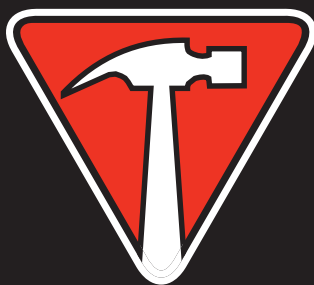


# MANITOBA

WORKPLACE INJURY AND ILLNESS  
STATISTICS REPORT FOR 2000-2004



# SAFE WORK

**S** SPOT THE HAZARD  
**A** ASSESS THE RISK  
**F** FIND A SAFER WAY  
**E** EVERYDAY

TM

---

# Manitoba

## Workplace Injury and Illness

### Statistics Report for

2000 - 2004



October 2005



Manitoba Labour and Immigration  
Workplace Safety and Health Division

---

## **TABLE OF CONTENTS**

<b>Acknowledgements</b> .....	5
<b>Executive Summary</b> .....	6
<b>1.0 Introduction</b> .....	<b>8</b>
<b>2.0 Injury Rates</b> .....	<b>9</b>
2.1 Background.....	9
2.2 Time Loss Injury Rate.....	9
2.3 All Injury Rate .....	13
<b>3.0 Workplace Fatalities</b> .....	<b>16</b>
3.1 Acute Hazard/Traumatic Fatalities by Industry Sector.....	17
3.2 Occupational Illness Fatalities .....	20
3.3 Bystander Fatalities .....	21
<b>4.0 Workplace Injury and Illness Analysis</b> .....	<b>23</b>
4.1 Accepted Claims by Gender .....	23
4.2 Accepted Claims by Age Group .....	26
4.3 Accepted Claims Industry Sector .....	27
4.4 Occupations of Injured and Ill Workers (Time loss Claims Only) .....	29
4.5 Part of Body Injured for All Accepted Claims .....	31
4.6 Time Loss Claims by Nature of Injury or Illness .....	32
4.7 Time Loss Claims by Source of Injury or Illness .....	34
4.8 Time Loss Claims by Event or Exposure .....	36
4.9 Musculoskeletal Injuries .....	37
<b>5.0 Discussion</b> .....	<b>38</b>
5.1 Injury Rate Trends .....	38
5.2 Fatalities.....	39
5.3 Age .....	40
5.4 Musculoskeletal Injuries.....	41
<b>6.0 Terms and Definitions</b> .....	<b>42</b>
6.1 Definitions and Sources of Identification for Fatalities .....	44
<b>Appendix: Tables</b> .....	<b>47</b>

---

## ***LIST OF TABLES***

### **Report**

Table 1	Population of Claims Used to Calculate Injury Rates, 2000 to 2004.....	9
Table 2	Time Loss Injury Rate by Major Industry Sectors and Selected Sub-Sectors, 2000 to 2004.....	12
Table 3	All Injury Rate by Industry Sectors and Selected Sub-Sectors, 2000 to 2004.....	15
Table 4	Acute Hazard and Occupational Disease Deaths, 2000 to 2004.....	16
Table 5	Acute Hazard Exposure Fatalities by Industry, 2000 to 2004.....	18
Table 6	Occupational Illness Fatalities Accepted by the WCB, 2000 to 2004....	21
Table 7	Bystander Deaths in the Workplace by Type of Event, 2000 to 2004....	22
Table 8	Accepted Claims by year of Injury, 2000 to 2004.....	23
Table 9	Time Loss Claims by Part of Body Affected, 2000 to 2004.....	32
Table 10	Time Loss Claims by Nature of Injury or Illness for Injury Year 2000 to 2004.....	33
Table 11	Time Loss Claims by Source of Injury or Illness for Injury Year 2000 to 2004.....	35
Table 12	Time Loss Claims by Type of Event or Exposure for Injury Year 2000 to 2004.....	36
Table 13	Time Loss Claims, Musculoskeletal Injuries (MSI), 2000 to 2004.....	37

### **Appendix**

Table A1	Full-time Equivalent Workers by WCB Major Industry Sectors and Selected Sub-Sectors, 2000 to 2004.....	47
Table A2	Claims by Gender, 2000 to 2004.....	48
Table A3	Claims by Age Group, 2000 to 2004.....	48
Table A4	Claims by WCB Industry Group, Injury Year 2000 to 2004.....	49
Table A5	Time Loss Claims by Occupational Group, Injury Year 2000 to 2004.....	49
Table A6	Time Loss Claims by Detailed Source of Injury 2000 to 2004.....	50
Table A7	Time Loss Claims by Event or Exposure, 2000 to 2004.....	51
Table A8	Claims by Part of Body Injured (Stickman Codes), Injury Year 2000 to 2004.....	52
Table A9	Time Loss Claims by Nature of Injury, 2000 to 2004.....	53

---

## ***LIST OF FIGURES***

Figure 1	Manitoba Time Loss Injury Rates 1994 to 2004.....	10
Figure 2	Time Loss Injury Rate by Industry Sector, 2000 and 2004 .....	11
Figure 3	All Injury Rate and Time Loss Injury Rate, 2000 and 2004.....	13
Figure 4	All Injury Rate and Time Loss Injury Rate, Selected Manufacturing Sub Sectors, 2004 .....	14
Figure 5	All Injury Rate and Time Loss Injury Rate, Other Industry Sub Sectors, 2004 .....	14
Figure 6	Acute Hazard and Occupational Disease Deaths, 2000 to 2004.....	17
Figure 7	Traumatic Fatalities by Major Industry Sector, 2000 to 2004, Aggregated.....	19
Figure 8	Age Distribution of Traumatic Fatalities, 2000 to 2004, Aggregated.....	20
Figure 9	Claims by Gender, 2000 to 2004 .....	24
Figure 10	Female Claims by Gender, 2000 to 2004 .....	25
Figure 11	Male Claims by Gender, 2000 to 2004.....	25
Figure 12	Accepted Claims by Age Groups, 2000 to 2004.....	27
Figure 13	Distribution of Claims by Major Industry Sectors, 2000 to 2004.....	28
Figure 14	Industry Shares of Full-Time Equivalent Workers, 2000 to 2004 ....	28
Figure 15	Occupational Groupings of Male Injured Workers.....	30
Figure 16	Occupational Groupings of Female Injured Workers .....	30
Figure 17	Proportion of Musculoskeletal Injuries to Time Loss Claims, 2000 to 2004.....	37

---

## *Acknowledgements*

The Manitoba Workplace Injury Statistics Report 2000-2004 is the third annual report of this type. Its development has stemmed from cooperative efforts between the Workplace Safety and Health Division of Manitoba Labour and Immigration and the Workers Compensation Board of Manitoba (WCB) and is an integral component of Manitoba's joint injury prevention strategy (*SAFE Work*).

Committee members involved in this initiative to develop improved workplace injury and illness surveillance and reporting systems for the province have included Dr. Ted Redekop and Jo-Anna Guerra from the Workplace Safety and Health Division of Manitoba Labour and Immigration and, from the Workers Compensation Board of Manitoba, Barry Warrack, Michael Rohatynsky, Janet Sprout, Murray Lempen, Jim Brown and Harv Peters.

---

## ***EXECUTIVE SUMMARY***

This is the third comprehensive annual report on the subject of workplace injuries and illnesses in Manitoba, a joint initiative of the Workers Compensation Board of Manitoba and the Workplace Safety and Health Division of Manitoba Labour and Immigration. This report is one component of the *SAFE Work* strategy to foster a strong workplace safety and health culture in Manitoba. This report provides a point of reference for monitoring shifts in workplace injury and illness trends over time.

This year's report provides a complete picture of workplace injuries by providing both the all injury rate and the time loss injury rate. Secondly, using a variety of sources, it continues to present a comprehensive picture of workplace fatalities in both covered and uncovered workplaces. For the first time, this year's report examines five years of data and assesses trends from 2000 to 2004.

Major highlights of the report include:

- ☑ The time loss injury rate continues to decline from a high of 5.8 in 2000 to 4.6 in 2004, a decline of 21% since 2000.
- ☑ The all injury rate is approximately double the time loss injury rate in all industries except mining, where it is six (6) times the time loss rate, and meat processing where it is three (3) times the all injury rate. This data suggests that even in industries where progress has been made in reducing time loss injury rates, exposures to hazards continue and work remains to reduce no time loss injuries.
- ☑ The manufacturing sector with a 37% decline in the number of time loss claims and 33% decline in all claims from 2000 to 2004 has had significant injury reductions in many of its sub sectors. Despite this, manufacturing continues to generate the largest number of claims, far out of proportion to the number of workers employed in the industry. While manufacturing employs only 16% of all Manitoba workers, it still generates 30% of all claims in 2004. At 16.8 claims per 100 full-time equivalent workers, it has the third highest all injury rate among industry sectors after construction at 17 injuries per 100 full-time equivalent workers and mining at 16.9 injuries per 100 full-time equivalent workers.
- ☑ Several industry sub-sectors have significantly higher time loss injury rates than the provincial average. These include agricultural implement manufacturing (11.6 time loss claims per 100 full-time equivalent workers), metalworking (11.5 time loss claims per 100 full-time equivalent workers), vehicle manufacturing (10.6 time loss claims per 100 full-time equivalent workers), meat processing (9.9 time loss per 100 full-time equivalent workers), construction (9.0 time loss claims per 100 full-time equivalent workers), trucking (8.0 time loss claims per 100 full-time equivalent workers), agriculture (7.1 time loss claims per 100 full-time equivalent workers) and wood manufacturing (6.7 time loss claims per 100 full-time equivalent workers).

- 
- ☑ This report used all available sources to identify workplace fatalities. Not counting by-stander deaths, 23 workers died in 2000 as a result of exposures to acute hazards in the workplace, 28 in 2001, 17 in 2002, 16 in 2003 and 17 in 2004. This is a total of 101 deaths from acute workplace hazards in the five year period under study. In addition, the WCB accepted 12 occupational disease claims in 2000, 17 in 2001, nine in 2002, 19 in 2003 and nine in 2004 or 66 in the five year period.
  - ☑ A bystander is a person who is killed as a result of exposure to a workplace hazard but who was not a worker at that workplace at their time of death. There were five by-stander deaths identified in 2000, five in 2001, 16 in 2002, eight in 2003 and 12 in 2004 for a total of 46 over the five year period 2000-2004.
  - ☑ In the farm sector, there were a total of 31 deaths from 2000-2004; 21 were directly attributable to workers involved in farm operations and 10 deaths were to by-standers coming into contact with the farm operation in some way.
  - ☑ Men are more likely to suffer a workplace injury or illness than women. In 2004, men reported 70% of accepted claims, and women reported 30%. This is partly due to the fact that men are more likely to be employed in higher-risk industries (44% of their employment is in manufacturing and 12% in construction), while women are more likely to work in lower-risk industries (52% of their employment is in the service sector and 12% in retail trade) or in industries exempt from compulsory WCB coverage.
  - ☑ Reflecting the aging workforce, the typical injured worker is older than before. In 2004, the average age of injured male workers was 38, an increase from 36 in 2000, while the average age of injured female workers was 40, up from 38 in 2000.
  - ☑ About 59% of all time loss injuries are musculoskeletal injuries (MSI's), with the majority being strains and sprains. Women are more likely to sustain MSI's (63% of time loss) than men (52% of time loss). The MSI trend for women has been increasing while it is decreasing for men.
  - ☑ Injuries to hands and fingers comprise nearly a quarter of all injuries, injuries to multiple body parts (usually the back and another extremity) are 16% of all injuries and back injuries are 15% of total injuries to body parts.



---

## ***1.0 INTRODUCTION***

This is the third annual report on workplace injuries and illnesses in Manitoba. It has been generated using data obtained, for the most part, from the Workers Compensation Board (WCB) of Manitoba database of accepted claims for the years 2000 through 2004. For the first time, the report presents five years of data which makes it possible to begin to identify and discuss emerging trends. The section of this report on workplace fatalities also makes use of data from a variety of other data sources.

This report is part of the Province of Manitoba's Workplace Safety and Health Injury Prevention Strategy. This strategy was introduced in 2002 by the Minister of Labour and Immigration and is a joint initiative of the WCB of Manitoba and the Workplace Safety and Health Division (WSHD) of Manitoba Labour and Immigration. Progress towards the goal of a 25% reduction in Manitoba's time loss injury rate is due in large part to the actions of employers and workers to strengthen their own injury prevention efforts. The information in this report allows benchmarks to be established and results to be tracked over time.

The injury and illness statistics report contains four major sections:

1. Injury rates;
2. Workplace fatalities;
3. Characteristics of injured workers and accepted claims; and
4. Discussion.

The first major section of the statistics report contains information on injury rates per 100 full-time equivalent workers. Two rates are calculated: a time loss injury rate and an all injury rate. Each of these rates is sub-categorized by major WCB industry sectors and selected sub-sectors. These particular sub-sectors have been chosen to profile major industry sectors where the majority of injuries and illnesses are occurring or where significant health and safety challenges exist.

The second section of the report discusses work-related fatalities. A wide variety of data sources are used to develop this comprehensive picture of workplace fatalities in Manitoba.

The third section of the report presents the characteristics of injured workers and their claims. This knowledge is being effectively used to target prevention efforts to reduce work-related injuries and illnesses. The age, gender and occupations of injured and ill workers are profiled. Specific characteristics of the workplace injury or illness are also discussed including part of body injured, nature of injury or illness, event causing injury and source of injury or illness.

The last section explores emerging trends in workplace injuries and illnesses.

---

## 2.0 INJURY RATES

### 2.1 Background

Manitoba's time loss injury rate and its all injury rate are outlined in this section. The time loss injury rate is the number of time loss claims per 100 full-time equivalent workers for WCB-covered industries. The all injury rate, on the other hand, is the number of time loss and no time loss claims expressed per 100 full-time equivalent workers for WCB-covered industries. Because *The Workers Compensation Act* covers about 70% of Manitoba workers, injury frequency data cannot be obtained for the whole workforce. Nevertheless, rates derived from WCB data serve as useful proxy measure of the overall frequency of worker injuries and illnesses in Manitoba.

The claims used to calculate these two injury rates were reported to the WCB and accepted in calendar years 2000 to 2004 (see Table 1). Details about the specific definitions and formulas used to calculate the two rates are included in the section at the end of this report titled "terms and definitions."

**Table 1 Population of Claims Used to Calculate Injury Rates, 2000 to 2004**

Type of Claim	Reported to WCB and Accepted in				
	2000	2001	2002	2003	2004
<b>Time loss Claims<sup>1</sup></b>	20,147	18,919	18,278	17,766	17,492
<b>No Time loss Claims</b>	20,052	18,114	17,322	17,767	17,372
<b>Total All Claims</b>	<b>40,199</b>	<b>37,033</b>	<b>35,600</b>	<b>35,533</b>	<b>34,864</b>

Note: The all claims population used to calculate the annual injury rates includes claims where the WCB is notified of the claim and it is accepted in the particular year. This differs from the claims population in Table 8 of this report which uses accepted claims by year of injury or illness.

### 2.2 Time loss Injury Rate

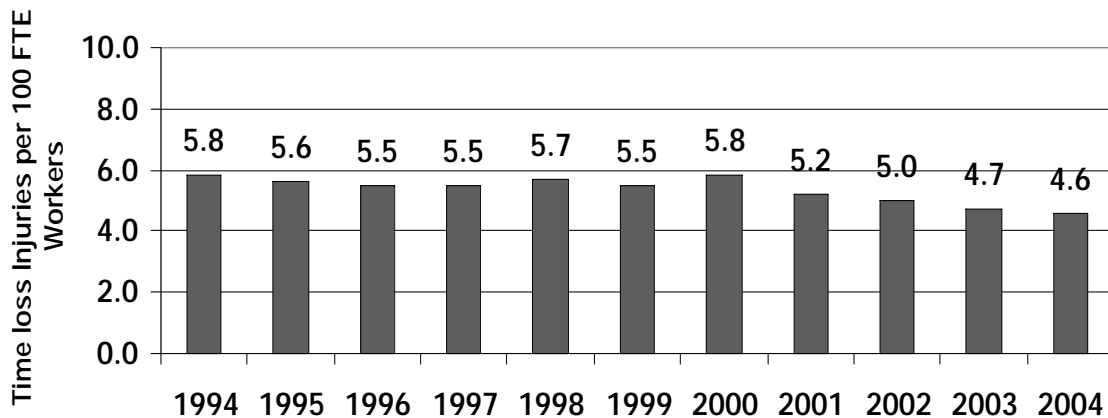
The Government of Manitoba, in agreement with the recommendation of the Workplace Safety and Health Review Committee, set a target of reducing the time loss injury rate by 25%. The Government of Manitoba and the WCB have been focusing prevention activities in four priority areas: enhancing public awareness and education, training employers and supervisors, improving prevention measures and standards, and enhancing the internal and external responsibility systems.

