

# Missing work in 1998 – industry differences

Ernest B. Akyeampong

With the advent of the North American Free Trade Agreement (NAFTA), Canada, the United States and Mexico agreed upon a new industrial classification system, namely, the North American Industry Classification System (NAICS). Its major objectives are to facilitate comparisons between NAFTA members, to accommodate industries that have emerged in the past two decades, and to acknowledge the growing importance of the service sector.

This article examines work absence rates according to NAICS (see *Comparing SIC 1980 and NAICS*),<sup>1</sup> focusing on 1998.<sup>2</sup> It provides a brief overview of absence levels for 1997 and 1998, and a detailed examination of industry differences in the latter year.

## Work absences rose in 1998

The proportion of full-time employees missing work for personal reasons (“own illness or disability” and “personal or family responsibilities”) during each week rose between 1997 and 1998, as did average days lost per employee over the course of the year (see *Data source, definitions and measurements*). In 1998, an estimated 5.7% (525,000) of all full-time employees were absent from work for all or part of any given week for personal reasons, up from 5.5% a year earlier (Table 1). As a result of these absences, approximately 3.1% of usual weekly work time was lost (inactivity rate) in 1998, also up slightly from 3.0%. This translates into an increase of nearly half a day per full-time employee – from 7.4 to 7.8. Stated differently, employees missed approximately 72 million workdays because of personal reasons in 1998, up from 66 million in 1997.

All of the increase in incidence (0.2 percentage points) over the period was due to illness or disability,

*Ernest B. Akyeampong is with the Labour and Household Surveys Analysis Division. He can be reached at (613) 951-4624 or akyeem@statcan.ca.*

## Data source, definitions and measurements

The data in this article are annual averages from the Labour Force Survey (LFS). They refer to full-time employees holding only one job. Part-time, self-employed and unpaid family workers are excluded because they generally have more opportunity to arrange their work schedules around personal or family responsibilities. Multiple jobholders, too, are excluded because it is not possible, using LFS data, to allocate time lost, or the reason for it, to specific jobs. Women on maternity leave are also excluded. Employed persons on long-term illness or disability leave (exceeding one year) are included.<sup>3</sup>

**Personal reasons for absence** are split into two categories: “own illness or disability” and “personal or family responsibilities” (caring for own children, caring for elder relative, and other personal or family responsibilities). Absences for these two reasons represented about 26% of all time lost by full-time paid workers each week in 1998. Vacations, which accounted for about 46% of total time away from work, are not counted in this study, nor are statutory holidays, which represented 13%. Maternity leave represented 7% and other reasons, 9%.

The **incidence of absence** is the percentage of full-time paid workers reporting some absence in the reference week. In calculating incidence, the length of work absence – whether an hour, a day, or a full week – is irrelevant.

The **inactivity rate** shows hours lost as a proportion of the usual weekly hours of full-time paid workers. It takes into account both the incidence and length of absence in the reference week.

**Days lost per worker** are calculated by multiplying the inactivity rate by the estimated number of working days in the year (250).

as was the 0.4 rise in days lost per employee (its largest annual jump for this reason since 1980). In 1998, the work absence rate among full-time employees due to illness or disability stood at 4.3%, and average days

missed for that reason at 6.6. In contrast, for both 1997 and 1998 the rate and work time missed per employee on account of personal or family responsibilities were 1.4% and 1.2 days, respectively.

### Men's rates up: women's unchanged

Virtually all the increase in overall incidence of absence and workdays lost in 1998 can be traced to a rise in men's absence due to illness or disability. Even so, men continued to report work absences less often than women, and missed less time when they did so, whether for illness or disability, or for personal or family responsibilities. For example, male full-time employees lost on average 6.9 workdays (5.9 for illness or disability and 1.0 for personal or family responsibilities). This compares with an average 9.2 days missed by their female counterparts that year (7.7 and 1.5, respectively) (Table 1).

### Time lost varies by industry

The nature and demands of a job, the composition of the workforce, and the percentage of employees belonging to a union or covered by collective agreement all contribute to variations in work absence rates by industry.

