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OCCUPATIONAL INJURIES AND DISEASES IN **ALBERTA**



Lost-Time Claims, Disabling Injury
Claims and Claim Rates

Forestry and Related Industries

2002 to 2006

Summer 2007



Alberta Employment, Immigration
and Industry



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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).

The Occupational Injury and Disease in Forestry report provides a detailed look at workplace injury claim data to allow for the tracking of workplace health and safety performance over time. This is important for evaluating real and potential performance and in providing strategic information for the direction of workplace health and safety policy. The statistics contained in this report provides a comprehensive picture of workplace injury in the province, allowing for a program health to be made based on injury prevention and control possibilities.

A few notes about this report:

- This report presents 2001 data for the 2001 year in order to allow for comparison. Additional historical data are presented where possible.
- Information presented in this report is based on information that occurred during 2001 and adopted as law-time or modified-work claims by WCB as of March 31, 2007.
- About 80% of injured 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 on 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 since WCB coverage is not compulsory.
- Injury claim rates based on a small number of years are less reliable to make

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

Occupational Injuries and Diseases in Alberta – Alberta Forestry and Related Industries 2002 to 2006

Employment, Immigration and Industry (EII) prepares this annual report to provide analysis of workplace health and safety in the Forestry and Related Industries 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.

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 Forestry and Forest Products Manufacturing industries.

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
Manufacturing, Processing and Packaging	3.43	7.35	3.11	7.01
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
Forestry Industries	2.98	3.58	3.13	4.13
Forest Products Manufacturing Industries	2.14	4.44	1.93	4.19

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

The Forestry industries include two specific industries that are part of the Agriculture and Forestry major industry sector. These are the Logging and Woodlands Operations (including Trucking of Logs) industry and the Timber Management industry. In 2006, the lost-time claim rate for the Forestry industries of 3.13 per 100 person-years was higher than all major industry sectors, except for Agriculture and Forestry and Transportation, Communication and Utilities. The disabling injury rate for the Forestry industries, 4.13 per 100 person-years, is just below the average rate for all sectors in the province, 4.14.

The Forest Products Manufacturing industries had a lost-time claim rate of 1.93 per 100 person-years. This rate ranks third lowest when compared to the major sectors in the province. The disabling injury rate of 4.19 per 100 person-years is just above the average rate for all sectors in the province, 4.14. The Forest Products Manufacturing industries include five industries that form part of the Manufacturing, Processing and Packaging major industry sector, but have forest related activities. These are the Sawmills and Planing Mills industry, the Treating of Timber industry, the Plywood, Chipboard, Strandboard and Fibreboard Mills industry and The Pulp Mills industry, and are examined in part two of the report.

PART 1

FORESTRY INDUSTRIES

HIGHLIGHTS

Higher lost-time and disabling injury rates in 2006.

- The lost-time claim rate in the Forestry industries increased by 5.0%, from 2.98 in 2005 to 3.13 per 100 person-years in 2006. The average rate for all sectors in the province was 2.35 per 100 person-years.
- The disabling injury rate was 4.13 per 100 person-years. This was an increase of 15.6% from 2005, slightly below 4.14 per 100 person-years, the average rate for all sectors in the province.
- The increase in lost-time and disabling injury rates was a result of the fall in person-years being greater than the fall in injury claims. Person-years decreased by 15.6% in 2006. Lost-time claims decreased by 11.4% and disabling injury claims by 2.5%.
- The Timber Management sub-sector had the highest lost-time claim and disabling injury rates in the Forestry industries at 6.01 and 11.84 per 100 person-years, respectively. Meanwhile, Logging and Woodlands Operations accounted for 78.2% of lost-time claims, 67.5% of disabling injury claims and 88.7% of person-years in the Forestry industries.
- Employers with 20-39 person-years had the highest lost-time claim rate at 3.43 per 100 person-years, followed by employers with less than 10 person-years at 3.33. Employers with 40-99 person-years had the highest disabling injury rate at 5.10.
- The duration rate increased by 9.4% from 132 in 2005 to 144 per 100 person-years in 2006. The average rate for all sectors in the province was 54.
- The median days-lost and average days-lost were 23 and 46, respectively. These numbers are higher than the average figures for all sectors of the province, seven and 23.
- There were four fatalities accepted by the WCB in the Forestry industries in 2006.

Since 2002, the Forestry industries have experienced a 21.5% fall in the lost-time claim rate.

- Since 2002, the average lost-time claim rate for all sectors in the province decreased by 19.6%. Over the same time period, the Forestry industries saw a 21.5% decrease, largely as a result of a decrease in lost-time claims, 24.2%. Person-years figures decreased by 3.5%.

INDUSTRY SECTOR SUMMARY

The 2006 lost-time claim rate for the Forestry industries was 3.13, while the disabling injury rate was 4.13 per 100 person-years.

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. 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 147 lost-time claims and 194 disabling injury claims in the Forestry industries, representing less than one percent of the total lost-time and disabling injury claims in the province. The Forestry industries' lost-time claim rate was 3.13 per 100 person-years, a 5.0% increase from 2005, while the disabling injury rate was 4.13, an increase of 15.6% (see Table 4.1).

The rise in the lost-time claim and disabling injury rates were the result of a larger decrease in person-years than lost-time claims. Person-years decreased by 15.6% in 2006. Lost-time claims decreased by 11.4% and disabling injury claims by 2.5%. The 2006 provincial lost-time claim rate was 2.35, while the disabling injury rate was 4.14 per 100 person-years.

Table 4.1
Forestry Industries — Alberta: 2005-2006

	2005	2006	% Change
Person-years	5,562	4,692	-15.6%
Lost-time claims	166	147	-11.4%
Lost-time claim rate	2.98	3.13	5.0%
Modified-work claims	49	74	51.0%
Lost-time claims involving modified work	16	27	68.8%
Disabling injury claims	199	194	-2.5%
Disabling injury rate	3.58	4.13	15.6%
Duration rate	132	144	9.4%
Days lost (LTC)	7,344	6,776	-7.7%
Compensation payments	\$1,788,847	\$1,810,045	1.2%

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

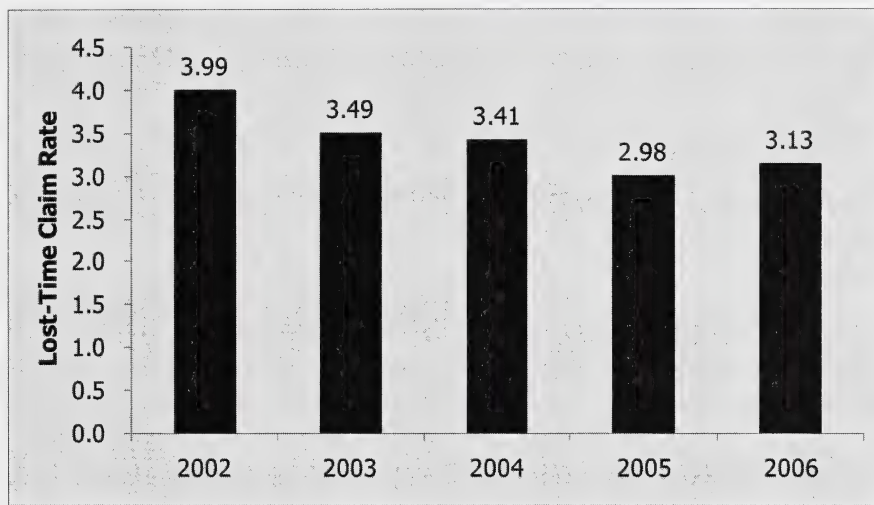
The duration rate is intended to show the severity of the effects of occupational injury and disease as reflected by the number of days off work per 100 person-years. In 2006, the Forestry industries had a duration rate of 144, over two times higher than the provincial rate of 54. The median days-lost was 23, while the average days-lost per claim was 46. Both of these figures are well above the numbers for all sectors at seven and 23. Therefore, claims in the Forestry industries have relatively high severity compared to claims filed in other sectors.

The average lost-time claim rate for all sectors of the province fell by 19.6% between 2002 and 2006. Over the same period, the lost-time claim rate for the Forestry industries fell by 21.5%. This was a result of the number lost-time claims decreasing by 24.2% and

person-years fluctuating around a similar level (around 5,000), so proportionally there were fewer claims.

Chart 4.1

Lost-Time Claim Rate for the Forestry Industries —Alberta: 2002 - 2006



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

Size of Employer

In the Forestry industries, employers with 20-39 person-years had the highest lost-time claim rate at 3.43 per 100 person-years, followed by employers with less than 10 person-years at 3.33. Employers with 40-99 person-years had the highest disabling injury rate at 5.10 (see Table 4.2).

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 4.2
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	2,326	2,133	71	81	3.33	3.80
10 to 19 person-years	61	891	29	33	3.26	3.71
20 to 39 person-years	28	787	27	33	3.43	4.19
40 to 99 person-years	16	882	19	45	2.15	5.10
Unspecified*	39	0	1	2	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 4.3 presents figures for the proportion of employers in the Forestry industries with no lost-time or disabling injury claims in 2006. Table 4.4 displays figures for the number of claims submitted by employers.

Approximately 96% of employers had no lost-time claims and 95% had no disabling injury claims, meaning the injuries and diseases happening in the province are the result of incidents occurring at the operations of less than 5% of employers (see Table 4.3). 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 71% and 64% of the total person-years in the Forestry industries respectively (see Table 5.6).

Employers who submitted one to five lost-time and disabling injury claims accounted for around 27% and 33% of the total person-years in the Forestry industries respectively. Employers who submitted over 6 lost-time and disabling injury claims accounted for approximately 2% and 3% of the total person-years in the Forestry industries.

³ Size is measured in terms of person-years.



Table 4.3
Proportion of Employers with no Lost-Time or Disabling Injury Claims – Forestry Industries: 2006

Proportion of Employers	With no Lost-Time Claims	With no Disabling Injury Claims
Forestry Industries	96%	95%

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

For employers with submitted claims, approximately 79% submitted one lost-time claim, 19% two to five claims and 2% over six lost-time claims. For disabling injury claims, similar proportions exist (see Table 4.4).

Table 4.4
Proportion of Employers with Claims – Forestry Industries: 2006

1 Lost-Time Claim	2 to 5 Lost-Time Claims	6 to 20 Lost-Time Claims	Over 20 Lost-Time Claims
79%	19%	2%	0%
1 Disabling Injury Claim	2 to 5 Disabling Injury Claims	6 to 20 Disabling Injury Claims	Over 20 Disabling Injury Claims
75%	23%	2%	1%

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

INDUSTRY SECTOR ANALYSIS

The Timber Management industry had the higher injury rates of the Forestry industries.

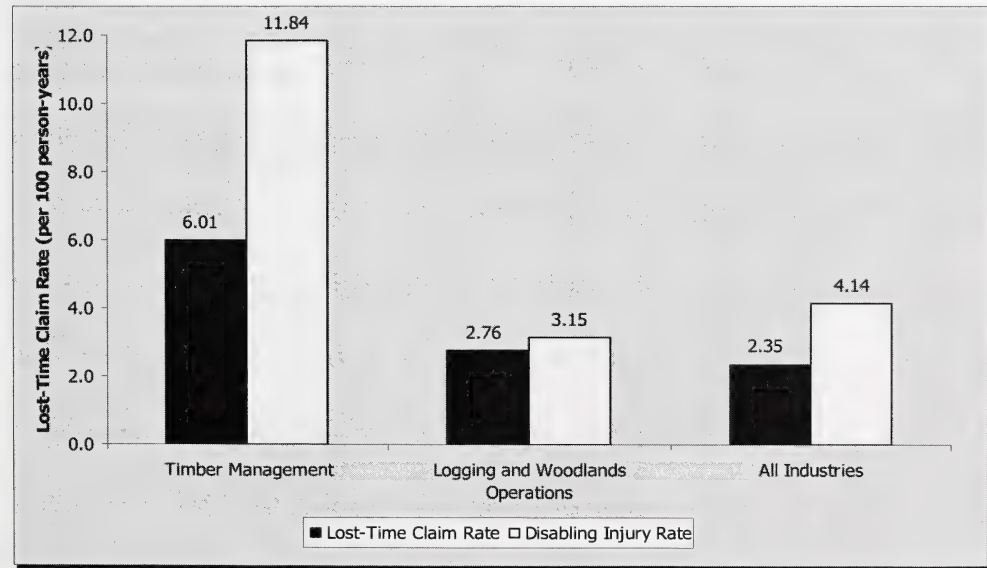
Between 2002 and 2006, the Timber Management industry had the higher lost-time claim rate of the two Forestry industries. For the period 2002 to 2006, lost-time claim rates in both industries were higher than the provincial average each year (see Table 5.1).