---

<sup>1</sup> Includes time-loss injuries, pensions and fatalities

Manitoba's time loss injury rate fell from a high of 5.8 time loss injuries per 100 full-time equivalent workers in 2000 to 4.6 in 2004, a decline of 21% in the rate since 2000 (Figure 1).

**Figure 1 Manitoba Time Loss Injury Rates, 1994 to 2004**

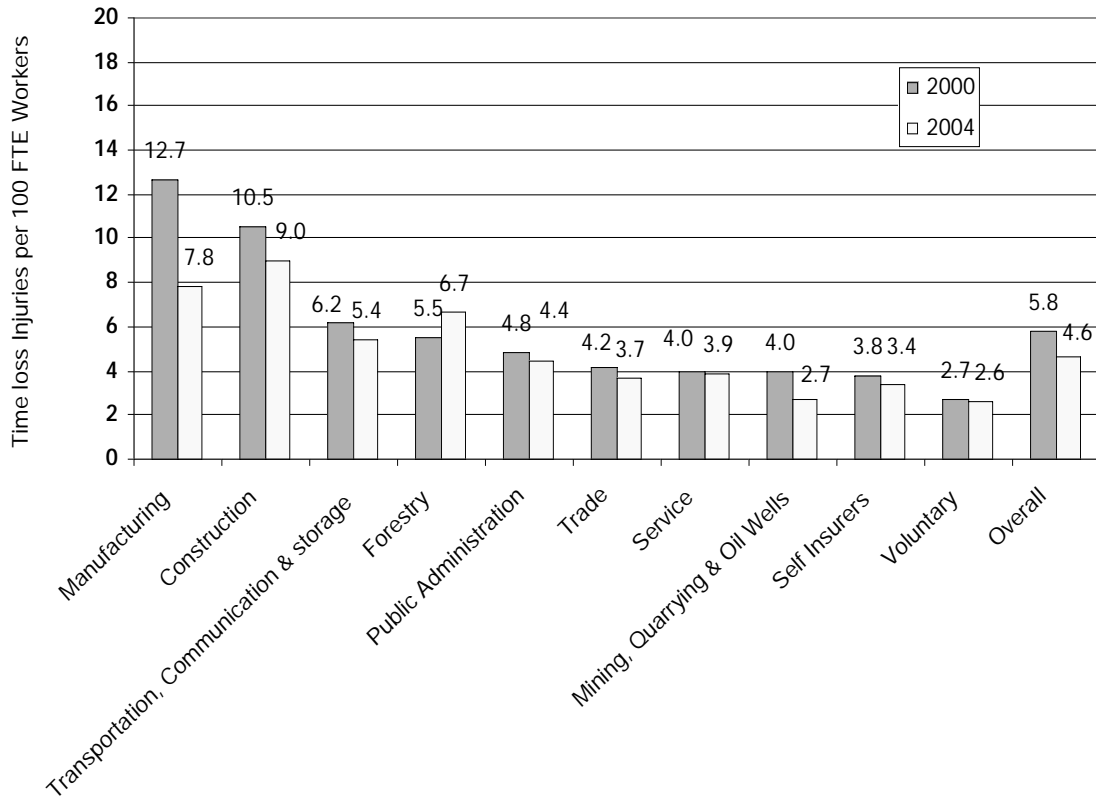


### 2.2.1 Industry Sector and Sub-Sector Rates

Table 2 details the time loss injury rates of major WCB industry sectors and selected sub-sectors for 2000 to 2004. Figure 2 illustrates that:

- Construction (10.5 in 2000 reducing to 9.0 in 2004) and manufacturing (12.7 in 2000 declining to 7.8 in 2004) still have the highest rates among industry sectors.
- Within the manufacturing sector, vehicle manufacturing (29.3 in 2000 and 10.6 in 2004), agricultural implement manufacturing (19.6 in 2000 and 11.6 in 2004), meat processing (19.0 in 2000 and 9.9 in 2004), wood manufacturing (16.0 in 2000 and 6.7 in 2004) and metal works (17.6 in 2000 and 11.5 in 2004) had particularly large rate declines since 2000. The manufacturing sector as a whole is primarily responsible for the overall drop in the provincial time loss injury rate over the five-year period.
- The service, voluntary and self insurers sectors have shown little or no improvement over the five years profiled. A similar trend is seen in a number of sub-sectors such as clothing manufacturing (3.8 in 2000 and 3.7 in 2004), heavy construction (7.9 in 2000 and 7.5 in 2004), and healthcare (5.1 in 2000 and 5.0 in 2004). For example, most of the improvement in the construction sector has been centered in the building construction sub-sector.

**Figure 2 Time Loss Injury Rate by Major Industry Sectors, 2000 and 2004**



**Table 2 Time Loss Injury Rate by Major Industry Sectors and Selected Sub-Sectors, 2000 to 2004**

WCB Industry Sectors and Sub-Sectors	Year of Reported Injury or Illness									
	2000		2001		2002		2003		2004	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
<b>Forestry</b>	<b>21</b>	<b>5.5</b>	<b>29</b>	<b>7.8</b>	<b>28</b>	<b>7.5</b>	<b>33</b>	<b>7.9</b>	<b>27</b>	<b>6.7</b>
<b>Mining, Quarrying and Oil Wells</b>	<b>175</b>	<b>4.0</b>	<b>131</b>	<b>2.8</b>	<b>119</b>	<b>2.6</b>	<b>116</b>	<b>2.6</b>	<b>111</b>	<b>2.7</b>
<i>Mining</i>	130	3.5	87	2.4	77	2.2	76	2.3	76	2.4
<b>Manufacturing</b>	<b>7,724</b>	<b>12.7</b>	<b>6,687</b>	<b>10.8</b>	<b>6,063</b>	<b>9.9</b>	<b>5,549</b>	<b>9.0</b>	<b>4,870</b>	<b>7.8</b>
<i>Meat Processing</i>	526	19.0	482	15.4	497	14.3	438	12.2	367	9.9
<i>Metal Works</i>	1,000	17.6	821	14.0	828	14.2	874	14.6	729	11.5
<i>Vehicle Manufacturing</i>	1,129	29.3	940	25.6	538	16.8	440	14.4	298	10.6
<i>Agricultural Implement Manufacturing</i>	828	19.6	645	15.3	645	14.9	606	13.3	579	11.6
<i>Wood Manufacturing</i>	1,333	16.0	1,182	13.1	1,097	11.2	924	9.0	820	6.7
<i>Printing</i>	244	4.5	208	3.8	259	4.7	221	4.0	204	3.9
<i>Clothing Manufacturing</i>	220	3.8	184	3.5	177	3.6	165	3.7	138	3.7
<i>Aircraft Manufacturing and Repair</i>	228	5.4	233	5.7	193	5.3	130	3.9	128	3.6
<b>Construction</b>	<b>1,705</b>	<b>10.5</b>	<b>1,471</b>	<b>9.1</b>	<b>1,568</b>	<b>9.7</b>	<b>1,590</b>	<b>9.1</b>	<b>1,615</b>	<b>9.0</b>
<i>Building Construction</i>	1,436	11.4	1,229	9.5	1,299	9.9	1,318	8.9	1,359	8.8
<i>Heavy Construction</i>	269	7.9	242	7.3	269	8.7	272	8.0	256	7.5
<b>Transportation, Communication and Storage</b>	<b>1,388</b>	<b>6.2</b>	<b>1,271</b>	<b>5.3</b>	<b>1,281</b>	<b>5.4</b>	<b>1,291</b>	<b>5.4</b>	<b>1,353</b>	<b>5.4</b>
<i>Trucking</i>	886	10.0	815	9.1	814	9.1	826	8.5	910	8.0
<b>Trade</b>	<b>2,704</b>	<b>4.2</b>	<b>2,741</b>	<b>4.2</b>	<b>2,658</b>	<b>3.9</b>	<b>2,652</b>	<b>3.8</b>	<b>2,703</b>	<b>3.7</b>
<i>Supermarket and Department Stores</i>	1,291	3.1	1,441	3.3	1,414	3.1	1,384	2.9	1,401	2.8
<b>Service</b>	<b>3,466</b>	<b>4.0</b>	<b>3,614</b>	<b>4.1</b>	<b>3,679</b>	<b>4.1</b>	<b>3,655</b>	<b>3.9</b>	<b>3,760</b>	<b>3.9</b>
<i>Accommodation and Restaurants</i>	845	2.8	881	3.0	761	2.6	750	2.5	764	2.6
<i>Healthcare</i>	2,249	5.1	2,336	5.1	2,502	5.3	2,483	5.0	2,553	5.0
<b>Public Administration</b>	<b>144</b>	<b>4.8</b>	<b>142</b>	<b>4.4</b>	<b>165</b>	<b>5.5</b>	<b>132</b>	<b>4.1</b>	<b>149</b>	<b>4.4</b>
<b>Voluntary</b>	<b>948</b>	<b>2.7</b>	<b>953</b>	<b>2.7</b>	<b>920</b>	<b>2.4</b>	<b>888</b>	<b>2.4</b>	<b>966</b>	<b>2.6</b>
<i>Agriculture<sup>2</sup></i>	91	5.0	122	5.2	125	4.9	130	5.4	153	7.1
<i>Educational Institutions<sup>2</sup></i>	409	2.9	378	2.6	394	2.6	378	2.7	404	2.9
<b>Self Insurers</b>	<b>1,869</b>	<b>3.8</b>	<b>1,875</b>	<b>3.4</b>	<b>1,796</b>	<b>3.4</b>	<b>1,856</b>	<b>3.3</b>	<b>1,935</b>	<b>3.4</b>
<b>Overall<sup>3</sup></b>	<b>20,147</b>	<b>5.8</b>	<b>18,919</b>	<b>5.2</b>	<b>18,278</b>	<b>5.0</b>	<b>17,766</b>	<b>4.7</b>	<b>17,492</b>	<b>4.6</b>

Source: WCB Claim and Employer Databases and Statistics Canada Survey of Employment, Payrolls and Hours

<sup>2</sup> Note: The WCB covers only a small proportion of the agriculture and education sectors so that most work related injuries are not reported to the WCB.

<sup>3</sup> Totals may not add as a few claims do not have their sector coded.

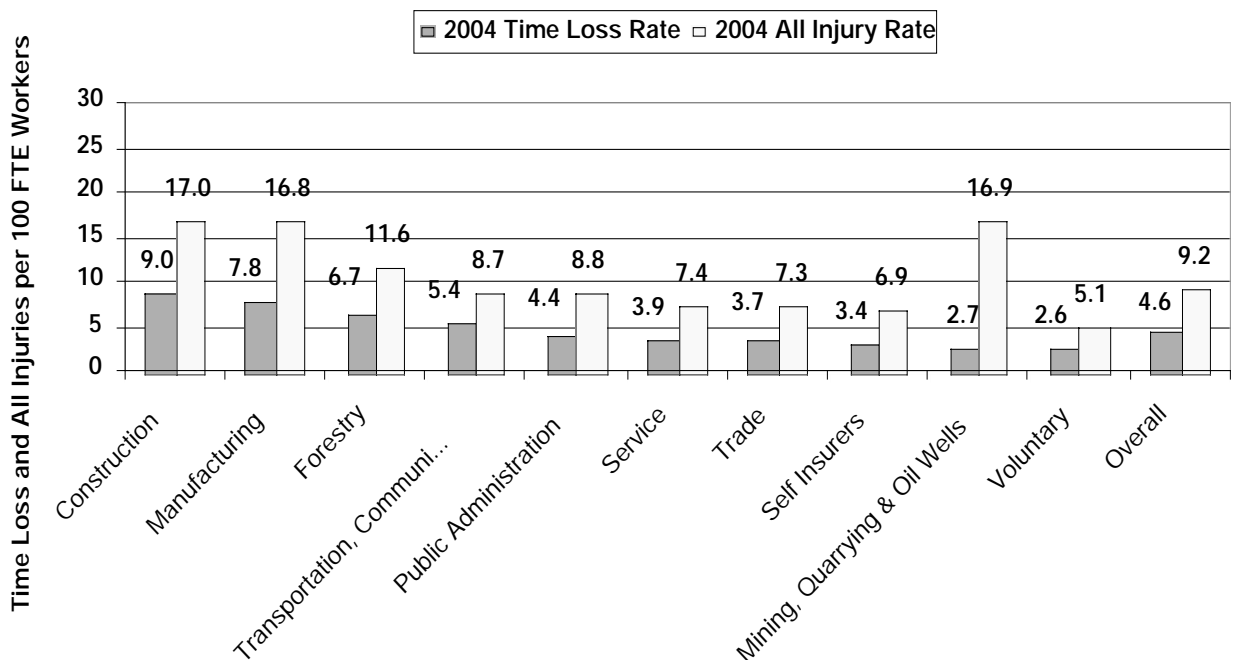
### 2.3 All Injury Rate

The all injury rate is derived from the all accepted claims population (time loss, no time loss). In most industry sectors, the number of time loss claims is about equal to the number of no time loss claims. As a result, the all injury rate is approximately double the time loss injury rate in most industries.

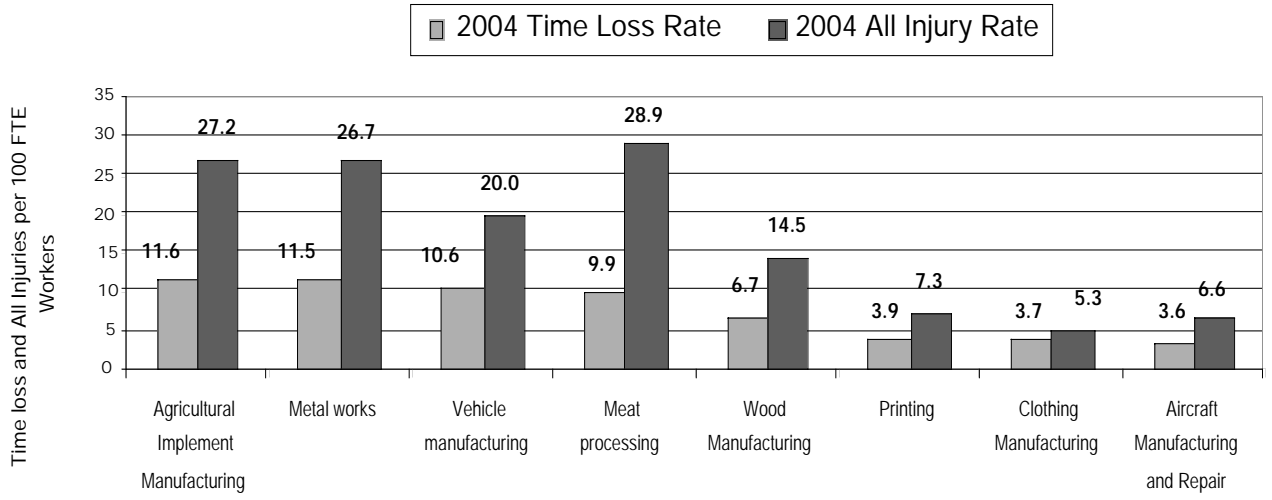
Where the nature of work tends to cause more no time loss injuries (e.g. foundries which are dusty environments where a lot of grinding of metal takes place, resulting in elevated numbers of eye injuries which are generally no time loss claims. As a result, the all injury rate is inflated compared to the time loss rate), this can cause the all injury rate to be more than double the time loss rate.