Generally, the more physically demanding and/or hazardous the job, the higher the illness or disability absence rate (Haggard-Guénette, 1988 and Haggard-Guénette and Proulx, 1992). And, as can be inferred from the earlier findings, the higher the proportion of women in an industry, the greater the likelihood of absence for both illness or disability and personal or family responsibilities. Finally, workdays lost on account of illness or disability by unionized employees (almost all of whom are entitled to paid sick leave) are almost twice those of non-unionized employees (Akyeampong, 1998).

With these generalizations in mind, how did the major industries compare in 1998? <sup>4</sup>

At the highest level of aggregation, the incidence of work absence was identical in both goods- and service-producing industries in 1998. Approximately 5.7% of full-time employees in both sectors reported some absence every week for personal reasons (Table 2). However, because illness or disability among goods sector workers (especially in manufacturing) resulted in more lost work time, average days missed for that reason exceeded those in the service sector (6.9 versus 6.5). And as both sectors lost 1.2 days per worker on account of personal or family responsibilities, total workdays missed for both reasons by full-time employees in the goods sector (8.1 days) exceeded the 7.7 days for workers in the service sector.

**Table 1: Absence rates of full-time employees by sex, 1997 and 1998**

	Incidence *			Inactivity rate**			Days lost per worker in a year †		
	Total	Illness or disability	Personal or family responsibilities	Total	Illness or disability	Personal or family responsibilities	Total	Illness or disability	Personal or family responsibilities
		%			%			days	
<b>Both sexes</b>									
1997	5.5	4.1	1.4	3.0	2.5	0.5	7.4	6.2	1.2
1998	5.7	4.3	1.4	3.1	2.6	0.5	7.8	6.6	1.2
<b>Men</b>									
1997	4.6	3.4	1.2	2.5	2.1	0.4	6.3	5.3	0.9
1998	4.9	3.7	1.2	2.8	2.3	0.4	6.9	5.9	1.0
<b>Women</b>									
1997	6.7	5.1	1.7	3.7	3.0	0.6	9.1	7.6	1.5
1998	6.7	5.1	1.6	3.7	3.1	0.6	9.2	7.7	1.5

Source: Labour Force Survey

\* Absent workers divided by total.

\*\* Hours absent divided by hours usually worked.

† Inactivity rate multiplied by working days in year (250).

### Comparing SIC 1980 and NAICS

The new classification system (NAICS) differs from the Standard Industrial Classification (SIC 1980) in a number of important respects. It groups industries in terms of common inputs and processes, rather than outputs, the basis for the earlier classification. It also accommodates industries that have emerged since the 1970s. Finally, service industries, which account for about three-quarters of employment and a large share of national output, play a more prominent role in the new classification.

A detailed account of NAICS can be found at the Statistics Canada Internet address:

[www.statcan.ca/english/Subjects/Standard/index.htm](http://www.statcan.ca/english/Subjects/Standard/index.htm).

The new classification system has six levels of detail, but the LFS uses only four. This provides roughly the same level of detail as the SIC 1980.

Both classification schemes are hierarchical in structure, composed of sectors, subsectors, industry groups and industries. At the highest level of aggregation, NAICS has 20 sectors, compared with 18 divisions in the SIC 1980. This level is still too detailed to provide reliable seasonally adjusted estimates for all provinces. The LFS groups some of the sectors (divisions), leaving 16 categories for monthly, seasonally adjusted publication. While some NAICS and SIC group titles are the same, the detailed industries represented are different.

Construction, for example, is a division of the SIC 1980 and a sector in NAICS. In the SIC 1980, it includes the inspection of buildings and landscaping activities but excludes street and highway repairs. In NAICS, it excludes building and landscaping inspection but includes

street and highway repairs. Consequently, direct comparisons cannot be made. (For comparison tables, see Akyeampong, 1999.)

