

Minnesota **Workplace Safety Report**

Occupational Injuries and Illnesses, 2000



**Research and Statistics
Minnesota Department of Labor and Industry**

Minnesota Workplace Safety Report: Occupational Injuries and Illnesses, 2000

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Executive Summary

About 168,000 Minnesotans a year are hurt at work or become ill from job-related causes, 34,600 of which involve more than three days of disability. An average of 78 Minnesotans a year were killed at work from 1996 through 2000.

These injuries, illnesses and deaths exact a toll on workers and their families; they also affect business costs and productivity. Workers' compensation in Minnesota cost an estimated \$1.1 billion in 2000. This does not count other costs, such as delayed production, hiring and training workers, pain and suffering, and those economic losses to workers and their families that are not covered by workers' compensation.

This report, part of an annual series, gives information about Minnesota's job-related injuries, illnesses and fatalities. Data sources are the U.S. Bureau of Labor Statistics (BLS) *Survey of Occupational Injuries and Illnesses* and the *Census of Fatal Occupational Injuries*.

Major findings include the following:

Non-Fatal Occupational Injuries and Illnesses

- Minnesota's total rate of workplace injuries and illnesses remained at 6.8 per 100 full-time-equivalent (FTE) workers in 2000. This matches the 1999 rate and is Minnesota's lowest rate in the history of the state survey.
- The rate of cases with lost workdays (days away from work and/or restricted work activity) increased from 3.2 per 100 FTE workers in 1999, to 3.4 in 2000.
- The rate of cases with days away from work fell steadily from 3.1 to 1.8 from 1985 to 1999, and increased slightly to 1.9 in 2000.
- Minnesota's case rates were below their U.S. counterparts until the early 1990s, but have been above the U.S. rates since that time. For the private sector in 2000, the total case rate was 7.0 per 100 FTE workers for the state versus 6.1 for the nation. The rate

of cases with lost workdays was 3.5 for the state versus 3.0 for the nation.

- Minnesota's rate of cases with days away from work was roughly equal to the national rate starting in 1996. In 2000, the private-sector rate of cases with days away from work was 1.9 for the state and 1.8 for the nation.

Data for 1998 through 2000 indicate that among industry divisions (the broadest industry grouping), Minnesota's highest total injury and illness rates per 100 full-time-equivalent workers were in:

- (1) construction (12.2);
- (2) manufacturing (9.9); and
- (3) agriculture, forestry and fishing (9.8).

Survey results from 2000 indicate seven of the 10 major industry groups (the next more detailed classification) with the highest total case incidence rates were in manufacturing. These 10 industries accounted for 23 percent of the annual number of cases.

- Of the detailed industries with published survey results, the industries with the highest total case rates averaged for 1998 through 2000 were:
 - (1) motor vehicle manufacturing (35.3);
 - (2) nursing homes (20.8); and
 - (3) poultry slaughtering and processing (20.7).
- Traumatic injuries and disorders accounted for 89 percent of the cases with days away from work. Most common among these were:
 - (1) sprains, strains and tears of muscles, joints and tendons (47 percent);
 - (2) wounds and bruises (9 percent); and
 - (3) open wounds (8 percent).
- Ten percent of the cases with days away from work involved systemic diseases and disorders.

- The most common body parts affected in cases with days away from work were:
 - (1) the back (30 percent);
 - (2) upper extremities (21 percent); and
 - (3) lower extremities (19 percent).
- The most frequent event or exposure leading to the injury or illness for cases with days away from work was bodily reaction and exertion (53 percent of the total). This included:
 - (1) overexertion (37 percent);
 - (2) bodily reaction, such as bending, slips, and trips (11 percent); and
 - (3) repetitive motion (5 percent).
- People were identified as the most frequent source of injury or illness for Minnesota's cases with days away from work (27 percent). These were primarily the injured or ill worker in cases involving bodily motion or position (17 percent) and health care patients and facility residents (8 percent).

Fatal Occupational Injuries

The nationwide *Census of Fatal Occupational Injuries* (CFOI) covers all fatal work injuries in the private and public sectors regardless of program coverage; thus, it includes federal workers and self-employed workers along with all others. However, fatal *illnesses* (such as asbestosis) are excluded.

- In 2000, 68 Minnesotans were fatally injured on the job. For 1996 through 2000, Minnesota had an average of 78 fatal work injuries a year, consisting of approximately 57 wage-and-salary workers and 22 self-employed people.
- Among industry divisions, the highest *numbers* of fatal injuries a year for 1996 through 2000 were in:
 - (1) agriculture, forestry, and fishing (21.2);
 - (2) construction (14.4);
 - (3) transportation, communication and utilities (10.4); and
 - (4) manufacturing (10.0).
- The most frequent causes of Minnesota's fatal work injuries for 1996 through 2000 were:
 - (1) transportation accidents (46 percent);
 - (2) contact with objects and equipment (24 percent); and
 - (3) falls (12 percent).

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1

Introduction

Workplace injuries and illnesses continue to be a major concern, both in Minnesota and nationwide. The latest workers' compensation system figures show that about 460 Minnesotans are hurt at work or become ill from job-related causes each day. This amounts to roughly 168,000 cases a year. About 34,600 of these involve more than three days of disability. An average of 78 Minnesotans a year were killed on the job from 1996 through 2000.

These injuries, illnesses and deaths exact a toll on workers and their families; they also affect business costs and productivity. Workers' compensation in Minnesota cost an estimated \$1.1 billion in 2000, or \$1.37 per \$100 of covered payroll. This includes indemnity benefits (for lost wages, functional impairment or death), medical treatment, rehabilitation, litigation, claims administration and other system costs. In 1998 (the most current data available), the average cost of an insured claim was \$3,780 (in 2000 dollars) for medical treatment plus indemnity benefits (indemnity benefits are paid in about 20 percent of all cases). For those claims with indemnity benefits, the average medical and indemnity cost was much higher — \$17,300. Other workplace injury and illness costs are more difficult to measure, such as delayed production, hiring and training of new workers, pain and suffering, and those economic and non-economic losses to injured workers and their families that are not covered by workers' compensation.

This report is part of an annual series. It gives information, through 2000, about Minnesota's job-related injuries, illnesses and fatalities — their incidence, nature and causes; the industries in which they occur; and changes in their incidence over time. This information is important for improving the safety and health of Minnesota's workplaces and, thereby, reducing the burden of occupational injuries and illnesses on workers, families and employers.

Data Sources

This report presents data from three sources: (1) the U.S. Bureau of Labor Statistics (BLS) annual *Survey of Occupational Injuries and Illnesses*; (2) the BLS annual *Census of Fatal Occupational Injuries* (CFOI); and (3) the OSHA Integrated Management Information System (IMIS). The BLS and CFOI data are available through 2000, and the IMIS data is available through 2001.

BLS Survey

The BLS survey, conducted jointly by the BLS and state agencies, is the primary source of workplace injury and illness data nationwide. Approximately 4,900 Minnesota employers participated in the 2000 survey. The survey includes all cases on the Occupational Safety and Health Administration (OSHA) 200 log, on which employers with 11 or more employees are required to record workplace injuries and illnesses.¹ Employers with 10 or fewer employees who participate in the survey also record their cases on the OSHA 200 log for the survey year. The survey data is collected from the log and from an additional set of questions regarding cases with at least one day off the job.

The survey defines different types of cases according to whether they have days off the job and/or work restrictions:

- "Cases without lost workdays" are cases with no days off the job and no work restrictions.

¹OSHA-recordable cases include all nonfatal occupational illnesses and those nonfatal occupational injuries that result in: loss of consciousness; medical treatment other than first aid; any lost time from work, restricted work activity or transfer to another job after the day of injury.

- “Lost-workday” (LWD) cases are those with days when the worker is off the job *or* working with restrictions. LWD cases consist of:
 - (1) “days-away-from-work” (DAFW) cases — those with any days off the job (with or without additional days of restricted work); and
 - (2) “restricted-work-activity-only” (RWAO) cases — those with restricted work but no days off.

These case types are more precisely defined in Appendix A.

An important issue with the BLS survey data is sampling error — the random error in survey statistics that occurs because they are estimated from a sample. This sampling error is greater for smaller categories, such as particular industries, because of smaller sample size. To reduce sampling errors, most state-level survey statistics in this report are averaged over three years.

Fatal Injuries

The BLS, in cooperation with state and other federal agencies, conducts the nationwide *Census of Fatal Occupational Injuries* (CFOI). The CFOI covers all fatal work injuries in the private and public sectors, whether the workplaces concerned are covered by the Occupational Safety and Health Act, other federal or state laws, or are outside the scope of regulatory coverage. For example, the CFOI includes federal employees and resident armed forces, even though they have different legal and regulatory coverage than other workers. It also includes self-employed and unpaid family workers, including family farm workers. Work-related fatal *illnesses* (e.g., asbestosis, silicosis and lead poisoning) are excluded from the CFOI because many occupational illnesses have long latency periods and are difficult to link to work.

The CFOI provides a complete count of fatal work injuries by using multiple sources to identify, verify and profile these incidents. Information is obtained from several sources, including death certificates, coroners’ reports, workers’ compensation reports, news media and others.

OSHA Activity Measures

OSHA Compliance inspection and consultation service activities are officially recorded in the IMIS system. This system is used by federal and state OSHA management to produce statistics regarding their programs.

More Data Available

The BLS survey provides a large volume of information for the United States and most states. This information includes the number and incidence of injuries and illnesses by industry and establishment size. For DAFW cases, the survey provides data about the characteristics of injuries and illnesses, how they occur, severity (number of days away from work), length of time on the job when injured, occupation and worker characteristics.

The BLS survey Minnesota case counts and incidence rates for all publishable industries for survey years 1999 and 2000 are available on the DLI Web site at www.doli.state.mn.us/dlistats.html and for 1996 through 2000, on the BLS Web site at www.bls.gov/iif/oshstate.htm#MN. The BLS Web site also contains the year 2000 CFOI tables for Minnesota. The DLI Web site contains many other BLS survey data tables and charts for Minnesota at www.doli.state.mn.us/blsstats.htm.

The national BLS survey and CFOI tables are available at www.bls.gov/iif/. The national data, because of larger sample sizes, includes more detailed categories than the state data and produces smaller sampling errors.

Some IMIS OSHA Compliance inspection data, accident investigation summaries and lists of frequently cited standards by industry are available on the Web at www.osha.gov/oshstats/.

Report Organization

The next four chapters in this report describe the incidence and characteristics of occupational injuries and illnesses. Chapter 2 presents data about the incidence of Minnesota’s workplace injuries and illnesses over time, focusing on the

state as a whole. Chapter 3 gives injury and illness incidence rate statistics by industry and establishment size. Chapter 4 describes the characteristics and causes of workplace injuries and illnesses. Chapter 5 presents data about the characteristics of the injured workers.

Chapter 6 gives information about the state's fatal workplace injuries, using data from the CFOI program. Figures show the number of fatalities, the events causing the fatalities and characteristics of the fatally injured workers.

Chapter 7 provides statistics about DLI programs and services to help employers achieve safe and healthful workplaces.

Unless otherwise indicated, all figures in chapters 2 through 5 are based on statistics from the *BLS Survey of Occupational Injuries and Illnesses*, and figures in chapter 6 are based on the CFOI program.

Two data appendices are provided. Appendix B provides the distribution of days away from work by industry using the BLS survey data. Appendix C shows the workers' compensation indemnity case rate for each industry, based on the DLI workers' compensation claims database. Finer industry detail is available for the workers' compensation data, because it is based on a complete count of workers' compensation indemnity cases rather than a sample.

2

Incidence of Workplace Injuries and Illnesses Over Time

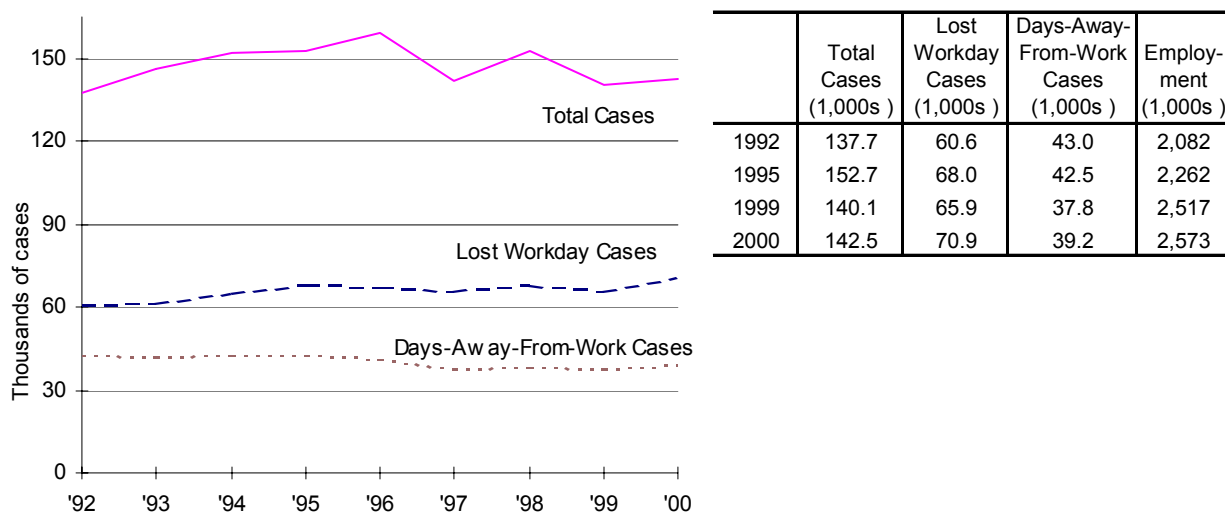
Number of Injury and Illness Cases

While incidence rate data, to be reviewed below, provides a standardized measurement of injuries and illnesses, the number of cases shows the magnitude of the occupational injury and illness situation. Based on employers' responses to the *Survey of Occupational Injuries and Illnesses*, there were an estimated 142,500 recordable injury and illness cases in 2000.² This is a number larger than the combined populations of St. Cloud, Mankato, Moorhead and Red Wing.

Figure 2.1 shows estimates of the number of nonfatal injuries and illnesses in Minnesota for 1992 through 2000. The estimates are based on data collected for the BLS survey and are not the same as the number of workers' compensation cases.

- The number of cases has remained relatively stable compared with the increases in employment. Since 1992, the total number of cases increased 3 percent, lost-workday (LWD) cases increased 17 percent and days-away-from-work (DAFW) cases decreased 9 percent, while employment increased 24 percent.
- The number of cases in all three categories increased in 2000, compared to 1999. While employment increased by 2 percent, the total number of cases also increased by 2 percent, LWD cases increased 8 percent and DAFW cases increased 4 percent.

Figure 2.1 Number of Injury and Illness Cases, Minnesota 1992-2000



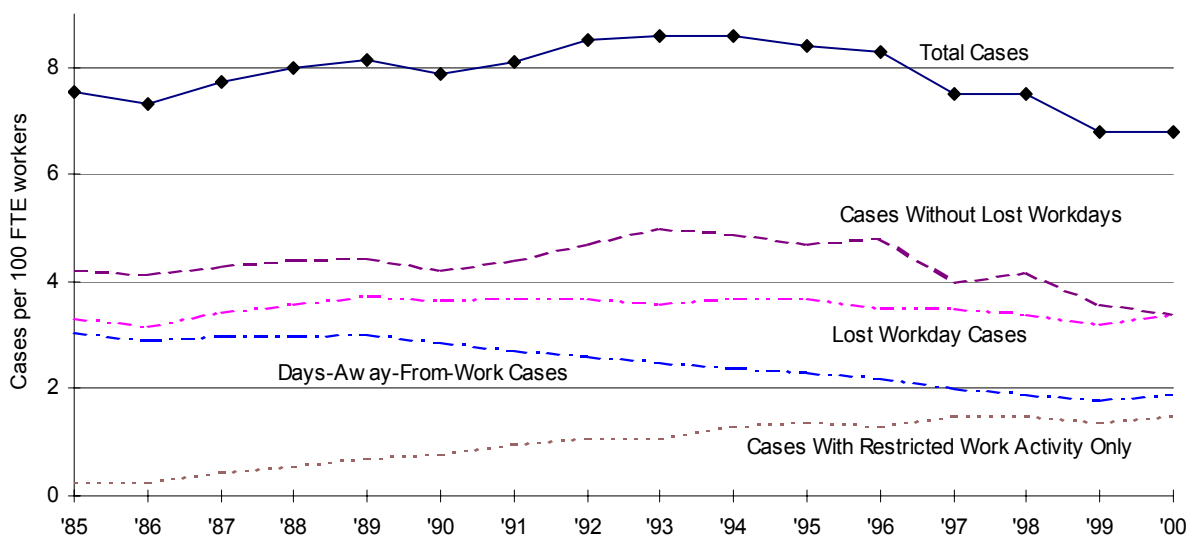
² An injury or illness is recordable if it meets the criteria for being included on the OSHA 200 log. The OSHA recordkeeping requirements were recently revised and new criteria are being used starting with injuries and illnesses in 2002.

Incidence Rate Trends

The incidence rates are statewide estimates based on the number of recordable injury and illness cases and the total hours worked by the employers participating in the survey. Figure 2.2 shows estimates of the incidence of nonfatal injuries and illnesses for Minnesota for 1985 through 2000, expressed as cases per 100 full-time-equivalent (FTE) workers. Both the private sector and state and local government are included. The incidence rates for 2000 changed little from 1999.

- Total case incidence rose through the late 1980s and early 1990s, then started dropping sharply in 1997. Minnesota's 2000 total case incidence rate matched the 1999 rate, the lowest in the history of the state survey. The slight increase in LWD cases from 1999 through 2000 was the first increase since 1994.
- Within LWD cases, the relative numbers of DAFW and restricted-work-activity-only (RWAOW) cases have changed substantially over time. The DAFW case rate started to fall in 1991, and reached its lowest level in 1999. In contrast, the RWAOW case rate rose steadily from 1985 through 1997, and has been relatively level since then.
- As a proportion of total cases, DAFW cases fell from 41 percent to 28 percent from 1985 to 2000, while RWAOW cases rose from 3 percent to 22 percent. As a share of LWD cases, DAFW cases fell from 93 percent to 56 percent during the entire period, with the remainder being RWAOW cases.
- The explanation for these trends is not clear. It could involve decreases in the severity of LWD cases, changes in what happens after

Figure 2.2 Injury and Illness Case Incidence Rates, Minnesota 1985-2000



	Total Cases per 100 FTE Workers	Lost-Workday Cases						Cases Without Lost Workdays	
		Total Lost-Workday Cases		Days-Away-From-Work Cases		Cases With Restricted Work Activity Only			
		Rate per 100 FTE Workers	% of Total	Rate per 100 FTE Workers	% of Total	Rate per 100 FTE Workers	% of Total	Rate per 100 FTE Workers	% of Total
1985	7.6	3.3	44%	3.1	41%	0.3	3%	4.2	56%
1990	7.9	3.7	46%	2.9	37%	0.8	10%	4.2	54%
1993	8.6	3.6	42%	2.5	29%	1.1	13%	5.0	58%
1995	8.4	3.7	44%	2.3	27%	1.4	17%	4.7	56%
1998	7.5	3.4	45%	1.9	25%	1.5	20%	4.2	56%
1999	6.8	3.2	47%	1.8	26%	1.4	21%	3.6	53%
2000	6.8	3.4	50%	1.9	28%	1.5	22%	3.4	50%

1. Includes injuries and illnesses in the private sector and state and local government.

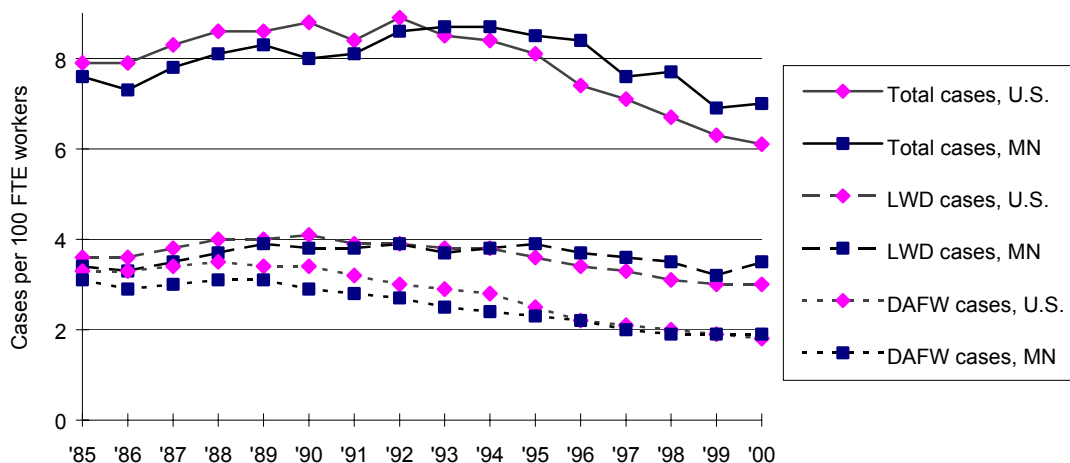
an injury or illness occurs (e.g. promptness of medical treatment, prevalence of return-to-work and light-duty programs or availability of work with other employers) or changes in reporting.³

Comparing Minnesota with the Nation

Figure 2.3 shows the rates of total cases, LWD cases and DAFW cases in the private sector for Minnesota and the United States for 1985 through 2000. The data are limited to the private sector because the national data are only available for the private sector.⁴

- Minnesota's private sector total case rate was below the national rate from 1985 to 1992, but has been above the U.S. rate since 1993. For 2000, Minnesota's total rate was 7.0 per 100 FTE workers, while the U.S. rate was 6.1.
- Minnesota's LWD case rate was lower than the U.S. rate in the late 1980s, about the same as the U.S. rate during the early 1990s, and higher than the national rate beginning in 1995. Minnesota's LWD case rate for 1999 was 3.2, as opposed to 3.0 for the nation.
- Minnesota had a lower DAFW case rate than the United States through 1995, with little difference thereafter.

