

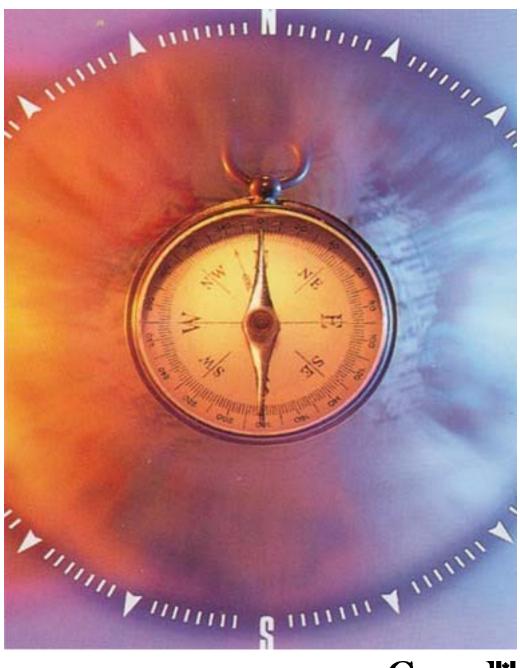
Catalogue no. 75-001-XIE

# PERSPECTIVES

ON LABOUR AND INCOME

### **MARCH 2004** Vol. 5, No. 3

- MINIMUM WAGE WORKERS
- PERMANENT LAYOFF RATES
- UPDATE: WORK ABSENCES





Statistique Canada **Canadä** 

### At Your Service...

### How to obtain more information

Specific inquiries about this product and related statistics or services should be directed to: *Perspectives on Labour and Income*, 9 A-6 Jean Talon, Statistics Canada, Ottawa, Ontario, K1A 0T6 (telephone: (613) 951-4608; e-mail: perspectives@statcan.ca).

For information on the wide range of data available from Statistics Canada, you can contact us by calling one of our toll-free numbers. You can also contact us by e-mail or by visiting our Web site.

National inquiries line	1 800 263-1136
National telecommunications devi- for the hearing impaired	ce 1 800 363-7629
Depository Services Program inqui	iries 1 800 700-1033
Fax line for Depository Services Program	1 800 889-9734
E-mail inquiries	infostats@statcan.ca
Web site	www.statcan.ca

### Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner and in the official language of their choice. To this end, the agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact Statistics Canada toll free at 1 800 263-1136.

### Perspectives on Labour and Income

(Catalogue no. 75-001-XIE; aussi disponible en français: L'emploi et le revenu en perspective, n° 75-001-XIF au catalogue) is published monthly by authority of the Minister responsible for Statistics Canada. ©Minister of Industry 2004. ISSN: 1492-496X.

PRICE: CDN \$6.00 per issue, CDN \$52.00 for a one-year subscription, plus applicable taxes.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any other means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission from Licence Services, Marketing Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

### **Symbols**

The following standard symbols are used in Statistics Canada publications:

- not available for any reference period
- not available for a specific reference period
- ... not applicable
- p preliminary
- r revised
- x confidential
- E use with caution
- F too unreliable to be published

# **Highlights**

### In this issue

### Minimum wage workers

- In 2003, some 547,000 people worked at or below the minimum wage set by their province. Nearly half were aged 15 to 19—the majority of them students and living with their parents.
- Women aged 25 to 54 accounted for 22% of minimum wage workers. This may reflect the tendency for some women to work part time, often at a lower paid job, in order to balance paid work with childcare and other family responsibilities.
- Almost all minimum wage workers were employed in the service sector. Accommodation and food services, in particular, had the highest incidence, with one in six workers working at or below minimum wage.
- Part-time employment is a notable feature of minimum wage work. Some 60% of minimum wage workers worked part time compared with less than 20% of all employees.

### Permanent layoff rates

■ Despite some high-profile corporate downsizing, permanent layoff rates were virtually the same in the 1980s and the 1990s. In 1989, 5.9% of employees permanently lost their job. In 1999, a comparable year in terms of labour market conditions, the proportion stood at 5.7%.

- While overall permanent layoff rates did not change, two groups—men aged 55 to 64 and women 35 to 44—saw their rates rise. The men's rate increased from 7.4% in 1989 to 8.1% in 1999, and the women's from 3.2% to 3.7%.
- The risk of permanent layoff rose for large firms, but either fell or changed little in smaller companies. Even though job loss rose in large firms, employees in small firms were, at the end of the 1990s, about three times more likely to lose their job.
- While workers' chances of losing their job did not rise substantially during the 1990s, their chances of finding a new job in the event of a layoff fell markedly. Between 1985 and 1989, 25% of jobs existing in a given year were filled by new hirings. This rate declined to 21% between 1995 and 1999.
- As companies hired fewer workers, employees tended to quit much less often. While 9.2% of workers quit their job permanently in 1989, only 7.3% did so in 1999. The decline was widespread and not simply due to the aging of the workforce.
- Although employees were no more likely to lose their jobs, more were choosing to stay longer with their employer. Hence, average job duration rose between the 1980s and the 1990s.

Perspectives

# PERSPECTIVES

ON LABOUR AND INCOME

### THE COMPREHENSIVE JOURNAL

# on labour and income from Statistics Canada

☐ Yes, I want PERSPECTIVES ON LABOUR AND INCOME (Catalogue no. 75-001-XPE).

Save
by extending your
subscription!
Save 20%

Save 20% by subscribing for 2 years! Only \$100.80 (plus taxes) Save 30%

by subscribing for 3 years!
Only \$132.30
(plus taxes)

Subscribe to Perspectives on Labour and Income today!

				_				
	AIL PHONE		I	METH	IOD O	F PAYMENT	(Check only or	ne)
Statistics Ca Circulation M 120 Parkdale Ottawa, Onta	1 800 267-6677 Avenue Quote PF024082		E-MAIL ler@statcan.ca	Charge	to my:	MasterCard	VISA	American Express
Canada K1A	T6			Ca	ard Numb	ber	E	xpiry Date
Name				Αι	uthorized	d Signature		
Company		Department				er (Please print)		
Address	( )	City	Province			nclosed \$		
Postal Co	de Phone	Fax		Pu	irchase O	Order Number		
E-Mail ad	dress			Αι	uthorized	d Signature		
Catalogue N		Title		Subscr	ription	Price (CDN \$)	Quantity	Total CDN \$
75-001-XF	Perspective	es on Labour and Incom	ie	1 ye	ear	63.00		
	· ·			2 ye	ears	100.80		
•				3 ye	ears	132.30		
	arges for delivery in Canada. Outside Cana er 7% GST and applicable PST or HST (GS			Subtotal				
in Canadian o	llars drawn on a Canadian bank <b>or</b> pay in e drawn on a US bank. Federal government	equivalent US dollars, converted at the		Applicab	ole GST (7	%)		
	orders their IS Organization Code			Applicable	e PST			
	nformation is protected by the <i>Privacy Act</i> .			Applicab	ole HST (N	.S., N.B., N.L.)		
this sales tran	action, deliver your product(s), announce profer you other Statistics Canada products and	oduct updates and administer your acco	unt. From time to time,	Shipping	charges U.	S. CDN \$24, other cou	ntries CDN \$40	
If you do not	rish to be contacted again for promotional pu	urposes□ and/or market research□, ch	neck as appropriate.	Grand T	otal			

## Minimum wage workers

Deborah Sussman and Martin Tabi

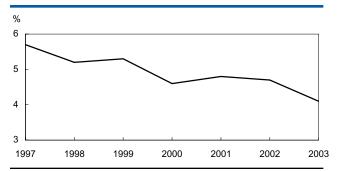
hey are young. They are single. They are students. They work part time, many in retail stores and restaurants. They are sons and daughters living at home, working to finance their education and other expenses. Less frequently they are middle-aged, married, or working full time. Some are men and women trying to support their families, while others are older workers looking to supplement their pension. Together, they make up the 547,000 people (about 4% of the paid workforce) who worked for minimum wage or less in 2003 (Chart A).

Minimum wage legislation is one of Canada's oldest social policies. Originating in New Zealand, Australia and Great Britain, it was introduced in Canada in the early part of the 20<sup>th</sup> century as part of an effort to promote fairer treatment of the most vulnerable employees—namely, women and children. It was later extended to men. Eventually, all provinces enacted minimum wage legislation as employment standards became more widespread (HRDC 2001).

Over the years, minimum wage legislation has become the subject of considerable debate, primarily revolving around whether current rates are too low or too high. On the one hand, some argue that the minimum wage should be increased as an important policy tool for addressing wage inequalities as well as an essential element in helping to meet anti-poverty and social welfare goals. By this reasoning, the minimum wage should be set at a rate where basic needs may be adequately met (Battle 2003; Goldberg and Green 1999; Black and Shaw 1998). On the other hand, the argument is that a minimum wage is a 'killer of jobs' and a 'passport to poverty,' since too high a minimum wage can artificially increase the cost of labour, often

Deborah Sussman is with the Labour and Household Surveys Analysis Division. She can be reached at (613) 951-4226. Martin Tabi is with Finance Canada. He can be reached at (613) 943-9399. Both authors can be reached at perspectives@statcan.ca.

Chart A: The proportion of employees earning minimum wage has fallen steadily since 1997.



Source: Labour Force Survey

to the detriment of the very people it is designed to help (Law 1999). Increases in the minimum wage would reduce the demand for workers (as firms find substitutes for the now more costly labour input) and might also increase the supply of workers (as some would be encouraged to consider jobs that they would previously not have found attractive), resulting in reduced employment and increased unemployment rates (Sarlo 2000; Law and Mihlar 1998; Shannon and Beach 1995).<sup>1</sup>

Both these arguments rely in part on the prevailing socio-political climate, as well as on the characteristics of the minimum wage workers themselves and the types of jobs they hold. This study examines the latter, looking at which workers might be affected by a change in the minimum wage.

As implied, the minimum wage is the lowest rate an employer can pay employees covered by the legislation (see *Data source and definitions*). Minimum wage legislation is by no means static. Since 1997, over 30 increases in minimum wage rates have been recorded across the provinces. In 2002 alone, seven provinces raised their minimum wage, as did four in 2003. 3

In this article, minimum wage workers are those working for the 'minimum wage for experienced adult workers' (or the 'general adult rate') set by their province. Those who earn less are also included. Hourly earnings below the set minimum do not necessarily indicate violations of the legislation; they may instead reflect workers who are either exempt from the legislation or subject to lower minimum wage rates. One such special category covers young workers. This is of particular interest given the significant presence of young people among minimum wage workers. Although there has been a marked trend towards their repeal, youth rates still exist in Ontario. And in Newfoundland and Labrador, the general adult rate does not apply to workers under 16 years of age. These young workers are not strictly minimum wage workers but are included here for simplicity.<sup>5</sup>

### Lowest proportion in Alberta

In 2003, some 547,000 people worked at or below the minimum wage set by their province: 4.1% of employees, down from 5.7% in 1997. In 2003, minimum wage rates ranged from a high of \$8.00 per hour in British Columbia to a low of \$5.90 in Alberta (Table 1). The latter rate has remained unchanged since October 1999. Alberta also had the lowest proportion of employees working at or below minimum wage (1.1%), while Newfoundland and Labrador had the highest (8.5%). The relatively high proportion in Newfoundland and Labrador may be due in part to

less favourable labour market conditions, given an unemployment rate of 16.7% in 2003, more than double the national rate of 7.6%. Similarly, comparatively more favourable market conditions in Alberta may have contributed to the low proportion in that province (an unemployment rate of 5.1% in 2003). That is, more opportunities in Alberta may have translated into greater bargaining power for workers (Statistics Canada 1998). However, high unemployment rates are not necessarily associated with a greater proportion of workers receiving minimum wage or less. For example, Prince Edward Island had the second-highest unemployment rate in 2003 (11.1%), yet its proportion of minimum wage workers (3.8%) was slightly less than the national average. This suggests that other factors such as industry composition, part-time rate, the economic cycle, and legislation play a role.

Part of the disparity in provincial incidence of working for minimum wage may be attributed to the variation in minimum wage rates (or general adult rates). If a universal threshold of \$8.00 had been used (the highest provincial rate), some 1.6 million workers would have been below that rate in 2003, about 12% of employees. By far the lowest proportion of employees earning \$8.00 or less would have been in British Columbia (5.6%), while Newfoundland and Labrador would have had the highest (25.0%). Ontario (11.2%) and Alberta (12.5%) would have remained among the provinces with the lowest proportions; however, New Brunswick (19.3%) and

Table 1: Employees earning minimum wage or less

	Total	Minim	ium wage	General adult	Unem- ployment	Workers earning \$8.00/hour
	employees	Total	Incidence	minimum wage*	rate	or less
	'000	'000	%	\$/hour	%	%
Province						
Newfoundland and Labrador	190.5	16.1	8.5	6.00 (November 2002)	16.7	25.0
Nova Scotia	379.2	21.9	5.8	6.25 (October 2003)	9.3	18.9
British Columbia	1,639.7	92.1	5.6	8.00 (November 2001)	8.1	5.6
Quebec	3,165.0	161.9	5.1	7.30 (February 2003)	9.1	11.6
Saskatchewan	386.5	19.1	4.9	6.65 (November 2002)	5.6	17.9
Manitoba	478.2	22.1	4.6	6.75 (April 2003)	5.0	15.2
Canada	13,333.2	547.0	4.1	•••	7.6	11.7
New Brunswick	303.2	12.3	4.1	6.00 (August 2002)	10.6	19.3
Prince Edward Island	58.0	2.2	3.8	6.25 (January 2003)	11.1	20.0
Ontario	5,319.4	184.3	3.5	6.85 (January 1995)	7.0	11.2
Alberta	1,413.6	15.1	1.1	5.90 (October 1999)	5.1	12.5

Source: Labour Force Survey, 2003

<sup>\* (</sup>Month in which the rate became effective.)

