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# PERSPECTIVES

ON LABOUR AND INCOME

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- Life after teenage motherhood
- Low-income children
- Provincial labour force differences
- Work absence rates



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|                |   |
|----------------|---|
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| -              | not available for a specific reference period |
| ...            | not applicable                                |
| 0 <sup>§</sup> | not statistically significant                 |
| P              | preliminary                                   |
| r              | revised                                       |
| X              | confidential                                  |
| E              | use with caution                              |
| F              | too unreliable to be published                |

# Highlights

*In this issue*

## ■ Life after teenage motherhood

- Women who had their first child under age 20 (teenage mothers) were 17 percentage points less likely to have completed high school than women who had their first child later (adult mothers). Teenage mothers were also at least 14 percentage points less likely to complete their postsecondary studies than adult mothers.
- Overall, almost no difference was seen in labour force participation between teenage mothers and adult mothers of similar education levels. The only difference was that teenage mothers with postsecondary education were more likely to be in full-year full-time employment than adult mothers with postsecondary education.
- Teenage mothers and adult mothers with similar education had almost the same probability of living in low income.
- Unlike in the United States, a smaller proportion of immigrants in Canada were teenage mothers. Only 9% of immigrants who were a visible minority and 6% of immigrants who were not a visible minority were teenage mothers compared with 11% of those Canadian-born and not a visible minority.

## ■ Low-income children

- Low income among children is a very dynamic phenomenon in Canada. Many children experienced low income between 1999 and 2004, but few remained in this situation for the entire period.
- While children living in lone-parent families are much more vulnerable to low income, those in two-parent families are not exempt from it. In 2004, half of the children living in low income were part of a two-parent family. In both one-parent and two-parent families, total work effort in the family and parents' working conditions were key indicators of vulnerability to low income.
- Despite sustained economic growth since the mid-1990s, the rate of low-income among children was no lower in 2004 than in 1989—the peak of the previous business cycle. Indeed, the gap between the net family income of low-income children and that of other children widened in the past decade.

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# Life after teenage motherhood

May Luong

The general view has been that teenage childbearing will have long-term negative effects on the mother's well-being. The argument being that these individuals will have more difficulty completing high school because of the time off required for pregnancy, recuperation and childcare. And so, it is also less likely that they will be able to continue on to postsecondary education to acquire the skills for better jobs. Since low-skilled jobs tend to pay less, it follows that teenage mothers will have a higher likelihood of living in low income.

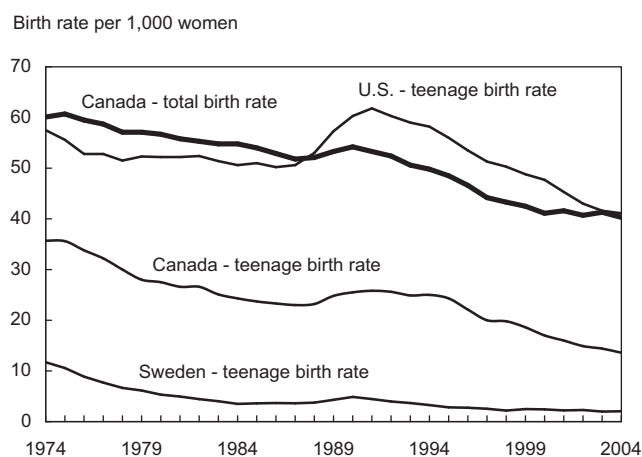
Indeed, American research during the 1970s and 1980s consistently documented the negative effects of teenage childbearing across a range of outcomes, finding that teenage mothers were more likely to be socially and economically disadvantaged throughout their lives than women who delayed childbearing. Teenage mothers were also less likely to complete their education, be employed and earn high wages, or be married. Furthermore, they were more likely to have larger families and receive welfare (Hayes 1987). Not only is the well-being of teenage mothers affected by their situation, teenage motherhood is also a repetitive cycle that can affect the likelihood that their children end up in the same situation. Indeed, one study found that, in the U.S., daughters of teenage mothers were 25 percentage points more likely to become teenage mothers themselves (Kearney and Levine 2007).

However, according to more recent research, the link between teenage childbearing and a poor socioeconomic outcome may not be causal—the probability of being a teenage mother and the probability of being disadvantaged later on may be due to having a disadvantaged family background from the start.<sup>1</sup> That is, women from disadvantaged backgrounds are more likely to end up disadvantaged even if they delay childbearing. And while teenage childbearing continues to

be a significant indicator of lower socioeconomic outcomes, the effect is smaller than originally believed (Ashcraft and Lang 2006; Levine and Painter 2003; Klepinger et al. 1997 and 1995; Ahn 1994; Hoffman et al. 1993).

Although research in the United States has placed tremendous efforts in disentangling the causal effects of teenage childbearing and family background, the research on this issue in Canada remains scarce. Most research in Canada has focused on trends in incidence and abortion rates using vital statistics data. Furthermore, the bulk of the research has been on educational outcomes, with few studies on other long-term socioeconomic outcomes such as labour force participation and living conditions. And while U.S. studies

**Chart A** Canada's teenage birth rate in the mid-range among developed countries



Sources: Statistics Canada, Health Statistics Division, Canadian Vital Statistics Database; U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics; National Vital Statistics System as published by Guttmacher Institute; Statistics Sweden, online statistical database.

May Luong is with the Labour and Household Surveys Analysis Division. She can be reached at 613-951-6014 or [perspectives@statcan.ca](mailto:perspectives@statcan.ca).

show that teenage childbearing occurs predominantly among visible minority groups, Canada's very different ethnic profile suggests that the characteristics of teenage mothers in Canada may be very different.

Certainly the birth rate differs between the two countries. Canada remains far below the United States, which had a rate of 41.1 births per 1,000 teenage women in 2004 and has traditionally had the highest teenage birth rate of all developed countries (Chart A). In 2004, Canada had 31,611 teenage pregnancies (30.5 per 1,000 women aged 15 to 19), of which 14,075 resulted in live births (4.2% of all births that year). And although Canada's teenage birth rate fell dramatically from 35.7 to 13.6 during the last two decades, in 2004 it was still almost seven times higher than Sweden's, which continues to have one of the lowest teenage birth rates of all developed countries.

Using the Survey of Labour and Income Dynamics (SLID), this study examines the personal and long-term socioeconomic characteristics of women aged 30 to 39 who gave birth as teenagers (see *Data source and definitions*). SLID carries information on the educa-

tion of the parents of teenage mothers, which provides a proxy for family background. Specifically, this paper compares women who were teenage mothers with those who were adult mothers with respect to educational outcome, long-term labour force participation, and low-income status.

### Teenage motherhood more than double among women with Aboriginal background

Among women who reported an Aboriginal background, 24% were teenage mothers compared with just 10% of other mothers. While Aboriginal background in SLID includes only those living off-reserve and is not representative of the whole Aboriginal population, those who reported an Aboriginal background in this study represented 3.8% of the sample compared with 3.5% of the population in 2001 and 4.0% in 2006.<sup>4</sup>

Unlike in the United States, immigrant women (visible minority or not) in Canada have a lower likelihood of being teenage mothers than native-born women not in a visible minority (Chart B). These results likely

#### Data source and definitions

The **Survey of Labour and Income Dynamics** (SLID) covers roughly 97% of the Canadian population, excluding those in the territories, in institutions, on Aboriginal reserves or in military barracks. Each panel of respondents, approximately 15,000 households and 30,000 adults, is surveyed for six consecutive years. A new panel is introduced every three years, so two panels always overlap. This study pools the first cross-sectional wave of each of the five existing panels of SLID (1993, 1996, 1999, 2002 and 2005) in order to attain an adequate sample of women who were teenage mothers.

The study was restricted to women aged 30 to 39 in each reference year.<sup>2</sup> The upper age limit minimized cohort differences while maintaining an adequate sample of teenage mothers; the lower limit gave teenage mothers a chance to 'catch up' to adult mothers in terms of education. For example, most women graduate from high school by age 17 or 18, and college or university by age 22 to 25, but because teenage mothers may have a harder time completing their studies due to the birth of their first child (and possibly subsequent children), they may not have completed their highest level of education until their late twenties or older.

The sample excluded women who had never given birth (5,262) or for whom the age at first birth is missing (700). The final sample consisted of 19,064 mothers aged 30 to 39 during the reference year, just over 10% of whom gave birth as teenagers.

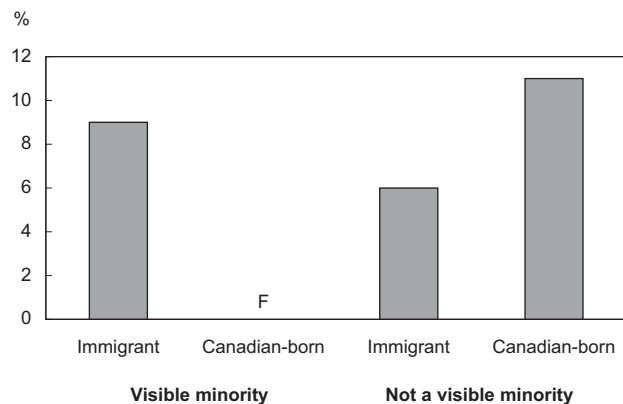
**Teenage mothers** are women who had their first birth under the age of 20. **Adult mothers** had their first birth at age 20 or older. A binary variable was derived using the self-reported 'age at first birth.' This was set to 1 for first birth under age 20 and 0 for first birth at a later age.<sup>3</sup>

**Education** refers to the highest level completed at the time of the survey, recoded into three groups: less than high school; high school diploma; and postsecondary degree, certificate or diploma.

**Low income measures** (LIMs) are set at 50% of median family income and adjusted for the number of people, reflecting the economies of scale inherent in family size and composition. The adjustment is based on the **family equivalence scale**, which is the sum of the 'equivalences' for each family member. The oldest person receives an equivalence of 1.0 and the second oldest person 0.4. All others 16 and older receive an equivalence of 0.4 and those under 16 receive 0.3. This adjusts family income for family size and composition in order to enable comparison of incomes for all families.

**Disability status** summarizes several questions. Starting with the 1999 reference year, the screening questions were significantly modified to reflect those used in the 2001 Census. For this reason, interpretation of the results must be made with care.

**Chart B Teenage childbearing lower among immigrants and visible minorities**



Note: Results are restricted to those with a valid response.  
Source: Statistics Canada, Survey of Labour and Income Dynamics, 1993, 1996, 1999, 2002 and 2005.

reflect varying immigration policies leading to differences in the ethnic, cultural and socioeconomic status of immigrants. That is, in Canada immigrants tend to be more educated because of the focus on skilled applicants, and women of educated families are less likely to be teenage mothers (Galarneau and Morissette 2004). Furthermore, the difference between the U.S. and Canada in the prevalence of teenage childbearing within visible minority groups may be partly attributable to different ethnic profiles.

### Teenage mothers more likely to marry in their teens but not before their first birth

About half of teenage mothers also married in their teens, compared with only 8% of adult mothers (Table 1). And while 71% of the latter married in their twenties, only 28% of the former did so. Furthermore, teenage mothers were more likely to remain single (19% versus 13%).

Although teenage mothers tend to marry young, 39% waited at least one year after having their first child. Only 20% of teenage mothers married prior to giving birth and 22% married in the same year. The majority of adult mothers, on the other hand, married prior to their first birth (72%) with only 6% marrying the same year and 8% the subsequent year. While 19% of teenage mothers never married, 46% reported being in common-law relationships during the reference year.

**Table 1 Marriage and marital status of teenage and adult mothers**

|                               | Teenage mothers | Adult mothers  |
|-------------------------------|-----------------|----------------|
|                               |                 | %              |
| <b>Age at first marriage</b>  |                 |                |
| Under 20                      | 49*             | 8              |
| 20 to 24                      | 19*             | 43             |
| 25 to 29                      | 9*              | 28             |
| 30 to 39                      | 4*              | 7              |
| Never married                 | 19*             | 13             |
| <b>Marriage and birth</b>     |                 |                |
| Married prior to birth        | 20*             | 72             |
| Married same year as birth    | 22*             | 6              |
| Married post birth            | 39*             | 8              |
| Never married                 | 19*             | 13             |
| <b>Current marital status</b> |                 |                |
| Married                       | 60*             | 76             |
| Common-law                    | 14*             | 10             |
| Separated                     | 9*              | 5              |
| Divorced                      | 7*              | 4              |
| Widowed                       | F               | 0 <sup>E</sup> |
| Never married                 | 10*             | 5              |

\* statistically significant from adult mothers at the 0.05 level or better

Note: Results are restricted to those with a valid response.  
Source: Statistics Canada, Survey of Labour and Income Dynamics, 1993, 1996, 1999, 2002 and 2005.

Although individuals in common-law partnerships have many characteristics similar to the married, it was not possible to combine these groups since no date was provided for the formation of the union.

Although most teenage mothers were eventually married (60%) by the time they were in their 30s, the proportion still trailed that of adult mothers (76%). On the other hand, teenage mothers were more likely to live in common-law relationships (14% versus 10%). Nevertheless, teenage mothers were still more likely to separate or divorce. Furthermore, teenage mothers were almost three times more likely to report marrying more than once (16% versus 6%).

Since teenage mothers, by definition, started their families at a younger age, they would also have had more time to have subsequent children. Indeed, teenage mothers, on average, had larger families (2.5 children) than adult mothers (2.0 children). However, adult mothers may also have delayed the completion of their families. So, while teenage mothers are more likely to have completed their family formation, adult mothers may still be having more children well into their 30s or later.

**Table 2 Marginal effects of the impact of teenage motherhood on education**

|  | High school graduation   | Completing postsecondary education |
|--|--------------------------|------------------------------------|
|  | Baseline probability (%) |                                    |
|  | 91                       | 55                                 |
| <b>Marginal effects</b>                    | % points                 |                                    |
| <b>Timing of motherhood and marriage</b>   |                          |                                    |
| Teenage, married before age 20             | -17*                     | -19*                               |
| Teenage, not married before 20             | -17*                     | -14*                               |
| Adult, married before age 20               | -7*                      | -17*                               |
| Adult, not married before 20               | ref                      | ref                                |
| <b>Father's education</b>                  |                          |                                    |
| Less than high school                      | ref                      | ref                                |
| High school diploma                        | 5*                       | 10*                                |
| Postsecondary completed                    | 7*                       | 22*                                |
| <b>Mother's education</b>                  |                          |                                    |
| Less than high school                      | ref                      | ref                                |
| High school diploma                        | 5*                       | 10*                                |
| Postsecondary completed                    | 8*                       | 19*                                |
| <b>Personal background</b>                 |                          |                                    |
| Aboriginal                                 | -4*                      | -12*                               |
| Non-aboriginal                             | ref                      | ref                                |
| Immigrant                                  | 0                        | 6                                  |
| Non-immigrant                              | ref                      | ref                                |
| Visible minority                           | 2                        | -1                                 |
| Non-visible minority                       | ref                      | ref                                |
| <b>Elementary or high school education</b> |                          |                                    |
| Newfoundland and Labrador                  | -4*                      | 7*                                 |
| Prince Edward Island                       | -5*                      | 4                                  |
| Nova Scotia                                | -2                       | 4                                  |
| New Brunswick                              | -2                       | -5*                                |
| Quebec                                     | -3*                      | -2                                 |
| Ontario                                    | ref                      | ref                                |
| Manitoba                                   | -1                       | -8*                                |
| Saskatchewan                               | 4*                       | 3                                  |
| Alberta                                    | 2                        | -4                                 |
| British Columbia                           | 1                        | -5                                 |
| Elsewhere                                  | -5*                      | -11*                               |
| <b>Wave</b>                                |                          |                                    |
| 1993                                       | -2                       | -3                                 |
| 1996                                       | ref                      | ref                                |
| 1999                                       | 1                        | 2                                  |
| 2002                                       | 3*                       | 7*                                 |
| 2005                                       | 3*                       | 11*                                |
| <b>Year of birth</b>                       |                          |                                    |
| 1949 to 1955                               | 3                        | 4                                  |
| 1956 to 1960                               | 2*                       | 1                                  |
| 1961 to 1965                               | ref                      | ref                                |
| 1966 to 1970                               | 1                        | 1                                  |
| 1971 to 1975                               | 0                        | -1                                 |

\* statistically significant from the reference category (ref) at the 0.05 level or better  
 Source: Statistics Canada, Survey of Labour and Income Dynamics 1993, 1996, 1999, 2002, 2005.

### Teenage mothers less likely to have completed high school or postsecondary education

Separate logit regressions examined women's outcomes for high school and postsecondary completion (see *Modeling socioeconomic outcomes*). The sample consisted of women aged 30 to 39 in each reference year who had previously given birth. The baseline probabilities of completing high school and postsecondary education among all mothers were 91% and 55%, respectively (Table 2). As expected, even after controlling for other factors, the timing of motherhood was found to be significantly related to the chances of finishing high school or postsecondary education. Teenage mothers were 17 percentage points less likely to complete high school and between 14 and 19 points less likely to complete postsecondary studies. This is consistent with a study using the Youth in Transition Survey, which found teenage pregnancy and childrearing to be related to dropping out of high school (Bowlby and McMullen 2002).<sup>5</sup>

The timing of marriage and its interaction with the timing of motherhood was also significant. Marriage and birth do not necessarily coincide for young mothers. For example, the first birth for married teenage mothers may have been planned, but for those who were single the birth was more likely to be unplanned. Therefore, the combination of the timing of motherhood and marriage may reflect some unobserved differences either in personal characteristics or in their situations that may influence educational outcomes. The results show that teenage mothers not married prior to age 20 were slightly more likely to



### Modeling socioeconomic outcomes

While descriptive analysis can provide some information on the relationship between teenage childbearing and long-term socioeconomic outcomes, multivariate analysis takes other factors that may influence these outcomes into account.

The outcomes studied were educational attainment, labour force participation, and living in low income. The education models used separate logit regressions estimating the marginal effects of teenage childbearing and other controls on the probability of completing high school and postsecondary school. A multinomial logit regression estimated the marginal effects of teenage childbearing and other controls on the probability of full-year, full-time employment, some employment, and not working. The income model used a logit regression to estimate the marginal effects of teenage childbearing and other controls on the probability of living in low income.

Logit regressions were chosen for the education and income models since the outcome variable had two responses. Similarly, the multinomial logit regression was chosen for the labour model because the outcome variable had three responses. Bootstrap weights were used to account for the effect of multi-stage sample selection in SLID. Stata was used to implement the model and bootstrap weights.

Note: Younger teenage mothers (age at first birth 17 and under) and older teenage mothers (age at first birth 18 to 19) were tested separately but no significant differences were evident, so the two groups were collapsed into one.

complete postsecondary school, having a 5 percentage point smaller decline than those married prior to age 20.

