

OCCUPATIONAL INJURIES AND DISEASES IN ALBERTA

Lost-Time Claims, Disabling Injury Claims
and Claim Rates

**Manufacturing, Processing and
Packaging Sector**
2006 to 2010



**WORK SAFE
ALBERTA**

Summer 2011

**Government
of Alberta** ■

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HIGHLIGHTS

Lower lost-time and disabling injury rates in 2010.

- The 2010 lost-time claim rate for the Manufacturing, Processing and Packaging sector decreased by 5.1% to 1.55 per 100 person-years worked from 1.64 in 2009. The average lost-time claim rate for all sectors in the province was 1.41 per 100 person-years worked.
- The disabling injury rate decreased by 2.7% in 2010 to 4.21 per 100 person-years worked. The average disabling injury rate for all sectors in the province was 2.67 per 100 person-years worked.
- The decreases in the lost-time claim rate and disabling injury rate in 2010 were the result of decreases in the number of injury claims. Lost-time claims decreased by 4.2% and disabling injury claims by 1.7%. The person-years worked estimates increased by 1.0%.

Largest employers experienced the lowest lost-time claim rate.

- Employers with 100 or more person-years worked had the lowest lost-time claim rate in 2010, at 1.27 per 100 person-years worked. Employers with 10 to 19 person-years worked had the highest lost-time claim rate, at 2.15 per 100 person-years worked, followed by employers with 20 to 39 person-years worked at 1.97.
- Employers with 100 or more person-years worked had the highest disabling injury rate at 4.94 per 100 person-years worked, followed by employers with 20 to 39 person-years worked, 3.82.

Lost-time claim rate decreased in most sub-sectors.

- Lost-time claim rate decreased in eight of eleven Manufacturing, Processing and Packaging sub-sectors.
- The Gases, Fertilizer and Petrochemical - Refining and Manufacturing sub-sector had the lowest lost-time claim and disabling injury rates in 2010 at 0.18 and 0.64 per 100 person-years worked respectively.
- The Manufacturing, Processing and Packaging sector accounted for 9.9% of the person-years worked in the province, 10.9% of the lost-time claims, 17.5% of modified work claims and 15.7% of the disabling injury claims.
- Sprains, strains and tears continued to be the leading nature of injury, accounting for 39.3% of the disabling injury claims submitted in the Manufacturing, Processing and Packaging sector in 2010.

A few notes about this report:

- This report presents 2010 data beside 2009 data to help with comparisons. Additional historical data are presented where possible.
- Information presented in this report is based on incidents that occurred during 2010 and were accepted as lost-time or modified work claims by Workers' Compensation Board – Alberta (WCB) as of March 31, 2011.
- The person-years worked estimates in the *OID 2010 Manufacturing, Processing and Packaging Industries* report have been provided by the WCB back to 2006, thus previous years OID Manufacturing, Processing and Packaging industries report numbers and rates will not be comparable.
- Injury claim rates based on a small number of person-years worked are too volatile to make valid comparisons over time. Therefore, claim rates are not calculated when there are fewer than 40 person-years worked.
- Estimates of year-over-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 total 100, due to rounding.
- Throughout the report, the lost-time claim rate is the number of lost-time claims per 100 person-years worked, the disabling injury rate is the number of disabling injury claims per 100 person-years worked. Fatality rates are expressed as the number of fatalities per million person-years worked.
- Analyses by industry are based on WCB industry classification and aggregation. For more information see the industry rate manual on the WCB website.
- Analyses by occupation group are based on the National Occupational Classification (NOC). The NOC provides a standard list of occupations across the country. For more information see <http://www5.hrsdc.gc.ca/NOC>.
- Occupational injuries and diseases listed throughout this report are based on the Z795 Coding of Work Injury or Disease Information produced by the Canadian Standards Association (CSA) for categorizing occupational injury and disease. For information see <http://www.shopcsa.ca/onlinestore/GetCatalogItemDetails.asp?mat=2416404>.
- Terms, definitions and formulas used throughout this report are described in Appendix A.

INDUSTRY SECTOR SUMMARY

The 2010 lost-time claim rate for the Manufacturing, Processing and Packaging sector was 1.55 per 100 person-years worked and the disabling injury rate was 4.21.

In 2010, there were 2,664 lost-time claims and 7,224 disabling injury claims in the Manufacturing, Processing and Packaging sector. The Manufacturing, Processing and Packaging sector's lost-time claim rate decreased by 5.1% to 1.55 per 100 person-years worked. The disabling injury rate decreased by 2.7% to 4.21 per 100 person-years worked (see Table 1.1). The 2010 lost-time claim rate for all sectors in the province was 1.41 per 100 person-years worked, while the disabling injury rate was 2.67.

The decreases in the lost-time claim and disabling injury rates in 2010 were the result of decreases in the numbers of injury claims. The number of lost-time claims decreased by 4.2% and the number of disabling injury claims decreased by 1.7%.

Table 1.1

Manufacturing, Processing and Packaging Sector — Alberta: 2009 - 2010

| | 2009 | 2010 | % Change |
|--|--------------|---------------------|--------------|
| Person-years worked | 169,705 | 171,448 | 1.0% |
| Lost-time claims | 2,780 | 2,664 | -4.2% |
| Lost-time claim rate | 1.64 | 1.55 | -5.1% |
| Modified-work claims | 6,139 | 6,180 | 0.7% |
| Lost-time claims involving modified work | 1,573 | 1,620 | 3.0% |
| Disabling injury claims | 7,346 | 7,224 | -1.7% |
| Disabling injury rate | 4.33 | 4.21 | -2.7% |
| Days-lost (LTC) | 60,641 | 52,535 | -13.4% |
| Compensation payments (LTC) | \$22,324,441 | \$21,552,082 | -3.5% |

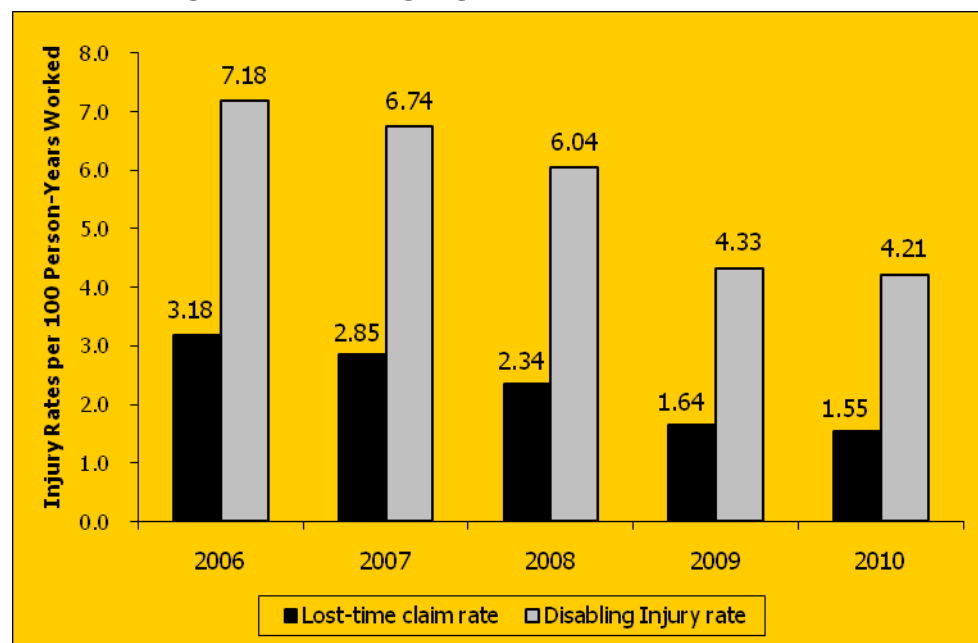
Data Source: WCB Data, Prepared by Data Development and Evaluation

The Manufacturing, Processing and Packaging sector had relatively low median and average days lost at six and 20 respectively, lower than the provincial figures of seven and 23 days per claim.

