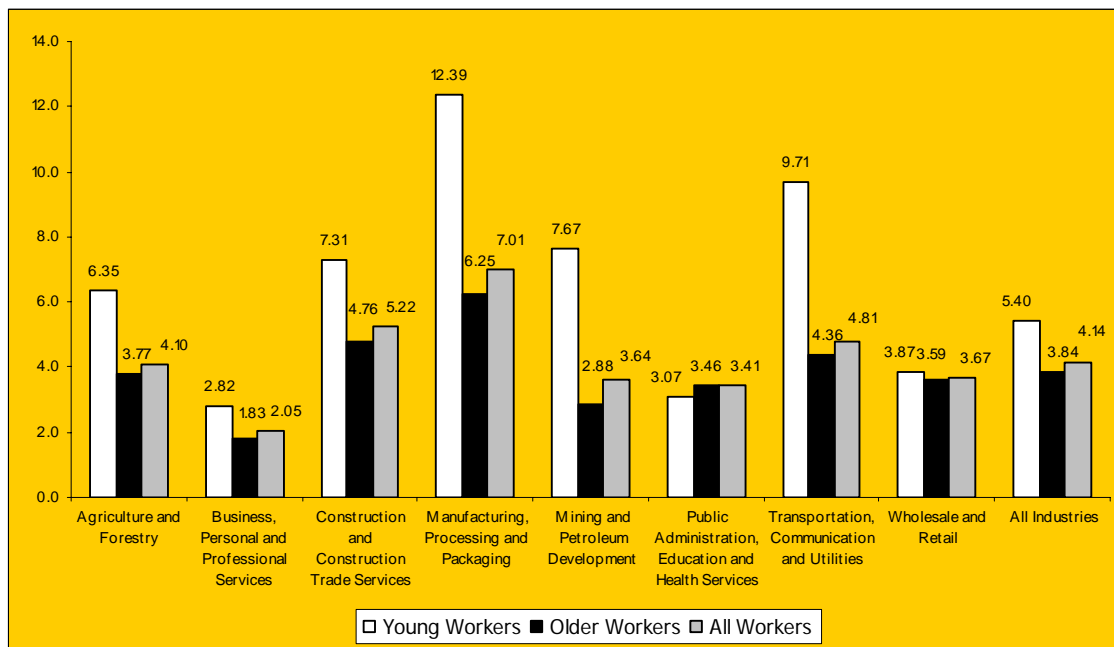
Data Source: Statistics Canada's Labour Force Survey (2006 Historical Review), Prepared by Data Development and Evaluation

Every sector, except Public Administration, Education and Health Service, had an estimated young worker injury claim frequency higher than their equivalent sector rate for older workers. Manufacturing, Processing and packaging had the highest estimated lost-time injury claim frequency at 4.62 per 100 young workers, compared to 2.90 per 100 older workers. This was followed by the Transportation, Communication and Utilities at 4.49 per 100 young workers, compared to 3.05 per 100 older workers (see Chart 4.2).

Disabling injury claim frequencies for young workers followed a similar trend. All sectors, except Public Administration, Education and Health Services, had higher disabling injury claim frequencies for young workers than their equivalent sector rate for older workers. The Manufacturing, Processing and Packaging sector had the highest estimated disabling injury claim frequency for young workers' of 12.39 per 100 young workers, compared to 6.25 per 100 older workers. The Transportation, Communication and Utilities had an estimated frequency of 9.71 per 100 young workers, compared to 4.36 per 100 older workers (see Chart 4.3).

Chart 4.3

Estimated* Disabling Injury Frequencies for Young Workers – Alberta 2006



*Disabling injury frequencies for young workers (those under 25 years) and older workers (those aged 25 and over) are calculated by applying the number of injury claims from young workers to a proportion of WCB person-years (worker) figures. The proportion is determined using information available from the Labour Force Survey on young workers employed in a particular industry sector.

Data Source: 2006 WCB Data; Statistics Canada's Labour Force Survey (2006 Historical Review), Prepared by Data Development and Evaluation.

Industry Analysis

Of the specific WCB industries, the Food/Convenience Stores industry (in the Wholesale and Retail Sector) had the largest number of lost-time claims for young workers in 2006, 708 lost-time claims, followed by Restaurant/Take out food services industry, 611 lost-time claims, Steel/Metal Fabrication industry, 321 lost-time claims, and General Trucking Services industry with 204 lost-time claims.

