

OCCUPATIONAL INJURIES AND DISEASES IN ALBERTA



Lost-Time Claims, Disabling Injury
Claims and Claim Rates

Manufacturing, Processing and Packaging Industries

2002 to 2006

Summer 2007



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HIGHLIGHTS

Lower lost-time claim and disabling injury rates in 2006.

- The lost-time claim rate for the Manufacturing, Processing and Packaging sector decreased by 9.3% in 2006, from 3.43 to 3.11 per 100 person-years, as proportionally, there were fewer injury claims. This sector has the third highest lost-time claim rate of all sectors in the province. The average lost-time claim rate for all sectors of the province was 2.35 per 100 person-years.
- In 2006, the disabling injury rate was the highest of all the major industry sectors in the province at 7.01 per 100 person-years. This was a decrease of 4.5% from the 2005 figure of 7.35. The average rate for all sectors of the province was 4.14 per 100 person-years.
- The fall in the lost-time claim and disabling injury rates in 2006 was the result of the number of injury claims either staying at a similar level or increasing by a lesser amount than the person-years (workers). The number of lost-time claims remained around 6,460, whereas the number of person-years increased by 10.2%, meaning that despite an increase in the number of people working in the Manufacturing, Processing and Packaging sector, the number of lost-time claims has not increased. The number of disabling injuries increased in 2006 by 5.2%, a lesser amount than the person-years.
- The Manufacturing, Processing and Packaging sector accounted for 13.3% of the person-years, 17.6% of lost-time claims, and 22.3% of disabling injury claims in the province.
- The Manufacturing, Processing and Packaging sub-sectors display some of the highest and lowest lost-time claim and disabling injury claim rates in the province.
- The Meat, Hides and Pelt Products sub-sector had a lost-time claim rate of 6.97 per 100 person-years and a disabling injury rate of 21.52. Both of these are the highest of all the Manufacturing, Processing and Packaging sub-sectors.
- The Gases, Fertilizer and Petrochemical Refining and Manufacturing sub-sector had a lost-time claim rate of 0.18 and a disabling injury rate of 0.60. Both of these are the lowest of all the Manufacturing, Processing and Packaging sub-sectors.
- Employers with 20 to 39 person-years had the highest lost-time claim rate at 4.25 per 100 person-years. Employers with 100 or more person-years had the highest disabling injury rate at 7.84 per 100 person-years.
- The duration rate for the Manufacturing, Processing and Packaging sector was 54 days-lost per 100 person-years, equal to the average duration rate for all sectors in

the province.

- The median days-lost and average days-lost, at five days and 17, were also lower than the average figures for all sectors, seven and 23.
- The fatality rate decreased by 37.8% from 106 per million person-years in 2005 to 77 per million person-years in 2006.
- Approximately 87% of employers in the Manufacturing, Processing and Packaging sector had no lost-time claims and 85% had no disabling injury claims, meaning the injuries and diseases happening in the province are the result of incidents occurring at the operations of approximately 15% of employers. These figures however, are influenced by employer-size, and the number of employers with no lost-time or disabling injury claims translates to approximately 28% and 21% of the total person-years in the Manufacturing, Processing and Packaging sector respectively.

Over the last five years, the Manufacturing, Processing and Packaging sector experienced a 22.8% fall in the lost-time claim rate.

- Since 2002, the average lost-time claim rate for all sectors in the province has fallen by 19.6%. Over the same time period, the Manufacturing, Processing and Packaging sector saw a 22.8% decrease, a result of lost-time claims falling by 7.2% and person-years increasing by 20.3%. Over this time period, the lost-time claim rate for the Manufacturing, Processing and Packaging sector has been higher than the average rate for all sectors of the province
- Lost-time claim rates have fallen in all sub-sectors over the last five years. The Gases, Fertilizer and Petrochemical Refining and Manufacturing sub-sector experienced the largest decrease at 61.9%, followed by the Clothing and Textile Products, 48.0% and the Plastic Products sub-sector, 40.4%.
- The largest two sub-sectors, Primary Metal Products and Wood Products, displayed decreases in the lost-time claim rate of 20.6% and 16.1% respectively over the last five-years.

Occupational Injuries and Diseases in Alberta – Alberta Manufacturing, Processing and Packaging sector 2002 to 2006

Employment, Immigration and Industry (EII) prepares this annual report to provide analysis of workplace health and safety in the Manufacturing, Processing and Packaging sector 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

PROVINCIAL SUMMARY

The positive trend continues: there were more workers covered and lower lost-time claim rates in 2006.

A total of 36,701 injuries and diseases that required workers to recuperate away from work (beyond the day of incident) were accepted by WCB during 2006. This is an increase of 3.5% from 2005. In contrast, the person-years figures increased 6.1% to 1,560,078. This means that proportionally, there were fewer injury claims. Expressed as a lost-time claim rate, the data translates into a rate of 2.35 per 100 person-years, a decrease of 2.5% from 2005, (see Table 2.1).

Table 2.1

Provincial Figures – Alberta: 2005 and 2006

	2005	2006	% Change
Person-years	1,470,321	1,560,078	6.1%
Lost-time claims	35,460	36,701	3.5%
Lost-time claim rate	2.41	2.35	-2.5%
Modified-work claims	35,505	41,390	16.6%
Lost-time claims involving modified-work	11,820	13,566	14.8%
Disabling injury claims	59,145	64,525	9.1%
Disabling injury rate	4.02	4.14	2.8%
Duration rate	57	54	-5.0%
Days lost (LTC)	837,610	844,508	0.8%
Compensation payments (LTC)	\$189,951,321	\$202,598,539	6.7%

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

The total number of modified-work claims submitted in 2006 was 41,390. There were 13,566 claims involving both lost-time and modified-work, producing 64,525 disabling injury claims. Both modified-work claims and the lost-time claims involving modified-work, displayed increases of 16.6% and 14.8% from 2005. The 2006 disabling injury rate increased by 2.8% in 2006, from 4.02 to 4.14 per 100 person-years.

Tables 2.1 and 2.2 display the lost-time claim and disabling injury figures and rates for the province, and also for the major industry sectors in Alberta. The data provides a useful setting for analyzing the health and safety performance of the Manufacturing, Processing and Packaging sector.

Table 2.2

Lost-Time Claim and Disabling Injury Rates by Major Industry Sector – Alberta: 2005 and 2006

Major Industry Sector	2005		2006	
	Lost-Time Claim Rate	Disabling Injury Rate	Lost-Time Claim Rate	Disabling Injury Rate
Alberta	2.41	4.02	2.35	4.14
Agriculture and Forestry	3.30	3.87	3.24	4.10
Business, Personal and Professional Services	1.64	2.12	1.54	2.05
Construction and Construction Trade Services	2.58	5.18	2.50	5.22
Mining and Petroleum Development	1.01	3.80	0.87	3.64
Public Administration, Education and Health Services	2.60	3.12	2.66	3.41
Transportation, Communication and Utilities	3.06	4.35	3.17	4.81
Wholesale and Retail	2.35	3.35	2.43	3.67
Manufacturing, Processing and Packaging	3.43	7.35	3.11	7.01

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

The 2006 lost-time claim rate for the Manufacturing, Processing and Packaging sector decreased by 9.2%, to 3.11 per 100 person-years (see Table 3.1), and is the third highest major industry sector (see Table 2.2). The disabling injury rate for the Manufacturing, Processing and Packaging sector is the highest major industry sector in the province at 7.01 per 100 person-years.

INDUSTRY SECTOR SUMMARY

The 2006 lost-time claim rate for the Manufacturing, Processing and Packaging sector was 3.11 per 100 person-years, and the disabling injury rate was 7.01.

In 2006, improvements were made to the analysis of Workers' Compensation Board – Alberta (WCB) claim information allowing for modified-work claims to be analyzed alongside lost-time claims. Using modified-work claim data in addition to lost-time claim data ensures a more comprehensive picture of workplace injuries, and allows for greater insight into incident prevention.

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).

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.

Note 3.1

- The **lost-time claim rate** represents the probability or risk of an injury or disease to a worker requiring time away from work, during a period of one year of work.
- The **disabling injury rate** represents the probability or risk of a disabling injury.

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 combine 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 normal work duties to be modified.

In 2006, a total of 36,701 injuries and diseases that required workers to recuperate away from work (beyond the day of incident) were accepted by WCB during 2006. This is an increase of 3.5% from 2005. In contrast, the person-years figures increased by 6.1% to 1,560,078 between 2005 and 2006.

In 2006, there were 6,460 lost-time and 14,559 disabling injury claims in the Manufacturing, Processing and Packaging sector, representing 17.6% of lost-time claims and 22.7% of disabling injury claims in the province. The Manufacturing, Processing and Packaging sector's lost-time claim rate was 3.11 per 100 person-years, a decrease of 9.3% from 2005, as proportionally, there were fewer injury claims. The disabling injury rate also decreased from 7.35 to 7.01 per 100 person-years (see Table 3.1). The 2006 lost-time claim rate for all sectors in the province was 2.35 per 100 person-years, while the disabling injury rate was 4.14.

The fall in the lost-time claim and disabling injury rates in 2006 was the result of the number of injury claims increasing by a lesser amount than person-years (workers), which grew by 10.2%. The number of lost-time claims increased by 0.1% to 6,460 in 2006, while the number of disabling injuries increased by 5.2%, to 14,559.