The time loss rate may also be depressed in industries with proficient accessible modified or early return to work programs. For example the all injury rate in the mining sector is over 6 times the time loss rate. This, in part, highlights the success of the mining sector's injury-prevention efforts and also the effectiveness of large mining companies' mature disability-management programs which encourage workers to immediately return to work after an injury. In the mining sector, only the most serious injuries or illnesses are recorded as time loss. In cases where injuries and illnesses are less serious, workers can return to their regular duties or to a modified job immediately after the injury or illness. The challenge remains for the mining sector to achieve reductions in all types of injuries or illnesses.

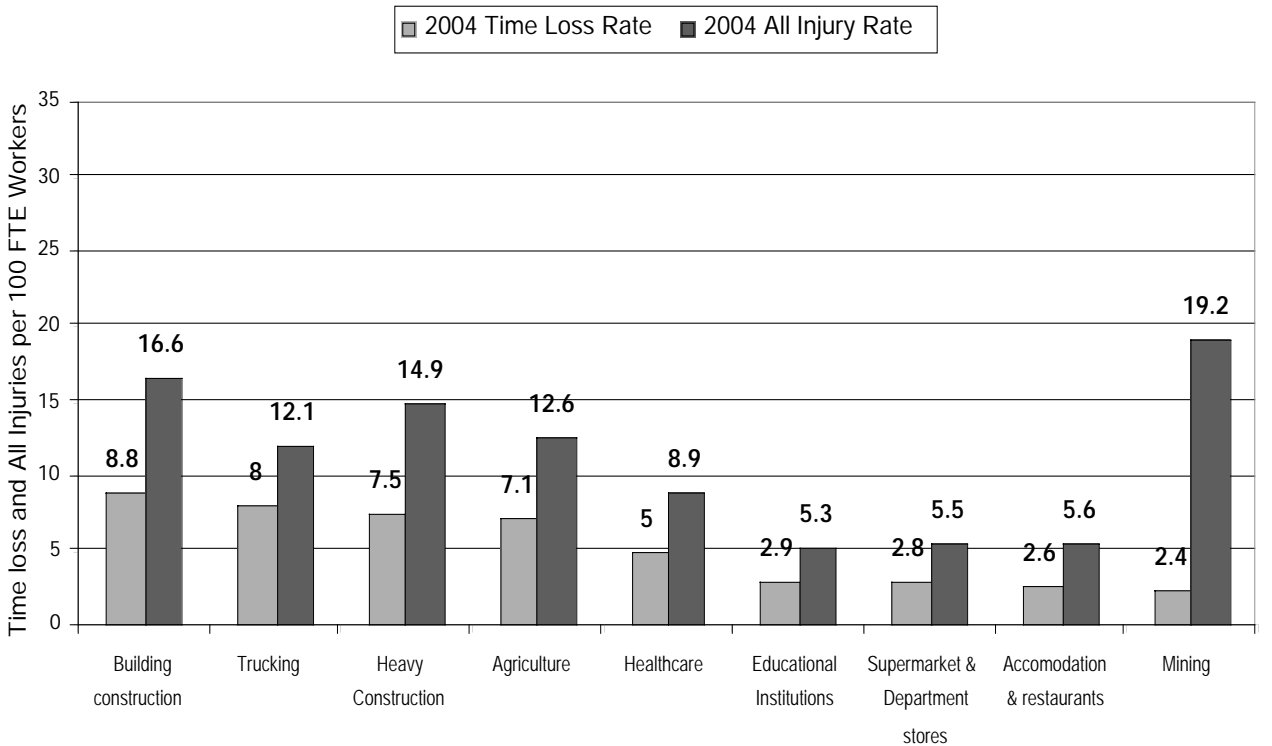
**Figure 3 All Injury Rate and Time Loss Injury Rate, 2004**



**Figure 4 All Injury Rate and Time Loss Injury Rate, Selected Manufacturing Sub-Sectors, 2004**



**Figure 5 All Injury Rate and Time Loss Injury Rate, Other Industry Sub-Sectors, 2004**



**Table 3 All Injury Rate by Industry Sectors and Selected Sub Sectors, 2000 to 2004**

WCB Industry Sectors and Sub-Sectors	Year of Reported Injury or Illness									
	2000		2001		2002		2003		2004	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
<b>Forestry</b>	<b>42</b>	<b>10.9</b>	<b>64</b>	<b>17.3</b>	<b>78</b>	<b>20.9</b>	<b>49</b>	<b>11.7</b>	<b>47</b>	<b>11.6</b>
<b>Mining, Quarrying and Oil Wells</b>	<b>958</b>	<b>22.0</b>	<b>888</b>	<b>19.1</b>	<b>724</b>	<b>16.1</b>	<b>715</b>	<b>16.2</b>	<b>703</b>	<b>16.9</b>
<i>Mining</i>	839	22.9	751	20.4	619	17.9	591	17.9	620	19.2
<b>Manufacturing</b>	<b>15,522</b>	<b>25.6</b>	<b>13,648</b>	<b>21.9</b>	<b>12,624</b>	<b>20.6</b>	<b>11,842</b>	<b>19.2</b>	<b>10,458</b>	<b>16.8</b>
<i>Meat Processing</i>	1,452	52.4	1,372	43.8	1,510	43.4	1,385	38.5	1,068	28.9
<i>Metal Works</i>	2,222	39.1	1,834	31.3	1,777	30.5	1,811	30.2	1,696	26.7
<i>Vehicle Manufacturing</i>	1,821	47.3	1,487	40.6	957	29.8	813	26.6	562	20.0
<i>Agricultural Implement Manufacturing</i>	1,704	40.3	1,303	30.9	1,299	29.9	1,324	29.1	1,354	27.2
<i>Wood Manufacturing</i>	2,620	31.4	2,511	27.8	2,357	24.0	2,041	19.8	1,764	14.5
<i>Printing</i>	466	8.7	379	6.8	443	8.0	445	8.1	384	7.3
<i>Clothing Manufacturing</i>	340	5.9	295	5.6	278	5.7	247	5.6	194	5.3
<i>Aircraft Manufacturing and Repair</i>	421	9.9	425	10.4	359	9.8	231	7.0	234	6.6
<b>Construction</b>	<b>3,331</b>	<b>20.4</b>	<b>2,768</b>	<b>17.0</b>	<b>2,836</b>	<b>17.5</b>	<b>3,011</b>	<b>17.3</b>	<b>3,073</b>	<b>17.0</b>
<i>Building Construction</i>	2,809	22.2	2,334	18.1	2,328	17.7	2,509	17.0	2,566	16.6
<i>Heavy Construction</i>	522	15.3	434	13.1	508	16.3	502	14.7	507	14.9
<b>Transportation, Communication and Storage</b>	<b>2,369</b>	<b>10.5</b>	<b>2,125</b>	<b>8.9</b>	<b>2,034</b>	<b>8.5</b>	<b>2,127</b>	<b>8.9</b>	<b>2,182</b>	<b>8.7</b>
<i>Trucking</i>	1,388	15.7	1,269	14.1	1,188	13.3	1,247	12.8	1,378	12.1
<b>Trade</b>	<b>5,386</b>	<b>8.3</b>	<b>5,224</b>	<b>7.9</b>	<b>5,106</b>	<b>7.4</b>	<b>5,356</b>	<b>7.6</b>	<b>5,320</b>	<b>7.3</b>
<i>Supermarket and Department Stores</i>	2,581	6.1	2,656	6.1	2,614	5.8	2,712	5.7	2,799	5.5
<b>Service</b>	<b>6,393</b>	<b>7.4</b>	<b>6,446</b>	<b>7.4</b>	<b>6,428</b>	<b>7.2</b>	<b>6,576</b>	<b>7.0</b>	<b>7,028</b>	<b>7.4</b>
<i>Accommodation and Restaurants</i>	1,981	6.5	1,875	6.3	1,662	5.6	1,614	5.4	1,658	5.6
<i>Healthcare</i>	3,811	8.6	3,945	8.7	4,116	8.8	4,265	8.6	4,584	8.9
<b>Public Administration</b>	<b>322</b>	<b>10.8</b>	<b>293</b>	<b>9.1</b>	<b>320</b>	<b>10.6</b>	<b>311</b>	<b>9.6</b>	<b>298</b>	<b>8.8</b>
<b>Voluntary</b>	<b>1,807</b>	<b>5.1</b>	<b>1,699</b>	<b>4.8</b>	<b>1,744</b>	<b>4.6</b>	<b>1,764</b>	<b>4.7</b>	<b>1,862</b>	<b>5.1</b>
<i>Agriculture<sup>4</sup></i>	175	9.6	211	9.1	211	8.3	240	9.9	273	12.6
<i>Educational Institutions<sup>4</sup></i>	758	5.3	670	4.6	747	5.0	722	5.2	750	5.3
<b>Self Insurers</b>	<b>3,977</b>	<b>8.1</b>	<b>3,801</b>	<b>7.0</b>	<b>3,680</b>	<b>7.0</b>	<b>3,758</b>	<b>6.8</b>	<b>3,876</b>	<b>6.9</b>
<b>Overall<sup>5</sup></b>	<b>40,199</b>	<b>11.5</b>	<b>37,033</b>	<b>10.2</b>	<b>35,600</b>	<b>9.7</b>	<b>35,533</b>	<b>9.4</b>	<b>34,864</b>	<b>9.2</b>

Source: WCB Claim and Employer Databases and Statistics Canada Survey of Employment, Payrolls and Hours

<sup>4</sup> Note: The WCB covers only a small proportion of the agriculture and education sectors so that most work related injuries are not reported to the WCB.

<sup>5</sup> Totals may not add as a few claims do not have their sector coded.



---

### **3.0 WORKPLACE FATALITIES**

Manitoba workplaces are tremendously diverse, ranging from farming to underground mining operations to aircraft manufacturers to hospitals and grocery stores. Depending on the nature of the workplace and the work itself, workers may be exposed to an extensive array of risks and hazards and their risk of death from exposure to hazards varies widely. For example, workers may operate heavy machinery, work with noxious substances, or work at height or in confined spaces.

This section of the report provides statistics on workers and bystanders who died as a result of a workplace incident. (A bystander is a person exposed to hazards at the worksite but who was not actually a worker at the time of the incident). For example, a child killed on a farm is classified as a bystander. Information on who is included is located at the end of this report.

Fatalities accepted by the WCB represent only some of the work-related fatalities that occur in Manitoba each year. A more complete picture of the number of workplace fatalities can be obtained from the fatality surveillance system maintained by WSHD. This system gathers information on fatalities from WSHD, the WCB, the Chief Medical Examiner's Office, Manitoba Department of Highways and the Royal Canadian Mounted Police. This section presents an overview of fatal workplace injuries and illnesses based on these sources.

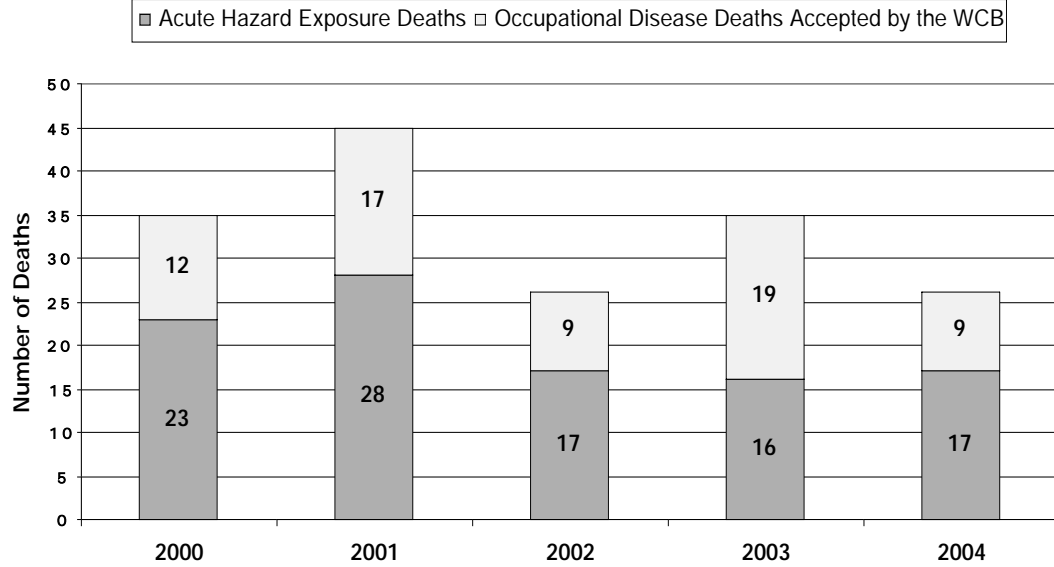
The characteristics of these fatalities are presented from a variety of perspectives. Fatalities are sorted by the cause of death, for example whether deaths were as a result of acute hazard exposures (e.g. falls from height) or from occupational disease.

Fatalities are also reported by industry sector and age. Table 4 displays the total numbers of acute hazard fatalities and occupational disease fatalities for the years 2000 through 2004. The WCB is the only data source on work-related disease related deaths.

**Table 4 Acute Hazard and Occupational Disease Deaths, 2000 to 2004**

<b>Cause of Death</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
<b>Acute Hazard Exposure Deaths</b>	23	28	17	16	17
<b>Occupational Disease Deaths Accepted by the WCB</b>	12	17	9	19	9
<b>Total</b>	<b>35</b>	<b>45</b>	<b>26</b>	<b>35</b>	<b>26</b>

**Figure 6 Acute Hazard and Occupational Disease Deaths, 2000 to 2004**



### ***3.1 Acute Hazard/ Trauma Fatalities by Industry Sector***

Table 5 shows all work-related deaths caused by an acute hazard in Manitoba from 2000 through 2004. Fatalities involving workers and bystanders are profiled in this table. Over this period, there were 101 acute hazard exposure deaths and 46 bystander deaths.

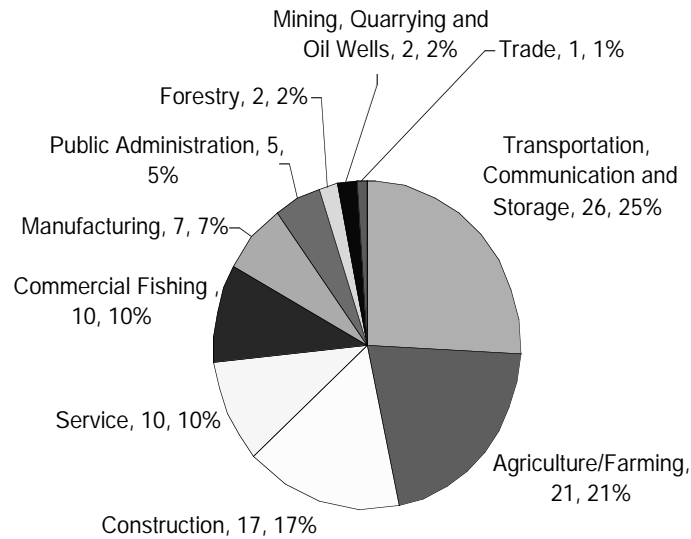
**Table 5 Acute Hazard Exposure Fatalities by Industry, 2000 to 2004**

<b>Sector</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>Total</b>
<i>Agriculture/Farming</i>	7	3	1	6	4	<b>21</b>
<i>Forestry</i>	0	1	0	0	1	<b>2</b>
<i>Commercial Fishing</i>	0	3	2	1	4	<b>10</b>
<i>Mining, Quarrying and Oil Wells</i>	2	0	0	0	0	<b>2</b>
<i>Manufacturing</i>	2	0	1	3	1	<b>7</b>
<i>Construction</i>	1	6	6	3	1	<b>17</b>
<i>Transportation, Communication and Storage (Includes interprovincial trucking and rail and air transport)</i>	9	9	4	2	2	<b>26</b>
<i>Trade</i>	0	0	0	0	1	<b>1</b>
<i>Service</i>	0	4	2	1	3	<b>10</b>
<i>Public Administration (includes RCMP, prisons, federal agencies)</i>	2	2	1	0	0	<b>5</b>
<b>Total for Acute Hazard Exposure Deaths</b>	<b>23</b>	<b>28</b>	<b>17</b>	<b>16</b>	<b>17</b>	<b>101</b>
<b>Bystander / Non-worker <sup>6</sup></b>	<b>5</b>	<b>5</b>	<b>16</b>	<b>8</b>	<b>12</b>	<b>46</b>
<b>Total</b>	<b>28</b>	<b>33</b>	<b>33</b>	<b>24</b>	<b>29</b>	<b>147</b>

Three sectors are primarily responsible for most acute hazard fatalities: transportation (26 or 25%), farming (21 or 20%) and construction (17 or 17%). Transportation fatalities are often associated with motor vehicle collisions or railroad injuries. Fatalities in the construction sector are mainly due to the risk of falling from height or being struck by or caught in vehicles and equipment. Primary agricultural production presents an environment with diverse hazards, such as heavy machinery.