For disabling injury claims the Food/Convenience Stores industry had the highest number with 1,072 disabling injury claims, followed by Steel/Metal Fabrication industry, 844 disabling injury claims, Restaurant/Take out food services industry with 743 disabling injury claims, and Wood Products Manufacturing industry with 530 disabling injury claims.

Due to the level of detail available in the Labour Force Survey and the differences in coverage and industry classification with WCB, it is not possible to analyze the frequency of injury for young workers by specific industry. However, it is possible to look at the frequency or proportion of lost-time and disabling injury claims from young workers compared to claims all workers, by specific industry.

Table 4.3 presents the five industries with the highest proportion of claims from young workers compared to all workers⁹. The Ski Resorts/Gondolas industry had the highest proportion of lost-time claims and disabling injury claims for young workers with 51.1% and 56.3%, followed by Tire Retreading, 45.1% and 52.8%.

Table 4.3

Highest Proportions* of Lost-Time Claims and Disabling Injury Claims by Industry - Young Workers', Alberta: 2006

Industry	Lost-Time Claims			Disabling Injury Claims		
	15-24 Years	All Ages	%	15-24 Years	All Ages	%
Ski Resorts/Gondolas	46	90	51.1%	81	144	56.3%
Tire Retreading	37	82	45.1%	113	214	52.8%
Well Servicing With Service Rigs	46	105	43.8%	289	649	44.5%
Restaurant/Take-Out Food Service	627	1,433	43.8%	764	1,719	44.4%
Framing Contractor - Construction	135	323	41.8%	153	360	42.5%

* Industries with less than 50 lost-time claims in 2006 were excluded from the analysis.

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

⁹ Industries with less than 50 lost-time claims in 2006 were excluded from this analysis.

INJURY AND DISEASE ANALYSIS

Contact with objects and equipment was the most common cause for lost-time claims and disabling injury claims. Sprains, strains and tears continued to be the leading nature of injury with the trunk and upper extremities being the most commonly injured body parts.

Nature of Injury or Disease

Nature of injury is used to identify the physical characteristics of the injury or disease. For workers of all ages¹⁰, 90.6% of all the lost-time and 91.9% of disabling injury claims were traumatic injuries and disorders. For lost-time claims, the four most common specific traumatic injuries and disorders were: sprains, strains and tears, 46.9%, surface wounds and bruises, 11.6%, fractures and dislocations, 9.0%, and open wounds, 8.6%.

Young workers experienced similar injuries over this time. In 2006, 92.9% of lost-time claims and 93.7% of disabling injury claims from young workers were caused by traumatic injuries and disorders. For lost-time claims, the four most common traumatic injuries and disorders were: sprains, strains and tears, 40.6%, open wounds, 13.8%, surface wounds and bruises, 13.0%, and fractures and dislocations, 9.1% (see Table 5.1).

¹⁰ See the Occupational Injuries and Diseases in Alberta 2006 Summary.

Table 5.1

Nature of Injury or Disease - Young Workers, Alberta: 2006

Nature of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Traumatic Injuries and Disorders	6,773	92.9%	14,135	93.7%
Sprains, Strains and Tears	2,959	40.6%	6,311	41.8%
Open Wounds	1,008	13.8%	2,252	14.9%
Surface Wounds and Bruises	946	13.0%	2,342	15.5%
Fractures and Dislocations	666	9.1%	1,133	7.5%
Burns	387	5.3%	576	3.8%
Other Traumatic Injuries and Disorders	807	11.1%	1,521	10.1%
Systemic Diseases and Disorders	234	3.2%	440	2.9%
Infectious and Parasitic Disorders	15	0.2%	18	0.1%
Symptoms, Signs and Ill-Defined Conditions	28	0.4%	54	0.4%
Other Diseases, Conditions and Disorders	13	0.2%	14	0.1%
Nature of Injury - Unknown	224	3.1%	427	2.8%
Total	7,287	100.0%	15,088	100.0%

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

Part of Body Injured

For workers of all ages¹¹, injuries to the trunk accounted for 37.8% of lost-time claims and 35.2% of disabling injury claims in 2006. Over the same period, 30.1% of lost-time claims and 29.2% of disabling injury claims from young workers were due to injuries to the trunk. This was followed by upper extremities at 29.4% and 35.8% of lost-time claims and disabling injury claims respectively. Injuries to the upper extremities were lower for workers of all ages at 23.1% of lost-time claims and 29.7% of disabling injury claims (see Table 5.2).