Table 3.1

Manufacturing, Processing and Packaging Sector —
Alberta: 2005-2006

	2005	2006	% Change
Person-years	188,345	207,563	10.2%
Lost-time claims	6,455	6,460	0.1%
Lost-time claim rate	3.43	3.11	-9.2%
Modified-work claims	9,830	10,747	9.3%
Lost-time claims involving modified work	2,452	2,648	8.0%
Disabling injury claims	13,833	14,559	5.2%
Disabling injury rate	7.34	7.01	-4.5%
Duration rate	62	54	-12.5%
Days lost (LTC)	116,031	111,898	-3.6%
Compensation payments	\$29,756,553	\$31,424,039	5.6%

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

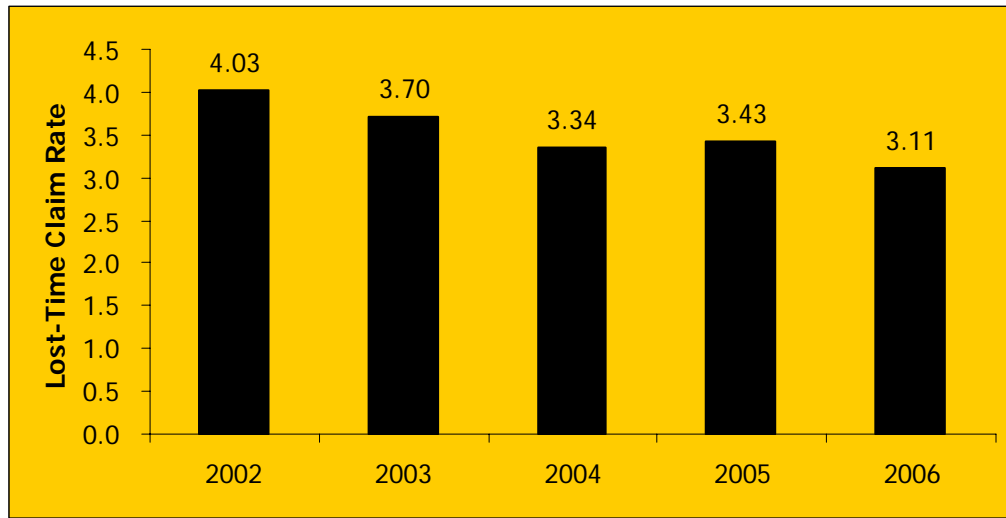
The duration rate is intended to show the severity of the effects of occupational injury and disease as reflected by the number of days off work per 100 person-years. In 2006, the Manufacturing, Processing and Packaging sector had a duration rate of 54, the lowest during the last five years and equal to the average rate for all sectors in the province (see Table 3.1). This sector also had relatively low median and average days-lost at five and 17 respectively, lower than the provincial median days-lost of seven and the average

days-lost of 23 days per claim.

Since 2002, the average lost-time claim rate for all sectors in the province has fallen by 19.6%. Over the same time period, the Manufacturing, Processing and Packaging sector saw a 22.8% decrease from 4.03 per 100 person-years in 2002 to 3.11 in 2006, a result of lost-time claims falling by 7.2% and person-years increasing by 20.3%. This means that despite an increase in the number of people working in Manufacturing, Processing and Packaging sector, the number of lost-time claims have fallen.

Chart 3.1

Manufacturing, Processing and Packaging Sector – Lost-Time Claim Rate: 2002-2006



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

Rates by Employer Size

In the Manufacturing, Processing and Packaging sector, employers with 20 to 39 person-years had the highest lost-time claim rate at 4.25, followed by employers with 40 to 99 person-years at 3.81. Employers with 100 or more person-years had the lowest lost-time claim rate at 2.69 and the highest disabling injury rate at 7.84 per 100 person-years (see Table 3.2).

For all sectors of the province, employers with 40 to 99 person-years and employers with 20 to 39 person-years had the highest lost-time claim rates at 2.72 and 2.58 per 100 person-years respectively. Employers with 100 or more person-years had the highest disabling injury rate at 4.58 per 100 person-years

Table 3.2

Lost-Time Claim and Disabling Injury Rate by Size³ of Employer
— Alberta: 2006

Size of Employer	Number of Accounts	Person-Years	Lost-Time Claims	Disabling Injury Claims	Lost-Time Claim Rate	Disabling injury Rate
Less than 10 person-years	11,666	18,944	526	654	2.78	3.45
10 to 19 person-years	865	12,309	460	621	3.74	5.05
20 to 39 person-years	608	17,170	729	1,026	4.25	5.98
40 to 99 person-years	577	35,944	1,369	2,481	3.81	6.90
100 or more person-years	404	123,196	3,319	9,663	2.69	7.84
Unspecified*	174	0	57	114	N/A	N/A

* These are employers with no payroll information or with person-years equal to zero.
Data Source: 2006 WCB Data, Prepared by Data Development and Evaluation

Distribution of injury claims

Table 3.3 presents figures for the proportion of employers in the Manufacturing, Processing and Packaging sector, with no lost-time or disabling injury claims in 2006. Table 3.4 displays figures for the number of claims submitted by employers (with submitted claims).

Approximately 87% of employers had no lost-time claims and 85% had no disabling injury claims, meaning the injuries and diseases happening in the province are the result of incidents occurring at the operations of approximately 15% of employers (see Table 3.3). For all sectors in the province, 92% of employers submitted no lost-time claims and 91% no disabling injury claims.

These figures however, are influenced by employer-size. In 2006, the number of employers with no lost-time or disabling injury claims translates to approximately 28% and 21% of the total person-years in the Manufacturing, Processing and Packaging sector respectively (see Table 4.14).

Table 3.3

Proportion of Employers with no Lost-Time or Disabling Injury Claims – Manufacturing, Processing and Packaging Sector: 2006

Proportion of Employers	With no Lost-Time Claims	With no Disabling Injury Claims
Manufacturing, Processing and Packaging	87%	85%

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

³ Size is measured in terms of person-years.

For employers with submitted claims, approximately 48% submitted one lost-time claim, 37% two to five claims and 18% over six lost-time claims. For disabling injury claims, similar proportions exist although the number of employers submitting over six disabling injury claims was 23% (see Table 3.4).

Employers that submitted one to five lost-time and disabling injury claims accounted for around 42% and 30% of the total person-years in the Manufacturing, Processing and Packaging sector respectively. Employers that submitted over 6 lost-time and disabling injury claims accounted for approximately 30% and 48% of the total person-years in the Manufacturing, Processing and Packaging sector.

Table 3.4

Proportion of Employers with Claims – Manufacturing, Processing and Packaging Sector: 2006

1 Lost-Time Claim	2 to 5 Lost-Time Claims	6 to 20 Lost-Time Claims	Over 20 Lost-Time Claims
48%	37%	12%	2%
1 Disabling Injury Claim	2 to 5 Disabling Injury Claims	6 to 20 Disabling Injury Claims	Over 20 Disabling Injury Claims
43%	34%	17%	6%

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

INDUSTRY SECTOR ANALYSIS

In 2006, the Meat, Hides and Pelt Products sub-sector had the highest lost-time claim rate and the highest disabling injury rate.

Between 2002 and 2006, the Meat, Hides and Pelt Products sub-sector had the highest lost-time claim rate of all Manufacturing, Processing and Packaging sub-sectors. The Furniture and Allied products sub-sector had the second highest rate in four of the five years, with Feed/Seed, Food and Beverage Products sub-sector having the second highest lost-time claim rate in 2005.

In 2006, the Meat, Hides and Pelt Products sub-sector had a lost-time claim rate of 6.97 per 100 person-years. The disabling injury rate was 21.52 per 100 person-years, the highest of any sub-sector in the province (see Chart 4.1 and Table 4.2).

Table 4.1

Lost-Time Claim Rate by Manufacturing, Processing and Packaging Sub-Sector — Alberta: 2002-2006