As expected, family background variables were statistically significant and showed that women of fathers who completed postsecondary education were 7 percentage points more likely to complete high school and 22 points more likely to complete postsecondary studies than women whose fathers had completed less than high school. Similarly, women whose mothers had completed postsecondary education were 8 points more likely to complete high school and 19 points more likely to complete postsecondary studies. Even parents who completed only high school were positively related to the likelihood of completing high school and postsecondary studies for women (between 5 and 10 percentage points). The interactions between age at first birth and parental education were not statistically significant and were subsequently dropped. Overall, parental education would seem to have a great influence on a woman's own educational outcome, regardless of teenage motherhood.

Immigrant and visible-minority status were also included in the model but were not statistically significant. The findings make sense—Canada's immigration policies are concentrated on skill selection, so many immigrants are going to be highly educated. Women with an Aboriginal background were found to be less likely to complete high school (-4 percentage points) or postsecondary studies (-12 points), consistent with previous research (Siggner and Costa 2005).

The model also controlled for the province or territory where most of the elementary or high school education was completed.<sup>6</sup> Although the results suggest some statistically significant differences between a few provinces and Ontario, they reflect conditions some 11 to 25 years prior to the reference year. Controls for cohort effect were not statistically significant. Finally, respondents from the 2002 and 2005 surveys were 3 percentage points more likely to have completed high school and 7 to 11 points more likely to have completed postsecondary studies than the 1996 respondents. This is not surprising since increasing emphasis has been put on higher educational attainment in order to qualify for better jobs. This can be seen especially in the higher marginal effect in recent years for postsecondary graduates.<sup>7</sup>

### Education helps counter negative effects of teenage childbearing on labour market participation

Previous research on the consequences of teenage childbearing has focused on education because, in most cases, it largely determines earnings, labour force participation, and occupation. Little research has delved more deeply into other socioeconomic outcomes of teenage childbearing. However, because job-related skills acquisition and significant earnings growth are concentrated at the start of one's career, teenage motherhood may affect a woman's long-term wage rates. Indeed, in this study, real composite wage rates<sup>8</sup> for teenage mothers were \$10.93 compared with \$13.29 for adult mothers,<sup>9</sup> consistent with other studies. Women in Canada who postponed having children earned at least 6% more than those who had children early (Drolet 2002). Similarly, in the U.S. teenage childbearing reduced white women's earnings by 23% and black women's by 13% (Klempinger et al. 1997).

Among mothers aged 30 to 39 in the reference year, the baseline probability of full-year full-time employment was 41%; for some employment, 34%; and for not working, 24%. The results demonstrate an impor-

tant relationship between teenage childbearing and education on labour force participation (Table 3). The interaction between the timing of motherhood and education level shows that teenage mothers with less than high school were 9 percentage points less likely to be in full-year full-time employment and more likely not to have worked during the reference year than adult mothers who graduated high school. Similarly, adult mothers with less than high school were 10 points less likely to be in full-year full-time employment and 13 points more likely to be not working during the reference year. However, what is striking is that teenage mothers with a high school diploma were no different from the reference group. Furthermore, teenage mothers with a postsecondary degree or certificate were actually more likely to be in full-year full-time employment than adult mother counterparts (13 percentage points versus 5 points above the reference profile). The results suggest that education plays an important role in women's labour force participation. That is, women who were teenage mothers were just as likely, if not more so, than adult mothers of a similar education level to work full year, full time. However, other unobserved characteristics such as family support, social network and a variety of other resources, or psychological traits may be at play.

Family background remains an influence even in the long run. Women whose mothers finished high school or postsecondary studies were 5 percentage points more likely to work full-year full-time than women whose mothers had less than high school. Possibly, mothers act as role models for their daughters and highly educated mothers may instil values that encourage higher educational attainment and labour force participation. However, fathers with completed postsecondary education had a statistically significant negative effect. This counterintuitive result may be due to omitted variables. For example, parental income, parental divorce and growing up with only one parent could influence outcomes. However, since SLID is limited to parental education, it was not possible to control for other potentially relevant background information.

In terms of personal background, immigrant women were 7 percentage points less likely to be working full year and more likely to be not working than non-immigrants. This may reflect immigrant women's preference to stay home with their children even if they are no longer of preschool age. Also, immigrant women may have fewer employment opportunities due to language barriers. Recognition of foreign credentials and

foreign work experience, and limited job contacts may also be factors. Visible minority women were no more or less likely to be in full-year full-time employment than other women. However, visible minority women were less likely to be in other forms of labour force participation and more likely to be not working. Women who reported an Aboriginal background did not have a statistically different likelihood of being in full-year full-time employment. The results suggest that differences in women with an Aboriginal background and labour force participation were explained by other factors in the model.

Compared with married mothers, only single (never married) mothers were statistically different. Single mothers were 12 percentage points less likely to be in full-year full-time employment and 13 points more likely to not have worked during the reference year. This finding is consistent with previous research on lone mothers and their labour force participation (Dooley and Finnie 2001).

Other controls were also included and found to be statistically significant. These include disability status, province of residence, area size of residence, and year for which the respondent was surveyed.

### **Education matters more in determining low income**

As noted, women who were teenage mothers have much lower average earnings than women who were adult mothers. However, their total personal after-tax income was not statistically different (\$16,500 versus \$17,500).<sup>10,11</sup> Although government transfers to families of the former were higher than to families of the latter (a difference of \$2,600), after-tax family incomes showed a much larger gap. Families of women who were teenage mothers, on average, had after-tax income of \$40,300 compared with \$47,300 for families of adult mothers. However, most of the difference disappeared once family size was taken into account. Families of women who were teenage mothers had adjusted after-tax income of \$19,900 compared with \$23,800 for families of adult mothers.<sup>12</sup>

Nevertheless, 21% of families of women who were teenage mothers had adjusted income below the low-income measure (LIM) compared with just 12% of adult mother families. However, as with the labour outcomes, the logit model on the probability of living below the LIM showed a statistically significant (at the 0.05 level or better) interaction between timing of motherhood and education.<sup>13</sup> Both women who were

**Table 3 Impact of teenage childbearing on labour force attachment of mothers aged 30 to 39**

|   | Full-year<br>full-time<br>employment | Some<br>employment | Did not<br>work |
|---|--------------------------------------|--------------------|-----------------|
|   | Baseline probability (%)             |                    |                 |
|   | 41                                   | 34                 | 24              |
| <b>Marginal effects</b>                   |                                      |                    |                 |
|   | % points                             |                    |                 |
| <b>Timing of motherhood and education</b> |                                      |                    |                 |
| Teenage, less than high school            | -9*                                  | 1                  | 8*              |
| Teenage, high school diploma              | -1                                   | -1                 | 1               |
| Teenage, postsecondary completed          | 13*                                  | 2                  | -15*            |
| Adult, less than high school              | -10*                                 | -3*                | 13*             |
| Adult, high school diploma                | ref                                  | ref                | ref             |
| Adult, postsecondary completed            | 5*                                   | 5*                 | -10*            |
| <b>Father's education</b>                 |                                      |                    |                 |
| Less than high school                     | ref                                  | ref                | ref             |
| High school diploma                       | -1                                   | 1                  | 0               |
| Postsecondary completed                   | -6*                                  | 3                  | 3               |
| <b>Mother's education</b>                 |                                      |                    |                 |
| Less than high school                     | ref                                  | ref                | ref             |
| High school diploma                       | 5*                                   | -3*                | -1              |
| Postsecondary completed                   | 5*                                   | -1                 | -4*             |
| <b>Personal background</b>                |                                      |                    |                 |
| Immigrant                                 | -7*                                  | -1                 | 7*              |
| Non-immigrant                             | ref                                  | ref                | ref             |
| Visible minority                          | 1                                    | -9*                | 8*              |
| Non-visible minority                      | ref                                  | ref                | ref             |
| Aboriginal background                     | 0                                    | -6*                | 5               |
| No aboriginal background                  | ref                                  | ref                | ref             |
| Disability reported                       | -15*                                 | -2                 | 17*             |
| No disability reported                    | ref                                  | ref                | ref             |
| Children born (mean = 2, ref)             | -9*                                  | 3*                 | 6*              |
| Living with preschool-age children        | -5*                                  | -1                 | 6*              |
| No preschool-age children                 | ref                                  | ref                | ref             |
| Gave birth during year                    | 5                                    | -6*                | 1               |
| Did not give birth during year            | ref                                  | ref                | ref             |
| Age (mean = 35, ref)                      | 1*                                   | 0                  | -1*             |
| <b>Marital status</b>                     |                                      |                    |                 |
| Married                                   | ref                                  | ref                | ref             |
| Common-law                                | 2                                    | -1                 | -2              |
| Separated                                 | 2                                    | -3                 | 1               |
| Divorced                                  | 5                                    | -9*                | 4               |
| Widowed                                   | -8                                   | -12                | 20              |
| Never married                             | -12*                                 | -1                 | 13*             |

\* statistically significant from the reference category (ref) at the 0.05 level or better  
Source: Statistics Canada, Survey of Labour and Income Dynamics 1993, 1996, 1999, 2002, 2005.

teenage mothers and adult mothers with less than high school were more likely to be living below the LIM than adult mothers with a high school diploma (4 and 5 percentage points respectively). Likewise, women who were teenage mothers and adult mothers who completed postsecondary studies were 3 and 5 points less likely to fall below the LIM. Overall the baseline probability of living in low income was 9%.

## Conclusion

Teenage childbearing has been shown to have negative and long-term effects on women's socioeconomic outcomes. Overall, teenage mothers in Canada had a lower probability than adult mothers of completing high school and postsecondary education, even after controlling for family background and other characteristics. Teenage childbearing and education are significantly related to a woman's labour market participation. In terms of labour force participation, the results suggest education matters more than family background—women with similar education had similar likelihoods of being in full-year full-time employment. Only women who were teenage mothers with a postsecondary education were more likely to be working full year full time during the reference year than women who were adult mothers with similar education. And although the mean wages for teenage mothers were lower than for women who were adult mothers, teenage mothers and adult mothers with similar education were almost equally likely to be living in low income. Furthermore, family background was no longer statistically significant for these mothers when it came to the likeli-

hood of living in low income. Similar results were found for the probability of living in low income. These results suggest that education may help counter the negative effects of teenage childbearing. However, other unobserved characteristics such as family support, social network and a variety of other resources, psychological traits, and other factors may also have an influence on outcomes.

In summary, the results from this study suggest that teenage childbearing is related to lower educational achievements, which may in turn lead to longer-term effects on labour force participation and rates of living in low income. However, teenage mothers and adult mothers with similar levels of education also had similar labour market participations and rates of living in low income—suggesting that education is more important in determining labour force participation and income in the long run.

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**Perspectives**

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■ **Notes**

1. Previous research has raised the endogeneity of teenage mothers as a predictor of educational attainment. Individuals intending to attain a high level of education can use preventive measures (e.g. birth control or abortion) to avoid pregnancy if they expect teenage childbearing to affect their schooling. Furthermore, high achievers may perceive their opportunity costs as education foregone if they become teenage mothers, while low achievers may not perceive any opportunity costs in education foregone given that they do not perceive education as important. Therefore, those who become teenage mothers may be those who never expected to achieve a high level of education. The perception of educational attainment may affect the probability of teenage motherhood. To correct for this endogeneity, researchers have employed instrumental variable (IV) analysis—estimating the probability of a teenage birth for each respondent in the survey with variables (instruments) correlated with the probability of a teenage birth but not with high school completion. The estimated probability is then used as a regressor in the model to estimate the probability of completing high school. Compared with the traditional analysis, which treats teenage childbearing as an exogenous variable, IV analysis finds that the teenage childbearing variable remains significant but with smaller estimated coefficients and marginal effects (Klepinger et al. 1995). In this study, teenage childbearing is treated as an exogenous variable since SLID does not lend itself to IV analysis. Consequently, results are likely to be accurate in predicting teenage childbearing as statistically significant in explaining the probability of finishing high school and postsecondary school. However, the estimated marginal effects may be overestimated.
2. The original target population included both women and men who had been teenage parents. However, men represented only 14% of the subsample. This low proportion of men suggests possible under-reporting and selection bias. With this in mind, the study focused only on women.
3. Due to the continuous nature of the original ‘age at first birth’ variable, it was possible to separately analyze younger teenage mothers (age at first birth less than 18) and older teenage mothers (age at first birth 18 or 19). Although on occasion older teenage mothers had characteristics closer to those of young adult mothers (age at first birth 20 to 24), more often than not they were more similar to younger teenage mothers.
4. Birth rates from Vital Statistics are not available by ethnicity, so the teenage Aboriginal birth rate, on- and off-reserve, is unknown.
5. The Youth in Transitions Survey could be used to study the educational outcomes of teenage childbearing. However, since the survey is only in its fourth cycle it would not be possible to observe longer-term socioeconomic outcomes such as employment and income of women in their 30s.
6. Information on the area of residence of women prior to or during the completion of high school or postsecondary school is not available in SLID.
7. Some other variables were tested but subsequently dropped as not statistically significant, based on the adjusted wald-test: age in reference year; and year of childbirth. As well, years since first birth was dropped since it is highly correlated with age at first birth. The total children born to the mother was also dropped as it is available only for the reference year. In order to determine the effect on high school and postsecondary completion, the model would require the total number of children prior to high school and postsecondary completion, however, this is not available in SLID. Furthermore, other research has found that after controlling for age at first birth, educational differences by number of children become quite small and unimportant (Grindstaff et al. 1991).
8. In 2005 dollars.
9. Older mothers who had their first birth in the reference year and were not employed full year were excluded in estimating the average composite hourly earnings.
10. All figures are in 2005 dollars.

11. Older mothers who had their first birth in the reference year and were not employed full year were excluded in estimating income averages, because those on maternity leave with their first child during the reference year will likely have a lower income compared with previous years and would therefore bias the results.
12. Income was adjusted using the family equivalence scale to reflect family size and composition. For more details on the family equivalence scale, see *Data source and definitions*.
13. The logit model for low income estimated the probability of living below the LIM. Covariates were interaction between timing of motherhood and education, parental education, personal background, marital status, family-related variables, demographic characteristics, disability status, survey year, age and year of childbirth.

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# Low-income children

*Dominique Fleury*

**C**hildhood poverty has been the focus of more than a few studies. Some of these studies have indicated that children who experience poverty, especially persistently, are at higher risk of encountering difficulties—health problems, developmental delays and behaviour disorders—and they are also more likely to fall into low income themselves in adulthood (Kornberger et al. 2001, Finnie and Bernard 2004). The negative effects associated with poverty are inconsistent with the general opinion that all children should live in conditions that allow them to reach their full potential.

But defining and measuring poverty among children is not straightforward, not only because for the most part children do not earn any income, but also because Canada, like many developed nations, has no official definition of poverty. Even so, it does have surveys of family income that enable various measures of low income to be defined. Some analysts question the validity of family income as an indicator of children's well-being, and still wonder about the actual link between the low-income experience, especially temporary, and an increased risk of encountering problems in adulthood. However, most agree that it is unfortunate when families with children do not have a sufficiently high income for suitable housing, food, clothing or some family activities.

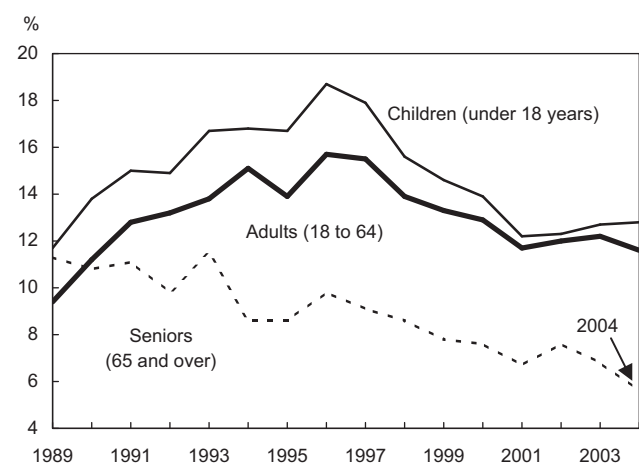
Using the *Survey of Labour and Income Dynamics* (SLID) and the survey that preceded it, this study looks at changes in the number, proportion and characteristics of children living in families whose income falls below various low-income cut-offs (Statistics Canada 2006). The starting point is 1989, the peak of the previous economic cycle. Since the recession of 1990/1992, Canada has enjoyed a lengthy period of expansion, which could be expected to have had a positive

impact on family incomes. However, despite sustained economic growth since the mid-1990s and the implementation of a federal program in 1998 to reduce child poverty in Canada (the National Child Benefit), the rate of low-income among children was no lower in 2004 than in 1989 (Chart). The objective of this study is to learn more about children with low-income status in Canada (see *Data source and definitions*).

## Rate and severity of low income among children in 2004

According to the low income after tax cut-off (LICO-IAT), 872,000 children under the age of 18 in 2004 (or 13% of all Canadian children<sup>1</sup>) lived in low-income families, whose average income after tax was \$21,400. On average, these families would have needed an additional \$8,000 not to be considered low income.

**Chart Evolution of the rate of low income in children, working-age adults and seniors**



Source: Statistics Canada, Survey of Labour and Income Dynamics.

*Dominique Fleury is with Human Resources and Social Development Canada. She can be reached at 613-957-6308 or perspectives@statcan.ca*

## Data source and definitions

The **Survey of Labour and Income Dynamics (SLID)** has collected information on income, labour and the characteristics of individuals and their families since 1993. SLID allows both cross-sectional and longitudinal analysis.

SLID samples selected for this study were from 1994 to 2004 for the cross-sectional analysis, and from 1999 to 2004 (Panel 3) for the longitudinal analysis.

The target population for the cross-sectional analyses was children under the age of 18. In 2004, roughly 6.8 million children lived in 3.8 million economic families.

The target population for the longitudinal analysis was children between the ages of 0 and 12 in 1999 (to ensure that no child would be over age 17 by 2004) for whom information was available every year between 1999 and 2004. Close to 4 million children met this criterion.

The trend analysis was limited to the period 1994 to 2004 because income data published in 2003 had major revisions for 1980 to 2003. These changes affected the low-income statistics, but only the most up-to-date SLID files were publicly available and not the Survey of Consumer Finances (the income survey prior to SLID).

### Low-income measures:

While no generally accepted definition of 'poverty' exists in Canada, the following low-income measures are widely used: the **low-income cut-off (LICO)** before and after tax,

the **low income measure (LIM)** before and after tax, and the **market basket measure (MBM)**.

With each of these measures, individuals—in this case, children—are considered to be in low income in a given year when the annual income of their economic family is below a pre-determined cut-off.

Individuals are in **persistent low income** when their annual family income cumulated over several consecutive years is below the total of the low-income cut-offs associated with their family for the same period.

An **economic family** comprises all individuals living under the same roof and related by blood, marriage, common-law marriage or adoption.