**Table 5.1
Lost-Time Claim Rate for the Forestry Industries — Alberta: 2002-2006**

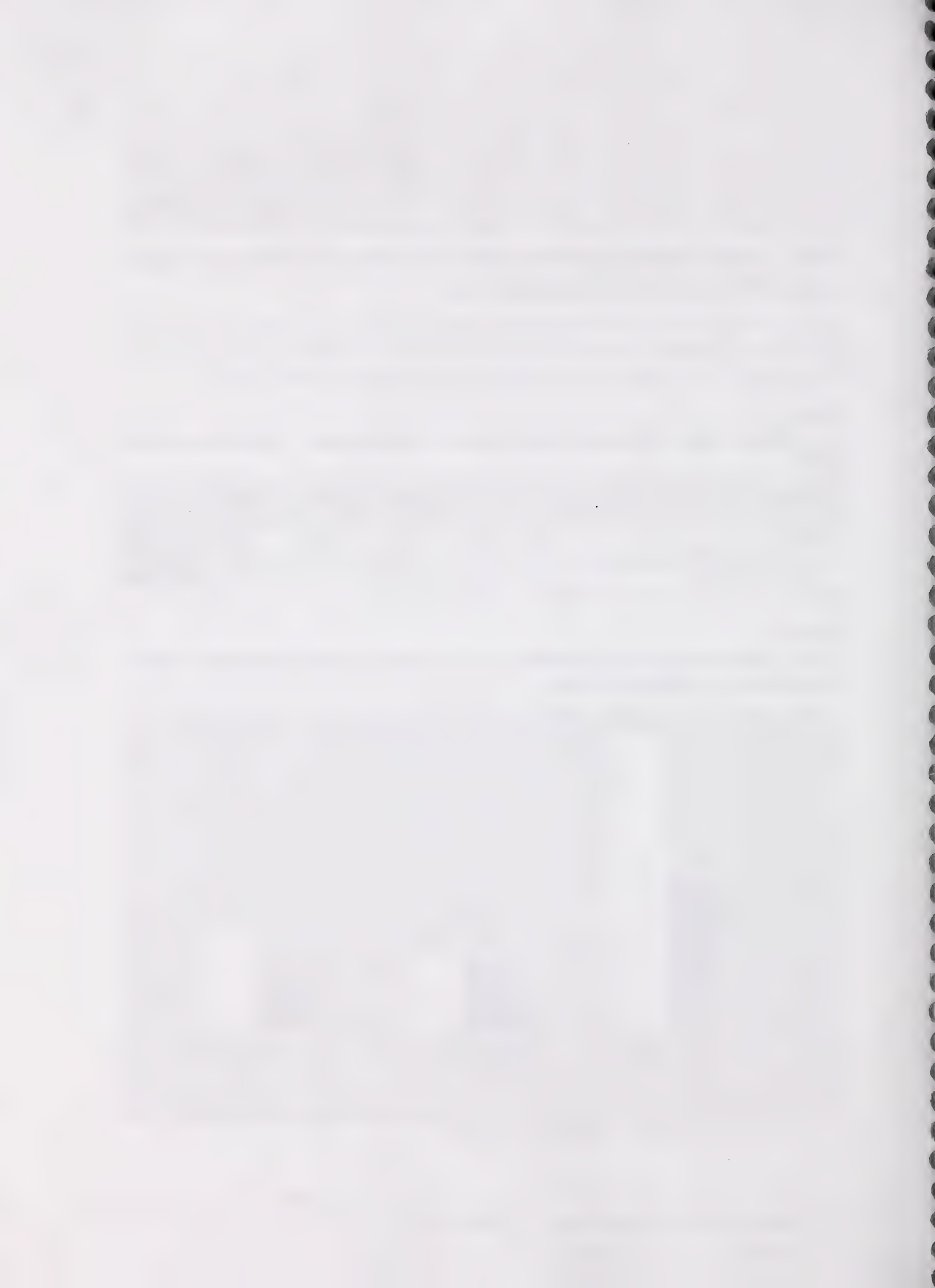
Sub-Sector	2002	2003	2004	2005	2006
Forestry	3.99	3.91	3.41	2.98	3.13
Logging and Woodlands Operations	2.99	3.11	2.95	2.54	2.76
Timber Management	10.95	9.92	6.21	7.04	6.01

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

**Chart 5.1
Lost-Time Claim and Disabling Injury Claim Rate for the Forestry Industries — Alberta: 2006**



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



In 2006, the Timber Management industry had the highest lost-time claim and disabling injury rates in the Forestry industries at 6.01 and 11.84 per 100 person-years (see Chart 5.1). Although the Logging and Woodlands Operations industry is the larger of the two and accounted for 78.2% of the lost-time claims, 67.5% of disabling injury claims and 88.7% of person-years in the Forestry industries.

Logging and Woodlands Operations (including Trucking of Logs)

The 2006 lost-time claim rate for the Logging and Woodlands Operations industry was 2.76 per 100 person-years, a 9.0% increase from 2005. Although the number of lost-time claims decreased by 9.4%, the person-years decreased by a larger amount impacting the rate. The disabling injury rate of 3.15 was below the average rate for all sectors in the province at 4.14 per 100 person-years.

The duration rate for the Logging and Woodlands Operations industry remained at 135 per 100 person-years, more than double the average rate for all sectors of 54 (see Table 5.3). Other indications of a high severity of injury in the Logging and Woodlands Operations sub-sector included the relatively high median days-lost of 25 and average days-lost of 49. Both figures are more than double their coinciding average for all sectors of the province of seven and 23.

Since 2002, the lost-time claim rate for the Logging and Woodlands Operations industry fluctuated between a high of 2.99 per 100 person-years in 2002 and a low of 2.54 per 100 person-years in 2005.

Table 5.3
Logging and Woodlands Operations, including Trucking of Logs —
Alberta: 2005-2006

	2005	2006	% Change
Person-years	5,007	4,160	-16.9%
Lost-time claims	127	115	-9.4%
Lost-time claim rate	2.54	2.76	9.0%
Modified-work claims	25	40	60.0%
Lost-time claims involving modified work	12	24	100.0%
Disabling injury claims	140	131	-6.4%
Disabling injury rate	2.80	3.15	12.6%
Duration rate	135	135	0.0%
Days lost (LTC)	6,759	5,615	-16.9%
Compensation payments (LTC)	\$1,708,744	\$1,686,365	-1.3%

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



Timber Management

In 2006, the Timber Management industry had a lost-time claim rate of 6.01 per 100 person-years, a decrease of 14.6% from 2005. This was largely the result of a 17.9% decrease in the number of lost-time claims. The disabling injury rate increased by 11.2% to 11.84 per 100 person-years (see Table 5.4). Both the lost-time claim rate and the disabling injury rate were above the average figures for all sectors in the province of 2.35 and 4.14.

The duration rate in the Timber Management industry increased from 106 days lost per 100 person-years in 2005 to 218 in 2006. This rate has shown a great degree of fluctuation over the past five years from a high of 292 days-lost per 100 person-years in 2003, to a low of 106 in 2005. The median days-lost for the Timber management sub-sector was 13, while the average days-lost per claim was 36. Both numbers are above the average figures for all sectors of the province, seven and 23.

Table 5.4
Timber Management — Alberta: 2005-2006

	2005	2006	% Change
Person-years	554	532	-4.0%
Lost-time claims	39	32	-17.9%
Lost-time claim rate	7.04	6.01	-14.6%
Modified-work claims	24	34	41.7%
Lost-time claims involving modified work	4	3	-25.0%
Disabling injury claims	59	63	6.8%
Disabling injury rate	10.65	11.84	11.2%
Duration rate	106	218	106.7%
Days lost (LTC)	585	1,161	98.5%
Compensation payments (LTC)	\$80,103	\$123,680	54.4%

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

Distribution of injury claims

Table 5.5 presents figures for the proportion of employers without lost-time or disabling injury claims in 2006, by sub-sector. Table 5.6 displays the respective person-years for those employers in 2006. Table 5.7 displays figures for the number of claims submitted by employers.

The Logging and Woodland Operations industry displayed highest proportion of employers with no lost-time or disabling injury claims, indicating a more highly concentrated occurrence of injury in that industry. This figure however, is influenced by employer-size. In 2006, the number of employers with no lost-time claims translates to approximately 72% of the total person-years in this industry (see Table 5.6).

Table 5.5
Proportion of Employers with no Lost-Time or Disabling Injury Claims, by Forestry industry – Alberta: 2006

Proportion of Employers by Sub-Sector	With no Lost-Time Claims	With no Disabling Injury Claims
Forestry Industries	96%	95%
Timber Management	91%	88%
Logging and Woodlands Operations	96%	96%

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

Table 5.6
Proportion of Person-years accounted for by Employers with no Lost-Time or Disabling Injury Claims, by Forestry industry – Alberta: 2006

Proportion of person-years accounted for by employers	With no Lost-Time Claims	With no Disabling Injury Claims
Forestry Industries	71%	64%
Timber Management	62%	43%
Logging and Woodlands Operations	72%	67%

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

For employers who did submit claims, the Logging and Woodlands Operations industry also had the highest proportion of employers submitting one lost-time claim and the lowest submitting over six lost-time claims (see Table 5.7).

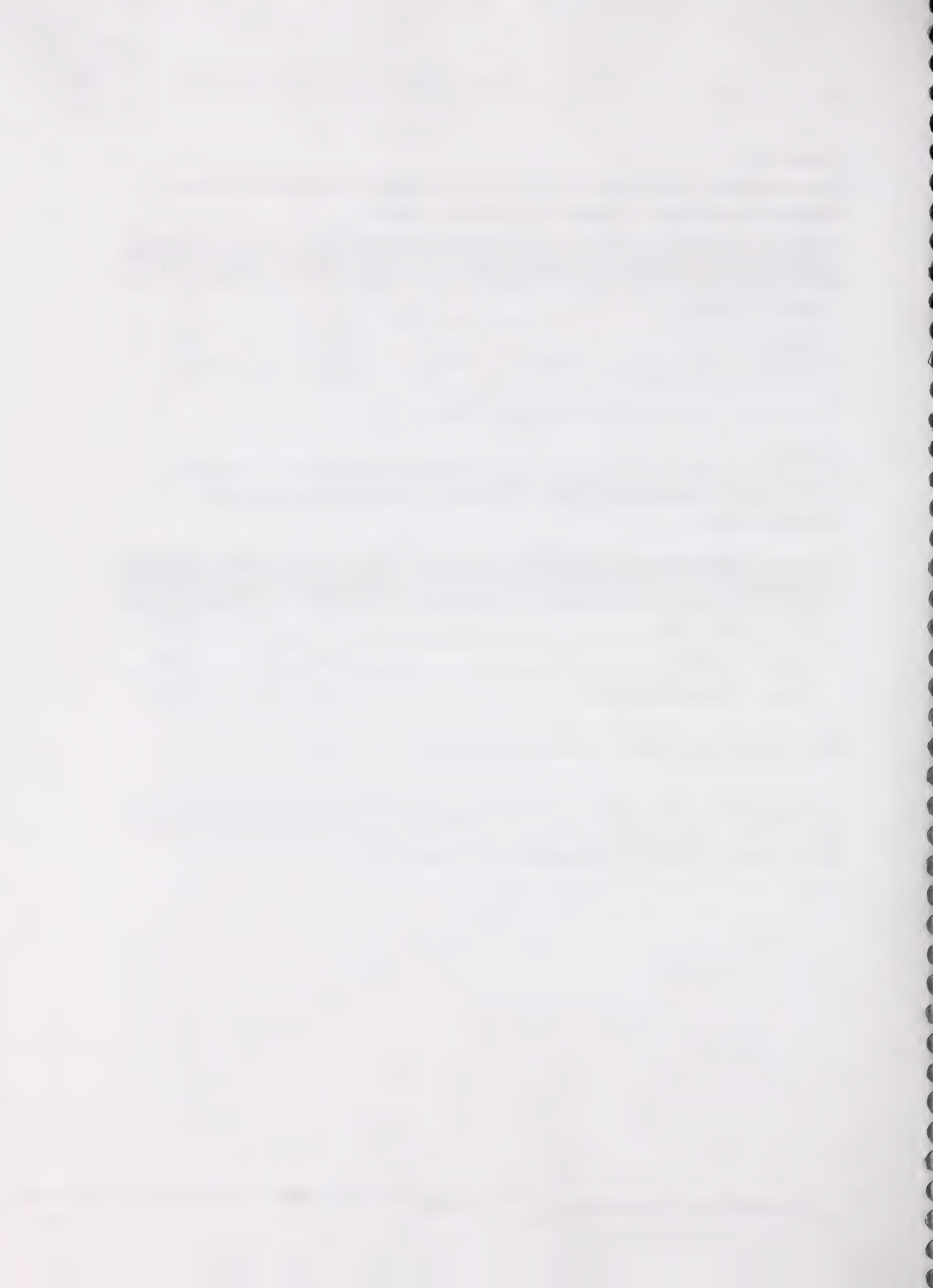
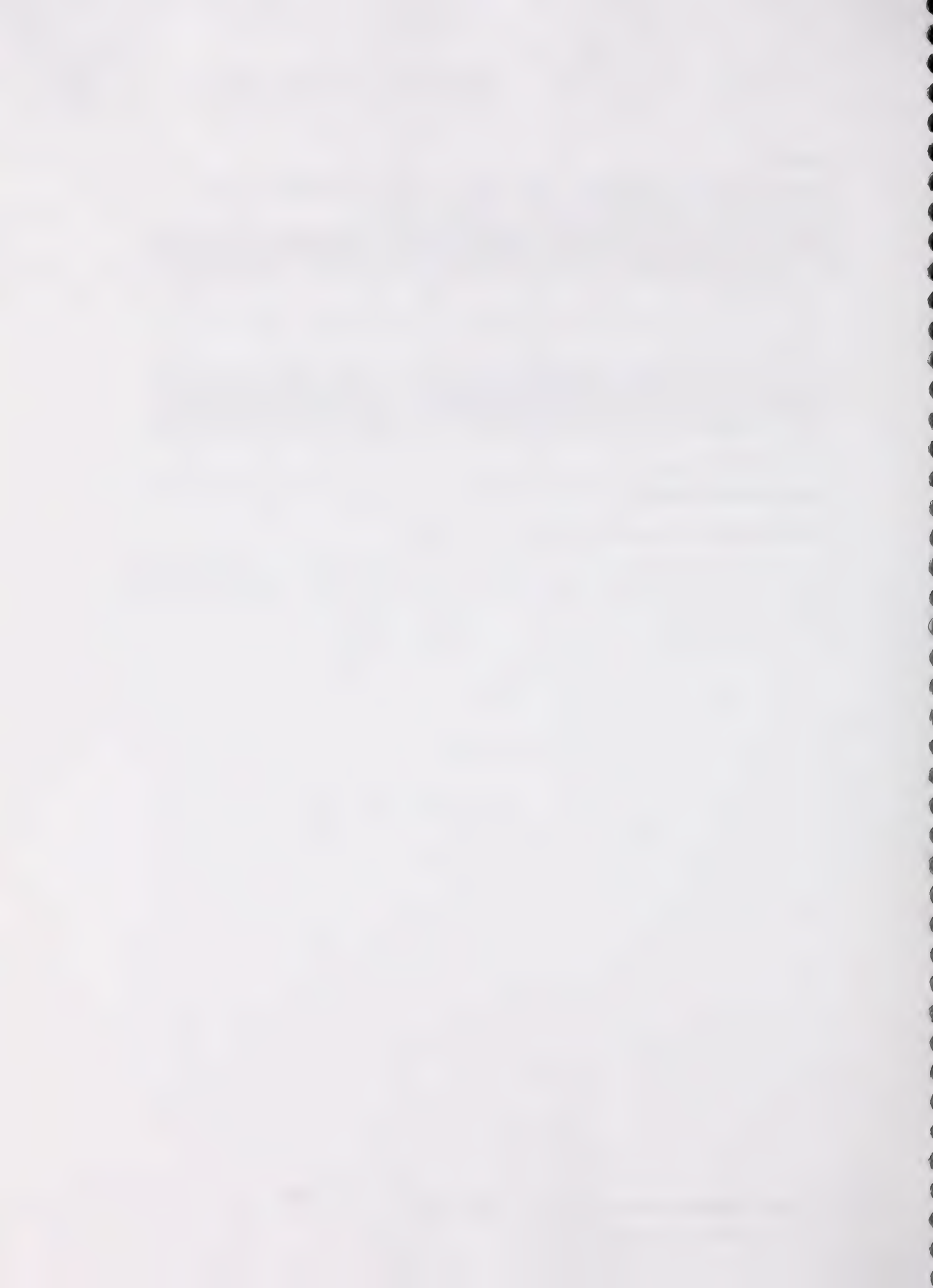