Prince Edward Island (20.0%) would have been among those with the highest (Table 1). In other words, the ranking of provinces shifts drastically according to the wage threshold chosen.

### Most are women

Women are more likely than men to be working for minimum wage. In 2003, women accounted for almost two-thirds of minimum wage workers, yet they made up just under half of employees (Table 2)—hence their higher rate of working for minimum wage

Table 2: Minimum wage workers by age and sex

	Takal	Minir	num wage
	Total employees	Total	Incidence
	'000	'000	%
Both sexes			
15 and over	13,333.2	547.0	4.1
15 to 19	864.5	260.0	30.1
20 to 24	1,433.7	84.1	5.9
25 to 34	3,104.7	60.1	1.9
35 to 44	3,530.9	57.2	1.6
45 to 54	3,017.3	50.4	1.7
55 and over	1,382.2	35.2	2.5
Men			
15 and over	6,819.9	198.5	2.9
15 to 19	433.9	103.5	23.9
20 to 24	729.6	32.8	4.5
25 to 34	1,619.3	20.7	1.3
35 to 44	1,800.8	14.7	0.8
45 to 54	1,500.5	14.3	1.0
55 and over	735.9	12.4	1.7
Women			
15 and over	6,513.3	348.5	5.4
15 to 19	430.6	156.5	36.3
20 to 24	704.1	51.3	7.3
25 to 34	1,485.3	39.4	2.7
35 to 44	1,730.1	42.4	2.5
45 to 54	1,516.8	36.1	2.4
55 and over	646.2	22.8	3.5

Source: Labour Force Survey, 2003

(1 in 20 women compared with 1 in 35 men). This overrepresentation of women existed in all age groups, with rates for women being almost double those for men. This may be a function of some of the occupations held by women that are associated with lower wages.

### Age a major factor

Teenagers between the ages of 15 and 19 had by far the highest rate of working for minimum wage—almost 1 in 3 (Table 2). Indeed, nearly half of all minimum wage workers were 15 to 19, with a large majority (77%) attending school either full time or part time. Another 15% were between 20 and 24, with many of them (44%) students.<sup>7</sup>

Students with summer jobs in particular were more likely to be working for minimum wage (1 in 5) than others the same age (1 in 7).8 Indeed, although only 45% of those 15 to 24 employed in the summer were students, they made up 71% of youths working for minimum wage during that time. The growing financial burden of postsecondary education likely encourages many students to take jobs, particularly during the summer months, to help finance their educational and other expenses. However, young workers often lack the job experience or education to command higher wages, or are interested in only short-term employment, leading many of them to accept minimum wage jobs (Statistics Canada 1998).

In sum, almost two-thirds of minimum wage workers were under 25, compared with only 17% of all employees. This translates into an incidence rate for this age group more than eight times that of those 25 and older. The prevalence of teenagers and young adults among minimum wage workers reflects the characteristics associated with minimum-wage work. These include lower levels of education, service-sector jobs, part-time work, and shorter job tenure.

Although the incidence of working for minimum wage declined sharply with age, it rose slightly among those 55 and older (Table 2). This suggests that some older workers may be working to supplement their pension income or to stay active. Working seniors tend to be concentrated in certain occupations, some of which are associated with lower wages. These occupations include retail salespersons and sales clerks; general office clerks; janitors, caretakers and building superintendents; babysitters, nannies and parent's helpers; and light duty cleaners (Duchesne 2004).

In addition, a sizeable portion (31%) of minimumwage workers were between the ages of 25 and 54, many of them women (Chart B). This may reflect the tendency for some women to work part time, often at a lower paid job, perhaps enabling some to balance paid work with childcare and other family

Table 3: Minimum wage workers by selected characteristics

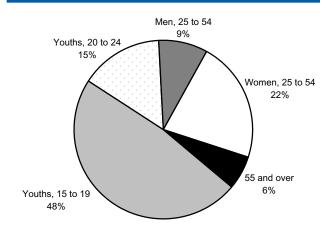
	Teenage	ers and young	adults	Individ	Individuals 25 and over			
	Total Minimum wage Total		Minin	num wage				
	employees	Total	Incidence	employees	Total	Incidence		
	'000	'000	%	'000	'000	%		
Total	2,298.2	344.1	15.0	11,035.1	202.9	1.8		
Education								
Less than high school	617.5	174.0	28.2	1,334.4	49.4	3.7		
Less than grade 9	35.7	9.4	26.3	355.2	21.0	5.9		
Some high school	581.9	164.6	28.3	979.2	28.4	2.9		
High school graduate	533.3	61.8	11.6	2,212.4	47.4	2.1		
At least some postsecondary	1,147.4	108.3	9.4	7,488.3	106.3	1.4		
Some postsecondary	530.2	74.0	14.0	843.2	18.9	2.2		
Postsecondary certificate or diploma	488.1	27.8	5.7	4,059.4	56.8	1.4		
University degree	129.1	6.5	5.0	2,585.7	30.6	1.2		
Industry								
Agriculture	39.7	7.1	17.9	80.5	5.3	6.6		
Forestry, fishing, mining, oil and gas	27.3	F	F	211.8	1.9	0.9		
Utilities	6.7	F	F	124.7	F	F		
Construction	108.6	1.8	1.7	535.3	5.1	1.0		
Manufacturing	227.6	7.1	3.1	1,976.6	13.6	0.7		
Trade	652.3	131.1	20.1	1,507.1	42.7	2.8		
Transportation and warehousing	51.3	2.0	3.9	577.3	9.0	1.6		
Finance, insurance, real estate and leasing	87.6	7.1	8.1	701.1	10.6	1.5		
Professional, scientific and technical	73.8	3.7	5.0	579.1	5.0	0.9		
Business, building and other support*	102.5	6.9	6.7	366.1	9.3	2.5		
Educational services	72.0	6.2	8.6	929.1	11.7	1.3		
Health care and social assistance	129.7	8.0	6.2	1,351.9	17.8	1.3		
Information, culture and recreation	156.5	26.0	16.6	439.0	6.0	1.4		
Accommodation and food	420.6	118.9	28.3	500.8	40.9	8.2		
Other services	85.6	12.5	14.6	396.1	19.8	5.0		
Public administration	56.3	4.5	8.0	758.6	3.7	0.5		
Full-time/part-time status								
Full-time	1,259.2	86.9	6.9	9,634.3	132.5	1.4		
Men	722.7	36.8	5.1	5,381.3	48.4	0.9		
Women	536.5	50.1	9.3	4,253.0	84.1	2.0		
Part-time	1,039.0	257.2	24.8	1,400.7	70.4	5.0		
Men	440.8	99.5	22.6	275.2	13.8	5.0		
Women	598.2	157.8	26.4	1,125.5	56.6	5.0		
Job tenure								
1 to 3 months	459.9	90.3	19.6	506.0	23.0	4.5		
4 to 6 months	347.0	64.6	18.6	503.9	21.0	4.2		
7 to 12 months	404.9	71.8	17.7	751.7	24.9	3.3		
13 to 60 months	999.8	112.7	11.3	3,473.6	69.5	2.0		
61 or more months	86.6	4.8	5.5	5,799.9	64.4	1.1		

responsibilities. It may also be that a number of workers spend their working lives in a series of minimum wage jobs (Carrington and Fallick 2001). For this group, minimum wages are not merely a transitory

phenomenon, and these individuals may require particular attention in any efforts aimed at improving their financial situation.

Source: Labour Force Survey, 2003
\* Previously called management of companies, administrative and other support services.

Chart B: People under 25 and women 25 to 54 accounted for 85% of minimum wage workers.



Source: Labour Force Survey, 2003

### Education makes a difference

Working for minimum wage or less was much more prevalent among those with less than a high school diploma (1 in 9) than among those with at least some postsecondary training (1 in 40) (Table 4). In fact, 41% of all minimum wage workers did not have a high school diploma compared with only 15% of all employees. This would explain the high rates of minimum wage work among young people, many of whom have not yet completed their studies. Remov-

ing teenagers and young adults confirms the role education plays in minimum wage work. Indeed, among those 25 and over (who presumably have completed their first cycle of formal education), those who had not completed high school were still more likely to be working for minimum wage than those who had a high school diploma and those with some postsecondary education (Table 3).

### Where do they work?

Almost all minimum wage workers were employed in the service sector. Accommodation and food services, in particular, had the high-

est incidence, with 1 in 6 working at or below minimum wage (Table 5). Working for minimum wage was also prevalent in trade (1 in 12). These industries are characterized by high concentrations of youth and part-time workers. Both groups tend to have less work experience and weaker attachment to the labour force, making them prime candidates for low-paying jobs. These industries often do not require specialized skills and training or a postsecondary education. Low levels of unionization may also account for lower wages. Women are also highly present in these industries, where many jobs are likely to be part-time.

Agriculture also had a relatively high incidence of minimum wage (1 in 10). Farm labour has traditionally been excluded from minimum wage provisions, and workers in this industry are often not unionized. However, they do sometimes benefit from non-wage remuneration such as free room and board (Akyeampong 1989). Another benefit may include some spouses of unincorporated farmers being paid a nominal wage as a tax deductible business expense. Following a change in tax legislation allowing owners of unincorporated businesses to claim a spousal employee's wages as a deduction, the number of women employees in agriculture rose markedly while unpaid family workers decreased (Duchesne 1989).9

In contrast, manufacturing, public administration and construction were among industries with the lowest rates of minimum wage workers. This is not surprising since they represent some of the most highly unionized industries (Akyeampong 2003).

Table 4: Minimum wage workers by educational attainment

	T. (-)	7000 547.0 223.3 30.3 193.0	mum wage	
	Total employees	Total	Incidence	
	'000	'000	%	
Education	13,333.2	547.0	4.1	
Less than high school	1,951.9	223.3	11.4	
Less than grade 9	390.8	30.3	7.8	
Some high school	1,561.1	193.0	12.4	
High school graduate	2,745.7	109.1	4.0	
At least some postsecondary	8,635.6	214.6	2.5	
Some postsecondary	1,373.3	93.0	6.8	
Postsecondary certificate or diploma	4,547.5	84.6	1.9	
University degree	2,714.8	37.0	1.4	

Source: Labour Force Survey, 2003

A slightly different picture emerges when age is factored in. Among teenagers and young adults, about 1 in 4 working in the accommodation and food services earned minimum wage or less (Table 3). This was also the case for 1 in 5 in trade, and 1 in 6 in agriculture. Among workers 25 and over, those in accommodation and food services were the most likely to be earning minimum wage or less (1 in 12), followed by those in agriculture (1 in 15), and in trade (1 in 35).

### Part-time jobs prominent

Part-time employment (less than 30 hours per week) is another notable feature of minimum wage work, with a rate almost seven times higher than full-time (Table 6). In fact, 60% of minimum wage workers worked part time, compared with less than 20% of all employees (Chart C).

Part-time was even more apparent among teenagers and young adults. This group made up almost four-fifths of all part-time minimum wage workers, reflecting the large number of students among the ranks. Indeed, the vast majority of young minimum wage workers worked part time because they were attending school. In relative terms, almost 1 in 4 young peo-

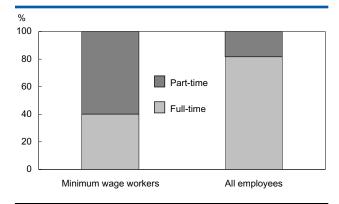
ple working part time earned minimum wage. This rate was higher among women than men.

By contrast, only one-third of minimum wage workers 25 and older worked part time. These workers cited economic reasons (business conditions, could not find full-time work), personal preference, and personal or family responsibilities as the main reasons.

### Most jobs are short-term

More than half of all minimum wage workers had been in their current job for no more than one year, compared with only 22% of all employees (Table 7). Many of these jobs are occupied by students and other young people at the start of their careers. With more education and experience, these workers move into better paying jobs. Indeed, working for minimum

Chart C: Almost 60% of minimum wage workers worked part time, compared with less than 20% of all employees.



Source: Labour Force Survey, 2003

wage was most prevalent among those who had been at their job for three months or less (1 in 9), and least common among those who had been there for more than five years (1 in 80). Again, the pattern holds for those 25 and over (Table 3).

Table 5: Minimum wage workers by industry

	Total	Minir	num wage
	Total employees	Total	Incidence
	'000	'000	%
Industry	13,333.2	547.0	4.1
Goods-producing Agriculture Forestry, fishing, mining, oil and gas Utilities Construction Manufacturing	3,338.7 120.2 239.0 131.4 643.9 2,204.2	43.6 12.4 3.1 F 6.9 20.7	1.3 10.3 1.3 F 1.1 0.9
Service-producing Trade Transportation and warehousing Finance, insurance, real estate and leasing Professional, scientific and technical Business, building and other support* Education Health care and social assistance Information, culture and recreation Accommodation and food Other Public administration	9,994.5 2,159.5 628.7 788.7 652.8 468.6 1,001.1 1,481.6 595.6 921.5 481.6 814.9	503.4 173.8 11.0 17.7 8.7 16.2 17.9 25.8 32.0 159.8 32.3 8.2	5.0 8.0 1.7 2.2 1.3 3.5 1.8 1.7 5.4 17.3 6.7 1.0

Source: Labour Force Survey, 2003

<sup>\*</sup> Previously called management of companies, administrative and other support services.