Figure 2.3 Injury and Illness Case Incidence Rates for Minnesota and the United States, Private Sector, 1985-2000



(Note: LWD cases = lost-workday cases; DAFW cases = days-away-from-work cases.)

	Cases per 100 Full-Time-Equivalent Workers					
	Total Cases		Lost-Workday Cases		Days-Away-From-Work Cases	
	Minnesota	U.S.	Minnesota	U.S.	Minnesota	U.S.
1985	7.6	7.9	3.4	3.6	3.1	3.3
1990	8.0	8.8	3.8	4.1	2.9	3.4
1993	8.7	8.5	3.7	3.8	2.5	2.9
1995	8.5	8.1	3.9	3.6	2.3	2.5
1998	7.7	6.7	3.5	3.1	1.9	2.0
1999	6.9	6.3	3.2	3.0	1.9	1.9
2000	7.0	6.1	3.5	3.0	1.9	1.8

³See the analysis by Hugh Conway and Jens Svenson in "Occupational injury and illness rates, 1992-96: Why they fell," *Monthly Labor Review*, November, 1998.

⁴In the BLS survey, participating states have the option to include their public sectors. Because not all states choose this option, public-sector data are not available at the national level.

3

Incidence of Workplace Injuries and Illnesses by Industry and Establishment Size

Many factors affect workplace safety. This report does not attempt to present information about all the factors — it is limited to the information available from the annual *Survey of Occupational Injuries and Illnesses*. Industrial categorization is the primary organization of the data from the survey; it forms the basis for the structure of the survey itself.

While the statewide rates are informative of general injury and illness levels, there is considerable variation in the injury and illness rates when they are analyzed by industry.

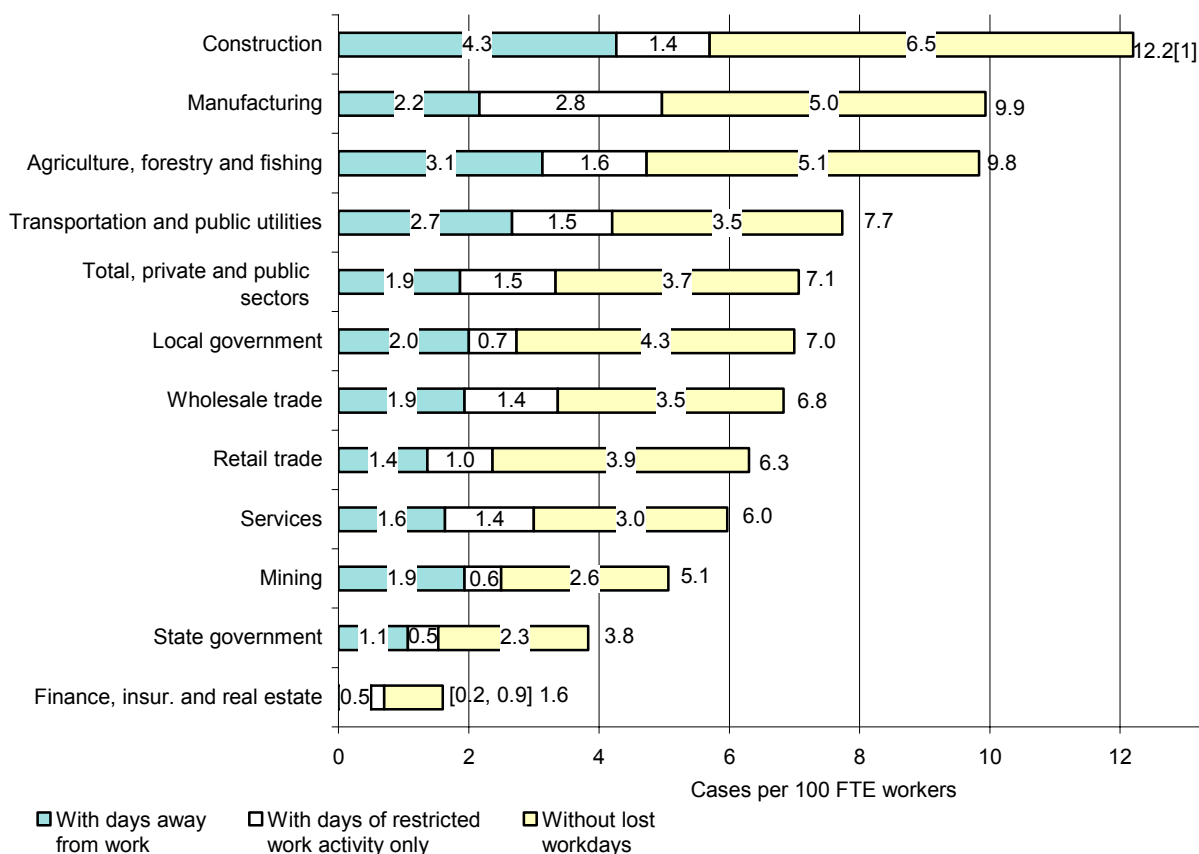
Industries can be analyzed at different levels, depending on the structure of the industry coding system. The Standard Industrial Classification (SIC) system is the industry coding hierarchy used in this survey. The SIC is established by the U.S. Government and used for industry-based economic statistics.⁵ The SIC uses a four-digit hierarchical code in which each successive digit indicates a finer level of detail. Industry division is the most aggregated industry grouping in the SIC. The two- and three-digit categories are referred to as “major industry groups” and “industry groups,” respectively.

Incidence by Industry Division

Figure 3.1 shows Minnesota’s average 1998 through 2000 injury and illness rates for the case types by industry division and all industries combined. The three-year average is used to reduce the effects of year-to-year fluctuations attributable to sampling variation. Industries are ranked by their total case rate.

- Construction had the highest incidence rates for cases without lost workdays and for days-away-from-work (DAFW) cases, while manufacturing had the highest rate for restricted-work-activity-only (RWAO) cases.
- Retail trade had a higher rate of cases without lost workdays than did transportation and public utilities, even though retail trade had a much lower total case incidence rate.
- Manufacturing, with the second-highest total incidence rate, had the fourth-highest DAFW rate.

⁵ Beginning with the survey for the 2002 injury and illness statistics, industries will be classified according to the North American Industry Classification System (NAICS).

Figure 3.1 Incidence Rates by Industry Division, 1998-2000

1. Total case incidence rate.

Major Industry Groups

Results of the 2000 survey can be used to determine the industries with the highest injury and illness incidence rates. The 10 industry groups (two-digit SIC classes) with the highest total case incidence rates in Minnesota are shown in Figure 3.2.

- Seven of these 10 industries are in the manufacturing division.
- These industries accounted for 23 percent of the annual average number of recordable cases in 2000.

Figure 3.2 Industry Groups with the Highest Total Case Rates, 2000

Industry (and Division [1])	Total Case Rate
Transportation equipment (Man.)	26.1
Furniture and fixtures (Man.)	18.6
Primary metal industries (Man.)	17.7
Agricultural production - livestock (AFF)	16.6
Lumber and wood products (Man.)	14.9
Local government health services (Srv.)	13.9
Food and kindred products (Man.)	12.6
Fabricated metal products (Man.)	12.5
Miscell. manuf. industries (Man.)	12.1
Special trade contractors (Con.)	12.1

1. Man.: Manufacturing; AFF: Agriculture, Forestry and Fishing; Srv.: Services; Con.: Construction.

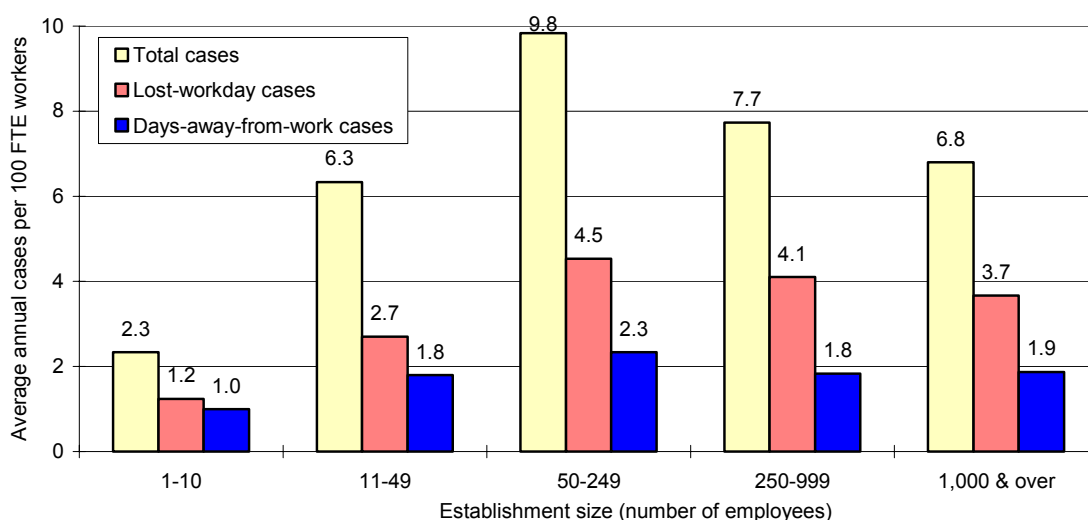
Incidence by Establishment Size

The incidence of workplace injuries and illnesses also varies by establishment size. Figure 3.3 shows the case incidence by case type and establishment size for Minnesota private industry, averaged for 1998 through 2000, and presents the DAFW rates by establishment size and industry division.

- For the private sector overall, the rates of all three case types were lowest for the smallest establishments (1 to 10 employees), highest for midsize establishments (50 to 249 employees), and intermediate for the largest establishments (1,000 or more employees).

- In all industry divisions with data shown, the smallest establishments have lower DAFW rates than do the midsize ones.
- In some industries — e.g., manufacturing and construction — the larger establishments also tend to have lower rates than the midsize ones, but in other industries — agriculture, forestry, and fishing and services — this is not the case. In services, this is partly attributable to relatively high incidence rates in hospitals, where a majority of workers are employed at hospitals in the largest establishment size class.⁶

Figure 3.3 Injury and Illness Case Incidence Rates by Establishment Size for Private Industry, 1998-2000 Average



Case Type	Average Annual Cases per 100 Full-Time-Equivalent Workers by Establishment Size (Number of Employees) [1]					
	All Sizes	1-10	11-49	50-249	250-999	1,000+
Total cases	7.2	2.3	6.3	9.8	7.7	6.8
Lost-workday cases	3.4	1.2	2.7	4.5	4.1	3.7
Days-away-from-work cases	1.9	1.0	1.8	2.3	1.8	1.9
<i>Days-away-from-work cases by industry division:</i>						
Agriculture, forestry and fishing	3.1	3.0	2.7	3.7	4.5	
Mining	1.9	1.2	1.4	3.0	2.0	1.9
Construction	4.3	3.3	5.1	4.6	2.4	
Manufacturing	2.2	1.4	2.8	2.6	2.0	1.3
Transportation, communication and utilities	2.7		2.5	2.4	2.2	
Wholesale trade	1.9		2.0	2.7		
Retail trade	1.4	0.4	1.3	1.9		
Finance, insurance and real estate	0.5	0.3	0.3	0.5	0.3	0.4
Services	1.6	0.7	1.0	2.1	1.9	2.4

1. Only data meeting BLS publication standards are used. Cells without at least two years of data are blank.

⁶ Shown by unpublished data from the BLS survey.

Incidence Trends Within Industry Division

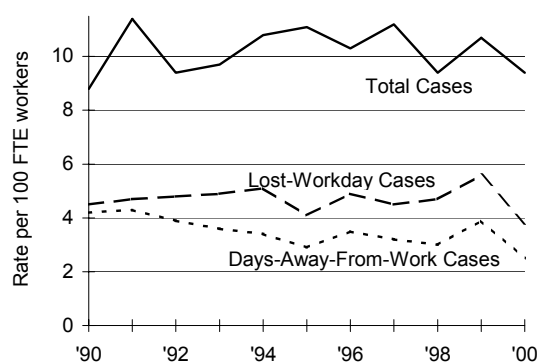
This section presents the incidence rate results from the BLS survey separately for the major industries available within each industry division. Each industry division has a figure with a line graph of the total case, lost-workday (LWD) and DAFW incidence rates for the division as a whole, from 1990 through 2000. The accompanying table lists the constituent major industry groups and industry groups with publishable data reported in the survey, showing the three-year average and average annual number of cases from 1998 through 2000.

The distribution of the number of days away from work for the DAFW cases, averaged over 1996 through 2000, and the 2000 median days away from work for each industry with available data are shown in Appendix B.

Agriculture, Forestry and Fishing

- For the division and its major industry groups, the total case rate and LWD rate decreased compared with the 1995 through 1997 period. There was no change in the DAFW rates.

Figure 3.4 Incidence Rates Per 100 FTE Workers, Agriculture, Forestry and Fishing

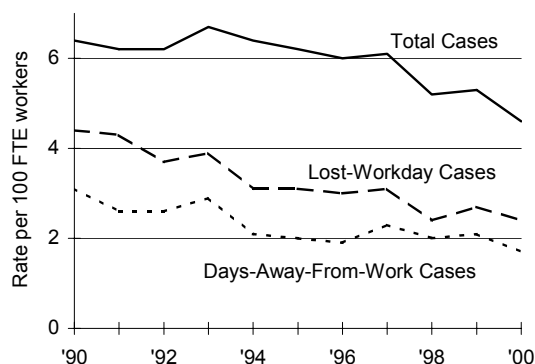


	SIC code	1998-2000 Average cases			
		Total	Lost-Work day	Away From Work	Total no. (1,000)
Agriculture, forestry, & fishing		9.8	4.7	3.1	1.6
Agricultural production	01-02	13.2	6.5	3.5	0.9
Agricultural services	07	7.7	3.6	2.9	0.8

Mining

- Mining is dominated by the iron ore mining activity in northern Minnesota. During 2000, there were 7,200 workers in this industry in Minnesota. The industry has been in a long contraction and few new workers are being hired.
- All three incidence rates have been generally decreasing during the past decade.

Figure 3.5 Incidence Rates Per 100 FTE Workers, Mining

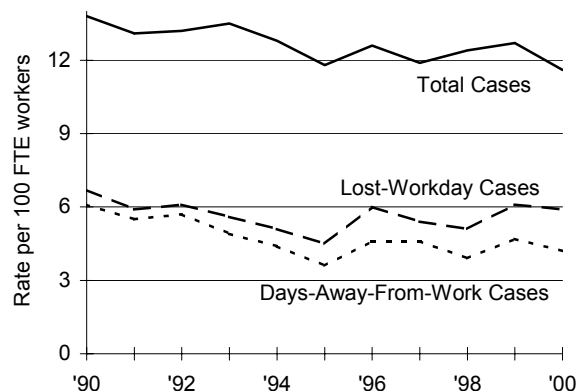


		1998-2000 Average cases			
	SIC code	Days Lost- Away From Work			Total no. (1,000)
		Total	day	Work	
Mining		5.0	2.5	1.9	0.4
Iron ores	101	5.3	2.5	2.0	0.3

Construction

- The incidence rates remained relatively stable for this industry as a whole, compared with the 1995 through 1997 period.
- While construction accounted for 5.3 percent of private employment in 2000, it accounted for 9.5 percent of the private sector total recordable cases and 12.6 percent of the DAFW cases.
- Since 1995, construction employment has increased by 45 percent, while the total number of cases increased by 42 percent. However, LWD cases increased by 88 percent and DAFW cases increased by 67 percent.

Figure 3.6 Incidence Rates Per 100 FTE Workers, Construction

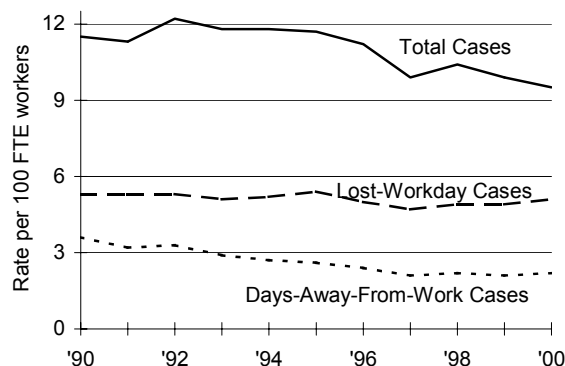


		1998-2000 Average cases			
	SIC code	Days Lost- Away From Work			Total no. (1,000)
		Total	day	Work	
Construction		12.2	5.7	4.3	11.9
General bldg. contractors	15	13.0	5.9	4.3	3.0
Residential bldg. const.	152	9.7	5.3	3.9	1.0
Nonresidential bldg. const.	154	16.0	6.4	4.4	1.9
Heavy const., ex. bldg.	16	9.8	4.3	3.4	1.2
Highway & street const.	161	12.8	4.9	4.0	0.7
Heavy const., ex. hwy	162	7.5	3.8	2.8	0.5
Special trade contractors	17	12.4	5.9	4.5	7.7
Plumbing, heating, air-conditioning	171	13.5	5.3	3.9	2.0
Electrical work	173	9.1	3.2	2.0	1.1
Masonry, stonework, plastering	174	12.9	6.8	5.6	1.0

Manufacturing

- Compared with the 1995 through 1997 period averages, the total case rate and the DAFW rate decreased, while the LWD rate remained unchanged.
- Meat products manufacturing (SIC 201) showed a significant drop in total cases, from 29.4 during 1995 through 1997 to 20.7 cases for 1998 through 2000.
- Motor vehicles and equipment manufacturing (SIC 371) had the highest total case rate and LWD rate among all industries. Compared with the 1995 through 1997 period, total cases were stable. LWD cases increased from 14.6 and DAFW cases decreased from 8.6.

Figure 3.7 Incidence Rates Per 100 FTE Workers, Manufacturing



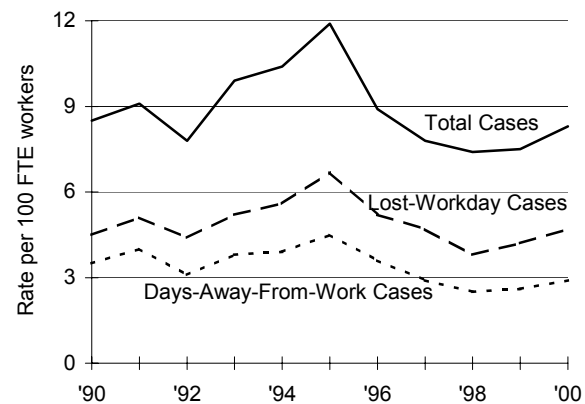
	SIC code	1998-2000 Average cases			
		Total	Lost-Work day	Days Away From Work	Total no. (1,000)
Manufacturing		9.9	5.0	2.2	43.0
Food & kindred products	20	13.2	7.8	2.4	7.2
Meat products	201	20.7	11.9	1.8	3.6
Dairy products	202	8.7	5.2	2.6	0.7
Preserved fruits & vgtbls.	203	9.6	4.8	2.4	0.6
Grain mill products	204	3.4	1.8	1.1	0.3
Lumber & wood products	24	15.7	8.1	4.5	3.2
Millwork, plywood, structural members	243	17.0	8.8	4.3	2.3
Furniture & fixtures	25	16.3	8.0	3.2	1.2
Paper & allied products	26	5.9	2.7	1.1	1.8
Paper mills	262	5.6	2.0	1.4	0.3
Printing & publishing	27	6.3	3.5	1.5	3.2
Newspapers	271	6.8	3.1	1.9	0.5
Commercial printing	275	8.0	4.7	1.8	1.9
Chemicals & allied prods.	28	4.8	2.6	1.0	0.5
Rubber & misc. plastics products	30	11.6	5.9	2.8	2.3
Stone, clay, glass products	32	12.9	7.0	3.1	1.3
Primary metal industries	33	17.6	9.9	4.6	1.4
Fabricated metal products	34	13.0	5.7	2.9	4.7
Fabricated structural metal	344	15.1	6.2	3.2	1.8
Metal forgings & stampings	346	16.8	6.6	3.9	0.8
Industrial machinery & equipment	35	9.2	3.9	1.9	7.2
Farm & garden machinery	352	11.1	4.7	2.9	0.6
Metalworking machinery	354	10.6	4.8	3.0	0.7
General industrial	356	13.0	5.5	2.2	1.2
Computer & office equip.	357	2.7	1.2	0.5	0.6
Refrigeration & service	358	11.0	5.0	1.9	0.8
Industrial machinery, nec.	359	12.5	4.5	2.5	1.8
Electronic & other electric	36	6.4	2.8	1.2	2.2
Electrical industrial	362	4.1	1.8	1.2	0.2
Electrical components & accessories	367	7.3	3.5	1.2	1.1
Transportation equipment	37	24.6	12.5	4.8	3.6
Motor vehicles & equip.	371	35.3	16.3	6.6	2.5
Instruments & related products	38	4.2	2.2	0.9	1.7
Measuring & controlling devices	382	4.8	2.4	1.1	0.6
Medical instruments & supplies	384	4.1	2.2	0.7	0.8
Misc. manuf. industries	39	10.4	5.0	2.2	0.7

Transportation and Public Utilities

For the industry as a whole, there were large rate decreases compared with the 1995 through 1997 period.