<sup>6</sup> There were 3 farm related bystander deaths in 2000, 1 in 2001, 0 in 2002, 2 in 2003 and 4 in 2004 for a total of 10 in the farming sector over the five year period.

**Figure 7 Acute Hazard Fatalities by Major Industry Sectors 2000 to 2004**



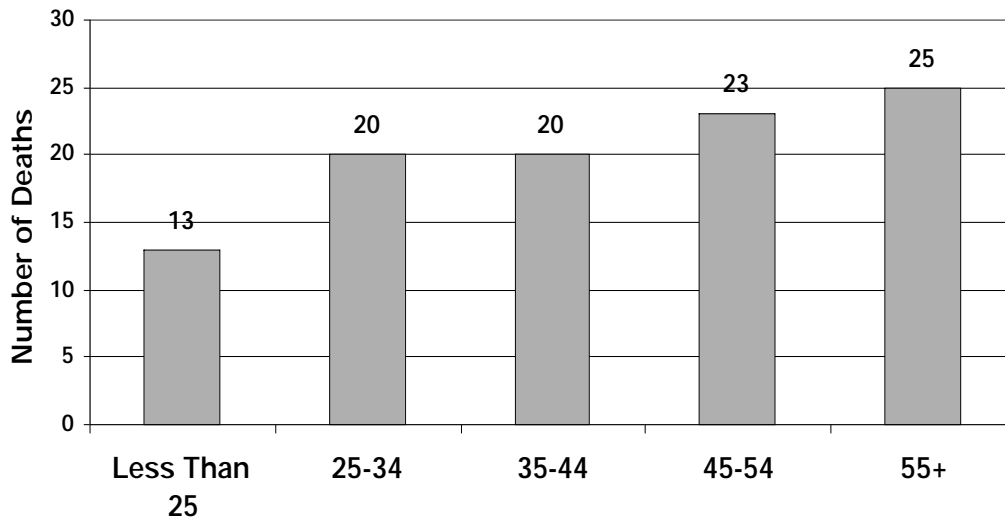
### 3.1.1 Agricultural Industry Fatalities

The most distinct feature of family farms is the exposure of all age groups to the work environment. The farm is the only workplace that regularly permits the presence of children and/or where young children are directly involved in the day-to-day activity of farming. From 2000 to 2004, 31 persons died as a direct result of farming operations, either during the performance of their farm related duties (21) or as bystanders to normal farming operations (10).

### 3.1.2 Fatalities by Age Group

Figure 8 displays the age distribution of acute hazard exposure deaths in Manitoba from 2000 to 2004. Thirteen fatalities were recorded for individuals under 25, 20 were aged 25-34, 20 were aged 35-44 and 23 were workers aged 45-54. The 55+ age group also experienced 25 traumatic fatalities in this period.

**Figure 8 Age Distribution of Acute Hazard Fatalities, 2000 to 2004**



### **3.2 Occupational Illness Fatalities**

Table 6 profiles the fatalities that were accepted by the WCB as resulting from long-term exposures to toxic substances in the workplace. Between 2000 and 2004, the WCB accepted 66 death claims from occupational disease. Work-related diseases represent a growing area of concern in Manitoba workplaces. While cancers from exposures to asbestos remain significant, cancers from other exposures (e.g., cancers among firefighters from inhaling toxic smoke while fighting fires) are becoming more recognized and accepted as work-related.

In Table 6, fatal claims are grouped by the year in which the WCB accepted the claim. The year the claim is accepted may not be the same as the year of death because fatalities caused by diseases may not be reported to the WCB until after the workers have died. This is especially the case when *The Workers Compensation Act (Act)* is revised to grant new entitlements to workers. For example, the amendments made to the *Act* in May 2002 recognizing certain cancers as being hazards of firefighting produced a number of new claims that were submitted involving workers who were ill or had already succumbed to these diseases.

Occupational disease develops slowly over time, with exposures to hazardous substances occurring decades before. These exposures may eventually lead to death. It is expected that asbestos-related disease claims will be peaking over the next 10-15 years largely due to exposure to asbestos fibres that occurred in the 1960's and 1970's. These types of claims are expected to decline since work-related exposure to asbestos has significantly decreased in recent years.

---

**Table 6 Occupational Illness Fatalities Accepted by the WCB, 2000 to 2004**

Disease Conditions	2000	2001	2002	2003	2004	Total
Asbestosis	1	4	1	1	1	<b>8</b>
Mesothelioma	4	8	7	9	7	<b>35</b>
Other Cancers	4	3	1	8*	0	<b>16</b>
Myocardial Infarction	2	1	0	1	1	<b>5</b>
Other	1	1	0	0	0	<b>2</b>
<b>Total</b>	<b>12</b>	<b>17</b>	<b>9</b>	<b>19</b>	<b>9</b>	<b>66</b>

\*Note: The large number of other cancers accepted in 2003 are due to the recent amendment to *The Workers Compensation Act*, which came into force in May 2002 which provides a rebuttable presumption of compensation for full-time firefighters who are regularly exposed to the hazards of a fire scene (other than a forest fire scene) for a prescribed minimum period and who contract primary site brain, bladder or kidney cancer, primary non-Hodgkin's lymphoma or primary leukemia.

### **3.3 Bystander Fatalities**

Bystander deaths occur in Manitoba workplaces as the result of contact with or exposure to hazards in a workplace. Table 7 profiles the event that caused these deaths from 2000 through 2004. The increase in the number of bystander fatalities in 2002 was due to the large number of individuals who died due to motor vehicle incidents in that year involving large vehicles such as trucks which that are in collision with passenger vehicles.

Although these victims are not employees of this workplace, they die from exposure to the same types of hazards that workers are exposed to daily. Safety and health legislation directs employers to ensure the safety and well-being of everyone at the worksite, whether or not they are workers.

---

**Table 7 Bystander Deaths<sup>7</sup> in the Workplace by Type of Event, 2000 to 2004**

Type of Event	2000	2001	2002	2003	2004	Total
Highway crash	3	2	12	6	10	<b>32</b>
Transportation, other (incl. pedestrian)	0	0	2	1	1	<b>5</b>
Fall from one level to another	0	2	0	0	0	<b>2</b>
Struck by an object	0	0	1	1	1	<b>3</b>
Carbon monoxide poisoning	0	0	1	0	0	<b>1</b>
Drowning	2	1	0	0	0	<b>3</b>
<b>Total*</b>	<b>5</b>	<b>5</b>	<b>16</b>	<b>8</b>	<b>12</b>	<b>46</b>

\*Note: Totals may vary from earlier years' Injury Statistics Reports as the WSHD fatality surveillance system has identified additional bystander deaths in intervening years.

---

<sup>7</sup> Note that there were 3 farm related bystander deaths in 2000, 1 in 2001, 0 in 2002, 2 in 2003 and 4 in 2004 for a total of 10 in the farming sector over the five year period.

---

## 4.0 WORKPLACE INJURY AND ILLNESS ANALYSIS

This section presents the characteristics of claims that were accepted by the Manitoba WCB from 2000 to 2004. Both accepted time loss claims (claims where wages were lost and replaced, or where there was a fatality or an impairment award) and no time loss claims are analyzed in this section.

Not all characteristics are available in the database for all claim populations. For example, information regarding the type of injury or the circumstances surrounding the injury event is only collected for time loss claims, while characteristics such as gender and age are collected for all accepted claims.

**Table 8 Accepted Claims by Year of Injury, 2000 to 2004**

Type of Claim	Injury Occurred and Claim Accepted in				
	2000	2001	2002	2003	2004
Time loss Claims	19,959	18,593	17,869	17,482	17,271
No Time loss Claims	19,883	17,844	16,974	17,582	17,222
<b>Total All Claims</b>	<b>39,842</b>	<b>36,437</b>	<b>34,843</b>	<b>35,064</b>	<b>34,493</b>

Note: The all claims population used to calculate the annual injury rates includes claims where the WCB is notified of the claim and accepted in the particular year. This differs from the claims population in Table 1 of this report, which uses accepted claims by year the WCB is notified of injury or illness.

Risk assessments allow a better understanding of hazard exposures so that we will know who is most likely to be at risk of workplace injury or illness. This allows injury and illness prevention to be more effective. The next sections of the report provide information about workers who are likely to be at risk, along with their ages, gender, types of jobs, and the industries in which they are employed at time of injury.

### 4.1 Accepted Claims by Gender

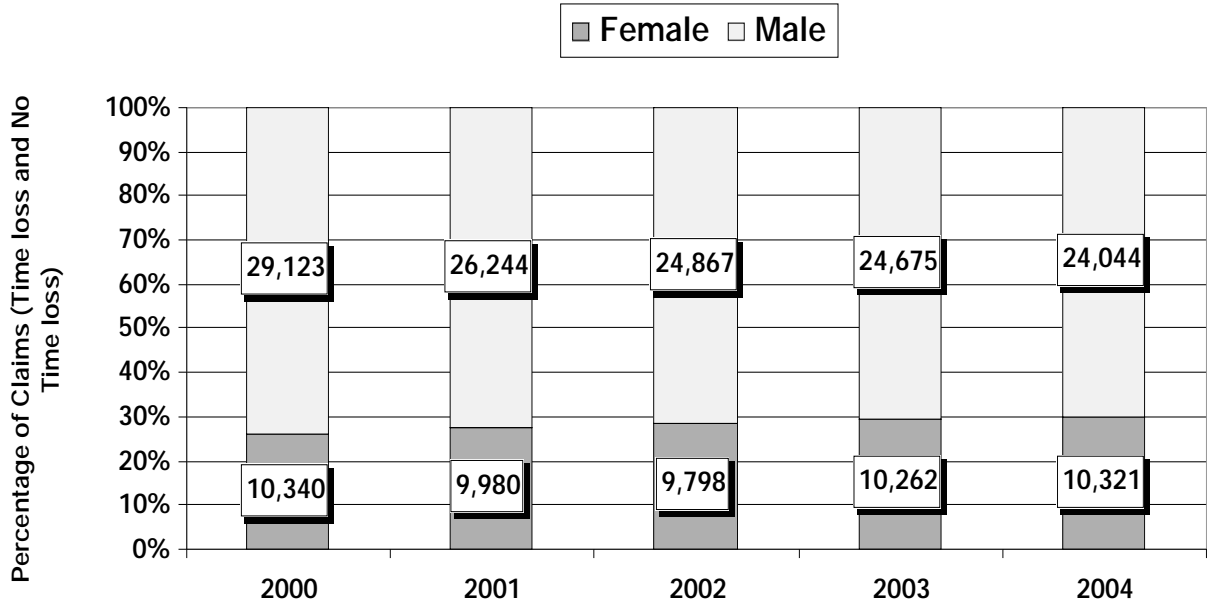
The percentage of claims received from men and women is somewhat different from the percentage of workers employed by gender. In 2004, male workers submitted 70% of accepted claims while female workers reported 30%. No gender was recorded in a small number of claims. By comparison, in 2004, Statistics Canada reported that 53% of employed workers in Manitoba were men and 47% were women.

Several factors may help to explain the overrepresentation of men in the accepted claim statistics. One of the most important is that men are more likely to work in the more hazardous jobs in the primary and goods-producing sectors that have the highest injury rates. Women are more likely to work in lower-risk service sector jobs. A total of 46%



of women's claims are concentrated in service (one-third of these in healthcare), manufacturing (20%), trade (14%), self insurers (10%) and voluntary industries (7%). Men's claims are concentrated in manufacturing (41%), trade (15%), construction (11%), and transportation (8%).

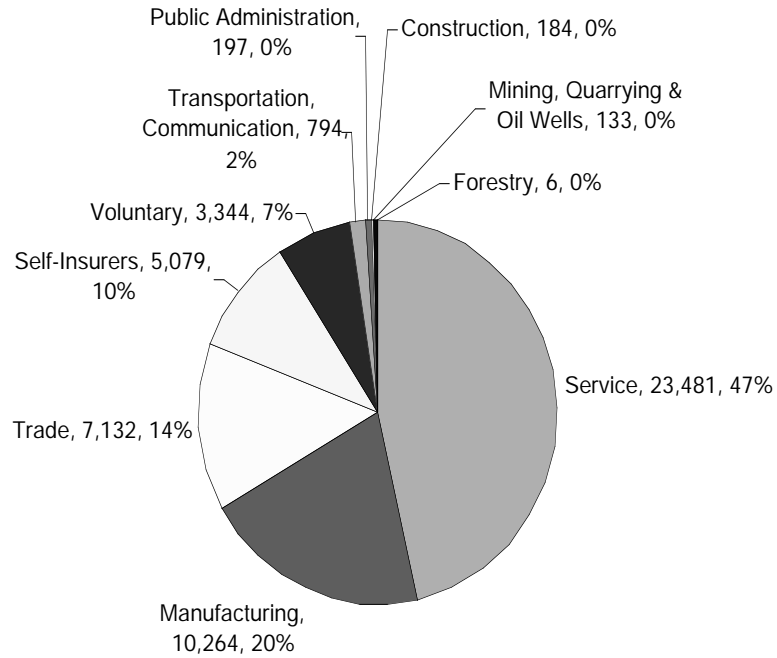
**Figure 9 Accepted Claims by Gender, 2000 to 2004**



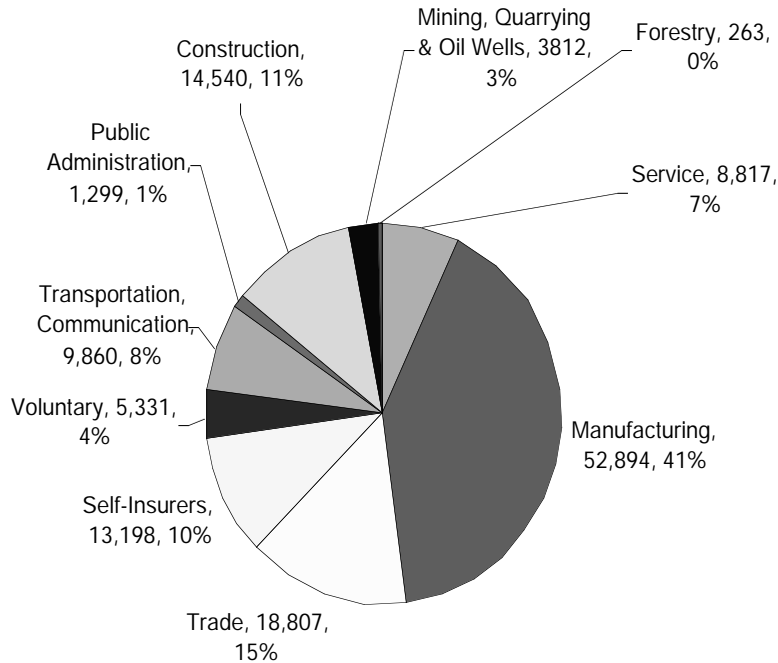
In four of these industry sectors (mining, forestry, construction and transportation/communication), men reported more than 90% of all accepted claims. In manufacturing and public administration, men reported more than 80%. Women reported more claims than men (more than 70%) only in the service sector.

The distribution of accepted claims by gender and industry is displayed in Figures 10 and 11. Overall, the ratio of males to females in WCB injury claims shows a gradual increase in the female proportion. This can be attributed to the fact that while employment growth for women has been double that of men the past 5 years, and while claims from men have dropped 17% during this period, there has been no corresponding decline in the number of claims from women.