Table 6: Minimum wage workers by full-time/ part-time status

	Total	Mini	mum wage
	employees	Total	Incidence
	'000	'000	%
Total	13,333.2	547.0	4.1
Men	6,819.9	198.5	2.9
Women	6,513.3	348.5	5.4
Full-time	10,893.5	219.4	2.0
Men	6,104.0	85.2	1.4
Women	4,789.5	134.1	2.8
Part-time Men Women	<b>2,439.7</b> 716.0 1.723.7	<b>327.7</b> 113.3 214.4	<b>13.4</b> 15.8 12.4
vvomen	1,723.7	214.4	12.4

Source: Labour Force Survey, 2003

### Employed by both large and small firms but rarely unionized

Almost equal numbers of minimum wage workers were employed by large firms (more than 500 employees) and small firms (less than 20 employees). Together they accounted for three-quarters of all minimum wage workers in 2003 (Table 7). The incidence

Table 7: Minimum wage workers by job tenure, firm size and union coverage

	Takal	Minimu	m wage
	Total employees	Total	Incidence
	'000	'000	%
Job tenure	13,333.2	547.0	4.1
1 to 3 months	965.9	113.3	11.7
4 to 6 months	850.9	85.6	10.1
7 to 12 months	1,156.6	96.7	8.4
13 to 60 months	4,473.4	182.2	4.1
61+ months	5,886.5	69.2	1.2
Firm size	13,333.2	547.0	4.1
Less than 20 employees	2,627.8	199.7	7.6
20 to 99 employees	2,153.6	89.1	4.1
100 to 500 employees	1,928.9	48.8	2.5
More than 500 employees	6,623.0	209.4	3.2
Union membership Union member or covered	13,333.2	547.0	4.1
by collective agreement Non-member and not covered	4,318.6	45.7	1.1
1 to 3 months 4 to 6 months 7 to 12 months 13 to 60 months 61+ months Firm size Less than 20 employees 20 to 99 employees 100 to 500 employees More than 500 employees Union membership Union member or covered	9,014.6	501.3	5.6

Source: Labour Force Survey, 2003

of working for minimum wage, however, was highest among workers in small firms (1 in 13). This likely stems from lower unionization rates and weaker bargaining power found in smaller firms—only 8% of minimum wage workers were covered by a collective agreement, compared with 32% of all employees. Indeed, only 1 in 90 union members worked for minimum wage or less, compared with 1 in 20 non-union members. The large number of part-time workers, students and other young people working for minimum wage, combined with their sizeable presence in smaller firms, tends to inhibit the ability of these workers to organize and thereby command better wages (Akyeampong 1989).

### Most live with parents

Since most Canadians belong to families, an individual earning minimum wage or less is not necessarily economically disadvantaged. However, low wages for the primary wage-earner could affect the economic well-being of all family members. A closer look at the family status of minimum wage workers provides insight into the earning power (or lack thereof) of the family as a whole.

Almost two-thirds of all minimum wage workers in 2003 lived with parents or other family members (Table 8), again reflecting the large number of mini-

mum wage workers under 25 and in school. This is often a temporary situation until the completion of education and the accumulation of experience. The incidence of working for minimum wage in this group was three times the overall rate. Indeed, sons, daughters and other relatives living with family had some of the highest rates, particularly those under 20 and those attending school.

One-quarter of all minimum wage workers were part of a couple. However, the incidence rate for this group was only 1 in 60. More than three-quarters had employed spouses, most earning more than minimum wage. This may in part reflect women who take lower-paying part-time work while caring for young children (Statistics Canada 1998).

#### Data source and definitions

The Labour Force Survey (LFS) is a monthly household survey of about 54,000 households across Canada. Demographic and labour force information is obtained for all civilian household members 15 years of age and older. Excluded are residents of institutions, persons living on Indian Reserves, and residents of the Territories.

Every province and territory stipulates a minimum wage in its employment standards legislation. It is an offence for employers to pay eligible employees less than the set rate, regardless of how remuneration is calculated (hourly, daily, weekly, monthly, or on a piecework basis). Likewise, employees are prohibited from accepting pay that is less than the applicable minimum. The minimum wage rate varies from province to province, and a change can become effective in any month of the year. For example, effective May 1, 2002, Newfoundland and Labrador raised its minimum wage rate to \$5.75. This was followed shortly by an increase to \$6.00, effective November 1, 2002.

The self-employed are not covered by minimum wage legislation and as such are not included in the analysis. Unpaid family workers are also excluded.

Other exclusions and special coverage provisions vary and include young workers (Ontario and Newfoundland and Labrador), workers with disabilities (Alberta, Manitoba and Saskatchewan; rarely used), domestic and live-in care workers (New Brunswick, Prince Edward Island, Manitoba and Quebec), farm labour (Alberta, Manitoba, Ontario and Saskatchewan), and home-based workers (for example, teleworkers, and pieceworkers in the clothing and textile industry). Other specific minimum wage rates cover nonhourly and tip-related wage rates (for example, Ontario sets a minimum wage rate of \$5.95 for employees who serve alcoholic beverages in licensed establishments). A more complete description of exclusions and special rates is available from Human Resources and Development Canada's database on minimum wages-Internet: www110.hrdcdrhc.gc.ca/psait\_spila/lmnec\_eslc/eslc/salaire\_minwage/ intro/index.cfm/doc/english.

The number of employees working for minimum wage was calculated using the applicable minimum wage for experienced adult workers (also known as the general adult rate) for each province for each month of 2003. The average of these 12 monthly observations provides the annual estimate for each province, while the total for Canada is the sum of the provincial estimates.

The annual average of the monthly minimum wage rates was not chosen since it would lead to over/under coverage resulting from the inclusion/exclusion of employees whose hourly earnings were slightly above or below the actual minimum wage rate applicable in a given month. In addition, the use of one month to represent the whole year was not selected in order to control for fluctuations in highly seasonal industries and those dependent on minimum wage work such as accommodation and retail sales. Moreover, because a change in the minimum wage rate can occur at any point within the year, choosing one month could fail to capture the month in which a change in the minimum wage rate became effective.

To determine whether an employee worked at or below the general adult rate wage for each province, hourly earnings were calculated using the reported wage or salary before taxes and other deductions. If the wage or salary including tips, commissions and bonuses was reported hourly, it was used directly. Other wage rates were converted to an hourly rate using the usual weekly hours of work. In principle, tips, commissions and bonuses should have been excluded to capture only those whose true base hourly wage was at or below the provincial general adult rate, but the required information is not collected. The result is a slight downward bias in the number of paid workers working at or below the official general adult rate set by each province. However, none of the exclusions or special minimum wage rates (such as special minimum wage rates for tip earners and young workers) were used, which introduces an upward bias.

Of particular interest are the 27,000 heads of family with no spouse, working at or below minimum wage. Although they make up only a small proportion of all minimum wage workers (5%) and are no more likely to be earning minimum wage than other individuals (1 in 30 versus 1 in 25), almost all had at least one child under the age of 18 to support. Additionally, some 31,000 minimum wage workers had a spouse who was not employed. While their incidence rate is not alarming, as sole family providers (and barring income from other sources), these individuals would be hard-pressed to support more than one person. Another 28,000 minimum wage workers living alone may also have had difficulty supporting themselves.

### Summary

Minimum wage legislation continues to generate heated debate among supporters and detractors alike. Although both sides agree that the needs of those at the bottom end of the wage scale should be addressed, they disagree on how it should be accomplished. To evaluate the effects of a change to the minimum wage, it is important to understand who these minimum wage workers are and the types of jobs they hold.

In 2003, some 547,000 workers worked at or below the minimum wage set by their province. Overall, more women, young people, students and part-time

Table 8: Minimum wage workers by family status

	T. (.)	Minim	Minimum wage		
	Total employee	Total	Incidence		
	'000	'000	%		
Total	13,333.2	547.0	4.1		
Member of a couple	7,901.1	137.3	1.7		
Spouse not employed	1,543.8	31.0	2.0		
Spouse unemployed	343.1	8.7	2.5		
Spouse not in the labour force	1,200.7	22.3	1.9		
Less than 55	804.9	12.1	1.5		
55 and over	395.8	10.2	2.6		
Spouse employed	6,357.3	106.3	1.7		
Earning minimum wage or less	84.2	5.6	6.7		
Earning more than minimum wage	5,394.0	79.3	1.5		
Self-employed	879.1	21.4	2.4		
Head of family, no spouse present	824.3	27.0	3.3		
Youngest child less than 18	702.3	24.3	3.5		
No children, or children 18 or older	122.1	2.8	2.3		
Son, daughter or other relative					
living with family	2,667.4	332.4	12.5		
15 to 19, in school	468.7	163.4	34.9		
15 to 19, not in school	339.7	84.4	24.8		
20 to 24, in school	233.4	23.2	9.9		
20 to 24, not in in school	631.2	34.0	5.4		
25 or over, in school	53.6	3.2	6.0		
25 or over, not in school	940.7	24.2	2.6		
Unattached individual	1,940.4	50.4	2.6		
Living alone	1,314.8	28.0	2.1		
15 to 24	95.1	5.3	5.6		
25 to 54	1,031.0	16.4	1.6		
55 and over	188.7	6.3	3.3		
Living with non-relatives	625.5	22.4	3.6		
15 to 24	179.2	10.8	6.0		
25 to 54	421.6	10.5	2.5		
55 and over	24.8	F	F		

Source: Labour Force Survey, 2003

workers are minimum wage workers. They are concentrated in accommodation, food and trade industries, and in large and small firms. They are rarely unionized and tend to hold these jobs for less than a year. Most live with parents or other relatives.

Nevertheless, a sizeable proportion of minimum wage workers are in their core working years (25 to 54) and work full time. Also of interest are minimum wage workers who are the sole employed household member, particularly those responsible for a spouse, at least one child

under 18, or both. These workers in particular may find it hard to make ends meet.

### **Perspectives**

### ■ Notes

1 This model assumes the existence of competitive markets for labour and the absence of market power in the determination of wages. That is, it presumes that both employers and workers are wage takers and that the equilibrium wage rate is determined by the equality of the cumulative demand for workers and the availability of workers with the necessary qualifications.

This argument has been challenged empirically, most notably by Card and Krueger (1994) in their case study of the fast food industry in New Jersey and Pennsylvania. That study found no evidence that the rise in New Jersey's minimum wage reduced employment at fast-food restaurants in the state. In fact, the increase in the minimum wage increased employment. Moreover, meal prices increased in New Jersev relative to Pennsylvania (where the minimum wage was constant), suggesting that much of the burden of the minimum wage increase was passed on to consumers.

- 2 Since December 1996, the minimum wage rate applicable to workers under federal jurisdiction has been the general adult minimum wage rate of the province or territory where the work is performed.
- 3 Several provinces have scheduled increases to their minimum wage rates for 2004, and some have planned increases even further into the future. Prince Edward Island has scheduled increases to \$6.50, effective January 1, 2004 and \$6.80, January 1, 2005; Nova Scotia, \$6.50, April 1, 2004; New Brunswick, \$6.20, January 1, 2004; Manitoba, \$7.00, April 1, 2004; Quebec, \$7.45, May 1, 2004; \$7.60, May 1, 2005; and Ontario, \$7.15, February 1, 2004; \$7.45, February 1, 2005; \$7.75, February 1, 2006; and \$8.00, February 1, 2007. (Ontario's minimum wage had remained unchanged since 1995.)
- 4 Ontario has a special minimum wage rate of \$6.40 for students under 18 working up to 28 hours a week or during a school holiday. In 2003, there were approximately 50,000 such students whose hourly earnings fell below the general adult rate but were above or equal to the student minimum wage rate.
- 5 None of the other exclusions or special rates were used in the estimation of minimum wage workers in this paper. See *Data source and definitions* for a more complete discussion.

- 6 Another factor is the minimum wage differential for special categories of workers such as students and tip earners and other exceptions, which also differ across provinces. For example, Ontario's minimum wage legislation specifies a special minimum wage rate of \$6.40 for students under the age of 18 working up to 28 hours a week or during a school holiday. Removing these individuals would result in a provincial rate of 2.5% versus 3.5% using the general adult rate.
- 7 The student estimate is based on an eight-month average (January to April and September to December, 2003).
- 8 The estimate for students with summer jobs is based on an average of the summer months (May to August, 2003) and refers to students working in the summer but planning to return to school full time in the fall.
- 9 Prior to 1980, this deduction was available only to owners of incorporated businesses. Several conditions must be met: The spouse must actually be paid a wage or salary; the work done must be necessary to produce income; if the spouse were not employed, the work would have to be performed by hired help; and the wages paid must be reasonable.

### **■** References

Akyeampong, Ernest. 2003. "Unionization." Fact sheet. *Perspectives on Labour and Income* (Catalogue no. 75-001-XPE) 15, no. 3 (Autumn): 48-55.

Akyeampong, Ernest. 1989. "Working for minimum wage." *Perspectives on Labour and Income* (Statistics Canada, Catalogue no. 75-001-XPE) 1, no. 3 (Winter): 8-20.

Battle, Ken. 2003. Minimum wages in Canada: A statistical portrait with policy implications. Ottawa: Caledon Institute of Social Policy.

Black, Errol and Lisa Shaw. 1998. The case for a strong minimum wage policy. The Canadian Centre for Policy Alternatives.—Manitoba. Internet: www.policy alternatives.ca/mb.

Card, David and Alan B. Krueger. 1994. "Minimum wages and employment: A case study of the fast food industry in New Jersey and Pennsylvania." *American Economic Review* 84, no. 4: 772-793.

Carrington, William J. and Bruce C. Fallick. 2001. "Do some workers have minimum wage careers?" *Monthly Labor Review* 124, no. 5 (May): 17-27.

Duchesne, Doreen. 2004. "More seniors at work." *Perspectives on Labour and Income* (Statistics Canada, Catalogue no. 75-001-XIE) 5, no. 2. February 2004 online edition.