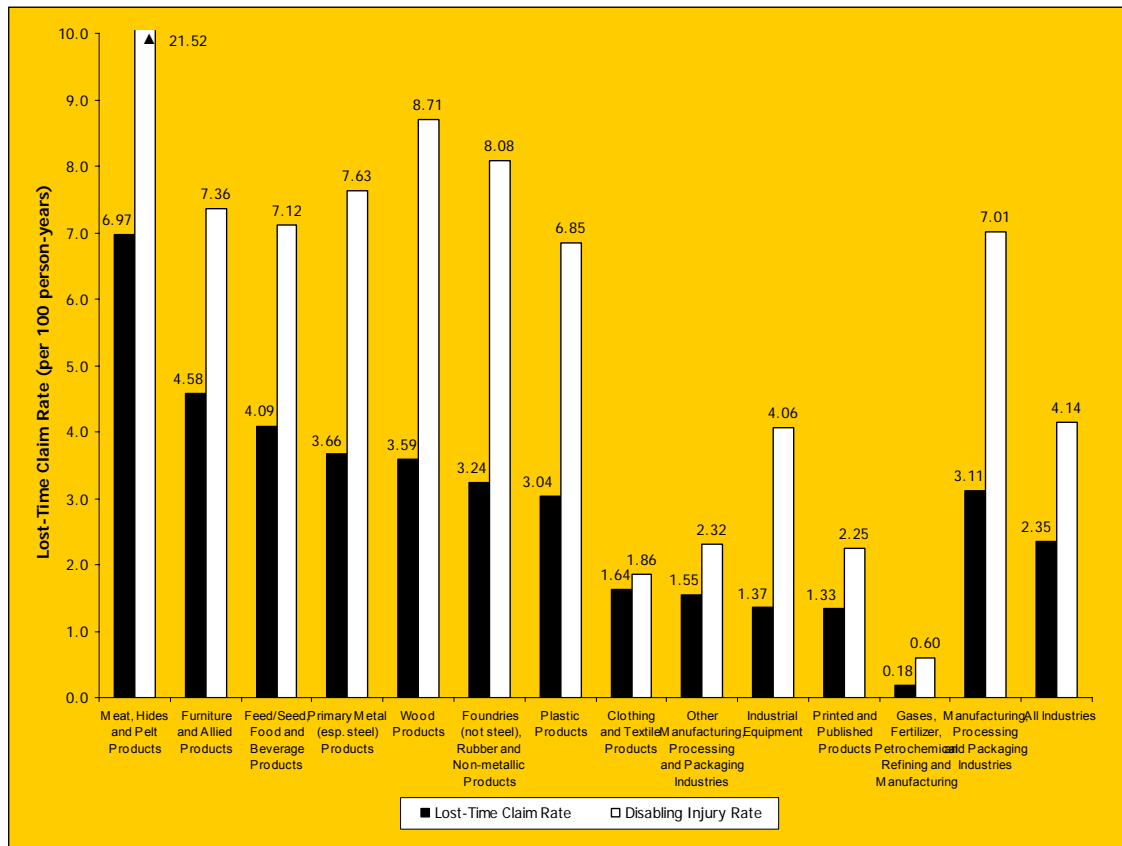
Sub-Sector	2002	2003	2004	2005	2006
Manufacturing, Processing and Packaging	4.03	3.70	3.34	3.43	3.11
Meat, Hides and Pelt Products	7.40	7.35	6.11	6.48	6.97
Clothing and Textile Products	3.15	3.10	1.96	1.47	1.64
Feed/Seed, Food and Beverage Products	5.25	5.28	4.43	4.51	4.09
Wood Products	4.48	3.78	3.59	3.61	3.59
Furniture and Allied Products	6.66	6.17	4.91	4.46	4.58
Printed and Published Products	1.87	1.47	1.42	1.73	1.33
Foundries (not steel), Rubber and Non-metallic Products	3.81	3.58	3.52	3.58	3.24
Primary Metal (esp. steel) Products	4.61	4.23	3.92	4.03	3.66
Industrial Equipment	2.01	1.78	1.26	1.33	1.37
Gases, Fertilizer and Petrochemical Refining and Manufacturing	0.48	0.37	0.53	0.42	0.18
Plastic Products	5.10	4.10	3.86	3.29	3.04
Other Manufacturing, Processing and Packaging Industries	1.98	1.89	1.82	1.67	1.55

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

The Gases, Fertilizer and Petrochemical Refining and Manufacturing had the lowest lost-time claim and disabling injury rates at 0.18 and 0.60 per 100 person-years, respectively (see Chart 3.1). More than half of the sub-sectors in the Manufacturing, Processing and Packaging sector had lost-time claim and disabling injury rates that were higher than the average rates for all sectors of 2.35 and 4.14 per 100 person-years.

Chart 4.1

Lost-Time Claim and Disabling Injury Rate by Manufacturing, Processing and Packaging Sub-Sector — Alberta: 2006



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

Meat, Hides and Pelt Products

In 2006, the Meat, Hides and Pelt Products sub-sector had a lost-time claim rate of 6.97 per 100 person-years, over twice the average rate for the Manufacturing, Processing and Packaging sector. The disabling injury rate was the highest of any sub-sector in the province at 21.52 per 100 person-years. The duration rate of 102 was almost double the provincial rate of 54 per 100-person-years (see Table 4.2).

Table 4.2

Meat, Hides and Pelt Products — Alberta: 2005-2006

	2005	2006	% Change
Person-years	14,682	13,753	-6.3%
Lost-time claims	952	958	0.6%
Lost-time claim rate	6.48	6.97	7.4%
Modified-work claims	3,040	2,575	-15.3%
Lost-time claims involving modified work	570	573	0.5%
Disabling injury claims	3,422	2,960	-13.5%
Disabling injury rate	23.31	21.52	-7.7%
Duration rate	100	102	1.7%
Days lost (LTC)	14,715	14,016	-4.8%
Compensation payments (LTC)	\$4,478,638	\$4,290,826	-4.2%

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

The Meat, Hides and Pelt Products sub-sector had the highest lost-time claim rate over the last five years, of all the sub-sectors. However, there were indications of lower injury severity in this sub-sector, with a median days-lost of six and an average days-lost of 15 days per claim. The average for all sectors in the province was slightly higher at seven and 23, respectively. This sub-sector also had a high number of lost-time claims involving modified work (compared to lost-time claims) indicative of proficient claims management procedures.

Since 2002, the average lost-time claim rate for all sectors in the province decreased by 19.6%. Over the same time period, the Manufacturing, Processing and Packaging sector saw a 22.8% decrease and the Meat, Hides and Pelt Products sub-sector a 5.9% decrease.

Clothing and Textile Products

In 2006, the lost-time claim rate for the Clothing and Textile Products sub-sector increased by 11.6% to 1.64 per 100 person-years. The disabling injury rate increased by 8.4% from 2005, to 1.86 per 100 person-years. The duration rate fell from 40 to 31 days-lost per 100 person-years (see Table 4.3). The median days-lost was ten while the average days-lost were 19 days per-claim.

Between 2002 and 2006, the lost-time claim rate decreased by almost half, from 3.15 in 2002 to 1.64 in 2006, or 47.9%. Since 2002, the average lost-time claim rate for all sectors in the province decreased by 19.6%. Over the same time period, the Manufacturing, Processing and Packaging sector experienced a 22.8% decrease.

Table 4.3

Clothing and Textile Products — Alberta: 2005-2006

	2005	2006	% Change
Person-years	3,676	3,661	-0.4%
Lost-time claims	54	60	11.1%
Lost-time claim rate	1.47	1.64	11.6%
Modified-work claims	16	29	81.3%
Lost-time claims involving modified work	7	21	200.0%
Disabling injury claims	63	68	7.9%
Disabling injury rate	1.71	1.86	8.4%
Duration rate	40	31	-21.7%
Days lost (LTC)	1,457	1,136	-22.0%
Compensation payments (LTC)	\$284,209	\$233,770	-17.7%

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

Feed/Seed, Food and Beverage Products

The lost-time claim rate for the Feed/Seed, Food and Beverage Products sub-sector decreased by 9.3%, to 4.09 per 100 person-years in 2006, the lowest over the last five years. The disabling injury rate increased by 2.1%, to 7.12 per 100 person-years. The duration rate fell slightly from 67 to 65 days-lost per 100 person-years (see Table 4.4).

The decrease in the lost-time claim rate in 2006 was the result of a 12.4% fall in the number of lost-time claims. The person-years also fell but by a lesser amount, 3.4%. The Feed/Seed, Food and Beverage Products sub-sector had a median days-lost of five and an average days-lost of 16 days per claim. Both of these figures were lower than their coinciding average figure for all sectors of the province, at seven and 23 respectively.

This sub-sector had a growing proportion of lost-time claims involving modified work, compared to all lost-time claims, indicative of improving claims management procedures in these industries.

Since 2002, the average lost-time claim rate for all sectors in the province decreased by 19.6% and the Manufacturing, Processing and Packaging sector a 22.8% decrease. Over the same time period, the Feed/Seed, Food and Beverage Products sub-sector experienced a 22.1% decrease, a result of the person-years remaining at similar level (fluctuating around 15,650) and lost-time claims decreasing by 25.0%

Table 4.4

Feed/Seed, Food and Beverage Products — Alberta: 2005-2006

	2005	2006	% Change
Person-years	16,224	15,664	-3.4%
Lost-time claims	732	641	-12.4%
Lost-time claim rate	4.51	4.09	-9.3%
Modified-work claims	686	800	16.6%
Lost-time claims involving modified work	287	326	13.6%
Disabling injury claims	1,131	1,115	-1.4%
Disabling injury rate	6.97	7.12	2.1%
Duration rate	67	65	-3.9%
Days lost (LTC)	10,903	10,120	-7.2%
Compensation payments (LTC)	\$2,704,077	\$2,380,398	-12.0%

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

Wood Products

The Wood Products sub-sector is the second largest sub-sector, accounting for around 14% of the person-years in this sector. In 2006, the lost-time claim rate for the Wood Products sub-sector was 3.59 per 100 person-years. The disabling injury rate was the second highest in the Manufacturing, Processing and Packaging sector, 8.71 per 100 person-years (see Table 4.1).

The duration rate in 2006 was 65 per 100 person-years, a 9.6% decrease from 2005 (see Table 4.5). The median days-lost was six, while the average days-lost was 18. Both numbers were lower than their coinciding numbers for all sectors in the province of seven and 23.

The number of lost-time claims involving modified work, compared to all lost-time claims, increased in this sector in 2006, indicative of improvement in claims management procedures.

Since 2002, the lost-time claim rate decreased by 19.7% although from 2004, the rate remained relatively unchanged. The average lost-time claim rate for all sectors of the province decreased by 19.6%. Over the same time period, the Manufacturing, Processing and Packaging sector experienced a 22.8% decrease.

Table 4.5

Wood Products — Alberta: 2005-2006

	2005	2006	% Change
Person-years	27,491	28,519	3.7%
Lost-time claims	992	1,025	3.3%
Lost-time claim rate	3.61	3.59	-0.4%
Modified-work claims	1,682	1,896	12.7%
Lost-time claims involving modified work	397	438	10.3%
Disabling injury claims	2,277	2,483	9.0%
Disabling injury rate	8.28	8.71	5.1%
Duration rate	72	65	-9.6%
Days lost (LTC)	19,826	18,591	-6.2%
Compensation payments (LTC)	\$4,863,367	\$4,875,950	0.3%

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

Furniture and Allied Products

In 2006, the Furniture and Allied Products sub-sector had an increase in the lost-time claim rate of 2.7%, to 4.58 per 100 person-years. The disabling injury rate increased by 20.1%, to 7.36 per 100 person-years. The duration rate fell by 12.4% from 108 to 95 days-lost per 100 person-years (see Table 4.6). The median days-lost and average days, eight and 21 days per claim, were similar to the average for all sectors of the province, seven and 23 days.