For more information on the LICO, LIM and MBM, please consult the following documents:

- 1) <http://www.hrsdc.gc.ca/en/cs/sp/sdc/pkrf/publications/research/2002-000662/SP-628-05-06e.pdf>
- 2) <http://www.statcan.gc.ca/english/research/75F0002MIE/75F0002MIE2004011.pdf>

Given that the **low income after tax cut-off (LICO-IAT)** is the most widely used in Canada, it was used for this study. However, the market basket measure was also used to test the validity of the results—most of the results stood up to the change in measure.

Almost half of these low-income children lived in a situation that could be considered fairly severe since their family's income was below 75% of the low income after tax cut-off. By contrast, the average family income for children not in low-income families that year was 3.4 times higher, at \$72,800.<sup>2</sup>

Overall, market income accounts for 80% of total income for families with children, but for only 40% among low-income families with children. The latter received a greater proportion from social assistance, child benefits and other transfers. Nevertheless, less than two in five low-income children (38%) lived in families that received social assistance in 2004, and more than four in five were able to count on some market income (85%).

### Certain family characteristics increase vulnerability to low income

Family work effort and type are the factors most strongly associated with the risk of low income for children. According to specification A of the logistic regression model (Table 1), children who lived in a family whose main income recipient was not in the

labour market for most of the year were the most vulnerable to low income in 2004, followed by those whose main income recipient was unemployed or still in school. Children whose main income recipient was self-employed also had a higher risk of being in low income than those whose main income recipient was an employee. Furthermore, regardless of the main income recipient's labour market status, children from single-parent families were much more vulnerable to low income than children from two-parent families. Children who lived in families with several siblings were also more vulnerable to low income.

However, living in a two-parent family is not a guarantee against low income, since half of low-income children (51%) lived with two parents in 2004. Children's vulnerability to low income depends not only on their family type, but also on the family's work ability and effort.

More than two-thirds (68%) of all Canadian children lived in families with two income earners in 2004, compared with only one in five low-income children (21%). Although in many cases (45%) the low-income children's family type simply did not allow for the possi-

**Table 1 Impact of personal and family characteristics and main income recipient on risk of low income among children**

|  | Distribution |      | Specification A                    |                        | Specification B                    |                        |
|--|--------------|------|------------------------------------|------------------------|------------------------------------|------------------------|
|  | Low income   |      | Estimated probability <sup>1</sup> | Difference with lowest | Estimated probability <sup>1</sup> | Difference with lowest |
|  | Yes          | No   |                                    |                        |                                    |                        |
| <b>Children's characteristics</b>        |              |      |                                    |                        |                                    |                        |
| Boy                                      | 52.2         | 51.7 | 12.8                               | 0.0                    | 13.0                               | 0.3                    |
| Girl                                     | 47.8         | 48.4 | 12.9                               | 0.1                    | 12.7                               | 0.0                    |
| Under age 6                              | 29.8         | 29.6 | 12.3                               | 0.0                    | 12.8                               | 0.0                    |
| Age 6 to 11                              | 36.0         | 32.9 | 13.0                               | 0.7                    | 12.9                               | 0.1                    |
| Age 12 to 17                             | 34.2         | 37.6 | 13.1                               | 0.8                    | 12.9                               | 0.1                    |
| <b>Region of residence</b>               |              |      |                                    |                        |                                    |                        |
| Atlantic                                 | 6.2          | 7.0  | 14.7                               | 3.2*                   | 17.1                               | 5.8*                   |
| Quebec                                   | 18.9         | 22.9 | 11.5                               | 0.0                    | 11.3                               | 0.0                    |
| Ontario                                  | 40.8         | 40.5 | 13.2                               | 1.7                    | 12.5                               | 1.2                    |
| Prairies                                 | 16.7         | 18.0 | 12.5                               | 1.0                    | 12.1                               | 0.8                    |
| British Columbia                         | 17.4         | 11.6 | 14.1                               | 2.6                    | 16.0                               | 4.7*                   |
| <b>Size of inhabited region</b>          |              |      |                                    |                        |                                    |                        |
| Rural                                    | 5.4          | 14.1 | 5.1                                | 0.0                    | 5.2                                | 0.0                    |
| Urban, population under 500,000          | 35.0         | 38.8 | 11.5                               | 6.4*                   | 11.3                               | 6.1*                   |
| Urban, population 500,000 and over       | 59.6         | 47.1 | 16.4                               | 11.3*                  | 16.5                               | 11.3*                  |
| <b>Family type</b>                       |              |      |                                    |                        |                                    |                        |
| One parent                               | 45.3         | 12.1 | 27.9                               | 18.7*                  | 33.5                               | 25.0*                  |
| Two parents                              | 51.3         | 85.0 | 9.4                                | 0.2                    | 8.5                                | 0.0                    |
| Other family                             | 3.1          | 2.9  | 9.2                                | 0.0                    | 12.2                               | 3.7                    |
| One child                                | 18.9         | 24.1 | 9.6                                | 0.4                    | 8.8                                | 0.0                    |
| Two children                             | 35.4         | 46.3 | 10.9                               | 1.3                    | 10.7                               | 1.9                    |
| Three or more children                   | 45.8         | 29.3 | 18.1                               | 8.5*                   | 19.4                               | 10.6*                  |
| <b>Main income recipient<sup>2</sup></b> |              |      |                                    |                        |                                    |                        |
| Under age 30                             | 15.6         | 7.4  | 19.1                               | 8.4*                   | 21.9                               | 11.6*                  |
| Age 30 to 39                             | 46.2         | 39.3 | 14.0                               | 3.3*                   | 14.0                               | 3.3*                   |
| Age 40 and over                          | 38.3         | 53.4 | 10.7                               | 0.0                    | 10.3                               | 0.0                    |
| <b>Education</b>                         |              |      |                                    |                        |                                    |                        |
| Less than high school diploma            | 19.5         | 11.2 | 17.8                               | 9.2*                   | 19.6                               | 12.3*                  |
| High school diploma                      | 31.6         | 22.3 | 14.3                               | 5.7*                   | 15.6                               | 8.3*                   |
| More than high school diploma            | 36.9         | 39.7 | 12.4                               | 3.8*                   | 11.3                               | 4.0*                   |
| University                               | 11.8         | 26.7 | 8.6                                | 0.0                    | 7.3                                | 0.0                    |
| <b>Work limitations</b>                  |              |      |                                    |                        |                                    |                        |
| Yes                                      | 16.8         | 6.9  | 15.4                               | 2.8                    | 20.1                               | 7.9*                   |
| No                                       | 83.2         | 93.1 | 12.6                               | 0.0                    | 12.2                               | 0.0                    |
| <b>Recent immigrant</b>                  |              |      |                                    |                        |                                    |                        |
| Yes                                      | 12.8         | 5.4  | 22.2                               | 10.5*                  | 26.8                               | 15.5*                  |
| No                                       | 87.2         | 94.6 | 11.7                               | 0.0                    | 11.3                               | 0.0                    |
| <b>Aboriginal off-reserve</b>            |              |      |                                    |                        |                                    |                        |
| Yes                                      | 8.0          | 4.0  | 16.4                               | 3.7                    | 17.5                               | 4.9*                   |
| No                                       | 92.0         | 96.0 | 12.7                               | 0.0                    | 12.6                               | 0.0                    |
| <b>Main activity</b>                     |              |      |                                    |                        |                                    |                        |
| Employee                                 | 26.2         | 76.6 | 5.6                                | 0.0                    | ..                                 | ..                     |
| Self-employed                            | 18.9         | 15.7 | 15.8                               | 10.2*                  | ..                                 | ..                     |
| Unemployed                               | 8.4          | 1.9  | 34.3                               | 28.7*                  | ..                                 | ..                     |
| Student                                  | 9.0          | 1.2  | 27.2                               | 21.6*                  | ..                                 | ..                     |
| Not working                              | 33.8         | 4.7  | 39.3                               | 33.6*                  | ..                                 | ..                     |

\* difference in predicted probability is statistically significant to a confidence level of 95%

1. Corresponds to the probability that a child with a particular characteristic would be in a low-income situation compared with another child without this characteristic, all others being equal.

2. Since the main income recipient gender variable is too closely correlated with being in a one-parent family, it has been omitted from the regressions.

Source: Statistics Canada, Survey of Labour and Income Dynamics, 2004.



bility of two income earners (e.g. single-parent families), many others lived in families in which not all the parents were employed. In particular, for more than one-third (34%) of low-income children from single-parent families, the parent did not declare any earnings, and more than 60% of low-income children from two-parent families lived in a family in which neither or only one parent declared earnings.

Moreover, parents' labour market participation does not always protect children from low income. In 2004, more than 40% of low-income children lived with at least one parent who declared a significant work effort (i.e. worked at least 910 paid hours during the year), and more than 20% lived in families with at least two earners.

Parents' work does not always protect children from low income because some parents have working conditions that do not enable them to meet their family's financial needs. Low-income children's parents who worked in 2004 had less favourable working conditions than other workers. They worked fewer hours (500 fewer),<sup>3</sup> were more likely to be self-employed (33% versus 16%), and had atypical work schedules (33% versus 25%). In addition, chances were much higher that they earned less than \$10 per hour (49% versus 4%), had non-unionized jobs (85% versus 63%) or had jobs that did not offer additional benefits such as a dental or supplementary health plan (61% versus 17%).

In addition to family work effort, parents' working conditions and family type, some parents' personal characteristics are associated with a greater vulnerability of children to low income. Children dependent mainly on one parent with at the very most a high school diploma, who was under the age of 30, a recent immigrant, an Aboriginal person living off-reserve or who had limitations at work were at higher risk of having low family incomes in 2004.<sup>4</sup> However, the association between low income and the last two characteristics was statistically significant only when the main income recipient's labour market status was omitted from the model (Table 1, specification B). This means that these characteristics affect family income through their influence on labour market participation. However, in the absence of information on parents' labour market status, children who depend primarily on one parent with a limitation at work or of Aboriginal origin were at higher risk of low income. The three other characteristics (being of recent immigrant status, having no more than a high school

diploma, or being under the age of 30) were associated with low income for children even when the main income recipient's labour market status was taken into consideration, but to a lesser degree.

A third model specification was also used to capture the effect of the total family work effort. It indicated that family work effort is the best predictor of low income for children. Its effect was even more significant than the labour market status of the family's main income recipient or the family type. Children who lived in families with no earners were at the greatest risk of low income. In fact, their probability of living in a low-income situation was 71% in 2004. By contrast, the probability of low income among children who lived in a family whose main income recipients declared not being in the labour force for most of the year was 39%. Furthermore, this specification showed that children in families with one earner (single-parent family or not) were more likely to live in low income (23%) than children who could count on the economic support of two parents (5%).

To date, the association between children's place of residence and the risk of being in a low-income situation has not been analyzed. Given that the LICO-IAT does not control for differences in the cost of living in different communities of the same size in Canada, it is difficult to establish a firm link between the region of residence and the probability of low income among children.

Using LICO-IAT suggests that children who lived in rural areas were much less at risk of belonging to low-income families in 2004 than children in large cities (their estimated low-income probabilities were 5% and 16% respectively). However, with the market basket measure, which accounts for differences in the cost of living across communities, children's vulnerability to low income was very similar whether they lived in rural or urban areas (16% versus 17%).

Furthermore, with the LICO-IAT, only children in the Atlantic provinces stood out as being at slightly higher risk of low income compared with children elsewhere in Canada. However, the market basket measure revealed more significant provincial differences in the vulnerability of children to low income. For example, children in British Columbia were the most likely to be in a low-income situation in 2004 (their low-income probability was estimated at 23%), followed by children in the Atlantic provinces (20%). Children in Quebec were the least vulnerable (8%).

**Table 2 Evolution of the severity of situation of low-income children**

|      | Low income          |                         |                               | Not low income      |
|------|---------------------|-------------------------|-------------------------------|---------------------|
|      | Income <sup>1</sup> | Difference <sup>2</sup> | Severe situation <sup>3</sup> | Income <sup>1</sup> |
|      | 2004 \$             | %                       | %                             | 2004 \$             |
| 1994 | 20,200              | 29.6                    | 52.5                          | 60,200              |
| 1995 | 19,700              | 30.3                    | 53.3                          | 60,600              |
| 1996 | 20,000              | 29.3                    | 50.3                          | 61,300              |
| 1997 | 20,100              | 29.8                    | 50.7                          | 62,500              |
| 1998 | 20,300              | 29.2                    | 51.5                          | 63,900              |
| 1999 | 20,600              | 28.4                    | 47.4                          | 65,500              |
| 2000 | 21,300              | 27.0                    | 43.1                          | 68,400              |
| 2001 | 20,500              | 28.3                    | 47.9                          | 70,100              |
| 2002 | 20,700              | 28.2                    | 49.1                          | 70,000              |
| 2003 | 20,700              | 28.1                    | 46.5                          | 70,400              |
| 2004 | 21,400              | 27.7                    | 48.3                          | 72,800              |

1. After tax.
  2. The formula used to calculate the difference in income for each low-income child is the following: 1-(family income after transfers and tax ÷ low-income cut-off after tax).
  3. Family income after transfers and tax for low-income children is below the 50% low-income cut-offs associated with their family.
- Source: Statistics Canada, Survey of Labour and Income Dynamics.

between the family income of low-income children and their low-income cut-off was 30% in 1994, slightly but not statistically different than the gap 10 years later (28% in 2004) (Table 2). The proportion of low-income children in severe low income was 53% in 1994, slightly higher than the 2004 rate (48%). However, the average family income difference between low-income children and other children was greater in 2004 than in 1994 (\$51,400 compared with \$40,000).<sup>6</sup> This increase in income inequality seems to be due to a significant increase in the family income of children not living in a low-income situation during this period—more specifically, a major income increase for families at the highest end of the income distribution—rather than an income decline for economically disadvantaged families.

**Income taxes and transfers play an important role in reducing low income**

Every year between 1994 and 2004, the redistribution of income through income taxes and transfers helped reduce the rate and severity of low income for children. Comparing market income, rather than income after tax and transfers, with the Statistics Canada low income after tax cut-off, shows that 22% of children, rather than 13%, would have had low-income status in 2004 (Table 3)—i.e. an additional 584,000 children

Since the market basket measure is more specific in determining differences in the cost of living across Canada, it should generally be more effective in identifying the impact of the region of residence and its size on the rate of low income among children.

**Changes in low income among children in the past few years**

From 12% in 1989, low income among children steadily increased to a peak of 19% in 1996, before declining to 12% in 2001. Since then, it has remained fairly stable despite sustained economic growth.<sup>5</sup> Furthermore, the severity of low income among children remained fairly stable between 1994 and 2004. The average difference

**Table 3 Low income in children, comparing low-income cutoffs after tax, with market income or income after tax**

|      | Rate          |                                | Number of children |                                | Difference    |                                |
|------|---------------|--------------------------------|--------------------|--------------------------------|---------------|--------------------------------|
|      | Market income | Income after tax and transfers | Market income      | Income after tax and transfers | Market income | Income after tax and transfers |
|      | %             |                                | '000               |                                | %             |                                |
| 1994 | 25.1          | 16.8                           | 1,753              | 1,174                          | 63.5          | 29.6                           |
| 1995 | 25.0          | 16.7                           | 1,753              | 1,171                          | 63.9          | 30.3                           |
| 1996 | 28.0          | 18.7                           | 1,968              | 1,319                          | 61.4          | 29.3                           |
| 1997 | 26.6          | 17.9                           | 1,871              | 1,260                          | 61.4          | 29.8                           |
| 1998 | 24.8          | 15.6                           | 1,737              | 1,093                          | 60.3          | 29.2                           |
| 1999 | 22.9          | 14.6                           | 1,596              | 1,015                          | 58.4          | 28.4                           |
| 2000 | 21.5          | 13.9                           | 1,491              | 967                            | 57.0          | 27.0                           |
| 2001 | 21.5          | 12.2                           | 1,484              | 844                            | 55.8          | 28.3                           |
| 2002 | 22.1          | 12.3                           | 1,519              | 849                            | 53.6          | 28.2                           |
| 2003 | 21.7          | 12.7                           | 1,480              | 867                            | 54.8          | 28.1                           |
| 2004 | 21.5          | 12.9                           | 1,456              | 872                            | 53.9          | 27.7                           |

Source: Statistics Canada, Survey of Labour and Income Dynamics.

### Cross-sectional analysis

To estimate the impact of certain characteristics on the risk of low income among children in 2004, a logistic regression model was used. The binary dependent variable had a value of 1 if the child lived in a low-income family in 2004, 0 otherwise.

Explanatory variables covered children's personal characteristics, as well as family and main income recipient characteristics. Given the important interactions between different explanatory variables of interest, different specifications were estimated.

**Specification A** included all the children's personal characteristics, as well as the characteristics of their family and the main income recipient, *including labour market status*. This regression was used to determine the importance of the association between the labour force attachment of the family's main income recipient and the risk of low income. However, the effects of a number of other characteristics were reduced, since they are partly captured through the impact they have on the labour market status of the main income recipient.

**Specification B** included all the children's personal characteristics, as well as the characteristics of their family

and the main income recipient, *excluding labour market status*. This regression was used to determine the direct association between several characteristics that affect labour market status and then the risk of low income.

**Specification C** included all the children's personal characteristics, as well as the characteristics of their family and the main income recipient, *excluding labour market status but including total family work effort*. Given that family type (single-parent, two-parent or other) and the main income recipient's labour market status (employee, self-employed, unemployed, student, not working) are too strongly correlated to the total family work effort, these two variables had to be excluded from the model in order to see to what extent the total number of income earners in the family was associated with low income.

Since the coefficients estimated using Logit are not easy to interpret (due to the non-linear nature of the Logit-type function), the predicted probabilities were derived from the coefficients estimated for each selected model specification. Only those probabilities derived from estimated coefficients significantly different from zero (with a 95% confidence level) were discussed.

in the absence of income redistribution. Moreover, the low-income gap would have been 54% in 2004, rather than the observed 28%.

Every year since 1994, income taxes and transfers reduced the rate of low income for children by eight or nine percentage points. However, their impact on low-income severity in 2004 was less than it had been 10 years earlier. Taxes and transfers reduced the low-income gap by an average of 26 percentage points in 2004 compared with 34 in 1994.

Every year, government transfers represented a significant proportion of the after-tax income of low-income families with children—between 59% and 67%. However, the source of these transfers evolved significantly between 1994 and 2004. Since 1999, the most important source has been child benefits (federal and provincial), whereas in previous years,

social assistance represented the biggest portion of transfer income. More specifically, 36% of the income of low-income families with children in 1994 was from social assistance, while 16% came

from child benefits. Ten years later, these proportions were practically reversed, with 31% of their family income coming from child benefits and 17% from social assistance (Table 4).