¹¹ See the Occupational Injuries and Diseases in Alberta 2006 Summary.

Table 5.2

Part of Body Injured - Young Workers, Alberta: 2006

Part of Body Injured	Lost-Time Claims	%	Disabling Injury Claims	%
Trunk	2,190	30.1%	4,402	29.2%
Back, Including Spine, Spinal Cord	1,519	20.8%	2,862	19.0%
Other Trunk	671	9.2%	1,540	10.2%
Upper Extremities	2,144	29.4%	5,406	35.8%
Finger(s), Fingernail(s)	883	12.1%	2,361	15.6%
Wrist(s) and Hand(s) Except Finger(s)	872	12.0%	2,089	13.8%
Other Upper Extremities	389	5.3%	956	6.3%
Lower Extremities	1,653	22.7%	3,178	21.1%
Ankle(s) and Foot (Feet) Except Toes	851	11.7%	1,678	11.1%
Leg(s)	665	9.1%	1,279	8.5%
Other Lower Extremities	137	1.9%	221	1.5%
Head	718	9.9%	1,167	7.7%
Other Head Parts	383	5.3%	605	4.0%
Eye(s)	335	4.6%	562	3.7%
Multiple Body Parts	382	5.2%	603	4.0%
Neck, Including Throat	134	1.8%	233	1.5%
Body Systems	45	0.6%	65	0.4%
Part of Body - Unknown	20	0.3%	32	0.2%
Other Body Parts	1	<0.1%	2	<0.1%
Total	7,287	100.0%	15,088	100.0%

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

Source of Injury or Disease

Source of injury or disease describes the object or substance that the worker came into contact with that resulted in an injury or disease. Four primary sources of injury accounted for more than half of the total lost-time claims and disabling injury claims from young workers in 2006. For lost-time claims these sources were: persons, plants, animals and minerals, 19.3%, parts and materials, 13.3%, structures and surfaces, 13.0%, and containers, 11.3% (see Table 5.3).

Injuries to workers of all ages¹² came from similar sources although the same four sources accounted for over 60% of lost-time claims and disabling injury claims.

¹² See the Occupational Injuries and Diseases in Alberta 2006 Summary.

Table 5.3

Source of Injury or Disease - Young Workers, Alberta: 2006

Source of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Persons, Plants, Animals and Minerals	1,406	19.3%	2,854	18.9%
Person - Injured or Ill Worker	976	13.4%	2,192	14.5%
Person - Other Than Injured or Ill Worker*	195	2.7%	264	1.7%
Minerals - Metallic or Nonmetallic (except fuel)	34	0.5%	63	0.4%
Other Persons, Plants, Animals & Minerals	201	2.8%	335	2.2%
Parts and Materials	970	13.3%	2,581	17.1%
Structures and Surfaces	945	13.0%	1,728	11.5%
Containers**	822	11.3%	1,586	10.5%
Tools, Instruments and Equipment	636	8.7%	1,568	10.4%
Hand tools - Nonpowered	381	5.2%	1,001	6.6%
Hand tools - Powered	116	1.6%	235	1.6%
Other Tools and Equipments	139	1.9%	332	2.2%
Vehicles	547	7.5%	892	5.9%
Machinery	518	7.1%	982	6.5%
Furniture and Fixtures	239	3.3%	423	2.8%
Chemicals and Chemical Products	120	1.6%	184	1.2%
Other Sources	395	5.4%	770	5.1%
Source of Injury - Unknown	689	9.5%	1,520	10.1%
Total	7,287	100.0%	15,088	100.0%

* Person – other than injured or ill worker: classifies injuries or illnesses inflicted by family members as well as non-family relations, including co-workers, former co-workers, and patients.

** Containers: classifies receptacles that are commonly used to hold, store or carry materials (examples: dishes, cups and glasses, luggage, etc.).

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

Type of Event or Exposure

Type of event or exposure describes the incident or event that occurred at the time of the exposure that directly resulted in the injury or disease. The two most common types of events or exposures comprised about 70% of the total lost-time claims and disabling injury claims from young workers in the past year. Contact with objects and equipment accounted for 36.0% of lost-time claims and 39.8% of disabling injury claims from young workers while bodily reaction and exertion represented 32.6% and 33.8% of lost-time claims and disabling injury claims respectively (see Table 5.4).