Between 2002 and 2006, the lost-time claim rate in the Furniture and Allied Products sub-sector decreased by 31.3%, from 6.66 per 100 person-years in 2002 to 4.58 in 2006, a result of the number of lost-time claims falling despite a growing workforce (person-years). The fall was greater than the decrease in the average lost-time claim rate for the Manufacturing, Processing and Packaging sector, 22.8%.

Table 4.6

Furniture and Allied Products — Alberta: 2005-2006

	2005	2006	% Change
Person-years	3,184	3,277	2.9%
Lost-time claims	142	150	5.6%
Lost-time claim rate	4.46	4.58	2.7%
Modified-work claims	96	141	46.9%
Lost-time claims involving modified work	43	50	16.3%
Disabling injury claims	195	241	23.6%
Disabling injury rate	6.12	7.36	20.1%
Duration rate	108	95	-12.4%
Days lost (LTC)	3,444	3,106	-9.8%
Compensation payments (LTC)	\$643,947	\$658,033	2.2%

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

Printed and Published Products

The Printed and Published Products sub-sector had a lost-time claim rate of 1.33 per 100 person-years and a disabling injury rate of 2.25 in 2006. Both rates were under half the rate for the Manufacturing, Processing and Packaging sector. The duration rate decreased by 28.7% from 46 to 32 days-lost per 100 person-years (see Table 4.7).

The 22.8% decrease in the lost-time claim rate in 2006 was caused by both a rise in the person-years and a fall in number of lost-time claims. The median days-lost of eight and the average days-lost of 24 days per claim were similar to the average for all sectors of the province, seven and 23.

Over the last five years the lost-time claim rate has fluctuated from a high of 1.86 per 100 person-years in 2002, to a low of 1.33 in 2006.

Table 4.7

Printed and Published Products — Alberta: 2005-2006

	2005	2006	% Change
Person-years	12,345	13,892	12.5%
Lost-time claims	213	185	-13.1%
Lost-time claim rate	1.73	1.33	-22.8%
Modified-work claims	146	174	19.2%
Lost-time claims involving modified work	51	46	-9.8%
Disabling injury claims	308	313	1.6%
Disabling injury rate	2.49	2.25	-9.7%
Duration rate	46	32	-28.7%
Days lost (LTC)	5,622	4,511	-19.8%
Compensation payments (LTC)	\$924,824	\$801,483	-13.3%

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

Foundries (not Steel), Rubber and Non-metallic Products

The lost-time claim rate for Foundries (not Steel), Rubber and Non-metallic Products was 3.24 per 100 person-years in 2006, while the disabling injury rate was 8.08. The disabling injury rate was the third highest in the Manufacturing, Processing and Packaging sector. The duration rate fell 17.1% from 82 to 68 days-lost per 100 person-years (see Table 4.8).

The 2006 lost-time claim rate for Foundries (not Steel), Rubber and Non-metallic Products was the lowest it has been in five years. The median days-lost of seven and average days-lost of 21 were similar to the average for all sectors, seven and 23.

Since 2002, the lost-time claim rate decreased by 15.1%, largely as a result of increasing

person-years, 21.0%. The number of lost-time claims fluctuated around 300. The average lost-time claim rate for all sectors in the province decreased by 19.6%. Over the same time period, the Manufacturing, Processing and Packaging sector experienced a 22.8% decrease.

Table 4.8

Foundries (not Steel), Rubber and Non-metallic Products —
Alberta: 2005-2006

	2005	2006	% Change
Person-years	9,241	9,302	0.7%
Lost-time claims	331	301	-9.1%
Lost-time claim rate	3.58	3.24	-9.7%
Modified-work claims	483	572	18.4%
Lost-time claims involving modified work	136	121	-11.0%
Disabling injury claims	678	752	10.9%
Disabling injury rate	7.34	8.08	10.2%
Duration rate	82	68	-17.1%
Days lost (LTC)	7,589	6,332	-16.6%
Compensation payments (LTC)	\$2,140,243	\$1,815,110	-15.2%

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

Primary Metal (esp. Steel) Products

The Primary Metal (esp. Steel) Products is the largest sub-sector, accounting for around 34% of the person-years in this sector. The lost-time claim rate fell by 9.1% to 3.66 per 100 person-years in 2006, while the disabling injury rate was 7.63, a 2.5% increase. The duration rate fell to a five-year low. In 2006 it went from 70 days-lost to 64 per 100 person-years, a reduction of 8.7% (see Table 4.9).

The decrease in the lost-time claim rate in 2006 was largely caused by a 13.2% increase in the person-years. The number of lost-time claims increased by 3.0%.

This sub-sector had a median days-lost of four and the average days-lost of 18 days per claim. This was below the provincial average of seven and 23 respectively, indicative of lower injury severity in this sub-sector.

Over the last five-years, this sub-sector experienced a 20.6% decrease in the lost-time claim rate. The person-years grew by 39.5% and the number of lost-time claims by 10.8%. The average lost-time claim rate for all sectors in the province decreased by 19.6%. Over the same time period, the Manufacturing, Processing and Packaging sector experienced a 22.8% decrease.

Table 4.9

Primary Metal (esp. Steel) Products — Alberta: 2005-2006

	2005	2006	% Change
Person-years	61,863	70,052	13.2%
Lost-time claims	2,491	2,565	3.0%
Lost-time claim rate	4.03	3.66	-9.1%
Modified-work claims	2,872	3,629	26.4%
Lost-time claims involving modified work	758	850	12.1%
Disabling injury claims	4,605	5,344	16.0%
Disabling injury rate	7.44	7.63	2.5%
Duration rate	70	64	-8.7%
Days lost (LTC)	43,338	44,805	3.4%
Compensation payments (LTC)	\$11,293,287	\$13,136,713	16.3%

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

Industrial Equipment

The lost-time claim rate for the Industrial Equipment sub-sector was 1.37 per 100 person-years in 2006, while the disabling injury rate was 4.06. The duration rate decreased by 19.5% to 18 days-lost per 100 person-years in 2006 (see Table 4.10).

Although both the lost-time claim and disabling injury rates increased in 2006 they remain some of the lowest in the Manufacturing, Processing and Packaging sector. The median and average days-lost for the Industrial Equipment sub-sector, four and 14, were below their corresponding provincial figures of seven and 23.

Since 2002, the lost-time claim rate decreased by 31.7%. The person-years grew by 49.3% and the number of lost-time claims fluctuated around 155. The average lost-time claim rate for all sectors in the province decreased by 19.6%. Over the same time period, the Manufacturing, Processing and Packaging sector experienced a 22.8% decrease.

Table 4.10

Industrial Equipment — Alberta: 2005-2006

	2005	2006	% Change
Person-years	10,289	12,673	23.2%
Lost-time claims	137	173	26.3%
Lost-time claim rate	1.33	1.37	2.5%
Modified-work claims	332	413	24.4%
Lost-time claims involving modified work	54	72	33.3%
Disabling injury claims	415	514	23.9%
Disabling injury rate	4.03	4.06	0.6%
Duration rate	23	18	-19.5%
Days lost (LTC)	2,361	2,340	-0.9%
Compensation payments (LTC)	\$815,068	\$901,249	10.6%

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

Gases, Fertilizer and Petrochemical – Refining and Manufacturing

In 2006, the lost-time claim and disabling injury rates in the Gases, Fertilizer and Petrochemical – Refining and Manufacturing were 0.18 and 0.60 per 100 person-years, respectively. Both of these rates are the lowest in the Manufacturing, Processing and Packaging sector. The duration rate decreased from 8 days-lost per 100 person-years in 2005, to 3 in 2006 (see Table 4.11).

Between 2002 and 2006, the Gases, Fertilizer and Petrochemical – Refining and Manufacturing sub-sector had the lowest lost-time claim rate each year and experienced its lowest rate in 2006. The median and average days-lost, six and 17 were also both below the provincial average, seven and 23.

Table 4.11

Gases, Fertilizer and Petrochemical – Refining and Manufacturing — Alberta: 2005-2006

	2005	2006	% Change
Person-years	12,328	17,497	41.9%
Lost-time claims	52	32	-38.5%
Lost-time claim rate	0.42	0.18	-56.6%
Modified-work claims	78	82	5.1%
Lost-time claims involving modified work	17	9	-47.1%
Disabling injury claims	113	105	-7.1%
Disabling injury rate	0.92	0.60	-34.5%
Duration rate	8	3	-58.7%
Days lost (LTC)	951	558	-41.3%
Compensation payments (LTC)	\$365,415	\$540,844	48.0%

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

Plastic Products

The lost-time claim rate for Plastic Products was 3.04 per 100 person-years in 2006, the lowest rate over the last five years. The disabling injury rate also experienced a slight decrease from 6.96 per 100 person-years in 2005, to 6.85 in 2006. The duration rate was 48 days-lost per 100 person-years (see Table 4.12).

Over the last five years, the lost-time claim rate for the Plastics Products sub-sector decreased by 40.4%. In 2006, this decrease was caused by both a rise in the person-years and a drop in the number of lost-time claims. The median days-lost was six, while the average days-lost was 16 days per claim. Both numbers are lower than the average for all sectors of the province, seven and 23.