- Trucking and warehousing (SIC 42) showed much of the decrease, as DAFW rates dropped from 7.0 during 1995 through 1997 to 3.1 during 1998 through 2000.
- The DAFW rate in air transportation (SIC 45) increased from 4.2 during 1995 through 1997 to 4.6 during 1998 through 2000, while the total case rate decreased from 11.7 to 10.3.

Figure 3.8 Incidence Rates Per 100 FTE Workers, Transportation and Public Utilities

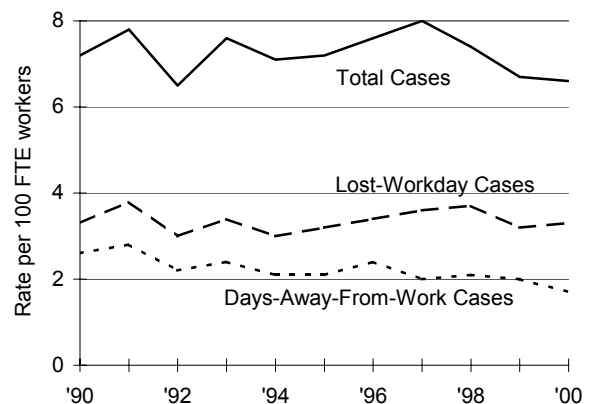


	SIC code	1998-2000 Average cases			
		Total	Lost-Work day	Away From Work	Total no. (1,000)
Transportation & public utilities		7.7	4.2	2.7	9.1
Railroad transportation	40	4.5	3.1	2.3	0.2
Local & interurban pass. transit	41	7.9	3.7	2.7	0.6
Trucking & warehousing	42	10.1	4.8	3.1	3.2
Transportation by air	45	10.3	7.4	4.6	2.8
Transportation services	47	1.8	1.0	0.8	1.0
Communication	48	3.3	1.4	0.7	0.7
Telephone communication	481	2.9	1.2	0.6	0.4
Electric, gas & sanitary services	49	8.1	3.2	1.8	1.1
Electric services	491	9.2	3.7	2.1	0.7

Wholesale Trade

- For the division, the total case rate and DAFW rate decreased from the 1995 through 1997 period averages, while the LWD case rate remained unchanged.
- While the total case rate for wholesalers of groceries and related products (SIC 514) decreased, the LWD and DAFW rates increased.

Figure 3.9 Incidence Rates Per 100 FTE Workers, Wholesale Trade

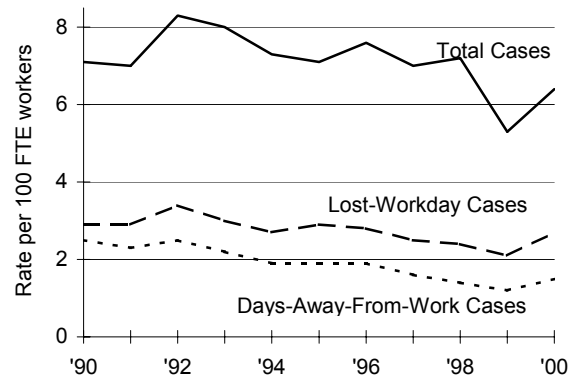


	SIC code	1998-2000 Average cases			
		Total	Lost-Work day	Days Away From Work	Total no. (1,000)
Wholesale trade		6.9	3.4	1.9	10.0
Motor vehicles, parts & supplies	501	9.0	4.1	2.5	0.9
Lumber & const. materials	503	10.9	5.3	3.0	0.6
Prof. & commercial equip.	504	2.7	1.0	0.6	0.6
Machinery, equip. & supplies	508	6.9	2.7	1.4	1.3
Groceries & related products	514	10.1	6.8	3.2	2.1

Retail Trade

- For the division as a whole, the incidence rates in 2000 were up sharply from 1999. However, this may be the result of the particular sample used in the 1999 survey. All three rates are below the average levels for 1995 through 1997.
- Retail trade accounts for 19 percent of employment, so while most retail trade is not especially hazardous, it accounts for a large proportion of injured workers. Retail trade accounts for 14 percent of total cases and 12 percent of DAFW cases.
- The retail industries with the highest rates, food stores (SIC 54) and new and used car dealers (SIC 551), decreased from the 1995 through 1997 period.

Figure 3.10 Incidence Rates Per 100 FTE Workers, Retail Trade

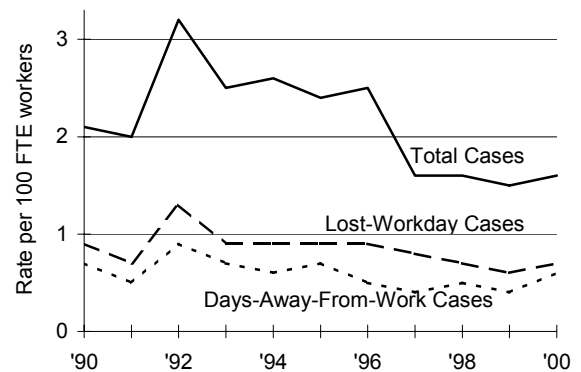


	SIC code	1998-2000 Average cases			Total no. (1,000)
		Total	Lost-Work day	Days Away From Work	
Retail trade		6.3	2.4	1.4	19.1
Bldg. materials & garden supplies	52	7.1	3.3	1.9	1.3
Lumber & other bldg. materials	521	7.8	3.7	2.1	0.9
General merchandise stores	53	6.6	3.4	1.9	2.6
Food stores	54	9.7	3.6	1.5	4.0
Auto dealers & service stations	55	7.5	2.6	1.8	3.3
New & used car dealers	551	9.7	2.8	2.0	1.8
Apparel & accessory stores	56	3.1	1.1	0.8	0.3
Furniture & home furnishings	57	6.2	3.1	1.2	1.2
Eating & drinking places	58	5.6	1.7	1.3	4.7
Misc. retail	59	3.7	1.3	0.7	1.6

Finance, Insurance and Real Estate

- Even though it has very low injury and illness rates, the total case rate and the LWD rate decreased from the 1995 through 1997 levels.

Figure 3.11 Incidence Rates Per 100 FTE Workers, Finance, Insurance and Real Estate

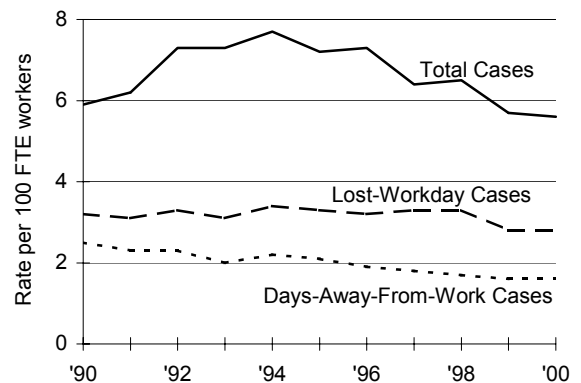


	SIC code	1998-2000 Average cases			Total no. (1,000)
		Total	Lost-Work day	Days Away From Work	
Finance, insur. & real estate		1.6	0.7	0.5	2.2
Real estate	65	3.5	1.8	1.3	0.6

Services

- The three incidence rates for services all decreased from the average 1995 through 1997 levels.
- Nearly half of the injuries and illnesses in the services industry are in health services (SIC 80).
- Nursing and personal care facilities (SIC 805) has the second-highest total case rate and LWD rate of any industry, and among the highest DAFW rates. The total case rate and LWD rate increased from the 1995 through 1997 averages.

Figure 3.12 Incidence Rates Per 100 FTE Workers, Services

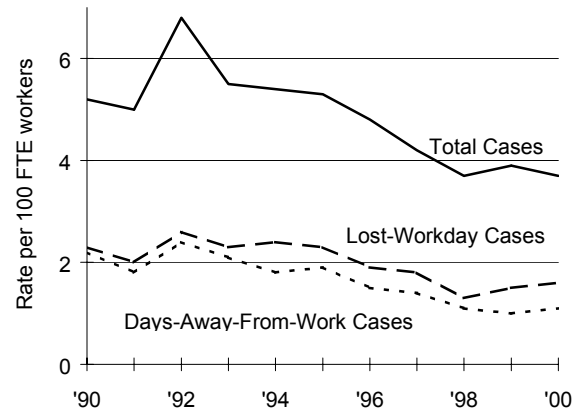


	SIC code	1998-2000 Average cases			Total no. (1,000)
		Total	Lost-Work day	Days Away From Work	
Services		5.9	3.0	1.6	32.6
Hotels, other lodging places	70	7.7	3.7	2.3	1.5
Personal services	72	4.0	2.3	1.4	0.7
Business services	73	3.0	1.6	0.7	4.4
Auto repair, serv., & parking	75	6.0	2.6	2.0	1.2
Misc. repair services	76	8.2	3.5	2.5	0.4
Amusement & rec. services	79	7.5	3.6	2.1	2.0
Health services	80	9.8	5.2	2.7	16.0
Nursing & pers care facil.	805	20.8	12.8	5.1	6.8
Hospitals	806	10.7	5.8	3.9	6.0
Home health care services	808	9.0	4.6	2.7	0.5
Education services	82	2.9	1.2	0.8	0.5
Social services	83	7.7	3.8	2.2	3.9
Residential care	836	10.5	4.9	2.9	1.8

State Government

- The incidence rates dropped, for state government as a whole, from the 1995 through 1997 average levels. All three rates decreased for each of the industry's subdivisions, except for construction.

Figure 3.13 Incidence Rates Per 100 FTE Workers, State Government

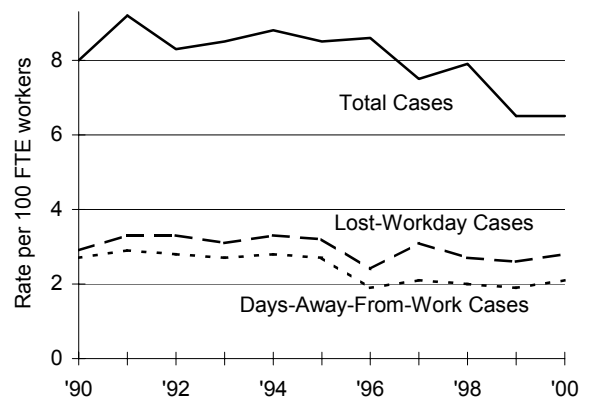


	SIC code	1998-2000 Average cases			
		Total	Days Lost-Work day	Days Away From Work	Total no. (1,000)
State government		3.8	1.5	1.1	2.6
Construction		12.5	5.6	3.4	0.5
Services		3.1	1.1	0.8	1.5
Health services	80	11.8	7.0	5.5	0.4
Education services	82	2.5	0.7	0.4	0.9
Public administration		3.4	1.4	1.0	0.8

Local Government

- All three rates have decreased from the 1995 through 1997 average levels for local government as a whole, and for education services and public administration. However, rates for health services increased.
- Local government nursing homes (SIC 805) had rates similar to those for private sector nursing homes. The DAFW rate is the highest in the state.

Figure 3.14 Incidence Rates Per 100 FTE Workers Local Government



	SIC code	1998-2000 Average cases			
		Total	Days Lost-Work day	Days Away From Work	Total no. (1,000)
Local government		7.0	2.7	2.0	12.6
Services		7.1	2.5	1.8	8.0
Health services	80	15.0	7.9	5.0	2.2
Nurs'g & pers. care facil.	805	19.9	14.3	10.2	0.5
Hospitals	806	13.4	5.9	3.6	1.5
Education services	82	6.1	1.8	1.5	5.6
Public administration		5.6	2.5	1.7	3.4

4

Characteristics and Causes of Injuries and Illnesses

This chapter presents information from the BLS survey about the characteristics and causes of Minnesota's workplace injuries and illnesses that result in days-away-from-work (DAFW) cases. Characteristics include the nature of the injury or illness and the part of body affected. Causes consist of the event or exposure leading to the injury or illness and the source of injury or illness — the object, substance, person, or environmental condition that directly produced or inflicted it.

As an example of how the four classifications combine to describe injuries and illnesses,

consider an injury to a nursing aide who sprains her back while lifting a patient. The nature, or physical effect, is a sprain or strain; the part of body affected, her back; the event, overexertion while lifting; and the source, the health care patient.

The following four tables show the percentages of classifiable claims for three years combined, 1998 through 2000. The percentage distributions of the injury and illness characteristics are very stable—there are no important differences between the 1998 through 2000 period and the percentages for the 1992 through 1994 period, the first three-year period available.

Nature of Injury or Illness

- Traumatic injuries and disorders accounted for 89 percent of all DAFW cases. Nearly half of these (48 percent of the total) were sprains, strains and tears of muscles, tendons and joints. The next most common types of traumatic injuries and disorders were open wounds (9 percent) and surface wounds and bruises (8 percent).
- Most of the remaining cases (10 percent of the total) were systemic diseases and disorders.

Figure 4.1 Nature of Injury or Illness for Days-Away-From-Work Cases, 1998-2000 Average

Nature of Injury or Illness	Percent- age of Cases [1]	Nature of Injury or Illness	Percent- age of Cases [1]
Traumatic injuries and disorders	88.9%	Other traumatic injuries and disorders	11.1%
Traumatic injuries to muscles, tendons, joints, etc.	46.6	Nonspecified injuries and disorders	10.7
Sprains, strains, and tears	46.4	Back pain, hurt back	3.9
Open wounds	8.7	Soreness, pain, hurt, except back	3.7
Cuts and lacerations	6.0	Crushing injuries	0.8
Punctures, except bites	1.8	Multiple nonspec. injuries and disorders	0.4
Amputations	0.5	Nonspec. injuries and disorders, n.e.c.	1.8
Amputations, fingertip	0.3	Electrocutions, electric shocks	0.1
Surface wounds and bruises	8.1	Other poisonings and toxic effects	0.1
Bruises and contusions	6.1	Systemic diseases and disorders	9.9
Foreign bodies (superf. splinters, chips)	1.2	Musculoskeletal system diseases and disorders	3.4
Abrasions and scratches	0.8	Rheumatism, except the back	2.2
Traumatic injuries to bones, nerves, and spinal cord	6.3	Tendinitis	1.1
Fractures	5.3	Dorsopathies	1.2
Dislocations	1.2	Nervous system and sense organs diseases	3.1
Burns	1.9	Disorders of peripheral nervous system	2.7
Heat burns, scalds	1.2	Carpal tunnel syndrome	2.3
Chemical burns	0.6	Disorders of the eye, adnexa, vision	0.3
Intracranial injuries	0.3	Digestive system diseases and disorders	2.2
Concussions	0.3	Hernia	2.2
Multiple traumatic injuries and disorders	4.2	Disorders of skin and subcutaneous tissue	0.5
Sprains and bruises	1.2	Respiratory system diseases	0.4
Fractures and other injuries	1.1	Symptoms, signs, and ill-defined conditions	0.9
Cuts, abrasions, and bruises	0.9	Infectious and parasitic diseases	0.1

1. Percentages are relative to the number of classifiable cases. Nonclassifiable cases were 4.8 percent of the total.

Part of Body

- The most common body part affected in DAFW cases for 1998 through 2000 was the trunk (43 percent of the total). A majority of these cases (30 percent of the total) involved the back. Shoulders were the second most commonly injured trunk area (6 percent).
- Upper extremities were involved in 21 percent of the cases, most commonly the fingers (7 percent of total) and wrists (5 percent). Lower extremities accounted for 19 percent of the cases, most often the knees (7 percent) and ankles (5 percent). Multiple body parts were injured in 9 percent of the cases.

Figure 4.2 Part of Body Affected by Injury or Illness for Days-Away-From-Work Cases, 1998-2000 Average

Part of Body	Percent- age of Cases [1]	Part of Body	Percent- age of Cases [1]
Trunk	42.8%	Lower extremities	18.7%
Back, including spine, spinal cord	30.4	Leg(s)	9.5
Lumbar region	17.0	Knee(s)	6.7
Thoracic region	1.7	Lower leg(s)	0.9
Coccygeal region	0.2	Thigh(s)	0.3
Multiple back regions	0.5	Leg(s), unspecified	1.2
Back, unspecified	10.9	Ankle(s)	4.7
Shoulder	5.8	Foot (feet), except toe(s)	3.0
Abdomen	2.5	Toe(s), toenail(s)	1.1
Internal location of diseases and disorders	1.5	Multiple lower extremities locations	0.5
Abdomen, except internal location of diseases and disorders	0.3	Head	5.5
Chest	1.6	Face	3.8
Pelvic region	1.4	Eye(s)	2.9
Hip(s)	0.7	Nose, nasal cavity	0.1
Groin	0.6	Mouth	0.1
Multiple trunk locations	0.9	Tooth (teeth)	0.0
Upper extremities	20.7	Forehead	0.2
Finger(s), fingernail(s)	6.8	Multiple face locations	0.1
Wrist(s)	5.3	Cranial region	0.5
Arm(s)	4.1	Brain	0.4
Elbow(s)	1.3	Ear(s)	0.1
Forearm(s)	0.9	Head, unspecified	1.0
Upper arm(s)	0.3	Neck, including throat	2.5
Arm(s), unspecified	1.3	Multiple body parts [2]	8.7
Hand(s), except finger(s)	3.3	Body systems [3]	1.5
Multiple upper extremities locations	1.2		

1. Percentages are relative to the number of classifiable cases. Nonclassifiable cases were 2.6 percent of the total.

2. Injuries and illnesses involving multiple body parts are counted in this category only.

3. This category applies when the functioning of an entire body system (e.g. circulatory system) is affected without injury to a particular body part.

Event or Exposure

- Bodily reaction and exertion caused slightly more than half of DAFW cases (53 percent). This took the form of overexertion (37 percent of total), most frequently in lifting (18 percent) and bodily reaction (e.g. slips, trips, bending, reaching) (11 percent).
- The next most frequent cause was contact with objects and equipment (23 percent); this included being struck by an object (13 percent of total), struck against an object (5 percent) and caught in or compressed by equipment or objects (4 percent).
- Fourteen percent of DAFW cases resulted from falls. Four percent of DAFW cases were caused by exposure to harmful substances or environments, primarily exposure to caustic or allergenic substances and contact with temperature extremes. Transportation incidents were responsible for 4 percent of DAFW cases, and assaults and violent acts, 1.3 percent.

Figure 4.3 Event or Exposure Leading to Injury or Illness for Days-Away-From-Work Cases, 1998-2000 Average

Event or Exposure	Percent- age of Cases [1]	Event or Exposure	Percent- age of Cases [1]
Bodily reaction and exertion	53.3%	Fall to lower level	5.1%
Overexertion	36.7	Fall down stairs or steps	1.3
Overexertion in lifting	17.5	Fall from nonmoving vehicle	0.5
Overexertion in pulling or pushing objects	4.4	Fall from ladder	1.0
Overexertion in holding, carrying, turning or welding objects	1.6	Fall from floor, dock or ground level	0.4
		Fall from roof	0.3
		Fall from scaffold, staging	0.2
Bodily reaction	11.0	Jump to lower level	0.4
Slip, trip, loss of balance -- without fall	2.8		
Bending, climbing, reaching, and twisting	2.9	Exposure to harmful substances or environments	4.0
Walking -- without other incident	0.6	Exposure to caustic or allergenic subst.	2.4
Standing	0.1	Contact with skin or other exposed tissue	0.9
Sitting	0.0	Inhalation of substance	0.5
Repetitive motion	5.4	Contact with temperature extremes	1.2
Repetitive use of tools	1.0	Contact with hot objects or substances	1.1
Typing or key entry	1.1		
Repetitive placing, grasping or moving of objects, except tools	1.0	Contact with electric current	0.2
Contact with objects and equipment	23.3	Exposure to radiation	0.2
Struck by object	12.5	Exposure to welding light	0.2
Struck by falling object	4.9		
Struck by swinging or slipping object	1.9	Transportation incidents	3.6
Struck by flying object	0.8	Highway incident	2.6
		Collision between vehicles, mobile equip.	1.8
Struck against object	5.2		
		Pedestrian, nonpassenger struck by vehicle	0.4
Caught in or compressed by equipment or objects	3.5	Pedestrian struck by vehicle or mobile equipment in non-roadway area	0.3
Caught in running equip. or machinery	1.3		
Compressed by rolling or sliding objects	0.5	Nonhighway incident except rail, air, water	0.5
		Noncollision incident	0.4
Rubbed or abraded by friction or pressure	1.4		
Rubbed, abraded by foreign matter in eye	1.2	Assaults and violent acts	1.3
		Assaults and violent acts by person(s)	1.1
Rubbed, abraded or jarred by vibration -- by vibration of vehicle or motor equip.	0.3	Assaults by animals	0.1
	0.2		
Falls	14.2	Fires and explosions	0.2
Fall on same level	8.4		
Fall to floor, walkway or other surface	6.9		
Fall onto or against objects	1.2		

1. Percentages are relative to the number of classifiable cases. Nonclassifiable cases were 6.1 percent of the total.

Source of Injury or Illness

- The most frequent source for Minnesota's 1998 through 2000 DAFW cases was the persons, plants, animals and minerals category (27 percent). The particular sources were the injured or ill worker, in cases involving bodily motion or position

(15 percent of total) and a health care patient or facility resident (8 percent).