Since 2006, the average lost-time claim rate for all sectors in the province has decreased by 37.3%. Over the same time period, the Manufacturing, Processing and Packaging sector saw a 51.3% decrease from 3.18 per 100 person-years worked in 2006 to 1.55.

Chart 1.1

Lost-Time Claim and Disabling Injury Rates for the Manufacturing, Processing and Packaging Sector: 2006 - 2010



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

Rates by Employer Size

In the Manufacturing, Processing and Packaging sector, employers with 10 to 19 person-years worked had the highest lost-time claim rate at 2.15 per 100 person-years worked, followed by employers with 20 to 39 person-years worked at 1.97. Employers with 100 or more person-years worked had the lowest lost-time claim rate at 1.27, although the highest disabling injury rate at 4.94 per 100 person-years worked (see Table 1.2).

Table 1.2

Lost-Time Claim and Disabling Injury Rate by Size¹ of Employer — Alberta: 2010

| Size of Employer | Lost-Time Claims | Disabling Injury Claims | Lost-Time Claim Rate | Disabling Injury Rate |
|---------------------------|------------------|-------------------------|----------------------|-----------------------|
| Less than 10 person-years | 339 | 433 | 1.76 | 2.25 |
| 10 to 19 person-years | 254 | 420 | 2.15 | 3.56 |
| 20 to 39 person-years | 338 | 654 | 1.97 | 3.82 |
| 40 to 99 person-years | 478 | 1,115 | 1.55 | 3.61 |
| 100 or more person-years | 1,160 | 4,506 | 1.27 | 4.94 |
| Unspecified* | 95 | 96 | N/A* | N/A* |

*These are employers with no payroll information or with person-years worked equal to zero.

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

¹ Size is measured in terms of person-years worked. One person-year is equivalent to one full-time worker working for one year.

INDUSTRY SECTOR ANALYSIS

In 2010, the Gases, Fertilizer and Petrochemical Refining and Manufacturing sub-sector had the lowest lost-time claim rate and the lowest disabling injury rate.

Between 2006 and 2010, the Gases, Fertilizer and Petrochemical Refining and Manufacturing sub-sector had the lowest lost-time claim and disabling injury rates of all Manufacturing, Processing and Packaging sub-sectors. The Gases, Fertilizer and Petrochemical Refining and Manufacturing sub-sector had the lowest lost-time claim and disabling injury rates in 2010 at 0.18 and 0.64 per 100 person-years worked, respectively. The Furniture and Allied products sub-sector had the highest lost-time claim rate in 2010, at 2.49 per 100 person-years worked. The Industrial Equipment sub-sector displayed the largest decrease since 2006, 63.1%.

Table 2.1

Lost-Time Claim Rate by Manufacturing, Processing and Packaging Sub-Sector — Alberta: 2006 - 2010

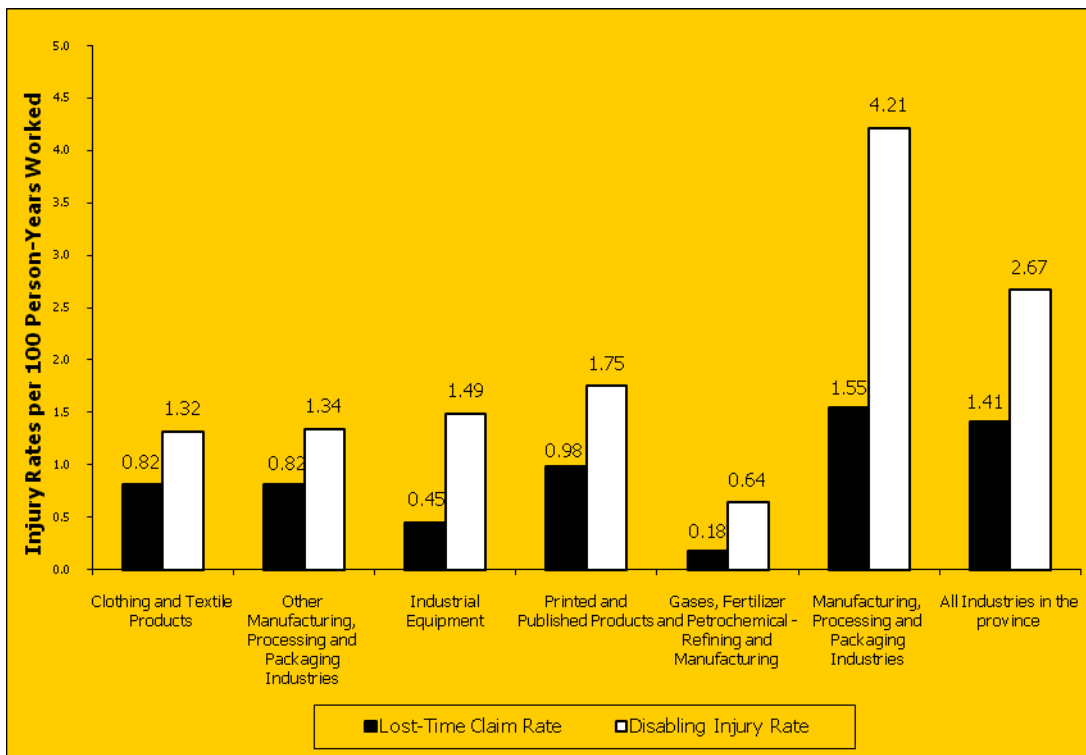
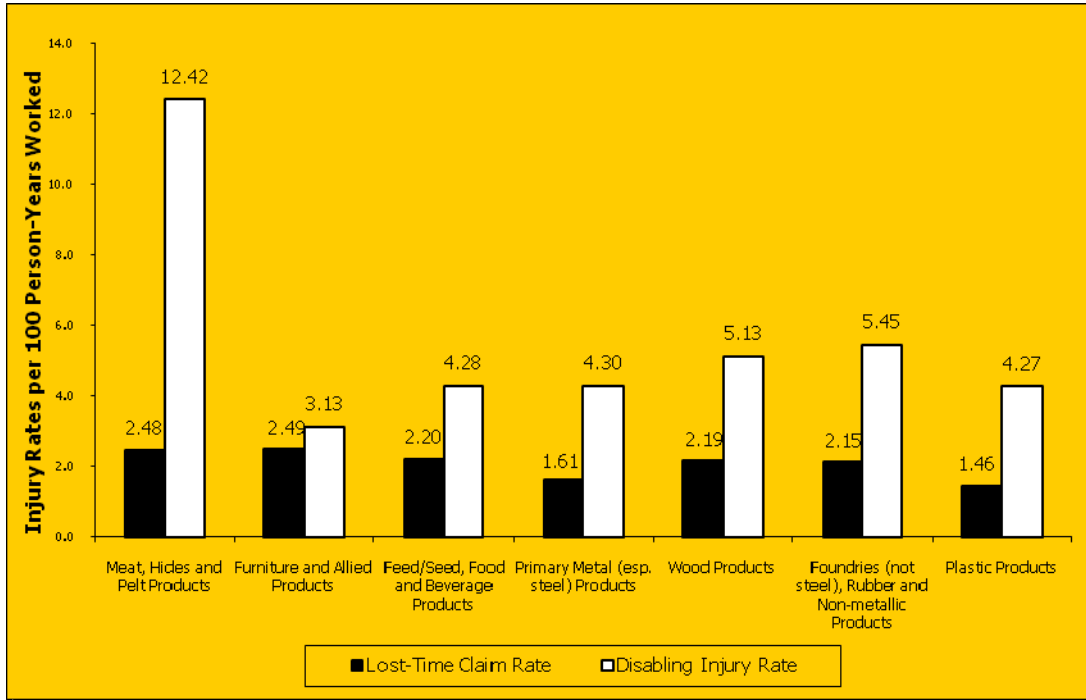
| Sub-Sector | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|------|------|------|------|-------------|
| Manufacturing, Processing and Packaging | 3.18 | 2.85 | 2.34 | 1.64 | 1.55 |
| Meat, Hides and Pelt Products | 6.72 | 5.30 | 3.88 | 2.56 | 2.48 |
| Clothing and Textile Products | 1.54 | 1.27 | 0.89 | 0.72 | 0.82 |
| Feed/Seed, Food and Beverage Products | 3.88 | 3.44 | 3.27 | 2.37 | 2.20 |
| Wood Products | 3.62 | 3.76 | 2.67 | 2.03 | 2.19 |
| Furniture and Allied Products | 4.31 | 4.43 | 2.16 | 3.11 | 2.49 |
| Printed and Published Products | 1.34 | 1.60 | 1.13 | 1.24 | 0.98 |
| Foundries (not steel), Rubber and Non-metallic Products | 3.00 | 2.80 | 2.70 | 2.30 | 2.15 |
| Primary Metal (esp. steel) Products | 3.46 | 2.96 | 2.52 | 1.72 | 1.61 |
| Industrial Equipment | 1.22 | 1.03 | 0.80 | 0.59 | 0.45 |
| Gases, Fertilizer and Petrochemical Refining and Manufacturing | 0.25 | 0.34 | 0.24 | 0.14 | 0.18 |
| Plastic Products | 2.89 | 2.35 | 2.33 | 1.71 | 1.46 |
| Other Manufacturing, Processing and Packaging Industries | 1.44 | 1.60 | 1.41 | 1.00 | 0.82 |