#### Seasonally adjusted industry detail from the Labour Force Survey

SIC 1980	NAICS
<b>Goods-producing</b>	<b>Goods-producing</b>
Agriculture	Agriculture
Other primary	Forestry, fishing, mining, oil and gas
Logging and forestry	Utilities
Fishing and trapping	Construction
Mining, quarrying and oil wells	Manufacturing
Utilities	
Construction	
Manufacturing	
<b>Service-producing</b>	<b>Service-producing</b>
Transportation, storage and communication	Transportation and warehousing
Trade	Trade
Wholesale	Finance, insurance, real estate and leasing
Retail	Information, culture and recreation
Finance, insurance and real estate	Educational services
Community, business and personal services	Health care and social assistance
Education	Professional, scientific and technical
Health and social services	Management, and administrative and support services
Business and personal services	Accommodation and food
Accommodation, food and beverage	Other services
Public administration	Public administration

At the major industry (2-digit) level some variations were noteworthy. For both personal reasons combined, full-time employees who lost the most time (12.8 days) were in health care and social assistance, a highly unionized industry believed to be relatively stressful and having a large proportion of female workers. They were followed by those in transportation and warehousing, a relatively hazardous and heavily unionized

industry (9.4); public administration, also heavily unionized and with a high concentration of female employees (9.4); and manufacturing (8.5). Workers who lost comparatively little time were in the professional, scientific and technical industries (4.6 days); accommodation and food services (5.7); and agriculture (5.8).

Most of these variations can be traced to illness or disability. In 1998, health care and social assist-

ance employees missed 11.3 workdays for this reason, while those in transportation and warehousing lost 8.1, public administration, 8.0, and manufacturing, 7.3. In contrast, workers lost little time in the professional, scientific and technical industries (3.4 days); agriculture (4.7); and accommodation and food services (4.8).

Workdays missed on account of personal or family responsibilities ranged from 0.9 to 1.6 among

**Table 2: Absence for personal reasons by industry, full-time paid workers, 1998**

	Incidence *			Inactivity rate**			Days lost per worker in a year †		
	Total	Illness or disability	Personal or family responsibilities	Total	Illness or disability	Personal or family responsibilities	Total	Illness or disability	Personal or family responsibilities
		%			%			days	
<b>All industries</b>	<b>5.7</b>	<b>4.3</b>	<b>1.4</b>	<b>3.1</b>	<b>2.6</b>	<b>0.5</b>	<b>7.8</b>	<b>6.6</b>	<b>1.2</b>
<b>Goods-producing</b>	<b>5.7</b>	<b>4.2</b>	<b>1.5</b>	<b>3.2</b>	<b>2.8</b>	<b>0.5</b>	<b>8.1</b>	<b>6.9</b>	<b>1.2</b>
Agriculture	4.5	3.0	--	2.3	1.9	--	5.8	4.7	--
Forestry, fishing, mining, oil and gas	4.8	3.7	1.1	2.8	2.4	0.4	7.1	6.0	1.1
Utilities	5.5	4.0	1.5	2.7	2.3	0.4	6.8	5.8	1.0
Construction	5.3	3.9	1.4	3.1	2.6	0.5	7.6	6.5	1.1
Manufacturing	6.0	4.5	1.5	3.4	2.9	0.5	8.5	7.3	1.2
Durable	6.1	4.5	1.5	3.4	2.9	0.5	8.5	7.3	1.2
Non-durable	6.0	4.4	1.6	3.4	2.9	0.5	8.6	7.3	1.3
<b>Service-producing</b>	<b>5.7</b>	<b>4.3</b>	<b>1.3</b>	<b>3.1</b>	<b>2.6</b>	<b>0.5</b>	<b>7.7</b>	<b>6.5</b>	<b>1.2</b>
Trade	4.9	3.7	1.3	2.6	2.1	0.4	6.4	5.4	1.1
Wholesale	5.0	3.7	1.3	2.5	2.1	0.4	6.2	5.2	1.0
Retail	4.9	3.7	1.2	2.6	2.2	0.4	6.5	5.4	1.1
Transportation and warehousing	5.7	4.4	1.3	3.8	3.2	0.5	9.4	8.1	1.3
Finance, insurance, real estate and leasing	5.2	3.8	1.4	2.5	2.1	0.4	6.3	5.2	1.1
Finance and insurance	5.2	3.9	1.3	2.6	2.2	0.4	6.6	5.5	1.1
Real estate, rental and leasing	4.9	3.5	1.4	2.2	1.8	0.4	5.4	4.5	0.9
Professional, scientific and technical	4.8	3.2	1.6	1.8	1.4	0.5	4.6	3.4	1.2
Management, and administrative and support services	5.4	4.0	1.4	2.9	2.4	0.5	7.4	6.0	1.4
Educational services	5.5	4.3	1.2	3.0	2.5	0.6	7.6	6.2	1.4
Health care and social assistance	8.2	6.7	1.4	5.1	4.5	0.6	12.8	11.3	1.6
Information, culture and recreation	5.0	3.6	1.3	2.4	2.0	0.4	6.1	5.1	1.0
Accommodation and food services	4.3	3.3	0.9	2.3	1.9	0.4	5.7	4.8	0.9
Other services	5.1	3.7	1.5	2.7	2.2	0.5	6.8	5.4	1.4
Public administration	6.9	5.3	1.5	3.8	3.2	0.5	9.4	8.0	1.4
Federal	8.0	6.0	2.0	4.1	3.4	0.6	10.2	8.5	1.6
Provincial	7.0	5.7	1.3	4.0	3.5	0.5	10.1	8.9	1.2
Local, including other	5.7	4.3	1.3	3.3	2.7	0.5	8.2	6.9	1.3