- Other common injury sources were structures and surfaces (usually floors, walkways and ground surfaces) (17 percent); containers (15 percent); and parts and materials (12 percent)

Figure 4.4 Source of Injury or Illness for Days-Away-From-Work Cases, 1998-2000 Average

Source	Percent- age of Cases [1]	Source	Percent- age of Cases [1]
Persons, plants, animals and minerals	27.1%	Vehicles	7.3%
Person -- injured or ill worker	16.5	Highway vehicle, motorized	4.5
Bodily motion or position of injured or ill worker	15.3	Truck	1.7
		Automobile	1.3
		Bus	0.4
Person, other than injured or ill worker	9.0	Van -- passenger or light delivery	0.3
Health care patient or facility resident	7.5		
Animals and animal products	0.4	Plant and industrial vehicle -- nonpowered	1.1
Mammals, except humans	0.2	Cart, dolly, handtruck	1.0
Plants, trees, and vegetation--not processed	0.5		
Food products -- fresh or processed	0.3	Plant and industrial powered vehicles, tractors	1.0
Nonmetallic minerals, except fuel	0.2	Forklift	0.9
Structures and surfaces	16.8	Machinery	6.5
Floors, walkways and ground surfaces	13.4	Metal, woodworking, and special material machinery	1.3
Floors	6.6	Material handling machinery	1.3
Ground	2.9	Special process machinery	1.2
Stairs, steps	1.3	Heating, cooling, and cleaning machinery	0.7
Parking lots	0.7	Constr., logging, and mining machinery	0.3
		Office and business machinery	0.2
Other structural elements	2.7	Tools, instruments, and equipment	6.6
Structures (incl. scaffolds, towers, poles)	0.6	Handtools -- nonpowered	3.5
Containers	15.0	Cutting handtools--nonpowered	1.6
Containers -- nonpressurized	11.0		
Boxes, crates, cartons	5.3	Handtools -- powered	1.1
Bags, sacks, totes	1.5	Ladders	0.3
		Handtools -- power not determined	0.2
Containers -- variable restraint	1.8	Furniture and fixtures	3.7
Skids and pallets	1.0	Furniture	2.2
Containers -- pressurized	0.4	Cases, cabinets, racks, and shelves	1.1
Luggage and handbags	0.3	Chemicals and chemical products	1.5
Parts and materials	11.7	Other sources	3.8
Building materials -- solid elements	4.8	Scrap, waste, and debris	1.8
Structural metal materials	1.2	Chips, particles and splinters	1.6
Wood and lumber	1.4		
Vehicle and mobile equipment parts	1.2	Steam, vapors, and liquids n.e.c.	0.4
Machine, tool, and electric parts	1.8	Atmospheric and environmental conditions	0.4
Fasteners, connectors, ropes and ties	1.6		
Metal materials, nonstructural	0.8		

1. Percentages are relative to the number of classifiable cases. Nonclassifiable cases were 7.3 percent of the total.

5

Characteristics of Injured Workers

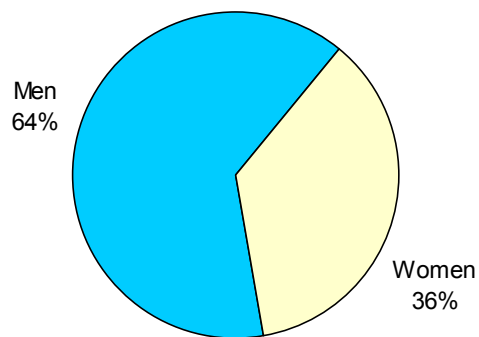
This chapter presents information from the BLS survey about the characteristics of the workers with workplace injuries and illnesses that result in DAFW cases. Personal characteristics include the injured worker's gender, age and race or ethnic origin. Job characteristics include the injured workers' occupation and job tenure. The figures show the percentages of classifiable claims for 2000.

Personal Characteristics

Gender

- Men account for nearly two-thirds of the injured workers with DAFW cases. This percentage has remained very stable for the past seven years, with men comprising 65 percent of the injured workers in 1995.

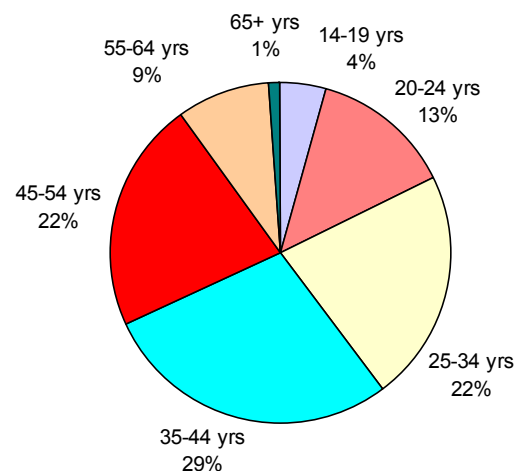
Figure 5.1 Gender of Workers with Days-Away-From-Work Cases, 2000



Age

- The distribution of injured workers' ages has changed significantly since 1995, reflecting the increasing average age of the workforce.
- The percentage of workers 25 to 34 years old decreased from 30 percent in 1995, to 22 percent in 2000, while the percentage of workers 45 to 54 years old increased from 16 percent to 22 percent.
- The number of injured workers 55 to 64 years old increased by 17 percent since 1995, and the number of injured workers 65 years old and older increased by 18 percent.

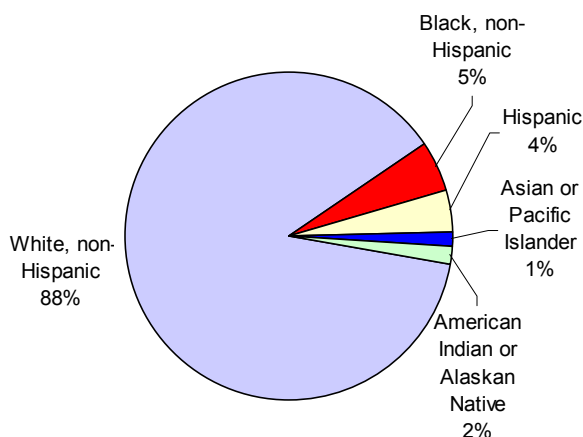
Figure 5.2 Age of Workers with Days-Away-From-Work Cases, 2000



Race or Ethnic Origin

- Some caution is needed in the analysis of race or ethnic origin, because 28 percent of the survey responses did not include the injured worker's race or ethnic origin. The survey results reflect the increasing diversity of Minnesota's workforce.
- The number of black, non-Hispanic injured workers increased by 27 percent since 1995, and the percentage increased from 3.8 percent to 5.0 percent of all injured workers.
- The number of Hispanic injured workers increased by 75 percent since 1995, and the percentage increased from 2.4 percent to 4.4 percent of all injured workers.

Figure 5.3 Race or Ethnic Origin of Workers with Days-Away-From-Work Cases, 2000

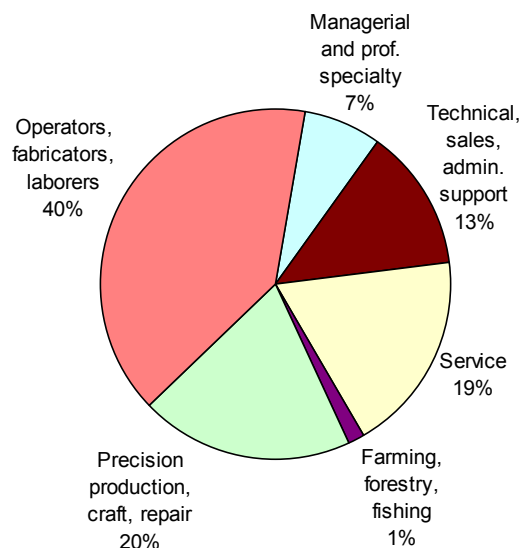


Job Characteristics

Occupation

- The number of precision production, craft and repair workers increased by 38 percent since 1995, and the percentage increased from 14 percent to 20 percent of all injured workers. Many of these workers are employed in the construction industry. The number of DAFW cases in construction increased by 72 percent from 1995 to 2000.
- In contrast, the percentage of operators, fabricators, and laborers and workers in service occupations each decreased by 3 percent.

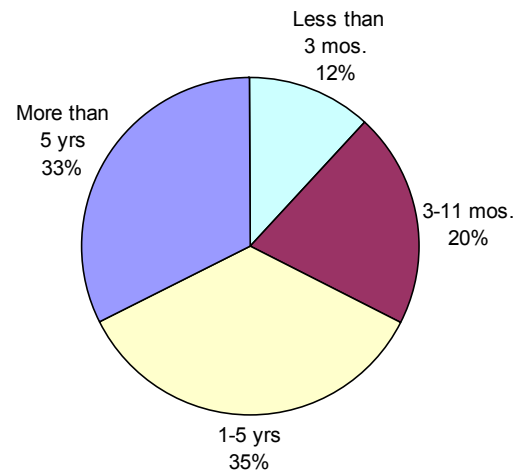
Figure 5.4 Occupation of Workers with Days-Away-From-Work Cases, 2000



Job Tenure

- The worker's length of service (job tenure) with an employer is a general measure of the worker's attainment of job skills. Injuries to workers with short job tenures may be indicative of workers who were not adequately trained or who did not meet all the physical requirements the job demanded.
- One-third of the injured workers had been with their employers for less than one year at the time of injury.

Figure 5.5 Length of Service of Workers with Days-Away-From-Work Cases, 2000



6

Fatal Occupational Injuries

Nationwide, 5,915 workers were fatally injured during 2000. This is nearly the same as the 1999 total of 6,054 and 4 percent lower than the 1995 through 1999 average of 6,165. These and other findings are from the nationwide *Census of Fatal Occupational Injuries* (CFOI), conducted by the BLS with state and other federal agencies.

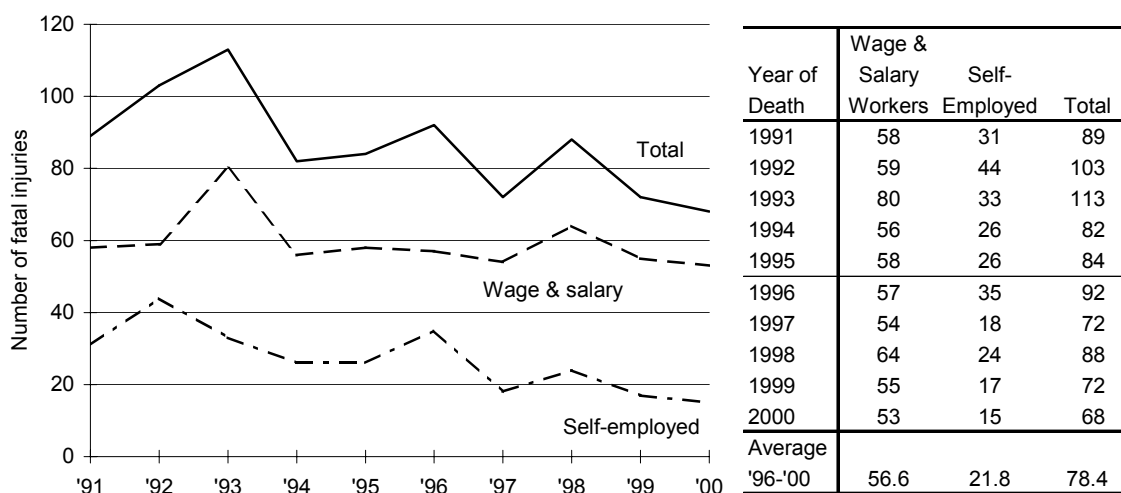
In 2000, 68 Minnesota workers were fatally injured on the job. This is down from the 1999 total of 72 fatalities, and less than the 1995 through 1999 annual average of 82 fatalities. The 68 fatalities are the lowest annual total reported in the CFOI since its inception in 1991.

This chapter presents CFOI data for Minnesota, showing trends for 1991 through 2000, incidence by industry division, the event or exposure causing the fatal injury and the characteristics of fatally injured workers. Because of the low number of fatalities, CFOI data from 1996 through 2000 were combined to produce more stable percentages.

Number of Fatal Injuries

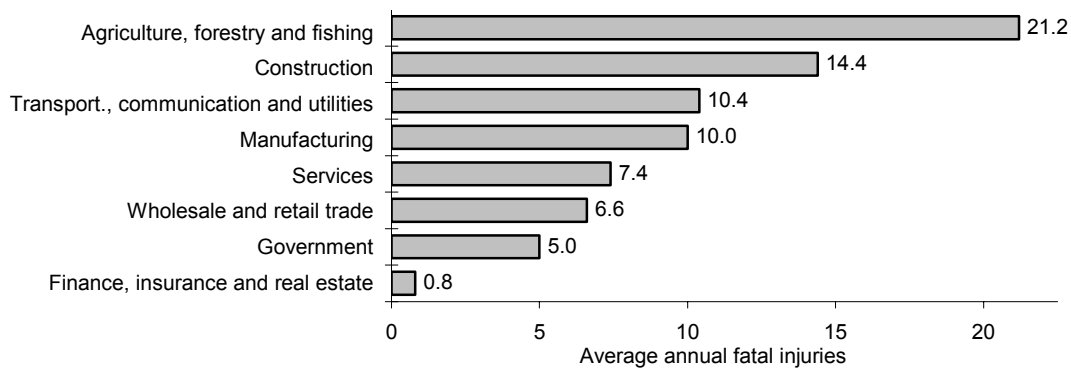
- As shown in Figure 6.1, Minnesota had from 68 to 113 fatal work injuries a year from 1991 through 2000.
- For wage-and-salary workers, the annual fatality toll was from 53 to 64 except for 1993, when it reached 80.
- For self-employed workers, the annual fatality figure ranged from 15 to 44. The drop in the annual number of self-employed worker fatalities since 1996 has been the main cause of the decrease in total annual fatalities.
- For 1996 through 2000, the fatality toll averaged 78 a year, consisting of 57 a year for wage-and-salary workers and 22 for self-employed workers. Fatal injuries for the self-employed were 28 percent of the total, far higher than the 10 percent self-employed share of total state employment during that period.⁷

Figure 6.1 Fatal Work Injuries in Minnesota, 1991-2000[1]



1. Includes private sector plus local, state and federal government (including resident armed forces). Includes self-employed and unpaid family workers, including family farm workers. Excludes fatal illnesses.

⁷Unpublished Current Population Survey data from BLS for 1996 through 1999.

Figure 6.2 Number of Fatal Work Injuries by Industry Division, 1996-2000 Average [1]

1. Includes private sector plus federal, state and local government. Excludes fatal illnesses. Mining is not shown separately, because of statistical issues concerning the employment estimates for that industry. The average annual number of cases includes the self-employed, family workers, private household workers and resident military personnel.

Incidence by Industry Division

Figure 6.2 shows the number of Minnesota's fatal work injuries by industry division, averaged for 1996 through 2000.

- The highest annual numbers of fatal injuries were in agriculture, forestry and fishing (21.2 a year) and construction (14.4). Together, they account for 45 percent of all fatalities.

Figure 6.3 Event or Exposure Causing Fatal Work Injury, 1996-2000 Average [1]

Event or Exposure	Average Annual Number of Fatalities	Percentage of Total
Total	78	100%
Transportation accidents	36	46
Highway accident	21	26
Nonhighway accident, except air, rail, water [2]	7	9
Worker struck by vehicle	4	5
Contact with objects and equipment	19	24
Struck by object	8	10
Struck by falling object	5	7
Caught in or compressed by equipment or objects	7	8
Caught in running equipment or machinery	3	3
Caught in or crushed by collapsing materials	4	5
Falls	9	12
Assaults and violent acts	6	8
Homicide	5	6
Exposure to harmful substances or environments	6	7
Contact with electric current	3	4
Fires and explosions	2	3

1. Includes private sector plus local, state and federal government (including resident armed forces). Includes self-employed and unpaid family workers, including family farm workers. Excludes fatal illnesses.

2. Includes accidents on farms, industrial premises and construction sites.

Causes of Fatal Injuries

Figure 6.3 shows the event or exposure causing fatal work injuries in Minnesota during 1996 through 2000.

- The most common cause of fatal injuries was transportation incidents, accounting for 46 percent of all fatal work injuries. These incidents consisted primarily of highway incidents (motor vehicles traveling on roads), but also included nonhighway incidents (motor vehicles on farm and industrial premises) and workers being struck by vehicles.
- The second most common cause was contact with objects and equipment (24 percent). These cases included workers being struck by an object, caught in or compressed by equipment or objects, and caught in or crushed by collapsing materials.
- Assaults and violent acts accounted for 8 percent of the workplace fatalities. Primary among assaults and violent acts was homicide, accounting for 6 percent of the total. Assaults are the fifth leading cause of fatal workplace injuries for the state. By contrast, assaults were responsible for 17 percent of the national total for 1996 through 2000. Assaults were the third highest cause of fatal workplace injuries nationwide in 2000.

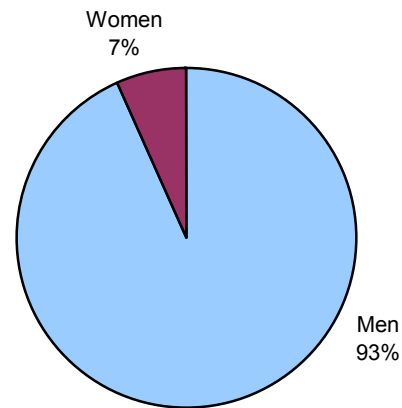
Characteristics of Fatally Injured Workers

Figures 6.4 through 6.7 show the percentage distributions of fatally injured workers for 1996 through 2000 combined. The data were combined because of the small number of fatalities in any single year.

Gender

- Males accounted for the overwhelming majority of fatally injured workers (93 percent).

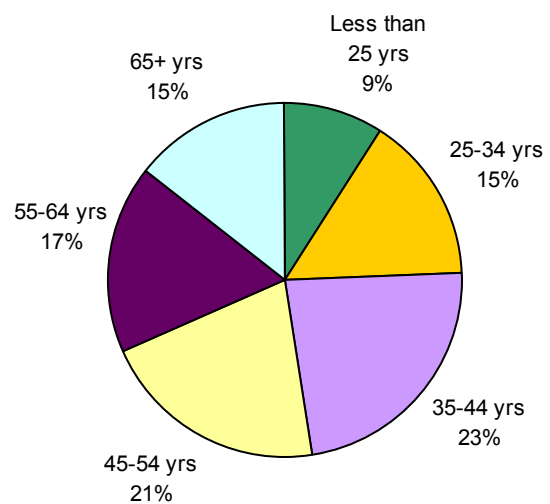
Figure 6.4 Gender of Fatally Injured Workers, 1996-2000



Age

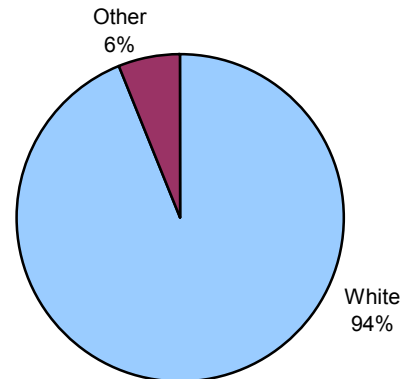
- The workers had a wide age distribution, with the greatest number among workers 35 to 44 years of age and 45 to 54 years of age.