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

In 2010, the Meat, Hides and Pelt Products sub-sector had a disabling injury claim rate of 12.42 per 100 person-years worked, the highest of any Manufacturing, Processing and Packaging sub-sectors (see Chart 2.1). Half of the sub-sectors in the Manufacturing, Processing and Packaging sector had lost-time claim and disabling injury rates higher than the average rates for all sectors of 1.41 and 2.67 per 100 person-years worked.

Chart 2.1

Lost-Time Claim and Disabling Injury Rates by Manufacturing, Processing and Packaging Sub-Sector — Alberta: 2010



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

Meat, Hides and Pelt Products

In 2010, the lost-time claim rate for the Meat, Hides and Pelt Products sub-sector decreased by 3.1% to 2.48 per 100 person-years worked, a result of the number of lost-time claims decreasing by 3.0%. The disabling injury rate decreased by 7.1% in 2010 although it remains the highest in the Manufacturing, Processing and Packaging sector at 12.42 per 100 person-years worked (see Table 2.2).

Since 2006, the lost-time claim rate for this sub-sector decreased by 63.0%. The average decrease for the Manufacturing, Processing and Packaging sector was 51.3%.

Table 2.2

Meat, Hides and Pelt Products — Alberta: 2009 - 2010

| | 2009 | 2010 | % Change |
|--|--------------|--------------------|--------------|
| Person-years worked | 12,909 | 12,915 | 0.0% |
| Lost-time claims | 330 | 320 | -3.0% |
| Lost-time claim rate | 2.56 | 2.48 | -3.1% |
| Modified-work claims | 1,637 | 1,528 | -6.7% |
| Lost-time claims involving modified work | 242 | 244 | 0.8% |
| Disabling injury claims | 1,725 | 1,604 | -7.0% |
| Disabling injury rate | 13.36 | 12.42 | -7.1% |
| Days-lost (LTC) | 4,798 | 4,087 | -14.8% |
| Compensation payments (LTC) | \$2,239,102 | \$1,919,047 | -14.3% |

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

Clothing and Textile Products

In 2010, the lost-time claim rate for the Clothing and Textile Products sub-sector increased by 14.4% to 0.82 per 100 person-years worked, a result of the number of lost-time claims increasing by 27.8% and person-years worked increasing by 11.7%. The disabling injury rate in 2010 was the second lowest of the Manufacturing, Processing and Packaging sub-sectors at 1.32 per 100 person-years worked (see Table 2.3).

Since 2006, the lost-time claim rate for this sub-sector decreased by 46.8%. The average decrease for the Manufacturing, Processing and Packaging sector was 51.3%.

Table 2.3

Clothing and Textile Products — Alberta: 2009 - 2010

| | 2009 | 2010 | % Change |
|--|-------------|-------------|--------------|
| Person-years worked | 2,501 | 2,793 | 11.7% |
| Lost-time claims | 18 | 23 | 27.8% |
| Lost-time claim rate | 0.72 | 0.82 | 14.4% |
| Modified-work claims | 17 | 30 | 76.5% |
| Lost-time claims involving modified work | 6 | 16 | 166.7% |
| Disabling injury claims | 29 | 37 | 27.6% |
| Disabling injury rate | 1.16 | 1.32 | 14.2% |
| Days-lost (LTC) | 621 | 595 | -4.2% |
| Compensation payments (LTC) | \$161,847 | \$149,193 | -7.8% |

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

Feed/Seed, Food and Beverage Products

In 2010, the lost-time claim rate for the Feed/Seed, Food and Beverage Products sub-sector decreased by 7.0% to 2.20 per 100 person-years worked, a result of the number of lost-time claims decreasing by 8.9% and person-years worked decreasing by 2.1%, meaning that proportionately, there were fewer lost-time claims. The disabling injury rate decreased by 13.4% in 2010 to 4.28 per 100 person-years worked (see Table 2.4).

Since 2006, the lost-time claim rate for this sub-sector decreased by 43.3%. The average decrease for the Manufacturing, Processing and Packaging sector was 51.3%.

Table 2.4

Feed/Seed, Food and Beverage Products — Alberta: 2009 - 2010

| | 2009 | 2010 | % Change |
|--|-------------|-------------|---------------|
| Person-years worked | 16,079 | 15,740 | -2.1% |
| Lost-time claims | 381 | 347 | -8.9% |
| Lost-time claim rate | 2.37 | 2.20 | -7.0% |
| Modified-work claims | 654 | 560 | -14.4% |
| Lost-time claims involving modified work | 240 | 233 | -2.9% |
| Disabling injury claims | 795 | 674 | -15.2% |
| Disabling injury rate | 4.94 | 4.28 | -13.4% |
| Days-lost (LTC) | 6,006 | 5,273 | -12.2% |
| Compensation payments (LTC) | \$1,965,633 | \$2,184,151 | 11.1% |

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

Wood Products

The Wood Products sub-sector is the second largest sub-sector in the Manufacturing, Processing and Packaging sector, accounting for 11.3% of the person-years worked. In 2010, the lost-time claim rate increased by 7.8% to 2.19 per 100 person-years worked, a result of the number of lost-time claims increasing by 8.5% and person-years worked increasing by 0.6%, meaning that proportionately there were more lost-time claims. The disabling injury rate in 2010 increased by 6.1% to 5.13 per 100 person-years worked (see Table 2.5).