Duchesne, Doreen. 1989. The decline of unpaid family work in Canada. Labour Analytic Report no. 2. Ottawa: Statistics Canada.

Goldberg, Michael and David Green. 1999. Raising the floor: The social and economic benefits of minimum wages in Canada. Canadian Centre for Policy Alternatives.

Human Resources Development Canada (HRDC). 2001. Database on Minimum Wages. Internet: www110.hrdc-drhc.gc.ca/psait\_spila/lmnec\_eslc/eslc/salaire\_minwage/intro/index.cfm/doc/english.

Law, Marc T. 1999. The economics of minimum wage laws. Fraser Institute Public Policy Sources. Number 14. Internet: oldfraser.lexi.net/publications/pps/14.

Law, Marc T. and Fazil Mihlar. 1998. Is there a youth unemployment crisis? Fraser Institute Public Policy Sources. Number 8. The Fraser Institute. 1998. Internet: oldfraser.lexi.net/publications/pps/8.

Sarlo, Chris. 2000. The minimum wage and poverty: A critical evaluation. Report for the Canadian Restaurant and Foodservices Association. Internet: www.crfa.ca/issues\_minimum\_wage.shtml.

Shannon, Michael T. and Charles M. Beach. 1995. "Distributional employment effects of Ontario minimum-wage proposals: A microdata approach." *Canadian Public Policy* 21, no. 3: 284-303.

Statistics Canada. 1998. A new perspective on wages—Labour Force Update (Statistics Canada, Catalogue no. 71-005-XPB) 2, no. 3 (Summer).

## Permanent layoff rates

### René Morissette

In 1996, the New York Times published a series of articles, "Downsizing of America," arguing that more intense competition and computer-based technological changes were inducing many companies to reduce costs and lay off workers, even ones with considerable seniority. Not surprisingly then, a recent study using the 1977 to 1996 U.S. General Social Survey showed that during the 1990s, U.S. workers were more pessimistic than their counterparts in the 1980s about losing their jobs (Schmidt 1999).

Since the mid-1990s, media reports of mass layoffs in large, often profitable companies have been common. Presumably, globalization has opened new market opportunities for some firms while confronting others with greater competition from abroad. In this context, many Canadians may ask whether they now face a greater chance than two decades ago of losing their job.

Layoffs cause general uncertainty. For example, families with unstable earnings may need to change their consumption and savings patterns. Workers who cannot transfer their defined-benefit pension plans to other plans may find their retirement income affected. And displaced workers often require retraining.

Job security can be viewed as a function of two components: the risk of layoff and the costs associated with layoff, measured by the earnings loss of displaced workers (OECD 1997). This article focuses on the first component, using the Longitudinal Worker file (LWF) to determine if permanent layoff rates rose between the 1980s and the 1990s (see *Data source and concepts*). But what were the chances of finding a new job in the event of a layoff? This issue is looked at by examining hiring rates and permanent quit rates during the same period.

René Morissette is with the Business and Labour Market Analysis Division. He can be reached at (613) 951-3608 or perspectives@statcan.ca.

### Data source and concepts

The Longitudinal Worker File (LWF) is a 10% random sample of all workers constructed from four sources: the Record of Employment (ROE) from Human Resources Development Canada (worker separations), the T1 (individual tax returns) and T4 (reported wages and salaries) from the Canada Customs and Revenue Agency, and the Longitudinal Employment Analysis Program (longitudinal company data) from Statistics Canada.

The Employment Insurance Act requires every employer to issue an ROE when an employee working in insurable employment has an interruption in earnings. The ROE determines qualification for Employment Insurance (EI) benefits, the benefit rate, and the duration of a claim. An ROE must be issued even if the employee does not intend to file a claim for EI benefits. Because the ROE indicates the reason for the work interruption or separation, it can be used to count separations from firms by reason.

All employers must register with the Canada Customs and Revenue Agency and issue an annual T4 slip to each employee. The T4 files cover virtually all Canadian workers. Thus, workers at risk of separation are known from the T4 files, and those who actually separate are known from the ROE files.

Job separations are classified into three categories: quits, layoffs and other separations. Layoffs are separations caused by shortage of work. Permanent layoffs are those where the separated worker does not return to the same employer in the same or following year.<sup>2</sup> Other separations are those resulting from a strike or lockout, a return to school, illness or injury, pregnancy or adoption, retirement, work sharing, apprentice training, dismissal, or other reasons. Permanent separation rates are permanent separations divided by total person-jobs in the year.

The hiring rate is hires divided by person-jobs. Hires are the permanent separations in a given year plus the net change in employment between that year and the next. That is, hires are determined indirectly by adding replacement demand (permanent separations) and expansion demand (the net increase in employment).

The large sample size of the LWF allows a very detailed level of analysis of job separations (for example, detailed age group, firm size, province, or industry).

### Job stability and job loss

Job stability fell between 1977 and 1993, particularly for jobs with initial tenure of less than one year. However, between 1993 and 2001 the trend reversed. As a result, no long-term trend towards declining job stability was evident for any age, sex or education group over the whole period (Heisz 2002).

Over the 1978-1994 period, years that were comparable in the business cycle showed no general upward trend in permanent layoff rates. However, the probability of permanent layoffs increased among older and highly paid workers (Picot and Lin 1997).

An analysis of the incidence of job loss in the United States between 1981 and 2001 concluded that "while there was no secular increase in overall rates of job loss, there was a secular increase in the rate of job loss for the older and more educated, due largely to an increase in job loss to position/shift abolished," rather than from a rise in plant closings, slack work or other reasons—a pattern consistent with the notion of 'downsizing' (Farber 2003, 13).

Job stability and job loss are two distinct concepts. Job stability implicitly incorporates both layoff rates (rates of job loss) and quit rates. Measured by average job duration or retention rates, job stability could remain unchanged if an increase in layoff rates were accompanied by a decrease in quit rates;<sup>3</sup> for example, an increase in job-loss rates in conjunction with a decrease in hiring rates or heightened insecurity among workers might induce many to remain in their job. Thus, the absence of a long-term trend toward declining job stability is not necessarily inconsistent with an increase in permanent layoff rates.

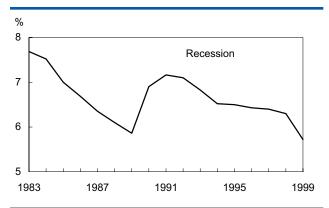
### Permanent layoffs, 1983-1999

The concept of permanent layoff applies only to employees. Permanent layoffs rise in recessions and fall during expansion periods. Structural changes in permanent layoff rates can be determined by comparing years that are roughly at the same point in the business cycle. Between 1983 and 1999, the economy went through two full business cycles, which were reflected in the unemployment rate of men aged 25 to 54. The rates in 1989 and 1999 were very similar (6.3% and 6.5% respectively). Furthermore, the overall unemployment rate in 1999 was 7.6%, very close to the 7.5% in 1989. The question then is whether permanent layoff rates were higher in 1999 than in 1989.

To ensure a consistent time series of permanent layoff rates, both the jobs for which employers issue a T4 slip and the jobs for which they are required to issue an ROE must be fairly consistent. However, both changed slightly during the 1983-1999 period. But, selecting jobs with an annual wage of at least \$500 in 1989 dollars (\$621 in 1999 dollars) allows permanent layoffs to be measured on a consistent basis.<sup>4</sup> Following the 1981-82 recession, permanent layoff rates fell, reaching a low of 5.9% in 1989 (Chart A). They rose again with the 1990-92 recession but ended the 1990s at 5.7%.

Even with higher cutoffs (from \$1,000 to \$5,000 in 1989 dollars), permanent layoff rates displayed no upward trend—although the values of the permanent layoff rates fall as higher cutoffs are used.

Chart A: Permanent layoff rates\* fall during expansions and rise in recessions.



Source: Longitudinal Worker File

\* Jobs paying at least \$500 in 1989 dollars

Like permanent layoff rates, temporary layoff rates were very similar in 1989 and 1999 (Table 1). However, hiring rates were generally lower during the second half of the 1990s than during the second half of the 1980s. And, permanent quit rates were only 7.3% in 1999, almost 2 percentage points lower than in 1989.

Permanent layoff rates were higher in 1999 than in 1989 by half a percentage point or more for men 55 to 64 and women 35 to 44 (Table 2). No other agesex group showed a sizeable increase.

Compared with 1989, permanent layoff rates in 1999 were generally higher by half a percentage point or more in business services and distributive services.

Table 1: Separation and hiring rates\*

		Hiring	Tempo- rary lay-			
	Total	Layoffs	Quits	Other	rates	off rates
				%		
1983	19.5	7.7	5.4	6.5		9.6
1985	21.3	7.0	7.0	7.3	24.6	8.5
1987	22.4	6.4	8.7	7.3	25.3	7.8
1989	22.3	5.9	9.2	7.2	25.0	7.3
1991	20.2	7.2	5.8	7.1	17.7	9.5
1993	18.4	6.8	4.8	6.8	18.0	9.3
1995	18.6	6.5	5.4	6.8	19.1	9.0
1997	18.6	6.4	6.2	6.0	23.3	8.5
1999	19.1	5.7	7.3	6.0	21.8	7.8

However, rates did not increase in either manufacturing or primary industries/construction. These patterns were observed for both men and women.

In large private-sector firms (500 or more employees), permanent layoff rates rose between 1989 and 1999—from 3.3% to 4.0% for men and from 1.9% to 2.5% for women. In contrast, in firms with fewer than 20 employees—whose rates were at least three times higher than those in large firms (except in 1999)—rates showed no increase during the period.

While permanent layoff rates of highly paid men (\$50,000 or more in the year prior to the layoff) did not rise, the raw data show some evidence of rising layoff rates among highly paid women.

The only sizeable increases in job loss took place in Newfoundland and Labrador, and Prince Edward Island; these provinces saw their permanent layoff rates rise by about 2 percentage points between 1989 and 1999.<sup>5</sup> Nova Scotia experienced a slight increase, while the remaining provinces were unchanged or had slight declines. Hence, for most workers and most provinces, permanent layoff rates were no higher at the end of the 1990s than at the end of the 1980s.

### Multivariate analysis

To assess whether the patterns hold for workers of similar ages holding comparable jobs, logit models were run to estimate the probability of being laid off in a given year (Table 3). Separate regressions were run for 10 age-sex groups. The dependent variable equals 1 when a job ends with a permanent layoff, 0 otherwise.

For each group, two models were defined. The first used the regressors age, age squared, province, and a vector of year effects covering the 1983-1999 period (1989 being omitted). The second model added controls for industry (six categories) and firm size (four categories).<sup>6</sup>

Model 1 showed that between 1989 and 1999, the probability of being permanently laid off increased significantly (at the 5% level) for men aged 35 to 44 and 55 to 64. However, the increases were modest—0.3 and 0.6 percentage points respectively. Women 25 to 34 and 35 to 44 also experienced increases—0.3 and 0.5 points respectively. Although moderate in absolute terms, the increase for women 35 to 44 is not negligible in relative terms, amounting to 16% (since their permanent layoff rate was just 3.2% in 1989). In contrast, men 15 to 24 saw their risk of job loss fall by 1 percentage point. Hence, only men 55 to 64 and women 35 to 44 experienced increases of half a percentage point or more between 1989 and 1999.

Since layoff rates vary across industries and are higher in small firms than in larger ones, changes in the distribution of employment by industry and firm size may affect the risk of job loss experienced by Canadian workers. The extent to which this occurred is assessed in model 2.

Changes in the distribution of employment by industry and firm size accounted for only a small portion of the increased risk of job loss experienced by men aged 55 to 64 and women 35 to 44. Most of the increase in job loss observed for these two groups remained when controls for industry and firm size were added in model 2. A similar conclusion holds for women 25 to 34.

In contrast, compositional effects accounted for all the increased risk of job loss faced by men 35 to 44. Their probability of being permanently laid off no longer increased after controlling for industry and firm size.

The risk of job loss rose by about 0.5 percentage points for workers—both men and women—aged 45 to 54, after controlling for industry and firm size. The lack of increase in the likelihood of job loss in model 1 suggests that changes in the distribution of employment by industry and firm size, which occurred between 1989 and 1999, tended to *decrease* layoff rates of these workers.

<sup>\*</sup> Jobs paying at least \$500 in 1989 dollars.