Table 4.12

Plastic Products — Alberta: 2005-2006

	2005	2006	% Change
Person-years	4,626	4,803	3.8%
Lost-time claims	152	146	-3.9%
Lost-time claim rate	3.29	3.04	-7.5%
Modified-work claims	238	251	5.5%
Lost-time claims involving modified work	68	68	0.0%
Disabling injury claims	322	329	2.2%
Disabling injury rate	6.96	6.85	-1.6%
Duration rate	45	48	7.1%
Days lost (LTC)	2,087	2,320	11.2%
Compensation payments (LTC)	\$468,573	\$606,517	29.4%

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

Distribution of injury claims

Table 4.13 presents figures for the proportion of employers without lost-time or disabling injury claims in 2006, by sub-sector. Table 4.14 displays the respective person-years for those employers in 2006. Table 4.15 displays figures for the number of claims submitted by employers.

Four industry sub-sectors had higher proportions of employers with no lost-time or disabling injury claims than the average for the Manufacturing, Processing and Packaging sector, indicating a more highly concentrated occurrence of injury in those sub-sectors. These were the Clothing and Textile Products sub-sector, the Furniture and Allied Products sub-sector, the Primary Metal (esp. steel) Products sub-sector and the Other Manufacturing, Processing and Packaging Industries sub-sector. The Meat, Hides and Pelt Products sub-sector, Foundries (not steel), Rubber and Non-metallic Products sub-sector and the Plastic Products sub-sector had lower proportions of employers with no claims.

These figures however, are influenced by employer-size. In 2006, the number of employers with no lost-time claims translates to approximately 61%, 51%, 29% and 48% of the total person-years in these four sub-sectors respectively (see Table 4.14).

Table 4.13

Proportion of Employers with no Lost-Time or Disabling Injury Claims, by Manufacturing, Processing and Packaging Sub-Sector – Alberta: 2006

Proportion of Employers by Sub-Sector	With no Lost-Time Claims	With no Disabling Injury Claims
Manufacturing, Processing and Packaging	87%	85%
Meat, Hides and Pelt Products	57%	55%
Clothing and Textile Products	92%	91%
Feed/Seed, Food and Beverage Products	79%	77%
Wood Products	78%	75%
Furniture and Allied Products	94%	94%
Printed and Published Products	86%	84%
Foundries (not steel), Rubber and Non-metallic Products	68%	62%
Primary Metal (esp. steel) Products	90%	88%
Industrial Equipment	88%	84%
Gases, Fertilizer and Petrochemical Refining and Manufacturing	81%	66%
Plastic Products	64%	58%
Other Manufacturing, Processing and Packaging Industries	89%	88%

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

Table 4.14

Proportion of Person-years accounted for by Employers with no Lost-Time or Disabling Injury Claims, by Manufacturing, Processing and Packaging Sub-Sector – Alberta: 2006

Proportion of person-years accounted for by employers	With no Lost-Time Claims	With no Disabling Injury Claims
Manufacturing, Processing and Packaging	28%	21%
Meat, Hides and Pelt Products	4%	3%
Clothing and Textile Products	61%	54%
Feed/Seed, Food and Beverage Products	18%	15%
Wood Products	17%	11%
Furniture and Allied Products	51%	49%
Printed and Published Products	36%	30%
Foundries (not steel), Rubber and Non-metallic Products	22%	11%
Primary Metal (esp. steel) Products	29%	22%
Industrial Equipment	36%	24%
Gases, Fertilizer and Petrochemical Refining and Manufacturing	40%	21%
Plastic Products	21%	13%
Other Manufacturing, Processing and Packaging Industries	48%	46%

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

For employers who did submit lost-time claims, four sub-sectors had proportions of employers submitting over six claims that were higher than 15%. These were the Meat, Hides and Pelt Products sub-sector, Wood Products sub-sector, Plastic Products sub-sector and the Foundries, Rubber and Non-metallic Products sub-sector (see Table 4.15). Eight of the sub-sectors had proportions of employers submitting over six disabling injury claims that were higher than 15%.

Table 4.15

Proportion of Employers with Lost-Time or Disabling Injury Claims, by Manufacturing, Processing and Packaging Sub-Sector – Alberta: 2006

Sub-Sector	1 Lost-Time Claim	2 to 5 Lost-Time Claims	6 to 20 Lost-Time Claims	Over 20 Lost-Time Claims
Meat, Hides and Pelt Products	35%	34%	13%	18%
Clothing and Textile Products	70%	27%	3%	0%
Feed/Seed, Food and Beverage Products	46%	34%	15%	5%
Wood Products	40%	44%	12%	4%
Furniture and Allied Products	76%	17%	6%	1%
Printed and Published Products	46%	42%	12%	0%
Foundries (not steel), Rubber and Non-metallic Products	56%	28%	15%	1%
Primary Metal (esp. steel) Products	72%	23%	4%	0%
Industrial Equipment	54%	32%	14%	0%
Gases, Fertilizer and Petrochemical Refining and Manufacturing	61%	39%	0%	0%
Plastic Products	43%	43%	13%	0%
Other Manufacturing, Processing and Packaging Industries	55%	34%	11%	0%

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

Table 4.15 (Continued)

Proportion of Employers with Lost-Time or Disabling Injury Claims, by Manufacturing, Processing and Packaging Sub-Sector – Alberta: 2006

Sub-Sector	1 Disabling Injury Claim	2 to 5 Disabling Injury Claims	6 to 20 Disabling Injury Claims	Over 20 Disabling Injury Claims
Meat, Hides and Pelt Products	35%	24%	18%	24%
Clothing and Textile Products	66%	32%	2%	0%
Feed/Seed, Food and Beverage Products	41%	29%	23%	7%
Wood Products	38%	36%	17%	10%
Furniture and Allied Products	75%	16%	7%	3%
Printed and Published Products	46%	41%	11%	3%
Foundries (not steel), Rubber and Non-metallic Products	40%	35%	17%	8%
Primary Metal (esp. steel) Products	68%	25%	6%	2%
Industrial Equipment	49%	32%	11%	8%
Gases, Fertilizer and Petrochemical Refining and Manufacturing	33%	52%	15%	0%
Plastic Products	32%	44%	19%	5%
Other Manufacturing, Processing and Packaging Industries	51%	33%	16%	1%

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

DEMOGRAPHICS OF INJURED WORKERS

Injured Worker Characteristics

In 2006, the Machinists, metal forming, shaping and erecting occupation group had the highest proportion of lost-time claims in the Manufacturing Processing and Packaging sector at 20.7%. Labourers in processing, manufacturing and utilities had the highest proportion of disabling injuries at 19.1%. The Trades helpers, construction and transportation labourers and related occupations group had the largest difference between their proportion of lost-time claims and proportion of those employed at 13.7% and 1.7%, respectively, indicating these workers were more likely to be injured than other occupational groups in the Manufacturing, Processing and Packaging sector. In contrast, Clerical occupations group accounted for 4.7% of lost-time claims, 4.2% of disabling injury claims, and 10.2% of those in employment (see Chart 5.1).

Chart 5.1

Lost-Time, Disabling Injury Claims and Employment by Selected Occupation Group — Alberta: 2006

Occupation Group	Lost-time Claims	Disabling Injury Claims	Employment
Machinists, Metal Forming, Shaping and Erecting Occupations	20.7%	18.3%	9.7%
Labourers in Processing, Manufacturing and Utilities	18.1%	19.1%	8.9%
Machine Operators in Manufacturing	13.8%	17.4%	18.2%
Trades Helpers, Construction, and Transportation Labourers and Related Occupations	13.7%	13.6%	1.7%
Construction Trades	5.6%	5.6%	2.0%
Clerical Occupations	4.7%	4.2%	10.2%
Transportation Equipment Operators and Related Workers, Excl. Labourers	3.9%	2.9%	1.4%
Assemblers in Manufacturing	3.7%	3.3%	7.8%
All Other Occupations	15.8%	15.6%	40.0%

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

In 2006, workers aged 15 to 34 years accounted for almost half of all lost-time and disabling injury claims. Young workers aged between 15 and 24 accounted for 18.5% of lost-time claims and 22.0% of disabling injury claims, while representing only 12.4% of those employed⁴, indicating that young workers are more likely to be injured on the job in the Manufacturing, Processing and Packaging sector than are older workers⁵ (see Table 5.2).

Table 5.2

Lost-Time and Disabling Injury Claims by Age — Alberta: 2005-2006

Age	2005				2006			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
15-19 Years	327	5.1%	808	6.0%	326	5.0%	829	5.7%
20-24 Years	889	13.8%	2181	16.3%	867	13.4%	2369	16.3%
25-34 Years	1705	26.4%	3842	28.7%	1654	25.6%	4070	28.0%
35-44 Years	1748	27.1%	3460	25.8%	1683	26.1%	3687	25.3%
45-54 Years	1261	19.5%	2285	17.1%	1372	21.2%	2664	18.3%
55-64 Years	467	7.2%	737	5.5%	489	7.6%	848	5.8%
65+ Years	62	1.0%	77	0.6%	69	1.1%	92	0.6%
Unspecified	1	N/A	448	N/A	0	N/A	0	N/A
Total	6,460	100.0%	13,838	100.0%	6,460	100.0%	14,559	100.0%

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

In the Manufacturing, Processing and Packaging sector, the majority of claims were from men. In 2006, 81.3% of lost-time and 82.2% of disabling injury claims involved men, while they composed 74.6% of those employed (see Table 5.3)⁶.

Table 5.3

Lost-Time and Disabling Injury Claims by Gender — Alberta: 2005-2006

Gender	2005				2006			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
Women	1,148	18.0%	2,489	18.8%	1,192	18.7%	2,565	17.8%
Men	5,228	82.0%	10,778	81.2%	5,197	81.3%	11,856	82.2%
Unspecified	84	N/A	571	N/A	71	N/A	138	N/A
Total	6,460	100.0%	13,838	100.0%	6,460	100.0%	14,559	100.0%

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

⁴ Statistics Canada's Labour Force Survey (2006 Historical Review).