Since 2006, the lost-time claim rate for this sub-sector decreased by 39.5%. The average decrease for the Manufacturing, Processing and Packaging sector was 51.3%.

Table 2.5

Wood Products — Alberta: 2009 - 2010

| | 2009 | 2010 | % Change |
|--|-------------|--------------------|-------------|
| Person-years worked | 19,209 | 19,326 | 0.6% |
| Lost-time claims | 390 | 423 | 8.5% |
| Lost-time claim rate | 2.03 | 2.19 | 7.8% |
| Modified-work claims | 761 | 832 | 9.3% |
| Lost-time claims involving modified work | 223 | 264 | 18.4% |
| Disabling injury claims | 928 | 991 | 6.8% |
| Disabling injury rate | 4.83 | 5.13 | 6.1% |
| Days-lost (LTC) | 9,151 | 10,214 | 11.6% |
| Compensation payments (LTC) | \$3,658,469 | \$4,272,337 | 16.8% |

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

Furniture and Allied Products

In 2010, the lost-time claim rate for the Furniture and Allied Products sub-sector decreased by 19.9% to 2.49 per 100 person-years worked, a result of the number of lost-time claims decreasing by 20.3% and person-years worked decreasing by 0.4%. The disabling injury rate in 2010 decreased by 31.6% to 3.13 per 100 person-years worked (see Table 2.6).

Since 2006, the lost-time claim rate for this sub-sector decreased by 42.2%. The average decrease for the Manufacturing, Processing and Packaging sector was 51.3%.

Table 2.6

Furniture and Allied Products — Alberta: 2009 - 2010

| | 2009 | 2010 | % Change |
|--|-------------|-------------|---------------|
| Person-years worked | 2,539 | 2,528 | -0.4% |
| Lost-time claims | 79 | 63 | -20.3% |
| Lost-time claim rate | 3.11 | 2.49 | -19.9% |
| Modified-work claims | 75 | 45 | -40.0% |
| Lost-time claims involving modified work | 38 | 29 | -23.7% |
| Disabling injury claims | 116 | 79 | -31.9% |
| Disabling injury rate | 4.57 | 3.13 | -31.6% |
| Days-lost (LTC) | 2,177 | 3,202 | 47.1% |
| Compensation payments (LTC) | \$792,547 | \$1,127,022 | 42.2% |

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

Printed and Published Products

In 2010, the lost-time claim rate for the Printed and Published Products sub-sector decreased by 21.1% to 0.98 per 100 person-years worked, a result of the number of lost-time claims decreasing by 20.5% and person-years worked increasing by 0.8%. The disabling injury rate decreased in 2010 by 17.8% to 1.75 per 100 person-years worked and the number of disabling injury claims decreased by 17.4% (see Table 2.7).

Since 2006, the lost-time claim rate for this sub-sector decreased by 26.9%. The average decrease for the Manufacturing, Processing and Packaging sector was 51.3%.

Table 2.7

Printed and Published Products — Alberta: 2009 - 2010

| | 2009 | 2010 | % Change |
|--|-------------|-------------|---------------|
| Person-years worked | 10,227 | 10,304 | 0.8% |
| Lost-time claims | 127 | 101 | -20.5% |
| Lost-time claim rate | 1.24 | 0.98 | -21.1% |
| Modified-work claims | 151 | 132 | -12.6% |
| Lost-time claims involving modified work | 60 | 53 | -11.7% |
| Disabling injury claims | 218 | 180 | -17.4% |
| Disabling injury rate | 2.13 | 1.75 | -17.8% |
| Days-lost (LTC) | 2,938 | 1,804 | -38.6% |
| Compensation payments (LTC) | \$725,514 | \$557,760 | -23.1% |

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

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

In 2010, the lost-time claim rate for the Foundries, Rubber and Non-metallic Products sub-sector decreased by 6.6% to 2.15 per 100 person-years worked, a result of the number of lost-time claims decreasing by 0.6% and person-years worked increasing by 6.5%. The disabling injury rate in 2010 increased by 10.3% to 5.45 per 100 person-years worked (see Table 2.8).

Since 2006, the lost-time claim rate for this sub-sector decreased by 28.3%. The average decrease for the Manufacturing, Processing and Packaging sector was 51.3%.

Table 2.8

Foundries (not Steel), Rubber and Non-Metallic products – Alberta:
2009 - 2010

| | 2009 | 2010 | % Change |
|--|-------------|-------------|--------------|
| Person-years worked | 7,206 | 7,672 | 6.5% |
| Lost-time claims | 166 | 165 | -0.6% |
| Lost-time claim rate | 2.30 | 2.15 | -6.6% |
| Modified-work claims | 290 | 351 | 21.0% |
| Lost-time claims involving modified work | 100 | 98 | -2.0% |
| Disabling injury claims | 356 | 418 | 17.4% |
| Disabling injury rate | 4.94 | 5.45 | 10.3% |
| Days-lost (LTC) | 4,322 | 4,511 | 4.4% |
| Compensation payments (LTC) | \$1,529,024 | \$2,151,443 | 40.7% |

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

Primary Metal (esp. Steel) Products

The Primary Metal Products sub-sector is the largest of the Manufacturing, Processing and Packaging sub-sectors, accounting for 36.3% of the total person-years worked. In 2010, the lost-time claim rate decreased by 6.6% to 1.61 per 100 person-years worked, a result of the number of lost-time claims decreasing by 3.0% and person-years worked increasing by 3.8%. The disabling injury rate in 2010 increased by 1.8% to 4.30 per 100 person-years worked (see Table 2.9).

Since 2006, the lost-time claim rate for this sub-sector decreased by 53.5%. The average decrease for the Manufacturing, Processing and Packaging sector was 51.3%.

Table 2.9

Primary Metal (esp. Steel) Products — Alberta: 2009 - 2010

| | 2009 | 2010 | % Change |
|--|-------------|-------------|--------------|
| Person-years worked | 59,953 | 62,255 | 3.8% |
| Lost-time claims | 1,033 | 1,002 | -3.0% |
| Lost-time claim rate | 1.72 | 1.61 | -6.6% |
| Modified-work claims | 2,011 | 2,218 | 10.3% |
| Lost-time claims involving modified work | 511 | 543 | 6.3% |
| Disabling injury claims | 2,533 | 2,677 | 5.7% |
| Disabling injury rate | 4.22 | 4.30 | 1.8% |
| Days-lost (LTC) | 24,450 | 18,982 | -22.4% |
| Compensation payments (LTC) | \$8,785,485 | \$7,569,939 | -13.8% |

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

Industrial Equipment

In 2010, the lost-time claim rate for the Industrial Equipment sub-sector decreased by 24.1% to 0.45 per 100 person-years worked, a result of the number of lost-time claims decreasing by 25.8% and person-years worked decreasing by 2.1%, meaning that proportionately there were fewer lost-time claims. The disabling injury rate in 2010 decreased by 30.2% to 1.49 per 100 person-years worked (see Table 2.10).

Since 2006, the lost-time claim rate for this sub-sector decreased by 63.1%. The average decrease for the Manufacturing, Processing and Packaging sector was 51.3%.