Table 2: Permanent layoff rates\* by various characteristics

	1983	1985	1987	1989	1991	1993	1995	1997	1999
					%				
Total	7.7	7.0	6.4	5.9	7.2	6.8	6.5	6.4	5.7
Men	9.7	8.8	8.1	7.7	9.4	8.8	8.5	8.1	7.5
15 to 24	11.8	10.4	9.2	8.3	10.2	9.5	9.2	8.4	7.6
25 to 34	10.5	9.4	8.7	8.1	10.5	9.8	9.1	8.7	7.8
35 to 44	8.3	7.6	7.3	7.1	8.7	8.3	8.0	7.9	7.3
45 to 54	7.7 7.1	7.4 7.2	6.8 6.9	6.7 7.4	7.9	7.6 8.1	7.4	7.4	7.0 8.1
55 to 64					8.5		8.4	8.3	
Women	5.0	4.6	4.2	3.8	4.6	4.5	4.2	4.5	3.9
15 to 24 25 to 34	6.3 5.0	5.8 4.6	4.9 4.4	4.3 4.0	5.2 5.0	5.2 4.9	5.1 4.5	5.1 5.0	4.3 4.2
35 to 44	3.9	3.9	3.5	3.2	4.2	4.9	3.8	4.3	3.7
45 to 54	3.9	3.6	3.3	3.1	3.9	3.7	3.3	3.7	3.3
55 to 64	3.9	3.6	3.5	3.5	4.3	4.5	3.8	4.3	3.6
Province									
Newfoundland and Labrador	16.1	17.2	16.9	15.8	17.0	17.2	14.0	14.8	18.0
Prince Edward Island	12.2	12.4	11.8	12.2	12.7	12.0	12.3	14.9	14.3
Nova Scotia	8.7	9.1	8.4	8.2	8.7	8.7	8.9	8.4	8.7
New Brunswick	12.0	11.8	11.7	11.4	11.9	12.4	11.8	11.8	11.2
Quebec	8.5	8.3	7.6	7.3	8.3	7.7	7.5	8.0	6.5
Ontario	5.6	4.8	4.1	3.9	5.5	4.9	4.6	4.7	3.9
Manitoba	5.4	5.1 6.1	5.0 6.6	4.4 5.7	5.2 6.5	5.3 6.3	4.7 5.8	4.5 5.5	4.4 5.5
Saskatchewan Alberta	6.6 9.9	7.5	7.2	5.7 6.1	7.1	7.3	5.6 6.9	5.6	5.9
British Columbia	9.4	9.1	8.2	7.2	8.3	7.8	7.7	7.4	6.7
Industry									
Primary and construction	23.6	22.1	21.1	20.5	23.8	23.1	22.5	20.7	20.0
Manufacturing	7.4	6.7	5.7	5.9	8.0	6.9	6.6	6.1	5.4
Distributive services	5.5	5.3	5.2	4.2	6.0	5.8	5.2	5.3	4.8
Business services	6.1	5.5	4.6	4.2	5.9	5.6	5.5	5.4	5.1
Consumer services	7.5	6.4	5.4	4.4	5.9	5.8	5.5	5.2	4.7
Public services	2.5	2.6	2.4	2.0	2.3	2.6	2.2	3.3	2.3
Firm size									
1 to 19 employees	13.7	12.6	11.4	10.2	12.0	12.0	11.3	10.6	9.6
20 to 99	9.9	9.0	7.9	7.6	9.5	8.6	8.6	8.0 6.2	7.3
100 to 499 500 or more	7.3 3.4	6.2 3.0	5.8 2.7	6.0 2.4	7.5 3.0	6.0 2.9	6.0 2.6	3.1	5.3 2.7
Firm size – private sector	0.4	0.0	2.1	2.7	3.0	2.5	2.0	0.1	2.1
Men 15 to 64 1 to 19 employees	17.7	16.3	14.9	13.4	16.3	16.1	15.0	14.1	12.8
20 to 99	17.7	11.9	10.5	10.2	12.8	11.4	11.6	10.2	9.5
100 to 499	10.9	9.2	8.4	9.1	11.5	8.8	8.7	8.5	7.6
500 or more	5.0	4.0	3.6	3.3	4.6	4.1	3.9	3.9	4.0
Women 15 to 64									
1 to 19 employees	9.9	9.4	8.4	7.5	8.9	8.7	8.3	7.9	7.3
20 to 99	6.9	5.8	5.0	4.9	6.5	6.1	5.6	5.6	5.1
100 to 499	5.4	4.3	3.9	3.9	5.3	4.7	4.4	4.3	3.8
500 or more	2.9	2.6	2.3	1.9	2.7	2.5	2.3	2.5	2.5
Earnings**									
Less than \$20,000	10.5	10.0	8.9	7.9	9.4	9.9	9.3	8.8	7.6
\$20,000 to \$50,000	5.3	4.3	4.1	4.3	5.6	4.5	4.4	4.7	4.4
\$50,000 or more	4.1	1.9	1.9	2.4	3.5	2.1	1.7	2.2	2.2

Source: Longitudinal Worker File

\* Jobs paying at least \$500 in 1989 dollars.

\*\* Total earnings (in 1999 dollars) in the year prior to layoff.

Table 3: Logit models of permanent layoffs by age and sex

Permanent		
in 1989	Model 1	Model 2
%	% p	oint
8.3	-1.0	-0.5
8.1	-0.3	0.0*
7.1	0.3	0.0*
6.7	0.2*	0.4
7.4	0.6	0.4
4.3	-0.1	0.0*
4.0	0.3	0.3
3.2	0.5	0.5
3.1	0.1*	0.5
3.5	0.0*	0.2*
	layoff rate in 1989	Rayoff rate in 1989 Model 1

Note: For each group, marginal effects for the year 1999 are evaluated at a probability equal to the average permanent layoff rate of 1989. Model 1 controls for age, age squared, province and a vector of year effects. Model 2 adds industry (6 categories) and firm size (4 categories).

Taken together, the descriptive evidence and the statistical models provide little evidence that chances of job loss increased substantially between the 1980s and the 1990s.

Only men aged 55 to 64 and women 35 to 44 saw their risk of job loss increase by half a percentage point or more between 1989 and 1999. However, some segments of the economy may have experienced greater risk than others.

Three questions arise. First, were men and women of a given age and employed in a given industry more likely to be permanently laid off in 1999 than in 1989? Some industries did indeed experience growing risks of job loss (Table 4). While the risk generally decreased in goods-producing industries and changed very little in consumer services, it rose by at least half a percentage point in distributive services, business services and public services.<sup>8</sup>

Second, did firm size affect these rates? Large firms in the private sector laid off workers at a greater rate in 1999 than in 1989. The risk of permanent layoff in these firms rose by 0.7 percentage points for men and 0.6 points for women. This is not negligible since it represents an increase of at least 20% in relative terms

(the permanent layoff rate in large firms in 1989 was 3.3% for men and 1.9% for women). In 1999, large firms accounted for one-third of private-sector employment. 10

Third, did highly paid workers see their chances of being laid off rise? Highly paid women in the private sector experienced an increase of at least half a percentage point in their risk of layoff. Since their permanent layoff rate in 1989 was only 1%, their chances of being laid off remained fairly low by the end of the 1990s. No evidence of increased chances was found for highly paid men.

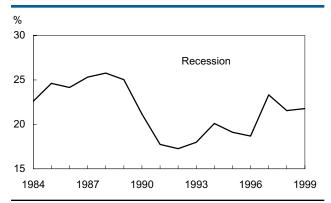
Hence, while permanent layoff rates did not rise substantially between the 1980s and the 1990s, workers in some sectors did experience growing chances of losing their jobs.

### Hiring rates, permanent quit rates and job stability

In the first half of the 1990s, hiring rates were relatively low compared with after the 1981-82 recession (Chart B). Between 1995 and 1999, rates averaged 21%, much lower than the 25% during the 1985-1989 period.

In most provinces, hiring rates were substantially lower in the second half of the 1990s than in the second half of the 1980s. For instance, in Ontario they were about 21% in 1997, fully 4 percentage points below 1987. Rates in British Columbia were 20% in 1999, almost 10 points lower than in 1989. This suggests that while

Chart B: Hiring rates\* were lower in the 1990s than in the 1980s.



Source: Longitudinal Worker File

\* Jobs paving at least \$500 in 1989 dollars

<sup>\*</sup> Coefficient for the year 1999 not statistically significant at the 5% level (two-tailed test).

<sup>\*\*</sup> How much did the probability of being permanently laid off change between 1989 and 1999?

Table 4: Logit models of permanent layoffs by industry, firm size and earnings

	M	len	Wo	omen
	Permanent layoff rate in 1989	layoff rate of layoff		Change in risk of layoff 1989-1999**
	%	% point	%	% point
Industry		· ·		•
Primary and construction	on 22.2	-0.4	12.7	-1.0*
Manufacturing	6.1	-0.3	5.7	-0.3
Distributive services	4.4	0.9	3.8	0.5
Business services	5.6	0.7	3.2	1.1
Consumer services	5.0	0.3	4.0	0.1
Public services	2.3	0.8	1.8	0.7
Firm size - private se	ctor			
1 to 19 employees	13.4	-1.2	7.5	-0.4
20 to 99 employees	10.2	-1.1	4.9	0.1*
100 to 499 employees	9.1	-1.7	3.9	-0.1*
500 or more employees	3.3	0.7	1.9	0.6
Highly paid workers†				
All industries	2.7	0.1*	0.4	0.3
Private sector	3.6	0.1*	0.9	0.7

the 1990s than in the 1980s. Indeed, between 1989 and 1999, permanent quit rates in Canada fell from 9.2% to 7.3% (Table 6). Decreases were observed for all age groups, all major industry groups, all size classes, and all provinces except Prince Edward Island and New Brunswick. In absolute terms, permanent quit rates fell most in Ontario and British Columbia, 3.1 and 2.5 percentage points respectively. In relative terms, they fell by at least 25% in these two provinces as well as in Newfoundland and Labrador.

The drop in quit rates was not simply caused by the aging of the workforce. For all age groups, logit models of permanent quits still showed a substantial decrease in the probability of quitting even after controlling for age, age squared, and province of work. Between 1989 and 1999, the probability of quitting fell between 0.7 and 2.2 percentage points for women and between 0.4 and 1.9 points for men (Table 7). For most

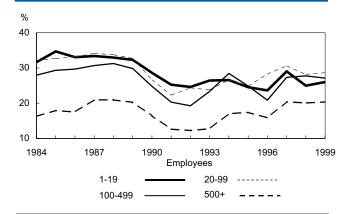
chances of being permanently laid off did not rise substantially between the 1980s and the 1990s, chances of finding a new job in the event of a layoff were considerably lower (Table 5).

In the private sector, hiring rates fell much more in small firms than in large firms. In firms with less than 20 employees, average hiring rates fell 23% between the 1985-1989 period and the 1995-1999 period (Chart C). In contrast, they fell only 4% in large firms.

The drop in hiring rates was not uniform across age groups. Workers aged 25 to 34 (both men and women) saw their average hiring rates fall by at least 15% between the 1985-1989 and 1995-1999 periods (Chart D). In contrast, men aged 45 to 54 experienced a 10% increase.

If labour market opportunities, measured by hiring rates, were lower in the 1990s, one might expect that employees quit their jobs less frequently in

Chart C: In the private sector, hiring rates\* fell more in smaller firms.



Source: Longitudinal Worker File
\* Jobs paying at least \$500 in 1989 dollars.

<sup>\*</sup> Coefficient for the year 1999 not statistically significant at the 5% level (two-tailed test).

<sup>\*\*</sup> How much did the probability of being permanently laid off change between 1989 and 1999? † Workers with total earnings of \$50,000 or more (in 1999 dollars) in the preceding year.

Note: Industry-specific logit models and firm size-specific logit models use the explanatory variables age, age squared, province, and year effects. Logit models for highly paid workers use age, age squared, industry, firm size, province, and a vector of year effects. All models are run separately for men and women. The private sector refers to all industries except public services.

Table 5: Hiring rates\* by province

	Nfld. Lab.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
						%				
1985	35.8	30.3	25.3	26.6	23.6	23.7	21.4	23.1	29.8	24.6
1987	35.2	30.8	25.2	28.0	24.5	25.3	21.8	20.8	27.0	26.5
1989	32.6	28.2	25.3	28.0	24.7	23.4	20.7	22.0	27.7	29.7
1991	30.0	24.4	18.8	21.8	17.8	14.1	15.3	19.0	21.7	23.2
1993	30.1	22.0	19.6	22.7	17.9	14.5	16.0	17.7	23.0	22.1
1995	25.0	27.7	20.6	23.4	18.9	16.8	17.9	19.4	22.8	21.1
1997	28.8	27.7	24.0	23.8	22.3	21.1	22.0	23.8	31.5	23.8
1999	25.2	25.5	22.6	26.2	23.2	21.0	19.7	19.7	24.6	20.4
1985-1989	34.6	30.0	25.5	27.3	24.2	24.2	21.3	22.1	27.6	27.3
1995-1999	26.0	26.1	21.7	24.0	21.1	18.9	19.8	20.4	25.7	21.2
% change	-24.9	-13.1	-15.0	-12.1	-12.7	-21.8	-7.1	-7.7	-6.7	-22.2

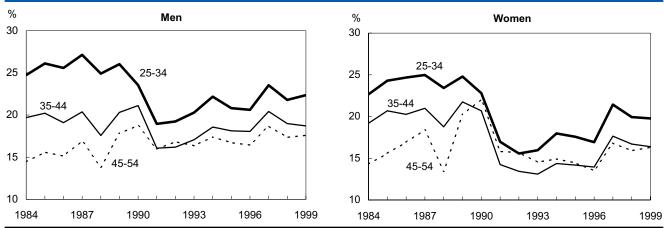
age groups, adding controls for industry and firm size did not attenuate these decreases. In fact, the probability of quitting fell between 16% and 21%—in relative terms—for workers aged 35 to 54 when these controls were added.<sup>11</sup>

Since people with greater seniority tend to quit less—likely reflecting a good match between job requirements and employee skills—one might argue that the decrease in quit rates was simply due to growing levels of seniority within age groups. This argument does

not hold for men. In 1999, their average levels of seniority were, in all age groups, no higher than in 1989 (Table 8). In contrast, women aged 35 and over had more seniority in 1999 than in 1989. Thus, part of the decrease in quit rates of women could be due to increased seniority.

For men aged 45 to 54, the fall in quit rates coupled with increased hiring rates suggests that other factors may have contributed to decreasing quit rates. For instance, legislative changes in Employment Insurance

Chart D: Hiring rates\* varied considerably by age and sex.



Source: Longitudinal Worker File

<sup>\*</sup> Jobs paying at least \$500 in 1989 dollars.

<sup>\*</sup> Jobs paying at least \$500 in 1989 dollars.