Table 5.7
Proportion of Employers with Lost-Time or Disabling Injury
Claims, by Forestry industry – Alberta: 2006

Sub-Sector	1 Lost-Time Claim	2 to 5 Lost-Time Claims	6 to 20 Lost-Time Claims	Over 20 Lost-Time Claims
Timber Management	54%	38%	8%	0%
Logging and Woodlands Operations	82%	16%	1%	0%

Sub-Sector	1 Disabling Injury Claim	2 to 5 Disabling Injury Claims	6 to 20 Disabling Injury Claims	Over 20 Disabling Injury Claims
Timber Management	39%	50%	6%	6%
Logging and Woodlands Operations	81%	18%	1%	0%

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



DEMOGRAPHICS OF INJURED WORKERS

Injured Worker Characteristics

In 2006, two occupation groups, Transportation equipment operators and related workers (excluding labourers) and Occupations unique to forestry operations, mining and gas extraction, and fishing (excluding labourers) accounted for about half of lost-time and disabling injury claims in the Forestry industries. Occupations unique to forestry operations, mining and gas extraction, and fishing (excluding labourers) made up 49.0% of those employed in the Forestry industries while only accounting for 14.5% of lost-time claims and 13.3% of disabling injury claims (see Table 6.1).

Table 6.1
Lost-Time and Disabling Injury Claims by Occupation – Alberta: 2006

Occupation Group	Lost-time Claims	Disabling Injury Claims	Employment
Transportation Equipment Operators and Related Workers, Excl. Labourers	40.6%	34.4%	N/A*
Occupations Unique to Forestry Operations, Mining, Oil and Gas Extraction, and Fishing, excluding labourers	14.5%	13.3%	49.0%
Primary Production Labourers	11.6%	22.2%	N/A*
Mechanics	6.5%	6.1%	N/A*
Technical Occupations Related to Natural and Applied Sciences	4.3%	5.0%	31.8%
Heavy Equipment and Crane Operators Including Drillers	4.3%	3.9%	N/A*
All Other Occupations	18.2%	15.1%	9.6%

* Employment figures have been suppressed due to low sample size.

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

In 2006, workers aged 35 to 44 accounted for 32.7% of lost-time claims and 28.4% of disabling injury claims in the Forestry industries. Young workers aged 15 to 24 accounted for 9.6% of lost-time claims and 20.1% of disabling injury claims, while only making up 7.2% of those employed in the Forestry industries⁴ (see Table 6.2).

⁴ Statistics Canada, Labour Force Survey (Microdata Files) information for the Forestry and logging with support activities industry. For further information see the Occupational Injuries and Diseases in Alberta Young Workers publication.

Table 6.2
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	8	4.8%	11	5.5%	2	1.4%	10	5.2%
20-24 Years	27	16.3%	36	18.1%	12	8.2%	29	14.9%
25-34 Years	42	25.3%	51	25.6%	32	21.8%	43	22.2%
35-44 Years	36	21.7%	44	22.1%	48	32.7%	55	28.4%
45-54 Years	31	18.7%	35	17.6%	30	20.4%	33	17.0%
55-64 Years	16	9.6%	16	8.0%	19	12.9%	20	10.3%
65+ Years	6	3.6%	6	3.0%	4	2.7%	4	2.1%
Unspecified	0	N/A	0	N/A	0	N/A	0	N/A
Total	166	100.0%	199	100.0%	147	100.0%	194	100.0%

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

In the Forestry industries, the majority of claims were from men. In 2006, 95.9% of lost-time claims and 91.1% of disabling injury claims involved men, although men do comprise the majority of those employed with this industry, 85.7%⁵. Lost-time claims and disabling injury claims from women accounted for 4.1% and 8.9% of the total claims respectively (see Table 6.3).

Table 6.3
Lost-Time Claims by Gender — Alberta: 2005-2006

Gender	2005				2006			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
Women	12	7.4%	20	10.2%	6	4.1%	17	8.9%
Men	151	92.6%	176	89.8%	139	95.9%	175	91.1%
Unspecified	3	N/A	3	N/A	2	N/A	2	N/A
Total	166	100.0%	199	100.0%	147	100.0%	194	100.0%

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

⁵ Statistics Canada, Labour Force Survey (Historical review) information for the Forestry and logging with support activities industry.

INJURY AND DISEASE ANALYSIS

Struck by objects and bodily reaction were the most common causes for lost-time and disabling injury claims in the Forestry industries. 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, 87.8% of lost-time claims and 87.1% of disabling injury claims were caused by traumatic injuries and disorders. The two most common traumatic injuries and disorders were: sprains, strains and tears and fractures and dislocations (see Table 7.1).

Most nature of injury classifications had similar or lower relative frequency of lost-time and disabling injury claims than the average for all sectors in the province.⁶ Only systemic diseases and disorders and fractures and dislocations stood out as being significantly higher than the provincial average. Both of these classifications were 2.5 times higher than the average frequency for lost-time claims across all sectors in the province. Disabling injury claims were 2.0 and 1.9 times higher than the average frequency for all sectors of the province.

⁶ Number of times higher or lower compares the Forestry industries' 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 7.1
Nature of Injury or Disease — Alberta: 2006

Nature of Injury	Lost-Time Claims	%	Disabling Injury claims	%
Traumatic Injuries and Disorders	129	87.8%	169	87.1%
Sprains, Strains and Tears	53	36.1%	73	37.6%
Fractures and Dislocations	25	17.0%	27	13.9%
Surface Wounds and Bruises	17	11.6%	24	12.4%
Open Wounds	11	7.5%	16	8.2%
Burns	2	1.4%	2	1.0%
Other Traumatic Injuries and Disorders	21	14.3%	27	13.9%
Systemic Diseases and Disorders	14	9.5%	17	8.8%
Neoplasms, Tumors and Cancer	0	0.0%	0	0.0%
Infectious and Parasitic Disorders	0	0.0%	0	0.0%
Symptoms, Signs and Ill-Defined Conditions	0	0.0%	0	0.0%
Multiple Diseases, Conditions and Disorders	0	0.0%	0	0.0%
Other Diseases, Conditions and Disorders	1	0.7%	1	0.5%
Nature of Injury - Unknown	3	2.0%	7	3.6%
Total	147	100.0%	194	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 over one-third of total lost-time and disabling injury claims in the Forestry industries, followed by upper extremities, at 23.1% and 24.2%, and lower extremities, at 19.0% and 20.1% (see Table 7.2).

For the most part, all part of body injured categories occurred about the same or lower relative frequencies than the average for all sectors of the province.⁷ Although, the proportion of lost-time claims for the part of body category other trunk was 2.2 times higher than the frequency for all sectors.

⁷ Number of times higher or lower compares the Forestry industries' 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 7.2
Part of Body Injured — Alberta: 2006

Part of Body Injured	Lost-Time Claims	%	Disabling Injury Claims	%
Trunk	55	37.4%	70	36.1%
Back, Including Spine, Spinal Cord	24	16.3%	31	16.0%
Other Trunk	31	21.1%	39	20.1%
Upper Extremities	34	23.1%	47	24.2%
Wrist(s) and Hand(s) Except Finger(s)	16	10.9%	20	10.3%
Finger(s), Fingernail(s)	9	6.1%	15	7.7%
Other Upper Extremities	9	6.1%	12	6.2%
Lower Extremities	28	19.0%	39	20.1%
Ankle(s) and Foot (Feet) Except Toes	17	11.6%	18	9.3%
Leg(s)	10	6.8%	20	10.3%
Other Lower Extremities	1	0.7%	1	0.5%
Head	12	8.2%	16	8.2%
Eye(s)	2	1.4%	2	1.0%
Other Head Parts	10	6.8%	14	7.2%
Multiple Body Parts	13	8.8%	17	8.8%
Neck, Including Throat	4	2.7%	4	2.1%
Body Systems	1	0.7%	1	0.5%
Part of Body - Unknown	0	0.0%	0	0.0%
Other Body Parts	0	0.0%	0	0.0%
Total	147	100.0%	194	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, two primary sources of injury in the Forestry industries accounted for nearly half of all claims. Persons, plants, animals and minerals accounted for 27.2% of lost-time claims and 29.9% of disabling injury claims, while vehicles accounted for 17.7% and 16.5% of claims respectively (see Table 7.3).

Compared to the average for all sectors in the province, the Forestry industries had lower relative proportions of lost-time and disabling injury claims in most sources of injury categories⁸. The source of injury category for other persons, plants, animals and minerals was 2.6 times higher than the frequency for all sectors and vehicles was 2.3 times higher. The number of disabling injury claims for these categories were 3.1 and 2.0 times higher than the average for all sectors of the province.

⁸ Number of times higher or lower compares the Forestry industries' 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 7.3
Source of Injury or Disease — Alberta: 2006

Source of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Persons, Plants, Animals and Minerals	40	27.2%	58	29.9%
Person-Injured or Ill Worker	32	21.8%	44	22.7%
Minerals - Metallic or Nonmetallic (except fuel)	0	0.0%	0	0.0%
Person-Other Than Injured or Ill Worker*	0	0.0%	0	0.0%
Other Persons, Plants, Animals & Minerals	8	5.4%	14	7.2%
Vehicles	26	17.7%	32	16.5%
Structures and Surfaces	25	17.0%	28	14.4%
Parts and Materials	15	10.2%	19	9.8%
Tools, Instruments and Equipment	7	4.8%	11	5.7%
Hand tools - Nonpowered	5	3.4%	6	3.1%
Hand tools - Powered	1	0.7%	3	1.5%
Other Tools and Equipments	1	0.7%	2	1.0%
Machinery	11	7.5%	12	6.2%
Containers**	1	0.7%	1	0.5%
Furniture and Fixtures	0	0.0%	0	0.0%
Chemicals and Chemical Products	0	0.0%	0	0.0%
Other Sources	10	6.8%	11	5.7%
Source of Injury - Unknown	12	8.2%	22	11.3%
Total	147	100.0%	194	100.0%

* Persons – 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 events or exposures that comprised more than half of lost-time and disabling injury claims in the Forestry industries in the last year are: bodily reaction and exertion at 27.9% and 29.4%, and contact with objects and equipment, at 22.4% and 22.2%, respectively (see Table 7.4).

The type of injury category for transportation accidents had a relative proportion that was 3.3 times higher than the average frequency for all sectors.⁹ The number of disabling injury claims for this category was 2.2 times higher. Lost-time claims for repetitive motion in the Forestry industries was also 2.2 times higher than the relative frequency for all sectors.

⁹ Number of times higher or lower compares the Forestry industries' 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.