**Table 4 Income components after transfers and tax for low-income families with children**

|      | Income  | Net market income | Social assistance | Employment Insurance | Benefits for children | Other transfers |
|------|---------|-------------------|-------------------|----------------------|-----------------------|-----------------|
|      | 2004 \$ |                   |                   |                      | %                     |                 |
| 1994 | 18,900  | 35.5              | 35.8              | 6.3                  | 16.0                  | 6.3             |
| 1995 | 18,500  | 34.9              | 36.4              | 5.9                  | 15.9                  | 6.8             |
| 1996 | 18,700  | 33.5              | 36.2              | 3.8                  | 18.3                  | 8.1             |
| 1997 | 18,500  | 33.7              | 33.1              | 3.9                  | 20.0                  | 9.2             |
| 1998 | 18,500  | 32.9              | 29.8              | 4.1                  | 25.1                  | 8.2             |
| 1999 | 19,000  | 35.7              | 25.8              | 2.3                  | 27.0                  | 9.2             |
| 2000 | 19,200  | 38.0              | 22.4              | 2.8                  | 28.2                  | 8.6             |
| 2001 | 18,700  | 34.8              | 23.0              | 2.4                  | 30.1                  | 9.6             |
| 2002 | 18,900  | 37.9              | 21.2              | 2.9                  | 30.2                  | 7.7             |
| 2003 | 19,300  | 38.1              | 20.4              | 3.7                  | 29.8                  | 8.1             |
| 2004 | 19,700  | 40.8              | 16.7              | 3.5                  | 31.1                  | 7.6             |

Source: Statistics Canada, Survey of Labour and Income Dynamics.

Adding up all the low-income gaps indicates that a total of \$3.3 billion in additional income (from market income, transfers or other sources) would have been required for all low-income families with children to move above the low-income thresholds in 2004.

### Children no more likely to be in a family vulnerable to low income in 2004 than in 1989

Many factors can make the rate of low income in children vary over time, including changes in the economy, government interventions, and changes in population composition. Regression analyses using 2004 data have revealed that some family characteristics are associated with a higher risk of low income for children. If the proportion of children in families with characteristics strongly associated with low income grows, then a greater proportion of all children will be vulnerable. This type of trend could mitigate the impact of economic growth and government interventions on low income among children. However, this does not seem to have been the case between 1989 and 2004.

In fact, the distribution of children based on certain characteristics identified as low-income risk factors precludes the conclusion that children were more likely to be in a family at high risk of low-income in 2004 than in 1989 (Table 5). On the one hand, they were more likely to be in a single-parent family or in a family whose main income recipient was a recent immigrant. On the other hand, fewer depended on a main income recipient under the age of 30 with less than a high school diploma. The rate of low income for children based on their family characteristics also evolved

**Table 5 Children's family and main income recipient's characteristics and low income rate among children**

|                                 | 1989           |                    | 2004           |                    |
|---------------------------------|----------------|--------------------|----------------|--------------------|
|                                 | Children       | Rate of low income | Children       | Rate of low income |
|                                 | '000           | %                  | '000           | %                  |
| <b>All children</b>             | <b>6,684.8</b> | <b>11.7</b>        | <b>6,784.1</b> | <b>12.9</b>        |
| <b>Family</b>                   |                |                    |                |                    |
| Two parents                     | 85.5*          | 7.0                | 80.8*          | 8.2                |
| Single parent                   | 12.2*          | 44.0*              | 16.3*          | 35.7*              |
| Other family type               | 2.4            | 15.8               | 3.0            | 13.6               |
| <b>0 income earners</b>         | <b>4.6</b>     | <b>84.0*</b>       | <b>4.0</b>     | <b>78.8*</b>       |
| 1 income earner                 | 25.1           | 19.6*              | 24.5           | 26.1*              |
| 2 or more income earners        | 70.2           | 4.1                | 71.5           | 4.6                |
| <b>1 or 2 children</b>          | <b>68.8</b>    | <b>11.0</b>        | <b>68.6</b>    | <b>10.2</b>        |
| 3 or more children              | 31.2           | 13.2*              | 31.4           | 18.7*              |
| <b>Main income recipient</b>    |                |                    |                |                    |
| Under age 30                    | 13.1*          | 25.7               | 8.4*           | 23.9               |
| Less than a high school diploma | 27.8*          | 21.5               | 12.2*          | 19.6               |
| Recent immigrant                | 6.7*           | 22.6*              | 9.4*           | 26.1*              |

\* the estimates are statistically different between 1989 and 2004

Source: Statistics Canada, Survey of Consumer Finances, 1989; Survey of Labour and Income Dynamics, 2004.

little during this period. While it grew for children of recent immigrants and children in families with one income earner and three or more children, it fell for children in families with no income earners and children in single-parent families.

### For many children, low income is a transitory situation

A snapshot of low income children for one year does not provide a complete picture of the situation. Indeed, several consecutive years of data provide additional useful information. For instance, the proportion of children affected by low income over a six-year period is

much higher than in a single year. Of the children under age 13 in 1999, 22% experienced low income at least one year between 1999 and 2004, compared with just 12% in 1999. But the longer time frame also reveals that a small proportion of children are in a persistent low-income situation. Between 1999 and 2004, 3% of children under age 13 in 1999 (or just less than 100,000) were in a low-income situation for all six years (Table 6).

Low income among children is a very dynamic phenomenon. The majority of children living in low income do not remain in that situation continuously, nor are children not in low income necessarily exempt from it. From 1999 to

**Table 6 Persistence of low income**

|  | '000  | %    |
|--|-------|------|
| <b>All children</b>                        |       |      |
| In 1999                                    | 486.1 | 12.3 |
| At least 1 year                            | 878.6 | 22.3 |
| Every year                                 | 98.9  | 2.5  |
| Persistent <sup>1</sup>                    | 275.2 | 7.0  |
| <b>After at least 1 year in low income</b> |       |      |
| Only 1 year                                | 317.9 | 36.2 |
| 2 years                                    | 185.9 | 21.2 |
| 3 to 4 years                               | 190.9 | 21.7 |
| 5 to 6 years                               | 183.9 | 20.9 |
| Persistent <sup>1</sup>                    | 275.2 | 31.3 |

1. Annual family income cumulated over several consecutive years is below the low-income cut-offs in the same period.  
Source: Statistics Canada, Survey of Labour and Income Dynamics, 1999 to 2004.

2004, between 2% and 4% of children not in low income in a given year fell into it the following year. But between 28% and 46% of children in a low-income situation in a given year climbed out the following year.<sup>7</sup> However, approximately 30% of children who escaped low income between 1999 and 2000 re-entered it before 2005.

For children, entry into and exit from low income can be explained by changes in their family situation or their parents' labour market situation. Approximately 2% of children from 2003 fell into low income in 2004. For 42% of these children, the main reason was a change in their family environment (for example, parental separation or a new sibling); for 27%, it was mainly due to a lower employment income for the main income recipient; and for 31%, it resulted from a reduction in family income from other sources (transfers, second earner, etc.).

The main reasons behind children escaping low income are also interesting. Of the 28% of children in low income in 2003 but not in 2004, 20% escaped mainly due to a change in their family environment (for example, a new spouse for the parent or the departure of a sibling). The main reason for others was an increase in the income of their family members (50% due to an earnings increase for the main income recipient, and 29% from an increase in the family income from other sources).

Of all the children under 13 in 1999 who experienced low income for at least one year between 1999 and 2004, the average time in this situation was 2.7 years, or just under half of the study period. More than 30% of them experienced persistent low income and 43% experienced low income from three to six years between 1999 and 2004, which represents a significant part of their childhood.

**Only a few factors help predict persistence of low income for children**

Of all the children in a low-income situation in 1999, only those whose main income recipient was not in the labour market, was 30 years of age or older or had at most a high school diploma had a significantly higher risk of persistent low income (Table 7). For example, the risk of persistent low income when the main income recipient was not in the labour market in 1999 was more than 60%, while it varied between 22% and 24% for low-income children whose parent was either self-employed or an employee. While a parent's self-employment seems to be a determining factor of low income among children in a given year, it is

not associated with persistent low income. The same can be said for children in a single-parent family. In fact, the probability of persistent low income for children is similar for those in a single-parent (40%) or two-parent (45%) family, whereas in a given year, children in single-parent families are clearly at higher risk of low income. And low-income children whose main income recipient was under the age of 30 were at lower risk of persistent low income than those whose main income recipient was older, while for the risk of low income in a given year, the opposite was true (Tables 1 and 7).<sup>8</sup>

**Conclusion**

The proportion of children under the age of 18 living in a low-income family was virtually the same in 2004 as in 1989, despite the steady economic growth since the 1990-1992 recession. More than 12% of children lived in a low-income family in 2004, and more than 22% of children experienced an episode of low income between 1999 and

**Longitudinal analysis**

To estimate the impact of certain characteristics on the risk low-income children in 1999 had of experiencing persistent low income between 1999 and 2004, another logistic regression model was used. In this model, the binary dependent variable had a value of 1 if the low-income child in 1999 experienced persistent low income between 1999 and 2004, 0 otherwise. The explanatory variables were the same as those in specification A for the cross-sectional analysis, except some had to be categorized differently (e.g. variables on age and the education level of the main income recipient), given the limited number of observations.

**Table 7 Impact of characteristics of low-income children under 13 years in 1999 on their risk of persistent low income**

|                                      | Distribution of low-income children in 1999 | Estimated probability of persistent low income from 1999 to 2004 |
|--------------------------------------|---|--|
|                                      |   | %  |
| <b>All children</b>                  | <b>100.0</b>                                | <b>41.5</b>  |
| Boy                                  | 54.2  | 40.7   |
| Girl                                 | 45.9  | 42.3   |
| Under age 6                          | 40.7  | 42.2   |
| Age 6 to 12                          | 59.3  | 42.1   |
| <b>Province</b>                      |   |  |
| Atlantic                             | 10.9  | 48.8   |
| Quebec                               | 25.2  | 40.9   |
| Ontario                              | 31.8  | 34.6   |
| Prairies                             | 21.3  | 54.5   |
| British Columbia                     | 10.8  | 35.9   |
| <b>Region</b>                        |   |  |
| Rural                                | 7.1   | 45.0   |
| Urban, population under 500,000      | 38.1  | 48.8   |
| Urban, population 500,000 and over   | 54.9  | 37.1   |
| <b>Family type</b>                   |   |  |
| Single parent                        | 55.7  | 39.9   |
| Two parents                          | 41.3  | 44.6   |
| Other family                         | F   | F  |
| One child                            | 14.0  | 39.3   |
| Two children                         | 36.2  | 49.6   |
| Three or more children               | 49.8  | 37.7   |
| <b>Main income recipient</b>         |   |  |
| Under 30 years                       | 23.6  | 33.5   |
| 30 years and over                    | 76.4  | 44.8*  |
| <b>Educational level completed</b>   |   |  |
| High school diploma                  | 54.3  | 55.2*  |
| More than a high school diploma      | 45.7  | 27.9   |
| <b>Work limitations</b>              |   |  |
| Yes                                  | 10.9  | 49.5   |
| No                                   | 89.1  | 42.0   |
| <b>Recent immigrant</b>              |   |  |
| Yes                                  | 15.1  | 62.9   |
| No                                   | 84.9  | 38.7   |
| <b>Aboriginal off-reserve</b>        |   |  |
| Yes                                  | 5.8   | 58.1   |
| No                                   | 94.2  | 41.3   |
| <b>Main activity during the year</b> |   |  |
| Employee                             | 26.2  | 24.3   |
| Self-employed                        | 18.0  | 21.7   |
| Unemployed                           | F   | F  |
| Student                              | 8.6   | 53.1   |
| Not working                          | 42.7  | 60.8*  |

\* difference in predicted probability is statistically significant to a confidence level of 95%

Source: Statistics Canada, Survey of Labour and Income Dynamics, 1999 to 2004.

2004. Children who experienced an episode of low income remained in this situation on average for almost half (2.7 years) of the 1999 to 2004 study period.

Furthermore, the severity of low income for children was the same in 2004 as 10 years prior, and since the economic situation of the well-off children in Canada improved significantly in the past decade, income inequality widened.

Family situation and parents' lack of employment are the factors that most influenced children's vulnerability to low income. While children in single-parent families were clearly more vulnerable to low income, those in two-parent families were not exempt from it. In 2004, more than half of low-income children lived in a two-parent family. Whether children were part of single- or two-parent families, their parents' labour market situation was a key determining factor in the risk of getting into a low-income situation. Children in families with no workers were the most vulnerable to low income, while those with one parent working were more vulnerable than those with both parents working. However, even parents' substantial work effort does not always protect children from low income if salary or working hours are insufficient.

Low income for children is a very dynamic phenomenon in Canada. Many children experience low income, but few remain in that situation for several consecutive years. In addition, in the last decade, income taxes and transfers have played an important role in reducing the rate and severity of low income among children. However, despite sustained economic growth and a significant increase in child benefits, many children remain in that situation in Canada. In 2004, low-income families with children would have needed more than \$3 billion in additional income (from market income, transfers or other sources) to surpass low-income cut-offs.

### Perspectives

#### ■ Notes

1. Since the publication of Income in Canada: 2004, some minor changes have been made to the Survey of Labour and Income Dynamics data. These changes may slightly affect the number of children identified as being in a low-income family using LICO-IATs. As a result, the estimates of the number of low-income children that appear in the most recent Statistics Canada publication (877,000 according to the LICO-IATs) differ slightly from the estimates in this study (872,000).

2. The median family income of children not living in a low-income situation (\$62,700) was significantly lower than their average income; however, this is not the case for low-income children (\$20,600). This suggests that the average family income of children from financially well-off families was probably biased upward by very high income levels. Despite this difference, the median family income of children not living in a low-income situation was three times higher than that of low-income children.
3. It is not possible to determine whether the fewer working hours result from unfavourable labour market conditions or a lower work effort.
4. It is not possible to determine whether the greater vulnerability to low income of recent immigrants, individuals with work limitations and Aboriginal persons can be attributed to discrimination rather than to other characteristics not observed in the data.
5. The low income rates of 12.2% in 2001 and 12.9% in 2004 are not statistically different. After this study began, the 2005 and 2006 low-income data were published and showed that the rate of low income among children in 2005 was 11.7%, which equals the unrevised 1989 rate. Revisions to the 1989 data would likely raise the rate of low income that year only slightly, not enough to make it significantly different from the 2005 rate.
6. This statement is also true for income adjusted to take family size into account, when a purely relative measure is used (LIM-IAT) to identify low-income children, and when the median rather than the average income is compared, although in the latter case, the difference is smaller.
7. Even though the annual exit rates are much higher than the entry rates, it does not necessarily mean that fewer children live in low income every year. The entry rate into low income is the proportion of children who did not live in a low-income situation in a given year, but did the following year, while the low-income exit rate is the

proportion of children who lived in a situation of low income in a given year, but did not the following year. Since different denominators are used, even if the exit rate seems higher than the entry rate, the absolute number of people who escape low income is not necessarily higher than the absolute number of people entering low income. For example, between 2003 and 2004, the 2.3% entry rate corresponded to 84,000 children, while the exit rate of 28.4% equalled 99,000 children.

8. While few characteristics are associated with significant persistent low income, it is perhaps due to the small number of observations available for analysis. Among other things, the results lead one to believe that recent immigrant status is positively associated with persistent low income for children.

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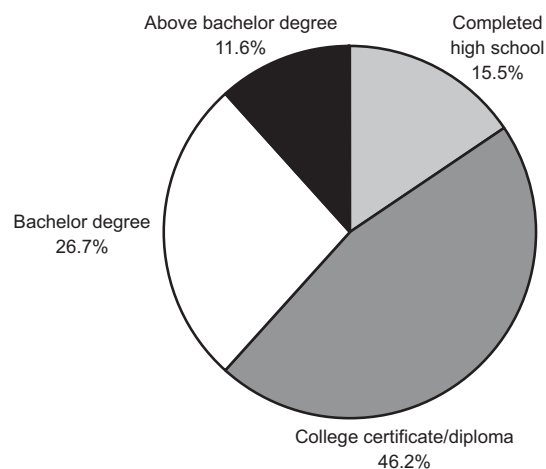
# Provincial labour force differences by level of education

Canada is a diverse country. Its ten provinces and three territories are endowed with varying natural resources and have developed their own industrial infrastructures and labour markets. Nevertheless, education is always a major factor in the ability to find a job.

This issue of *Perspectives on Labour and Income* launches a series examining key labour market indicators by education and province for 1990 and 2006. The variables covered include sex, age, full-/part-time work, occupation, industry, multiple job holdings, hours worked, and earnings. The objective is to provide a better understanding of how provincial economies utilize workers with different levels of education.

Nearly half of 26.2 million persons aged 15 or older had completed postsecondary education in 2006 compared with one-third of 21.2 million in 1990. The proportion with postsecondary education increased not only because more young people are proceeding to higher education, but also because of the relatively larger intake of immigrants with higher education and skills. Of the additional working-age population between 1990 and 2006, 84.5% had postsecondary education.

## Nearly half of the increased working-age population between 1990 and 2006 had a community college certificate or diploma



Source: Statistics Canada, Labour Force Survey.



In both 1990 and 2006, the proportion with a university degree was highest in Ontario, followed by Alberta and British Columbia, and lowest in Newfoundland and Labrador. Some of the growth in the proportion of degree holders in the first three provinces could be attributed to their relatively larger intake of immigrants (who are selected on the basis of education and skills). Persons with less than postsecondary education constituted the largest group in each province. In 1990, Prince Edward Island led the rank-

ing at 72.2%, while Nova Scotia trailed at 64.3%. By 2006, the proportion had dropped, the rankings had changed and the range had widened—Manitoba led with 58.3% and Quebec trailed at 48.8%. At the same time, the range in the proportion of university degree holders rose from 6.9 points to 10.4 points, indicating that the education differential between provinces increased over the 1990 to 2006 period.