**Figure 10 Female Claims by Industry<sup>8</sup> Sector, 2000 to 2004**



**Figure 11 Male Claims by Industry<sup>8</sup> Sector, 2000 to 2004**



<sup>8</sup> In a small number of cases the industry sector is not known.

---

## **4.2 Accepted Claims by Age Group**

The number of injuries and illnesses among workers younger than 25 has been declining more rapidly than injuries and illnesses in other age groups. The number of youth time loss claims declined 20% in the five year period 2000 to 2004 while no time loss claims declined 19%. Employment growth for youth was 1.4% over this same period. In comparison, time loss claims decreased by 13% while no time loss claims fell by 12% for all age groups between 2000 and 2004 despite employment growing by 4.4%.

Higher injury rates for youth persist, suggesting that younger workers remain more likely to experience an injury or illness than their older colleagues. During the same period, claims from experienced workers (25+) declined half as much as that of young workers while their employment growth was more than double (5% vs. 1.4%).

In 2004, young workers (those under the age of 25) comprised 17% of the work force and 17% of accepted claims. Workers between the ages of 25 and 34 made up 21% of the work force, but 23% of claimants, while workers between the ages of 35 and 44 made up 25% of the workforce and 26% of accepted claims.

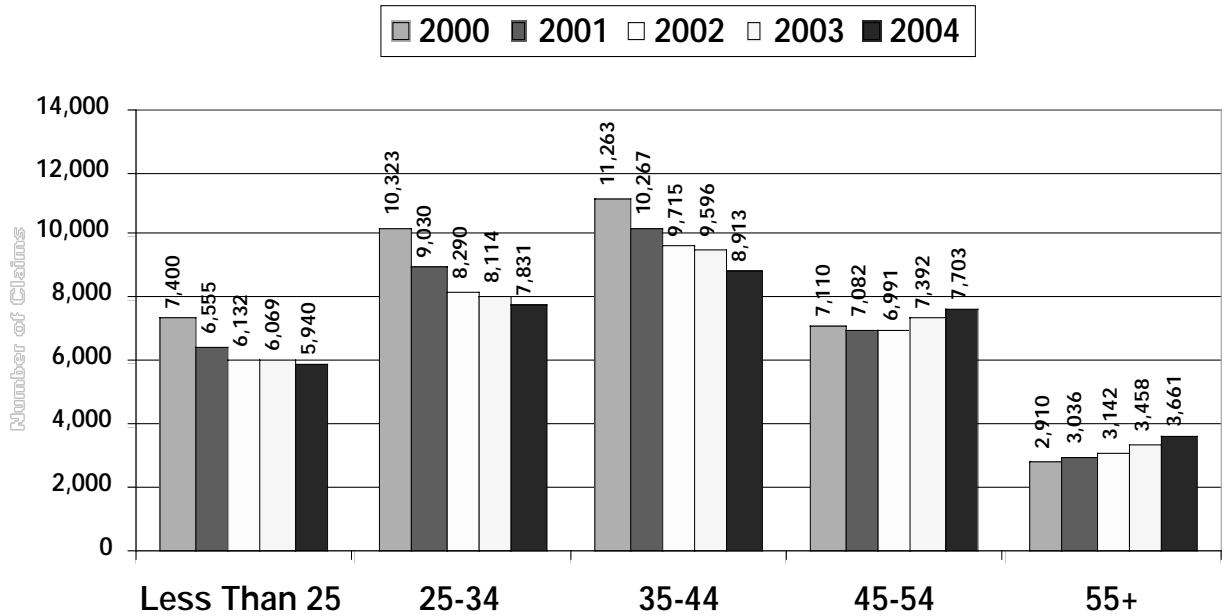
The proportion of workers with accepted claims who are 45 to 54 is growing relative to other age groups. It has increased from 18% of accepted claims in 2000 to 23% in 2004 while having 24% of employment in the workforce. In 2004, those 55 years of age and older were 14% of the workforce but only 11% of accepted claims. This increase in claims for older workers parallels labour force changes where employment of the 45-54 age group rose 12% and accepted claims rose 7%, while employment for the 55+ group rose 23% and claims rose 26%.

While workers 45+ saw time loss claims increases of 15% and no time loss rise 12% from 2000-2004, older women have increases in time loss claims of 21% and no time loss 31% compared to older men with increases in time loss claims of 12% and no time loss claim increases of 6%.

Almost half of the workforce is in the 25-44 age group, where there was a reduction of 3% in the number of workers since 2000. During the past five years the share of claims for this age grouping has declined from 55% of all claims to 49%.

In 2004, the average age of injured or ill females was 40 (median 41) compared to an average of 38 (median 38 years) in 2000. More claims are coming from older women concentrated in healthcare jobs in the service sector, where there is an aging workforce while younger workers are normally in low risk sectors such as retail trade. For men, the average age of injured or ill workers was 38 (median 37 years) in 2004, up from 36 years (median 35) in 2000.

**Figure 12 Accepted Claims by Age Groups (Time Loss and No Time Loss), 2000 to 2004**



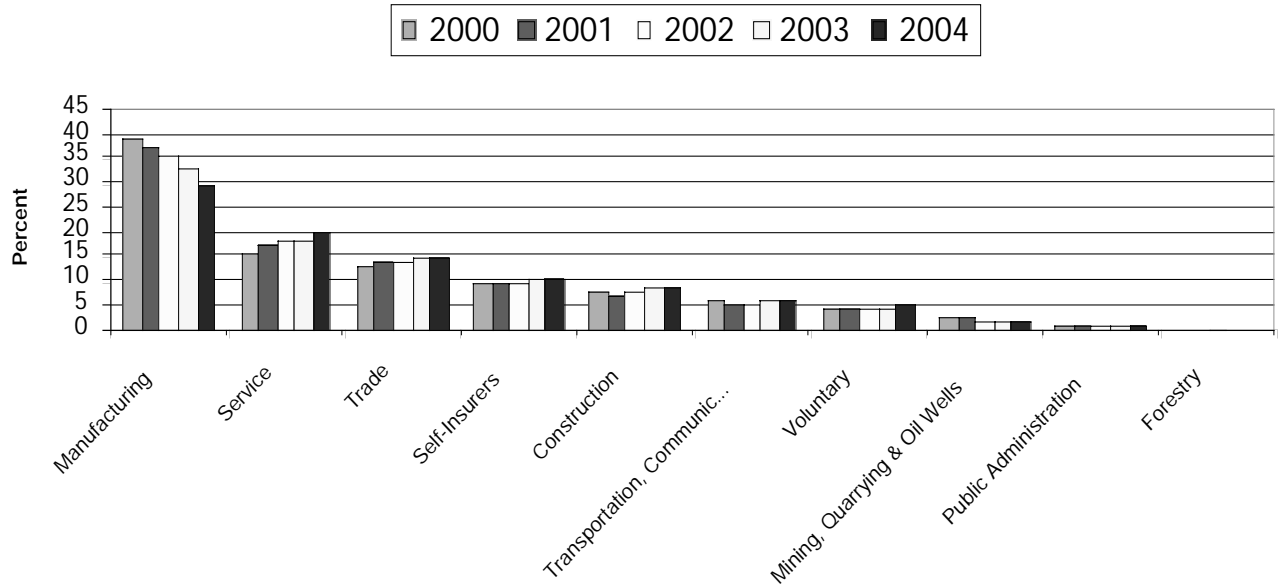
### 4.3 Accepted Claims by Industry Sector

The industry groupings in this section are drawn from WCB rate code groups rather than the Standard Industrial Classification or the North American Industry Classification System codes. In 2000, the proportion of no time loss and time loss claims in the manufacturing sector was roughly equal at 39%. By 2004, this sector's share of no time loss claims fell to 31% while its share of time loss decreased to 36%. Nevertheless, this is far disproportionate to manufacturing's share of covered workers (16%).

By comparison, service, self insurers and trade sectors increased their share of accepted claims from 2000 to 2004 as a percentage of claims filed. The service sector experienced 22% of the time loss claims and 19% of the no time loss claims in 2004. The construction sector had 9% of the time loss and 9% of the no time loss claims in 2004, while transportation, communication and storage had roughly 9% of time loss and 5% of no time loss claims in 2004.

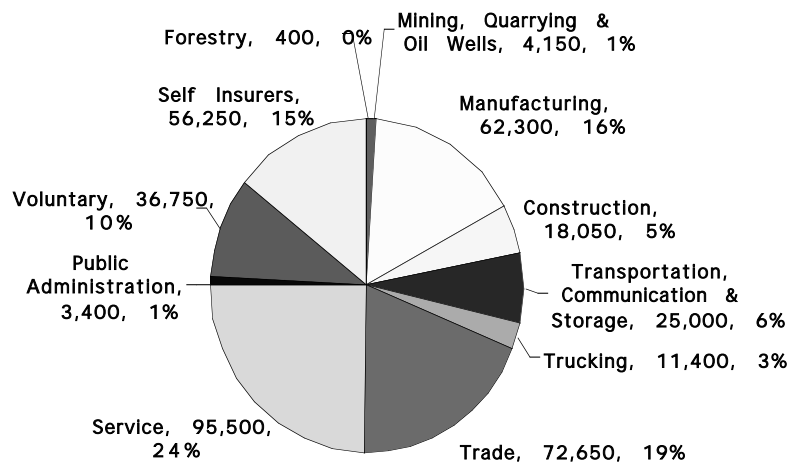
While the mining sector had about 4% of all accepted claims, it only had 1% of the time loss claims in 2004.

**Figure 13 Distribution of Claims by Major Industry Sectors, 2000 to 2004**



From 2000 to 2004, workers younger than 25 accounted for 18% of accepted claims while workers 45 and older represented 30%. The majority of youth claims occurred in the following sectors: manufacturing (40%), trade (20%), service (17%), and construction (10%). Accepted claims by older workers (45+) were centered in manufacturing (28%), service (22%), self insurers (16%) and trade (11%).

**Figure 14 Industry Shares of Full-Time Equivalent Workers, 2004**



---

#### ***4.4 Occupations of Injured and Ill Workers (Time Loss Claims Only)***

Just as certain industries have more workplace injuries and illnesses, so do certain occupations. Over the 2000-2004 period, one occupation group (trades, transportation and equipment operators) accounted for the largest proportion of time loss claims. In 2000, this occupational group had about 32% of time loss claims. By 2004, this ratio had increased to 38%. By contrast, employment for this occupational group declined 5% during this five year period.

In 2004, 18% of time loss claims were in processing and manufacturing occupations, down from 27% in 2000. From 2000 to 2004, employment fell 1% in this occupational group.

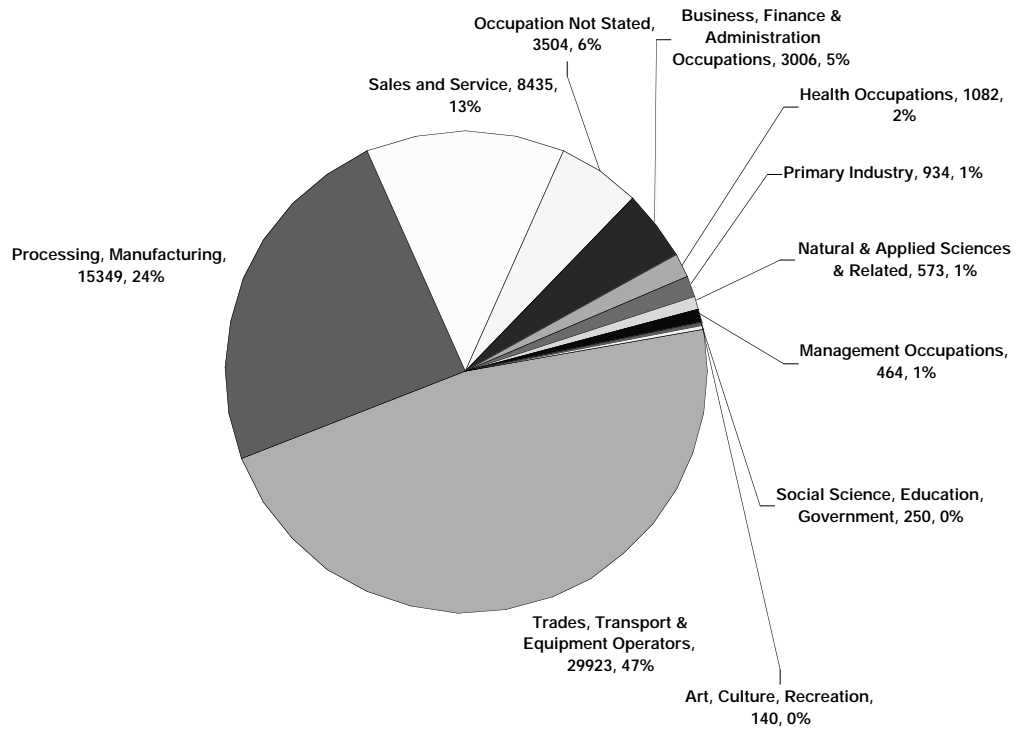
Sales and service occupations employed about 21% of injured or ill workers in 2004 compared to 19% in 2000. About 11% of the injured or ill workers were in health-care occupations in 2004, an increase from 8% in 2000. Employment in healthcare occupations rose 18% during this five year period.

In 2004, women accounted for 86% of the time loss claims filed by health-care workers. In addition, women reported a fair proportion of time loss claims in the skilled sales and service occupations (53%), social sciences (77%), education, art and culture (45%). In this same year, men reported a high proportion of the time loss claims in the natural sciences (77%), trades and transport equipment (94%), primary occupations (84%), and processing manufacturing occupations (79%).

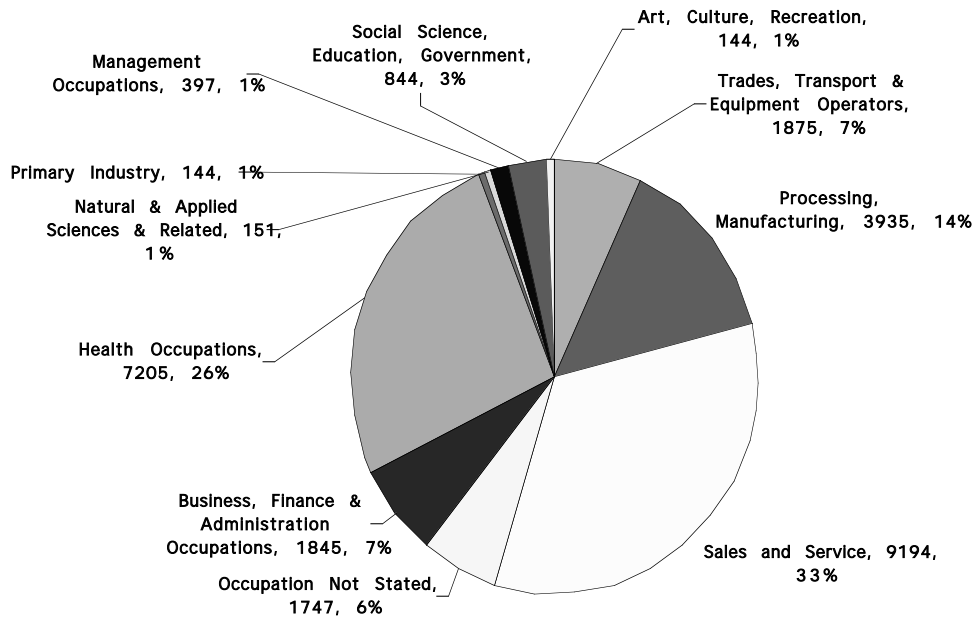
From 2000-2004, women's time loss claims were mainly in sales and service (33%), health occupations (26%), and processing/ manufacturing occupations (14%).

Over this same period, men had 70% of their time loss claims in two occupational groups: trades, transport and equipment operator's occupations (47%) and processing/ manufacturing occupations (24%). While the male share of processing job injuries has declined from 31% to 21% of total time loss claims since 2000, trades, transportation and equipment operators increased its proportion from 42% to 52% of total time loss claims. Sales and service jobs make up 15% of men's time loss claims in 2004.