Among workers of all ages¹³, contact with objects and equipment represented 25.3% of lost-time claims and 30.1% of disabling injury claims. Injuries and diseases caused by bodily reaction and exertion were more common and accounted for around 40% of both lost-time claims and disabling injury claims.

¹³ See the Occupational Injuries and Diseases in Alberta 2006 Summary.

Table 5.4
Type of Event or Exposure - Young Workers, Alberta: 2006

Type of Event or Exposure	Lost-Time Claims	%	Disabling Injury Claims	%
Contact with Objects or Equipment	2,626	36.0%	6,005	39.8%
Struck by Object	1,465	20.1%	3,276	21.7%
Caught in Object	488	6.7%	1,252	8.3%
Struck against Object	458	6.3%	1,045	6.9%
Rubbed or Abraded	131	1.8%	244	1.6%
Other Contact with Object/Equipment	84	1.2%	188	1.2%
Bodily Reaction or Exertion	2,376	32.6%	5,106	33.8%
Overexertion	1,344	18.4%	2,793	18.5%
Bodily Reaction*	721	9.9%	1,550	10.3%
Repetitive Motion	208	2.9%	532	3.5%
Other Bodily Reaction/Exertion	103	1.4%	231	1.5%
Falls	928	12.7%	1,691	11.2%
Fall on Same Level	478	6.6%	955	6.3%
Fall to Lower Level	324	4.4%	519	3.4%
Other Falls	126	1.7%	217	1.4%
Exposure to Harmful Substances	487	6.7%	750	5.0%
Transportation Accidents	379	5.2%	570	3.8%
Assaults and Violent Acts	82	1.1%	122	0.8%
Assaults and Violent Acts by Person(s)	61	0.8%	88	0.6%
Other Assaults and Violent Acts	21	0.3%	34	0.2%
Fires and Explosions	21	0.3%	25	0.2%
Other Events or Exposures	1	<0.1%	1	<0.1%
Type of Event - Unknown	387	5.3%	818	5.4%
Total	7,287	100.0%	15,088	100.0%

* Bodily reaction: injuries or illnesses resulting from a single incident of free bodily motion which imposed stress or strain on some part of the body.

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

Duration of Disability

Duration of disability¹⁴ is intended to reflect the severity of the effects of occupational injury and disease as reflected by the number of days off work. However, the efforts of employers to introduce modified work programs to integrate injured workers more quickly back into the workforce can have a major impact on workdays lost.

In 2006, 50.7% of the lost-time claims from young workers had duration of disability of five days or less. Nearly fifteen percent of all lost-time claims from young workers resulted in 31 days or more away from work (see Table 5.5).

Lost-time claims from workers of all ages were more likely to have a longer duration, indicative of quicker recovery times for younger workers. Lost-time claims with one to five days duration represented approximately 40% of all lost-time claims. Lost-time claims with duration of 31 days or more accounted for 21.6% of all lost-time claims from workers of all ages.

Table 5.5

Duration of Disability - Young Workers, Alberta: 2005-2006

Duration of Disability	2005		2006	
	Lost-Time Claims	%	Lost-Time Claims	%
1 - 5 Days	3,635	50.7%	3,682	50.5%
6 - 10 Days	1,078	15.0%	1,113	15.3%
11 - 15 Days	535	7.5%	496	6.8%
16 - 20 Days	338	4.7%	341	4.7%
21 - 30 Days	400	5.6%	393	5.4%
31 Days or more	984	13.7%	1,045	14.3%
Unspecified	204	2.8%	217	3.0%
Total	7,174	100.0%	7,287	100.0%

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

¹⁴ The duration of disability refers to the length of time, in days, for which the worker receives wage compensation from the WCB.

OCCUPATIONAL FATALITIES

In 2006, the WCB accepted four fatalities from workers aged 15 to 24, accounting for 3.2% of all 124 fatalities in the province.

A WCB accepted occupational fatality is defined as the death of a worker, resulting from a work-related incident or exposure, which has been accepted by the WCB for compensation. The WCB classifies occupational fatalities into three general types:

Motor Vehicle Incidents

Motor vehicle incidents typically involve non-industrial vehicles operating on public roads in which the fatally injured worker was either the driver or a passenger. This type of occupational fatality also includes cases involving aircraft, train, helicopter and water vehicle crashes. Between 2002 and 2006, there were 18 motor vehicle incident fatalities accepted by the WCB from young workers aged 15 to 24 (see Table 6.1).