Table 6: Permanent quit rates\* by various characteristics

	1983	1985	1987	1989	1991	1993	1995	1997	1999
					%				
Total	5.4	7.0	8.7	9.2	5.8	4.8	5.4	6.2	7.3
Men	4.8	6.5	8.3	8.9	5.4	4.6	5.3	6.3	7.2
15 to 24	7.5	10.4	13.3	13.9	9.3	8.1	9.1	10.4	12.3
25 to 34	5.4	7.4	9.4	9.8	6.4	5.7	6.7	8.2	9.3
35 to 44	3.5	4.5	5.6	5.9	3.7	3.3	3.9	4.8	5.5
45 to 54	2.3	2.9	3.7	3.8	2.4	2.0	2.4	2.8	3.3
55 to 64	1.4	1.8	2.4	2.7	1.6	1.3	1.6	2.1	2.2
Women	6.3	7.8	9.3	9.6	6.4	5.1	5.5	6.2	7.4
15 to 24	9.1	11.8	14.2	14.6	10.9	9.3	10.2	10.6	12.8
25 to 34	6.6	8.2	9.9	9.8	7.1	5.8	6.5	7.7	9.0
35 to 44	4.5	5.3	6.5	6.6	4.5	3.5	3.8	4.5	5.5
45 to 54	3.2	4.0	4.8	4.7	3.3	2.5	2.5	3.0	3.5
55 to 64	2.7	3.1	3.6	3.7	2.6	1.9	1.8	2.2	2.4
Province									
Newfoundland and Labrador	2.8	2.9	3.9	4.4	2.7	2.0	2.2	2.6	3.3
Prince Edward Island	3.1	3.3	3.8	4.4	2.9	2.2	2.6	3.4	4.5
Nova Scotia	3.9	4.9	5.8	6.3	4.0	3.3	3.6	3.9	5.7
New Brunswick	3.5	4.0	5.2	5.6	4.0	3.1	3.6	4.1	5.7
Quebec Ontario	4.1 5.6	5.7 7.9	7.5 10.2	7.7 10.4	4.9 5.6	4.0 4.4	4.7 5.2	5.3 5.8	6.8 7.3
Manitoba	5.7	7.9	8.1	8.1	5.7	4.4	5.2	7.0	7.8
Saskatchewan	6.9	7.6	7.9	8.1	6.3	5.1	6.1	7.7	7.0
Alberta	8.2	10.0	10.4	11.4	8.9	7.5	8.0	10.5	10.2
British Columbia	5.4	5.9	7.5	9.2	7.3	6.3	6.3	6.4	6.7
Industry									
Primary and construction	5.0	6.1	7.7	7.9	4.2	3.5	3.9	5.2	5.4
Manufacturing	4.9	7.0	9.5	10.0	5.1	4.2	5.2	5.9	7.3
Distributive services	4.2	5.9	7.5	8.4	5.0	4.3	5.0	6.4	7.4
Business services	6.8	8.4	9.8	10.1	6.6	5.4	5.8	6.8	7.6
Consumer services	8.7	10.9	13.2	13.9	10.1	8.5	9.3	10.0	11.8
Public services	2.5	3.1	3.5	3.5	2.4	1.8	1.8	2.2	2.4
Firm size									
1 to 19 employees	6.0	7.5	8.8	8.7	5.8	4.8	5.4	5.9	6.7
20 to 99	7.7	10.0	12.2	12.8	8.3	7.0	7.8	8.7	10.1
100 to 499	6.6	9.0	11.1	11.7	7.4	6.0	6.7	7.7	9.1
500 or more	3.7	4.9	6.3	6.9	4.3	3.4	3.9	4.8	5.6
Earnings**									
Less than \$20,000	7.3	9.5	11.6	12.0	8.3	6.9	7.6	8.4	9.9
\$20,000 to \$50,000	3.9	5.0	6.3	7.0	4.0	3.1	3.6	4.5	5.2
\$50,000 or more	2.2	2.4	3.0	3.5	2.2	1.7	2.0	2.7	3.0

in 1993, eliminating the EI eligibility of workers quitting without just cause, reduced the propensity to quit among young workers (those 15 to 24) and women aged 25 to 54 (Kuhn and Sweetman 1998).12

Hence, while permanent layoff rates showed no substantial increase between the 1980s and the 1990s, permanent quit rates fell markedly. Since other permanent separations fell moderately, permanent separations taken as a whole (permanent layoffs, permanent quits and other permanent separations) fell in the 1990s. This explains why job stability, measured by average complete job duration, rose in the 1990s.13

This increase in job stability is not necessarily a positive development if the decrease in permanent quit rates results partly from a decrease in hiring rates—that is, from lessened labour market opportunities. An

Source: Longitudinal Worker File

\* Jobs paying at least \$500 in 1989 dollars.

Total earnings (in 1999 dollars) in the year prior to layoff.

Table 7: Logit models of permanent quits

	Permanent	of qu	n chances uitting -1999*
	quit rate in 1989	Model 1	Model 2
	%	%	point
Men			
15 to 24	13.9	-1.9	-2.5
25 to 34	9.8	-0.4	-0.9
35 to 44	5.9	-0.5	-0.9
45 to 54	3.8	-0.5	-0.7
55 to 64	2.7	-0.6	-0.7
Women			
15 to 24	14.6	-2.2	-2.9
25 to 34	9.8	-0.7	-1.0
35 to 44	6.6	-1.1	-1.4
45 to 54	4.7	-1.2	-1.0
55 to 64	3.7	-1.3	-1.2

Note: For each group, marginal effects for 1999 are evaluated at a probability equal to the average permanent quit rate of 1989. Model 1 controls for age, age squared, province, and a vector of year effects. Model 2 adds industry (6 categories) and firm size (4 categories). For all age-sex groups, the coefficient for the year 1999 is statistically significant at the 0.01% level (two-tailed test).

increase in job stability resulting from falling labour market opportunities has quite different implications for workers' well-being than one resulting from a growing supply of permanent well-paid jobs.

### Conclusion

Both descriptive evidence and statistical models provide little evidence of a substantial rise in permanent layoff rates between the 1980s and the 1990s. While the risk of job loss increased in a non-negligible way in some industries and in large private-sector firms, men and women of different age groups generally did not experience drastic increases in their likelihood of being permanently laid off. Only men aged 55 to 64 and women 35 to 44 saw their chances of being permanently laid off rise by half a percentage point or more.

These averages reflect aggregate patterns for the economy and do not necessarily apply to all sectors of the labour market. For instance, two provinces, Newfoundland and Labrador and Prince Edward Island, experienced substantial increases in layoff rates

Table 8: Average months of seniority

	en	All nployees	are	oloyees who not full-time students
	1989	1999	1989	1999
			%	
Men				
15 to 24	17.4	17.5	19.6	18.8
25 to 34	53.0	49.4	53.3	49.8
35 to 44	113.7	102.8	113.8	103.0
45 to 54	169.3	168.4	169.5	168.4
55 to 64	188.2	175.3	188.2	175.3
Women				
15 to 24	16.1	16.0	18.3	17.6
25 to 34	49.2	48.2	49.6	48.7
35 to 44	84.1	93.8	84.2	94.1
45 to 54	107.8	135.6	108.0	135.6
55 to 64	143.1	149.0	143.1	149.0

Source: Labour Force Survey, September

between 1989 and 1999. Furthermore, there is little evidence that permanent layoff rates decreased despite increases in educational attainment between the 1980s and the 1990s. The lower chances of being permanently laid off among highly educated workers (Galarneau and Stratychuk 2001) suggests that permanent layoff rates of some groups—for example, workers with no high school diploma—may well have risen during this period.

Most striking is the widespread drop in permanent quit rates observed during the period. It seems reasonable to argue that part of the decrease in quit rates was due to the decrease in hiring rates in the 1990s. While chances of losing one's job did not rise substantially over the 1980s and 1990s, chances of finding a new job in the event of a layoff fell markedly.

### **Perspectives**

### **■ Notes**

- 1 Non-compliance penalties may apply to employers who fail to issue an ROE.
- 2 The Longitudinal Employment Analysis Program file is used to distinguish permanent separations from temporary separations. The T1 files provide age and sex.
- 3 Retention rate refers to the conditional probability that a job of any given length will last another year.

<sup>\*</sup> How much did the probability of permanently quitting change between 1989 and 1999?

- 4 See Morissette (2004) for details.
- 5 In both provinces, the increase in permanent layoff rates is statistically significant at the 1% level (two-tailed test).
- 6 Interaction terms between covariates and year effects were excluded in order to capture any increase in the probability of being laid off by intercept shifts, thereby measuring an 'average' increase in probability across years. The number of observations used in these logit models varied between 711,562 for women aged 55 to 64 and 4,323,671 for men aged 25 to 34.
- 7 The increase of 0.2 percentage points observed among men aged 45 to 54 is statistically significant at the 6% level (two-tailed test).
- 8 The careful reader may wonder why the risk of permanent layoff in public services rose by 0.7 to 0.8 percentage points for workers of a given age while permanent layoff rates rose by only 0.3 percentage points between 1989 and 1999 (Table 2). One explanation is that the average age of employees rose substantially in public services, increasing from 36.1 to 39.6, compared with 32.2 to 35.0 in the private sector (Longitudinal Worker File: 1% version). Older workers generally have relatively low layoff rates, so permanent layoff rates in public services tended to decrease. The effect was more than offset by a growing risk of layoff for workers of a given age, thereby generating the modest increase in permanent layoff rates shown in Table 2.
- 9 In contrast, men employed in firms with less than 500 employees and women employed in small firms saw their risk of permanent layoff fall between 1989 and 1999.
- 10 As calculated from the 1% version of the LWF.
- 11 It fell even more for those aged 55 to 64—men -24% and women -33%.
- 12 Kuhn and Sweetman (1998, 570) conclude that "the magnitude of the reductions is quite large for women: relative to the baseline period, the quit rate drops by 12% to 18% in the short run and roughly 30% in the long run. In striking contrast, prime age males' separation behaviour seems unaffected by the legislation."
- 13 Following Picot, Heisz and Nakamura (2001, 8), average complete job duration is computed as follows. Assuming an exponential survivor function, job duration can be estimated by 1/l, where l = -ln(R)/t, where R is the average retention

rate for workers and t, the time interval used here, is equal to 1 year. The average retention rate R is simply 1 minus the probability of permanent separation.

### **■** References

Farber, Henry S. 2003. "Job loss in the United States, 1981-2001." National Bureau of Economic Research (NBER). Working paper no. 9707. Cambridge Mass.: NBER.

Galarneau, Diane and Lori Stratychuk. 2001. "After the layoff." *Perspectives on Labour and Income* (Statistics Canada, Catalogue 75-001-XIE) 2, no. 10. October 2001 online edition.

Heisz, Andrew. 2002. The evolution of job stability in Canada: Trends and comparisons to U.S. results. Analytical Studies Branch Research Paper Series no. 162. Catalogue no. 11F0019MIE. Ottawa: Statistics Canada.

Kuhn, Peter, and Arthur Sweetman. 1998. "Unemployment insurance and quits in Canada." *Canadian Journal of Economics* 31, no. 3 (August): 549-572.

Morissette, René. 2004. Have permanent layoff rates increased in Canada? Analytical Studies Branch, Research Paper Series no. 218. Catalogue no. 11F0019MIE. Ottawa: Statistics Canada.

Organisation for Economic Co-operation and Development (OECD). 1997. "Is job insecurity on the increase in OECD countries?" Chapter 5 in OECD Employment Outlook, 1997.

Picot, G., A. Heisz and A. Nakamura. 2001. Job tenure, worker mobility and the youth labour market during the 1990s. Analytical Studies Branch, Research Paper Series no. 155. Catalogue no. 11F0019MIE. Ottawa: Statistics Canada.

Picot, Garnett and Zhengxi Lin. 1997. Are Canadians more likely to lose their jobs in the 1990s? Analytical Studies Branch, Research Paper Series no. 96. Catalogue no. 11F0019MIE. Ottawa: Statistics Canada.

Schmidt, Stefanie. 1999. "Long-run trends in workers' beliefs about their own job security: Evidence from the General Social Survey." *Journal of Labor Economics* 17, no. 4: S127-141.



# PERSPECTIVES

ON LABOUR AND INCOME

# Fact-sheet on work absences

There are many kinds of absence. Some, such as annual vacations, are generally considered beneficial for both the organization and the employee. Since they are usually scheduled, their effect on the organization can be fairly easily absorbed; the same can be said of statutory holidays. Other absences, such as those caused by illness and family-related demands, are generally unavoidable, as are those due to inclement weather.

'Absenteeism'—a term used to refer to absences that are avoidable, habitual and unscheduled—is a source of irritation to employers and co-workers. Such absences are disruptive to proper work scheduling and output, and costly to an organization and the economy as a whole.

Although absenteeism is widely acknowledged to be a problem, it is not easy to quantify. The dividing line between avoidable and unavoidable is difficult to draw, and absenteeism generally masquerades as legitimate absence. The Labour Force Survey (LFS) can provide measures of time lost because of 'personal reasons,' that is, illness or disability, and personal or family responsibilities. However, within these categories, it is impossible to determine if an absence is avoidable or unscheduled. LFS data on absences for personal reasons can, however, be analyzed to identify patterns or trends that indicate the effect of absenteeism (see *Data source and definitions*).

### Recent trends-1997 to 2003

Estimates from the Labour Force Survey reveal a steady rising trend in both work absence incidence and time lost for personal reasons (own illness or disability, and other personal and family demands) between 1997 and 2002. Several factors accounted for the rising trend: notably, the aging of the workforce; the growing share of women in the workforce, especially mothers with young children; high stress among workers, and the increasing prevalence of generous sick and family-related leave at the workplace (Chart).