### Working-age population by education and province

|                           | Population<br>15 and<br>over | Less than postsecondary |                             |  | Completed postsecondary |                         |                      |                    |
|---------------------------|------------------------------|-------------------------|-----------------------------|--|-------------------------|-------------------------|----------------------|--------------------|
|                           |                              | Total                   | Less<br>than high<br>school | Completed<br>high<br>school <sup>1</sup> | Total                   | Certificate/<br>diploma | Bachelor's<br>degree | Advanced<br>degree |
| <b>1990</b>               | '000                         | %                       |                             |  |                         |                         |                      |                    |
| <b>Canada</b>             | <b>21,214.7</b>              | <b>67.3</b>             | <b>37.8</b>                 | <b>29.5</b>                              | <b>32.7</b>             | <b>21.8</b>             | <b>7.5</b>           | <b>3.3</b>         |
| Newfoundland and Labrador | 439.8                        | 71.6                    | 48.5                        | 23.1                                     | 28.4                    | 22.6                    | 4.0                  | 1.8                |
| Prince Edward Island      | 98.1                         | 72.2                    | 48.3                        | 23.9                                     | 27.8                    | 21.0                    | 4.9                  | 1.9                |
| Nova Scotia               | 697.0                        | 64.3                    | 42.4                        | 21.8                                     | 35.7                    | 25.6                    | 6.9                  | 3.3                |
| New Brunswick             | 569.1                        | 71.1                    | 44.3                        | 26.9                                     | 28.9                    | 21.1                    | 5.6                  | 2.2                |
| Quebec                    | 5,457.0                      | 68.1                    | 43.4                        | 24.8                                     | 31.9                    | 22.6                    | 6.5                  | 2.7                |
| Ontario                   | 7,960.0                      | 66.8                    | 35.8                        | 31.0                                     | 33.2                    | 20.5                    | 8.6                  | 4.1                |
| Manitoba                  | 824.2                        | 71.8                    | 41.9                        | 29.9                                     | 28.2                    | 18.3                    | 7.0                  | 2.9                |
| Saskatchewan              | 733.8                        | 71.0                    | 42.0                        | 29.1                                     | 29.0                    | 21.0                    | 6.0                  | 2.0                |
| Alberta                   | 1,889.8                      | 64.6                    | 32.0                        | 32.6                                     | 35.4                    | 23.6                    | 8.5                  | 3.2                |
| British Columbia          | 2,545.9                      | 65.6                    | 29.2                        | 36.4                                     | 34.4                    | 23.4                    | 7.7                  | 3.4                |
| <b>2006</b>               |                              |                         |                             |  |                         |                         |                      |                    |
| <b>Canada</b>             | <b>26,185.1</b>              | <b>51.2</b>             | <b>23.2</b>                 | <b>28.0</b>                              | <b>48.8</b>             | <b>29.9</b>             | <b>13.2</b>          | <b>5.8</b>         |
| Newfoundland and Labrador | 427.7                        | 56.7                    | 30.8                        | 26.0                                     | 43.3                    | 32.5                    | 7.3                  | 3.5                |
| Prince Edward Island      | 112.3                        | 54.1                    | 28.3                        | 25.8                                     | 45.8                    | 31.9                    | 9.7                  | 4.2                |
| Nova Scotia               | 762.8                        | 51.5                    | 26.6                        | 24.9                                     | 48.5                    | 32.3                    | 11.5                 | 4.7                |
| New Brunswick             | 611.3                        | 55.9                    | 27.1                        | 28.8                                     | 44.1                    | 30.6                    | 9.9                  | 3.7                |
| Quebec                    | 6,251.5                      | 48.8                    | 26.5                        | 22.3                                     | 51.2                    | 33.8                    | 12.6                 | 4.8                |
| Ontario                   | 10,229.0                     | 50.1                    | 21.6                        | 28.6                                     | 49.9                    | 28.6                    | 14.3                 | 7.0                |
| Manitoba                  | 892.0                        | 58.3                    | 27.1                        | 31.2                                     | 41.7                    | 25.7                    | 12.1                 | 4.0                |
| Saskatchewan              | 746.4                        | 57.6                    | 26.9                        | 30.7                                     | 42.4                    | 28.3                    | 10.7                 | 3.4                |
| Alberta                   | 2,641.3                      | 52.0                    | 20.8                        | 31.2                                     | 48.0                    | 29.6                    | 13.1                 | 5.3                |
| British Columbia          | 3,511.0                      | 53.0                    | 19.6                        | 33.4                                     | 47.0                    | 27.4                    | 13.5                 | 6.1                |

1. Includes those who had some postsecondary education.  
Source: Statistics Canada, Labour Force Survey.

As expected, participation in the labour force increases with education. In both 1990 and 2006, the participation rate for those with less than a postsecondary education ranged from 66% in Alberta to 46% in Newfoundland and Labrador. However, for those with a university degree, Newfoundland and Labrador had the highest participation rate (91.1%) in 1990. But this fell to 81.0% by 2006, indicating that new degree holders—the majority women—were participating at lower rates. With Newfoundland and Labra-

dor dropping to fifth place in 2006, Alberta moved into top spot. Alberta also had the highest participation rate for those with a certificate or diploma from a community college. Ontario, which ranked second in 1990, slid to fifth place in 2006 as its overall participation rate fell from 69.5% to 67.7%.

While the range of participation rates remained around 20 percentage points for those with less than postsecondary education, it narrowed from 10.5 points to 6.8 points for those with a university degree.

### Participation rate by education and province

|                           | Population 15 and over | Less than postsecondary |                       |                                    | Completed postsecondary |                     |             |
|---------------------------|------------------------|-------------------------|-----------------------|------------------------------------|-------------------------|---------------------|-------------|
|                           |                        | Total                   | Less than high school | Completed high school <sup>1</sup> | Total                   | Certificate/diploma | University  |
| %                         |                        |                         |                       |                                    |                         |                     |             |
| <b>1990</b>               |                        |                         |                       |                                    |                         |                     |             |
| <b>Canada</b>             | <b>67.1</b>            | <b>60.2</b>             | <b>49.7</b>           | <b>73.7</b>                        | <b>81.5</b>             | <b>79.5</b>         | <b>85.4</b> |
| Newfoundland and Labrador | 56.7                   | 46.4                    | 37.5                  | 65.1                               | 82.5                    | 80.3                | 91.1        |
| Prince Edward Island      | 65.6                   | 60.0                    | 51.7                  | 76.9                               | 80.2                    | 77.2                | 89.6        |
| Nova Scotia               | 61.9                   | 53.3                    | 44.3                  | 70.7                               | 77.4                    | 74.3                | 85.1        |
| New Brunswick             | 60.0                   | 52.7                    | 41.8                  | 70.5                               | 78.1                    | 75.4                | 85.5        |
| Quebec                    | 64.2                   | 55.7                    | 45.7                  | 73.2                               | 82.4                    | 80.4                | 87.5        |
| Ontario                   | 69.5                   | 63.3                    | 53.8                  | 74.2                               | 82.2                    | 80.1                | 85.5        |
| Manitoba                  | 67.3                   | 61.4                    | 51.1                  | 75.9                               | 82.3                    | 79.9                | 86.5        |
| Saskatchewan              | 66.6                   | 61.0                    | 50.1                  | 76.7                               | 80.2                    | 78.1                | 85.9        |
| Alberta                   | 72.5                   | 66.3                    | 55.2                  | 77.3                               | 83.9                    | 83.2                | 85.5        |
| British Columbia          | 66.9                   | 61.5                    | 49.3                  | 71.3                               | 77.2                    | 75.6                | 80.6        |
| <b>2006</b>               |                        |                         |                       |                                    |                         |                     |             |
| <b>Canada</b>             | <b>67.2</b>            | <b>56.9</b>             | <b>41.9</b>           | <b>69.4</b>                        | <b>78.0</b>             | <b>76.6</b>         | <b>80.1</b> |
| Newfoundland and Labrador | 59.2                   | 46.3                    | 33.2                  | 61.8                               | 76.2                    | 74.6                | 81.0        |
| Prince Edward Island      | 68.7                   | 61.5                    | 48.1                  | 76.2                               | 77.0                    | 74.6                | 82.7        |
| Nova Scotia               | 62.9                   | 52.6                    | 38.1                  | 68.0                               | 73.9                    | 70.8                | 79.9        |
| New Brunswick             | 63.7                   | 54.6                    | 38.9                  | 69.4                               | 75.3                    | 73.5                | 79.3        |
| Quebec                    | 65.5                   | 52.3                    | 39.3                  | 67.6                               | 78.1                    | 77.3                | 79.6        |
| Ontario                   | 67.7                   | 57.2                    | 41.6                  | 69.0                               | 78.3                    | 76.7                | 80.6        |
| Manitoba                  | 68.8                   | 61.3                    | 46.6                  | 74.1                               | 79.2                    | 77.7                | 81.7        |
| Saskatchewan              | 69.1                   | 62.1                    | 46.5                  | 75.9                               | 78.5                    | 76.5                | 82.6        |
| Alberta                   | 73.4                   | 66.2                    | 52.8                  | 75.1                               | 81.1                    | 79.7                | 83.3        |
| British Columbia          | 65.7                   | 57.1                    | 40.7                  | 66.7                               | 75.3                    | 74.5                | 76.5        |

1. Includes those who had some postsecondary education.  
Source: Statistics Canada, Labour Force Survey.

The unemployment rate is inversely related to education. In all provinces, a person with more education is less likely to be unemployed. For persons with less than a postsecondary education, the unemployment rate ranged from 21.9% in Newfoundland and Labrador to 7.6% in Ontario in 1990 and from 20.1% in the former to 4.4% in Alberta in 2006. Even though the overall rate of unemployment was highest in Newfoundland and Labrador, in both 1990 and 2006 its rate for university degree holders was lower than Quebec's. The unemployment rate spread for those with a university degree, however, was only 2.5 percentage points in 2006, down from 3.0 points in 1990.

Alberta's unemployment rate of 3.4% in 2006 was the lowest in Canada, replacing Ontario whose 6.2% was the lowest in 1990. The low rate in Alberta was largely due to the demand for labour by its booming economy. This also likely opened up employment opportunities for persons with less than a postsecondary education—a group more likely to experience unemployment in other provinces. For instance, this group had an unemployment rate of 11.2% in Quebec and 8.7% in Ontario, compared with just 4.4% in Alberta. This conclusion is further supported by the group's high participation rate of 66.2% compared with 52.3% in Quebec and 57.2% in Ontario.

### Unemployment rate by education and province

|                           | Population 15 and over | Less than postsecondary |                       |                                    | Completed postsecondary |                     |            |
|---------------------------|------------------------|-------------------------|-----------------------|------------------------------------|-------------------------|---------------------|------------|
|                           |                        | Total                   | Less than high school | Completed high school <sup>1</sup> | Total                   | Certificate/diploma | University |
| %                         |                        |                         |                       |                                    |                         |                     |            |
| <b>1990</b>               |                        |                         |                       |                                    |                         |                     |            |
| <b>Canada</b>             | <b>8.1</b>             | <b>9.9</b>              | <b>12.4</b>           | <b>7.8</b>                         | <b>5.4</b>              | <b>6.3</b>          | <b>3.8</b> |
| Newfoundland and Labrador | 17.0                   | 21.9                    | 25.9                  | 17.1                               | 10.0                    | 12.0                | 3.0        |
| Prince Edward Island      | 14.4                   | 18.1                    | 21.2                  | 13.9                               | 7.8                     | 8.8                 | 5.0        |
| Nova Scotia               | 10.7                   | 13.1                    | 14.8                  | 11.1                               | 7.6                     | 8.8                 | 5.0        |
| New Brunswick             | 12.1                   | 15.1                    | 18.7                  | 11.7                               | 7.0                     | 8.4                 | 3.7        |
| Quebec                    | 10.4                   | 12.6                    | 14.8                  | 10.1                               | 7.3                     | 8.1                 | 5.6        |
| Ontario                   | 6.2                    | 7.6                     | 9.5                   | 6.1                                | 3.9                     | 4.7                 | 2.6        |
| Manitoba                  | 7.4                    | 8.6                     | 10.4                  | 7.0                                | 4.9                     | 5.3                 | 4.2        |
| Saskatchewan              | 7.0                    | 8.2                     | 10.0                  | 6.6                                | 4.9                     | 5.2                 | 4.0        |
| Alberta                   | 6.9                    | 8.4                     | 11.3                  | 6.4                                | 4.6                     | 5.2                 | 3.4        |
| British Columbia          | 8.4                    | 10.1                    | 14.0                  | 8.0                                | 5.8                     | 6.5                 | 4.3        |
| <b>2006</b>               |                        |                         |                       |                                    |                         |                     |            |
| <b>Canada</b>             | <b>6.3</b>             | <b>8.5</b>              | <b>12.3</b>           | <b>6.5</b>                         | <b>4.6</b>              | <b>5.1</b>          | <b>4.0</b> |
| Newfoundland and Labrador | 14.8                   | 20.1                    | 25.9                  | 16.5                               | 10.5                    | 12.8                | 4.3        |
| Prince Edward Island      | 11.0                   | 15.2                    | 20.9                  | 11.3                               | 7.1                     | 8.2                 | 4.7        |
| Nova Scotia               | 7.9                    | 10.8                    | 15.1                  | 8.3                                | 5.7                     | 6.6                 | 4.1        |
| New Brunswick             | 8.8                    | 12.0                    | 18.0                  | 8.8                                | 5.9                     | 7.1                 | 3.4        |
| Quebec                    | 8.0                    | 11.2                    | 15.3                  | 8.5                                | 6.0                     | 6.6                 | 4.9        |
| Ontario                   | 6.3                    | 8.7                     | 12.5                  | 7.0                                | 4.5                     | 4.7                 | 4.2        |
| Manitoba                  | 4.3                    | 5.7                     | 9.1                   | 3.9                                | 2.8                     | 2.8                 | 2.8        |
| Saskatchewan              | 4.7                    | 6.0                     | 8.5                   | 4.7                                | 3.2                     | 3.4                 | 2.8        |
| Alberta                   | 3.4                    | 4.4                     | 6.4                   | 3.4                                | 2.6                     | 2.8                 | 2.4        |
| British Columbia          | 4.8                    | 5.9                     | 9.0                   | 4.8                                | 3.8                     | 3.9                 | 3.6        |

1. Includes those who had some postsecondary education.  
Source: Statistics Canada, Labour Force Survey.

The strong relationship between education and the likelihood of being employed prevailed in all provinces in both 1990 and 2006. Alberta had the highest employment rate in both 1990 and 2006, 67.6% and 70.8% respectively. The strong increase reflects the effect of an economic boom, which has resulted in employment growth of 46.5% compared with 25.0% for Ontario and just 4.3% for Newfoundland and Labrador. Persons with less than a postsecondary education had the highest employment rate in Alberta, 63.3%

compared with 52.2% in Ontario and 36.9% in Newfoundland and Labrador. On the other hand, for those with a university degree, Newfoundland and Labrador had the highest rate in 1990 (88.3%), falling to 77.5% in 2006. As with the participation rate, the interprovincial range for the employment rate also narrowed, from 11.2 percentage points to 7.6 points for those with a university degree compared with around 25 points for those with less than a postsecondary education.

### Employment rate by education and province

|                           | Population 15 and over | Less than postsecondary |                       |                                    | Completed postsecondary |                     |             |
|---------------------------|------------------------|-------------------------|-----------------------|------------------------------------|-------------------------|---------------------|-------------|
|                           |                        | Total                   | Less than high school | Completed high school <sup>1</sup> | Total                   | Certificate/diploma | University  |
| %                         |                        |                         |                       |                                    |                         |                     |             |
| <b>1990</b>               |                        |                         |                       |                                    |                         |                     |             |
| <b>Canada</b>             | <b>61.7</b>            | <b>54.2</b>             | <b>43.5</b>           | <b>68.0</b>                        | <b>77.0</b>             | <b>74.4</b>         | <b>82.2</b> |
| Newfoundland and Labrador | 47.0                   | 36.2                    | 27.7                  | 54.1                               | 74.3                    | 70.7                | 88.3        |
| Prince Edward Island      | 56.2                   | 49.2                    | 40.7                  | 66.2                               | 74.0                    | 70.4                | 85.1        |
| Nova Scotia               | 55.3                   | 46.2                    | 37.7                  | 62.8                               | 71.5                    | 67.8                | 80.8        |
| New Brunswick             | 52.8                   | 44.7                    | 34.0                  | 62.3                               | 72.7                    | 69.1                | 82.4        |
| Quebec                    | 57.5                   | 48.7                    | 39.0                  | 65.8                               | 76.4                    | 73.9                | 82.6        |
| Ontario                   | 65.3                   | 58.4                    | 48.7                  | 69.7                               | 79.0                    | 76.3                | 83.2        |
| Manitoba                  | 62.3                   | 56.1                    | 45.7                  | 70.6                               | 78.2                    | 75.7                | 82.9        |
| Saskatchewan              | 61.9                   | 56.0                    | 45.1                  | 71.7                               | 76.4                    | 74.1                | 82.5        |
| Alberta                   | 67.6                   | 60.7                    | 49.0                  | 72.3                               | 80.1                    | 78.8                | 82.5        |
| British Columbia          | 61.3                   | 55.3                    | 42.4                  | 65.6                               | 72.7                    | 70.6                | 77.1        |
| <b>2006</b>               |                        |                         |                       |                                    |                         |                     |             |
| <b>Canada</b>             | <b>63.0</b>            | <b>52.1</b>             | <b>36.7</b>           | <b>64.8</b>                        | <b>74.3</b>             | <b>72.7</b>         | <b>76.9</b> |
| Newfoundland and Labrador | 50.4                   | 36.9                    | 24.5                  | 51.5                               | 68.2                    | 65.1                | 77.5        |
| Prince Edward Island      | 61.1                   | 52.3                    | 38.1                  | 67.9                               | 71.6                    | 68.4                | 78.8        |
| Nova Scotia               | 57.9                   | 46.9                    | 32.4                  | 62.3                               | 69.6                    | 66.1                | 76.6        |
| New Brunswick             | 58.1                   | 48.1                    | 31.9                  | 63.3                               | 70.9                    | 68.3                | 76.7        |
| Quebec                    | 60.2                   | 46.4                    | 33.3                  | 61.9                               | 73.4                    | 72.2                | 75.7        |
| Ontario                   | 63.5                   | 52.2                    | 36.4                  | 64.1                               | 74.8                    | 73.1                | 77.2        |
| Manitoba                  | 65.8                   | 57.8                    | 42.3                  | 71.2                               | 77.0                    | 75.6                | 79.3        |
| Saskatchewan              | 65.9                   | 58.4                    | 42.5                  | 72.3                               | 76.0                    | 73.9                | 80.3        |
| Alberta                   | 70.8                   | 63.3                    | 49.5                  | 72.6                               | 79.0                    | 77.5                | 81.3        |
| British Columbia          | 62.5                   | 53.7                    | 37.0                  | 63.5                               | 72.5                    | 71.6                | 73.8        |

1. Includes those who had some postsecondary education.  
Source: Statistics Canada, Labour Force Survey.

## Provincial labour force differences by level of education

Employment for persons with less than a postsecondary education grew by 17.3% in Alberta and 8.3% in British Columbia, whereas it fell in all other provinces. On the other hand, employment levels increased in all provinces for persons with a certificate or diploma from a community college or a university

degree. The growth was higher for women, reflecting the change in the mix of an economy generating more services jobs—in retail and wholesale trade and the public sector (mostly women)—and fewer goods-producing jobs—in manufacturing, construction, and utilities (mostly men).