⁵ See the Occupational Injuries and Diseases in Alberta Young Workers publication.

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

INJURY AND DISEASE ANALYSIS

Overexertion was the most common cause for lost-time claims in the Manufacturing, Processing and Packaging sector. Sprains, strains and tears continued to be the leading nature of injury with the trunk being the most commonly injured body part.

Nature of Injury or Disease

The nature of injury is used to identify the physical characteristics of the injury or disease. In 2006, 89.4% of lost-time and 91.4% of disabling injury claims were caused by traumatic injuries and disorders. The four most common traumatic injuries and disorders were: sprains, strains and tears, surface wounds and bruises, open wounds, and fractures and dislocations (see Table 6.1).

Compared to the rest of the province, the Manufacturing, Processing and Packaging sector had higher relative proportions of lost-time and disabling injury claims in most nature of injury categories⁷. For lost-time claims the nature of injury category systemic diseases and disorders was 1.9 times higher than the frequency for all sectors. The number of disabling injury claims for this category was 2.2 times higher. Open wounds and surface wounds and bruises displayed higher relative lost-time claim proportions both at 1.8 times higher, and higher disabling injury claim proportions at 2.4 and 2.1 times higher than the average for all sectors in the province.

Note 6.1

Throughout this section, the classifications used are based on the Canadian Standards Association (CSA) standards for categorizing occupational injury and disease information.

Note 6.2

The CSA standard is designed so that Nature of Injury and Part of Body categories are directly linked when classifying injuries. This is also true for the relationship between the Source of Injury and Type of Event categories.

⁷ Number of times higher or lower compares the Manufacturing, Processing and Packaging sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.1
Nature of Injury or Disease — Alberta: 2006

Nature of Injury	Lost-Time Claims	%	Disabling Injury claims	%
Traumatic Injuries and Disorders	5,775	89.4%	13,311	91.4%
Sprains, Strains and Tears	2,564	39.7%	5,970	41.0%
Surface Wounds and Bruises	1,018	15.8%	2,405	16.5%
Open Wounds	770	11.9%	2,181	15.0%
Fractures and Dislocations	502	7.8%	845	5.8%
Burns	164	2.5%	312	2.1%
Other Traumatic Injuries and Disorders	757	11.7%	1,598	11.0%
Systemic Diseases and Disorders	461	7.1%	822	5.6%
Neoplasms, Tumors and Cancer	4	0.1%	4	<0.1%
Infectious and Parasitic Disorders	2	<0.1%	2	<0.1%
Symptoms, Signs and Ill-Defined Conditions	18	0.3%	26	0.2%
Multiple Diseases, Conditions and Disorders	0	0.0%	0	0.0%
Other Diseases, Conditions and Disorders	8	0.1%	9	0.1%
Nature of Injury - Unknown	192	3.0%	385	2.6%
Total	6,460	100.0%	14,559	100.0%

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

Part of Body Injured

In 2006, the trunk was the main injured body part, accounting for about one-third of lost-time and disabling injury claims in the Manufacturing, Processing and Packaging sector, followed by upper extremities, at 29.6% and 39.5%, and lower extremities at 17.6% and 15.4% respectively. The most common trunk injury was to the back, including spine and spinal cord, representing 22.5% of lost-time claims and 18.7% of disabling injury claims (see Table 6.2).

In 2006, the head accounted for 11.6% of lost-time claims and 7.8% of disabling injury claims in the Manufacturing, Processing and Packaging sector. This was 4.7 and 4.4 times higher than the average percentage of lost-time and disabling injury claims, respectively, for this part of body category for the whole province.⁸ Eyes were also 2.9 and 2.7 times higher. Percentages of injuries in all part of body categories were higher than or equal to the provincial average, except multiple body parts and body systems.

⁸ Number of times higher or lower compares the Manufacturing, Processing and Packaging sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.2

Part of Body Injured — Alberta: 2006

Part of Body Injured	Lost-Time Claims	%	Disabling Injury Claims	%
Trunk	2,224	34.4%	4,568	31.4%
Back, Including Spine, Spinal Cord	1,453	22.5%	2,724	18.7%
Other Trunk	771	11.9%	1,844	12.7%
Upper Extremities	1,913	29.6%	5,754	39.5%
Finger(s), Fingernail(s)	784	12.1%	2,432	16.7%
Wrist(s) and Hand(s) Except Finger(s)	664	10.3%	1,981	13.6%
Other Upper Extremities	465	7.2%	1,341	9.2%
Lower Extremities	1,134	17.6%	2,247	15.4%
Leg(s)	564	8.7%	1,107	7.6%
Ankle(s) and Foot (Feet) Except Toes	500	7.7%	1,027	7.1%
Other Lower Extremities	70	1.1%	113	0.8%
Head	751	11.6%	1,133	7.8%
Eye(s)	462	7.2%	701	4.8%
Other Head Parts	289	4.5%	432	3.0%
Multiple Body Parts	284	4.4%	559	3.8%
Neck, Including Throat	99	1.5%	227	1.6%
Body Systems	34	0.5%	45	0.3%
Part of Body - Unknown	16	0.2%	19	0.1%
Other Body Parts	5	0.1%	7	0.0%
Total	6,460	100.0%	14,559	100.0%

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

Source of Injury or Disease

The source of injury or disease describes the object or substance that came into contact with the worker and resulted in an injury or disease. In 2006, persons, plants, animals and minerals and parts and materials accounted for 38.7% of lost-time claims and 42.2% of disabling injury claims (see Table 6.3).

In 2006 hand tools – powered, accounted for 2.4% of lost-time and 2.1% of disabling injury claims in the Manufacturing, Processing and Packaging sector. This was 3.1 times higher than the average percentage of lost-time and disabling injury claims for this source of injury category for the province.⁹ The percentages of injuries caused by parts and materials were 2.4 and 2.6 times that of the provincial lost-time and disabling injury claim percentages.

⁹ Number of times higher or lower compares the Manufacturing, Processing and Packaging sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.3

Source of Injury or Disease Alberta: 2006

Source of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Persons, Plants, Animals and Minerals	1,282	19.8%	3,200	22.0%
Person-Injured or Ill Worker	1,149	17.8%	2,858	19.6%
Minerals - Metallic or Nonmetallic (except fuel)	15	0.2%	26	0.2%
Person-Other Than Injured or Ill Worker*	12	0.2%	24	0.2%
Other Persons, Plants, Animals & Minerals	106	1.6%	292	2.0%
Parts and Materials	1,216	18.8%	2,951	20.3%
Structures and Surfaces	763	11.8%	1,507	10.4%
Containers**	543	8.4%	1,123	7.7%
Tools, Instruments and Equipment	513	7.9%	1,439	9.9%
Hand Tools - Nonpowered	259	4.0%	841	5.8%
Hand Tools - Powered	154	2.4%	309	2.1%
Other Tools and Equipments	100	1.5%	289	2.0%
Machinery	503	7.8%	995	6.8%
Vehicles	205	3.2%	373	2.6%
Furniture and Fixtures	140	2.2%	291	2.0%
Chemicals and Chemical Products	86	1.3%	132	0.9%
Other Sources	553	8.6%	951	6.5%
Source of Injury - Unknown	656	10.2%	1,597	11.0%
Total	6,460	100.0%	14,559	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

The 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 event or exposure comprising about three-quarters of the total lost-time and disabling injury claims in the Manufacturing, Processing and Packaging sector in 2006 are: bodily reaction and exertion and contact with objects and equipment (see Table 6.4).

Lost-time claims caused by rubs or abrasions were 3.3 times more likely to happen in the Manufacturing, Processing and Packaging sector than the average for all sectors in the province.¹⁰ Most other types of event displayed a higher, or similar, relative likelihood than the average for all sectors in the province, with exception to assaults and violent acts and transportation accidents, which were 0.2 and 0.3 times as likely to occur and result in a lost-time or disabling injury claim.

¹⁰ Number of times higher or lower compares the Manufacturing, Processing and Packaging sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.4
Type of Event or Exposure — Alberta: 2006

Type of Event or Exposure	Lost-Time Claims	%	Disabling Injuries	%
Bodily Reaction or Exertion	2,441	37.8%	5,649	38.8%
Overexertion	1,232	19.1%	2,667	18.3%
Bodily Reaction*	652	10.1%	1,425	9.8%
Repetitive Motion	418	6.5%	1,251	8.6%
Other Bodily Reaction/Exertion	139	2.2%	306	2.1%
Contact with Objects or Equipment	2,380	36.8%	5,759	39.6%
Struck by Object	1,198	18.5%	2,887	19.8%
Caught in Object	505	7.8%	1,248	8.6%
Struck against Object	388	6.0%	1,075	7.4%
Rubbed or Abraded	212	3.3%	350	2.4%
Other Contact with Object/Equipment	77	1.2%	199	1.4%
Falls	804	12.4%	1,506	10.3%
Fall on Same Level	489	7.6%	946	6.5%
Fall to Lower Level	218	3.4%	385	2.6%
Other Falls	97	1.5%	175	1.2%
Exposure to Harmful Substances	347	5.4%	556	3.8%
Transportation Accidents	119	1.8%	168	1.2%
Assaults and Violent Acts	20	0.3%	29	0.2%
Assaults and Violent Acts by Person(s)	9	0.1%	14	0.1%
Other Assaults and Violent Acts	11	0.2%	15	0.1%
Fires and Explosions	15	0.2%	19	0.1%
Other Events or Exposures	1	<0.1%	1	<0.1%
Type of Event - Unknown	333	5.2%	872	6.0%
Total	6,460	100.0%	14,559	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 disability¹¹ 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 positive impact on workdays-lost.