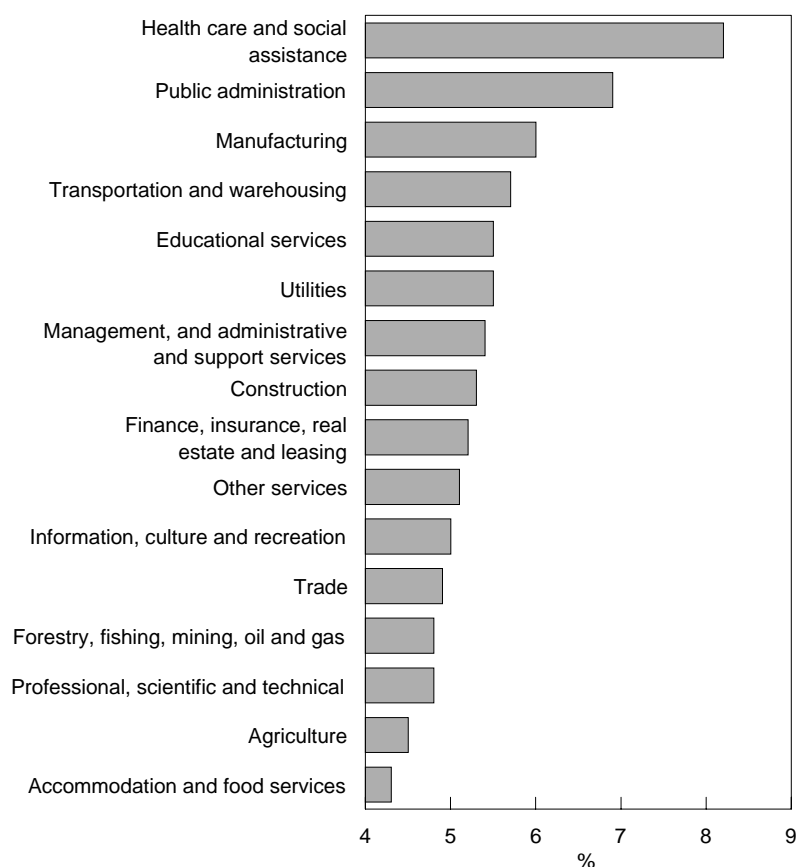
Source: Labour Force Survey

\* Absent workers divided by total.

\*\* Hours absent divided by hours usually worked.

† Inactivity rate multiplied by working days in year (250).

**Chart : In 1998, health care and social assistance had the highest incidence of time lost for personal reasons.**



Source: Labour Force Survey

major industries, with many clustered around 1.1 days. Higher-than-average missed days were recorded in health care and social assistance (1.6); as well as in management, and administrative and support services; educational services; and public administration (1.4 days each). Lower-than-average time was lost by those in accommodation and food services (0.9 days); information, culture and recreation; and utilities (1.0 days each).