Figure 6.5 Age of Fatally Injured Workers, 1996-2000

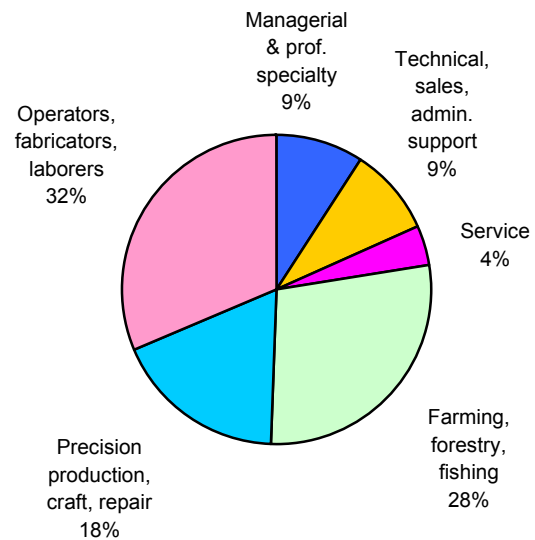


Race

- White workers accounted for 94 percent of the fatalities. White, nonminority people account for 90 percent of the population that is 18 years old and older.

Figure 6.6 Race of Fatally Injured Workers, 1996-2000**Occupation**

- Fatally injured workers were concentrated in the occupation groups of operators, fabricators and laborers (32 percent) and farming, forestry and fishing (28 percent).

Figure 6.7 Occupation of Fatally Injured Workers, 1996-2000

7

Workplace Safety Programs and Services of the Department of Labor and Industry

The Department of Labor and Industry (DLI) has a variety of programs and services to help employers maintain a safe and healthful workplace. Minnesota has an approved state occupational safety and health services plan under the federal Occupational Safety and Health Act (OSHA). Minnesota operates its plan under the Minnesota Occupational Safety and Health Act of 1973 (MNOSHA) and its related standards.

DLI administers MNOSHA through two divisions, each with a focus on different parts of MNOSHA. The Occupational Safety and Health (OSH) Division is responsible for compliance program administration, which includes conducting enforcement inspections, adoption of standards, and operation of other related OSHA activities. The Workplace Safety Consultation (WSC) Division provides free consultation services, on request, to help employers prevent workplace injuries and diseases by identifying and correcting safety and health hazards. Both units disseminate information about state and federal workplace safety and health standards.

Further Information

For further information about OSHA requirements, standards and procedures, contact OSH Division by phone at (651) 284-5050 or 1-877-470-6742, by fax at (651) 297-2527; by e-mail at OSHA.Compliance@state.mn.us; or visit the Web site at www.doli.state.mn.us/mnosha.html.

For further information about WSC services and programs, contact WSC by phone at (651) 284-5060 or 1-800-657-3776, by fax at (651) 297-1953; by e-mail at OSHA.Consultation@state.mn.us; or visit the Web site at www.doli.state.mn.us/wsc.html.

Occupational Safety and Health Compliance

Workplace Inspections

MNOSHA authorizes the department to conduct workplace inspections to determine whether employers are complying with safety and health standards. The department's inspectors are trained in OSHA standards and in recognition of safety and health hazards. With certain exceptions, the act requires inspections to be without advance notice. Employers are required to allow the inspector to enter work areas without delay and must otherwise cooperate with the inspection.

MNOSHA's compliance program is based on a system of inspection priorities. The priorities, highest to lowest, are imminent danger (established from reports by employees or the public or from observation by a MNOSHA investigator), fatal accidents and catastrophes (accidents causing hospitalization of three or more employees), employee complaints (not concerning imminent danger), programmed inspections (which target employers in high-hazard industries) and follow-up inspections (for determining whether previously cited violations have been corrected).

Employers found to have violated OSHA standards receive citations for the violations and are assessed penalties based on the seriousness of the violations. These employers are also required to correct the violations. Citations, penalties, and time periods allowed for correcting violations may be appealed by employers or employees.

Figure 7.1 shows statistics for MNOSHA compliance inspections from federal fiscal years 1996 through 2001.

- Approximately 2,000 inspections were conducted annually, covering between 60,000 and 100,000 workers. Since 1999, more than two-thirds of inspections resulted in at least one violation, with total annual penalty assessments of \$2 million to \$3 million.
- During 2001, MNOSHA initiated inspections for 32 fatalities, 13 of which were in the construction industry.
- Also in 2001, MNOSHA investigated 39 serious injury incidents, 10 of which were in the construction industry. Serious injuries involve amputations, loss of sight, electrocutions or electrical burns, falls from elevations, crushed-by injuries, workplace violence and struck-by accidents resulting in head or spine injuries, broken bones or multiple trauma.

Figure 7.1 Minnesota OSHA Compliance Inspections

Federal Fiscal Year [1]	Inspections Conducted	Employees Covered [2]	Inspections with Violations	Violations	Penalties Assessed (\$millions)
1996	2,126	76,884	1,243	4,025	\$2.46
1997	1,770	64,516	950	2,637	\$1.38
1998	2,060	73,964	1,296	3,751	\$2.12
1999	1,877	102,958	1,312	3,951	\$3.13
2000	1,992	84,593	1,369	4,071	\$2.46
2001	1,952	73,451	1,339	3,845	\$2.46

1. Federal fiscal years are from Oct. 1 of the preceding year to Sept. 30 of the indicated year.

2. "Employees covered" refers to the number of employees who were affected by the scope of the inspection, but not always all employees at a facility.

Source: OSHA Integrated Management Information System.

Figure 7.2 shows the most commonly cited OSHA standards violations for 2001.

- Violations associated with compliance with the AWAIR Act and the Employee Right-To-Know Act were the most commonly cited standards.

Under the A Workplace Accident and Injury Reduction Act (AWAIR) — also part of the state's Occupational Safety and Health Act — employers in high-hazard industries must develop and implement a written safety and health plan to reduce workplace injuries and illnesses.

Under the Employee Right-To-Know Act and its standards — part of the state's Occupational Safety and Health Act — employers must evaluate their workplaces for the presence of hazardous substances, harmful physical agents and infectious agents, and determine which employees are routinely exposed to these substances and agents. Identified employees must be provided with appropriate training and readily accessible written information about identified hazardous substances and agents in their work areas. Containers, work areas and equipment must be labeled to warn employees of associated hazardous substances or agents.

Figure 7.2 Minnesota OSHA's Most Frequently Cited Standards, 2001

Standard [1]	Description	Frequency
MN Statutes 182.653 subd. 8	A Workplace Accident and Injury Reduction (AWAIR) Program	245
MN Rules 5206.0700 subp.1	Employee Right-To-Know training	138
MN Rules 5206.0700 subp.1B	Employee Right-To-Know written program	129
MN Statutes 182.653 subd. 2	General Duty Clause -- unsafe working condition	117
MN Rules 5205.0116 subp. 1 & 2	Forklifts -- monitoring for carbon monoxide	96
29 CFR 1926.652(a)(1)	Use of sloping or protective systems to prevent excavation cave-ins	94
29 CFR 1910.134(a)(2)	Respiratory protection program	86
29 CFR 1910.212(a)(1)	Machine guarding -- general requirements	81
29 CFR 1910.151(c)	Emergency eyewash/shower facilities	78
29 CFR 1926.100(a)	Hard hats in construction	72
29 CFR 1926.501(b)(1)	Fall protection in construction -- general requirements	65
MN Rules 5206.0700 subp.1G	Frequency of Employee Right-To-Know training	61
29 CFR 1910.178(l)	Forklifts -- operator training	60
29 CFR 1910.242(b)	Compressed air used for cleaning	60
29 CFR 1910.212(a)(3)(ii)	Point of operation guarding of machines	59
29 CFR 1926.451(g)(1)	Fall protection on scaffolds above 10 feet	57
29 CFR 1910.305(d)	Electrical hazards involving switchboards and panelboards	53
29 CFR 1910.23(c)(1)	Guardrails for open-sided floors	45
29 CFR 1910.305(g)(1)(iii)	Improper use of flexible electrical cords and cables	45
29 CFR 1910.305(g)(2)(iii)	Strain relied on flexible electrical cord devices and fittings	43
29 CFR 1910.95(c)(1)	Hearing conservation program	42
29 CFR 1926.501(b)(13)	Fall protection in residential roofing	41

1. 29 CFR refers to the U.S. Code of Federal Regulations Title 29, which covers the U.S. Department of Labor.

Source: OSHA Integrated Management Information System.

Workplace Safety Consultation

WSC offers a variety of workplace safety services. The services are voluntary, confidential and separate from the OSH Division.

Workplace Consultations

WSC offers a free consultation service to help employers prevent workplace accidents and diseases by recognizing and correcting safety and health hazards. This service is targeted primarily toward smaller businesses in high-hazard industries but is also available to public-sector employers.

On-site consultations are conducted by WSC safety and health professionals. During consultations, businesses are assisted in determining how to improve workplace conditions and practices to comply with regulations and to reduce accidents and illnesses and their associated costs. The consultant makes recommendations dealing with all aspects of an effective safety and health program.

No citations are issued or penalties proposed as a result of the consultation. The employer is only obligated to correct, in a timely manner, any serious safety and health hazards found. No information about the employer is reported to the OSH Division, unless the employer fails to correct the detected safety and health hazards within a specified period of time. This has happened only once in the past seven years.

Figure 7.3 shows statistics for worksite visits from 1996 through 2001.

- The number of worksite visits has doubled and the number of employees at the visited worksites has almost doubled from 1996 through 2001. This is a result of a federal policy decision to shift more OSHA resources to consultation services.

Figure 7.3 Consultation Visits

Calendar Year	Consultation Visits	Employees at Worksites
1996	401	63,930
1997	523	130,974
1998	515	114,034
1999	677	88,936
2000	826	141,690
2001	819	112,742

Source: OSHA Integrated Management Information System.

- During the past five years, WSC visits have resulted in the identification and correction of safety and health hazards that would have cost employers an average of \$2.1 million annually in MNOSHA penalties.

Training Seminars

WSC provides seminars to help employers and employees understand and comply with safety and health regulations and to develop and implement mandatory programs, including Employee Right-To-Know, AWAIR and labor-management safety committees. The seminars provide information that safety directors, supervisors, safety committee members and employees can use to help train their coworkers. Many of the WSC seminars are coordinated and conducted with 13 training organizations throughout the state, including community and technical colleges, labor-management associations and government training centers.

Figure 7.4 shows the number of seminars and seminar attendees increased nearly 150 percent from 1996 through 2001.

Figure 7.4 Consultation Seminars

Calendar Year	Seminars	Attendees
1996	208	6,271
1997	255	8,801
1998	411	11,676
1999	391	10,006
2000	453	12,305
2001	502	15,066

Source: OSHA Integrated Management Information System.

Labor-Management Safety Committees

MNOSHA also requires all public and private employers with more than 25 employees, and smaller employers in high-hazard industries, to establish and use a joint labor-management safety committee. Employee representatives on the committee must be chosen by employees and the committee must meet regularly.

The WSC Labor-Management Safety Committee program emphasizes the safety committee structure through a joint effort with the State Bureau of Mediation Services. This program reinforces the importance of labor-management cooperation in workplace safety issues to help prevent workplace injuries. Services include interpretation of OSHA standards, training in self-inspection techniques and instruction for preparing and implementing education and training programs.

Loggers' Safety Education Program

WSC also provides one-day logging safety training (LogSafe) seminars throughout the state. To receive workers' compensation premium rebates from the Targeted Industry Fund, logging employers must maintain current workers' compensation insurance and they or their employees must have attended, during the previous year, a Logsafe seminar or a seminar approved by DLI. WSC conducted 23 LogSafe seminars during 2001, attended by 1,170 logging employers and employees.

Additionally, WSC conducts training sessions for public-sector employers and employees who are involved in tree removal. Their logging work usually relates to cleanup following storms or other circumstances. In many cases, the trees are damaged and hazardous to work on by workers for which logging is not a daily activity. WSC conducted 16 public-sector logging training sessions for 414 attendees.

MNSHARP

The Minnesota Safety and Health Achievement Recognition Program (MNSHARP), under

WSC, is a voluntary program that assists small high-hazard employers in achieving safety and health improvements and recognizes them for doing so. For program purposes, high-hazard employers are those in high-hazard industries (e.g., construction and food processing) or special-emphasis industries (e.g., fabricated metals manufacturing and nursing homes) and those with higher-than-average lost-workday injury and illness rates for their industry. Eligibility is limited to employers with up to 500 workers at the worksite and priority is given to employers with fewer than 100 workers.

MNSHARP participants receive a free comprehensive safety and health consultation survey from WSC, which results in a one-year action plan. Within a year, in consultation with WSC, participants must correct hazards identified in the initial survey and develop and implement an effective safety and health program with full employee involvement. The goal is to reduce the employer's total injury and illness rate and lost-workday case rate to a point below the national industry average for at least one year. Participants must also consult in advance with WSC on changes in work processes or conditions that might introduce new hazards.

After a year, a second on-site visit occurs to determine whether the employer has met these requirements and the injury and illness reduction goal. If so, the employer receives a MNSHARP Certificate of Recognition and is exempted from programmed MNOSHA compliance inspections for one year. (Inspections will occur, however, in the event of imminent danger, fatalities or other catastrophes, formal complaints or referrals, or as follow-ups on previously cited violations.)

Certified MNSHARP employers may apply annually for certification renewal. If an on-site survey by WSC determines the employer continues to meet program requirements, the employer's certification is renewed and it continues to be exempt from programmed MNOSHA compliance inspections.

There are currently seven certified MNSHARP employers; all are manufacturers. Six of the

employers have been re-certified and one is in its first year of certification. The total injury and illness cases rates for these employers are now half the statewide rates for their industries.

MNSTAR

MNSTAR is a voluntary program patterned after the federal Voluntary Protection Program.⁸ It is available to Minnesota employers of all sizes. In comparison with MNSHARP, MNSTAR has more rigorous requirements and confers a higher level of recognition on certified employers. MNSTAR relies mainly on employer self-assessment and requires an extensive application, including submission of written safety and health policies and procedures. After one or more on-site safety and health surveys, the employer will qualify for MNSTAR status if all eligibility requirements have been met, including an injury and illness rate below the state and national averages for the industry. MNSTAR recognition exempts the employer from programmed MNOSHA Compliance inspections for three years. There are currently seven MNSTAR employers.

Safety Grants Program

The Safety Grants Program awards funds up to \$10,000 to qualifying employers for projects designed to reduce the risk of injury and illness to their employees. To qualify, an employer must meet the following conditions:

- The employer must be under the jurisdiction of Minnesota OSHA.

- A qualified safety and health professional must have conducted an on-site safety inspection and produced a written report with recommendations based on the inspection.
- The project must be consistent with the recommendations of the safety and health inspection. The employer must have the knowledge and experience to complete the project and must be committed to its implementation.
- The employer must be able to match the grant money awarded and all estimated project costs must be covered by available funds (safety grant, employer match and any other funds).
- The project must be supported by all public entities involved and must comply with federal, state and local regulations.

Figure 7.5 shows Safety Grants Program statistics for the past state fiscal year.

- Among both private- and public-sector employers, the safety grant amounts were combined with more than twice the amount in employer matches and other funds to complete the safety projects.
- Since 1995, the WSC unit has awarded 894 safety grants for more than \$5.5 million.

Figure 7.5 Safety Grant Activity, State Fiscal Year 2001

Recipient	Number of Grants	Total Project Costs	Employer Match Fund	State Match Fund
Total	160	\$3,627,506	\$2,614,551	\$1,012,955
Private sector	105	\$2,592,251	\$1,905,835	\$ 686,416
Public sector	55	\$1,035,255	\$ 708,716	\$ 326,539
Breakdown of Public Sector Grants				
Schools	3	\$ 58,081	\$ 38,112	\$ 19,969
Cities	45	\$ 847,374	\$ 582,888	\$ 264,486
Counties	5	\$ 109,790	\$ 77,711	\$ 32,079
State	2	\$ 20,010	\$ 10,005	\$ 10,005

Source: MNOSHA Workplace Safety Consultation.

⁸See www.osha.gov/oshprogs/vpp.

Appendix A

Definitions of BLS Survey Case Types

The U.S. Bureau of Labor Statistics (BLS) conducts the annual *Survey of Occupational Injuries and Illnesses* to provide nationwide and state-level information about workplace injuries and illnesses, including their number and incidence.⁹

The survey includes all cases recorded by employers on their OSHA 200 logs. These “OSHA-recordable” cases include all nonfatal occupational illnesses and those nonfatal occupational injuries that result in: loss of consciousness; medical treatment other than first aid; or any lost time from work, restricted work activity, or transfer to another job after the day of injury.

The survey defines types of injury and illness cases according to whether or not they have “days away from work” and/or “days of restricted work activity.”

- “Days away from work” are days after the injury or onset of illness when the employee

would have worked but does not because of the injury or illness. “Days-away-from-work” (DAFW) cases are cases with any days away from work. These cases may have days of restricted work activity, in addition to days away from work.

- “Days of restricted work activity” are days after the injury or onset of illness when the employee works reduced hours, has restricted duties, or is temporarily assigned to another job because of the injury or illness. “Restricted-work-activity-only” (RWAO) cases have days of restricted work activity, but no days away from work.
- “Lost workdays,” a combined category, includes days away from work *and* days of restricted work activity.
- “Cases without lost workdays” are recordable cases with medical treatment but no days away from work or days with restricted work activity.

⁹See pp. 1-2 for more background on the survey. The survey is described in more detail on the BLS website at www.bls.gov/iif/oshover.htm.

Appendix B

Average Annual Rates of DAFW Cases by Number of Days Away From Work

Appendix B shows the average annual rates of days-away-from-work (DAFW) cases of different severity levels, measured by the number of days away from work, by industry for 1998 through 2000. The incidence rate for each severity level by industry was computed as the product of two factors from published Bureau of Labor Statistics *Survey of Occupational Injuries and Illnesses* data.

One factor was the average annual incidence of DAFW cases by industry for 1998 through 2000. Industries without at least two years of data were excluded. The second factor was the percentage of DAFW cases by industry that were at or above the given severity level, i.e., they had at

least the number of days away from work corresponding to that level. This factor was averaged from 1996 through 2000 to reduce sampling variation in the presence of small numbers of cases in the distribution of DAFW cases by severity level.

Because of sample-size concerns, incidence rates by severity level were only computed if at least three years of severity data were available for 1996 through 2000.