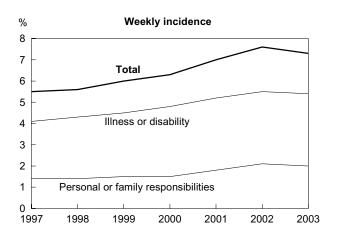
In an average week in 1997, excluding women on maternity leave, about 5.5% (484,000) of all full-time employees holding one job were absent from work for all or part of the week for personal reasons. By 2002, the figure had risen to 7.6% (771,000) (Table 1). Total work time missed for these reasons also rose steadily, from 3.0% of the weekly scheduled work time in 1997 to 3.6% in 2002. Extrapolated over the full year, work time lost for personal reasons increased from the equivalent of 7.4 days per worker in 1997 to 9.0 days in 2002. Work absences due to own illness or disability as well as those due to other personal or family responsibilities witnessed continuous increases during the period.

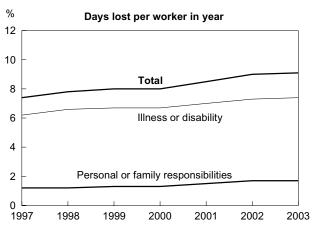
For further information, contact Ernest B. Akyeampong, Labour and Household Surveys Analysis Division. He can be reached at (613) 951-4624 or perspectives@statcan.ca.





### Chart: Work absence rates, 1997 to 2003





Source: Labour Force Survey

The steadily rising trend stalled in 2003. That year, the incidence fell to 7.3%, but the days lost per worker (9.1 days) were a shade higher than the year before, suggesting that absence durations in 2003 were generally longer. Whether this is the beginning of a new trend is too early to speculate.

### Variations in absence rates in 2003

Absence for personal reasons differs among various worker groups. Several factors are responsible; among the principal ones are working conditions (for example, the physical environment, degree of job stress,

employer-employee relations, collective agreement provisions, work schedules); adequacy and affordability of community facilities such as child-care centres and public transportation; family circumstances, especially the presence of preschool children and other dependent family members; and physical health of the worker, a factor closely related to age. Measuring the effects of these and other contributing factors is not easy since many are not captured by the LFS. However, some insight is gained by examining personal absences in 2003 by selected demographic characteristics, occupation and industry, and other attributes such as union and job status.

### Demographic differences

In 2003, excluding women on maternity leave, an estimated 7.3% (760,000) of full-time employees missed some work each week for personal reasons: 5.4% for own illness or disability, and 2.0% for personal or family responsibilities (Table 2). As a result, full-time employees lost about 3.6% of their work time each week.

On average, each full-time employee lost 9.1 days over the year for personal reasons (about 7.4 for own illness or disability, and 1.7 for personal or family demands). In total, full-time employees missed an estimated 94.2 million workdays for personal reasons in 2003.

On average, men working full time lost fewer days (8.1 or 6.6 for illness or disability plus 1.5 for personal or family demands) than women full-time employees (10.5 or 8.7 plus 1.9).

The presence of preschool-aged children exerts a strong influence on work absences for personal or family responsibilities, especially for women. In such families, women employed full time lost an average of 4.5 days in 2003; men, 4.0 days.

Workdays missed because of illness or disability tended to rise with age, from an average of 5.0 days for youth (15 to 19) to 10.8 for full-time employees aged 55 to 64.

### **Industry and sector**

Work absence rates differ by sector (public or private) and industry, with almost all of the difference emanating from illness and disability absences (Table 3). Contributing factors include the nature and

demands of the job, the male/female composition of the workforce, and the union density—the last being a strong determinant of the presence or lack of paid sick/family leave entitlements.

Full-time employees in the public sector lost more work time in 2003 for personal reasons (about 11.4 days on average) than their private-sector counterparts (8.5 days).

At the major industry level, the most workdays missed were by employees in health care and social assistance (12.8 days), transportation and warehousing (11.4), and public administration (10.7).

The lowest averages were recorded by full-time workers in the professional, scientific and technical industry (5.3 days), and in agriculture (6.2).

### **Occupation**

Contributing factors by occupational absence rates are similar to those for industry (Table 4). Again, as by industry, differences arise mainly from time lost due to illness or disability.

The most days lost in 2003 were recorded for full-time employees in health occupations (13.0); occupations unique to production (11.1); and trades, transport and equipment operators (10.6).

Workers in managerial jobs (5.2), natural and applied sciences (6.1), and culture and recreation (6.9) recorded the fewest days lost.

### Union coverage, job status, workplace size and job tenure

Full-time workers who belonged to unions or were covered by collective agreements missed almost 80% more workdays on average in 2003 for personal reasons than their non-unionized counterparts (12.8 versus 7.2) (Table 5).

Workers who considered their jobs to be permanent (and hence more likely to be unionized) lost more workdays (9.2) than those who said their jobs were not permanent (7.7).

Days lost tended to rise with workplace size, increasing from a low of 7.5 in workplaces with fewer than 20 employees (firms more likely to have low union rates) to over 10.0 in workplaces with 100 or more (firms likely to have high union rates).

Days lost tended to rise with job tenure, with almost all the differences arising from illness and disability. They rose from an average of 6.6 days among persons with tenure of up to one year to more than 10.0 days among those with over nine years (the latter group likely being older).

### **Province and CMA**

Work absence levels differed by geographic area (Table 6), with most of the variation again arising from illness or disability.

Full-time employees in Quebec and Saskatchewan lost the most work time in 2003 (10.6 and 10.5 days). Those in Prince Edward Island (7.5) and Alberta (7.9) lost the least.

Among the census metropolitan areas, workers in St. John's, Saint John, Saguenay, Montréal, Sherbrooke, Gatineau, Thunder Bay, Regina, Saskatoon and Victoria lost the most workdays (an average of more than 10 days per full-time worker). Those in Greater Sudbury, Toronto, London and Calgary lost the least time (an average of less than 8.0 days per full-time worker).

### ■ Notes

- 1 1997 marks the introduction of the revised Labour Force Survey questionnaire.
- 2 For more information on this subject, see Margot Shields, "Stress, health and the benefit of social support," *Health Reports* (Statistics Canada, Catalogue 82-003-XIE) 15, no. 1, January 2004.

Also see Cara Williams, "Sources of workplace stress," *Perspectives on Labour and Income* (Statistics Canada, Catalogue 75-001-XIE) 4, no. 6. June 2003 online edition.

**Perspectives** 

Table 1: Absence rates for full-time paid workers by sex, 1997 to 2003, excluding maternity leave

		Incidence	*		Inactivity*	*	Days Id	st per work	er in year†
	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities
		%			%			days	
Both sexes								, ,	
1997	5.5	4.1	1.4	3.0	2.5	0.5	7.4	6.2	1.2
1998	5.6	4.3	1.4	3.1	2.6	0.5	7.8	6.6	1.2
1999	6.0	4.5	1.5	3.2	2.7	0.5	8.0	6.7	1.3
2000	6.3	4.8	1.5	3.2	2.7	0.5	8.0	6.7	1.3
2001	7.0	5.2	1.8	3.4	2.8	0.6	8.5	7.0	1.5
2002	7.6	5.5	2.1	3.6	2.9	0.7	9.0	7.3	1.7
2003	7.3	5.4	2.0	3.6	3.0	0.7	9.1	7.4	1.7
Men									
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	2.7	2.3	0.4	6.9	5.8	1.0
1999	5.2	3.8	1.3	2.8	2.4	0.4	7.0	5.9	1.1
2000	5.5	4.1	1.4	2.8	2.4	0.4	7.0	5.9	1.1
2001	6.1	4.5	1.6	3.0	2.5	0.5	7.6	6.3	1.3
2002	6.6	4.7	1.9	3.2	2.6	0.6	7.9	6.4	1.6
2003	6.4	4.6	1.8	3.2	2.6	0.6	8.1	6.6	1.5
Women									
1997	6.7	5.0	1.7	3.6	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
1999	7.1	5.3	1.7	3.8	3.2	0.6	9.5	7.9	1.6
2000	7.5	5.7	1.8	3.8	3.1	0.6	9.4	7.8	1.5
2001	8.2	6.1	2.0	3.9	3.2	0.7	9.7	8.0	1.8
2002	8.9	6.5	2.4	4.2	3.4	0.8	10.4	8.6	1.9
2003	8.6	6.4	2.2	4.2	3.5	0.7	10.5	8.7	1.9

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).

Table 2: Absence rates for full-time paid workers by sex, age, education and presence of children, 2003, excluding maternity leave

		Incidence	*		Inactivity*	*	Days Id	/s lost per worker in year <sup>†</sup>	
	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities
Age		%			%			days	
Both sexes 15 to 19 20 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65 and over	<b>7.3</b> 6.4 6.6 7.5 7.5 7.0 8.2 5.3	<b>5.4</b> 4.6 4.9 5.2 5.3 5.5 6.4 3.4	2.0 1.8 1.7 2.3 2.2 1.6 1.7	3.6 2.6 2.7 3.4 3.7 3.8 4.9 3.0	3.0 2.0 2.1 2.5 3.0 3.3 4.3 2.3	0.7 0.7 0.6 0.8 0.7 0.5 0.6	9.1 6.6 6.7 8.4 9.2 9.5 12.3 7.5	7.4 5.0 5.3 6.4 7.4 8.2 10.8 5.7	1.7 1.6 1.4 2.0 1.8 1.3 1.5
Men 15 to 19 20 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65 and over	6.4 6.1 6.0 6.7 6.3 6.0 7.1 5.2	4.6 4.5 4.4 4.6 4.4 4.6 5.6 3.5	1.8 1.7 1.6 2.1 1.9 1.4 1.5	3.2 2.7 2.6 3.1 3.1 3.3 4.3 3.1	2.6 2.1 2.0 2.3 2.5 2.8 3.8 2.4	0.6 0.6 0.8 0.6 0.5	8.1 6.8 6.5 7.9 7.9 8.2 10.8 7.7	6.6 5.3 5.1 5.8 6.3 7.0 9.6 6.0	1.5 1.5 1.4 2.1 1.5 1.1 1.2
Women 15 to 19 20 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65 and over	8.6 6.9 7.3 8.7 9.0 8.3 9.7 F	6.4 4.9 5.6 6.2 6.5 6.6 7.6	2.2 2.0 1.7 2.5 2.6 1.7 2.0	<b>4.2</b> 2.5 2.8 3.7 4.4 4.5 5.9	3.5 1.8 2.2 2.9 3.6 3.9 5.1	0.7 0.7 0.6 0.8 0.8 0.6 0.7	10.5 6.3 7.0 9.2 11.0 11.3 14.7	8.7 4.5 5.6 7.2 8.9 9.7 12.8	1.9 1.8 1.4 2.0 2.1 1.6 1.9
Educational attainment  Both sexes Less than Grade 9 Some secondary High school graduate Some postsecondary Postsecondary certificate or diploma University degree	<b>7.3</b> 8.4 8.3 7.3 7.7	<b>5.4</b> 6.6 6.3 5.5 5.6 4.3	2.0 1.7 2.0 1.8 2.2 2.0 1.9	3.6 5.1 4.5 3.7 3.7 3.8 2.7	3.0 4.6 3.8 3.1 2.9	0.7 0.5 0.7 0.6 0.8 0.7	9.1 12.9 11.2 9.4 9.3	7.4 11.6 9.5 7.8 7.3	1.7 1.3 1.7 1.5 2.0
Presence of children	0.2	4.0	1.5	2.1	2.0	0.7	0.1	3.0	1.0
Both sexes With children Preschool-aged (under 5 years) 5 to 12 years 13 years and over Without children	7.3 7.7 9.0 7.9 6.8 7.0	5.4 5.3 5.0 5.5 5.2 5.5	2.0 2.5 3.9 2.4 1.6 1.6	3.6 3.8 4.2 3.7 3.7 3.5	3.0 2.9 2.5 3.0 3.1 3.0	0.7 0.9 1.7 0.6 0.5 0.5	9.1 9.5 10.5 9.2 9.2 8.8	7.4 7.3 6.4 7.6 7.8 7.5	1.7 2.2 4.2 1.6 1.4 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).