In 2006, lost-time claims with duration of disability between one and ten days accounted for 60.9% of all claims. Lost-time claims resulting in 31 days or more lost accounted for 16.2% of all lost-time claims in 2006 (see Table 6.5). For all sectors in the province, those claims resulting in one to ten days-lost accounted for 54.6% of total claims, while those claims which resulted in 31 or more days-lost accounted for 21.6%.

Table 6.5

Duration of Disability — Alberta: 2005-2006

Duration of Disability	2005		2006	
	Lost-Time Claims	%	Lost-Time Claims	%
1-5 Days	2,980	46.1%	3,013	46.6%
6-10 Days	896	13.9%	918	14.2%
11-15 Days	468	7.2%	447	6.9%
16-20 Days	348	5.4%	288	4.5%
21-30 Days	393	6.1%	405	6.3%
31-40 Days	262	4.1%	270	4.2%
41-50 Days	189	2.9%	199	3.1%
51 Days or More	622	9.6%	576	8.9%
Unspecified	302	4.7%	344	5.3%
Total	6,460	100.0%	6,460	100.0%

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

¹¹ 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 16 fatalities in the Manufacturing, Processing and Packaging sector, accounting for 12.9% 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. In 2006, two Manufacturing, Processing and Packaging fatalities accepted by WCB were motor vehicle incidents (see Table 7.1).

Workplace Incidents

Workplace incidents consisted 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. In 2006, five of the Manufacturing, Processing and Packaging fatalities accepted by WCB were workplace incidents (see Table 7.1).

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 some occupational fatality claims for compensation. Occupational fatality claims that were accepted in a particular year may include fatalities from prior years. In 2006, nine of the fatalities accepted by the WCB in the Manufacturing, Processing and Packaging sector were occupational disease incidents (see Table 7.1).

Table 7.1

Types of Occupational Fatalities Accepted by the WCB –
Alberta: 2002 - 2006

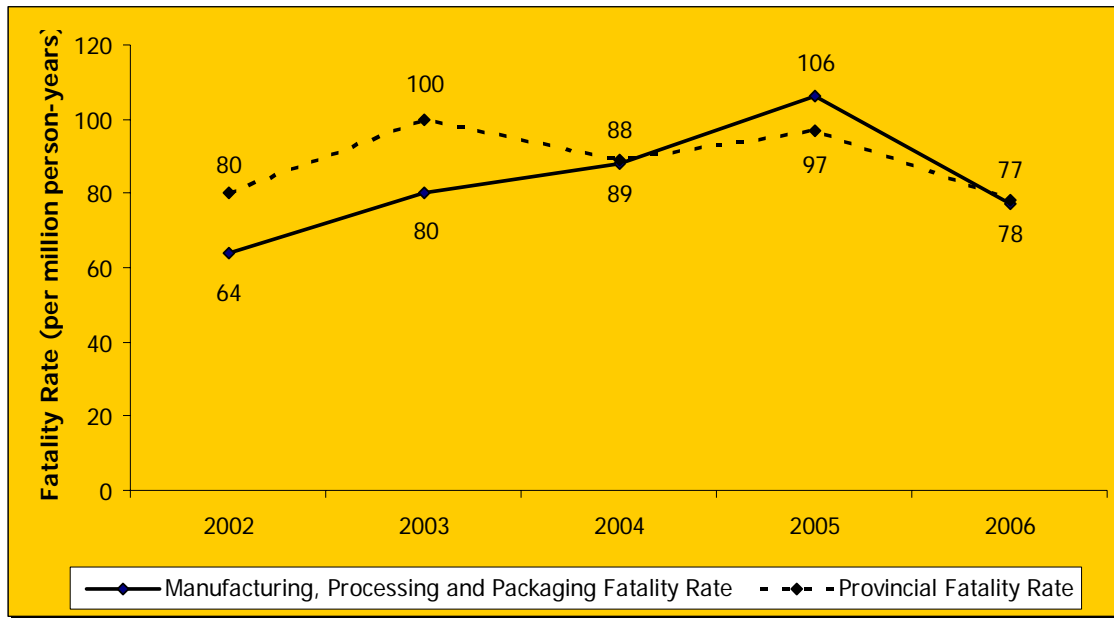
Year	Motor Vehicle Incident		Workplace Incident		Occupational Disease		Total
	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities
2002	3	27.3%	2	18.2%	6	54.5%	11
2003	1	7.1%	3	21.4%	10	71.4%	14
2004	2	12.5%	6	37.5%	8	50.0%	16
2005	3	15.0%	7	35.0%	10	50.0%	20
2006	2	12.5%	5	31.3%	9	56.3%	16
Total	11	14.3%	23	29.9%	43	55.8%	77

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

The fatality rate is calculated by dividing the number of accepted fatalities in the year by the number of person-years in that year. The result is expressed as “per million person-years.” The 2006 fatality rate decreased by 37.8% from 106 per million person-years in 2005 to 77 per million person-years in 2006 (see Chart 7.1). The average fatality rate for all sectors in the province in 2006 was 78 per million person-years.

Chart 7.1

Fatality Rate¹² for the Manufacturing, Processing and Packaging Sector : 2002-2006



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

¹² Estimates are based upon information provided by the WCB. Fatalities occurring under Government of Canada jurisdiction are excluded from the calculation of the fatality rates.

Between 2002 and 2006, the WCB accepted 77 fatalities in the Manufacturing, Processing and Packaging sector. The Primary Metal (especially Steel) Products sub-sector had the most with 35 fatalities, accounting for just under half of all fatalities in the Manufacturing, Processing and Packaging sector (see Table 7.2). The Gases, Fertilizer and Petrochemical Refining and Manufacturing sub-sector had 13 fatalities over the last five-years, with 11 of these being occupational disease fatalities.

Table 7.2

Manufacturing, Processing and Packaging Occupational Fatalities Accepted by the WCB by Sub-Sector – Alberta: 2002 - 2006

Sub-Sector	2002	2003	2004	2005	2006	Number of Fatalities	%
Feed/Seed, Food and Beverage Products	1	1	1	1	1	5	6.5%
Foundries (not steel), Rubber and Non-metallic Products	0	2	2	2	1	7	9.1%
Furniture and Allied Products	0	0	0	1	0	1	1.3%
Gases, Fertilizer and Petrochemical Refining and Manufacturing	4	3	3	2	1	13	16.9%
Industrial Equipment	0	0	1	1	1	3	3.9%
Meat, Hides and Pelt Products	0	0	0	2	1	3	3.9%
Other Manufacturing, Processing and Packaging Industries	0	0	1	0	1	2	2.6%
Primary Metal (esp. steel) Products	4	6	8	8	9	35	45.5%
Printed and Published Products	1	0	0	0	0	1	1.3%
Wood Products	1	2	0	3	1	7	9.1%
Manufacturing, Processing and Packaging Industries	11	14	16	20	16	77	100.0%

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

CERTIFICATE OF RECOGNITION EMPLOYERS

A Certificate of Recognition (COR) is given to employers who develop health and safety programs that meet established standards. Certificates are issued by Certifying Partners and are co-signed by EII¹³.

In 2006, 5.2% of Manufacturing, Processing and Packaging sector's employers were COR holders. These employers represented 45.6% of the total person-years in the Manufacturing, Processing and Packaging sector. The Gases, Fertilizer and Petrochemical – Refining and Manufacturing sub-sector had the highest proportion of COR holders at 19.6%. Nearly two thirds of all person-years in the Wood Products sub-sector were from certified COR holders (see Table 8.1).

Table 8.1
Employers With Valid COR — Alberta: 2006

Sub-Sector	Number of Certified Employers	Total Number of Employers	% of Total Employers Certified	% of Total Person-Years Certified
Manufacturing, Processing and Packaging	738	14,294	5.2%	45.6%
Clothing and Textile Products	5	437	1.1%	1.7%
Feed/Seed, Food and Beverage Products	29	623	4.7%	41.1%
Foundries (not steel), Rubber and Non-metallic Products	58	323	18.0%	56.7%
Furniture and Allied Products	9	1,186	0.8%	19.4%
Gases, Fertilizer and Petrochemical Refining and Manufacturing	19	97	19.6%	55.9%
Industrial Equipment	48	451	10.6%	51.0%
Meat, Hides and Pelt Products	14	159	8.8%	62.8%
Plastic Products	14	149	9.4%	29.5%
Primary Metal (esp. steel) Products	413	8,346	4.9%	45.6%
Printed and Published Products	3	504	0.6%	11.9%
Wood Products	98	1,081	9.1%	65.3%
Other Manufacturing, Processing and Packaging	28	938	3.0%	25.8%

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

¹³ For more information on the COR program visit <http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/277.html>

Between 2005 and 2006, the lost-time claim rate for COR holders in the Manufacturing, Processing and Packaging sector decreased from 2.91 per 100 person-years to 2.65, while the rate for non-COR holders decreased from 3.86 per 100 person-years to 3.50 per 100 person-years. Disabling injury rates for COR holders fell from 8.18 to 7.95, while non-COR holders from 6.65 to 6.23 per 100 person-years (see Table 8.2). For all sectors in the province, the lost-time claim and disabling injury rates for COR holders were 2.40 and 5.47 per 100 person-years respectively, for non-COR holders the respective numbers were 2.32 and 3.27. A low lost-time claim rate and high disabling injury rate can be indicative of proficient claims management. However, it may also be a reflection of larger employers having greater capacity to offer modified duties to injured workers than smaller employers.