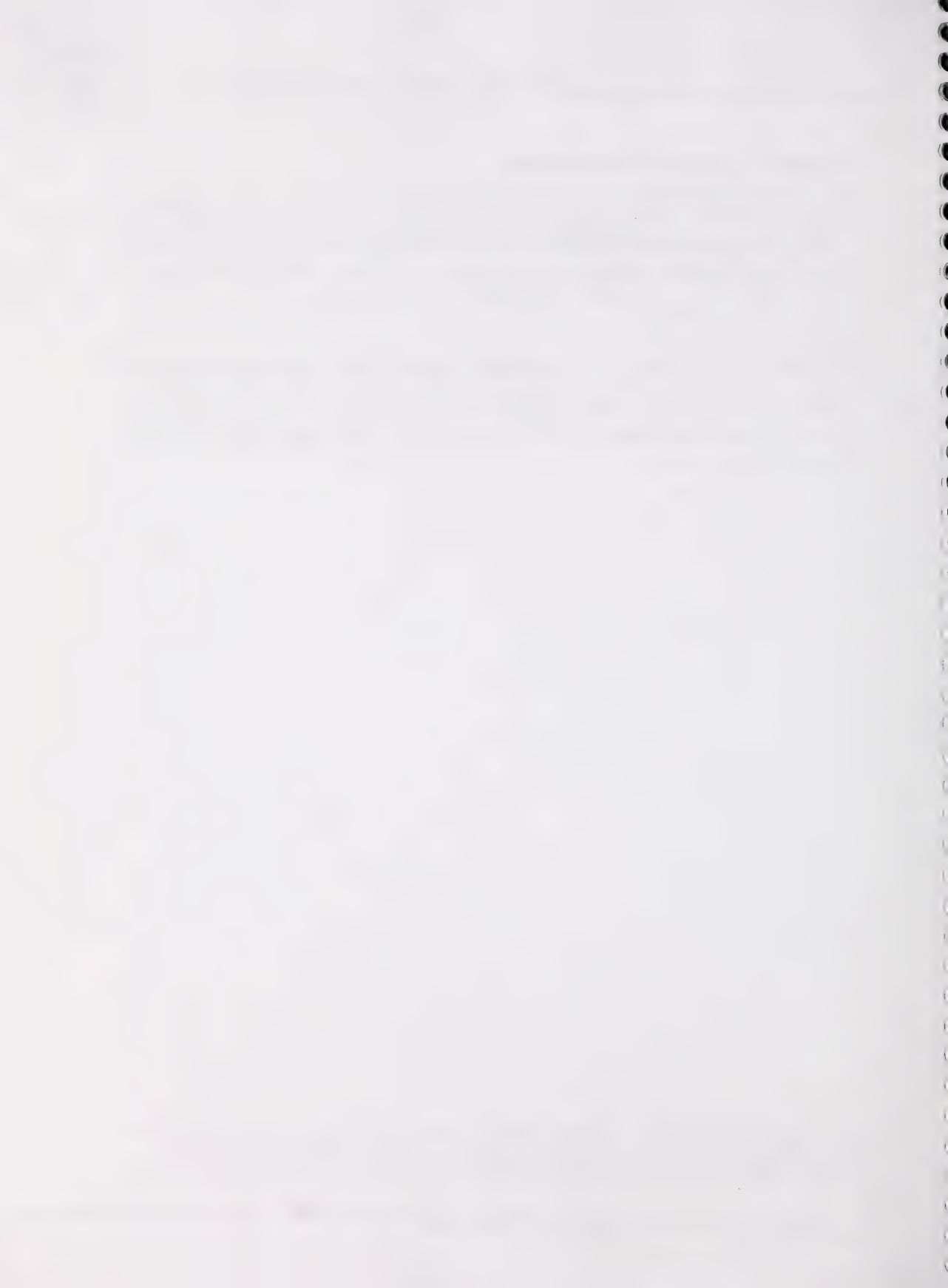
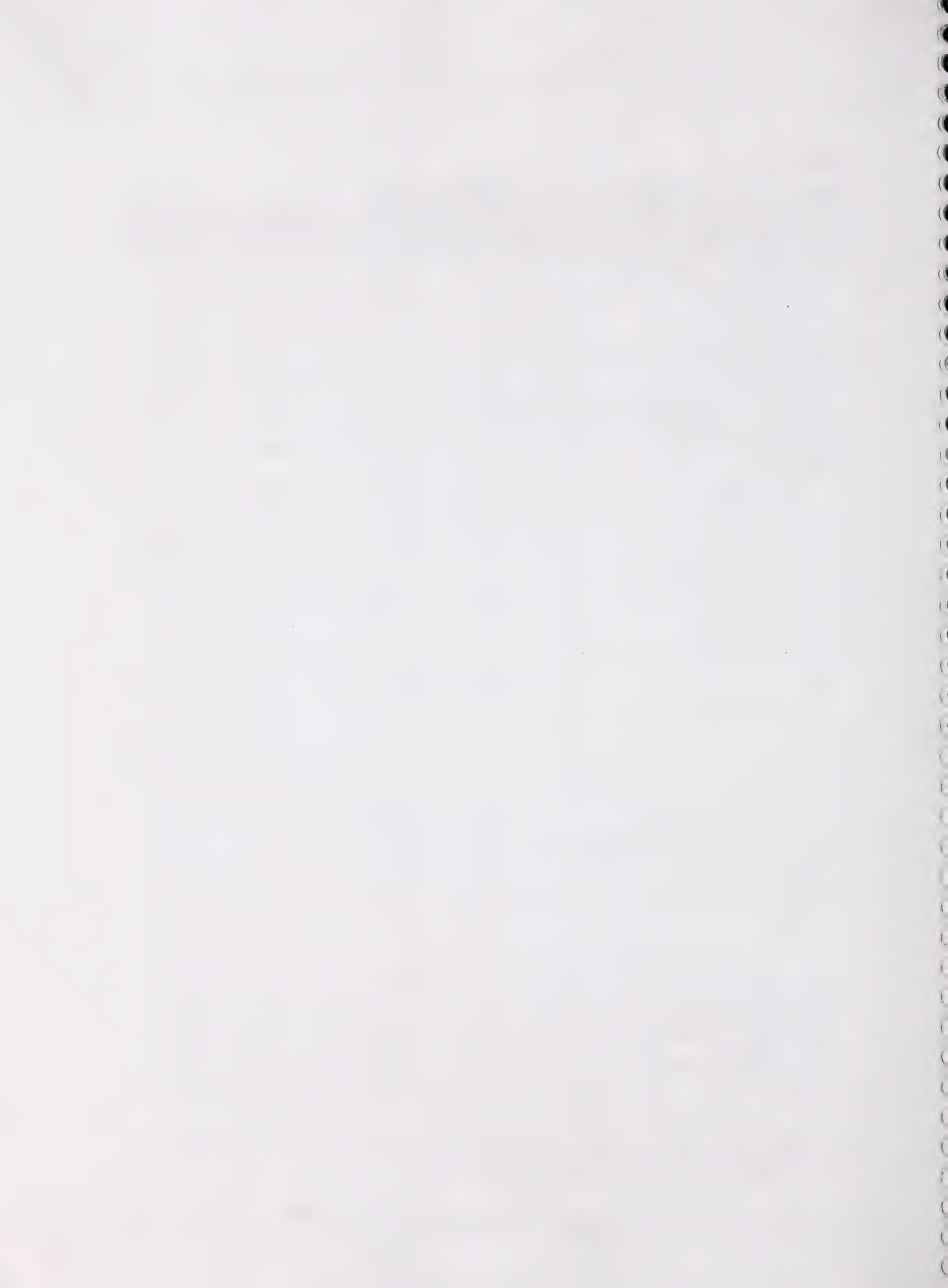


Table 7.4
Type of Event or Exposure — Alberta: 2006

Type of Event or Exposure	Lost-Time Claims	%	Disabling Injuries	%
Bodily Reaction or Exertion	41	27.9%	57	29.4%
Bodily Reaction*	20	13.6%	29	14.9%
Repetitive Motion	11	7.5%	14	7.2%
Overexertion	8	5.4%	12	6.2%
Other Bodily Reaction/Exertion	2	1.4%	2	1.0%
Contact with Objects or Equipment	33	22.4%	43	22.2%
Struck by Object	17	11.6%	24	12.4%
Caught in Object	6	4.1%	8	4.1%
Struck against Object	5	3.4%	5	2.6%
Rubbed or Abraded	2	1.4%	3	1.5%
Other Contact with Object/Equipment	3	2.0%	3	1.5%
Falls	29	19.7%	35	18.0%
Fall on Same Level	12	8.2%	18	9.3%
Fall to Lower Level	11	7.5%	11	5.7%
Other Falls	6	4.1%	6	3.1%
Transportation Accidents	28	19.0%	33	17.0%
Exposure to Harmful Substances	8	5.4%	9	4.6%
Assaults and Violent Acts	0	0.0%	0	0.0%
Assaults and Violent Acts by Person(s)	0	0.0%	0	0.0%
Other Assaults and Violent Acts	0	0.0%	0	0.0%
Fires and Explosions	0	0.0%	0	0.0%
Other Events or Exposures	0	0.0%	0	0.0%
Type of Event - Unknown	8	5.4%	17	8.8%
Total	147	100.0%	194	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 disability¹⁰ 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 reduce workdays lost.

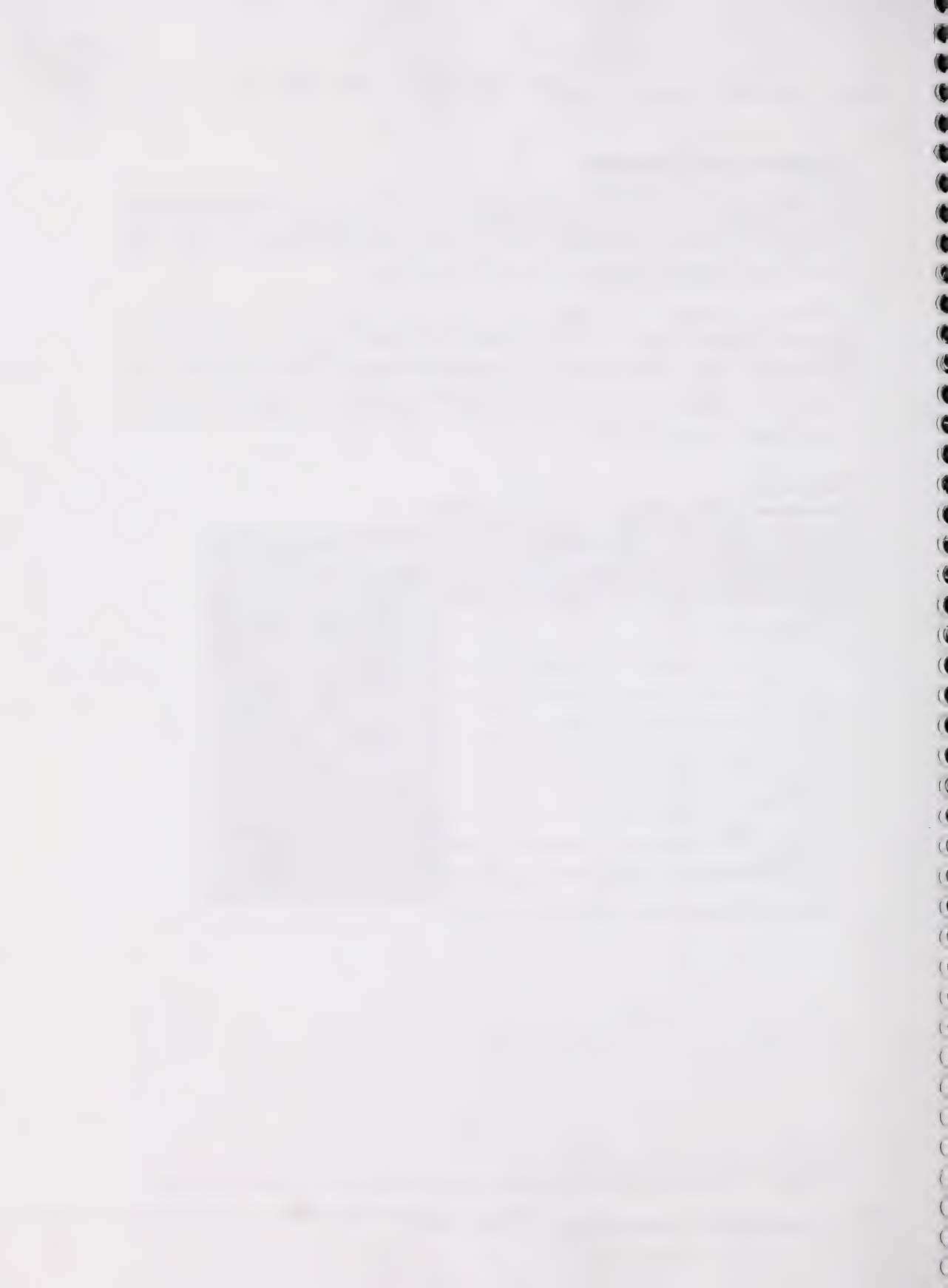
In 2006, the duration of disability figures indicated a high severity of injury in the Forestry industries. Forty-two percent of claims resulted in a duration of disability of 31 or more days, while claims lasting 1 to 10 days only made up 27.9% of claims (see Table 7.5). For all sectors in the province, 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 7.5
Duration of Disability — Alberta: 2006

Duration of Disability	2005		2006	
	Lost-Time Claims	%	Lost-Time Claims	%
1-5 Days	35	21.1%	32	21.8%
6-10 Days	15	9.0%	9	6.1%
11-15 Days	9	5.4%	12	8.2%
16-20 Days	8	4.8%	11	7.5%
21-30 Days	16	9.6%	16	10.9%
31-40 Days	15	9.0%	10	6.8%
41-50 Days	8	4.8%	10	6.8%
51 Days or More	45	27.1%	42	28.6%
Unspecified	15	9.0%	5	3.4%
Total	166	100.0%	147	100.0%

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

¹⁰ 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 in the Forestry industries.