Among selected industries at the 3-digit level, full-time employees in durable and non-durable manufacturing both lost around 8.5 days in 1998 (Table 2). Workers in retail trade missed slightly more time than those in wholesale trade (6.5 days versus 6.2). Similarly, those in finance and insurance (6.6 days) lost more work time to personal reasons than their counterparts in real estate, rental and leasing (5.4). In public administration, full-time employees in the federal and

provincial governments lost just slightly over 10 days each in 1998, significantly higher than the 8.2 days missed by those in local and other government.

## Summary

Workdays missed by full-time employees for personal reasons rose from 7.4 in 1997 to 7.8 in 1998. All of the increase was due to a rise in time lost to illness or disability; workdays missed for personal or family responsibilities remained unchanged at 1.2 days. Although men accounted for all of the increase over the year, women continued to report absences more often than men during a given work week, and to miss more work time during the year, at ratios of approximately 3 to 2. Among the major industries, those losing considerably more time than others to personal reasons per full-time employee were health care and social assistance; public administration; and transportation and warehousing. Those with relatively few lost workdays were professional, scientific and technical industries; accommodation and food services; and agriculture.

## Perspectives

### Notes

1 Previous studies in this journal (Akyeampong, 1992, 1995, 1996 and 1998) and elsewhere (Akyeampong, 1988, and Akyeampong and Usalcas, 1998) have examined absence rate differences among workers based on the former Standard Industrial Classification 1980.

2 Although the LFS has produced historical NAICS data back to 1987, this article considers 1998 for two reasons. First, the redesign of the LFS in



### Reasons for work absences in the LFS

The pre-1997 version of the LFS grouped the reasons for being away from work all or part of the week as follows:

- illness or disability
- personal or family responsibilities
- weather (part-week absence)
- labour dispute
- vacation
- holiday (part-week absence)
- working short time (part-week absence)
- laid off during week
- new job started during week
- seasonal business (full-week absence)
- other

Studies using pre-1997 data referred to the first two reasons as absences from work for personal reasons.

Reasons for time lost to illness or disability included medical or dental appointments and other temporary health-related absences. Absence for personal or family responsibilities included taking care of children, attending funerals, appearing in court, serving on a jury, and taking care of a sick family member. Longer absences, such as maternity leave, were also included.

The redesigned LFS, whose 1998 estimates are used in this study, sets out the following reasons for being away from work:

- own illness or disability
- caring for own children
- caring for elder relative (60 years or older)
- maternity leave (women only)
- other personal or family responsibilities
- vacation
- labour dispute (strike or lockout)
- temporary layoff due to business conditions
- holiday (legal or religious)
- weather
- job started or ended during week
- working short time (because of material shortages, plant maintenance or repair, for instance)
- other

Illness or disability remain unchanged, and personal or family responsibilities now consist of caring for own children, caring for elder relative, and other personal or family responsibilities.

1997 allowed the removal of maternity leave – clearly not an “absenteeism” factor – from work absence rates (see *Reasons for work absences in the LFS*). In other words, there was a break in the time series starting in 1997, making comparisons with data from earlier years less meaningful. Second, detailed time series covering the period 1987 to 1998 (with pre- and post-1997 LFS redesign information) by industry (NAICS) and occupation (the new SOC 1991) – as well as other socio-demographic variables such as sex, age, education, province, workplace size, public and private sectors – are available in a companion publication (Akyeampong, 1999).

3 Some human resource practitioners exclude persons on long-term illness or disability leave (exceeding one year) from their attendance management statistics. Such persons are, however, included in Statistics Canada’s work absence estimates if they count themselves as employed (that is, they continue to receive partial or full pay from their employer). In 1998, the number of employed persons on such long-term illness or disability leave averaged only 16,000 in a typical week. Their exclusion would have reduced the weekly work

absence incidence for illness or disability from 4.3% to 4.1%, the inactivity rate from 2.6% to 2.5%, and days lost per worker from 6.6 to 6.2.

4 The following analysis looks mainly at differences in average time lost per worker. Differences in incidences and inactivity rates are shown, however, in the chart and in Table 2.

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