**Distribution of Days-Away-From-Work Cases by Number of Days Away,
1996-2000 Average Percentage**

Industry	SIC Code	1996-2000 Average Percentage of DAFW Cases by Number of Days Away							2000 Median Days Away
		1	2	3-5	6-10	11-20	21-30	31+	
Total including state & local gov.		21.3	14.9	21.1	14.0	11.6	4.7	12.6	5
Private industry		20.7	15.2	23.1	13.5	10.3	5.1	12.0	5
Agriculture, forestry, & fishing		19.5	13.6	26.9	13.6	8.8	7.0	10.6	4
Agricultural production	01-02	13.2	17.0	26.9	14.5	11.3	3.0	14.1	5
Agricultural services	07	24.8	10.7	25.7	12.4	7.3	12.1	7.0	4
Mining		6.8	6.4	10.6	9.3	8.5	5.1	53.4	57
Metal mining	10	6.1	6.2	9.4	8.9	8.9	5.6	55.0	57
Iron ores	101	6.1	6.2	9.4	8.9	8.9	5.6	55.0	57
Construction		16.8	12.4	23.8	13.5	10.9	6.3	16.3	5
General building contractors	15	13.2	12.7	25.3	11.2	15.6	5.1	17.0	5
Residential building construction	152	9.8	17.2	21.9	10.0	18.9	4.7	17.5	7
Nonresidential building construction	154	15.8	8.8	25.2	13.2	13.0	6.2	17.7	4
Heavy construction, ex. building	16	16.9	12.4	24.9	12.2	10.9	5.4	17.3	6
Highway & street construction	161	15.0	11.1	26.5	11.5	9.4	5.4	21.0	6
Heavy construction, ex. highway	162	18.8	13.5	22.0	13.3	12.5	6.2	13.8	10
Special trade contractors	17	17.9	12.2	23.1	14.5	9.4	7.0	16.0	5
Plumbing, heating, air-conditioning	171	19.0	13.0	15.9	16.0	10.0	9.8	16.2	5
Electrical work	173	21.9	8.2	23.8	12.5	12.2	4.8	16.5	4
Masonry, stonework, & plastering	174	17.6	11.6	20.5	17.3	6.7	6.8	19.5	6
Manufacturing		23.4	14.6	22.0	13.4	10.5	5.4	10.7	4
Food & kindred products	20	17.9	14.5	21.4	15.4	13.4	5.3	12.1	5
Meat products	201	17.4	15.1	22.3	15.2	12.9	5.4	11.7	5
Poultry slaughtering & processing	2015	23.6	15.3	21.9	8.1	10.8	7.2	13.1	5
Dairy products	202	23.3	15.3	17.8	12.8	10.7	4.6	15.5	3
Preserved fruits & vegetables	203	13.0	11.9	35.4	14.1	13.4	4.3	8.0	4
Grain mill products	204	21.6	15.2	19.5	7.9	16.9	4.8	14.2	--
Lumber & wood products	24	20.4	13.5	26.7	13.6	9.2	6.3	10.4	4
Millwork, plywood, structural memb.	243	21.4	14.3	28.6	14.8	8.9	4.7	7.3	3
Millwork	2431	16.4	14.5	29.8	17.7	8.3	5.8	7.6	8
Furniture & fixtures	25	45.0	11.7	15.1	10.0	7.0	3.3	8.0	9
Paper & allied products	26	24.5	12.0	16.8	14.0	9.4	7.4	15.9	4
Paperboard containers & boxes	265	32.7	5.9	24.5	10.9	8.0	6.6	11.4	--
Printing & publishing	27	21.1	14.3	20.2	16.7	11.4	4.2	12.2	4
Newspapers	271	22.1	9.6	30.0	12.8	6.1	3.9	15.5	4
Commercial printing	275	21.3	16.0	18.9	16.6	11.8	4.0	11.3	4
Chemicals & allied products	28	21.5	12.2	23.2	16.5	9.1	3.7	13.7	9
Rubber & misc. plastics products	30	21.6	17.2	24.8	13.0	10.2	5.5	7.7	8
Misc. plastics products, n.e.c.	308	25.1	16.2	28.7	9.6	8.0	6.0	6.4	0
Stone, clay, & glass products	32	28.1	7.9	23.5	10.1	12.1	6.7	11.8	--
Primary metal industries	33	57.6	10.2	11.0	7.0	7.4	3.2	3.6	7
Fabricated metal products	34	25.9	17.2	21.0	12.0	8.8	5.3	9.8	4
Fabricated structural metal products	344	27.2	16.3	17.1	12.1	9.7	6.0	11.7	5
Metal forgings & stampings	346	28.3	16.5	22.5	11.4	7.2	4.4	9.7	3
Ordnance & accessories, n.e.c.	348	22.8	19.2	19.1	15.6	9.9	5.4	8.1	--
Industrial machinery & equipment	35	26.8	14.4	22.5	11.7	9.6	5.2	9.8	4
Farm & garden machinery	352	25.2	10.3	31.2	10.6	8.3	2.3	12.1	3
Metalworking machinery	354	37.6	9.2	17.3	13.3	11.7	1.3	9.7	5
General industrial machinery	356	24.7	10.7	23.4	14.6	7.3	8.0	11.3	3
Computer & office equipment	357	20.5	11.5	29.6	15.1	7.5	4.3	11.5	4
Refrigeration & service machinery	358	16.1	12.7	22.3	15.2	17.8	3.9	12.1	8
Industrial machinery, n.e.c.	359	25.1	16.8	17.2	10.3	9.1	9.6	11.8	3

Industry	SIC Code	1996-2000 Average Percentage of DAFW Cases by Number of Days Away							2000 Median Days Away
		1	2	3-5	6-10	11-20	21-30	31+	
Industrial machinery, n.e.c.	3599	25.6	16.5	16.9	9.8	8.5	10.9	11.8	3
Electronic & other electric equip.	36	24.2	15.1	25.3	11.9	8.8	4.9	9.8	4
Electrical industrial apparatus	362	25.4	19.0	20.7	13.3	11.0	5.3	5.2	2
Electronic components & acc.	367	22.6	17.0	30.6	11.5	7.6	4.5	6.2	4
Transportation equipment	37	24.9	15.2	20.1	11.8	10.0	6.6	11.4	3
Motor vehicles & equipment	371	24.1	13.2	19.2	11.9	10.6	8.2	12.8	3
Instruments & related products	38	24.6	10.6	18.2	17.6	11.8	5.0	12.3	6
Measuring & controlling devices	382	19.7	10.0	17.9	21.7	14.6	3.2	12.9	5
Medical instruments & supplies	384	28.6	11.0	19.8	15.6	9.8	6.0	9.2	6
Misc. manufacturing industries	39	19.3	15.3	29.8	12.2	12.3	3.4	7.8	4
Transportation & public utilities		14.7	12.4	21.5	14.9	11.0	7.4	18.1	5
Railroad transportation	40	8.8	10.3	14.4	13.6	12.4	6.9	33.6	11
Local & interurban passenger transit	41	16.1	12.7	27.4	15.6	10.1	4.5	13.7	6
Trucking & warehousing	42	12.7	9.2	19.7	15.7	12.3	10.0	20.4	14
Trucking & courier services, ex. air	421	12.8	11.0	15.7	17.3	12.0	7.9	23.2	14
Transportation by air	45	13.6	13.5	21.1	16.0	12.0	6.3	17.5	6
Transportation services	47	19.3	7.1	29.2	7.0	4.1	7.7	25.5	6
Communication	48	18.4	15.1	27.2	14.0	5.6	7.5	12.1	10
Electric, gas, & sanitary services	49	20.4	16.0	18.0	14.7	11.0	7.4	12.5	8
Electric services	491	13.6	20.2	18.7	10.0	12.5	7.0	17.9	10
Wholesale trade		13.6	20.2	18.7	10.0	12.5	7.0	17.9	4
Wholesale trade -- durable	50	19.2	18.1	23.2	12.0	11.5	5.2	10.8	5
Motor vehicles, parts, & supplies	501	19.6	20.3	21.3	11.1	10.5	5.5	11.6	3
Lumber & construction materials	503	22.3	13.3	24.9	10.6	9.5	10.0	9.6	5
Professional & commercial equip.	504	16.4	12.2	24.4	9.6	15.9	2.4	19.1	3
Machinery, equipment, & supplies	508	21.4	17.0	22.4	14.4	11.0	5.6	8.3	5
Wholesale trade -- nondurable	51	19.5	16.4	22.9	12.5	13.2	4.2	11.4	4
Groceries & related products	514	22.6	15.2	24.4	14.2	10.7	4.2	8.7	--
Retail trade		20.3	15.8	22.6	15.3	10.1	4.6	11.3	4
Building materials & garden supplies	52	17.9	12.2	27.5	14.8	14.1	5.5	8.0	9
Lumber & other building materials	521	11.4	13.4	23.5	18.5	17.6	5.9	9.8	11
General merchandise stores	53	20.2	15.0	27.4	13.0	13.4	3.3	7.6	4
Department stores	531	19.6	15.6	28.5	13.7	13.1	3.3	6.3	4
Food stores	54	20.9	13.1	21.6	14.9	10.4	5.5	13.6	5
Grocery stores	541	22.0	14.0	21.6	14.4	9.8	5.2	12.9	5
Auto dealers & service stations	55	20.0	17.3	21.3	14.0	13.4	3.0	11.0	4
New & used car dealers	551	19.8	19.6	19.7	16.0	10.9	4.4	9.6	2
Apparel & accessory stores	56	11.5	23.0	30.7	16.4	13.8	0.8	3.7	2
Furniture & home furnishings stores	57	17.9	14.5	24.4	15.9	10.1	3.8	13.3	8
Eating & drinking places	58	20.4	18.6	16.6	19.3	3.7	9.7	11.7	2
Misc. retail	59	19.6	18.0	20.1	11.8	9.3	3.7	17.5	7
Finance, insurance, & real estate		24.0	11.1	22.2	12.8	8.8	6.2	14.9	8
Real estate	65	23.6	15.0	25.4	14.1	8.2	5.6	8.1	--
Services		23.1	17.5	25.0	12.1	9.8	3.5	9.0	5
Hotels & other lodging places	70	17.5	16.8	18.1	15.4	6.6	5.1	20.5	5

Industry	SIC Code	1996-2000 Average Percentage of DAFW Cases by Number of Days Away							2000 Median Days Away
		1	2	3-5	6-10	11-20	21-30	31+	
Hotels & motels	701	20.8	16.4	20.0	14.9	8.4	5.8	13.7	5
Personal services	72	20.4	12.4	19.6	22.2	8.0	3.9	13.5	3
Business services	73	19.0	18.6	27.1	15.2	10.7	1.5	7.8	—
Auto repair, services, & parking	75	13.2	8.9	23.7	8.8	16.5	8.5	20.5	9
Misc. repair services	76	8.2	19.5	22.4	10.1	14.3	9.1	16.6	20
Amusement & recreation services	79	17.6	24.3	23.5	9.9	12.9	4.4	7.4	5
Misc. amusement, recreation servs.	799	17.1	19.3	31.2	8.8	10.4	6.1	7.1	—
Health services	80	28.6	18.1	23.3	11.9	8.2	3.0	6.8	4
Nursing & personal care facilities	805	27.1	20.6	22.9	13.8	6.8	1.4	7.4	4
Hospitals	806	30.6	17.0	24.2	10.3	8.3	3.9	5.7	3
Home health care services	808	15.9	17.3	24.1	15.2	16.3	5.9	5.5	5
Education services	82	25.4	17.7	19.9	11.2	8.3	6.0	11.5	5
Social services	83	21.9	19.1	31.2	9.5	8.1	4.0	6.1	3
Residential care	836	16.5	17.0	38.6	8.8	7.0	5.8	6.4	5
State government		26.1	17.5	23.3	13.1	10.1	2.6	7.4	3
Construction		23.8	19.4	19.8	12.1	12.4	2.6	9.8	3
Services		26.0	13.2	24.8	15.0	11.5	2.6	6.9	5
Health services (state gov.)	80	26.1	18.0	25.3	14.8	7.8	3.3	4.6	3
Education services (state gov.)	82	16.2	13.5	26.0	14.3	16.6	2.9	10.4	5
Public administration		29.2	21.5	20.6	10.6	7.6	2.9	7.5	3
Local government		27.9	15.4	19.8	13.4	10.3	4.2	9.0	3
Services		29.7	15.3	21.8	12.0	9.4	4.2	7.7	3
Health services (local gov.)	80	26.2	14.0	27.0	14.4	8.8	2.8	6.7	3
Hospitals (local gov.)	806	27.5	19.4	22.7	11.7	9.1	3.0	6.6	3
Education services (local gov.)	82	31.0	14.8	20.9	11.4	9.4	4.6	7.9	2
Elem. & sec. schools (local gov.)	821	28.4	12.9	25.4	10.0	10.5	5.2	7.8	—
Public administration		27.4	15.4	14.9	17.4	10.6	3.3	11.0	2

Source: Survey of Occupational Injuries and Illnesses (U.S. Bureau of Labor Statistics).

Appendix C

Incidence of Paid Indemnity Claims for Detailed Industries, Minnesota, 1995-2000

Comparison of Injury and Illness Rates from the BLS Survey and Workers' Compensation Data

Clearly, a strong relationship should exist between the incidence rates from the Bureau of Labor Statistics (BLS) survey and from the workers' compensation data. Although one would expect the BLS total case rate and workers' compensation total claims rate to be quite similar, there are some differences in definition that would cause them to deviate. For example, an injury would generate a medical-only workers' compensation claim but would not be OSHA-recordable — and thus not reported in the BLS survey — if there were medical costs for diagnosis or first aid but not for treatment, and there were no effects on work activity after the day of the incident and no loss of consciousness. An injury would be OSHA-recordable but would not generate a workers' compensation claim if the injured worker missed work or had restricted work activity for just one or two days after the incident, and there was no permanent impairment or medical treatment, except for possible first aid that did not generate medical cost.

The nearest similarity between BLS case types and workers' compensation claim types is between days-away-from-work (DAFW) cases and indemnity claims. DAFW, however, includes all cases with one or more days off the job, excluding the day of injury, while indemnity claims generally involve more than three calendar days of work disability, including the day of injury. More precisely, DAFW cases are not indemnity cases if there are only 1-2 days off the job and the injured worker receives no temporary partial or permanent partial disability benefits. Some indemnity claims are not DAFW cases because the worker loses no full days at work but instead works only part-time for some

period while receiving temporary partial disability benefits or returns immediately to full time work but receives a permanent partial disability award for some permanent loss of function.

The incidence of BLS total cases has been less than that of workers' compensation total claims, although in recent years the gap has narrowed. It seems unlikely that definitional differences could explain more than a small portion of this discrepancy.

A possible explanation for the discrepancy is that the workers' compensation data are more complete because injured workers have a financial incentive to file claims, whereas employers have no financial incentive to maintain their OSHA 200 logs. Also, employers may be reluctant to reveal injury and illness information to employees or OSHA inspectors, or may be unaware of record-keeping requirements. Furthermore, employers may not be inclined to record cases involving workers' compensation claims that were initially denied but eventually paid. The difference in financial incentives between the two systems may lead to under-reporting on the OSHA 200 log — and thus in the BLS survey.

Data Source and Estimation Procedures

The annual number of paid indemnity claims was tabulated by date of injury from the Department of Labor and Industry (DLI) claims database. The tabulated numbers were “developed,” using historical rates of claim development in the DLI database, to produce estimated figures at full claim maturity.

The number of full-time-equivalent (FTE) workers covered by workers' compensation was estimated as total nonfederal Unemployment Insurance (UI) covered employment from the

Minnesota Department of Economic Security (MDES), times average annual hours per employee (from the BLS survey of occupational injuries and illnesses) divided by 2,000.

The numbers of paid indemnity claims by detailed industry (4-digit SIC) were tabulated by matching data in the DLI database with UI data provided by MDES. For those claims that could not be matched with the UI data, the detail industry information was used from the DLI database. In developing these numbers, the rate of claim development was assumed to be the same for all industries. That is, the overall development factor for each injury year was applied to all industry-specific claim numbers for that year.

Public employees in industries outside of public administration (such as construction, health services, and education) were classified under those other industries.

Because of different coverage provisions under workers' compensation and UI, some industries were excluded in computing incidence rates. These were SICs 01 (agricultural production—crops), 02 (agricultural production—livestock), 5963 (door-to-door sales), 6411 (insurance agents), 6531 (real estate agents), 7993 (coin-operated amusement devices), 7999 (amusement and recreation services, nec), 8111 (domestic services), and 8661 (religious organizations). SIC 82 (education services) also has different coverage provisions under the two programs, in that student workers are covered under workers' compensation but not under UI. An adjustment was made for this industry, using background data from the BLS injury and illness survey.

Industry classification issues occur within the public administration division. Specifically, some (usually smaller) public entities may use different SIC codes in workers' compensation reporting than under UI. Consequently, incidence rates were not computed for industries within the public administration division. (However, a rate was computed for public administration as a whole, and this division was included in the all-industry rate.)

Even though the indemnity claims data are based on a complete count of cases (rather than a sample), sample-size issues exist in the computation of incidence rates since, in this report, these rates are intended to represent the underlying propensity for injuries and illnesses, rather than simply those injuries and illnesses that actually occurred. Therefore, indemnity claims rates were computed only where the FTE employment figure in the denominator was at least 1,200. In the three-year averages, annual-average FTE employment had to be at least 400. Thus, for some industries, rates were computed for three-year periods but not for single years.

Employment data confidentiality. The UI employment data used in the denominators of the indemnity claims rates are subject to nondisclosure provisions. Specifically, to protect the confidentiality of data for individual firms, the employment data may not be disclosed for industries in which there are fewer than three establishments or one establishment accounts for more than 80 percent of total employment. In this report, indemnity claims rates are expressed in a range for those industries, because otherwise they could be combined with claims data to derive the employment figure.

Incidence of Paid Indemnity Claims for Detailed Industries, Minnesota, 1995-2000

Industry [2]	SIC Code	Average FTE Covered Emp., 1998- 2000 [3]	Annual Avg. Pd. Indem. Claims, 1998- 2000 [4]	Paid Indemnity Claims per 100 Full-Time-Equivalent Covered Workers [5]									
										1995- 1997 Avg.	1998- 2000 Avg.		
				1995	1996	1997	1998	1999	2000				
Total		2,046,762	33,751	1.9	1.8	1.7	1.6	1.7	1.7		1.8	1.6	
Agriculture, forestry, & fishing		[a]	575	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
Agricultural production -- crops	01	[a]	105	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
Horticultural specialties	018	[a]	35	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
Ornamental nursery products	0181	[a]	35	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
General farms, primarily crop	019	[a]	25	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
General farms, primarily crop	0191	[a]	25	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
Agricultural production -- livestock	02	[a]	215	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
Livestock, ex. dairy & poultry	021	[a]	100	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
Hogs	0213	[a]	90	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
Dairy farms	024	[a]	65	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
Dairy farms	0241	[a]	60	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
Poultry & eggs	025	[a]	50	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
Turkeys & turkey eggs	0253	[a]	20	[a]	[a]	[a]	[a]	[a]	[a]		[a]	[a]	
Agricultural services	07	9,500	250	2.9	2.8	2.6	2.7	2.9	2.3		2.8	2.6	
Landscape & horticultural services	078	4,780	180	4.0	4.1	3.8	4.0	4.1	3.2		4.0	3.8	
Lawn & garden services	0782	3,100	100	3.8	4.0	3.2	3.9	3.6	2.6		3.7	3.4	
Ornamental shrub & tree services	0783	1,400	70	[c]	[c]	[c]	4.4	5.5	4.7		4.9	4.9	
Forestry	08	220	5	[c]	[c]	[c]	[c]	[c]	[c]		[c]	[c]	
Mining		7,130	255	2.9	3.1	3.7	3.5	3.7	3.5		3.2	3.5	
Metal mining	10	5,890	205	2.9	2.9	3.4	3.5	3.7	3.3		3.1	3.5	
Iron ores	101	[b]	205	2.9	2.9	3.4	3-4	3.7	3.3		3.1	3-4	
Iron ores	1011	[b]	205	2.9	2.9	3.4	3-4	3.7	3.3		3.1	3-4	
Nonmetallic minerals, ex. fuels	14	1,280	45	2.7	4.0	4.8	3.6	[c]	4.0		3.8	3.6	
Sand & gravel	144	720	20	[c]	[c]	[c]	[c]	[c]	[c]		3.9	2.9	
Construction sand & gravel	1442	670	20	[c]	[c]	[c]	[c]	[c]	[c]		4.1	2.9	
Construction		104,760	4,350	4.2	4.3	4.3	4.2	4.2	4.0		4.3	4.2	
General building contractors	15	22,420	955	4.0	4.3	4.2	4.3	4.3	4.1		4.2	4.3	
Residential building construction	152	10,580	485	3.6	4.2	4.3	4.8	4.7	4.3		4.0	4.6	
Single-family housing construction	1521	10,330	475	3.6	4.2	4.3	4.8	4.7	4.3		4.0	4.6	
Nonresidential building construction	154	11,580	465	4.3	4.4	4.2	4.0	4.1	4.1		4.3	4.0	
Industrial buildings & warehouses	1541	1,570	55	5.1	4.6	3.8	3.5	4.0	3.4		4.5	3.6	
Nonresidential construction, nec	1542	10,010	410	4.2	4.4	4.3	4.1	4.1	4.1		4.3	4.1	
Heavy construction, ex. building	16	19,590	695	3.9	4.0	3.8	3.7	3.5	3.4		3.9	3.5	
Highway & street construction	161	13,050	410	3.6	3.6	3.5	3.3	2.9	3.3		3.6	3.2	
Highway & street construction	1611	13,050	410	3.6	3.6	3.5	3.3	2.9	3.3		3.6	3.2	
Heavy construction, ex. highway	162	6,960	280	4.4	4.6	4.2	4.1	4.6	3.4		4.4	4.0	
Water, sewer, & utility lines	1623	4,270	180	4.4	4.8	4.3	4.5	4.7	3.4		4.5	4.2	
Heavy construction, nec	1629	2,270	85	4.3	4.4	4.3	3.4	4.4	3.4		4.3	3.7	
Special trade contractors	17	62,650	2,700	4.3	4.4	4.5	4.4	4.4	4.2		4.4	4.3	