Workplace Incidents

Workplace incidents consist of cases in which the worker died at a worksite or as a result of injuries sustained at a worksite. This is the type of fatality that AEII typically investigates. Between 2002 and 2006, there were 23 workplace incident fatalities accepted by the WCB from young workers aged 15 to 24 (see Table 6.1).

Occupational Disease

Occupational disease fatalities consist mostly of recognized occupational disease, that is, disease known to be primarily or exclusively work-related such as asbestosis and coal workers' pneumoconiosis. This category also includes heart attacks suffered on the job. Occupational diseases are frequently diagnosed several years after the initial or crucial exposure to the toxic substance, and in such cases, it is difficult to determine when the fatal exposure occurred. *The occupational disease category, therefore, should not be interpreted to reflect present worksite hazardous conditions or exposures.*

Each year, the WCB accepts occupational disease fatality claims for compensation. Occupational disease fatality claims that were accepted in a particular year often include fatalities from prior years. Between 2002 and 2006, six occupational disease fatalities accepted by the WCB from workers who were aged 15 to 24 when the original incident or exposure occurred. These six fatalities were originally workplace incidents that resulted in serious injury. Further complications post-injury, often years later, led to the incident being accepted as a fatality by WCB in a subsequent year from when the incident occurred, and categorized as occupational diseases.

Table 6.1

Types of Occupational Fatalities Accepted by the WCB - Young Workers, Alberta: 2002-2006

Year	Motor Vehicle Incident		Workplace Incident		Total
	Number of Fatalities	%	Number of Fatalities	%	
2002	2	33.3%	4	66.7%	6
2003	6	75.0%	2	25.0%	8
2004	5	38.5%	8	61.5%	13
2005	3	30.0%	7	70.0%	10
2006	2	50.0%	2	50.0%	4
Total	18	43.9%	23	56.1%	41

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

The WCB accepted 41 fatalities from workers aged 15 to 24 from 2002 to 2006. The Construction and Construction Trade Services and Mining and Petroleum Development sectors had the most with 12 and 11 fatalities respectively, with the majority of these being workplace incidents. Agriculture and Forestry reported only one young worker fatality over the past five years (see Table 6.2). However, much of the agricultural sector falls outside the jurisdiction of the WCB and are not included in these figures (see Note 6.1).

Note 6.1

In 2006, Alberta Agriculture, Food and Rural Development reported 20 fatalities on farm sites. Seven of the deceased were under the age of 18 (Agri-News, March 12, 2007). Three of the seven young people fatalities involved specific work-related activity. Four involved work related equipment or facilities, for example drowning in irrigation canals or dugouts.

Table 6.2

Occupational Fatalities Accepted by the WCB by Industry Sector
- Young Workers, Alberta: 2002-2006

Sector	Motor Vehicle Fatalities	Workplace Incident Fatalities	Total	%
Agriculture and Forestry	1	0	1	2.4%
Mining and Petroleum Development	5	6	11	26.8%
Manufacturing, Processing and Packaging	1	3	4	9.8%
Construction and Construction Trade Services	3	9	12	29.3%
Transportation, Communication and Utilities	6	4	10	24.4%
Public Administration, Education and Health Services	1	1	2	4.9%
Business, Personal and Professional Services	1	0	1	2.4%
Total	18	23	41	100.0%

Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

From 2002 to 2006, young workers aged 20 to 24 accounted for 30 occupational fatalities while workers aged 15 to 19 accounted for 11 (see Table 6.3). In 2006, workers aged 20 to 24 represented 10.6% of those in employment in Alberta and accounted for 2.4% of all occupational fatalities. Workers aged 15 to 19 accounted for 7.0% of those in employment and represented less than 0.1% of all occupational fatalities in Alberta.