### Growth in employment by education, province and sex from 1990 to 2006

|                           | Population 15 and over | Less than postsecondary |                       |                                    | Completed postsecondary |                     |              |
|---------------------------|------------------------|-------------------------|-----------------------|------------------------------------|-------------------------|---------------------|--------------|
|                           |                        | Total                   | Less than high school | Completed high school <sup>1</sup> | Total                   | Certificate/diploma | University   |
| %                         |                        |                         |                       |                                    |                         |                     |              |
| <b>Both sexes</b>         |                        |                         |                       |                                    |                         |                     |              |
| <b>Canada</b>             | <b>26.0</b>            | <b>-9.8</b>             | <b>-36.1</b>          | <b>11.7</b>                        | <b>77.9</b>             | <b>65.1</b>         | <b>101.0</b> |
| Newfoundland and Labrador | 4.3                    | -21.6                   | -45.4                 | 4.2                                | 35.9                    | 28.8                | 57.7         |
| Prince Edward Island      | 24.5                   | -8.6                    | -37.3                 | 27.1                               | 82.2                    | 69.0                | 115.8        |
| Nova Scotia               | 14.7                   | -11.1                   | -41.1                 | 24.0                               | 44.6                    | 35.0                | 65.0         |
| New Brunswick             | 18.3                   | -9.2                    | -38.2                 | 16.8                               | 60.2                    | 54.0                | 74.2         |
| Quebec                    | 19.9                   | -22.0                   | -40.2                 | -3.1                               | 77.0                    | 67.5                | 97.9         |
| Ontario                   | 25.0                   | -13.8                   | -42.1                 | 8.9                                | 82.8                    | 71.4                | 99.6         |
| Manitoba                  | 14.2                   | -9.5                    | -35.1                 | 13.7                               | 57.5                    | 51.4                | 67.9         |
| Saskatchewan              | 8.2                    | -13.9                   | -38.5                 | 8.4                                | 48.0                    | 37.0                | 73.8         |
| Alberta                   | 46.5                   | 17.3                    | -8.2                  | 34.3                               | 86.9                    | 72.1                | 115.4        |
| British Columbia          | 40.8                   | 8.3                     | -19.1                 | 22.5                               | 87.9                    | 63.7                | 134.9        |
| <b>Men</b>                |                        |                         |                       |                                    |                         |                     |              |
| <b>Canada</b>             | <b>19.9</b>            | <b>-11.2</b>            | <b>-37.5</b>          | <b>14.3</b>                        | <b>65.2</b>             | <b>59.3</b>         | <b>75.0</b>  |
| Newfoundland and Labrador | -6.1                   | -27.8                   | -50.9                 | 0.7                                | 23.3                    | 21.2                | 28.9         |
| Prince Edward Island      | 13.9                   | -15.1                   | -39.4                 | 24.4                               | 77.1                    | 88.7                | 55.9         |
| Nova Scotia               | 5.3                    | -17.8                   | -44.6                 | 20.0                               | 34.6                    | 31.2                | 40.9         |
| New Brunswick             | 9.7                    | -14.6                   | -40.1                 | 12.7                               | 50.0                    | 51.3                | 47.2         |
| Quebec                    | 12.1                   | -24.1                   | -42.0                 | -1.8                               | 62.6                    | 59.9                | 68.1         |
| Ontario                   | 19.9                   | -14.2                   | -43.7                 | 13.6                               | 70.1                    | 63.4                | 79.2         |
| Manitoba                  | 10.0                   | -9.0                    | -33.5                 | 16.7                               | 45.8                    | 53.9                | 33.8         |
| Saskatchewan              | 2.9                    | -13.7                   | -37.5                 | 12.0                               | 37.8                    | 35.9                | 41.4         |
| Alberta                   | 43.6                   | 16.8                    | -8.0                  | 35.9                               | 79.8                    | 76.8                | 85.1         |
| British Columbia          | 34.0                   | 7.5                     | -20.5                 | 24.3                               | 70.5                    | 53.1                | 101.7        |
| <b>Women</b>              |                        |                         |                       |                                    |                         |                     |              |
| <b>Canada</b>             | <b>33.5</b>            | <b>-8.1</b>             | <b>-33.9</b>          | <b>9.0</b>                         | <b>93.6</b>             | <b>71.8</b>         | <b>138.1</b> |
| Newfoundland and Labrador | 17.7                   | -12.7                   | -36.6                 | 8.9                                | 50.5                    | 37.0                | 100.0        |
| Prince Edward Island      | 37.3                   | 0.0                     | -34.3                 | 29.9                               | 86.8                    | 54.2                | 204.3        |
| Nova Scotia               | 26.2                   | -2.2                    | -35.5                 | 28.1                               | 55.9                    | 38.6                | 96.8         |
| New Brunswick             | 29.2                   | -1.8                    | -34.8                 | 21.6                               | 71.3                    | 56.8                | 106.0        |
| Quebec                    | 30.1                   | -19.1                   | -37.1                 | -4.5                               | 95.3                    | 76.5                | 141.3        |
| Ontario                   | 31.2                   | -13.4                   | -39.7                 | 4.2                                | 98.5                    | 80.6                | 128.0        |
| Manitoba                  | 19.5                   | -10.0                   | -37.6                 | 10.8                               | 71.3                    | 48.7                | 116.9        |
| Saskatchewan              | 15.1                   | -14.1                   | -40.4                 | 4.4                                | 58.6                    | 38.1                | 118.0        |
| Alberta                   | 50.1                   | 18.0                    | -8.5                  | 32.7                               | 96.2                    | 66.3                | 160.8        |
| British Columbia          | 49.2                   | 9.3                     | -17.0                 | 20.6                               | 111.3                   | 77.1                | 185.5        |

1. Includes those who had some postsecondary education.  
Source: Statistics Canada, Labour Force Survey.

Women represented 44.4% of the employed in 1990 and inched up to 47.1% by 2006. Although women's share increased in all provinces, Prince Edward Island remained on top with 45.2% and 49.9% respectively.<sup>1</sup> Over the period, women's share of employment increased by only 1.1 percentage points in Alberta compared with 3.6 points in Quebec and 5.6 points in Newfoundland and Labrador.

Women's share for those with a university degree is more dramatic. As more women earned bachelor's and higher degrees, their share of employment jumped from 40.4% to 56.9% in Prince Edward Island, from 41.1% to 53.0% in Manitoba and from 41.8% to 47.8%

in Ontario. Their share was lowest in British Columbia in 1990 (39.6%) and in Ontario in 2006 (47.8%). Among the employed with more than a bachelor's degree, the largest increases in women's share occurred in Manitoba (28.6% to 46.9%) and New Brunswick (32.7% to 49.4%).

The interprovincial range for women's share was 4.8 percentage points for those with less than a postsecondary education, 8.6 points for those with a community college certificate or diploma, 13.8 points for holders of a bachelor's degree, and 11.6 for those with an advanced degree.

### Women's share of employment by education and province

|                           | Population 15 and over | Less than postsecondary |                       |                                    | Completed postsecondary |                     |             |
|---------------------------|------------------------|-------------------------|-----------------------|------------------------------------|-------------------------|---------------------|-------------|
|                           |                        | Total                   | Less than high school | Completed high school <sup>1</sup> | Total                   | Certificate/diploma | University  |
| %                         |                        |                         |                       |                                    |                         |                     |             |
| <b>1990</b>               |                        |                         |                       |                                    |                         |                     |             |
| <b>Canada</b>             | <b>44.4</b>            | <b>44.3</b>             | <b>39.2</b>           | <b>48.5</b>                        | <b>44.5</b>             | <b>46.3</b>         | <b>41.2</b> |
| Newfoundland and Labrador | 43.5                   | 41.3                    | 37.8                  | 45.0                               | 46.3                    | 48.2                | 40.5        |
| Prince Edward Island      | 45.2                   | 41.4                    | 34.7                  | 49.7                               | 52.5                    | 57.2                | 40.4        |
| Nova Scotia               | 44.6                   | 42.6                    | 37.6                  | 48.4                               | 47.1                    | 48.9                | 43.4        |
| New Brunswick             | 44.5                   | 42.4                    | 37.2                  | 47.1                               | 47.5                    | 48.3                | 45.9        |
| Quebec                    | 43.3                   | 42.8                    | 37.5                  | 48.2                               | 43.9                    | 45.4                | 40.6        |
| Ontario                   | 45.1                   | 45.4                    | 40.6                  | 49.2                               | 44.7                    | 46.7                | 41.8        |
| Manitoba                  | 44.8                   | 44.1                    | 39.8                  | 48.0                               | 46.0                    | 48.9                | 41.1        |
| Saskatchewan              | 43.9                   | 40.9                    | 35.5                  | 45.9                               | 49.1                    | 52.1                | 42.3        |
| Alberta                   | 44.2                   | 44.9                    | 39.9                  | 48.2                               | 43.3                    | 45.0                | 40.0        |
| British Columbia          | 44.5                   | 45.7                    | 40.3                  | 48.5                               | 42.7                    | 44.2                | 39.6        |
| <b>2006</b>               |                        |                         |                       |                                    |                         |                     |             |
| <b>Canada</b>             | <b>47.1</b>            | <b>45.2</b>             | <b>40.6</b>           | <b>47.3</b>                        | <b>48.5</b>             | <b>48.2</b>         | <b>48.8</b> |
| Newfoundland and Labrador | 49.1                   | 45.9                    | 44.0                  | 47.0                               | 51.3                    | 51.3                | 51.4        |
| Prince Edward Island      | 49.9                   | 45.3                    | 36.4                  | 50.8                               | 53.8                    | 52.2                | 56.9        |
| Nova Scotia               | 49.1                   | 46.9                    | 41.2                  | 50.0                               | 50.8                    | 50.2                | 51.7        |
| New Brunswick             | 48.5                   | 45.9                    | 39.2                  | 49.1                               | 50.8                    | 49.1                | 54.3        |
| Quebec                    | 46.9                   | 44.4                    | 39.4                  | 47.5                               | 48.5                    | 47.9                | 49.5        |
| Ontario                   | 47.4                   | 45.6                    | 42.3                  | 47.0                               | 48.6                    | 49.2                | 47.8        |
| Manitoba                  | 46.8                   | 43.9                    | 38.3                  | 46.7                               | 50.0                    | 48.0                | 53.0        |
| Saskatchewan              | 46.6                   | 40.8                    | 34.4                  | 44.2                               | 52.7                    | 52.5                | 53.0        |
| Alberta                   | 45.3                   | 45.2                    | 39.8                  | 47.6                               | 45.4                    | 43.5                | 48.4        |
| British Columbia          | 47.1                   | 46.1                    | 41.3                  | 47.7                               | 48.0                    | 47.9                | 48.2        |

1. Includes those who had some postsecondary education.  
Source: Statistics Canada, Labour Force Survey.

As the level of education rises, the likelihood of working full time increases. Overall, between 79.7% and 84.8% of employed persons worked full time in 2006 compared with between 77.7% and 87.6% in 1990. The proportion was the lowest in British Columbia in 2006 and Saskatchewan in 1990, and highest in Newfoundland and Labrador in both years. Also in both years, 83% or more of those with a postsecondary education were working full time.

Between 1990 and 2006, the proportion of university graduates employed full time dropped in all provinces, with the largest declines in Newfoundland and Labrador and British Columbia. On the other hand, those with a community college certificate or diploma increased their share of full-time employment in five provinces: Prince Edward Island, New Brunswick, Manitoba, Saskatchewan and Alberta.

### Proportion employed full-time by education and province

|                           | Population 15 and over | Less than postsecondary |                       |                                    | Completed postsecondary |                     |             |
|---------------------------|------------------------|-------------------------|-----------------------|------------------------------------|-------------------------|---------------------|-------------|
|                           |                        | Total                   | Less than high school | Completed high school <sup>1</sup> | Total                   | Certificate/diploma | University  |
| %                         |                        |                         |                       |                                    |                         |                     |             |
| <b>1990</b>               |                        |                         |                       |                                    |                         |                     |             |
| <b>Canada</b>             | <b>83.0</b>            | <b>79.8</b>             | <b>75.8</b>           | <b>83.1</b>                        | <b>87.7</b>             | <b>86.7</b>         | <b>89.6</b> |
| Newfoundland and Labrador | 87.6                   | 84.0                    | 82.9                  | 85.2                               | 92.1                    | 91.7                | 93.4        |
| Prince Edward Island      | 82.9                   | 81.0                    | 79.8                  | 82.6                               | 87.1                    | 86.2                | 89.5        |
| Nova Scotia               | 82.9                   | 78.0                    | 75.2                  | 81.4                               | 88.5                    | 87.7                | 90.1        |
| New Brunswick             | 84.0                   | 80.6                    | 76.1                  | 84.6                               | 89.4                    | 88.1                | 92.3        |
| Quebec                    | 84.6                   | 82.9                    | 82.1                  | 83.8                               | 86.8                    | 85.6                | 89.4        |
| Ontario                   | 83.0                   | 79.0                    | 73.9                  | 83.2                               | 88.8                    | 87.9                | 90.2        |
| Manitoba                  | 79.8                   | 76.4                    | 71.9                  | 80.5                               | 85.9                    | 84.4                | 88.3        |
| Saskatchewan              | 77.7                   | 75.0                    | 69.9                  | 79.6                               | 82.6                    | 80.8                | 87.0        |
| Alberta                   | 83.0                   | 79.4                    | 73.1                  | 83.6                               | 87.9                    | 87.4                | 88.8        |
| British Columbia          | 82.2                   | 79.2                    | 71.9                  | 83.0                               | 86.4                    | 85.5                | 88.1        |
| <b>2006</b>               |                        |                         |                       |                                    |                         |                     |             |
| <b>Canada</b>             | <b>82.0</b>            | <b>76.6</b>             | <b>69.6</b>           | <b>79.8</b>                        | <b>85.9</b>             | <b>85.6</b>         | <b>86.4</b> |
| Newfoundland and Labrador | 84.8                   | 78.8                    | 75.5                  | 80.6                               | 89.3                    | 90.1                | 87.2        |
| Prince Edward Island      | 84.1                   | 79.9                    | 74.4                  | 83.2                               | 88.0                    | 87.8                | 88.6        |
| Nova Scotia               | 81.2                   | 74.0                    | 67.1                  | 77.9                               | 86.4                    | 86.3                | 86.5        |
| New Brunswick             | 83.9                   | 78.8                    | 70.6                  | 82.7                               | 88.4                    | 88.3                | 88.5        |
| Quebec                    | 81.8                   | 76.8                    | 76.4                  | 77.1                               | 84.7                    | 84.1                | 86.0        |
| Ontario                   | 82.3                   | 75.6                    | 66.1                  | 79.7                               | 86.9                    | 86.5                | 87.5        |
| Manitoba                  | 80.3                   | 75.5                    | 67.2                  | 79.8                               | 85.3                    | 85.6                | 84.8        |
| Saskatchewan              | 81.4                   | 77.1                    | 66.4                  | 82.6                               | 85.9                    | 86.0                | 85.6        |
| Alberta                   | 83.9                   | 79.6                    | 69.9                  | 84.0                               | 87.7                    | 88.1                | 87.1        |
| British Columbia          | 79.7                   | 76.1                    | 67.1                  | 79.2                               | 82.7                    | 82.8                | 82.5        |

1. Includes those who had some postsecondary education.  
Source: Statistics Canada, Labour Force Survey.

## Provincial labour force differences by level of education

About 60% of employed Canadians had a postsecondary education in 2006 compared with 40% in 1990. Among those with a postsecondary education, the proportion of university graduates inched up from 35.5% to 40.1%, with 7 in 10 having a bachelor's degree.

The proportion of the employed with a postsecondary education rose in all provinces over the 1990 to 2006 period, with the largest increases in Quebec (20.2 percentage points) and Ontario (18.6 points), and the smallest in Alberta (11.6).<sup>2</sup> The proportion with a uni-

### Distribution of employment by education by province

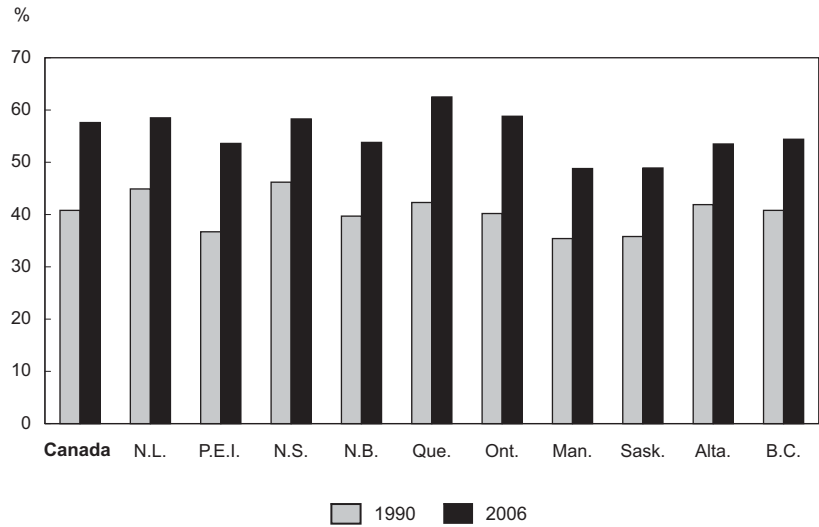
|                              | Employed<br>15 and<br>over | Less than postsecondary |                             |  | Completed postsecondary |                         |             | Degree<br>holder share<br>of post-<br>secondary | Bachelor's<br>share of<br>degrees |
|------------------------------|----------------------------|-------------------------|-----------------------------|--|-------------------------|-------------------------|-------------|---|-----------------------------------|
|                              |                            | Total                   | Less<br>than high<br>school | Completed<br>high<br>school <sup>1</sup> | Total                   | Certificate/<br>diploma | University  |   |                                   |
|                              | '000                       | %                       |                             |  |                         |                         |             |   |                                   |
| <b>1990</b>                  |                            |                         |                             |  |                         |                         |             |   |                                   |
| <b>Canada</b>                | <b>13,086.4</b>            | <b>59.2</b>             | <b>26.7</b>                 | <b>32.5</b>                              | <b>40.8</b>             | <b>26.3</b>             | <b>14.5</b> | <b>35.5</b>                                     | <b>68.3</b>                       |
| Newfoundland<br>and Labrador | 206.9                      | 55.1                    | 28.6                        | 26.5                                     | 44.9                    | 33.9                    | 11.0        | 24.5  | 67.0                              |
| Prince Edward<br>Island      | 55.1                       | 63.2                    | 35.0                        | 28.1                                     | 36.7                    | 26.3                    | 10.3        | 28.2  | 70.2                              |
| Nova Scotia                  | 385.3                      | 53.8                    | 29.0                        | 24.8                                     | 46.2                    | 31.3                    | 14.9        | 32.2  | 66.0                              |
| New Brunswick                | 300.3                      | 60.3                    | 28.5                        | 31.7                                     | 39.7                    | 27.6                    | 12.1        | 30.5  | 71.2                              |
| Quebec                       | 3,140.3                    | 57.7                    | 29.4                        | 28.3                                     | 42.3                    | 29.0                    | 13.3        | 31.4  | 69.6                              |
| Ontario                      | 5,194.1                    | 59.8                    | 26.7                        | 33.1                                     | 40.2                    | 24.0                    | 16.2        | 40.3  | 66.3                              |
| Manitoba                     | 513.8                      | 64.6                    | 30.7                        | 33.9                                     | 35.4                    | 22.2                    | 13.2        | 37.2  | 69.0                              |
| Saskatchewan                 | 454.2                      | 64.2                    | 30.6                        | 33.6                                     | 35.8                    | 25.1                    | 10.7        | 29.9  | 73.8                              |
| Alberta                      | 1,276.8                    | 58.1                    | 23.2                        | 34.9                                     | 41.9                    | 27.6                    | 14.4        | 34.3  | 72.1                              |
| British Columbia             | 1,559.6                    | 59.2                    | 20.2                        | 39.0                                     | 40.8                    | 26.9                    | 13.8        | 34.0  | 68.9                              |
| <b>2006</b>                  |                            |                         |                             |  |                         |                         |             |   |                                   |
| <b>Canada</b>                | <b>16,484.3</b>            | <b>42.4</b>             | <b>13.5</b>                 | <b>28.8</b>                              | <b>57.6</b>             | <b>34.5</b>             | <b>23.1</b> | <b>40.1</b>                                     | <b>69.5</b>                       |
| Newfoundland<br>and Labrador | 215.7                      | 41.5                    | 15.0                        | 26.5                                     | 58.5                    | 41.9                    | 16.6        | 28.4  | 67.0                              |
| Prince Edward<br>Island      | 68.6                       | 46.4                    | 17.6                        | 28.7                                     | 53.6                    | 35.7                    | 17.9        | 33.4  | 70.7                              |
| Nova Scotia                  | 441.8                      | 41.7                    | 14.9                        | 26.8                                     | 58.3                    | 36.9                    | 21.4        | 36.8  | 71.9                              |
| New Brunswick                | 355.4                      | 46.2                    | 14.9                        | 31.3                                     | 53.8                    | 35.9                    | 17.8        | 33.2  | 73.8                              |
| Quebec                       | 3,765.4                    | 37.5                    | 14.6                        | 22.9                                     | 62.5                    | 40.6                    | 21.9        | 35.1  | 72.2                              |
| Ontario                      | 6,492.7                    | 41.2                    | 12.4                        | 28.9                                     | 58.8                    | 32.9                    | 25.8        | 44.0  | 66.6                              |
| Manitoba                     | 587.0                      | 51.2                    | 17.4                        | 33.7                                     | 48.8                    | 29.5                    | 19.4        | 39.7  | 74.8                              |
| Saskatchewan                 | 491.6                      | 51.1                    | 17.4                        | 33.7                                     | 48.9                    | 31.7                    | 17.1        | 35.1  | 76.7                              |
| Alberta                      | 1,870.7                    | 46.5                    | 14.5                        | 32.0                                     | 53.5                    | 32.4                    | 21.1        | 39.5  | 72.1                              |
| British Columbia             | 2,195.5                    | 45.5                    | 11.6                        | 33.9                                     | 54.4                    | 31.3                    | 23.1        | 42.4  | 69.2                              |