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 crashes, train crashes, helicopter crashes and water vehicle crashes. In 2006, no occupational fatalities in the Forestry industries were motor vehicle incidents (see Table 8.1).

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. In 2006, three occupational fatalities in the Forestry industries were workplace incidents (see Table 8.1).

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, one occupational fatality in the Forestry industries was due to occupational diseases (see Table 8.1).

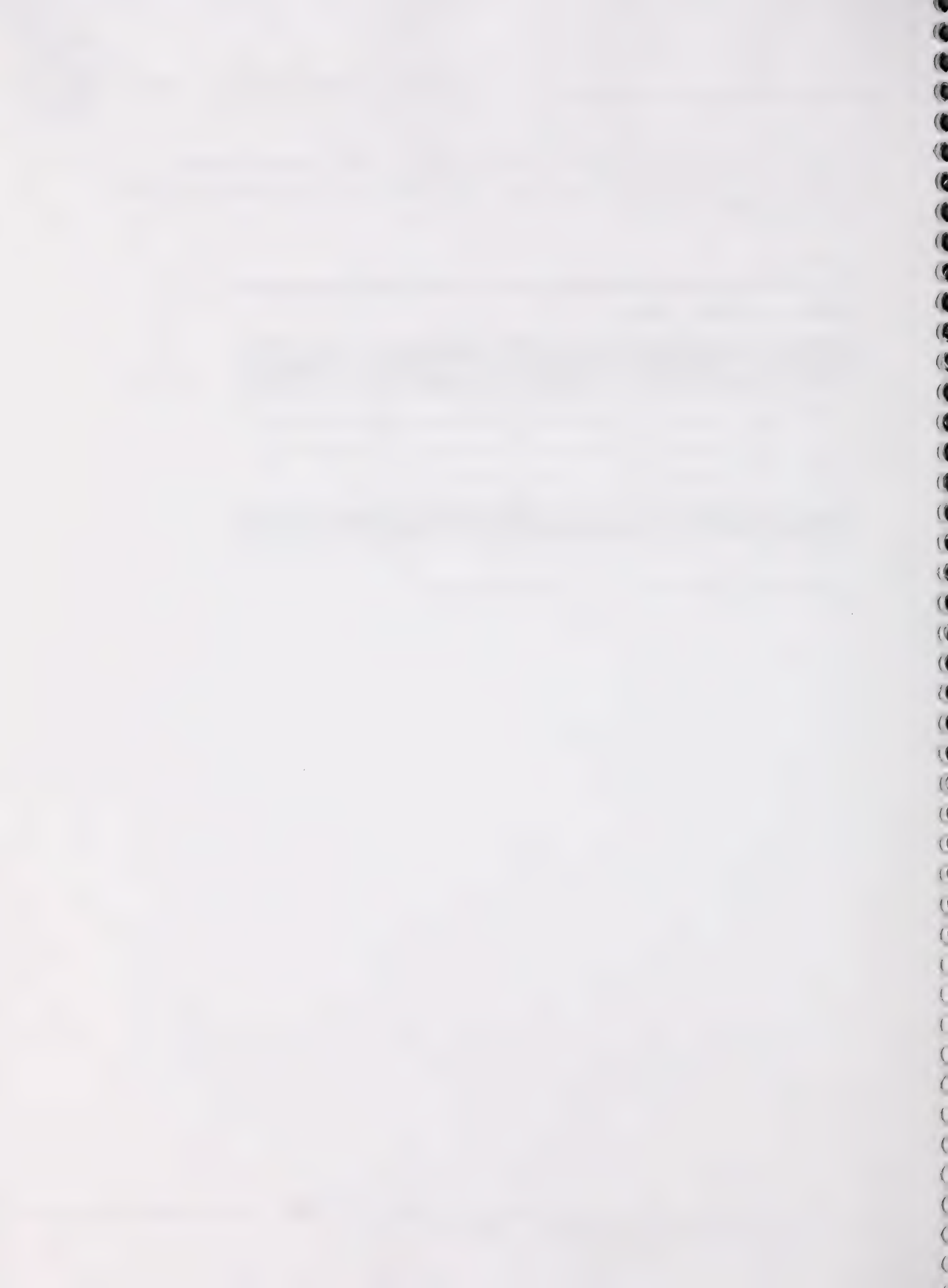


Between 2002 and 2006, the WCB accepted 11 fatalities in the Forestry industries. All of the fatalities occurred in the Logging and Woodlands Operations, including Trucking of Logs industry.

Table 8.1
Types of Occupational Fatalities Accepted by the WCB -
Alberta: 2002 - 2006

Year	Motor Vehicle Incident	Workplace Incident	Occupational Disease	Total
2002	0	2	2	4
2003	1	0	0	1
2004	1	1	0	2
2005	1	0	0	1
2006	0	3	1	4
Total	3	6	3	12

Data Source: 2006WCB 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 AEII¹¹.

In 2006, 9.8% of Forestry industries' employers were COR holders. These employers represented just over half of all person-years in the Forestry industries. In the Timber Management industry, 22.1% of employers were certified, covering 69.4% of all person-years in this industry (see Table 9.1).

**Table 9.1
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
Forestry	243	2,470	9.8%	53.2%
Logging and Woodlands Operations	210	2,321	9.0%	51.2%
Timber Management	33	149	22.1%	69.4%

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

Between 2005 and 2006, employers with a valid COR experienced an increase in their lost-time claim rate of 31.1% to 3.20 per 100 person-years. Non-COR holders saw their rate decrease in the Forestry industries from 3.59 in 2005 to 3.05 in 2006. The same trend held for the disabling injury rate, which increased by 44.4% for COR holders and decreased by 12.7% for non-COR holders (see Table 8.2).

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. 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.

¹¹ For more information on the COR program visit www.gov.ab.ca/hre/whs/partners



**Table 9.2
Lost-Time Claim and Disabling Injury Rate for Forestry 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	243	2,946	72	98	2.44	3.33	31.1%	44.4%
	2006	243	2,498	80	120	3.20	4.80		
Non-COR	2005	2,122	2,615	94	101	3.59	3.86	-15.0%	-12.7%
	2006	2,227	2,194	67	74	3.05	3.37		

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



PART 2

**FOREST PRODUCTS
MANUFACTURING INDUSTRIES**



HIGHLIGHTS

Lower lost-time and disabling injury rates in 2006.

- The lost-time claim rate in the Forest Product Manufacturing industries decreased by 9.7%, from 2.14 in 2005 to 1.93 per 100 person-years in 2006, as proportionally, there were fewer injury claims.
- The disabling injury rate was 4.19 per 100 person-years. This was a decrease of 5.5% from 2005, although slightly above the rate for all sectors in the province of 4.14.
- The fall in rates was driven by a 10.7% reduction in lost-time claims and a 6.6% reduction in disabling injury claims. The person-years decreased by 1.1%.
- The Treating of Timber sub-sector had the highest lost-time claim and disabling injury rates in the Forest Products Manufacturing industries at 7.95 and 13.73 per 100 person-years, respectively. This sub-sector accounted for 1.1% of the person-years in the Forest Products Manufacturing industries.
- Employers with less than 10 person-years had the highest lost-time claim rate at 13.35 per 100 person-years, followed by employers with 10-19 person-years at 7.48. Employers with less than 10 person-years also had the highest disabling injury rate at 17.28.
- The duration rate decreased by 42.8% from 61 in 2005 to 35 per 100 person-years in 2006. The average rate for all sectors in the province was 54.
- The median days-lost for the Forest Products Manufacturing industries was equal to the average figure for all sectors, at seven. The average days-lost was 18, five days shorter than the figure for all sectors in the province, 23.
- There was one fatality accepted by the WCB in the Forest Products Manufacturing industries in 2006.

Since 2002, the Forest Products Manufacturing industries have experienced a 15.5% 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 Forest Products Manufacturing industries saw a 15.5% decrease, a result of lost-time claims falling by a greater rate than the person-years, 22.6% decrease compared to 8.4%.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This not only helps in tracking expenses but also ensures compliance with tax regulations.

In the second section, the author outlines the process of reconciling bank statements with the company's ledger. This involves comparing the bank's records of deposits and withdrawals against the internal accounting records to identify any discrepancies.

The third section covers the preparation of financial statements, including the balance sheet, income statement, and cash flow statement. It provides a step-by-step guide on how to calculate each component and how they relate to each other.

Finally, the document concludes with a summary of key points and a reminder to review all records regularly to ensure the accuracy and integrity of the financial data.

INDUSTRY SECTOR SUMMARY

The 2006 lost-time claim and disabling injury rates for the Forest Products Manufacturing industries were 1.93 per 100 person-years and 4.19 per 100 person-years.

In 2006, there were 250 lost-time claims and 542 disabling injury claims in the Forest Products Manufacturing industries, representing less than one percent of the total lost-time and disabling injury claims in the province. The Forest Products Manufacturing industries lost-time claim rate was 1.93 per 100 person-years, a decrease of 9.7% from 2005, as proportionally, there were fewer injury claims. The disabling injury rate decreased by 5.5% to 4.19 (see Table 9.1). The decreases in rates were caused by a 10.7% fall in lost-time claims, and a 6.6% decrease in disabling injury claims. The person-years fell by 1.1%. The 2006 provincial lost-time claim rate was 2.35, while the disabling injury rate was 4.14 per 100 person-years.

Note 11.1

- 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.

Table 11.1
Forest Products Manufacturing Industries – Alberta: 2005-2006

	2005	2006	% Change
Person-years	13,068	12,926	-1.1%
Lost-time claims	280	250	-10.7%
Lost-time claim rate	2.14	1.93	-9.7%
Modified-work claims	406	382	-5.9%
Lost-time claims involving modified work	106	90	-15.1%
Disabling injury claims	580	542	-6.6%
Disabling injury rate	4.44	4.19	-5.5%
Duration rate	61	35	-42.8%
Days lost (LTC)	7,957	4,504	-43.4%
Compensation payments	\$2,296,888	\$1,529,631	-33.4%

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

In 2006, the Forest Products Manufacturing industries had a duration rate of 35 per 100 person-years. The average duration rate for all sectors of the province was 54. The median days-lost for the Forest Products Manufacturing industries was the same as the



median days-lost for all sectors at seven. The average days-lost of 18 was lower than the average figure for all sectors at 23.

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 Forest Products Manufacturing industries saw a 15.5% decrease, a result of lost-time claims falling by a greater rate than the person-years, 22.6% decrease compared to 8.4%.

Size of Employer

In the Forest Products Manufacturing industries, employers with less than 10 person-years had the highest lost-time claim and disabling injury rates at 13.5 per 100 person-years and 17.28. Employers with 100 or more person-years had the lowest rates at 1.37 and 3.34 per 100 person-years, respectively (see Table 9.2). This is a substantial difference from the trends seen in other sectors where disabling injury claims are far more prevalent in larger employers.

For 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 11.2
Lost-Time Claim and Disabling Injury Rates by Size¹² of Employer
— Alberta: 2006

Size of Employer	Number of Accounts	Person-Years	Lost-Time Claims	Disabling Injuries	Lost-Time Claim Rate	Disabling injury Rate
Less than 10 person-years	169	255	34	44	13.35	17.28
10 to 19 person-years	12	174	13	15	7.48	8.63
20 to 39 person-years	12	334	20	31	5.98	9.27
40 to 99 person-years	8	519	23	56	4.43	10.80
100 or more person-years	31	11,645	159	389	1.37	3.34
Unspecified	8	0	1	7	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 11.3 presents figures for the proportion of employers in the Forest Product Manufacturing industries with no lost-time or disabling injury claims in 2006. Table 11.4 displays figures for the number of claims submitted by employers.

¹² Size is measured in terms of person-years.



Approximately 71% of employers had no lost-time claims and 68% had no disabling injury claims, meaning the injuries and diseases happening in the province are the result of incidents occurring at the operations of around 30% of employers (see Table 4.3). 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 14% and 4% of the total person-years in the Forest Product Manufacturing industries respectively (see Table 4.14).

Table 11.3
Proportion of Employers with no Lost-Time or Disabling Injury Claims – Forestry Products Manufacturing Industries: 2006

Proportion of Employers	With no Lost-Time Claims	With no Disabling Injury Claims
Forest Products Manufacturing Industries	71%	68%

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

For employers with submitted claims, approximately 33% submitted one lost-time claim, 55% two to five claims and 12% over six lost-time claims. For disabling injury claims, similar proportions exist (see Table 4.4) although 36% submitted more than six disabling injury claims.

Employers who submitted one to five lost-time and disabling injury claims accounted for around 67% and 29% of the total person-years in the Forest Product Manufacturing industries respectively. Employers who submitted over 6 lost-time and disabling injury claims accounted for approximately 19% and 67% of the total person-years in the Forest Product Manufacturing industries.