**Figure 15 Occupational Groupings of Male Injured Workers 2000 to 2004**



**Figure 16 Occupational Groupings of Female Injured Workers, 2000 to 2004**



---

## **4.5 Part of Body Injured for All Accepted Claims**

This section provides information about which parts of the body are at the greatest risk of an workplace injury or illness. This information allows prevention efforts to be more effectively targeted. The WCB uses two methods of reporting the part of body injured. The first method assigns a letter of the alphabet to different parts of the body. The so-called “stickman” codes are a simple, first-level sorting of injured body parts and are reported in the WCB annual report<sup>9</sup>. All claims are given stickman codes. The next method uses a coding system developed by the Canadian Standards Association (the CSA Z795 coding system). This system provides additional details on injured body parts and is the standard coding methodology used by Workers Compensation authorities across Canada. Only time loss claims are classified by the CSA Z795 coding system.

### **4.5.1 Part of Body Injured for All Accepted Claims**

Using the WCB stickman codes, hands/fingers have been the most frequently injured body part in 2000 through 2004 (in 2004 about 22% of all injured body parts). The second most frequent injuries were those occurring to multiple body parts, at 16% (usually this type of injury includes the back and another nearby body part) followed by the back (15%), legs (10%), arms (9%) and eyes (8%).

### **4.5.2 Part of Body Injured for Time Loss Claims**

Using the Canadian Standards Association (CSA) coding system produces a different profile of affected body parts. Because injuries to eyes commonly result in mostly no time loss claims, these claims drop from 8% of injuries for all accepted claims to 4% of time loss claims that are coded using the CSA guide.

In 2000, trunk injuries accounted for roughly 36% of time loss claims. This proportion increased to 40% in 2004. Most trunk injuries (27% of all time loss injuries) were to the back and spine. The increased share is caused by declines in injuries to other body parts while injuries to the spine and other areas of the trunk have remained constant year by year.

Over the 2000 to 2004 period, injuries to the lower extremities accounted for 15.5% of the time loss injuries by part of body and these claims were comprised almost equally of injuries to the legs, ankles/feet.

For each of the five years profiled, injuries to the upper extremities accounted for slightly over one quarter of injuries. In 2004, injuries to fingers accounted for 10% of all time loss claims, and injuries to other upper extremities (6%) followed by hands and wrists (8%).

---

<sup>9</sup> See page 50 of the 2004 WCB Annual Report.



From 2000 to 2004, head and neck injuries accounted for about 8% of the time loss claims. Over this period, about 53% of head injuries involved the eye.

**Table 9 Time Loss Claims by Part of Body Affected, 2000 to 2004**

Part of Body*	Year of Injury or Illness				
	2000	2001	2002	2003	2004
<b>Trunk</b>	<b>7,103</b>	<b>6,522</b>	<b>6,420</b>	<b>6,563</b>	<b>6,823</b>
<i>Back including spine &amp; spinal cord</i>	5,025	4,714	4,762	4,803	4,876
<i>Other trunk</i>	2,078	1,808	1,658	1,760	1,947
<b>Upper Extremities</b>	<b>5,176</b>	<b>4,731</b>	<b>4,537</b>	<b>4,274</b>	<b>4,308</b>
<i>Hands/ wrists except fingers</i>	1,744	1,495	1,308	1,372	1,426
<i>Fingers</i>	2,212	2,172	2,046	1,820	1,804
<i>Other upper extremities</i>	1,220	1,064	1,183	1,082	1,078
<b>Lower Extremities</b>	<b>2,866</b>	<b>2,757</b>	<b>2,762</b>	<b>2,763</b>	<b>2,720</b>
<i>Legs</i>	1,283	1,271	1,250	1,253	1,281
<i>Ankles/feet (not toes)</i>	1,271	1,267	1,231	1,233	1,162
<i>Other lower extremities</i>	312	219	281	277	277
<b>Head and Neck</b>	<b>1,623</b>	<b>1,424</b>	<b>1,361</b>	<b>1,338</b>	<b>1,395</b>
<i>Eyes</i>	920	779	712	712	662
<i>Other head</i>	451	428	429	430	493
<i>Neck</i>	252	217	220	196	240
<b>Multiple body parts</b>	<b>2,347</b>	<b>2,397</b>	<b>2,368</b>	<b>2,135</b>	<b>1,677</b>
<b>Body systems</b>	<b>246</b>	<b>190</b>	<b>157</b>	<b>141</b>	<b>134</b>
<b>Missing/ Not Coded/ Part of body-unknown/ other</b>	<b>598</b>	<b>572</b>	<b>264</b>	<b>268</b>	<b>214</b>
<b>Total</b>	<b>19,959</b>	<b>18,593</b>	<b>17,869</b>	<b>17,482</b>	<b>17,271</b>

\*Note: This table is based on the CSA Z795 coding standard.

#### ***4.6 Time Loss Claims by Nature of Injury or Illness***

The WCB records the nature of injury or medical diagnosis (i.e., the principal physical characteristics of the disabling injury or disease such as an amputation) for each accepted time loss claim. Information on the nature of injury or illness is not recorded for any time loss claims. Approximately 8% of all time loss claims occur from occupational diseases. These are caused by exposures to chemical, physical (e.g. noise), biological, ergonomic (carpal tunnel syndrome) or psychosocial hazards (e.g. post-traumatic stress disorder) in the workplace.

In 2004, traumatic injuries and disorders accounted for 91% of time loss claims. Sprains, strains and tears were the leading nature of injury or illness accounting for 54%. Surface wounds and burns accounted for 12% and open wounds accounted for 10% of time loss claims in that year. Systemic diseases and disorders accounted for an additional 7% of time loss claims in 2004.

**Table 10 Time Loss Claims by Nature of Injury or Illness, 2000 to 2004**

Nature of Injury or Illness*	Year of Injury or Illness				
	2000	2001	2002	2003	2004
<b>Traumatic Injuries and Disorders</b>	<b>17,458</b>	<b>16,753</b>	<b>16,243</b>	<b>15,652</b>	<b>15,646</b>
<i>Sprains, strains and tears</i>	8,602	8,774	9,119	9,137	9,321
<i>Surface wounds, bruises</i>	2,623	2,283	2,146	2,204	2,115
<i>Open wounds</i>	2,235	2,167	2,005	1,805	1,747
<i>Other traumatic injuries &amp; disorders</i>	2,620	2,343	1,786	1,298	1,042
<i>Fractures, dislocations</i>	935	769	828	893	1,081
<i>Burns</i>	443	415	359	315	340
<b>Occupational Illnesses</b>	<b>1,867</b>	<b>1,210</b>	<b>1,215</b>	<b>1,525</b>	<b>1,327</b>
<i>Systemic diseases &amp; disorders</i>	1,575	1,051	1,060	1,191	1,144
<i>Other diseases, conditions &amp; disorders</i>	77	54	47	52	44
<i>Symptoms, signs, ill defined conditions</i>	165	76	51	97	43
<i>Infectious, parasitic diseases</i>	32	21	21	26	19
<i>Multiple diseases, conditions &amp; disorders</i>	14	4	31	157	75
<i>Neoplasms, tumors &amp; cancer</i>	4	4	5	2	2
<b>Nature of Disease Unknown or Not Coded</b>	<b>634</b>	<b>632</b>	<b>411</b>	<b>305</b>	<b>298</b>
<b>Total</b>	<b>19,959</b>	<b>18,593</b>	<b>17,869</b>	<b>17,482</b>	<b>17,271</b>

\*Note: This table is based on the CSA Z795 coding standard

---

#### ***4.7 Time Loss Claims by Source of Injury or Illness***

The WCB also records the source or cause of time loss injuries and illnesses. Source is defined as the object, substance, bodily motion or exposure that produced the injury or illness.

Of all source of injury or illness categories, contact with persons, plants, animals and minerals have caused about 36% of accepted time loss injuries and illnesses since 2000. In 78% of these cases between 2000 and 2004, workers were injured without coming into contact with other persons or objects. They injured themselves through bodily motion, repetitive motion or stretching, bending, walking, running or tripping without falling.

Coming into contact with structures and surfaces was the source of injury or illness of 16% of time loss claims in 2004. This includes workers who fell and came into contact with the floor or ground.

**Table 11 Time Loss Claims by Source of Injury or Illness, 2000 to 2004**

Primary Source of Injury or Illness*	Year of Injury or Illness				
	2000	2001	2002	2003	2004
<b>Persons, Plants, Animals and Minerals<sup>10</sup></b>	<b>6,320</b>	<b>7,087</b>	<b>7,081</b>	<b>6,557</b>	<b>5,371</b>
<i>Persons-bodily position or repetitive motion of injured or ill worker</i>	4,789	5,655	5,887	5,210	3,884
<i>Persons- other than injured worker (e.g. patients or co-workers)</i>	1,197	1,143	910	1,062	1,177
<i>Minerals- metallic or non-metallic</i>	44	55	47	43	44
<i>Other persons, plants, animals, minerals</i>	290	234	237	242	266
<b>Structures and Surfaces</b>	<b>2,523</b>	<b>2,439</b>	<b>2,514</b>	<b>2,555</b>	<b>2,760</b>
<b>Parts and Materials</b>	<b>2,720</b>	<b>2,083</b>	<b>1,842</b>	<b>1,851</b>	<b>2,137</b>
<b>Containers</b>	<b>2,259</b>	<b>1,601</b>	<b>1,596</b>	<b>1,620</b>	<b>1,829</b>
<b>Vehicles</b>	<b>833</b>	<b>725</b>	<b>688</b>	<b>724</b>	<b>835</b>
<b>Tools, Instruments and Equipment</b>	<b>1,326</b>	<b>1,158</b>	<b>1,099</b>	<b>1,139</b>	<b>1,193</b>
<i>Hand tools- non-powered</i>	777	738	640	650	647
<i>Hand tools-powered</i>	374	295	279	265	256
<i>Other-tools and equipment</i>	175	125	180	224	290
<b>Machinery</b>	<b>1,247</b>	<b>937</b>	<b>927</b>	<b>1,049</b>	<b>1,131</b>
<b>Other Sources</b>	<b>919</b>	<b>921</b>	<b>876</b>	<b>890</b>	<b>1,002</b>
<b>Furniture and Fixtures</b>	<b>643</b>	<b>546</b>	<b>524</b>	<b>555</b>	<b>557</b>
<b>Chemicals and Chemical Products</b>	<b>317</b>	<b>231</b>	<b>195</b>	<b>212</b>	<b>193</b>
<b>Source Unknown or Not Coded</b>	<b>852</b>	<b>865</b>	<b>527</b>	<b>330</b>	<b>263</b>
<b>Total</b>	<b>19,959</b>	<b>18,593</b>	<b>17,869</b>	<b>17,482</b>	<b>17,271</b>

Note: This table is based on the CSA Z795 coding standard.

<sup>10</sup> This category includes injuries sustained due to the bodily motion of the injured worker, repetitive motions and injuries caused by coworkers or others such as health-care patients

#### 4.8 Time Loss Claims by Event or Exposure

The WCB records the way in which workers sustained their injuries or illnesses.

Workers are much more likely to be injured by bodily reaction or exertion than from contact with objects or equipment, or by falls. In 2004 almost 50% of time loss claims were due to bodily reaction and exertion. Contact with objects or equipment resulted in 28% of the events or exposures in 2004. By comparison, falls from height or falls on one level made up roughly 16% of the time loss claims that same year.

**Table 12 Time Loss Claims by Type of Event or Exposure, 2000 to 2004**

Type of Event or Exposure	Year of Injury or Illness				
	2000	2001	2002	2003	2004
<b>Bodily Reaction and Exertion</b>	<b>9,652</b>	<b>8,986</b>	<b>8,889</b>	<b>8,678</b>	<b>8,158</b>
<i>Overexertion</i>	4,926	3,388	3,037	3,498	3,957
<i>Bodily reaction</i>	3,876	4,937	5,083	4,080	2,720
<i>Repetitive motions</i>	810	640	708	895	777
<i>Other bodily reaction &amp; exertion</i>	40	21	61	205	704
<b>Contact with Objects, Equipment</b>	<b>5,985</b>	<b>5,461</b>	<b>5,066</b>	<b>5,006</b>	<b>4,902</b>
<i>Struck by objects</i>	2,839	2,623	2,523	2,351	2,202
<i>Struck against objects</i>	1,582	1,377	1,222	1,261	1,413
<i>Caught in objects</i>	902	905	867	858	876
<i>Rubbed or abraded</i>	658	552	438	506	367
<i>Other contact with objects or equipment</i>	4	4	16	30	44
<b>Falls</b>	<b>2,200</b>	<b>2,227</b>	<b>2,361</b>	<b>2,334</b>	<b>2,720</b>
<i>Fall on same level</i>	1,343	1,424	1,571	1,608	1,930
<i>Fall from height</i>	857	803	790	726	790
<b>Exposure to Harmful Substances</b>	<b>949</b>	<b>831</b>	<b>747</b>	<b>700</b>	<b>681</b>
<b>Transportation Incidents</b>	<b>278</b>	<b>236</b>	<b>252</b>	<b>232</b>	<b>320</b>
<b>Assaults and Violent Acts</b>	<b>242</b>	<b>223</b>	<b>202</b>	<b>239</b>	<b>243</b>
<b>Fires and Explosions</b>	<b>20</b>	<b>11</b>	<b>18</b>	<b>8</b>	<b>16</b>
<b>Event Unknown/Missing/ Not Coded</b>	<b>633</b>	<b>618</b>	<b>334</b>	<b>285</b>	<b>231</b>
<b>Total</b>	<b>19,959</b>	<b>18,593</b>	<b>17,869</b>	<b>17,482</b>	<b>17,271</b>

Note: This table is based on the CSA Z795 coding standard

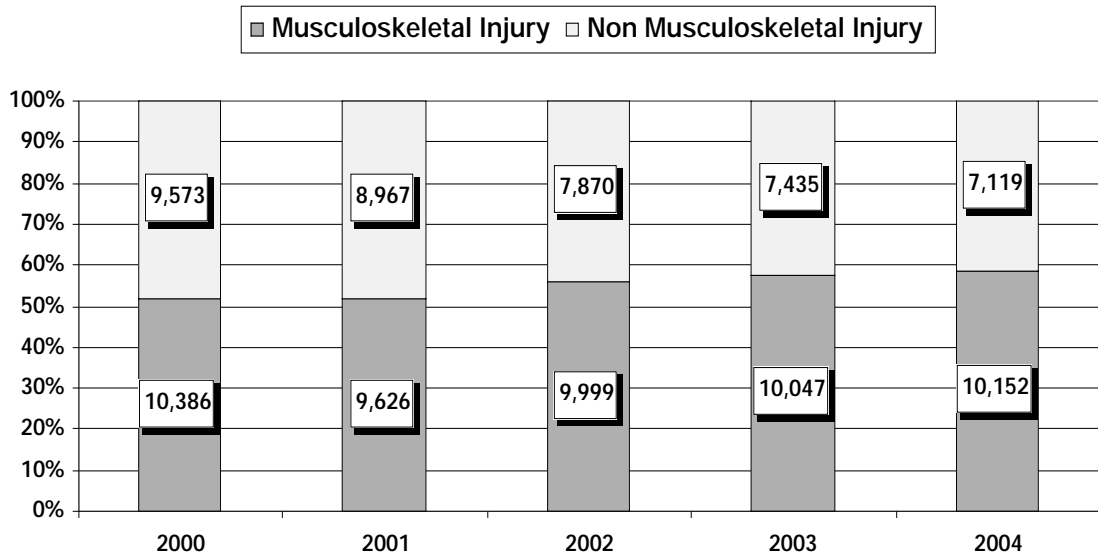
## 4.9 Musculoskeletal Injuries

Musculoskeletal injuries (MSIs) include sprains, strains, tears, back pain, carpal tunnel syndrome and other musculoskeletal or connective tissue diseases and disorders which result in time loss claims. These injuries often occur as a result of improper or inadequate workplace design or processes (ergonomic conditions). Proper ergonomic practices could prevent many of these types of injuries. Between 2000 and 2004, musculoskeletal injuries represent about 55% of accepted time loss claims.