Table 2.10

Industrial Equipment — Alberta: 2009 - 2010

| | 2009 | 2010 | % Change |
|--|-------------|-------------|---------------|
| Person-years worked | 11,212 | 10,971 | -2.1% |
| Lost-time claims | 66 | 49 | -25.8% |
| Lost-time claim rate | 0.59 | 0.45 | -24.1% |
| Modified-work claims | 215 | 148 | -31.2% |
| Lost-time claims involving modified work | 41 | 33 | -19.5% |
| Disabling injury claims | 240 | 164 | -31.7% |
| Disabling injury rate | 2.14 | 1.49 | -30.2% |
| Days-lost (LTC) | 1,542 | 975 | -36.8% |
| Compensation payments (LTC) | \$596,956 | \$539,032 | -9.7% |

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

Gases, Fertilizer and Petrochemical – Refining and Manufacturing

In 2010, the lost-time claim rate for the Gases, Fertilizer and Petrochemical – Refining and Manufacturing sub-sector increased from 0.14 in 2009 to 0.18 per 100 person-years worked. The disabling injury rate in 2010 increased from 0.36 to 0.64 per 100 person-years worked (see Table 2.11). The lost-time claim rate and the disabling injury rate for the Gases, Fertilizer and Petrochemical – Refining and Manufacturing sub-sector remain the lowest of the Manufacturing, Processing and Packaging sub-sectors.

Since 2006, the lost-time claim rate for this sub-sector decreased by 28.0%. The average decrease for the Manufacturing, Processing and Packaging sector was 51.3%.

Table 2.11

Gases, Fertilizer and Petrochemical – Refining and Manufacturing
— Alberta: 2009 - 2010

| | 2009 | 2010 | % Change |
|--|-------------|------------------|--------------|
| Person-years worked | 13,395 | 11,978 | -10.6% |
| Lost-time claims | 19 | 22 | 15.8% |
| Lost-time claim rate | 0.14 | 0.18 | 28.6% |
| Modified-work claims | 41 | 69 | 68.3% |
| Lost-time claims involving modified work | 12 | 14 | 16.7% |
| Disabling injury claims | 48 | 77 | 60.4% |
| Disabling injury rate | 0.36 | 0.64 | 77.8% |
| Days-lost (LTC) | 575 | 393 | -31.7% |
| Compensation payments (LTC) | \$686,343 | \$310,356 | -54.8% |

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

Plastic Products

In 2010, the lost-time claim rate for the Plastic Products industry decreased by 15.1% to 1.46 per 100 person-years worked, the result of the number of the lost-time claims decreasing by 3.2% and person-years worked increasing by 14.0%. The disabling injury rate in 2010 decreased by 10.8% to 4.27 per 100 person-years worked (see Table 2.12).

Since 2006, the lost-time claim rate for this industry decreased by 49.5%. The average decrease for the Manufacturing, Processing and Packaging sector was 51.3%.

Table 2.12
Plastic Products — Alberta: 2009 - 2010

| | 2009 | 2010 | % Change |
|--|-------------|------------------|---------------|
| Person-years worked | 3,675 | 4,190 | 14.0% |
| Lost-time claims | 63 | 61 | -3.2% |
| Lost-time claim rate | 1.71 | 1.46 | -15.1% |
| Modified-work claims | 153 | 165 | 7.8% |
| Lost-time claims involving modified work | 40 | 47 | 17.5% |
| Disabling injury claims | 176 | 179 | 1.7% |
| Disabling injury rate | 4.79 | 4.27 | -10.8% |
| Days-lost (LTC) | 1,007 | 527 | -47.7% |
| Compensation payments (LTC) | \$318,042 | \$221,658 | -30.3% |

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

DEMOGRAPHICS OF INJURED WORKERS

Injured Worker Characteristics

In 2010, the Labourers in Processing, Manufacturing and Utilities group had the highest proportion of lost-time claims and disabling injury claims in the Manufacturing, Processing and Packaging sector at 18.1% and 19.0%. The Trades Helpers, Construction, and Transportation Labourers and Related Occupations group had the largest difference between their proportion of lost-time claims and proportion of those in employment at 14.1% and 2.9%, indicating these workers were more likely to be injured than other occupational groups in this sector. In contrast, Assemblers in Manufacturing accounted for 2.2% of lost-time claims, 2.3% of disabling injury claims, and 8.0% of those in employment (see Table 3.1).

Table 3.1

Lost-Time, Disabling Injury Claims and Employment by Selected Occupation Group — Alberta: 2010

| Occupation Group | Lost-time Claims | Disabling Injury Claims | Employment |
|--|------------------|-------------------------|------------|
| Machinists, Metal Forming, Shaping and Erecting Occupations | 18.0% | 16.3% | 7.6% |
| Labourers in Processing, Manufacturing and Utilities | 18.1% | 19.0% | 6.8% |
| Trades Helpers, Construction, and Transportation Labourers and Related Occupations | 14.1% | 13.7% | 2.9% |
| Machine Operators in Manufacturing | 9.7% | 16.4% | 15.7% |
| Clerical Occupations | 6.0% | 4.7% | 8.6% |
| Construction Trades | 6.8% | 5.5% | 2.5% |
| Assemblers in Manufacturing | 2.2% | 2.3% | 8.0% |
| Transportation Equipment Operators and Related Workers, Excluding Labourers | 5.6% | 4.0% | 1.5% |
| Sales & Service Occupations N.E.C. | 3.4% | 3.1% | 1.6% |

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

In 2010, workers aged more than 55 years accounted for 14.6% of lost-time claims, 10.4% of disabling injury claims, and 14.9% of employment². Young workers aged between 15 and 24 accounted for 13.7% of lost-time claims and 15.5% of disabling injury claims, while representing only 11.7% of those in employment, indicating that young workers are more likely to be injured on the job in the Manufacturing, Processing and Packaging sector³ (see Table 3.2).

Table 3.2

Lost-Time and Disabling Injury Claims by Age — Alberta: 2009 - 2010

| Age | 2009 | | | | 2010 | | | |
|--------------|------------------|---------------|-------------------------|---------------|------------------|---------------|-------------------------|---------------|
| | Lost-Time Claims | % | Disabling Injury Claims | % | Lost-Time Claims | % | Disabling Injury Claims | % |
| 15-19 Years | 91 | 3.3% | 235 | 3.2% | 97 | 3.6% | 263 | 3.6% |
| 20-24 Years | 282 | 10.1% | 825 | 11.2% | 269 | 10.1% | 855 | 11.8% |
| 25-34 Years | 668 | 24.0% | 2,142 | 29.2% | 621 | 23.3% | 1,963 | 27.2% |
| 35-44 Years | 672 | 24.2% | 1,875 | 25.5% | 602 | 22.6% | 1,771 | 24.5% |
| 45-54 Years | 690 | 24.8% | 1,547 | 21.1% | 687 | 25.8% | 1,624 | 22.5% |
| 55-64 Years | 315 | 11.3% | 632 | 8.6% | 325 | 12.2% | 659 | 9.1% |
| 65+ Years | 62 | 2.2% | 89 | 1.2% | 63 | 2.4% | 89 | 1.2% |
| Unspecified | 0 | N/A | 1 | N/A | 0 | N/A | 0 | N/A |
| Total | 2,780 | 100.0% | 7,346 | 100.0% | 2,664 | 100.0% | 7,224 | 100.0% |

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

In the Manufacturing, Processing and Packaging sector, the majority of claims were from men. In 2010, 85.3% of lost-time and 86.0% of disabling injury claims involved men, while they comprised 75.9% of those employed (see Table 3.3)⁴.

Table 3.3

Lost-Time and Disabling Injury Claims by Gender — Alberta: 2009 - 2010

| Gender | 2009 | | | | 2010 | | | |
|--------------|------------------|---------------|-------------------------|---------------|------------------|---------------|-------------------------|---------------|
| | Lost-Time Claims | % | Disabling Injury Claims | % | Lost-Time Claims | % | Disabling Injury Claims | % |
| Women | 442 | 15.9% | 1,093 | 14.9% | 391 | 14.7% | 1,013 | 14.0% |
| Men | 2,338 | 84.1% | 6,228 | 85.1% | 2,273 | 85.3% | 6,200 | 86.0% |
| Unspecified | 0 | N/A | 25 | N/A | 0 | N/A | 11 | N/A |
| Total | 2,780 | 100.0% | 7,346 | 100.0% | 2,664 | 100.0% | 7,224 | 100.0% |

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

² Statistics Canada's Labour Force Survey (2010 Historical Review).