Comparing COR holders against all non-COR holders provides useful information about each group, although it does not compare like-with-like. A COR is given to employers who develop health and safety programs that meet established standards, with this group seeing continued improvement in their lost-time claim rates. Some non-COR holders have good programs in place above this standard, whereas others do not. This makes evaluating improving health and safety trends less clear for this group.

Table 8.2
Lost-Time Claim and Disabling Injury Rates for Manufacturing
COR Holders — Alberta: 2005 and 2006

Employer	Year	Number of Accounts	Person-Years	Lost-Time Claims	Disabling Injury Claims	Lost-Time Claim Rate	Disabling Injury Rate	Change in Lost-Time Claim Rate	Change in Disabling Injury Rate
COR	2005	723	85,627	2,488	7,007	2.91	8.18	-8.7%	-2.8%
	2006	738	94,659	2,511	7,530	2.65	7.95		
Non-COR	2005	12,159	102,717	3,967	6,826	3.86	6.65	-9.4%	-6.3%
	2006	13,556	112,905	3,949	7,029	3.50	6.23		

Data Source: 2006 WCB 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 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 combine 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. 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.
Lost-Time Claim Rate	The lost-time claim rate is calculated by dividing the number of lost-time claims by the person-year estimate, and multiplying the result by 100. The lost-time claim rate represents the probability or risk of an injury or disease to a worker during a period of one-year work, which will result in time lost from work. Comparisons of lost-time claim rates between industries, or between years, can be used to indicate increases, decreases, or differences in this risk.

$$\text{LTC Rate} = \frac{\text{Number of LTC's} \times 100}{\text{Person-Years}}$$

Disabling injury Rate

The disabling injury rate is calculated by dividing the number of disabling injury claims by the person-year estimates, and multiplying the result by 100. The disabling injury rate represents the probability or risk of a disabling injury or disease to a worker during a period of one-year of work. The disabling injury rate is similar to the LTC rate although it covers a broader range of injuries, including those that are less severe in nature (do not require time away from work). The rate represents the number of claims per 100 person-years and includes claims made for both lost-time and modified-work.

$$\text{Disabling Injury Rate} = \frac{\text{Number of DI's} \times 100}{\text{Person-Years}}$$

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.

Duration Rate

The duration rate is calculated by dividing the number of workdays-lost (disability days) by the person-year estimate, and multiplying by 100. The result is expressed as days-lost per 100 person-years, and indicates, in part, the economic impact of occupational injury and disease. Duration rates are not recommended as reliable indicators of full economic cost. In addition, readers are warned that duration rates are highly unstable when based on only a few lost-time claims; it is recommended that the duration rate not be calculated based upon fewer than 30 lost-time claims.

$$\text{Duration Rate} = \frac{\text{Disability Days} \times 100}{\text{Person-Years}}$$

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.

Fatality Rate The fatality rate is calculated by dividing the number of accepted fatalities by the person-years estimate and multiplying the result by one million. The result is expressed as fatalities per million person-years. Fatalities that are found under the jurisdiction of the Government of Canada are excluded before the calculation of the fatality rate.

$$\text{Fatality Rate} = \frac{\text{Number of Fatalities} \times 1,000,000}{\text{Person-Years}}$$

Number of Times Higher/Lower than the Provincial Average The number of times higher/lower than the provincial average is used to compare the performance of the industries with the province regarding specific injury or disease. A number less than one indicates that the injury of the industries is lower than the provincial average; if equal to one it indicates the injury of the industries is the same as the provincial average and a number greater than one indicates that the injury of the industries is higher than the provincial average.

$$\frac{\text{Per cent of Total Claims for the Industries} \times \text{Industries' LTC Rate}}{\text{Per cent of Total Claims for the Province} \times \text{Provincial LTC Rate}}$$

Where:

Per cent of Total Claims for the Industries =

$$\frac{\text{Number of LTCs for the Industries (e.g. back injury)} \times 100}{\text{Total LTCs for the Industries}}$$

Per cent of Total Claims for the Province =

$$\frac{\text{Number of LTCs for the Province (e.g. back injury)} \times 100}{\text{Total LTCs for the Province}}$$

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.

For the most part, annual 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. In certain instances, monthly LFS micro-data files have been combined and used to produce proportion estimates for the whole year for particular sub-groups of the population.

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

APPENDIX B:
MANUFACTURING, PROCESSING
AND PACKAGING WCB INDUSTRY CODES¹⁴

1. Meat, Hides and Pelt Products

01103 – Poultry Loading Services
10100 – Meat Processing
10104 – Rendering Plants
17200 – Tanneries

2. Clothing and Textile Products

17900 – Leather Goods – Manufacturing/Repair
21300 – Rope/Carpet – Manufacturing/Repair
22900 – Crests/Pennants – Manufacturing/Repair
22901 – Drapes/Linens – Manufacturing/Repair/Installation
24900 – Wearing Apparel – Manufacturing/Repair

3. Feed/Seed, Food and Beverage Products

02101 – Seed Cleaning Plants
02112 – Egg Grading
10500 – Dairy Products Processing
11202 – Fruit Juice Processing
12301 – Feed Mills
12400 – Flour Mills
12900 – Bakeries
13100 – Food Process – Miscellaneous
13101 – Candy Manufacturing
13300 – Beet Sugar Processing
13500 – Vegetable Oils/Yeast Manufacturing
13900 – Malt Manufacturing
13904 – Pasta Manufacturing
13905 – Vegetables Process/Grade
14100 – Soft Drinks/Water/Ice – Manufacturing
14300 – Liquor/Wine – Manufacturing
14500 – Breweries
37402 – Medicine/Vitamin Manufacturing

4. Wood Products

25100 – Saw Mills/Planing Mills
25401 – Wood Products – Manufacturing
25900 – Peel/Point – Posts
25901 – Treating of Timber

¹⁴ Codes are Workers' Compensation Board industry codes.

27102 – Pulp Mills
27103 – Panelboard – Manufacturing

5. Furniture and Allied Products

26101 – Upholstered Furniture – Manufacturing/Repair
26104 – Furniture Refinishing
42147 – Finishing Carpentry

6. Printed and Published Products

27402 – Envelope Manufacturing
28600 – Printing/Book Binding
28800 – Publish without Printing
28900 – Publish with Printing
86202 – Newspaper/Flyer Distribution
89301 – Electronic Print/Photofinishing

7. Foundries (not Steel), Rubber and Non-metallic Products

16901 – Tires/Rubber Products – Manufacturing
27200 – Asphalt Roofing Products – Manufacturing
29700 – Foundry – Non-ferrous
34100 – Pre-mixed Cement – Manufacturing
34500 – Gypsum Board – Manufacturing
34700 – Concrete Products – Manufacturing
34702 – Artificial Stone Products – Manufacturing
34800 – Transit Mix Operations
35200 – Clay Bricks – Manufacturing
35401 – Fibreglass Insulation – Manufacturing
38500 – Fibreglass Reinforced Products – Manufacturing

8. Primary Metal (esp. Steel) Products

26401 – Metal Furniture Manufacturing
29100 – Steel Manufacturing – exclude Foundries
29102 – Foundries, Iron and Steel
29200 – Steel Pipe Manufacturing
30100 – Steel/Metal Fabrication
30101 – Heat Treating/Stress Relieving
30403 – Metal/Porcelain Products – Coating
30407 – Pipe Cleaning/Coating
30412 – Sheet Metal Shops
30700 – Heat/Cooling Equipment Manufacturing
30801 – Machining
33602 – Switchboard/Electrical Panel – Manufacturing
33606 – Industrial Electric Equipment – Manufacturing
62500 – Steel Service Centre – No Salvage
62700 – Scrap/Salvage Dealers

89401 – Welding

9. Industrial Equipment

16902 – Industrial Belting – Install/Service

38100 – Instrumentation – Manufacturing

62304 – Compressors/Power Unit – Manufacturing

10. Gases, Fertilizer and Petrochemical – Refining and Manufacturing

36500 – Refine – Crude/Used Oil

37201 – Fertilizer Manufacturing/Nickel Refining

37801 – Petrochemicals – Manufacturing

37805 – Industrial Gases – Manufacturing

11. Plastic Products

37301 – Plastic Products – Manufacturing

12. Other Manufacturing, Processing and Packaging Industries

07900 – Peat Moss – Harvest/Process

12304 – Forage Processing

16900 – Rubber Stamps/Stencils – Manufacturing

17901 – Vinyl Goods – Manufacturing /Repair

22101 – Awnings/Tents/Tarps – Manufacturing /Repair

27300 – Cardboard Box/Tubing/Bag – Manufacturing

28603 – Signs/Advertising Displays – Manufacturing

29600 – Aluminum/Metal Extrusion

33500 – Phone Equipment – Manufacturing /Install

33900 – Light Fixtures – Manufacturing /Assembly

33902 – Electrical Components – Manufacturing

38200 – Jewelry – Manufacturing

38201 – Lapidary Services

39300 – Sporting Equipment/Brooms – Manufacturing

39701 – Outdoor Advertising

39901 – Picture Frame, Case, Casket – Manufacturing

69903 – Pottery – Manufacturing

86201 – Window/Store Display Ad Services

89916 – Taxidermists

CONTACT INFORMATION

For further information about the data presented in this report contact:

Employment, Immigration and Industry
Data Development and Evaluation
2nd Floor, 10808 – 99 Avenue
Edmonton, Alberta
T5K 0G5

Telephone: 780-427-8531, toll free by calling 310-0000
Fax: 780-422-5070

Employment, Immigration and Industry website:

<http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/129.html>

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

<http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/2874.html>

Certificate of Recognition (COR) Program:

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