**Table 13 Time Loss Claims, Musculoskeletal Injuries (MSI), 2000 to 2004**

Type of Injury	Year of Injury or Illness				
	2000	2001	2002	2003	2004
<b>Musculoskeletal Injuries</b>	<b>10,386</b>	<b>9,626</b>	<b>9,999</b>	<b>10,047</b>	<b>10,152</b>
<b>Non- Musculoskeletal<sup>11</sup></b>	<b>9,573</b>	<b>8,967</b>	<b>7,870</b>	<b>7,435</b>	<b>7,119</b>
<b>Total</b>	<b>19,959</b>	<b>18,593</b>	<b>17,869</b>	<b>17,482</b>	<b>17,271</b>

**Figure 17 Proportion of Musculoskeletal Injuries to Time Loss Claims, 2000 to 2004**



<sup>11</sup> Examples include fractures, open wounds, burns, occupational diseases, hearing loss

---

## 5.0 DISCUSSION

The five years of data presented in this report enable the observation of emerging trends in workplace injuries and illnesses in Manitoba. As future Injury Statistics Reports are published with longer time series, greater confidence in the trends will be warranted and other trends may emerge.

This section will comment on some significant patterns that are emerging, discuss possibly influential factors and identify potential impacts and consequences of the observed trends.

### 5.1 Injury Rate Trends

Manitoba's time loss injury rate is falling, from a high over the five year period of 5.8 time loss injuries per 100 full-time equivalent workers in 2000 to 4.6 in 2004, a reduction of 21%.

These reductions can be attributed to a number of factors:

1. Manitoba employers and workers are stepping up their injury prevention efforts;
2. there is increasing public awareness of the importance of workplace safety and health in response to the *SAFE Work* awareness campaign;
3. The WCB's experience rating system creates a financial incentive for employers to prevent injuries;
4. The SCORECARD system is demonstrating the effect and costs of time loss injuries on employers' present and future bottom-line; and
5. Workplace Safety and Health Division's improved inspection and enforcement efforts combined with focused inspections of high-hazard workplaces.

While this improvement is encouraging, employers, workers, government and the WCB will need to continue injury and illness prevention efforts if further reductions are to be realized. Unfortunately, the overall trend of a reduction in injury rates is not occurring consistently across all industry sectors. Significant improvements in the manufacturing sector are largely responsible for the overall reduction in the time loss injury rate. The manufacturing industry's time loss injury rate has declined by 39% from 2000 to 2004 and accounts for 95% of the reduction in the overall time loss injury rate for all industry sectors. In spite of the dramatic improvements in manufacturing's time loss injury rate, this rate remains high and indicates that there is more work to be done.

Transportation, communication and storage, construction (building construction) and the mining sectors have also experienced a drop in its time loss injury rate in 2004 compared to 2000. The injury rate in the building construction sector dropped and then plateaued in recent years. The service sector, which includes hotels and restaurants, healthcare and other sub sectors, has experienced an increase in the number of time loss injuries over the five year period, but since the number of workers employed in that sector has also

---

increased, its time loss injury rate has remained relatively static. The majority of injuries in this sector continue to occur to women.

The healthcare sector is one of Manitoba's largest employers. As employment in this sector grows, so does the number of injuries. Injuries in healthcare occupations are predominately musculoskeletal in nature, due to work activities such as overexertion from lifting and repetitive motion, resulting from the organization of work. In order to reduce injuries, a redesign of work procedures – such as additional training in patient lifting techniques and the regular use of mechanical lifting and other engineered devices is necessary. These issues present challenges to the industry, but are nevertheless vitally important if improvements in health and safety are to be achieved.

This report discusses both the time loss injury rate and the all injury rate. The all injury rate is comprised of both no time and time loss injuries. While no time loss injuries are generally less severe in nature, they are important as barometers of health and safety performance. The all injury rate has declined from 11.5 injuries per 100 workers in 2000 to 9.2 in 2004 – a reduction of 20% over the five year period. The manufacturing all injury rate fell by 34% from 25.6 to 16.8 during this same period. The manufacturing sector accounts for 72% of the reduction in the all injury rate. The remaining all injury rate reduction is shared about equally between the mining, construction and transportation sectors.

## **5.2 Fatalities**

Fatalities that occur at work can be divided into two broad groups. Fatalities caused by occupational diseases resulting from exposures to toxic substances and those resulting from acute traumatic hazards. Occupational diseases develop from long-term exposures to hazardous substances. A number of these disease deaths are due to exposure to asbestos fibres decades ago.

Typically, over a third of all workplace fatalities are related to occupational diseases. In 2003, over 50% of fatalities were due to occupational disease. This increased ratio is due to a greater number of firefighter cancer claims being accepted. In May 2002, *The Workers Compensation Act* was amended to include a rebuttable presumption that certain cancers are occupational diseases of full-time firefighters.

The majority of occupational diseases resulting in death are cancers and most of them are the result of exposures that occurred years or decades ago. Improved diagnosis and epidemiology is expected to increase the number of occupational disease claims identified, filed and accepted. As diagnostic procedures improve, more cancers may be detected earlier. Epidemiological studies may also increase the portion of cancers attributed to the workplace.

It is likely that claims and other claims related to asbestos dust exposure will continue to be reported to the WCB for a number of years to come. Such claims are due to exposures



---

that occurred approximately twenty to thirty years ago when the dangers of working with asbestos were less well understood, health and safety standards were lower and workers received little in the way of training or protective equipment. In recent years, protection standards have been strengthened to better reflect an understanding of the dangers of exposure to these harmful substances.

Traumatic workplace fatalities occur predominantly in three industry sectors: agriculture, construction and transportation. These types of deaths occur from contact with heavy equipment or falls. These tend to be hazardous workplaces – the farm, the construction site, the rail yard or highway – and the consequences of unsafe processes, practices and behavior are sometimes severe: serious injury and even death.

In the agriculture sector, the family farm doubles as a home and workplace. As a result, a number of by-stander deaths occur from family members' interactions with farming operations. From 2000 to 2004, there were 10 bystander deaths along with 21 work related fatalities in the agriculture sector.

### **5.3 Age**

Overall, while the number of injuries and illnesses have fallen from 2000 to 2004, (e.g. 13% decline since 2000), this trend is not paralleled among all age groups. Over this period, the number of claims to workers in the 45-54 age group grew by 8% while injuries and illnesses to workers in the 55+ group grew by 26%. By comparison, from 2000 to 2004, employment increased by 12% among workers aged 45 to 54 but jobs rose by 27% among workers aged 55 and older.

Some factors that may explain this:

- The aging of the workforce - the progression of baby boomers - born between 1946 and 1964 through cohorts of the workforce;
- The manufacturing sector is largely responsible for the drop in the injury rate and this sector tends to employ younger workers;
- Older workers (especially women) may be disproportionately represented in certain sectors – such as healthcare – that have not experienced a reduction in injuries; and
- Older workers may not be hearing the prevention message as well as their younger coworkers. Younger workers may be more likely to change their behaviour to protect themselves at work.

Further analysis of the data will assist in clarifying the reasons for this trend.

---

The aging of the workforce has several implications for the workers compensation system. While older workers still tend to be injured at a lower rate (injuries per 100 workers) than younger workers, the absolute number of injuries among older workers has been increasing. Furthermore, jobs among older workers have been increasing at a faster rate than for younger workers.

Older workers are more prone to age-related injuries and to occupational diseases with long latency periods. Older workers take longer to recover from their injuries and illnesses, and are more likely to die or be permanently disabled from their injuries and illnesses than their younger counterparts. When workers aged 55 years or older are seriously injured, they often need twice the recuperation time that younger workers require.

#### ***5.4 Musculoskeletal Injuries***

Some injuries to a worker's muscles and skeleton occur over a period of time given the physical demands at work. These injuries are also affected by the organization and manner that work is performed. These types of injuries have increased their share of time loss claims from 52% in 2000 to 59% in 2004.

Musculoskeletal injuries (MSIs) are generally caused by overexertion or repetitive motion that imposes stress or strain on the body. These injuries are difficult or costly to prevent since measures to reduce factors may involve a redesign of the workspace or production line reorganization of work processes. MSI's comprise 68% of the time loss injuries to women and the trend continues upwards. The healthcare sector has steadily increased its share of MSI's from 15% in 2000 to 19% in 2004.

In 2004, 78% of the time loss injuries to women in the healthcare sector were MSI's and this total represents almost half of all women's MSI's. While MSI's among women are increasing, MSI's for men are decreasing.

By sector, manufacturing has 30% of all MSI's, service 23%, trade 15% and self insurers 11% of the MSI population. Healthcare has the highest proportion of time loss injuries that are MSI related (73%).

---

## 6.0 TERMS AND DEFINITIONS

**Age:** The worker's age at date of injury or illness.

**All Injury Rate:** The all-injury rate represents the number of WCB-accepted claims per 100 full-time equivalent workers. This rate represents the risk of workplace injury or disease to a worker over a one-year period.

Full-time equivalent workers are estimated based on gross payrolls submitted by covered employers and matching Statistics Canada wage-rate data. The injury rate is then calculated by dividing the number of accepted WCB time loss and no time loss claims in a calendar year by the estimated number of full-time equivalent workers and multiplying that result by 100.

All injury rate =  $\frac{\text{Number of WCB time loss and no time loss claims in a calendar year} * 100}{\text{Estimated number of full-time equivalent workers}}$

**All Injuries:** All time loss and no time loss claims.

**Collective Liability:** This core principle of workers compensation spreads the cost of the compensation across all covered employers. In return for immunity from suit, covered employers wholly fund the compensation system through premiums or "assessments" paid into an Accident Fund. Compensation is paid from the Accident Fund maintained by the Workers Compensation Board (WCB) and is not dependent on an employer's ability to pay.

**CSA Z795-96 standard:** Many of the details surrounding the circumstances of the injury are coded using the Canadian Standards Association (CSA) guidelines for coding occupational injury and disease information (the CSA Z795-96 standard).

**Event or Exposure:** The manner in which the injury or disease was produced or influenced by the identified source (e.g., repetitive motion, fall, caught in machinery, etc.).

**Full-Time Equivalent Worker:** A full-time worker represents the equivalent of 52 paid weeks of employment, whether worked by one individual or several. Full-time equivalent workers are estimated based on the gross annual payroll submitted by covered employers in an industry and Statistics Canada average weekly wage-rate data appropriate to that industry. This method of estimating full-time equivalent workers is in accordance with a convention established by the Association of Workers' Compensation Boards of Canada (AWCBC) and adopted by the Manitoba WCB.

---

$$\text{Full-Time Equivalent Worker} = \frac{\text{Firm Payroll}}{(\text{Average Weekly Earnings} * 52)}$$

**Industry Classification:** The industry groups displayed in the tables are derived from the classification system used for determining WCB assessments for employers (rate code groups). Rate code groups contain employers whose workplaces experience similar levels of risk. The industry categories are similar to, but not identical to, Statistics Canada’s method of classifying industries. The federal agency uses the North American Industry Classification System (NAICS).

**Musculoskeletal Injuries (MSIs):** “Musculoskeletal injuries” or “MSIs” are injuries to or disorders of the muscles, tendons, ligaments, joints, nerves, blood vessels or related soft tissue including a sprain, strain and inflammation. Such injuries may be caused or aggravated by work.

**Nature of Injury or illness:** The principal characteristic of the injury or illness (e.g., amputation, sprain and strain, cut, etc.).

**No Time loss Claims:** No time loss claims include claims where no time at work is lost due to the workplace incident and the worker is receiving health-care benefits. Within this category, the WCB includes no-cost claims which are claims that are accepted but have no costs associated with them when adjudicated.

**Occupation:** A worker’s occupation at the time of the injury or either the onset of an occupational illness or the onset of a loss of earnings brought on by an occupational illness.

**Part of Body:** Part of body directly affected by the nature of injury or illness (e.g., eye, finger, etc.)

**Self Insurers:** Employers who are individually responsible for the costs of benefits and services for their workers. These employers pay an administration fee to the WCB to process each claim.

**Source of Injury or Illness:** Identifies the object, substance, exposure or bodily motion that directly produced or inflicted the injury or disease (e.g., knife, table saw, vehicles, etc.)

**Time loss Claims:** Time loss claims include claims where time at work is lost beyond the day of injury due to a workplace injury or illness, fatalities and claims where a worker is granted a permanent impairment award. Starting the day following the injury, the WCB will replace the wages the worker lost as a result of the injury.

**Time loss Injury Rate:** The time loss injury rate represents the number of time loss claims per 100 full-time equivalent workers. This rate represents the risk to a worker of a time loss workplace injury or disease in a calendar year.

---

Full-time equivalent workers are estimated based on gross payrolls submitted by covered employers and matching Statistics Canada wage-rate data. The injury rate is then calculated by dividing the number of accepted WCB time loss claims in a calendar year by the estimated number of full-time equivalent workers and multiplying that result by 100.

$$\text{Time loss injury rate} = \frac{\text{Number of WCB time loss claims in a calendar year}}{\text{Estimated number of full-time equivalent workers}} * 100$$

## ***6.1 Definitions and Sources of Identification for Fatalities***

### **Inclusion Criteria:**

This report attempts to include all deaths that occur in Manitoba as a result of an exposure to a hazard in the workplace.

Fatalities are included in this report when:

1. The Workers Compensation Board accepts a claim involving a fatality and determines that the death was the result of a workplace injury or illness. WCB-accepted fatalities are included regardless of where a death has occurred (i.e., a trucker who is killed while hauling out of province is included).
2. Manitoba Public Insurance accepts a claim involving a fatality and determines that the death was the result of a workplace injury or illness.
3. A death occurs in a non-WCB covered workplace and the Workplace Safety and Health Division of Manitoba Labour and Immigration investigates and determines that the death was the result of a workplace injury or illness.
4. The Royal Canadian Mounted Police investigates a fatality and determines that the death was the result of a workplace injury or illness.
5. A death occurs on a farm and falls under the inclusion criteria of the Canadian Agriculture Injury Surveillance Program.
6. The Office of the Chief Medical Examiner determines that a death the death was the result of a workplace injury or illness.

---

**Definitions:** For the purpose of workplace fatality surveillance, the following definitions are in use.

1. **Worker** – A worker is defined as a person in a position of employment performing any work which comes under the jurisdiction of the WCB of Manitoba, the Workplace Safety and Health Division of Manitoba Labour and Immigration or Human Resources Development Canada.
2. **Workplace** – A workplace is defined as any location where a worker is performing his or her assigned work. This includes the “highway” in the case of workers whose death occurred while they were traveling if traveling is part of their required duties.
3. **Bystander** – A bystander is defined as a person who is killed in a “workplace”, including a highway, as the result of a hazard of the workplace, but was not working for or in that workplace at the time of death.
4. **Acute-hazard exposure death** – This is a work-related fatality that occurs when a worker is injured or exposed to a significant amount of a hazardous agent. In such cases, the worker dies immediately or soon after the exposure. This category includes such deaths as falls from height, drowning, highway crashes, and chemical poisoning. It excludes deaths due to infectious agents.
5. **Work-related disease death** – This is a work-related fatality that occurs when a worker develops a disease as the result of a long-term exposure to a hazardous substance or contact with a disease-causing agent. In such cases, the worker dies after months or years have passed. This category also includes traumatic or single events that have precipitated a functional failure such as a myocardial infarction or an acute carbon monoxide inhalation. The fatalities are organized by year of acceptance by the Workers Compensation Board

**Sources of Identification of fatalities:**

The Workplace Safety and Health Division of Manitoba Labour and Immigration is responsible for tracking the occurrence of fatalities in Manitoba workplaces. Since 2000, closer partnerships have been established with other provincial agencies in an effort to enhance this monitoring system. This has resulted in a process of accessing multiple data sources for the identification of workplace fatalities.

---

The following sources currently contribute to the workplace fatality surveillance program.

- A. Workplace Safety and Health Division
- B. Workers Compensation Board of Manitoba
- C. Office of the Chief Medical Examiner
- D. Manitoba Department of Highways
- E. Royal Canadian Mounted Police
- F. Media clippings – daily review of local papers and electronic media.