Table 4.4
Proportion of Employers with Claims – Forestry Industries: 2006

1 Lost-Time Claim	2 to 5 Lost-Time Claims	6 to 20 Lost-Time Claims	Over 20 Lost-Time Claims
33%	55%	12%	0%
1 Disabling Injury Claim	2 to 5 Disabling Injury Claims	6 to 20 Disabling Injury Claims	Over 20 Disabling Injury Claims
23%	41%	26%	10%

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



INDUSTRY SECTOR ANALYSIS

Lost-Time and Disabling Injury Claims for the Forest Product Manufacturing Industries

Over the period 2002 to 2006, the Treating of Timber industry had the highest lost-time claim rate each year, except in 2004, when the Sawmills and Planing Mills industry had the highest rate at 2.60 per 100 person-years. The Treating of Timber industry has a small number of accounts and claims making the claim rates volatile.

Although the Treating of Timber sub-sector had the highest lost-time claim rate at 7.95 and disabling injury rate at 13.73 per 100 person-years in 2006, the Sawmills and Planing Mills sub-sector accounted for almost three-quarters of lost-time claims, 69.1% of disabling injury claims and 47.5% of the person-years in the Forest Products Manufacturing industries (see Table 12.2).

The Pulp Mills industry had the lowest rate of all Forest Products Manufacturing industries (see Table 12.1)¹³.

Table 12.1

Lost-Time Claim Rate for the Forest Products Manufacturing Industries – Alberta: 2006

Sub-Sector	2002	2003	2004	2005	2006
Forest Products Manufacturing	2.29	2.07	1.69	2.14	1.93
Sawmills and Planing Mills	3.46	3.59	2.60	2.89	3.11
Treating of Timber	8.69	4.90	1.85	10.10	7.95
Pulp Mills	0.49	0.64	0.37	0.70	0.43
Plywood, Chipboard, Strandboard and Fibreboard Mills	1.44	0.87	1.25	1.88	1.05

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

¹³ The Peeling and Pointing of Posts industry had no claims over the last five years and low person-years so have been removed from the analysis.

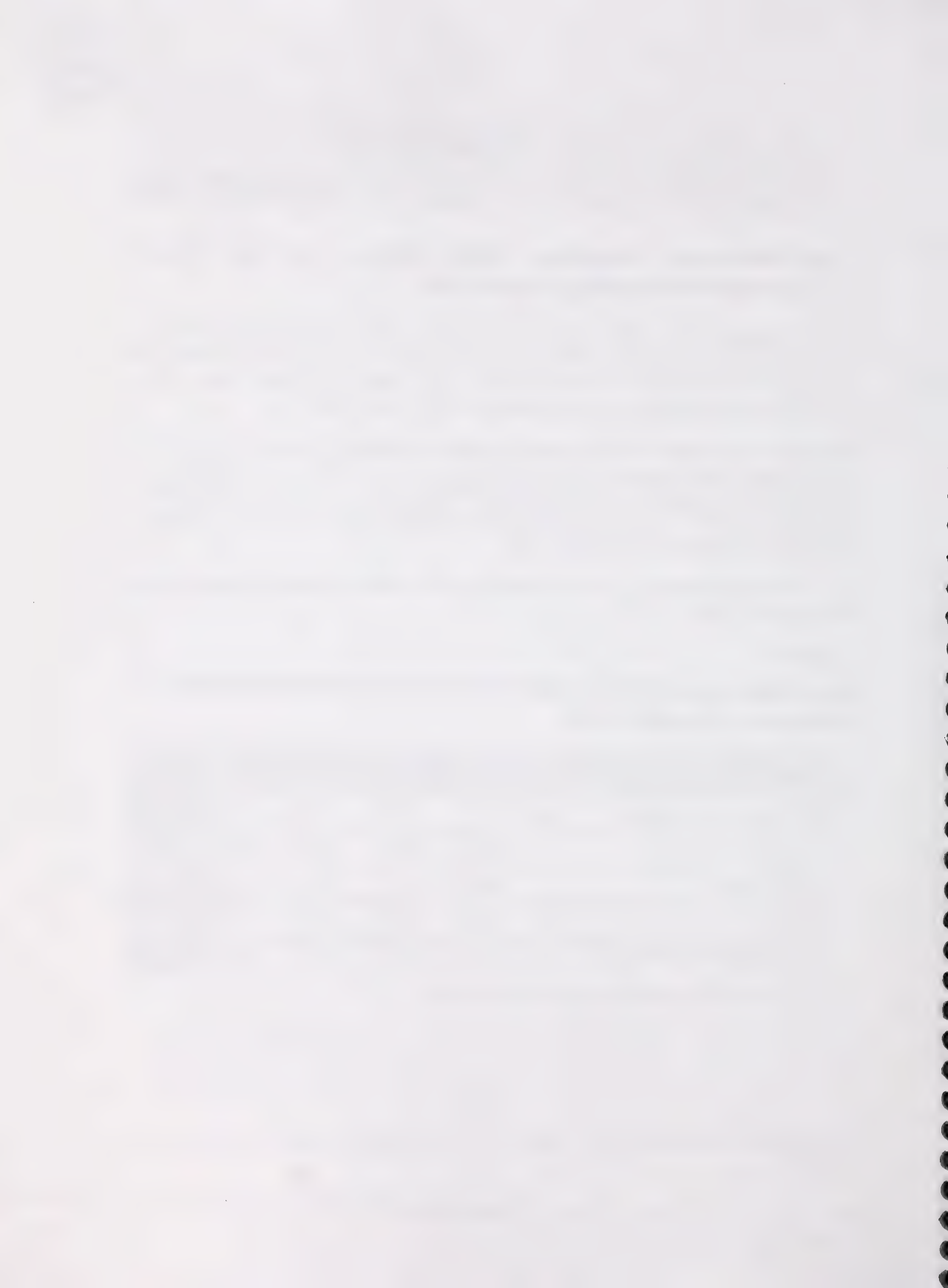
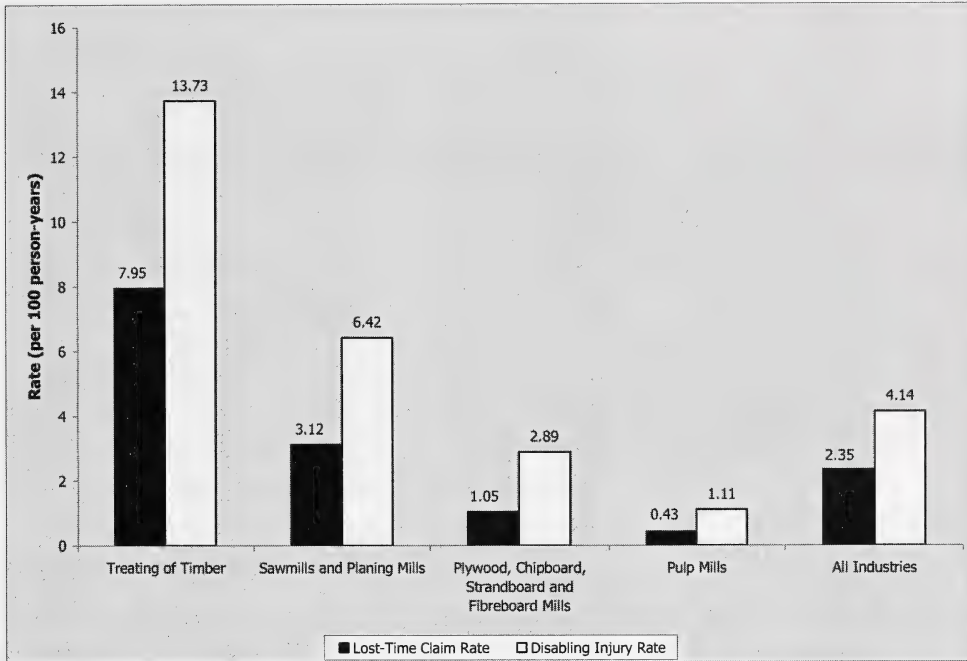


Chart 12.1

Lost-Time Claim Rate and Disabling Injury Rates for the Forest Products Manufacturing Industries¹⁴ – Alberta: 2006



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

Sawmills and Planing Mills

In 2006, the lost-time claim rate for the Sawmill and Planing Mills industry increased by 7.6%, to 3.12 per 100 person-years. The disabling injury rate was 6.42 per 100 person years, an increase of 6.7%. The increases in the rates were caused by the number of claims remaining at a similar level and the person-years decreasing by 6.6%. The duration rate decreased from 86 days lost per 100 person-years to 57, a decrease of 34.3% (see Table 12.2).

Over the last five years, this sub-sector has seen a 9.9% drop in its lost-time claim rate, from 3.46 in 2002 to 3.11 in 2006. This is largely the result of a 24.8% drop in the number of lost-time claims over the same period of time.

Sawmills and Planing Mills in the largest sub-sector in the Forest Products

¹⁴ Peeling and Pointing of Posts had no lost-time claims or disabling injuries in 2006 and are excluded from the analysis.



manufacturing industries with 6,119 person-years. This sub-sector also displayed indications of a below average severity of injury with a median days-lost of seven and average days-lost of 18 days per claim. The average figures for all sectors were seven and 23 respectively.

Table 12.2
Sawmills and Planing Mills – Alberta: 2005-2006

	2005	2006	% Change
Person-years	6,549	6,119	-6.6%
Lost-time claims	190	191	0.5%
Lost-time claim rate	2.90	3.12	7.6%
Modified-work claims	270	264	-2.2%
Lost-time claims involving modified work	66	62	-6.1%
Disabling injury claims	394	393	-0.3%
Disabling injury rate	6.02	6.42	6.8%
Duration rate	86	57	-34.3%
Days lost (LTC)	5,662	3,475	-38.6%
Compensation payments (LTC)	\$1,679,530	\$1,085,397	-35.4%

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

Treating of Timber

The lost-time claim rate for the Treating of Timber industry increased to 7.95 per 100 person-years in 2006, while the disabling injury rate was 13.73. This was the highest rate in the last five years and the highest in the Forest Products Manufacturing industries. This industry has a small number of accounts, person-years and claims making the lost-time claim rate volatile. Caution must be used in comparing year on year change. The duration rate in this industry is unavailable due to a low number of lost-time claims (see Table 12.3).

Despite the mercurial nature of these figures, there were indications of a low severity of injury in the Treating of Timber sub-sector. The median days-lost in this sub-sector was four while the average days-lost per claim was 11. Both of these numbers were lower than their coinciding average figures for all sectors, seven and 23.

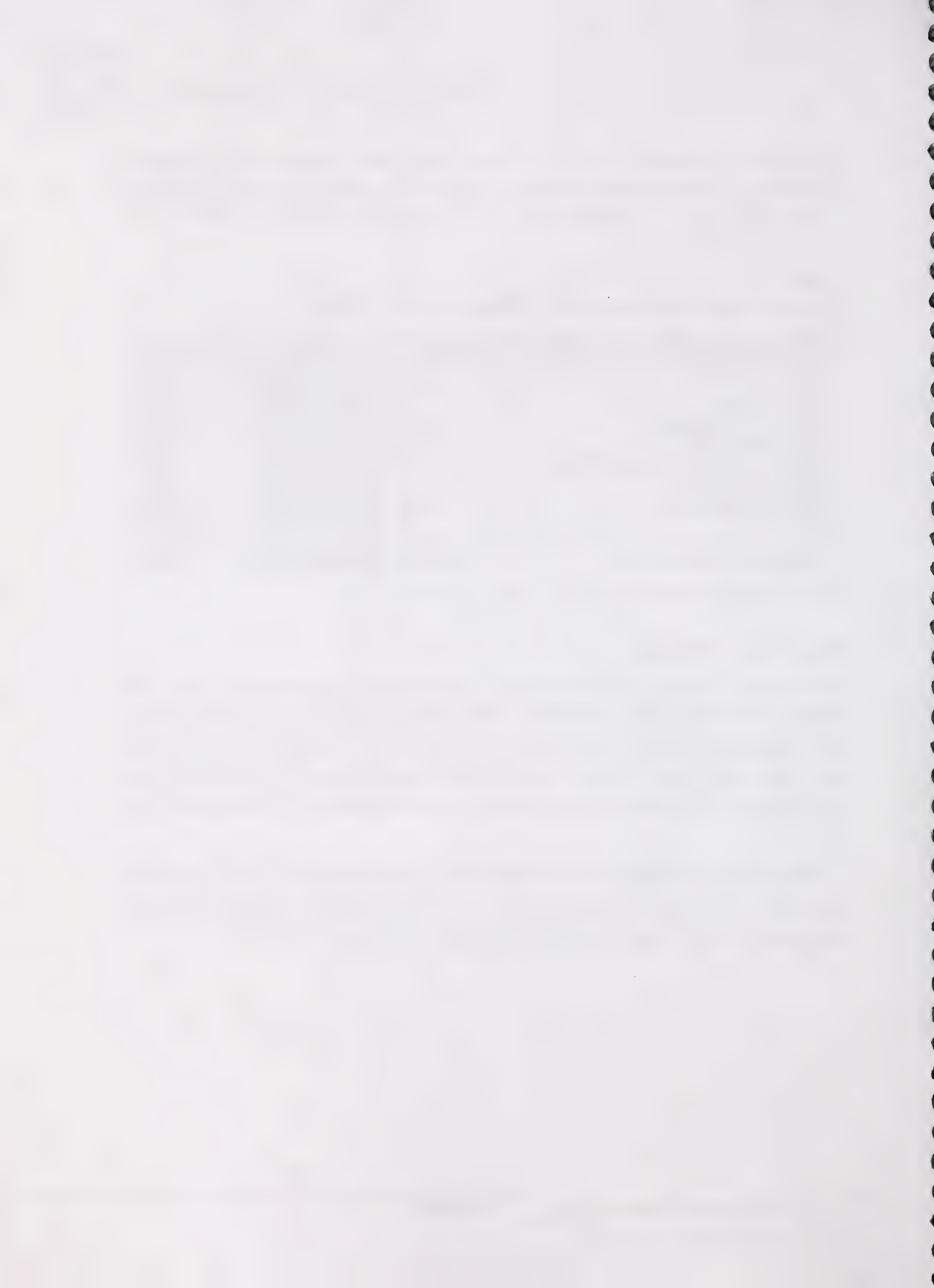


Table 12.3
Treating of Timber – Alberta: 2005-2006

	2005	2006	% Change
Person-years	158	138	-12.6%
Lost-time claims	16	11	-31.3%
Lost-time claim rate	10.10	7.95	-21.4%
Modified-work claims	7	12	71.4%
Lost-time claims involving modified work	3	4	33.3%
Disabling injury claims	20	19	-5.0%
Disabling injury rate	12.63	13.73	8.7%
Duration rate	N/A*	N/A*	N/A*
Days lost (LTC)	168	121	-28.0%
Compensation payments (LTC)	\$26,884	\$24,605	-8.5%

* Duration rates are unstable when based on a few lost-time claims. Duration rates are not calculated when there are fewer than 30 lost-time claims.