Industry [2]	SIC Code	Average FTE Covered Emp., 1998-2000 [3]	Annual Avg. Pd. Indem. Claims, 1998-2000 [4]	Paid Indemnity Claims per 100 Full-Time-Equivalent Covered Workers [5]							
										1995-1997 Avg.	1998-2000 Avg.
				1995	1996	1997	1998	1999	2000		
Plumbing, heating, air-conditioning	171	15,310	550	4.0	3.4	3.7	3.7	3.6	3.4	3.7	3.6
Plumbing, heating, air-conditioning	1711	15,310	550	4.0	3.4	3.7	3.7	3.6	3.4	3.7	3.6
Painting & paper hanging	172	3,130	115	2.7	3.4	4.1	3.3	4.0	3.6	3.4	3.6
Painting & paper hanging	1721	3,130	115	2.7	3.4	4.1	3.3	4.0	3.6	3.4	3.6
Electrical work	173	12,760	350	2.7	3.4	3.1	2.8	2.8	2.6	3.1	2.7
Electrical work	1731	12,760	350	2.7	3.4	3.1	2.8	2.8	2.6	3.1	2.7
Masonry, stonework, & plastering	174	7,660	465	5.2	5.7	5.8	6.1	5.9	6.1	5.6	6.0
Masonry & other stonework	1741	3,230	180	5.2	5.5	5.9	6.4	5.5	5.0	5.6	5.6
Plastering, drywall, & insulation	1742	3,850	250	5.4	6.2	5.9	5.9	6.5	6.9	5.8	6.5
Carpentry & floor work	175	4,600	260	5.4	5.7	6.3	5.5	5.9	5.5	5.8	5.7
Carpentry work	1751	3,380	190	5.1	6.3	6.4	5.7	5.9	5.3	5.9	5.6
Floor laying & floor work, nec	1752	1,220	70	[c]	[c]	[c]	[c]	6.0	6.1	5.5	5.8
Roofing, siding, & sheet metal work	176	4,180	255	6.4	6.9	6.5	6.8	6.1	5.5	6.6	6.1
Roofing, siding, & sheet metal work	1761	4,180	255	6.4	6.9	6.5	6.8	6.1	5.5	6.6	6.1
Concrete work	177	5,280	250	5.1	4.7	5.1	4.5	4.6	5.0	5.0	4.7
Concrete work	1771	5,280	250	5.1	4.7	5.1	4.5	4.6	5.0	5.0	4.7
Water well drilling	178	660	20	[c]	[c]	[c]	[c]	[c]	[c]	4.1	3.0
Water well drilling	1781	660	20	[c]	[c]	[c]	[c]	[c]	[c]	4.1	3.0
Misc. special trade contractors	179	9,960	445	4.6	4.4	4.6	4.6	4.4	4.4	4.5	4.5
Structural steel erection	1791	1,470	120	[c]	[c]	[c]	9.4	8.5	6.8	7.8	8.3
Glass & glazing work	1793	[b]	40	[c]	[c]	[c]	[c]	[c]	[c]	3.7	4.5
Excavation work	1794	2,830	75	3.0	3.4	3.1	2.9	2.5	2.8	3.1	2.7
Installing building equipment, nec	1796	1,780	80	4.6	3.7	3.5	3.2	4.5	5.3	3.9	4.3
Special trade contractors, nec	1799	2,940	130	5.4	4.5	5.2	4.8	4.4	4.2	5.0	4.5
Manufacturing		431,950	7,660	2.1	2.0	1.9	1.8	1.8	1.8	2.0	1.8
Food & kindred products	20	53,440	1,115	2.8	2.4	2.5	2.0	2.2	2.0	2.6	2.1
Meat products	201	16,640	345	2.9	2.4	2.2	2.2	2.3	1.7	2.5	2.1
Meat packing plants	2011	3,970	125	4.7	3.6	3.7	3.6	3.4	2.5	4.0	3.2
Poultry slaughtering & processing	2015	7,120	105	2.2	2.0	1.8	1.6	1.7	1.1	2.0	1.5
Dairy products	202	8,150	170	3.0	2.6	2.3	2.1	2.2	2.0	2.6	2.1
Cheese, natural & processed	2022	2,840	50	2.2	1.9	1.7	1.8	2.0	1.3	1.9	1.7
Fluid milk	2026	1,030	45	[c]	[c]	[c]	[c]	[c]	4.8	2.7	4.2
Preserved fruits & vegetables	203	6,050	130	2.4	2.1	2.6	2.1	2.0	2.4	2.4	2.2
Canned fruits & vegetables	2033	3,080	45	1.6	1.5	1.6	1.7	1.4	1.4	1.6	1.5
Frozen fruits & vegetables	2037	1,070	15	2.8	2.7	[c]	[c]	[c]	[c]	3.0	1.3
Frozen specialties, nec	2038	1,630	65	3.4	2.7	3.9	3.1	3.5	5.0	3.3	3.9
Cereal breakfast foods	2043	2,310	40	2.2	1.6	1.7	2.0	1.4	1.5	1.8	1.6
Prepared feeds, nec	2048	1,440	25	1.8	1.8	2.5	2.0	1.8	1.3	2.0	1.7
Bakery products	205	2,790	50	3.5	2.2	2.2	1.9	1.6	1.7	2.6	1.7
Bread, cake, & related products	2051	2,230	35	3.8	2.1	2.1	1.9	1.6	1.3	2.7	1.6
Sugar & confectionery products	206	2,980	65	2.7	2.5	2.6	2.4	2.3	1.7	2.6	2.1
Beet sugar	2063	1,600	35	2.6	2.4	3.2	2.3	2.6	1.8	2.7	2.2
Fats & oils	207	1,130	25	[c]	[c]	[c]	[c]	[c]	2.1	2.9	2.4
Beverages	208	2,700	110	7.8	6.2	7.1	2.6	3.9	5.8	7.0	4.1
Malt beverages	2082	[b]	10	[c]	[c]	[c]	[c]	[c]	[c]	6.8	[c]
Bottled & canned soft drinks	2086	2,050	90	8.7	6.6	8.0	2.4	4.1	6.9	7.8	4.5
Misc. food & kindred products	209	3,600	105	2.3	2.9	2.9	2.5	3.5	2.8	2.7	3.0
Potato chips & similar snacks	2096	710	40	[c]	[c]	[c]	[c]	[c]	[c]	4.8	5.8
Food preparations, nec	2099	2,320	50	1.9	2.4	2.0	1.9	2.6	1.8	2.1	2.1
Textile mill products	22	1,280	30	2.4	1.9	1.9	3.4	1.9	1.9	2.1	2.4
Apparel & other textile products	23	4,190	55	1.8	1.5	1.8	1.6	1.5	0.9	1.7	1.3

Industry [2]	SIC Code	Average FTE Covered Emp., 1998- 2000 [3]	Annual Avg. Pd. Indem. Claims, 1998- 2000 [4]	Paid Indemnity Claims per 100 Full-Time-Equivalent Covered Workers [5]									
										1995- 1997 Avg.	1998- 2000 Avg.		
				1995	1996	1997	1998	1999	2000				
Lumber & wood products	24	20,570	670	3.6	3.9	3.4	3.0	3.4	3.3	3.6	3.2		
Logging	241	820	30	[c]	[c]	[c]	[c]	[c]	[c]	3.9	3.4		
Logging	2411	820	30	[c]	[c]	[c]	[c]	[c]	[c]	3.9	3.4		
Sawmills & planing mills	242	1,210	60	5.1	6.0	5.0	5.1	[c]	[c]	5.4	5.1		
Sawmills & planing mills, general	2421	700	35	[c]	[c]	[c]	[c]	[c]	[c]	5.5	4.8		
Millwork, plywood & structural members	243	13,640	415	3.3	3.5	3.0	2.8	3.1	3.2	3.2	3.0		
Millwork	2431	8,300	270	3.3	3.5	3.3	2.8	3.6	3.4	3.4	3.2		
Wood kitchen cabinets	2434	3,780	95	2.9	3.1	2.1	2.3	2.4	2.8	2.7	2.5		
Structural wood members, nec	2439	1,440	45	[c]	4.2	3.6	3.7	2.6	3.1	3.9	3.2		
Wood containers	244	990	45	[c]	[c]	[c]	[c]	[c]	[c]	5.5	4.6		
Wood pallets & skids	2448	780	35	[c]	[c]	[c]	[c]	[c]	[c]	5.9	4.5		
Wood buildings & mobile homes	245	1,330	60	4.6	6.2	5.0	4.2	5.3	4.5	5.3	4.7		
Mobile homes	2451	700	40	[c]	[c]	[c]	[c]	[c]	[c]	5.9	5.6		
Misc. wood products	249	2,610	60	3.2	2.9	2.7	1.9	2.5	2.3	2.9	2.2		
Wood products, nec	2499	1,160	35	4.3	3.0	[c]	[c]	[c]	2.8	4.0	3.0		
Furniture & fixtures	25	7,250	210	3.4	3.3	3.3	2.9	2.8	2.9	3.3	2.9		
Household furniture	251	1,550	45	3.1	2.6	2.9	2.4	2.9	3.9	2.9	3.0		
Office furniture	252	1,470	45	[c]	[c]	[c]	[c]	3.0	2.5	4.2	3.0		
Partitions & fixtures	254	2,980	90	3.6	4.0	3.9	3.3	3.0	3.0	3.8	3.1		
Wood partitions & fixtures	2541	1,910	60	3.1	3.8	3.7	3.4	2.9	2.9	3.6	3.1		
Partitions & fixtures, ex. wood	2542	1,070	35	4.2	4.1	[c]	3.2	[c]	3.0	4.2	3.1		
Paper & allied products	26	30,310	420	1.6	1.3	1.2	1.2	1.3	1.6	1.4	1.4		
Paper mills	262	5,310	[b]	1.9	2.2	1.9	2.3	1.9	2-3	2.0	2-3		
Paper mills	2621	5,310	[b]	1.9	2.2	1.9	2.3	1.9	2-3	2.0	2-3		
Paperboard containers & boxes	265	5,190	100	2.4	1.7	1.7	1.6	2.0	2.3	1.9	1.9		
Corrugated & solid fiber boxes	2653	3,440	55	1.6	1.5	1.6	1.4	1.6	1.9	1.5	1.6		
Die-cut paper & board	2675	1,280	30	4.1	[c]	[c]	1.7	2.1	3.0	3.6	2.3		
Printing & publishing	27	49,630	700	1.3	1.4	1.4	1.4	1.5	1.3	1.4	1.4		
Newspapers	271	6,770	150	1.5	1.6	2.1	2.0	2.7	2.0	1.7	2.2		
Newspapers	2711	6,770	150	1.5	1.6	2.1	2.0	2.7	2.0	1.7	2.2		
Periodicals	272	3,180	80	2.8	2.7	2.0	2.1	2.9	2.8	2.5	2.6		
Periodicals	2721	3,180	80	2.8	2.7	2.0	2.1	2.9	2.8	2.5	2.6		
Chemicals & allied products	28	11,460	130	1.3	1.3	1.2	1.1	1.1	1.1	1.3	1.1		
Drugs	283	2,100	15	0.4	1.2	0.7	0.8	0.8	0.8	0.8	0.8		
Petroleum & coal products	29	2,280	30	1.5	1.6	2.1	1.7	1.1	1.0	1.7	1.3		
Rubber & misc. plastics products	30	19,790	405	2.9	2.5	2.3	2.2	1.9	2.1	2.6	2.0		
Fabricated rubber products, nec	306	2,020	60	2.8	2.8	3.5	3.7	2.8	2.4	3.0	3.0		
Fabricated rubber products, nec	3069	1,420	40	2.7	2.2	3.2	3.6	3.1	2.2	2.7	3.0		
Misc. plastics products, nec	308	17,260	325	2.8	2.4	2.2	2.0	1.7	2.0	2.5	1.9		
Unsupported plastics film & sheet	3081	1,970	35	2.2	2.2	3.0	2.2	1.6	1.8	2.5	1.9		
Plastics products, nec	3089	11,900	210	2.8	2.2	1.9	1.9	1.6	1.9	2.3	1.8		
Leather & leather products	31	2,020	50	2.8	3.3	3.2	2.5	1.5	3.2	3.1	2.4		
Leather tanning & finishing	311	440	30	[c]	[c]	[c]	[c]	[c]	[c]	9.0	6.5		
Leather tanning & finishing	3111	440	30	[c]	[c]	[c]	[c]	[c]	[c]	9.0	6.5		
Stone, clay, & glass products	32	10,270	270	3.1	2.9	3.0	2.5	2.8	2.6	3.0	2.6		
Products of purchased glass	323	2,350	35	2.5	2.5	2.2	2.3	1.3	1.0	2.4	1.5		
Products of purchased glass	3231	2,350	35	2.5	2.5	2.2	2.3	1.3	1.0	2.4	1.5		
Concrete, gypsum, & plaster products	327	4,710	200	4.5	4.5	4.4	3.9	4.3	4.4	4.5	4.2		
Concrete products, nec	3272	1,490	70	5.4	3.5	4.7	4.2	4.3	5.7	4.6	4.7		
Ready-mixed concrete	3273	2,470	110	4.0	5.4	4.0	4.2	5.0	4.1	4.4	4.4		
Misc. nonmetallic mineral products	329	1,090	10	[c]	[c]	[c]	[c]	[c]	1.2	1.0	0.8		

Industry [2]	SIC Code	Average FTE Covered Emp., 1998-2000 [3]	Annual Avg. Pd. Indem. Claims, 1998-2000 [4]	Paid Indemnity Claims per 100 Full-Time-Equivalent Covered Workers [5]								1995-1997 Avg.	1998-2000 Avg.
				1995	1996	1997	1998	1999	2000				
Abrasive products	3291	[b]	5	[c]	[c]	[c]	[c]	[c]	[c]			1.8	1-2
Primary metal industries	33	8,190	320	4.7	3.7	4.1	4.1	4.0	3.6			4.2	3.9
Blast furnace & basic steel products	331	1,100	35	[c]	[c]	[c]	[c]	[c]	2.9			2.1	3.0
Iron & steel foundries	332	1,740	100	7.5	5.3	6.7	6.2	5.9	5.3			6.5	5.8
Gray & ductile iron foundries	3321	1,030	80	[c]	[c]	[c]	[c]	[c]	[c]			8.4	7.6
Nonferrous foundries (castings)	336	3,980	145	4.9	4.1	4.1	3.8	3.9	3.2			4.3	3.6
Aluminum die-castings	3363	2,500	85	4.4	3.7	4.1	3.7	3.8	2.5			4.1	3.4
Aluminum foundries	3365	900	45	[c]	[c]	[c]	[c]	[c]	[c]			5.8	5.1
Fabricated metal products	34	37,090	890	2.8	2.6	2.6	2.4	2.5	2.3			2.6	2.4
Metal cans & shipping containers	341	1,080	30	[c]	[c]	[c]	[c]	[c]	2.5			2.9	2.7
Metal cans	3411	1,080	30	[c]	[c]	[c]	[c]	[c]	2.5			2.9	2.7
Fabricated structural metal products	344	11,860	320	2.9	2.9	2.7	2.8	2.7	2.6			2.8	2.7
Fabricated structural metal	3441	700	30	[c]	[c]	[c]	[c]	[c]	[c]			5.3	3.9
Fabricated plate work (boiler shops)	3443	2,510	80	2.8	3.4	2.7	3.2	3.2	3.2			3.0	3.2
Sheet metalwork	3444	6,510	140	2.4	2.6	2.3	2.1	2.5	2.0			2.4	2.2
Screw machine products, bolts, etc.	345	2,110	40	2.7	2.1	1.9	1.4	2.2	1.8			2.3	1.8
Screw machine products	3451	1,780	25	2.4	2.0	1.9	1.4	1.6	1.6			2.1	1.5
Metal forgings & stampings	346	5,000	135	3.4	3.0	3.4	3.0	2.7	2.4			3.3	2.7
Metal stampings, nec	3469	4,340	115	3.5	3.0	3.4	3.0	2.8	2.3			3.3	2.7
Metal services, nec	347	3,700	100	3.7	3.4	3.4	2.9	2.4	2.8			3.5	2.7
Plating & polishing	3471	2,250	65	4.4	3.7	4.0	3.1	2.8	3.0			4.0	3.0
Metal coating & allied services	3479	1,450	30	2.6	3.0	2.6	2.5	1.7	2.4			2.7	2.2
Misc. fabricated metal products	349	6,320	185	3.0	2.3	2.6	2.6	2.9	3.1			2.6	2.9
Misc. fabricated wire products	3496	1,360	45	3.6	2.1	2.6	3.3	2.9	4.0			2.7	3.4
Fabricated metal products, nec	3499	2,040	55	[c]	[c]	[c]	2.3	3.1	2.8			3.3	2.7
Industrial machinery & equipment	35	77,580	1,110	1.6	1.5	1.6	1.4	1.3	1.5			1.6	1.4
Farm & garden machinery	352	5,060	120	2.5	2.5	2.7	2.5	2.0	2.7			2.6	2.4
Farm machinery & equipment	3523	3,330	90	2.9	3.0	3.2	2.9	2.1	3.3			3.0	2.8
Lawn & garden equipment	3524	1,750	30	1.7	1.4	1.5	1.8	1.7	1.7			1.5	1.7
Construction & related machinery	353	5,590	170	3.2	3.3	3.5	3.3	2.7	3.2			3.3	3.1
Construction machinery	3531	3,040	105	3.4	3.5	3.3	3.3	3.0	3.9			3.4	3.4
Conveyors & conveying equipment	3535	710	20	[c]	[c]	[c]	[c]	[c]	[c]			2.3	2.9
Metalworking machinery	354	7,100	120	1.5	1.3	1.5	1.6	1.6	1.8			1.4	1.7
Special industry machinery	355	4,540	65	1.7	1.4	1.5	1.8	1.2	1.3			1.5	1.4
Special industry machinery, nec	3559	2,210	30	1.4	1.3	1.1	1.9	1.0	1.2			1.2	1.4
Refrigeration & service machinery	358	7,420	135	2.3	2.0	2.1	1.5	1.9	2.1			2.1	1.8
Refrigeration & heating equipment	3585	3,430	65	2.1	2.0	2.0	1.6	2.3	1.9			2.0	2.0
Industrial machinery, nec	359	14,820	265	2.3	2.1	2.2	1.7	1.7	2.0			2.2	1.8
Industrial machinery, nec	3599	11,850	205	2.2	2.1	2.2	1.8	1.6	1.8			2.2	1.7
Electronic & other electric equipment	36	35,000	335	1.4	1.1	1.1	0.9	1.0	0.9			1.2	1.0
Household appliances	363	[b]	10	1-2	1-2	0-1	0-1	0-1	0-1			1.3	0-1
Household refrigerators & freezers	3632	[b]	[d]	1-2	1-2	0-1	0-1	0-1	0-1			1-2	0-1
Electronic components, nec	3679	2,790	35	1.4	0.8	1.4	1.0	1.3	1.3			1.2	1.2
Transportation equipment	37	14,660	500	4.2	3.8	3.7	3.5	3.4	3.3			3.9	3.4
Motor vehicles & equipment	371	6,920	310	5.5	4.8	4.3	4.3	4.9	4.3			4.9	4.5
Motor vehicles & car bodies	3711	[b]	190	9-10	7-8	5-6	7-8	8-9	6.3			7-8	7-8
Motor vehicle parts & accessories	3714	2,970	75	3.3	3.7	3.4	2.5	2.6	2.3			3.5	2.5
Ship & boat building & repairing	373	2,430	80	4.5	3.3	3.3	3.5	3.1	3.5			3.7	3.4
Boat building & repairing	3732	[b]	80	4-5	3-4	3-4	3-4	3.1	3.5			3-4	3-4
Misc. transportation equipment	379	4,160	85	2.5	3.0	3.4	2.4	1.7	2.1			3.0	2.0
Transportation equipment, nec	3799	3,920	80	2.3	3.0	3.5	2.4	1.7	2.1			3.0	2.1