## Appendix: Tables

Table A1 Full-time Equivalent Workers by WCB Industry Sectors and Selected Sub-Sectors, 2000 to 2004

Industry Sub-Sectors	Number of FTE <sup>12</sup> Workers				
	2000	2001	2002	2003	2004
<b>Forestry</b>	<b>400</b>	<b>350</b>	<b>350</b>	<b>400</b>	<b>400</b>
<b>Mining, Quarrying &amp; Oil Wells</b>	<b>4,350</b>	<b>4,650</b>	<b>4,500</b>	<b>4,400</b>	<b>4,150</b>
<i>Mining</i>	<i>3,650</i>	<i>3,700</i>	<i>3,450</i>	<i>3,300</i>	<i>3,250</i>
<b>Manufacturing</b>	<b>60,600</b>	<b>62,200</b>	<b>61,300</b>	<b>61,800</b>	<b>62,300</b>
<i>Meat Processing</i>	<i>2,750</i>	<i>3,150</i>	<i>3,500</i>	<i>3,600</i>	<i>3,700</i>
<i>Metal Works</i>	<i>5,700</i>	<i>5,850</i>	<i>5,800</i>	<i>6,000</i>	<i>6,350</i>
<i>Vehicle Manufacturing</i>	<i>3,850</i>	<i>3,650</i>	<i>3,200</i>	<i>3,050</i>	<i>2,800</i>
<i>Agricultural Implement Manufacturing</i>	<i>4,250</i>	<i>4,200</i>	<i>4,350</i>	<i>4,550</i>	<i>5,000</i>
<i>Wood Manufacturing</i>	<i>8,350</i>	<i>9,050</i>	<i>9,800</i>	<i>10,300</i>	<i>12,150</i>
<i>Printing</i>	<i>5,400</i>	<i>5,550</i>	<i>5,550</i>	<i>5,500</i>	<i>5,250</i>
<i>Clothing Manufacturing</i>	<i>5,800</i>	<i>5,300</i>	<i>4,900</i>	<i>4,450</i>	<i>3,700</i>
<i>Aircraft Manufacturing &amp; Repair</i>	<i>4,250</i>	<i>4,050</i>	<i>3,650</i>	<i>3,300</i>	<i>3,550</i>
<b>Construction</b>	<b>16,300</b>	<b>16,250</b>	<b>16,200</b>	<b>17,400</b>	<b>18,050</b>
<i>Building Construction</i>	<i>12,650</i>	<i>12,900</i>	<i>13,150</i>	<i>14,750</i>	<i>15,450</i>
<i>Heavy Construction</i>	<i>3,400</i>	<i>3,300</i>	<i>3,100</i>	<i>3,400</i>	<i>3,400</i>
<b>Transportation, Communication &amp; Storage</b>	<b>22,500</b>	<b>23,850</b>	<b>23,850</b>	<b>23,900</b>	<b>25,000</b>
<i>Trucking</i>	<i>8,850</i>	<i>9,000</i>	<i>8,900</i>	<i>9,700</i>	<i>11,400</i>
<b>Trade</b>	<b>64,800</b>	<b>65,950</b>	<b>68,900</b>	<b>70,650</b>	<b>72,650</b>
<i>Supermarket &amp; Department Stores</i>	<i>42,100</i>	<i>43,700</i>	<i>45,050</i>	<i>47,550</i>	<i>50,750</i>
<b>Service</b>	<b>86,900</b>	<b>87,550</b>	<b>89,800</b>	<b>93,500</b>	<b>95,500</b>
<i>Accommodation and Restaurants</i>	<i>30,650</i>	<i>29,700</i>	<i>29,750</i>	<i>29,850</i>	<i>29,800</i>
<i>Healthcare</i>	<i>44,250</i>	<i>45,500</i>	<i>47,000</i>	<i>49,550</i>	<i>51,350</i>
<b>Public Administration</b>	<b>3,000</b>	<b>3,250</b>	<b>3,050</b>	<b>3,250</b>	<b>3,400</b>
<b>Voluntary</b>	<b>35,100</b>	<b>35,550</b>	<b>37,550</b>	<b>37,150</b>	<b>36,750</b>
<i>Agriculture</i>	<i>1,850</i>	<i>2,350</i>	<i>2,550</i>	<i>2,400</i>	<i>2,150</i>
<i>Educational Institutions</i>	<i>14,250</i>	<i>14,450</i>	<i>14,900</i>	<i>14,000</i>	<i>14,100</i>
<b>Self Insurers</b>	<b>49,150</b>	<b>54,600</b>	<b>52,800</b>	<b>55,450</b>	<b>56,250</b>
<b>Overall</b>	<b>348,700</b>	<b>362,000</b>	<b>365,600</b>	<b>376,800</b>	<b>379,850</b>

<sup>12</sup> Full time equivalent workers based on Statistics Canada average wage and WCB payroll data.



Table A2 Claims by Gender, 2000 to 2004

Gender	Year of Injury or Illness				
	2000	2001	2002	2003	2004
<b>Female</b>	10,340	9,980	9,798	10,262	10,321
<b>Male</b>	29,123	26,244	24,867	24,675	24,044
<b>Gender Unspecified</b>	379	213	178	127	128
<b>Total</b>	<b>39,842</b>	<b>36,437</b>	<b>34,843</b>	<b>35,064</b>	<b>34,493</b>

Table A3 Claims by Age Group, 2000 to 2004

Age Group	Year of Injury or Illness				
	2000	2001	2002	2003	2004
<b>15-24</b>	7,400	6,555	6,132	6,069	5,940
<b>25-34</b>	10,323	9,030	8,290	8,114	7,831
<b>35-44</b>	11,263	10,267	9,715	9,596	8,913
<b>45-54</b>	7,110	7,082	6,991	7,392	7,703
<b>55+</b>	2910	3036	3,142	3,458	3,661
<b>Not Coded</b>	836	467	573	435	445
<b>Total</b>	<b>39,842</b>	<b>36,437</b>	<b>34,843</b>	<b>35,064</b>	<b>34,493</b>

**Table A4 Claims by WCB Industry Group, 2000 to 2004  
(No Time Loss (NTL) & Time Loss (TL))**

Industry Sector	Year of Injury or Illness									
	2000		2001		2002		2003		2004	
	NTL	TL	NTL	TL	NTL	TL	NTL	TL	NTL	TL
Forestry	17	21	35	28	48	28	17	32	20	24
Mining	857	169	769	124	597	104	604	102	571	94
Manufacturing	7,764	7,667	6,883	6,598	6,482	5,958	6,242	5,466	5533	4,817
Construction	1,614	1,673	1,276	1,450	1,248	1,535	1,408	1,571	1457	1,590
Transportation, Communications & Storage	987	1,376	836	1,237	731	1,265	825	1,267	832	1,339
Trade	2,647	2,695	2,456	2,692	2,408	2,606	2,668	2,621	2613	2,673
Service	2,926	3,433	2,792	3,556	2,679	3,601	2,921	3,616	3242	3,715
Public Administration	174	145	147	140	151	156	178	123	145	147
Voluntary	842	928	732	934	806	905	874	862	886	956
Self Insurers	2,018	1,836	1,881	1,824	1,803	1,700	1,823	1,796	1896	1,897
Missing/ Not Coded	37	16	37	10	21	11	22	26	27	19
<b>Total</b>	<b>19,883</b>	<b>19,959</b>	<b>17,844</b>	<b>18,593</b>	<b>16,974</b>	<b>17,869</b>	<b>17,582</b>	<b>17,482</b>	<b>17,222</b>	<b>17,271</b>

**Table A5 Time Loss Claims by Occupational Groups, 2000 to 2004**

Occupational Groups	Year of Injury or Illness				
	2000	2001	2002	2003	2004
Trades, Transport & Equipment Operators	6,327	6,086	5,950	6,934	6,509
Processing, Manufacturing	5,395	4,094	3,336	3,286	3,174
Sales and Service	3,791	3,547	3,263	3,406	3,626
Health Occupations	1,619	1,570	1,492	1,761	1,845
Business, Finance & Administration Occupations	1,105	992	877	925	952
Primary Industry	277	205	197	187	213
Social Science, Education, Government	161	156	205	273	299
Management Occupations	151	139	170	192	209
Natural & Applied Sciences & Related	162	124	111	172	155
Art, Culture, Recreation	48	45	53	65	73
Not Coded	923	1,635	2,215	281	216
<b>Total</b>	<b>19,959</b>	<b>18,593</b>	<b>17,869</b>	<b>17,482</b>	<b>17,271</b>

**Table A6 Time Loss Claims by Detailed Source<sup>13</sup> of Injury, 2000 to 2004**

Source Description	Year of Injury or Illness				
	2000	2001	2002	2003	2004
Bodily motion or position of injured, ill worker	4,706	5,588	5,829	5,154	3,839
Health care patient or resident of health care facility	1,017	947	757	941	1,010
Ground	647	814	853	1,236	999
Boxes, crates, cartons	832	600	579	539	736
Floor of building	797	804	639	477	654
Knives	474	534	429	354	340
Metal chips, particles	346	274	255	273	262
Doors	292	253	215	241	221
Ice, sleet, snow	35	22	25	32	214
Cart, dolly, hand truck	242	214	200	206	208
Skids, pallets	194	154	161	218	192
Bags, sacks, totes	247	209	187	163	152
Dirt particles	138	173	143	159	127
Semi trailer, tractor trailer, trailer truck	92	89	79	83	123
Automobile	86	75	66	121	115
Buckets, baskets, pails	242	182	134	109	115
Vehicle and mobile equipment parts, n.e.c.	255	186	141	108	104
Parking lots	94	50	63	33	103
Stairs, steps-indoors	93	106	61	64	101
Person-other than injured or ill worker, n.e.c.	126	175	127	96	98
Tanks, bins, vats	110	81	111	119	94
Pots, pans, trays	116	52	53	61	93
Food slicers	96	95	70	88	90
Noise	38	56	70	58	87
Metal sheets, ingots, bars-nonstructural	43	22	56	117	84
Tables, worktables	114	144	122	91	84
Nails, brads, tacks	114	107	78	56	78
Wood, lumber, unspecified	140	142	115	62	76
Bars, rods, reinforcing bar (rebar)	180	156	101	72	74
Beds, bedding, mattresses	43	27	39	47	72
Missing/ Not Coded	595	570	246	267	211
"Other" Source Codes	7,415	5,692	5,865	5,837	6,515
<b>Total</b>	<b>19,959</b>	<b>18,593</b>	<b>17,869</b>	<b>17,482</b>	<b>17,271</b>

<sup>13</sup> These are the 30 most frequent sources of injury or illness.

**Table A7 Time Loss Claims by Event or Exposure<sup>14</sup>, 2000 to 2004**

Event Description	Year of Injury or Illness				
	2000	2001	2002	2003	2004
Overexertion in lifting	3,347	2,550	2,353	2,471	2,557
Fall to floor, walkway, or other surface	1,042	1,106	1,266	1,284	1,644
Bending, climbing, crawling, reaching, twisting	2,491	3,800	3,534	3,097	1,422
Struck against stationary object	798	997	916	943	973
Overexertion in pulling or pushing objects	869	484	427	535	696
Struck by falling object	1,026	896	705	621	688
Struck by slipping handheld object	824	924	737	714	560
Slipping on something without fall	586	480	399	338	503
Bodily reaction and exertion, n.e.c.	6	1	16	144	374
Overexertion in carrying, turning, or wielding objects	282	91	93	403	365
struck against stationary object	526	292	162	227	314
Rubbed or abraded by foreign matter in eye	575	501	420	420	313
Repetitive placing, grasping, or moving objects, except tools	375	206	145	282	289
Fall onto or against objects	301	315	293	316	285
Contact with hot objects or substances	332	295	277	264	273
Caught in or compressed by equipment or objects, n.e.c.	137	235	435	537	246
Caught in running equipment or machinery	280	287	219	178	245
Fall down stairs or steps	204	193	163	169	241
Struck by object, n.e.c.	328	343	675	481	224
Struck by dislodged flying object, particle	132	88	94	121	222
Repetitive motion, n.e.c.	217	292	415	475	219
Compressed or pinched by rolling, sliding, or shifting objects	466	368	191	131	216
Bodily reaction and exertion, twisting	0	0	0	0	211
Bodily reaction, unspecified	31	35	330	42	184
Tripping over something without fall	167	136	106	101	179
Overexertion, turning	0	0	0	0	171
Caught in or compressed by equipment or objects, unspecified	13	15	19	10	167
Fall from ladder	150	169	156	162	152
Bodily reaction, n.e.c.	287	270	485	286	149
Repetitive use of tools	153	119	98	100	127
Missing/ Not Coded	595	570	246	267	211
"Other" Event Codes	3,419	2,535	2,494	2,363	2,851
<b>Total</b>	<b>19,959</b>	<b>18,593</b>	<b>17,869</b>	<b>17,482</b>	<b>17,271</b>

<sup>14</sup> These are the 30 most frequent events or exposures causing illness or injury.

Table A8 Claims by Part of Body Injured (“Stickman Codes”), 2000 to 2004

Stickman Code Description	Year of Injury or Illness				
	2000	2001	2002	2003	2004
Hand/fingers	9,261	8,559	8,017	7,810	7,563
Multiple	5,935	5,478	5,495	5,289	5,581
Lower Back	6,000	5,425	5,155	5,328	5,080
Lower leg	3,378	3,183	3,139	3,211	3,157
Lower Arm	3,510	3,132	2,969	3,131	3,102
Eyes	3,595	2,901	2,775	2,828	2,701
Shoulder	1,526	1,481	1,374	1,453	1,519
Foot/ toes	1,355	1,213	1,127	1,133	1,027
Miscellaneous	1,187	1,167	969	987	1,014
Ribs/ chest	921	864	809	878	862
Head	862	742	766	760	733
Abdomen	471	496	448	467	414
Hearing	224	262	373	355	410
Neck	387	349	331	293	290
Upper back	249	243	252	285	252
Upper leg	242	236	176	215	224
Cardio Vascular/ respiratory system	324	276	247	220	173
Pelvis	180	186	182	167	169
Upper arm	142	160	154	148	134
Industrial disease	68	59	58	75	52
Not Coded	25	25	27	31	36
<b>Total</b>	<b>39,842</b>	<b>36,437</b>	<b>34,843</b>	<b>35,064</b>	<b>34,493</b>

**Table A9 Time Loss Claims by Nature<sup>15</sup> of Injury, 2000 to 2004**

Nature of Injury	Year of Injury or Illness				
	2000	2001	2002	2003	2004
Sprains, strains, tears, unspecified	7,961	8,504	8,554	8,619	8,289
Bruises, contusions	1,792	1,646	1,577	1,605	1,581
Cuts, lacerations	1,783	1,740	1,585	1,450	1,349
Fractures	728	667	665	699	803
Traumatic injuries to muscles, tendons, ligaments, joints	1,016	1,206	617	235	397
Foreign bodies (superficial splinters, chips)	622	502	423	432	366
Sprains and bruises	159	37	183	246	346
Crushing injuries	489	522	426	410	326
Punctures, except bites	305	303	270	224	263
Tendonitis	352	276	278	231	205
Back pain, hurt back	636	177	224	171	192
Dislocations	132	76	64	112	178
Abrasions, scratches	91	50	107	157	160
Second-degree heat burns, scalds	122	38	89	112	131
Traumatic tendonitis	110	56	75	81	117
Epicondylitis	119	100	135	133	109
Carpal tunnel syndrome	165	135	116	148	106
Cuts, abrasions, bruises	93	81	74	109	103
Soreness, pain, hurt, except the back	345	192	206	113	103
Fractures and other injuries	70	26	98	82	100
Inguinal hernia	119	105	98	109	94
Deafness, hearing loss or impairment	35	57	68	57	87
Unknown	39	62	165	38	87
Multiple diseases, conditions, and disorders	14	4	31	157	75
Traumatic epicondylitis	0	7	36	38	74
Sprains, strains, tears, n.e.c.	0	85	164	72	69
Heat burns, scalds, unspecified	159	249	96	71	67
Amputations, fingertip	86	58	60	62	64
Concussions	51	41	56	72	64
Missing/ Not Coded	595	570	246	267	211
"Other" Nature Codes	1,771	1,021	1,083	1,170	1,155
<b>Total</b>	<b>19,959</b>	<b>18,593</b>	<b>17,869</b>	<b>17,482</b>	<b>17,271</b>

<sup>15</sup> These are the 29 most frequent characteristics of injury or illness.