³ See the *Occupational Injuries and Diseases in Alberta Young Workers* publication.

⁴ Statistics Canada's Labour Force Survey (2010 Historical Review).

INJURY AND DISEASE ANALYSIS

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

Nature of Injury or Disease

The nature of injury is used to identify the physical characteristics of the injury or disease. In 2010, 91.6% of lost-time and 94.0% 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 surface wounds and bruises (see Table 4.1).

Note 6.1

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

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

Table 4.1
Nature of Injury or Disease — Alberta: 2010

| Nature of Injury | Lost-Time Claims | % | Disabling Injury claims | % |
|--|------------------|-----------------|-------------------------|-----------------|
| Traumatic Injuries and Disorders | 2,440 | 91.6% | 6,791 | 94.0% |
| Sprains, Strains and Tears | 1,067 | 40.1% | 2,841 | 39.3% |
| Surface Wounds and Bruises | 362 | 13.6% | 1,125 | 15.6% |
| Open Wounds | 337 | 12.7% | 1,083 | 15.0% |
| Fractures and Dislocations | 267 | 10.0% | 497 | 6.9% |
| Burns | 65 | 2.4% | 156 | 2.2% |
| Other Traumatic Injuries and Disorders | 342 | 12.8% | 1,089 | 15.1% |
| Systemic Diseases and Disorders | 213 | 8.0% | 408 | 5.6% |
| Neoplasms, Tumors and Cancer | 1 | <0.1% | 1 | <0.1% |
| Infectious and Parasitic Disorders | 3 | 0.1% | 3 | <0.1% |
| Symptoms, Signs and Ill-Defined Conditions | 5 | 0.2% | 10 | 0.1% |
| Multiple Diseases, Conditions and Disorders | 0 | 0.0% | 0 | 0.0% |
| Other Diseases, Conditions and Disorders | 2 | 0.1% | 2 | <0.1% |
| Nature of Injury - Unknown | 0 | 0.0% | 9 | 0.1% |
| Total | 2,664 | 100.0% | 7,224 | 100.0% |

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

Part of Body Injured

In 2010, the back (including spine and spinal cord) was the most commonly injured body part, accounting for 22.3% of lost-time claims in the Manufacturing, Processing and Packaging sector and 18.7% of disabling injury claims. This was followed by injuries to the fingers and fingernails, accounting for 13.1% and 17.4% of lost-time claims and disabling injury claims, and other trunk, 12.8% and 13.0% respectively (see Table 4.2).

Table 4.2

Part of Body Injured — Alberta: 2010

| Part of Body Injured | Lost-Time Claims | % | Disabling Injury Claims | % |
|---------------------------------------|------------------|---------------|-------------------------|-----------------|
| Trunk | 935 | 35.1% | 2,290 | 31.7% |
| Back, Including Spine, Spinal Cord | 593 | 22.3% | 1,350 | 18.7% |
| Other Trunk | 342 | 12.8% | 940 | 13.0% |
| Upper Extremities | 750 | 28.2% | 2,802 | 38.8% |
| Finger(s), Fingernail(s) | 350 | 13.1% | 1,256 | 17.4% |
| Wrist(s) and Hand(s) Except Finger(s) | 248 | 9.3% | 970 | 13.4% |
| Other Upper Extremities | 152 | 5.7% | 576 | 8.0% |
| Lower Extremities | 491 | 18.4% | 1,129 | 15.6% |
| Leg(s) | 258 | 9.7% | 575 | 8.0% |
| Ankle(s) and Foot (Feet) Except Toes | 217 | 8.1% | 520 | 7.2% |
| Other Lower Extremities | 16 | 0.6% | 34 | 0.5% |
| Head | 313 | 11.7% | 578 | 8.0% |
| Eye(s) | 133 | 5.0% | 291 | 4.0% |
| Other Head Parts | 180 | 6.8% | 287 | 4.0% |
| Multiple Body Parts | 122 | 4.6% | 301 | 4.2% |
| Neck, Including Throat | 42 | 1.6% | 105 | 1.5% |
| Body Systems | 11 | 0.4% | 18 | 0.2% |
| Part of Body - Unknown | 0 | 0.0% | 1 | <0.1% |
| Other Body Parts | 0 | 0.0% | 0 | 0.0% |
| Total | 2,664 | 100.0% | 7,224 | 100.0% |

Data Source: 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 2010, persons, plants, animals and minerals accounted for 18.8% of lost-time claims and 23.4% of disabling injury claims. Parts and materials accounted for 20.6% and 21.4% respectively (see Table 4.3).

Table 4.3

Source of Injury or Disease Alberta: 2010

| Source of Injury | Lost-Time Claims | % | Disabling Injury Claims | % |
|--|------------------|---------------|-------------------------|---------------|
| Persons, Plants, Animals and Minerals | 500 | 18.8% | 1,692 | 23.4% |
| Person-Injured or Ill Worker | 442 | 16.6% | 1,456 | 20.2% |
| Minerals - Metallic or Nonmetallic (except fuel) | 7 | 0.3% | 13 | 0.2% |
| Person-Other Than Injured or Ill Worker* | 7 | 0.3% | 12 | 0.2% |
| Other Persons, Plants, Animals & Minerals | 44 | 1.7% | 211 | 2.9% |
| Parts and Materials | 549 | 20.6% | 1,546 | 21.4% |
| Structures and Surfaces | 397 | 14.9% | 855 | 11.8% |
| Containers** | 247 | 9.3% | 631 | 8.7% |
| Tools, Instruments and Equipment | 235 | 8.8% | 868 | 12.0% |
| Hand Tools - Nonpowered | 98 | 3.7% | 457 | 6.3% |
| Hand Tools - Powered | 45 | 1.7% | 128 | 1.8% |
| Other Tools and Equipments | 92 | 3.5% | 283 | 3.9% |
| Machinery | 253 | 9.5% | 502 | 6.9% |
| Vehicles | 107 | 4.0% | 237 | 3.3% |
| Furniture and Fixtures | 58 | 2.2% | 152 | 2.1% |
| Chemicals and Chemical Products | 35 | 1.3% | 73 | 1.0% |
| Other Sources | 252 | 9.5% | 537 | 7.4% |
| Source of Injury - Unknown | 31 | 1.2% | 131 | 1.8% |
| Total | 2,664 | 100.0% | 7,224 | 100.0% |

*Person – other than injured or ill worker: classifies workplace 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: WCB Data, Prepared by Data Development and Evaluation

Type of Event or Exposure

The two most common types of event or exposure comprising around three-quarters of the total lost-time and disabling injury claims in the Manufacturing, Processing and Packaging sector in 2010 were bodily reaction or exertion, and contact with objects and equipment (see Table 4.4). Bodily reaction accounted for 39.3% of the lost-time claims and 42.3% of the disabling injury claims. Contact with objects and equipment accounted for 35.4% and 39.0% respectively.