Industry [2]	SIC Code	Average FTE Covered Emp., 1998-2000 [3]	Annual Avg. Pd. Indem. Claims, 1998-2000 [4]	Paid Indemnity Claims per 100 Full-Time-Equivalent Covered Workers [5]								1995-1997 Avg.	1998-2000 Avg.
				1995	1996	1997	1998	1999	2000				
Instruments & related products	38	39,960	325	0.9	1.0	1.0	0.9	0.9	0.7	1.0	0.8		
Environmental controls	3822	4,040	90	1.4	1.9	1.9	2.5	2.5	1.6	1.8	2.2		
Misc. manufacturing industries	39	6,680	100	2.1	1.8	1.7	1.7	1.6	1.3	1.9	1.5		
Toys & sporting goods	394	2,040	30	2.3	2.4	1.6	1.9	1.3	1.5	2.1	1.6		
Sporting & athletic goods, nec	3949	1,820	30	2.3	2.6	1.5	2.1	1.4	1.3	2.2	1.6		
Misc. manufactures	399	3,280	55	2.4	1.8	2.1	1.8	1.9	1.4	2.1	1.7		
Signs & advertising specialties	3993	2,010	30	2.4	1.8	1.9	1.8	1.7	1.2	2.0	1.6		
Manufacturing industries, nec	3999	1,090	20	[c]	[c]	[c]	[c]	[c]	[c]	1.9	1.8		
Transportation, communication, & util.		122,080	3,195	2.9	3.1	2.9	2.7	2.7	2.5	2.9	2.6		
Local & interurban passenger transit	41	9,920	280	4.4	4.4	4.4	[e]	[e]	[e]	4.4	[e]		
Local & suburban transportation	411	4,190	160	7.5	7.2	7.2	[e]	[e]	[e]	7.3	[e]		
Local & suburban transit	4111	1,900	50	10.0	11.2	11.1	[e]	[e]	[e]	10.8	[e]		
Local passenger transportation, nec	4119	2,290	105	5.1	3.9	3.9	5.5	4.3	4.2	4.3	4.6		
School buses	415	4,690	95	1.9	2.3	2.2	1.8	2.1	2.0	2.1	2.0		
School buses	4151	4,690	95	1.9	2.3	2.2	1.8	2.1	2.0	2.1	2.0		
Trucking & warehousing	42	30,730	1,320	4.4	4.8	4.5	4.1	4.2	4.6	4.6	4.3		
Trucking & courier services, ex. air	421	29,430	1,280	4.4	4.8	4.5	4.1	4.3	4.6	4.6	4.3		
Local trucking, without storage	4212	11,350	445	4.2	3.8	3.9	4.1	3.8	4.0	3.9	3.9		
Trucking, ex. local	4213	14,050	665	4.7	5.4	4.9	4.2	4.9	5.1	5.0	4.7		
Local trucking with storage	4214	840	45	[c]	[c]	[c]	[c]	[c]	[c]	6.0	5.5		
Courier services, ex. by air	4215	3,190	115	4.4	5.1	4.8	3.5	3.0	4.5	4.8	3.7		
Public warehousing & storage	422	[b]	40	[c]	[c]	3-4	2-3	3-4	3-4	3-4	3-4		
General warehousing & storage	4225	[b]	15	[c]	[c]	[c]	[c]	[c]	[c]	2.9	2.2		
Water transportation	44	1,000	10	[c]	[c]	[c]	[c]	[c]	[c]	1.3	1.0		
Transportation by air	45	27,280	1,105	2.8	3.9	3.8	3.9	4.0	4.2	3.5	4.0		
Air transportation, scheduled	451	24,820	1,045	2.8	4.0	3.8	4.0	4.2	4.4	3.6	4.2		
Air transportation, scheduled	4512	[b]	520	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3		
Air courier services	4513	[b]	525	10-11	8-9	8-9	7-8	7-8	8-9	9-10	8-9		
Airports, flying fields, & services	458	980	25	[c]	[c]	[c]	[c]	[c]	[c]	3.9	2.4		
Airports, flying fields, & services	4581	980	25	[c]	[c]	[c]	[c]	[c]	[c]	3.9	2.4		
Pipelines, ex. natural gas	46	[b]	[d]	[c]	[c]	[c]	[c]	[c]	[c]	[c]	[c]		
Transportation services	47	8,580	65	0.7	0.8	0.9	0.7	0.8	0.7	0.8	0.7		
Communication	48	21,950	145	0.8	0.8	0.7	0.6	0.7	0.7	0.8	0.7		
Electric, gas, & sanitary services	49	15,380	270	2.1	2.1	1.9	1.9	1.7	1.7	2.0	1.7		
Gas production & distribution	492	1,890	30	2.4	1.8	1.8	1.4	1.9	1.8	2.0	1.7		
Combination utility services	493	3,650	65	1.3	1.3	2.0	1.5	1.4	2.4	1.6	1.8		
Electric & other services combined	4931	[b]	60	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2		
Water supply	494	[b]	10	[c]	[c]	[c]	[c]	[c]	[c]	5-6	2-3		
Water supply	4941	[b]	10	[c]	[c]	[c]	[c]	[c]	[c]	5-6	2.0		
Sanitary services	495	1,410	55	[c]	6.9	3.2	4.1	4.4	3.7	5-6	4.1		
Refuse systems	4953	890	45	[c]	[c]	[c]	[c]	[c]	5.0	7.2	5.1		
Wholesale trade		147,920	2,670	1.8	1.9	1.8	1.8	1.9	1.8	1.8	1.8		
Wholesale trade -- durable goods	50	87,950	1,180	1.5	1.4	1.4	1.3	1.4	1.4	1.5	1.3		
Motor vehicles, parts, & supplies	501	10,550	245	2.5	2.4	2.5	2.4	2.5	2.2	2.4	2.3		
Automobiles & other motor vehicles	5012	2,900	65	2.7	2.7	3.4	2.5	2.0	2.3	2.9	2.3		
Motor vehicle supplies & new parts	5013	5,950	130	2.3	2.1	2.0	2.1	2.5	2.0	2.1	2.2		
Motor vehicle parts, used	5015	1,070	35	[c]	[c]	[c]	[c]	[c]	[c]	3.1	3.1		
Lumber & construction materials	503	5,830	150	2.6	2.5	2.3	2.3	2.5	2.9	2.5	2.6		
Lumber, plywood, & millwork	5031	3,690	95	2.9	2.3	2.0	2.3	2.5	2.7	2.4	2.5		
Metals & minerals, ex. petroleum	505	2,990	80	2.9	2.9	3.2	2.7	2.6	2.7	3.0	2.6		
Metals service centers & offices	5051	2,960	80	3.0	2.9	3.2	2.7	2.6	2.7	3.0	2.7		

Industry [2]	SIC Code	Average FTE Covered Emp., 1998-2000 [3]	Annual Avg. Pd. Indem. Claims, 1998-2000 [4]	Paid Indemnity Claims per 100 Full-Time-Equivalent Covered Workers [5]									
										1995-1997 Avg.	1998-2000 Avg.		
				1995	1996	1997	1998	1999	2000				
Plumbing & hydronic heating supplies	5074	2,210	40	2.4	2.1	1.5	1.9	1.3	2.2	2.0	1.8		
Construction & mining machinery	5082	2,050	45	2.4	2.3	1.9	2.3	2.4	1.8	2.2	2.1		
Farm & garden machinery	5083	5,380	90	1.7	1.8	1.8	1.5	2.0	1.5	1.8	1.7		
Misc. durable goods	509	5,080	75	2.8	2.0	1.6	1.5	1.6	1.3	2.2	1.4		
Scrap & waste materials	5093	1,550	45	5.9	4.2	3.0	2.9	3.2	3.0	4.4	3.0		
Wholesale trade -- nondurable goods	51	59,980	1,490	1.0	1.3	1.3	0.9	1.0	2.5	2.3	2.5		
Paper & paper products	511	5,730	55	0.7	2.1	1.7	0.7	2.9	1.0	1.2	0.9		
Industrial & personal service paper	5113	1,290	15	1.3	1.9	2.0	1.4	1.1	1.2	1.7	1.3		
Groceries & related products	514	20,200	900	3.3	4.5	4.1	4.4	4.6	4.4	4.0	4.5		
Groceries, general line	5141	6,500	485	3.2	6.9	6.5	7.3	7.5	7.6	5.5	7.5		
Dairy products, exc. dried or canned	5143	1,530	45	2.4	2.9	1.9	1.6	3.5	4.1	2.4	3.1		
Confectionery	5145	1,580	40	1.9	3.3	2.7	3.5	2.9	1.6	2.6	2.7		
Meats & meat products	5147	760	20	4.5	[c]	[c]	[c]	[c]	[c]	3.7	2.7		
Fresh fruits & vegetables	5148	1,550	55	3.7	3.7	3.3	3.6	3.6	3.9	3.6	3.7		
Groceries & related products, nec	5149	6,670	210	3.5	3.6	3.5	4.0	3.0	2.6	3.5	3.2		
Petroleum & petroleum products	517	2,190	35	2.1	1.9	1.5	1.6	2.1	1.2	1.8	1.7		
Petroleum products, nec	5172	1,710	30	2.2	2.1	1.4	1.6	2.2	1.2	1.9	1.7		
Beer, wine, & distilled beverages	518	2,460	105	4.6	4.2	3.5	4.1	4.9	4.1	4.1	4.3		
Beer & ale	5181	1,490	85	5.3	5.8	5.3	6.0	6.1	5.4	5.4	5.8		
Farm supplies	5191	6,600	110	1.9	2.3	1.8	1.4	1.7	1.8	2.0	1.6		
Retail trade		306,010	4,160	1.6	1.5	1.4	1.3	1.4	1.4	1.5	1.4		
Building materials & garden supplies	52	18,520	370	1.7	1.9	2.1	2.1	1.9	2.1	1.9	2.0		
Lumber & other building materials	521	10,940	280	2.2	2.5	2.7	2.6	2.5	2.6	2.5	2.6		
Lumber & other building materials	5211	10,940	280	2.2	2.5	2.7	2.6	2.5	2.6	2.5	2.6		
Retail nurseries & garden stores	526	2,130	30	1.6	1.6	1.2	1.9	1.0	1.5	1.5	1.4		
Retail nurseries & garden stores	5261	2,130	30	1.6	1.6	1.2	1.9	1.0	1.5	1.5	1.4		
General merchandise stores	53	40,750	605	1.6	1.6	1.5	1.4	1.5	1.6	1.6	1.5		
Misc. general merchandise stores	539	2,400	40	2.4	2.1	1.9	1.3	1.9	2.2	2.2	1.8		
Misc. general merchandise stores	5399	2,400	40	2.4	2.1	1.9	1.3	1.9	2.2	2.2	1.8		
Food stores	54	40,250	650	2.2	1.7	1.6	1.5	1.7	1.6	1.8	1.6		
Grocery stores	541	35,540	595	2.3	1.7	1.6	1.6	1.7	1.7	1.9	1.7		
Grocery stores	5411	35,540	595	2.3	1.7	1.6	1.6	1.7	1.7	1.9	1.7		
Automotive dealers & service stations	55	45,680	655	1.6	1.8	1.5	1.5	1.4	1.4	1.7	1.4		
New & used car dealers	551	19,520	285	1.8	1.7	1.7	1.5	1.4	1.5	1.7	1.5		
New & used car dealers	5511	19,520	285	1.8	1.7	1.7	1.5	1.4	1.5	1.7	1.5		
Auto & home supply stores	553	5,500	125	2.2	2.8	1.9	2.0	2.5	2.2	2.3	2.2		
Auto & home supply stores	5531	5,500	125	2.2	2.8	1.9	2.0	2.5	2.2	2.3	2.2		
Apparel & accessory stores	56	11,790	65	0.6	0.4	0.5	0.5	0.6	0.6	0.5	0.6		
Furniture & homefurnishings stores	57	19,590	280	1.5	1.4	1.5	1.4	1.5	1.4	1.5	1.4		
Furniture & homefurnishings stores	571	9,860	205	2.0	1.8	2.2	1.9	2.3	2.1	2.0	2.1		
Furniture stores	5712	6,180	160	2.2	2.3	2.6	2.3	2.8	2.6	2.3	2.6		
Floor covering stores	5713	1,430	25	2.4	1.6	2.7	1.2	1.5	2.2	2.2	1.6		
Eating & drinking places	58	85,930	1,160	1.8	1.6	1.4	1.4	1.4	1.3	1.6	1.4		
Eating places	5812	74,410	1,050	1.8	1.7	1.4	1.4	1.4	1.4	1.7	1.4		
Misc. retail	59	44,530	375	1.1	0.9	0.9	0.8	0.9	0.8	1.0	0.8		
Fuel dealers	598	990	30	1.5	3.1	2.1	3.1	2.7	3.2	2.2	3.0		
Finance, insurance, & real estate		123,430	550	0.7	0.6	0.5	0.5	0.5	0.4	0.6	0.5		
Depository institutions	60	34,270	85	0.5	0.3	0.2	0.3	0.2	0.2	0.4	0.3		
Nondepository institutions	61	13,450	20	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2		
Security & commodity brokers	62	18,040	20	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1		
Insurance carriers	63	38,090	120	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3		

Industry [2]	SIC Code	Average FTE Covered Emp., 1998- 2000 [3]	Annual Avg. Pd. Indem. Claims, 1998- 2000 [4]	Paid Indemnity Claims per 100 Full-Time-Equivalent Covered Workers [5]								1995- 1997 Avg.	1998- 2000 Avg.
				1995	1996	1997	1998	1999	2000				
Insurance agents, brokers, & service	64	[a]	30	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]	
Insurance agents, brokers, & service	6411	[a]	30	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]	
Real estate	65	12,220	240	3.7	3.6	3.1	2.7	2.7	1.4	3.5	2.2		
Real estate operators & lessors	651	7,000	130	1.8	2.0	1.8	1.6	2.0	2.0	1.8	1.1		
Nonresidential building operators	6512	1,460	35	2.1	1.7	1.7	2.2	2.3	2.8	1.8	2.4		
Apartment building operators	6513	4,960	85	1.7	1.9	1.6	1.5	1.9	1.7	1.7	1.7		
Real estate agents & managers	6531	[a]	95	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]		
Holding & other investment offices	67	5,130	25	0.4	0.5	0.3	0.5	0.5	0.5	0.4	0.5		
Services		679,340	8,925	1.6	1.5	1.4	1.3	1.3	1.3	1.5	1.3		
Hotels & other lodging places	70	20,700	365	2.1	1.8	1.7	2.0	1.8	1.5	1.9	1.8		
Hotels & motels	701	19,790	350	2.1	1.8	1.8	2.0	1.8	1.5	1.9	1.8		
Hotels & motels	7011	19,790	350	2.1	1.8	1.7	2.0	1.8	1.5	1.9	1.8		
Personal services	72	18,280	220	1.5	1.4	1.4	1.2	1.3	1.1	1.4	1.2		
Laundry, cleaning, & garment services	721	5,070	115	2.2	2.5	2.5	2.2	2.5	2.2	2.4	2.3		
Linen supply	7213	1,110	35	[c]	[c]	[c]	[c]	[c]	3.0	4.0	3.3		
Business services	73	142,770	1,640	1.6	1.4	1.3	1.2	1.1	1.1	1.4	1.1		
Direct mail advertising services	7331	1,760	30	1.7	1.6	1.8	2.1	1.8	1.3	1.7	1.7		
Services to buildings	734	12,620	250	2.2	2.2	2.0	1.9	2.1	2.0	2.2	2.0		
Building maintenance services, nec	7349	12,130	235	2.2	2.2	1.9	1.8	2.1	2.0	2.1	2.0		
Misc. equipment rental & leasing	735	2,770	65	2.6	2.5	2.3	2.4	1.9	2.6	2.5	2.3		
Equipment rental & leasing, nec	7359	1,900	45	2.9	2.4	2.8	2.4	1.8	2.7	2.7	2.3		
Personnel supply services	736	47,330	900	2.5	2.2	2.1	2.0	1.9	1.8	2.3	1.9		
Help supply services	7363	43,320	860	2.7	2.4	2.3	2.1	2.0	1.9	2.4	2.0		
Auto repair, services, & parking	75	19,990	345	2.0	2.0	1.8	1.7	1.8	1.6	1.9	1.7		
Automotive repair shops	753	11,290	220	2.6	2.4	2.1	2.0	2.1	1.8	2.4	1.9		
Top & body repair & paint shops	7532	3,890	60	1.9	1.7	1.8	1.7	1.6	1.4	1.8	1.6		
General automotive repair shops	7538	4,550	85	2.6	2.3	2.2	2.1	1.7	1.8	2.4	1.9		
Automotive repair shops, nec	7539	810	20	[c]	[c]	[c]	[c]	[c]	[c]	2.8	2.3		
Automotive services, ex. repair	754	3,950	60	1.7	2.0	1.6	1.4	1.4	1.7	1.8	1.5		
Carwashes	7542	2,210	30	1.8	1.5	1.7	1.3	1.1	1.6	1.6	1.3		
Automotive services, nec	7549	1,750	30	1.6	2.8	1.5	1.6	1.9	1.8	2.0	1.8		
Misc. repair services	76	4,970	95	2.0	2.5	2.1	1.8	1.9	2.0	2.2	1.9		
Misc. repair shops	769	3,530	70	2.1	2.5	2.4	2.0	1.9	2.2	2.3	2.0		
Repair services, nec	7699	2,700	50	1.7	2.4	2.2	1.9	1.6	1.9	2.1	1.8		
Motion pictures	78	5,120	20	0.2	0.6	0.3	0.4	0.3	0.4	0.4	0.4		
Amusement & recreation services	79	18,320	300	2.6	2.3	2.1	2.1	2.0	1.1	2.3	1.8		
Producers, orchestras, entertainers	792	2,110	35	1.5	2.1	1.9	1.8	1.9	1.2	1.9	1.6		
Theatrical producers & services	7922	[b]	30	[c]	[c]	2-3	2-3	2-3	1-2	2-3	2-3		
Commercial sports	794	1,100	45	[c]	[c]	[c]	[c]	[c]	2.8	3.6	4.1		
Sports clubs, managers, & promoters	7941	780	40	[c]	[c]	[c]	[c]	[c]	[c]	4.5	5.3		
Amusement & recreation, nec	7999	[a]	90	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]		
Health services	80	180,050	3,410	2.1	2.1	2.0	1.9	1.9	1.9	2.1	1.9		
Nursing & personal care facilities	805	37,550	1,335	3.9	3.6	3.6	3.4	3.6	3.6	3.7	3.6		
Skilled nursing care facilities	8051	33,660	1,185	3.9	3.6	3.5	3.3	3.6	3.7	3.7	3.5		
Intermediate care facilities	8052	2,010	75	2.9	3.7	3.9	4.3	3.5	3.0	3.5	3.6		
Nursing & personal care, nec	8059	1,880	75	5.0	4.3	4.9	4.9	3.1	3.3	4.7	3.8		
Hospitals	806	67,900	1,305	2.3	2.3	2.2	2.0	1.8	2.0	2.2	1.9		
General medical & surgical hospitals	8062	62,150	1,190	2.2	2.2	2.2	2.0	1.8	1.9	2.2	1.9		
Psychiatric hospitals	8063	[b]	80	4.1	3.8	2.8	2-3	2-3	3-4	3-4	3-4		
Home health care services	808	7,550	155	2.3	2.4	2.5	2.1	2.2	1.9	2.4	2.1		
Home health care services	8082	7,550	155	2.3	2.4	2.5	2.1	2.2	1.9	2.4	2.1		

Industry [2]	SIC Code	Average FTE Covered Emp., 1998-2000 [3]	Annual Avg. Pd. Indem. Claims, 1998-2000 [4]	Paid Indemnity Claims per 100 Full-Time-Equivalent Covered Workers [5]									
										1995-1997 Avg.	1998-2000 Avg.		
				1995	1996	1997	1998	1999	2000				
Health & allied services, nec	809	3,550	35	0.7	0.8	0.8	0.9	0.8	1.1	0.8	0.9		
Health & allied services, nec	8099	1,370	20	0.9	[c]	0.8	1.6	1.2	1.8	1.0	1.5		
Legal services	81	13,240	30	0.4	0.4	0.3	0.2	0.2	0.2	0.4	0.2		
Educational services	82	144,210	1,270	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9		
Social services	83	53,580	825	2.0	1.9	1.6	1.5	1.5	1.6	1.9	1.5		
Individual & family services	832	15,950	205	1.8	1.5	1.4	1.3	1.4	1.2	1.6	1.3		
Individual & family services	8322	15,950	205	1.8	1.5	1.4	1.3	1.4	1.2	1.6	1.3		
Job training & related services	833	6,690	175	3.4	3.4	2.8	2.7	2.5	2.7	3.2	2.6		
Job training & related services	8331	6,690	175	3.4	3.4	2.8	2.7	2.5	2.7	3.2	2.6		
Residential care	836	17,820	325	2.2	2.2	1.9	1.8	1.7	2.0	2.1	1.8		
Residential care	8361	17,820	325	2.2	2.2	1.9	1.8	1.7	2.0	2.1	1.8		
Museums, botanical, zoological gardens	84	1,780	15	0.5	0.6	0.7	0.4	0.7	[c]	0.6	0.8		
Membership organizations	86	15,410	190	1.5	1.5	1.4	1.2	1.3	1.2	1.5	1.2		
Religious organizations	8661	[a]	75	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]		
Engineering & management services	87	43,650	185	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
Private households	88	[a]	15	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]		
Services, nec	89	1,170	5	[c]	[c]	[c]	0.4	[c]	[c]	0.8	0.4		
Public administration		85,966	1,419	1.8	1.6	1.6	1.6	1.8	1.5	1.7	1.7		
Executive, legislative, & general	91	[e]	620	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
General government, nec	919	[e]	20	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
General government, nec	9199	[e]	20	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
Justice, public order, & safety	92	[e]	325	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
Public order & safety	922	[e]	310	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
Police protection	9221	[e]	125	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
Correctional institutions	9223	[e]	75	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
Fire protection	9224	[e]	90	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
Finance, taxation, & monetary policy	93	[e]	15	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
Administration of human resources	94	[e]	45	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
Environmental quality & housing	95	[e]	270	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
Administration of economic programs	96	[e]	55	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		
National security & intl. affairs	97	[e]	[d]	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]		

nec = not elsewhere classified.

- The incidence rate is the number of cases per year per 100 full-time-equivalent workers. Incidence rates are computed with claims data from the Department of Labor and Industry and employment and hours data from other sources. The numbers of indemnity claims are developed, using historical rates of claim development, to represent estimates of what the numbers will be when claims are mature and all data are reported to the Department of Labor and Industry.
- Two-digit industries are included if they had at least 200 employees in 2000. Three- and four-digit industries are included if they had an annual average of at least 25 paid indemnity claims and an average annual incidence rate of at least 1.5 for 1998-2000.
- Rounded to the nearest 10.
- Rounded to the nearest 5.
- Where the confidentiality of industry employment data is protected by nondisclosure rules, the incidence rate is given as a range between the two closest whole numbers.
 - Not computed because of differences in coverage between Unemployment Insurance and workers' compensation.
 - Not given because nondisclosure rules protect data confidentiality.
 - Not computed because industry employment did not meet minimum-size threshold.
 - Fewer than five per year.
 - Not computed because of industry classification issues.