Table 6.3

Occupational Fatalities Accepted by the WCB by Age Group -
Young Workers, Alberta: 2002-2006

Year	15-19 years	20-24 years	15-24 years
2002	2	4	6
2003	2	6	8
2004	4	9	13
2005	2	8	10
2006	1	3	4
Total	11	30	41

Data Source: 2006WCB Data, Prepared by Data Development and Evaluation

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APPENDIX A: TERMS, DEFINITIONS AND FORMULAS

Lost-Time Claim	A lost-time claim (LTC) is a claim for an occupational injury or disease that causes the worker to have time away from work, beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function.
Modified-Work Claim	A modified-work claim (MWC) is a claim for an occupational injury or disease where a worker had their normal work duties altered to enable them to remain working without losing time from work. Also included are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease.
Disabling Injury Claim	Disabling injury (DI) claims combines both the lost-time and modified-work concepts to produce an overall figure where an occupational injury or disease disables the worker causing either time-lost from work or for their normal work duties to be modified.
Person-Years	Person-years are estimates calculated from wage and payroll data provided by account holders to the WCB. Alberta Employment, Immigration and Industry uses data to estimate an average industry wage, and uses the average industry wage and employer payroll data to estimate person-years for each employer and each industry. One person-year is equivalent to one full-time worker working for one year, and can be assumed to equal 2,000 hours worked.
Young Worker Injury Claim Frequencies	The young worker (YW) lost-time claim and disabling injury claim frequencies are estimated by dividing the number of claims to a proportion of the person-year figures, and multiplying the result by 100. The proportion of person-year estimates for young workers are derived by estimating the number of young workers employed in each industry sector using the Statistics Canada Labour Force data. Injury claim frequencies represent the probability or risk of an injury or disease to a worker during a period of one-year work that will result in time lost from work. Comparisons of rates between industries, or between years, can be used to indicate increases, decreases, or differences in this risk.



$$\text{Proportion of YW's} = \frac{\text{Number of YW's employed (LFS)}}{\text{Total Employment (LFS)}}$$

$$\text{YW Lost-Time Claim Frequency} = \frac{\text{Lost Time Claims} \times 100}{(\text{Proportion of YW's}) \times \text{Person-Years}}$$

$$\text{YW Disabling Injury Frequency} = \frac{\text{Disabling injury claims} \times 100}{(\text{Proportion of YW's}) \times \text{Person-Years}}$$

Duration (Days Lost)	The duration of disability is the number of days following the injury or disease for which the worker was disabled and unable to perform normal work duties. This information is obtained for this report from data on compensation days paid on each claim from the WCB. Alberta Employment, Immigration and Industry obtains these data on March 31 of the year following the claim year, and does not update the information, even though many injured workers continue to be disabled beyond this date. As a result, the duration information reported here underestimates the true impact of lost-time injury and disease.
Cost of Claims	Compensation cost of a claim is the reimbursement of full or partial lost wages that a worker received from the WCB due to occupational illness or injury.
Industry Coverage	About 80% of employed persons in Alberta are covered by WCB. This report focuses on all industry activity in Alberta covered by the WCB and by the provincial legislation for occupational health and safety. Most industry sectors are included but notable exceptions consist of the Government of Canada, and parts of the agriculture and finance sectors. Several professional groups (i.e. the teaching and medical professions) are also excluded as are some industries where WCB coverage is not compulsory.
WCB Accepted Fatality	An occupational fatality is the death of a worker which resulted from a work-related incident or exposure and which has been accepted by the WCB for compensation. A fatality is counted in the year it is accepted.
NEC	Means 'Not Elsewhere Classified'.
UNS	Means 'Unspecified'.
Labour Force Survey	The Labour Force Survey (LFS) is a household survey carried out monthly by Statistics Canada. The objectives of the LFS have been to divide the working-age population into three mutually exclusive classifications - employed, unemployed, and not in the labour force - and to provide descriptive and explanatory data on each of these categories. Data from the survey provide information on major labour market trends such as shifts in employment across industrial sectors, hours worked, labour force participation and unemployment rates.

LFS data has been analyzed alongside injury and disease information to aid the understanding of injury risk or frequency by worker type. The LFS uses a different industry classification to WCB, although there are similarities in structure. Where possible, the two data sources are used comparably and proportions (of totals) have been used to evaluate information generated from both sources. Using proportions attempts to overcome obvious distortions in the numbers in employment from both sources, although the impact on the proportions from industry coverage differences is unclear.

For further information on the LFS, please see
<http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/67.html>

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Work Safe Alberta website:

www.worksafely.org

Workplace Health and Safety Contact Centre:

Telephone: 780-415-8690, toll free by calling 1-866-415-8690

www.worksafely.org

Certificate of Recognition (COR) Program:

<http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/277.html>