Table 4.4

Type of Event or Exposure — Alberta: 2010

| Type of Event or Exposure | Lost-Time Claims | % | Disabling Injury Claims | % |
|--|------------------|---------------|-------------------------|---------------|
| Bodily Reaction or Exertion | 1,048 | 39.3% | 3,059 | 42.3% |
| Overexertion | 550 | 20.6% | 1,450 | 20.1% |
| Bodily Reaction* | 273 | 10.2% | 717 | 9.9% |
| Repetitive Motion | 133 | 5.0% | 621 | 8.6% |
| Other Bodily Reaction/Exertion | 92 | 3.5% | 271 | 3.8% |
| Contact with Objects or Equipment | 944 | 35.4% | 2,819 | 39.0% |
| Struck by Object | 476 | 17.9% | 1,425 | 19.7% |
| Caught in Object | 231 | 8.7% | 663 | 9.2% |
| Struck against Object | 130 | 4.9% | 411 | 5.7% |
| Rubbed or Abraded | 47 | 1.8% | 120 | 1.7% |
| Other Contact with Object/Equipment | 60 | 2.3% | 200 | 2.8% |
| Falls | 399 | 15.0% | 827 | 11.4% |
| Fall on Same Level | 272 | 10.2% | 590 | 8.2% |
| Fall to Lower Level | 106 | 4.0% | 190 | 2.6% |
| Other Falls | 21 | 0.8% | 47 | 0.7% |
| Exposure to Harmful Substances | 191 | 7.2% | 320 | 4.4% |
| Transportation Accidents | 50 | 1.9% | 97 | 1.3% |
| Assaults and Violent Acts | 9 | 0.3% | 21 | 0.3% |
| Assaults and Violent Acts by Person(s) | 6 | 0.2% | 7 | 0.1% |
| Other Assaults and Violent Acts | 3 | 0.1% | 14 | 0.2% |
| Fires and Explosions | 7 | 0.3% | 15 | 0.2% |
| Type of Event - Unknown | 16 | 0.6% | 66 | 0.9% |
| Total | 2,664 | 100.0% | 7,224 | 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: WCB Data, Prepared by Data Development and Evaluation

Days-lost due to Disability

In 2010, lost-time claims with days-lost between one and ten days accounted for 54.0% of all claims, compared with 51.5% for all sectors in the province. Lost-time claims resulting in 31 days or more lost accounted for 19.5% of all lost-time claims in the Manufacturing, Processing and Packaging sector (see Table 4.5). For all sectors in the province, 22.2% of claimants were unable to work for 31 days or more.

Table 4.5

Days-lost due to Disability — Alberta: 2010

| Days-lost due to Disability | % of Manufacturing, Processing and Packaging Sector's Lost-Time Claims | % of Lost-Time Claims in the Province |
|-----------------------------|--|---------------------------------------|
| 1-5 Days | 40.1% | 37.9% |
| 6-10 Days | 13.9% | 13.6% |
| 11-15 Days | 6.6% | 7.5% |
| 16-20 Days | 4.9% | 4.9% |
| 21-30 Days | 5.8% | 6.5% |
| 31-40 Days | 4.9% | 4.7% |
| 41-50 Days | 3.1% | 3.5% |
| 51 Days or More | 11.6% | 13.9% |
| Unspecified | 9.2% | 7.4% |

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

OCCUPATIONAL FATALITIES

In 2010, the WCB accepted 15 fatalities in the Manufacturing, Processing and Packaging industries, accounting for 11.0% of all 136 fatalities in the province.

In 2010, six of the fatalities accepted by WCB in the Manufacturing, Processing and Packaging industries were workplace incidents and nine were occupational disease incidents (see Table 5.1).

Table 5.1

Types of Occupational Fatalities Accepted by the WCB –
Alberta: 2006 - 2010

| Year | Motor Vehicle Incident | | Workplace Incident | | Occupational Disease | | Total |
|-------------|------------------------|-------------|----------------------|--------------|----------------------|--------------|----------------------|
| | Number of Fatalities | % | Number of Fatalities | % | Number of Fatalities | % | Number of Fatalities |
| 2006 | 2 | 13.3% | 5 | 33.3% | 8 | 53.3% | 15 |
| 2007 | 3 | 13.6% | 4 | 18.2% | 15 | 68.2% | 22 |
| 2008 | 4 | 22.2% | 2 | 11.1% | 12 | 66.7% | 18 |
| 2009 | 2 | 11.8% | 3 | 17.6% | 12 | 70.6% | 17 |
| 2010 | 0 | 0.0% | 6 | 40.0% | 9 | 60.0% | 15 |
| Total | 11 | 12.6% | 20 | 23.0% | 56 | 64.4% | 87 |

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

Between 2006 and 2010, the WCB accepted 87 fatalities in the Manufacturing, Processing and Packaging industries. The Primary Metal (especially Steel) Products sub-sector had the most with 34 fatalities, accounting for 39.1% of all the fatalities in the Manufacturing, Processing and Packaging industries (see Table 5.2).

Table 5.2

Manufacturing, Processing and Packaging Occupational Fatalities Accepted by the WCB by Sub-Sector – Alberta: 2006 - 2010

| Sub-Sector | 2006 | 2007 | 2008 | 2009 | 2010 | Number of Fatalities | % |
|--|-----------|-----------|-----------|-----------|-----------|----------------------|---------------|
| Feed/Seed, Food and Beverage Products | 1 | 2 | 0 | 1 | 2 | 6 | 6.9% |
| Foundries (not steel), Rubber and Non-metallic Products | 1 | 3 | 0 | 1 | 2 | 7 | 8.0% |
| Furniture and Allied Products | 0 | 0 | 1 | 1 | 1 | 3 | 3.4% |
| Gases, Fertilizer and Petrochemical Refining and Manufacturing | 1 | 3 | 8 | 2 | 4 | 18 | 20.7% |
| Industrial Equipment | 1 | 1 | 1 | 1 | 0 | 4 | 4.6% |
| Meat, Hides and Pelt Products | 1 | 0 | 0 | 1 | 0 | 2 | 2.3% |
| Other Manufacturing, Processing and Packaging Industries | 1 | 0 | 0 | 0 | 0 | 1 | 1.1% |
| Primary Metal (esp. steel) Products | 8 | 9 | 6 | 8 | 3 | 34 | 39.1% |
| Printed and Published Products | 0 | 1 | 1 | 1 | 1 | 4 | 4.6% |
| Wood Products | 1 | 3 | 1 | 1 | 2 | 8 | 9.2% |
| Manufacturing, Processing and Packaging Sector | 15 | 22 | 18 | 17 | 15 | 87 | 100.0% |

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

CERTIFICATE OF RECOGNITION

A Certificate of Recognition (COR) is given to employers who develop health and safety programs that meet established standards. Certificates are jointly issued by Certifying Partners and E&I⁵.

In 2010, 7.0% of employers in the Manufacturing, Processing and Packaging sector were COR holders. These employers accounted for 53.2% of all person-years worked in the Manufacturing, Processing and Packaging sector. The Foundries (not steel), Rubber and Non-metallic Products sub-sector had the highest proportion with 23.7% of employers in this sub-sector holding a valid COR in 2010, covering 71.5% of person-years worked in this sub-sector (see Table 6.1).