1. Includes those who had some postsecondary education.  
Source: Statistics Canada, Labour Force Survey.



versity degree (bachelor's or above) was highest in Ontario in both years (partly due to its larger intake of immigrants), followed by Nova Scotia in 1990 but by British Columbia in 2006. Despite the progress in level of education, just over half of the employed in Manitoba and Saskatchewan in 2006 still had less than a postsecondary education.

**Employment among people with postsecondary education has increased in all provinces**



Source: Statistics Canada, Labour Force Survey.

People with less education or fewer skills are much more likely to experience unemployment. Between 54% and 69% of the unemployed had less than a post-secondary education in 2006, down considerably from between 68% and 83% in 1990. Although unemploy-

ment remains concentrated among those with less education, their share is falling. This is primarily a consequence of the overall increase in educational attainment in the working-age population.

### Distribution of unemployment by education by province

|                              | Employed<br>15 and<br>over | Less than postsecondary |                             |  | Completed postsecondary |                         |             | Degree<br>holder share<br>of post-<br>secondary | Bachelor's<br>share of<br>degrees |
|------------------------------|----------------------------|-------------------------|-----------------------------|--|-------------------------|-------------------------|-------------|---|-----------------------------------|
|                              |                            | Total                   | Less<br>than high<br>school | Completed<br>high<br>school <sup>1</sup> | Total                   | Certificate/<br>diploma | University  |   |                                   |
|                              | '000                       | %                       |                             |  |                         |                         |             |   |                                   |
| <b>1990</b>                  |                            |                         |                             |  |                         |                         |             |   |                                   |
| <b>Canada</b>                | <b>1,158.3</b>             | <b>73.4</b>             | <b>42.6</b>                 | <b>30.9</b>                              | <b>26.6</b>             | <b>20.2</b>             | <b>6.4</b>  | <b>24.1</b>                                     | <b>78.9</b>                       |
| Newfoundland<br>and Labrador | 42.3                       | 75.7                    | 48.9                        | 26.7                                     | 24.3                    | 22.7                    | 1.7         | 6.8   | 100.0                             |
| Prince Edward Island         | 9.3                        | 82.8                    | 55.9                        | 26.9                                     | 18.3                    | 15.1                    | 3.2         | 17.6  | 66.7                              |
| Nova Scotia                  | 46.1                       | 67.9                    | 42.1                        | 25.8                                     | 31.7                    | 25.2                    | 6.5         | 20.5  | 80.0                              |
| New Brunswick                | 41.3                       | 78.2                    | 47.7                        | 30.5                                     | 21.8                    | 18.4                    | 3.4         | 15.6  | 85.7                              |
| Quebec                       | 365.1                      | 71.4                    | 43.9                        | 27.4                                     | 28.6                    | 21.9                    | 6.7         | 23.4  | 81.2                              |
| Ontario                      | 341.5                      | 75.2                    | 42.5                        | 32.7                                     | 24.8                    | 18.2                    | 6.6         | 26.8  | 76.7                              |
| Manitoba                     | 40.9                       | 76.8                    | 45.0                        | 31.8                                     | 23.0                    | 15.6                    | 7.3         | 31.9  | 83.3                              |
| Saskatchewan                 | 34.4                       | 76.2                    | 44.8                        | 31.4                                     | 24.1                    | 18.3                    | 5.8         | 24.1  | 90.0                              |
| Alberta                      | 94.1                       | 72.6                    | 40.1                        | 32.5                                     | 27.4                    | 20.5                    | 6.9         | 25.2  | 81.5                              |
| British Columbia             | 143.4                      | 72.7                    | 35.8                        | 37.0                                     | 27.3                    | 20.4                    | 6.8         | 25.1  | 73.5                              |
| <b>2006</b>                  |                            |                         |                             |  |                         |                         |             |   |                                   |
| <b>Canada</b>                | <b>1,108.4</b>             | <b>58.2</b>             | <b>28.4</b>                 | <b>29.9</b>                              | <b>41.8</b>             | <b>27.6</b>             | <b>14.2</b> | <b>34.0</b>                                     | <b>70.1</b>                       |
| Newfoundland<br>and Labrador | 37.5                       | 60.3                    | 30.1                        | 30.1                                     | 39.5                    | 35.2                    | 4.3         | 10.8  | 75.0                              |
| Prince Edward Island         | 8.5                        | 67.1                    | 37.6                        | 29.4                                     | 32.9                    | 25.9                    | 7.1         | 21.4  | 83.3                              |
| Nova Scotia                  | 38.1                       | 58.8                    | 30.7                        | 28.1                                     | 41.2                    | 30.4                    | 10.8        | 26.1  | 70.7                              |
| New Brunswick                | 34.2                       | 65.2                    | 33.9                        | 31.3                                     | 34.8                    | 28.4                    | 6.4         | 18.5  | 77.3                              |
| Quebec                       | 328.7                      | 54.5                    | 30.2                        | 24.2                                     | 45.5                    | 32.7                    | 12.8        | 28.1  | 70.8                              |
| Ontario                      | 434.6                      | 58.9                    | 26.5                        | 32.4                                     | 41.1                    | 24.3                    | 16.8        | 40.8  | 68.4                              |
| Manitoba                     | 26.5                       | 69.1                    | 38.9                        | 30.2                                     | 30.9                    | 18.5                    | 12.5        | 40.2  | 81.8                              |
| Saskatchewan                 | 24.0                       | 66.7                    | 32.9                        | 33.8                                     | 32.9                    | 22.9                    | 10.0        | 30.4  | 79.2                              |
| Alberta                      | 66.8                       | 59.4                    | 27.8                        | 31.6                                     | 40.4                    | 25.9                    | 14.5        | 35.9  | 69.1                              |
| British Columbia             | 109.6                      | 57.5                    | 23.0                        | 34.5                                     | 42.5                    | 25.5                    | 17.1        | 40.1  | 70.6                              |

1. Includes those who had some postsecondary education.  
Source: Statistics Canada, Labour Force Survey.

**Distribution of those not in the labour force by education by province**

|                           | Not in<br>labour force | Less than postsecondary |                          |                                       | Completed postsecondary |                         |             |
|---------------------------|------------------------|-------------------------|--------------------------|---------------------------------------|-------------------------|-------------------------|-------------|
|                           |                        | Total                   | Less than<br>high school | Completed<br>high school <sup>1</sup> | Total                   | Certificate/<br>diploma | University  |
|                           | '000                   |                         |                          | %                                     |                         |                         |             |
| <b>1990</b>               |                        |                         |                          |                                       |                         |                         |             |
| <b>Canada</b>             | <b>6,970.1</b>         | <b>81.5</b>             | <b>57.9</b>              | <b>23.6</b>                           | <b>18.5</b>             | <b>13.6</b>             | <b>4.8</b>  |
| Newfoundland and Labrador | 190.7                  | 88.6                    | 70.0                     | 18.6                                  | 11.4                    | 10.2                    | 1.2         |
| Prince Edward Island      | 33.7                   | 84.0                    | 68.0                     | 16.0                                  | 16.0                    | 13.9                    | 2.1         |
| Nova Scotia               | 265.6                  | 78.8                    | 62.0                     | 16.8                                  | 21.2                    | 17.2                    | 4.0         |
| New Brunswick             | 227.5                  | 84.2                    | 64.4                     | 19.8                                  | 15.8                    | 13.0                    | 2.8         |
| Quebec                    | 1,951.6                | 84.4                    | 65.8                     | 18.6                                  | 15.6                    | 12.4                    | 3.2         |
| Ontario                   | 2,424.4                | 80.6                    | 54.3                     | 26.3                                  | 19.4                    | 13.4                    | 6.0         |
| Manitoba                  | 269.6                  | 84.6                    | 62.7                     | 22.0                                  | 15.4                    | 11.3                    | 4.1         |
| Saskatchewan              | 245.2                  | 82.9                    | 62.6                     | 20.3                                  | 17.1                    | 13.7                    | 3.4         |
| Alberta                   | 518.9                  | 79.3                    | 52.2                     | 27.1                                  | 20.7                    | 14.5                    | 6.2         |
| British Columbia          | 842.8                  | 76.3                    | 44.7                     | 31.6                                  | 23.7                    | 17.2                    | 6.5         |
| <b>2006</b>               |                        |                         |                          |                                       |                         |                         |             |
| <b>Canada</b>             | <b>8,592.4</b>         | <b>67.2</b>             | <b>41.1</b>              | <b>26.1</b>                           | <b>32.8</b>             | <b>21.3</b>             | <b>11.5</b> |
| Newfoundland and Labrador | 174.6                  | 74.7                    | 50.3                     | 24.3                                  | 25.3                    | 20.2                    | 5.1         |
| Prince Edward Island      | 35.1                   | 66.7                    | 47.0                     | 19.7                                  | 33.6                    | 25.9                    | 7.7         |
| Nova Scotia               | 282.8                  | 65.8                    | 44.3                     | 21.4                                  | 34.2                    | 25.4                    | 8.8         |
| New Brunswick             | 221.7                  | 70.0                    | 45.7                     | 24.3                                  | 30.1                    | 22.3                    | 7.8         |
| Quebec                    | 2,157.3                | 67.5                    | 46.5                     | 20.9                                  | 32.5                    | 22.2                    | 10.3        |
| Ontario                   | 3,301.7                | 66.5                    | 39.0                     | 27.5                                  | 33.5                    | 20.7                    | 12.8        |
| Manitoba                  | 278.5                  | 72.2                    | 46.4                     | 25.8                                  | 27.8                    | 18.3                    | 9.4         |
| Saskatchewan              | 230.9                  | 70.6                    | 46.6                     | 23.9                                  | 29.4                    | 21.5                    | 7.9         |
| Alberta                   | 703.8                  | 66.0                    | 36.8                     | 29.2                                  | 34.0                    | 22.5                    | 11.5        |
| British Columbia          | 1,205.9                | 66.3                    | 33.9                     | 32.3                                  | 33.7                    | 20.3                    | 13.4        |

1. Includes those who had some postsecondary education.  
Source: Statistics Canada, Labour Force Survey.

A person may be out of the labour force for various reasons including school attendance, sickness, home-care responsibility, voluntary or involuntary withdrawal, or retirement. In each province, the majority of those not in the labour force had less than a post-secondary education in both 1990 and 2006. However, in Ontario, Alberta and British Columbia, 12% to 13% had a university degree in 2006 compared with just 6% in 1990. A similar jump can be seen at the national level. There is a growing pool of highly educated individuals who may be drawn into the labour market should their circumstances change.

**Notes**

1. Estimates for Prince Edward Island may have larger sampling variability because of small sample sizes.
2. A relatively higher proportion of the employed with a community college certificate or diploma in Quebec pushed its ranking to the top.

*For more information, contact Raj K. Chawla of the Labour and Household Surveys Analysis Division at 613-951-6901 or [perspectives@statcan.ca](mailto:perspectives@statcan.ca)*

# Work absence rates

There are many kinds of absence. Some, such as annual vacation, 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.

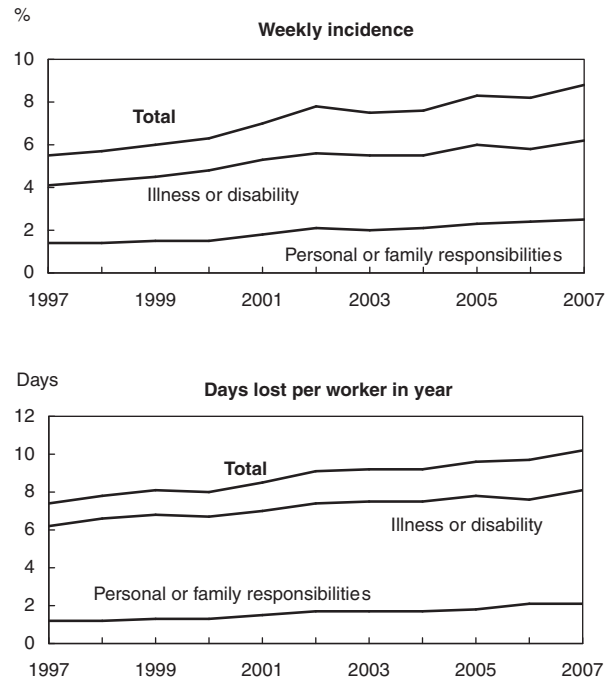
Absenteeism, a term used to refer to absences that are avoidable, habitual and unscheduled, is a source of irritation to employers and co-workers. Such absences are disruptive to proper work scheduling and output, and costly to an organization and the economy as a whole. Although absenteeism is widely 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 2007

Since 2000, both the incidence and the number of days lost for personal reasons (illness or disability, and personal or family responsibilities) have shown a rising trend (Chart). Several factors have contributed: notably, an aging workforce; the growing share of women in the workforce, especially those with young children; high worker stress;<sup>1</sup> and more generous sick- and family-related leave benefits.

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.<sup>2</sup> By 2007, the figure had risen to 8.8% (969,000) (Table 1). Total work time missed also rose steadily, from

Chart Work absence rates, 1997 to 2007



Source: Statistics Canada, Labour Force Survey.

3.0% of the scheduled week in 1997 to 4.1% in 2007. Extrapolated over the full year, work time lost for personal reasons increased from the equivalent of 7.4 days per worker in 1997 to 10.2 days in 2007.

## Variations in absence rates in 2007

Absence for personal reasons differs among various worker groups. Several factors are responsible, principally working conditions (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 or 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 2007 by selected demographic characteristics, occupation and industry, and other attributes such as union and job status.

### Demographic differences

In 2007, excluding women on maternity leave, an estimated 8.8% of full-time employees missed some work each week for personal reasons: 6.2% for own illness or disability, and 2.5% for personal or family responsibilities (Table 2). As a result, full-time employees lost about 4.1% of their work time each week.

On average, each full-time employee lost 10.2 days in 2007 for personal reasons (8.1 for own illness or disability plus 2.1 for personal or family demands). This amounted to an estimated 113 million workdays for all full-time employees. Men lost fewer days than women—8.8 (6.7 for illness or disability plus 2.1 for personal or family demands) versus 12.0 (9.9 plus 2.1).

The presence of preschool-aged children exerts a strong influence on work absences for personal or family responsibilities. In 2007, full-time employees in families with at least one preschool-aged child lost an average of 5.8 days, compared with only 1.6 for those in families without children.

The growing prevalence of family-leave entitlements in the workplace, the extension of Employment Insurance parental benefits,<sup>3</sup> and the greater involvement of fathers in child care appear to have eliminated the difference between the sexes with respect to personal and family-related absences (Marshall 2003; Marshall 2008, forthcoming). In 1997, women with preschool-aged children and working full time lost 4.1 days for such reasons, compared with 1.8 days for men in similar circumstances. By 2006, the gap had narrowed considerably (6.2 days for women versus 5.4 for men), and in 2007, it actually reversed (6.3 days for men versus 4.8 for women).

Workdays missed because of illness or disability tended to rise with age, from an average of 5.9 days for youth (15 to 19) to 11.4 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 arising 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 of paid sick or family leave.

Full-time employees in the public sector (more likely unionized or female) lost more work time in 2007 for personal reasons (12.8 days, compared with 13.0 in 2006) than their private-sector counterparts (9.5 days, unchanged from 2006).

At the major (2-digit) industry level, the most workdays were missed by employees in health care and social assistance (14.3 days), transportation and warehousing (12.2), and public administration (12.2).

The lowest averages were recorded by full-time workers in professional, scientific and technical services (6.6 days). Those in accommodation and food services (8.1), primary industries other than agriculture (8.5), and finance, insurance, real estate and leasing (8.9) also missed fewer workdays.

### Occupation

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

The most days lost in 2007 were recorded for full-time employees in health occupations (15.6), and occupations unique to production (12.8). Workers in management (6.4), and in culture and recreation (6.6) 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 more workdays on average in 2007 for personal reasons than their non-unionized counterparts (14.0 versus 8.4) (Table 5).

Workers with permanent jobs (more likely to be unionized) lost more workdays (10.4) than those whose jobs were not permanent (8.3).