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

Pulp Mills

In 2006, lost-time claim rate for Pulp Mills decreased from 0.70 per 100 person-years in 2005 to 0.43 in 2006. The disabling injury rate was 1.11 per 100 person-years. Both were the lowest rates in the Forest Products Manufacturing industries (see Table 12.4).

Between 2002 and 2006, the lost-time claim rate has remained relatively stable at under 1.00 per 100 person-years.

Table 12.4
Pulp Mills – Alberta: 2005-2006

	2005	2006	% Change
Person-years	3,840	3,507	-8.7%
Lost-time claims	27	15	-44.4%
Lost-time claim rate	0.70	0.43	-39.2%
Modified-work claims	48	30	-37.5%
Lost-time claims involving modified work	14	6	-57.1%
Disabling injury claims	61	39	-36.1%
Disabling injury rate	1.59	1.11	-30.0%
Duration rate	N/A*	N/A*	N/A*
Days lost (LTC)	558	138	-75.3%
Compensation payments (LTC)	\$210,694	\$107,883	-48.8%

* Duration rates are unstable when based on a few lost-time claims. Duration rates are not calculated when there are fewer than 30 lost-time claims.

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



Plywood, Chipboard, Strandboard and Fibreboard Mills

The lost-time claim and disabling injury rates for the Plywood, Chipboard, Strandboard and Fibreboard Mills industry was 1.05 and 2.89 per 100 person-years in 2006. Both rates decreased by large amounts in 2006, at 44.1% and 31.0% respectively. This reduction was caused by a rise in person-years, 25.6% and a decrease in lost-time claims, 29.8%, and disabling injury claims, 13.3%, meaning that less claims were submitted from a larger workforce. This was the only sub-sector in the Forest Products Manufacturing industries to experience a rise in person-years in 2006. The duration rate decreased by 60.9%, from 63 days lost per 100 person-years in 2005 to 24 in 2006 (see Table 12.5).

In the last five years, the lost-time claim rate fell from 1.44 in 2002 to 1.05 in 2006, a result of the number of claims remaining fairly constant while person-years growing, a 37.6% increase since 2002. The median days-lost was eight, while the average days-lost per claim was 23. Both numbers were very similar to the figures for all sectors at seven and 23.

Table 12.5
Plywood, Chipboard, Strandboard and Fibreboard Mills –
Alberta: 2005-2006

	2005	2006	% Change
Person-years	2,506	3,147	25.6%
Lost-time claims	47	33	-29.8%
Lost-time claim rate	1.88	1.05	-44.1%
Modified-work claims	81	76	-6.2%
Lost-time claims involving modified work	23	18	-21.7%
Disabling injury claims	105	91	-13.3%
Disabling injury rate	4.19	2.89	-31.0%
Duration rate	63	24	-60.9%
Days lost (LTC)	1,569	770	-50.9%
Compensation payments (LTC)	\$379,779	\$311,746	-17.9%

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

Distribution of injury claims

Table 12.6 presents figures for the proportion of employers without lost-time or disabling injury claims in 2006, by industry. Table 12.7 displays the respective person-years for those employers in 2006. Table 12.8 displays figures for the number of claims submitted by employers.

The Pulp Mills industry displayed higher proportions of employers with no lost-time or disabling injury claims than the average for the Forest Products Manufacturing

industries, indicating a more highly concentrated occurrence of injury in this industry. This figure however, is influenced by employer-size. In 2006, the number of employers with no lost-time claims translates to approximately 16% of the total person-years in this industry (see Table 12.7).

Table 12.6
Proportion of Employers with no Lost-Time or Disabling Injury Claims, by Forest Product Manufacturing Industry – Alberta: 2006

Proportion of Employers by Sub-Sector	With no Lost-Time Claims	With no Disabling Injury Claims
Forest Products Manufacturing	71%	68%
Sawmills and Planing Mills	72%	69%
Treating of Timber	56%	44%
Pulp Mills	74%	70%
Plywood, Chipboard, Strandboard and Fibreboard Mills	63%	53%

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

Table 12.7
Proportion of Person-years accounted for by Employers with no Lost-Time or Disabling Injury Claims, by Forest Product Manufacturing Industry – Alberta: 2006

Proportion of person-years accounted for by employers	With no Lost-Time Claims	With no Disabling Injury Claims
Forest Products Manufacturing	14%	4%
Sawmills and Planing Mills	8%	8%
Treating of Timber	26%	2%
Pulp Mills	16%	1%
Plywood, Chipboard, Strandboard and Fibreboard Mills	24%	2%

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

For the number of employers with submitted claims, the Treating of Timber industry, the Pulp Mills industry, the Plywood, Chipboard, Strandboard and Fibreboard Mills industry and the Peeling of Posts industry have been grouped together due to the small number of employer accounts.

Table 12.8
Proportion of Employers with Lost-Time or Disabling Injury
Claims, by Forest Product Manufacturing Industry – 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
Sawmills and Planing Mills	40%	48%	12%	0%
Other Forest Product Manufacturing Industries	12%	76%	12%	0%

Sub-Sector	1 Disabling Injury Claim	2 to 5 Disabling Injury Claims	6 to 20 Disabling Injury Claims	Over 20 Disabling Injury Claims
Sawmills and Planing Mills	30%	35%	23%	12%
Other Forest Product Manufacturing Industries	5%	57%	33%	5%

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

DEMOGRAPHICS OF INJURED WORKERS

Injured Worker Characteristics

In 2006, the Labourers in processing, manufacturing and utilities occupation group accounted for 34.6% of lost-time claims, 33.8% of disabling injury claims and 14.4% of employment in the Forest Products Manufacturing industries. In contrast, those employed as Assemblers in manufacturing had 2.1% of lost-time claims, 1.5% of disabling injury claims and 13.0% of employment (see Table 13.1).

Table 13.1
Lost-Time Claims and Disabling Injury Claims by Selected Occupation Group — Alberta: 2006

Occupation Group	Lost-time Claims	Disabling Injury Claims	Employment
Labourers in Processing, Manufacturing and Utilities	34.6%	33.8%	14.4%
Trades Helpers, Construction, and Transportation Labourers and Related Occupations	19.0%	17.7%	3.4%
Machine Operators in Manufacturing	14.8%	17.1%	18.3%
Mechanics	7.6%	9.2%	7.3%
Machinists, Metal Forming, Shaping and Erecting Occupations	3.8%	2.5%	N/A*
Assemblers in Manufacturing	2.1%	1.5%	13.0%
All Other Occupations	18.1%	18.2%	43.6%

* Employment figures have been suppressed due to issues with sample size.

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

In 2006, workers aged 25 to 44 accounted for about half of lost-time and disabling injury claims in the Forest Products Manufacturing industries. Young workers between 15 and 24 years accounted for 20.8% of lost-time claims, 24.0% of disabling injury claims and 15.6% of those employed.¹⁵ Thus, young workers are more likely to be injured in the Forest Products Manufacturing sub-sector than their older counterparts (see Table 13.2).

¹⁵ Statistics Canada, Labour Force Survey (Microdata Files)

Table 13.2
Lost-Time Claims 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	22	7.9%	53	9.3%	19	7.6%	40	7.4%
20-24 Years	29	10.4%	86	15.1%	33	13.2%	90	16.6%
25-34 Years	65	23.2%	145	25.5%	59	23.6%	145	26.8%
35-44 Years	73	26.1%	143	25.1%	65	26.0%	132	24.4%
45-54 Years	64	22.9%	103	18.1%	51	20.4%	101	18.6%
55-64 Years	23	8.2%	35	6.2%	19	7.6%	30	5.5%
65+ Years	4	1.4%	4	0.7%	4	1.6%	4	0.7%
Unspecified	0	N/A	11	N/A	0	N/A	0	N/A
Total	280	100.0%	580	100.0%	250	100.0%	542	100.0%

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

In the Forest Products Manufacturing industries, the majority of claims were from men. In 2006, 82.6% of lost-time claims and 81.5% of disabling injury claims involved men, while they made up 83.4% of those employed in the sub-sector (see Table 13.3).¹⁶

Table 13.3
Lost-Time Claims 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	53	19.3%	114	20.2%	43	17.4%	99	18.5%
Men	222	80.7%	450	79.8%	204	82.6%	436	81.5%
Unspecified	5	N/A	16	N/A	3	N/A	7	N/A
Total	280	100.0%	580	100.0%	250	100.0%	542	100.0%

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

¹⁶ Statistics Canada, Labour Force Survey (Microdata Files)

INJURY AND DISEASE ANALYSIS

Struck by objects and overexertion were the most common causes for lost-time and disabling injury claims in the Forest Products Manufacturing industries. Sprains, strains and tears continued to be the leading nature of injury with the upper extremities becoming the most commonly injured body part.

Nature of Injury or Disease

In 2006, 90.4% of lost-time claims and 93.0% of disabling injury claims in the Forest Products Manufacturing industries were caused by traumatic injuries and disorders. The two most common traumatic injuries and disorders were: sprains, strains and tears, and surface wounds and bruises (see Table 14.1).

When compared to all sectors of the province, no one nature of injury category stood out as having a higher relative frequency. All had lower or similar relative proportion to their coinciding proportion for all sectors in the province.¹⁷

¹⁷ Number of times higher or lower compares the Forestry industries' 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 14.1
Nature of Injury or Disease — Alberta: 2006

Nature of Injury	Lost-Time Claims	%	Disabling Injury claims	%
Traumatic Injuries and Disorders	226	90.4%	505	93.0%
Sprains, Strains and Tears	94	37.6%	225	41.4%
Surface Wounds and Bruises	36	14.4%	91	16.8%
Fractures and Dislocations	30	12.0%	54	9.9%
Open Wounds	30	12.0%	69	12.7%
Burns	5	2.0%	9	1.7%
Other Traumatic Injuries and Disorders	31	12.4%	57	10.5%
Systemic Diseases and Disorders	19	7.6%	27	5.0%
Neoplasms, Tumors and Cancer	0	0.0%	0	0.0%
Infectious and Parasitic Disorders	0	0.0%	0	0.0%
Symptoms, Signs and Ill-Defined Conditions	0	0.0%	0	0.0%
Multiple Diseases, Conditions and Disorders	0	0.0%	0	0.0%
Other Diseases, Conditions and Disorders	0	0.0%	1	0.2%
Nature of Injury - Unknown	5	2.0%	10	1.8%
Total	250	100.0%	543	100.0%

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

Part of Body Injured

In 2006, the upper extremities were the most common main body part injured, accounting for 34.8% of lost-time claims and 41.3% of disabling injury claims in the Forest Products Manufacturing industries. This was followed by the trunk at 30.0% and 26.7% of lost-time and disabling injury claims (see Table 14.2).

When compared to the average for all sectors in the province, only injuries to the upper extremities appeared to have a higher relative frequency in the forest Products Manufacturing industries. This category was 1.8 times higher than the relative frequency for all sectors. The number of disabling injury claims for this category was 2.0 times higher.¹⁸

¹⁸ Number of times higher or lower compares the Forestry industries' 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 14.2
Part of Body Injured — Alberta: 2006

Part of Body Injured	Lost-Time Claims	%	Disabling Injury Claims	%
Upper Extremities	87	34.8%	224	41.3%
Finger(s), Fingernail(s)	38	15.2%	103	19.0%
Wrist(s) and Hand(s) Except Finger(s)	28	11.2%	72	13.3%
Other Upper Extremities	21	8.4%	49	9.0%
Trunk	75	30.0%	145	26.7%
Back, Including Spine, Spinal Cord	37	14.8%	73	13.4%
Other Trunk	38	15.2%	72	13.3%
Lower Extremities	48	19.2%	105	19.3%
Leg(s)	25	10.0%	45	8.3%
Ankle(s) and Foot (Feet) Except Toes	23	9.2%	59	10.9%
Other Lower Extremities	0	0.0%	1	0.2%
Head	21	8.4%	32	5.9%
Eye(s)	6	2.4%	11	2.0%
Other Head Parts	15	6.0%	21	3.9%
Multiple Body Parts	12	4.8%	26	4.8%
Neck, Including Throat	6	2.4%	10	1.8%
Body Systems	1	0.4%	1	0.2%
Part of Body - Unknown	0	0.0%	0	0.0%
Other Body Parts	0	0.0%	0	0.0%
Total	250	100.0%	543	100.0%

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

Source of Injury or Disease

In 2006, two primary sources of injury in the Forest Products Manufacturing industries accounted for over half of lost-time and disabling injury claims. Parts and materials accounted for 30.0% and 29.7%, and persons, plants, animals and minerals represented 22.4% and 23.1% (see Table 14.3).