Table 6.1

Employers With Valid COR — Alberta: 2010

| Sub-Sector | % of Total Employers Certified | % of Total Person-Years Certified |
|--|--------------------------------|-----------------------------------|
| Manufacturing, Processing and Packaging Sector | 7.0% | 53.2% |
| Clothing and Textile Products | 1.8% | 7.2% |
| Feed/Seed, Food and Beverage Products | 6.1% | 46.9% |
| Foundries (not steel), Rubber and Non-metallic Products | 23.7% | 71.5% |
| Furniture and Allied Products | 0.9% | 17.4% |
| Gases, Fertilizer and Petrochemical - Refining and Manufacturing | 20.2% | 69.7% |
| Industrial Equipment | 19.1% | 52.8% |
| Meat, Hides and Pelt Products | 11.0% | 81.8% |
| Other Manufacturing, Processing and Packaging | 2.7% | 16.1% |
| Plastic Products | 13.3% | 52.4% |
| Primary Metal (especially steel) Products | 6.8% | 52.4% |
| Printed and Published Products | 2.0% | 25.6% |
| Wood Products | 10.2% | 70.2% |

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

In the Manufacturing, Processing and Packaging sector, the lost-time claim rate for COR holders was 1.36 per 100 person-years worked in 2010, while the rate for non-COR holders

⁵ For more information on the COR program visit <http://www.employment.alberta.ca/SFW/334.html>

was 1.79. For disabling injury rates, COR holders had a rate of 5.20 per 100 person-years worked, while the rate for non-COR holders was 3.15 (see Table 6.2).

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, with this group seeing continued improvement in their lost-time claim rates. Some non-COR holders have good programs in place above this standard, whereas others do not. This makes evaluating improving health and safety trends less clear for this group.

Table 6.2

Lost-Time Claim and Disabling Injury Rates for Manufacturing, Processing and Packaging COR Holders — Alberta: 2009 - 2010

| Employer | Year | Number of Accounts | 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 | 2009 | 964 | 1,273 | 4,573 | 1.47 | 5.27 | -7.5% | -1.3% |
| | 2010 | 963 | 1,235 | 4,712 | 1.36 | 5.20 | | |
| Non-COR | 2009 | 13,462 | 1,590 | 2,824 | 1.93 | 3.43 | -7.3% | -8.2% |
| | 2010 | 12,876 | 1,429 | 2,512 | 1.79 | 3.15 | | |

Data Source: WCB Data, Prepared Data Development and Evaluation

REFERENCES

Alberta Employment and Immigration. “Occupational Injuries and Diseases in Alberta 2010 Summary”

Canadian Standards Association. Z795-03: Coding of Work Injury or Disease Information, June 2003.

Statistics Canada. “Guide to the Labour Force Survey” 2010.

The Workers’ Compensation Board - Alberta. “Rate and Industry Description Manual”.

Occupational Injuries and Diseases in Alberta 2010 Young Workers report.

APPENDIX A: TERMS, DEFINITIONS AND FORMULAS

| | |
|------------------------|---|
| Lost-Time Claim | A lost-time claim (LTC) is a claim for an occupational injury or disease that causes the worker to have time away from work beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function. |
| Modified Work Claim | A modified work claim is a claim for an occupational injury or disease where a worker had their normal work duties altered to enable them to remain working without losing time from work. Also included are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease. |
| Disabling Injury Claim | Disabling injury (DI) claims combine both the lost-time and modified work concepts to produce an overall figure where an occupational injury or disease disables the worker causing either time-lost from work or for their normal work duties to be modified. |
| Person-Years Worked | Person-years worked are estimates provided by the WCB. One person-year is equivalent to one full-time worker working for one year, and can be assumed to equal 2,000 hours worked. The person-years worked estimates in the <i>OID 2010 Manufacturing, Processing and Packaging Industries</i> report have been provided by the WCB back to 2006, thus previous years OID Manufacturing, Processing and Packaging industries report numbers and rates will not be comparable. |
| Lost-Time Claim Rate | The lost-time claim rate is calculated by dividing the number of lost-time claims by the person-years worked 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. |

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

**Disabling
Injury Rate**

The disabling injury rate is calculated by dividing the number of disabling injury claims by the person-years worked 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 worked and includes claims made for both lost-time and modified work.

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

Days-lost

The days-lost 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 and Immigration 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 days-lost information reported here underestimates the true impact of lost-time injury and disease, although it provides a consistent method for reporting and observing trends in days-lost.

**Industry
Coverage**

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

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

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 from 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://www.employment.alberta.ca/BI/2599.html>

APPENDIX B: MANUFACTURING, PROCESSING AND PACKAGING INDUSTRIES WCB CODES

1. Meat, Hides and Pelt Products

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

2. Clothing and Textile Products

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

3. Feed/Seed, Food and Beverage Products

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

4. Wood Products

25100 – Saw Mills/Planing Mills
25401 – Wood Products – Manufacturing
25900 – Peel/Point – Posts
25901 – Treating of Timber
27102 – Pulp Mills
27103 – Panelboard – Manufacturing

5. Furniture and Allied Products

26101 – Upholstered Furniture – Manufacturing/Repair

26104 – Furniture Refinishing
42147 – Finishing Carpentry

6. Printed and Published Products

27402 – Envelope Manufacturing
28600 – Printing/Book Binding
28900 – Publish with Printing
86202 – Newspaper/Flyer Distribution
89301 – Electronic Print/Photofinishing

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

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

8. Primary Metal (esp. Steel) Products

26401 – Metal Furniture Manufacturing
29100 – Steel Manufacturing – excluding Foundries
29102 – Foundries, Iron and Steel
29200 – Steel Pipe Manufacturing
30100 – Steel/Metal Fabrication
30101 – Heat Treating/Stress Relieving
30403 – Metal/Porcelain Products – Coating
30407 – Pipe Cleaning/Coating
30412 – Sheet Metal Shops
30700 – Heat/Cooling Equipment Manufacturing
30801 – Machining
33602 – Switchboard/Electrical Panel – Manufacturing
33606 – Industrial Electric Equipment – Manufacturing
62500 – Steel Service Centre – No Salvage
62700 – Scrap/Salvage Dealers
89401 – Welding

9. Industrial Equipment

16902 – Industrial Belting – Installation/Service
38100 – Instrumentation – Manufacturing
62304 – Compressors/Power Unit – Manufacturing

10. Gases, Fertilizer and Petrochemical – Refining and Manufacturing

36500 – Refining – Crude/Used Oil

37201 – Fertilizer Manufacturing/Nickel Refining

37801 – Petrochemicals – Manufacturing

11. Plastic Products

37301 – Plastic Products – Manufacturing

12. Other Manufacturing, Processing and Packaging Industries

07900 – Peat Moss – Harvesting/Processing

12304 – Forage Processing

16900 – Rubber Stamps/Stencils – Manufacturing

17901 – Vinyl Goods – Manufacturing /Repair

22101 – Awnings/Tents/Tarps – Manufacturing /Repair

27300 – Cardboard Box/Tubing/Bag – Manufacturing

28603 – Signs/Advertising Displays – Manufacturing

29600 – Aluminum/Metal Extrusion

33500 – Phone Equipment – Manufacturing /Installation

33900 – Light Fixtures – Manufacturing /Assembly

33902 – Electrical Components – Manufacturing

38200 – Jewelry – Manufacturing

38201 – Lapidary Services

39300 – Sporting Equipment/Brooms – Manufacturing

39701 – Outdoor Advertising

39901 – Picture Frame, Case, Casket – Manufacturing

69903 – Pottery – Manufacturing

86201 – Window/Store Display Ad Services

89916 – Taxidermists

CONTACT INFORMATION

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

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Employment and Immigration
Data Development and Evaluation
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Fax: 780-422-5070

Email: whs@gov.ab.ca

Employment and Immigration website:

<http://employment.alberta.ca>

Work Safe Alberta website:

www.worksafe.alberta.ca

Occupational Health and Safety Contact Centre:

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

<http://www.employment.alberta.ca/SFW/2874.html>

Certificate of Recognition (COR) Program:

<http://www.employment.alberta.ca/SFW/334.html>