Table 3: Absence rates for full-time paid workers by industry and sector, 2003, excluding maternity leave

	Incidence*				Inactivity	**		Days lost worker in y	
	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities
		%			%			days	
All industries	7.3	5.4	2.0	3.6	3.0	0.7	9.1	7.4	1.7
Public employees	8.8	6.8	2.0	4.5	3.8	8.0	11.4	9.4	1.9
Private employees	6.9	5.0	1.9	3.4	2.8	0.6	8.5	6.9	1.6
Goods-producing	7.3	5.2	2.0	3.7	3.0	0.6	9.2	7.6	1.6
Primary Agriculture Other	5.7 5.9 5.6	3.8 3.6 3.9	1.9 2.4 1.7	3.1 2.5 3.3	2.4 1.8 2.7	0.6 0.7 0.6	7.7 6.2 8.3	6.1 4.4 6.7	1.6 1.7 1.6
Utilities	8.0	6.1	1.9	4.0	3.3	0.6	9.9	8.3	1.6
Construction	6.4	4.5	1.9	3.4	2.7	0.7	8.5	6.7	1.8
Manufacturing Durable Non-durable	7.7 7.8 7.5	5.6 5.6 5.6	2.1 2.2 1.9	3.8 3.8 3.9	3.2 3.2 3.3	0.6 0.7 0.6	9.6 9.6 9.6	8.1 8.0 8.2	1.5 1.6 1.4
Service-producing	7.4	5.4	1.9	3.6	2.9	0.7	9.1	7.4	1.7
Trade Wholesale Retail	6.6 6.6 6.7	4.8 4.5 5.0	1.8 2.1 1.7	3.2 3.0 3.3	2.7 2.4 2.8	0.6 0.6 0.5	8.0 7.5 8.2	6.6 6.0 6.9	1.4 1.5 1.4
Transportation and warehousing	7.3	5.9	1.5	4.6	4.0	0.6	11.4	9.9	1.5
Finance, insurance, real estate and leasing Finance and insurance Real estate and leasing	7.3 7.5 6.6	5.2 5.4 4.5	2.1 2.1 2.1	3.4 3.5 3.1	2.8 3.0 2.3	0.6 0.6 0.8	8.6 8.8 7.6	7.0 7.4 5.7	1.6 1.4 2.0
Professional, scientific and technical	6.0	3.8	2.3	2.1	1.5	0.6	5.3	3.8	1.5
Business, building and support services	7.6	5.6	2.0	3.5	2.8	0.7	8.7	7.0	1.7
Educational services	7.9	6.0	1.9	3.8	3.0	0.8	9.4	7.6	1.9
Health care and social assistance	9.2	7.2	2.0	5.1	4.3	0.9	12.8	10.7	2.1
Information, culture and recreation	6.4	4.7	1.7	2.9	2.4	0.6	7.3	5.9	1.4
Accommodation and food services	5.8	4.1	1.6	3.0	2.3	0.7	7.6	5.9	1.7
Other services	6.4	4.4	2.0	2.8	2.1	0.6	6.9	5.3	1.6
Public administration Federal Provincial	9.0 11.0 8.0	6.7 7.6 6.3	2.4 3.3 1.7	4.3 4.7 3.8	3.4 3.3 3.2	0.9 1.3 0.6	10.7 11.7 9.6	8.5 8.4 8.0	2.2 3.3 1.6
Local, other	7.5	5.7	1.8	4.2	3.6	0.6	10.4	9.0	1.4

Source: Labour Force Survey

\* Absent workers divided by

<sup>\*</sup> Absent workers divided by total.
\*\*Hours absent divided by hours usually worked.
† Inactivity rate multiplied by working days in year (250).

Table 4: Absence rates for full-time paid workers by occupation, 2003, excluding maternity leave

		Incidence*			Inactivi	ty**		Days lost worker in y	
	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities
		%			%			days	
All occupations	7.3	5.4	2.0	3.6	3.0	0.7	9.1	7.4	1.7
Management	4.9	3.2	1.7	2.1	1.5	0.6	5.2	3.7	1.5
Business, finance and									
administrative	8.1	5.8	2.3	3.7		0.7	9.1	7.4	1.8
Professional	6.6	4.5	2.1	2.7		0.6	6.7	5.3	1.4
Administrative Clerical	7.8 8.6	5.3 6.4	2.5 2.2	3.4 4.0		0.8 0.7	8.5 10.1	6.4 8.4	2.1 1.7
Ciericai	0.0	0.4	2.2	4.0	3.4	0.7	10.1	0.4	1.7
Natural and applied sciences	6.3	4.3	2.0	2.4	1.9	0.5	6.1	4.8	1.3
Health	8.9	7.2	1.8	5.2		8.0	13.0	11.0	2.0
Professional	5.5	3.4	F	2.6		F	6.6	4.5	F
Nursing Technical	9.8 7.8	8.1 5.9	1.7 1.9	6.2 4.2		0.9 0.7	15.4 10.5	13.1 8.7	2.3 1.8
Support staff	10.3	8.8	1.5	6.1		0.7	15.3	13.6	1.7
• •									
Social and public service	7.7 8.2	5.7 6.1	2.0 2.1	3.6 3.8		0.8 0.7	8.9 9.4	6.9 7.6	2.0 1.9
Legal, social and religious Teachers and professors	7.3	5.4	1.9	3.4		0.7	8.5	6.4	2.1
Secondary and elementary		6.6	1.9	4.1		0.9	10.3	7.9	2.4
Other	4.4	2.7	1.7	1.8		0.5	4.5	3.1	1.4
Culture and recreation	7.0	5.3	1.7	2.8	2.3	0.5	6.9	5.7	1.3
Sales and service	7.0	5.2	1.8	3.6	2.9	0.7	9.0	7.3	1.7
Wholesale	5.6	3.7	1.9	2.4		0.6	6.0	4.6	1.4
Retail	6.9	5.3	1.5	3.4		0.5	8.4	7.1	1.3
Food and beverage	6.1	4.4	1.7	3.4		0.7	8.6	7.0	1.6
Protective services	6.1	4.7	1.5	3.6		0.7	9.0	7.2	1.8
Childcare and home support Travel and accommodation	9.4 7.8	6.6 5.9	2.8 1.9	4.9 4.1	3.8 3.4	1.1 0.7	12.2 10.2	9.5 8.4	2.7 1.9
Trades, transport and equipment operators	7.5	5.6	1.8	4.2	3.6	0.6	10.6	9.0	1.5
Contractors and supervisors	5.5	3.7	1.8	2.9		0.7	7.3	5.6	1.7
Construction trades	7.8	5.6	2.2	4.4		0.8	11.1	9.2	1.9
Other trades	7.2	5.4	1.8	3.7	3.2	0.5	9.3	7.9	1.3
Transport equipment									
operators Helpers and labourers	7.6	6.0 6.5	1.5	4.9 4.7		0.6 0.7	12.3	10.7	1.5
•	8.3	6.5	1.9	4.7	4.0	0.7	11.7	10.0	1.7
Occupations unique to primary industry	5.6	3.9	1.7	3.4	2.7	0.7	8.4	6.8	1.7
Occupations unique to production Machine operators and	8.5	6.3	2.2	4.4	3.7	0.7	11.1	9.3	1.8
assemblers Labourers	8.2 9.7	6.1 7.3	2.1 2.5	4.3 5.1		0.7 1.0	10.8 12.6	9.1 10.1	1.7 2.5

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).

Table 5: Absence rates for full-time paid workers by workplace size, job tenure, job status and union coverage, 2003, excluding maternity leave

		Incidence	<b>)</b> *		Inactiv	ty**		Days lost worker in y	
	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities
		%			%			days	
Workplace size									
Both sexes Under 20 employees 20 to 99 employees 100 to 500 employees Over 500 employees	<b>7.3</b> 6.3 7.4 8.1 8.3	<b>5.4</b> 4.4 5.4 6.0 6.4	2.0 1.9 2.0 2.1 1.9	3.6 3.0 3.6 4.1 4.3	3.0 2.4 3.0 3.4 3.6	<b>0.7</b> 0.6 0.7 0.7	<b>9.1</b> 7.5 9.1 10.3 10.7	<b>7.4</b> 5.9 7.4 8.5 9.0	<b>1.7</b> 1.5 1.7 1.8 1.7
Job tenure									
Both sexes 1 to 12 months Over 1 to 5 years Over 5 to 9 years Over 9 to 14 years Over 14 years	<b>7.3</b> 6.2 7.3 7.9 7.8 7.7	<b>5.4</b> 4.4 5.2 5.7 5.9 6.0	2.0 1.8 2.1 2.1 1.9 1.7	3.6 2.6 3.4 4.0 4.1 4.3	3.0 2.1 2.7 3.2 3.4 3.7	0.7 0.6 0.7 0.8 0.7 0.6	<b>9.1</b> 6.6 8.6 10.0 10.3 10.7	<b>7.4</b> 5.1 6.8 8.1 8.5 9.3	1.7 1.4 1.8 1.9 1.8 1.4
Job status									
Both sexes Permanent Non-permanent	<b>7.3</b> 7.4 6.4	<b>5.4</b> 5.5 4.6	<b>2.0</b> 2.0 1.9	<b>3.6</b> 3.7 3.1	<b>3.0</b> 3.0 2.4	<b>0.7</b> 0.7 0.7	<b>9.1</b> 9.2 7.7	<b>7.4</b> 7.6 6.1	<b>1.7</b> 1.7 1.6
Union coverage									
Both sexes Union member or covered	7.3	5.4	2.0	3.6	3.0	0.7	9.1	7.4	1.7
by collective agreement Non-unionized	9.1 6.4	7.2 4.4	1.9 2.0	5.1 2.9	4.4 2.3	0.8 0.6	12.8 7.2	10.9 5.7	1.9 1.6

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).

Table 6: Absence rates for full-time paid workers by province, region and census metropolitan area (CMA), 2003, excluding maternity leave

	Incidence*				Inactivi	ty**		Days lost worker in y	
	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities	Total	Own illness or disability	Personal or family respon- sibilities
Province and region		%			%			days	
Both sexes	7.3	5.4	2.0	3.6	3.0	0.7	9.1	7.4	1.7
Atlantic	7.4	5. <del>7</del> 5.7	1.7	3.9	3.3	0.6	9.8	8.3	1.5
Newfoundland and Labrador	7.0	5.5	1.5	4.1	3.6	0.6	10.3	8.9	1.5
Prince Edward Island	6.4	4.7	1.6	3.0	2.5	0.5	7.5	6.3	1.2
Nova Scotia	7.6	5.7	1.9	3.9	3.2	0.7	9.7	8.0	1.7
New Brunswick	7.6	5.9	1.7	4.0	3.5	0.6	10.1	8.6	1.4
Quebec	7.9	6.0	1.9	4.2	3.6	0.6	10.6	9.1	1.5
Ontario	7.1	5.0	2.1	3.3	2.6	0.7	8.2	6.4	1.8
Prairies	7.3	5.2	2.0	3.4	2.7	0.7	8.6	6.9	1.7
Manitoba	7.9	5.9	2.0	3.7	3.1	0.6	9.3	7.8	1.6
Saskatchewan	8.2	6.2	2.0	4.2	3.5	0.7	10.5	8.6	1.8
Alberta	6.8	4.8	2.0	3.1	2.4	0.7	7.9	6.1	1.8
British Columbia	7.2	5.5	1.7	3.9	3.2	0.7	9.6	7.9	1.7
CMA									
Both sexes	7.3	5.4	2.0	3.6	3.0	0.7	9.1	7.4	1.7
All CMAs	7.3	5.4	2.0	3.5	2.8	0.7	8.8	7.1	1.7
St. John's	7.8	6.0	1.7	4.2	3.7	0.5	10.4	9.1	1.3
Halifax	7.3	5.5	1.9	3.3	2.6	0.7	8.1	6.5	1.7
Saint John	8.6	6.7	1.9	4.4	3.8	0.6	10.9	9.4	1.5
Saguenay	7.5	6.3	F	4.5	4.1	F	11.3	10.3	F
Québec	6.9	5.3	1.6	3.5	2.9	0.6	8.8	7.2	1.6
Montréal	8.2	6.1	2.1	4.2	3.6	0.6	10.5	9.0	1.5
Trois-Rivières	7.1	5.4	F	4.0	3.3	F	9.9	8.2	F
Sherbrooke	7.5	5.7	F	4.3	3.7	F	10.6	9.3	F
Gatineau	9.6	7.2	2.4	4.8	4.1	0.6	11.9	10.3	1.6
Ottawa	8.0	5.6	2.3	3.3	2.5	8.0	8.2	6.3	1.9
Greater Sudbury	6.3	4.5	F	3.1	2.5	F	7.8	6.3	F
Toronto	6.9	4.8	2.0	3.1	2.4	0.7	7.8	6.0	1.8
Hamilton	6.9	5.0	2.0	3.5	2.8	0.7	8.7	7.0	1.7
St. Catharines-Niagara	8.5	6.1	2.3	4.0	3.2	0.8	9.9	7.9	2.0
London	6.7	4.7	2.0	3.2	2.4	0.7	7.9	6.1	1.8
Windsor	7.3	4.9	2.4	3.5	2.7	0.8	8.7	6.7	2.0
Kitchener-Waterloo	7.1	5.0	2.1 2.0	3.2 3.9	2.5	0.7 0.7	8.0	6.2	1.7 1.8
Oshawa Thundor Boy	7.7 8.8	5.7 6.4	2.0 F	3.9 4.8	3.2 3.8	0. <i>1</i>	9.7 12.0	7.9 9.5	1.0 F
Thunder Bay Winnipeg	7.9	6.0	1.9	3.6	3.0	0.5	8.9	7.5	1.4
Regina	8.5	6.4	2.1	4.0	3.3	0.3	10.1	8.3	1.4
Saskatoon	8.0	6.3	1.7	4.1	3.5	0.7	10.1	8.8	1.4
Calgary	6.5	4.5	2.1	2.7	2.1	0.7	6.8	5.2	1.7
Edmonton	6.9	5.0	1.9	3.3	2.6	0.7	8.2	6.5	1.7
Vancouver	6.8	5.1	1.7	3.5	2.9	0.7	8.9	7.1	1.7
Victoria	8.3	6.4	1.9	4.2	3.5	0.7	10.5	8.8	1.7
Non-CMAs	7.3	5.3	1.9	3.9	3.2	0.6	9.7	8.0	1.6
Urban centres	7.6	5.7	1.8	4.0	3.3	0.7	9.9	8.2	1.7

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).

#### Data source and definitions

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. 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 2003, the number of employed persons on such long-term illness or disability leave averaged only 23,000 in a typical week. Their exclusion would have reduced the weekly work absence incidence for illness or disability from 5.4% to 5.2%, the inactivity rate from 3.0% to 2.8%, and days lost per worker that year from 7.4 to 6.9.

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 2003. Vacations, which accounted for about 40% of total time away from work, are not counted in this study, nor are statutory holidays, which represented 17%. Maternity leave represented 9% and other reasons. 7%.

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).

#### Reasons for work absences in the LFS

The LFS 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

As normally published, personal or family responsibilities consist of caring for own children, caring for elder relative, and other personal or family responsibilities.