Only the parts and materials source of injury category appeared to be more prevalent than the rest of the province. The relative frequency of injury for this category was 2.0 times higher for both lost-time and disabling injury claims when compared to the average for all sectors of the province¹⁹. All other categories had similar or lower frequencies when compared to the provincial numbers.

¹⁹ Number of times higher or lower compares the Forestry industries' 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 14.3
Source of Injury or Disease — Alberta: 2006

Source of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Parts and Materials	75	30.0%	161	29.7%
Persons, Plants, Animals and Minerals	56	22.4%	125	23.1%
Person-Injured or Ill Worker	45	18.0%	104	19.2%
Person-Other Than Injured or Ill Worker*	1	0.4%	1	0.2%
Minerals - Metallic or Nonmetallic (except fuel)	0	0.0%	0	0.0%
Other Persons, Plants, Animals & Minerals	10	4.0%	20	3.7%
Structures and Surfaces	28	11.2%	64	11.8%
Machinery	24	9.6%	47	8.7%
Tools, Instruments and Equipment	15	6.0%	33	6.1%
Hand tools - Nonpowered	8	3.2%	20	3.7%
Hand tools - Powered	0	0.0%	2	0.4%
Other Tools and Equipments	7	2.8%	11	2.0%
Vehicles	6	2.4%	13	2.4%
Containers**	5	2.0%	14	2.6%
Furniture and Fixtures	1	0.4%	3	0.6%
Chemicals and Chemical Products	2	0.8%	2	0.4%
Other Sources	17	6.8%	35	6.5%
Source of Injury - Unknown	21	8.4%	45	8.3%
Total	250	100.0%	542	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

In 2006, two types of events or exposures comprised more than three-quarters of lost-time and disabling injury claims in the Forest Products Manufacturing industries. Contact with objects and equipment accounted for 42.0% and 44.8%, followed by bodily reaction and exertion at 34.0% and 34.3% of claims (see Table 14.4).

For the most part, all type of event or exposure categories happened at a lower or similar frequency in the Forest Products Manufacturing industries. Only the caught in object category was more prevalent when compared to the rest of the province; its relative frequency was 2.0 and 1.9 times the frequency of lost-time and disabling injury claims for all sectors in the province.²⁰

²⁰ Number of times higher or lower compares the Forestry industries' 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 14.4
Type of Event or Exposure — Alberta: 2006

Type of Event or Exposure	Lost-Time Claims	%	Disabling Injuries	%
Contact with Objects or Equipment	105	42.0%	243	44.8%
Struck by Object	44	17.6%	97	17.9%
Caught in Object	33	13.2%	74	13.7%
Struck against Object	17	6.8%	52	9.6%
Rubbed or Abraded	7	2.8%	13	2.4%
Other Contact with Object/Equipment	4	1.6%	7	1.3%
Bodily Reaction or Exertion	85	34.0%	186	34.3%
Overexertion	40	16.0%	79	14.6%
Bodily Reaction*	23	9.2%	64	11.8%
Repetitive Motion	17	6.8%	33	6.1%
Other Bodily Reaction/Exertion	5	2.0%	10	1.8%
Falls	36	14.4%	67	12.4%
Fall on Same Level	25	10.0%	41	7.6%
Fall to Lower Level	7	2.8%	15	2.8%
Other Falls	4	1.6%	11	2.0%
Exposure to Harmful Substances	11	4.4%	15	2.8%
Transportation Accidents	2	0.8%	5	0.9%
Fires and Explosions	1	0.4%	1	0.2%
Assaults and Violent Acts	0	0.0%	0	0.0%
Assaults and Violent Acts by Person(s)	0	0.0%	0	0.0%
Other Assaults and Violent Acts	0	0.0%	0	0.0%
Other Events or Exposures	0	0.0%	0	0.0%
Type of Event - Unknown	10	4.0%	25	4.6%
Total	250	100.0%	542	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 disability²¹ is intended to reflect the severity of the effects of occupational injury and disease as reflected by the number of days off work. However, 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, 58.0% of lost-time claims lasted for 10 days or less. Lost-time claims resulting in 31 days lost or more accounted for 19.2% (see Table 14.5). 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 14.5
Duration of Disability — Alberta: 2006

Duration of Disability	2005		2006	
	Lost-Time Claims	%	Lost-Time Claims	%
1-5 Days	97	34.6%	98	39.2%
6-10 Days	37	13.2%	47	18.8%
11-15 Days	26	9.3%	10	4.0%
16-20 Days	12	4.3%	20	8.0%
21-30 Days	22	7.9%	15	6.0%
31-40 Days	17	6.1%	16	6.4%
41-50 Days	7	2.5%	7	2.8%
51 Days or More	38	13.6%	25	10.0%
Unspecified	24	8.6%	12	4.8%
Total	280	100.0%	250	100.0%

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

²¹ 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 one fatality in the Forest Products Manufacturing industries.

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 crashes, train crashes, helicopter crashes and water vehicle crashes. Between 2002 and 2006, there were no motor vehicle incident fatalities in the Forest Products Manufacturing industries (see Table 15.1).

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 two workplace fatalities in the Forest Products Manufacturing industries accepted by the WCB (see Table 15.1).

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. Between 2002 and 2006, there were three occupational disease fatalities accepted by the WCB in the Forest Products Manufacturing industries (see Table 15.1).

Table 15.1
Types of Occupational Fatalities Accepted by the WCB –
Alberta: 2002 - 2006

Year	Motor Vehicle Incident	Workplace Incident	Occupational Disease	Total
2002	0	0	1	1
2003	0	0	1	1
2004	0	0	0	0
2005	0	2	0	2
2006	0	0	1	1
Total	0	2	3	5

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

Between 2002 and 2006, the WCB accepted five fatalities in the Forest Products Manufacturing industries. The Sawmills and Planing Mills industry had three fatalities while the Pulp Mills industry had two (see Table 15.2).

Table 15.2
Forest Products Manufacturing Occupational Fatalities Accepted
by the WCB by Industry – Alberta: 2002 - 2006

Industry	2002	2003	2004	2005	2006	Total
Peeling and Pointing of Posts	0	0	0	0	0	0
Plywood, Chipboard, Strandboard and Fibreboard Mills	0	0	0	0	0	0
Pulp Mills	1	1	0	0	0	2
Sawmills and Planing Mills	0	0	0	2	1	3
Treating of Timber	0	0	0	0	0	0
Forest Products Manufacturing Industries	1	1	0	2	1	5

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

CERTIFICATE OF RECOGNITION EMPLOYERS

In 2006, 16.7% of Forest Products Manufacturing industries' employers were COR holders. These employers represented 83.1% of all person-years in the Forest Products Manufacturing industries.

The Plywood, Chipboard, Strandboard and Fibreboard Mills industry had the highest proportion of COR holders with 42.1% of employers certified, covering 87.7% of the person-years in this industry. The Pulp Mills industry had a comparatively smaller proportion of employers certified but these employers accounted for 99.5% of the all person-years in this industry (see Table 16.1).

Table 16.1
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
Forest Products Manufacturing	40	240	16.7%	83.1%
Plywood, Chipboard, Strandboard and Fibreboard Mills	8	19	42.1%	87.7%
Pulp Mills	7	23	30.4%	99.5%
Sawmills and Planing Mills	23	189	12.2%	72.6%
Treating of Timber	2	9	22.2%	27.0%

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

Between 2005 and 2006, COR holders experienced a decrease in their lost-time claim disabling injury rate in the Forest Products Manufacturing industries. For COR holders, the lost-time claim rate decreased from 1.52 to 1.21, while the rate for non-COR holders increased from 4.94 to 5.49. There was a similar trend with the disabling injury rate COR holders decreased by 11.9%, while non-COR holder increased by 11.6% (see Table 16.2). 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 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.

**Table 16.2
Lost-Time Claim Rate for Forest Products 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	39	10,699	163	382	1.52	3.57	-20.6%	-11.9%
	2006	40	10,740	130	338	1.21	3.15		
Non-COR	2005	201	2,369	117	198	4.94	8.36	11.1%	11.6%
	2006	200	2,186	120	204	5.49	9.33		

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 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.

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.

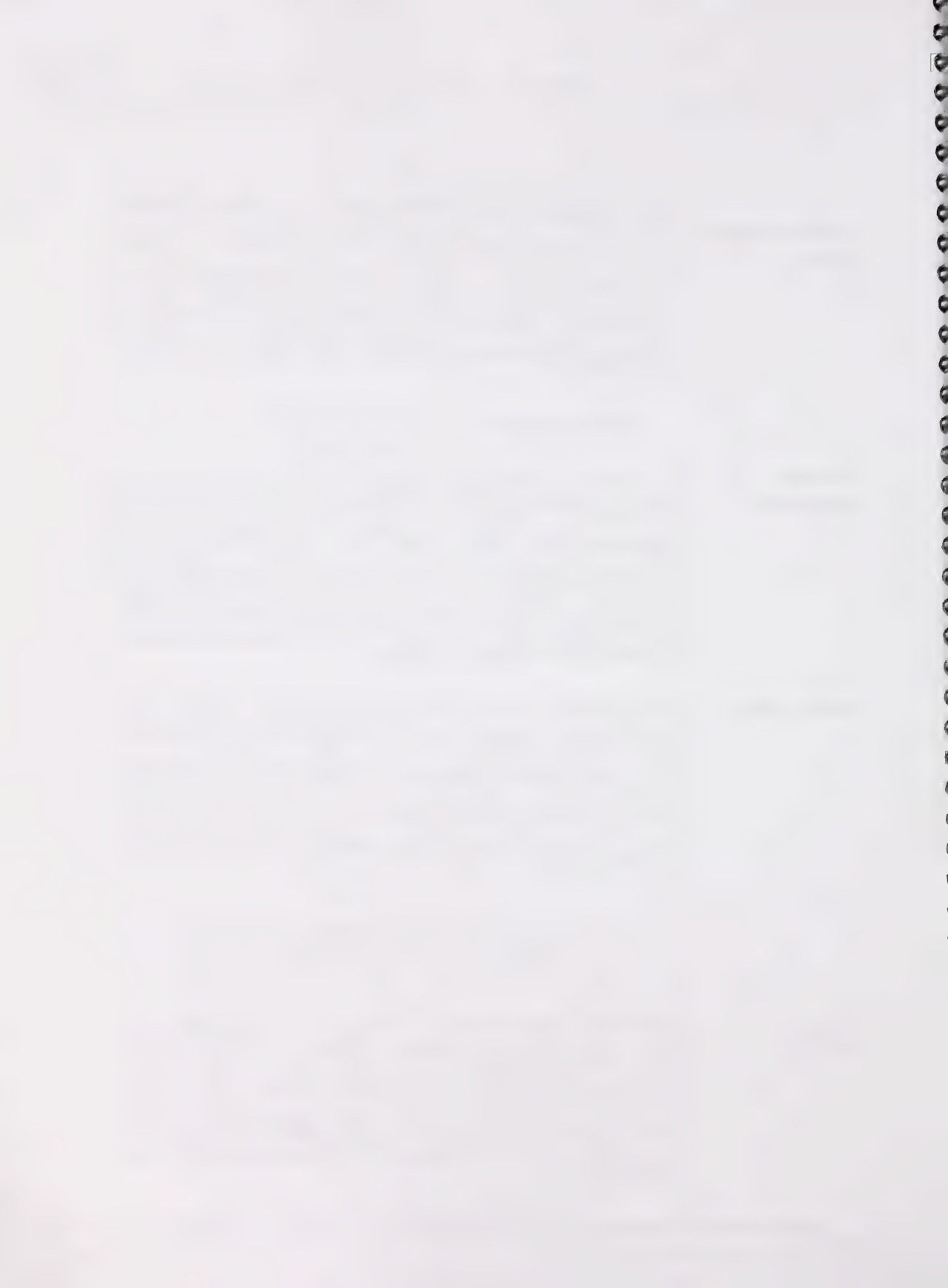
Duration Rate

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: FORESTRY AND RELATED INDUSTRIES WCB INDUSTRY CODES²²

1. Forestry

03100 – Logging and Woodlands Operations, including Trucking of Logs
03902 – Timber Management

2. Forest Products Manufacturing

25100 – Sawmills and Planing Mills
25900 – Peeling and Pointing of Posts
25901 – Treating of Timber
27102 – Pulp Mills
27103 – Plywood, Chipboard, Strandboard and Fibreboard Mills

²² Codes are Workers' Compensation Board industry codes.

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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>

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