Days lost tended to rise with workplace size, increasing from a low of 8.8 in workplaces with fewer than 20 employees (firms more likely to have low union rates) to 11.8 in workplaces with more than 500 employees (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. Employees with tenure of up to one year lost 7.8 days, while those with over 14 years lost 12.2 days (the latter group were also likely 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 Nova Scotia (12.0) and Quebec (12.0) lost the most work time in 2007. Those in Alberta (9.0) and Ontario (9.3) lost the least.

Among the census metropolitan areas, Thunder Bay (14.6), Gatineau (13.3) and Saguenay (12.0) lost the most days per full-time worker. Calgary (8.1), Kitchener (8.3) and Toronto (8.4) had the least.

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### Perspectives

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### ■ Notes

1. 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) vol. 15, no. 1, January 2004. Also see Cara Williams, "Sources of workplace stress," *Perspectives on Labour and Income* (Statistics Canada Catalogue 75-001-XIE) vol. 4, no. 6, June 2003 online edition.
2. 1997 marks the introduction of the revised Labour Force Survey questionnaire.
3. In December 2000, changes in Employment Insurance regulations extended the duration of parental leave benefits from 10 to 35 weeks. The 35 weeks can be taken by one (qualifying) parent, or they can be split between both (qualifying) parents.

### ■ References

Marshall, Katherine. 2003. "Benefiting from extended parental leave". *Perspectives on Labour and Income*. Vol. 4, no. 3. March. Statistics Canada Catalogue no. 75-001-XIE.

Marshall, Katherine. 2008. "Fathers' use of parental leave". *Perspectives on Labour and Income*. Vol. 9, no. 6. June (forthcoming). Statistics Canada Catalogue no. 75-001-XIE.

*For further information, contact Labouaria Yssaad, Labour and Household Surveys Analysis Division. She can be reached at 613-951-0627 or [perspectives@statcan.ca](mailto:perspectives@statcan.ca).*

## 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 2007, the number of employed persons on such long-term illness or disability leave averaged only 25,000 in a typical week. Their exclusion would have reduced the weekly work absence incidence for illness or disability from 6.2% to 6.0%, the inactivity rate from 3.2% to 3.0%, and days lost per worker that year from 8.1 to 7.5.

**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 31% of all time lost by full-time paid workers each week in 2007. Vacations, which accounted for 43% of total time away from work, are not counted in this study, nor are statutory holidays, which represented 8%. Maternity leave represented 11% 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.

## Work absence rates

**Table 1 Absence rates for full-time employees by sex, 1997 to 2007, excluding maternity leave**

|                   | Incidence <sup>1</sup> |                       |                                     | Inactivity rate <sup>2</sup> |                       |                                     | Days lost per worker in year <sup>3</sup> |                       |                                     |
|-------------------|------------------------|-----------------------|-------------------------------------|------------------------------|-----------------------|-------------------------------------|---|-----------------------|-------------------------------------|
|                   | Total                  | Illness or disability | Personal or family responsibilities | Total                        | Illness or disability | Personal or family responsibilities | Total                                     | Illness or disability | Personal or family responsibilities |
|                   | %                      |                       |                                     | %                            |                       |                                     | days                                      |                       |                                     |
| <b>Both sexes</b> |                        |                       |                                     |                              |                       |                                     |   |                       |                                     |
| 1997              | 5.5                    | 4.1                   | 1.4                                 | 3.0                          | 2.5                   | 0.5                                 | 7.4                                       | 6.2                   | 1.2                                 |
| 1998              | 5.7                    | 4.3                   | 1.4                                 | 3.1                          | 2.6                   | 0.5                                 | 7.8                                       | 6.6                   | 1.2                                 |
| 1999              | 6.0                    | 4.5                   | 1.5                                 | 3.2                          | 2.7                   | 0.5                                 | 8.1                                       | 6.8                   | 1.3                                 |
| 2000              | 6.3                    | 4.8                   | 1.5                                 | 3.2                          | 2.7                   | 0.5                                 | 8.0                                       | 6.7                   | 1.3                                 |
| 2001              | 7.0                    | 5.3                   | 1.8                                 | 3.4                          | 2.8                   | 0.6                                 | 8.5                                       | 7.0                   | 1.5                                 |
| 2002              | 7.8                    | 5.6                   | 2.1                                 | 3.6                          | 3.0                   | 0.7                                 | 9.1                                       | 7.4                   | 1.7                                 |
| 2003              | 7.5                    | 5.5                   | 2.0                                 | 3.7                          | 3.0                   | 0.7                                 | 9.2                                       | 7.5                   | 1.7                                 |
| 2004              | 7.6                    | 5.5                   | 2.1                                 | 3.7                          | 3.0                   | 0.7                                 | 9.2                                       | 7.5                   | 1.7                                 |
| 2005              | 8.3                    | 6.0                   | 2.3                                 | 3.9                          | 3.1                   | 0.7                                 | 9.6                                       | 7.8                   | 1.8                                 |
| 2006              | 8.2                    | 5.8                   | 2.4                                 | 3.9                          | 3.0                   | 0.9                                 | 9.7                                       | 7.6                   | 2.1                                 |
| 2007              | 8.8                    | 6.2                   | 2.5                                 | 4.1                          | 3.2                   | 0.8                                 | 10.2                                      | 8.1                   | 2.1                                 |
| <b>Men</b>        |                        |                       |                                     |                              |                       |                                     |   |                       |                                     |
| 1997              | 4.6                    | 3.4                   | 1.2                                 | 2.5                          | 2.1                   | 0.4                                 | 6.3                                       | 5.3                   | 0.9                                 |
| 1998              | 4.9                    | 3.7                   | 1.2                                 | 2.7                          | 2.3                   | 0.4                                 | 6.9                                       | 5.8                   | 1.0                                 |
| 1999              | 5.2                    | 3.9                   | 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                    | 4.6                   | 1.6                                 | 3.1                          | 2.5                   | 0.5                                 | 7.6                                       | 6.3                   | 1.3                                 |
| 2002              | 6.7                    | 4.8                   | 1.9                                 | 3.2                          | 2.6                   | 0.6                                 | 8.0                                       | 6.5                   | 1.6                                 |
| 2003              | 6.5                    | 4.7                   | 1.8                                 | 3.3                          | 2.6                   | 0.6                                 | 8.2                                       | 6.6                   | 1.5                                 |
| 2004              | 6.6                    | 4.6                   | 2.0                                 | 3.2                          | 2.6                   | 0.7                                 | 8.0                                       | 6.4                   | 1.6                                 |
| 2005              | 7.2                    | 5.2                   | 2.1                                 | 3.4                          | 2.7                   | 0.7                                 | 8.6                                       | 6.9                   | 1.7                                 |
| 2006              | 7.2                    | 5.1                   | 2.1                                 | 3.5                          | 2.7                   | 0.8                                 | 8.7                                       | 6.7                   | 1.9                                 |
| 2007              | 7.5                    | 5.1                   | 2.4                                 | 3.5                          | 2.7                   | 0.8                                 | 8.8                                       | 6.7                   | 2.1                                 |
| <b>Women</b>      |                        |                       |                                     |                              |                       |                                     |   |                       |                                     |
| 1997              | 6.7                    | 5.1                   | 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                                       | 7.8                   | 1.5                                 |
| 1999              | 7.1                    | 5.4                   | 1.8                                 | 3.8                          | 3.2                   | 0.6                                 | 9.6                                       | 8.0                   | 1.6                                 |
| 2000              | 7.5                    | 5.7                   | 1.8                                 | 3.8                          | 3.2                   | 0.6                                 | 9.4                                       | 7.9                   | 1.5                                 |
| 2001              | 8.2                    | 6.2                   | 2.0                                 | 3.9                          | 3.2                   | 0.7                                 | 9.8                                       | 8.0                   | 1.8                                 |
| 2002              | 9.2                    | 6.7                   | 2.4                                 | 4.3                          | 3.5                   | 0.8                                 | 10.7                                      | 8.7                   | 1.9                                 |
| 2003              | 8.9                    | 6.6                   | 2.3                                 | 4.3                          | 3.5                   | 0.8                                 | 10.7                                      | 8.8                   | 1.9                                 |
| 2004              | 8.9                    | 6.6                   | 2.3                                 | 4.3                          | 3.6                   | 0.7                                 | 10.8                                      | 9.0                   | 1.9                                 |
| 2005              | 9.6                    | 7.0                   | 2.6                                 | 4.5                          | 3.7                   | 0.8                                 | 11.2                                      | 9.1                   | 2.0                                 |
| 2006              | 9.5                    | 6.8                   | 2.7                                 | 4.5                          | 3.5                   | 1.0                                 | 11.2                                      | 8.8                   | 2.4                                 |
| 2007              | 10.3                   | 7.5                   | 2.8                                 | 4.8                          | 3.9                   | 0.9                                 | 12.0                                      | 9.9                   | 2.1                                 |

1. Absent workers divided by total.

2. Hours absent divided by hours usually worked.

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

Source: Statistics Canada, Labour Force Survey.



**Table 2 Absence rates for full-time employees by sex, age, education and presence of children, 2007, excluding maternity leave**

|                                      | Incidence <sup>1</sup> |                       |                                     | Inactivity rate <sup>2</sup> |                       |                                     | Days lost per worker in year <sup>3</sup> |                       |                                     |
|--------------------------------------|------------------------|-----------------------|-------------------------------------|------------------------------|-----------------------|-------------------------------------|---|-----------------------|-------------------------------------|
|                                      | Total                  | Illness or disability | Personal or family responsibilities | Total                        | Illness or disability | Personal or family responsibilities | Total                                     | Illness or disability | Personal or family responsibilities |
| <b>Age</b>                           | %                      |                       |                                     | %                            |                       |                                     | days                                      |                       |                                     |
| <b>Both sexes</b>                    | <b>8.8</b>             | <b>6.2</b>            | <b>2.5</b>                          | <b>4.1</b>                   | <b>3.2</b>            | <b>0.8</b>                          | <b>10.2</b>                               | <b>8.1</b>            | <b>2.1</b>                          |
| 15 to 19                             | 8.4                    | 6.0                   | 2.4                                 | 3.2                          | 2.4                   | 0.8                                 | 8.0                                       | 5.9                   | 2.1                                 |
| 20 to 24                             | 8.1                    | 5.9                   | 2.2                                 | 3.0                          | 2.4                   | 0.6                                 | 7.6                                       | 6.0                   | 1.5                                 |
| 25 to 34                             | 9.1                    | 6.0                   | 3.1                                 | 3.7                          | 2.6                   | 1.1                                 | 9.3                                       | 6.6                   | 2.8                                 |
| 35 to 44                             | 8.9                    | 6.1                   | 2.8                                 | 4.1                          | 3.1                   | 1.0                                 | 10.1                                      | 7.7                   | 2.4                                 |
| 45 to 54                             | 8.5                    | 6.3                   | 2.2                                 | 4.4                          | 3.7                   | 0.7                                 | 10.9                                      | 9.2                   | 1.7                                 |
| 55 to 64                             | 8.9                    | 7.0                   | 1.9                                 | 5.2                          | 4.5                   | 0.6                                 | 12.9                                      | 11.4                  | 1.5                                 |
| 65 and over                          | 7.7                    | 5.8                   | 1.8                                 | 4.3                          | 3.7                   | 0.6                                 | 10.8                                      | 9.2                   | 1.6                                 |
| <b>Men</b>                           | <b>7.5</b>             | <b>5.1</b>            | <b>2.4</b>                          | <b>3.5</b>                   | <b>2.7</b>            | <b>0.8</b>                          | <b>8.8</b>                                | <b>6.7</b>            | <b>2.1</b>                          |
| 15 to 19                             | 7.7                    | 5.3                   | 2.4                                 | 2.9                          | 2.2                   | 0.8                                 | 7.4                                       | 5.4                   | 1.9                                 |
| 20 to 24                             | 7.2                    | 5.3                   | 1.9                                 | 2.8                          | 2.3                   | 0.5                                 | 7.1                                       | 5.7                   | 1.4                                 |
| 25 to 34                             | 7.7                    | 4.7                   | 3.0                                 | 3.3                          | 2.0                   | 1.3                                 | 8.2                                       | 5.1                   | 3.1                                 |
| 35 to 44                             | 7.6                    | 4.9                   | 2.6                                 | 3.4                          | 2.4                   | 1.0                                 | 8.6                                       | 6.1                   | 2.5                                 |
| 45 to 54                             | 7.2                    | 5.2                   | 2.0                                 | 3.7                          | 3.1                   | 0.6                                 | 9.3                                       | 7.8                   | 1.4                                 |
| 55 to 64                             | 7.8                    | 6.2                   | 1.6                                 | 4.6                          | 4.1                   | 0.5                                 | 11.5                                      | 10.3                  | 1.1                                 |
| 65 and over                          | 6.4                    | 5.0                   | F                                   | 3.6                          | 3.1                   | F                                   | 9.1                                       | 7.7                   | F                                   |
| <b>Women</b>                         | <b>10.3</b>            | <b>7.5</b>            | <b>2.8</b>                          | <b>4.8</b>                   | <b>3.9</b>            | <b>0.9</b>                          | <b>12.0</b>                               | <b>9.9</b>            | <b>2.1</b>                          |
| 15 to 19                             | 9.5                    | 7.1                   | 2.4                                 | 3.6                          | 2.6                   | 1.0                                 | 9.0                                       | 6.6                   | 2.4                                 |
| 20 to 24                             | 9.2                    | 6.7                   | 2.5                                 | 3.3                          | 2.6                   | 0.7                                 | 8.3                                       | 6.5                   | 1.8                                 |
| 25 to 34                             | 10.9                   | 7.8                   | 3.2                                 | 4.4                          | 3.5                   | 0.9                                 | 10.9                                      | 8.7                   | 2.2                                 |
| 35 to 44                             | 10.6                   | 7.5                   | 3.1                                 | 4.9                          | 3.9                   | 0.9                                 | 12.2                                      | 9.9                   | 2.3                                 |
| 45 to 54                             | 10.0                   | 7.5                   | 2.5                                 | 5.2                          | 4.4                   | 0.8                                 | 12.9                                      | 10.9                  | 2.0                                 |
| 55 to 64                             | 10.2                   | 8.0                   | 2.2                                 | 5.9                          | 5.1                   | 0.8                                 | 14.9                                      | 12.8                  | 2.1                                 |
| 65 and over                          | 10.0                   | 7.5                   | F                                   | 5.7                          | 4.9                   | F                                   | 14.3                                      | 12.3                  | F                                   |
| <b>Educational attainment</b>        |                        |                       |                                     |                              |                       |                                     |   |                       |                                     |
| <b>Both sexes</b>                    | <b>8.8</b>             | <b>6.2</b>            | <b>2.5</b>                          | <b>4.1</b>                   | <b>3.2</b>            | <b>0.8</b>                          | <b>10.2</b>                               | <b>8.1</b>            | <b>2.1</b>                          |
| Less than grade 9                    | 9.2                    | 7.1                   | 2.1                                 | 5.6                          | 4.8                   | 0.8                                 | 13.9                                      | 12.0                  | 1.9                                 |
| Some secondary                       | 10.0                   | 7.5                   | 2.5                                 | 5.2                          | 4.3                   | 0.9                                 | 13.1                                      | 10.9                  | 2.2                                 |
| High school graduation               | 8.3                    | 6.0                   | 2.3                                 | 3.9                          | 3.1                   | 0.8                                 | 9.8                                       | 7.8                   | 2.0                                 |
| Some postsecondary                   | 9.1                    | 6.6                   | 2.5                                 | 4.0                          | 3.3                   | 0.8                                 | 10.1                                      | 8.1                   | 2.0                                 |
| Postsecondary certificate or diploma | 9.3                    | 6.6                   | 2.7                                 | 4.4                          | 3.6                   | 0.9                                 | 11.1                                      | 8.9                   | 2.1                                 |
| University degree                    | 7.8                    | 5.2                   | 2.6                                 | 3.2                          | 2.3                   | 0.9                                 | 7.9                                       | 5.7                   | 2.2                                 |
| <b>Presence of children</b>          |                        |                       |                                     |                              |                       |                                     |   |                       |                                     |
| <b>Both sexes</b>                    | <b>8.8</b>             | <b>6.2</b>            | <b>2.5</b>                          | <b>4.1</b>                   | <b>3.2</b>            | <b>0.8</b>                          | <b>10.2</b>                               | <b>8.1</b>            | <b>2.1</b>                          |
| With children                        | 9.3                    | 6.0                   | 3.3                                 | 4.3                          | 3.2                   | 1.2                                 | 10.8                                      | 7.9                   | 2.9                                 |
| Preschoolers -                       |                        |                       |                                     |                              |                       |                                     |   |                       |                                     |
| under 5 years                        | 11.3                   | 6.0                   | 5.4                                 | 5.1                          | 2.8                   | 2.3                                 | 12.7                                      | 6.9                   | 5.8                                 |
| 5 to 12 years                        | 8.8                    | 5.8                   | 3.0                                 | 3.8                          | 2.9                   | 0.8                                 | 9.4                                       | 7.3                   | 2.1                                 |
| 13 years and over                    | 8.3                    | 6.2                   | 2.1                                 | 4.3                          | 3.6                   | 0.6                                 | 10.6                                      | 9.1                   | 1.5                                 |
| Without children                     | 8.4                    | 6.4                   | 2.0                                 | 3.9                          | 3.3                   | 0.6                                 | 9.8                                       | 8.2                   | 1.6                                 |

1. Absent workers divided by total.

2. Hours absent divided by hours usually worked.

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

Source: Statistics Canada, Labour Force Survey.

**Table 3 Absence rates for full-time employees by industry and sector, 2007, excluding maternity leave**

|   | Incidence <sup>1</sup> |                       |                                     | Inactivity rate <sup>2</sup> |                       |                                     | Days lost per worker in year <sup>3</sup> |                       |                                     |
|---|------------------------|-----------------------|-------------------------------------|------------------------------|-----------------------|-------------------------------------|---|-----------------------|-------------------------------------|
|   | Total                  | Illness or disability | Personal or family responsibilities | Total                        | Illness or disability | Personal or family responsibilities | Total                                     | Illness or disability | Personal or family responsibilities |
|   | %                      |                       |                                     | %                            |                       |                                     | days                                      |                       |                                     |
| <b>All industries</b>                       | <b>8.8</b>             | <b>6.2</b>            | <b>2.5</b>                          | <b>4.1</b>                   | <b>3.2</b>            | <b>0.8</b>                          | <b>10.2</b>                               | <b>8.1</b>            | <b>2.1</b>                          |
| Public employees                            | 10.6                   | 8.0                   | 2.6                                 | 5.1                          | 4.2                   | 0.9                                 | 12.8                                      | 10.4                  | 2.4                                 |
| Private employees                           | 8.2                    | 5.7                   | 2.5                                 | 3.8                          | 3.0                   | 0.8                                 | 9.5                                       | 7.4                   | 2.0                                 |
| <b>Goods-producing</b>                      | <b>8.3</b>             | <b>5.6</b>            | <b>2.7</b>                          | <b>3.9</b>                   | <b>3.1</b>            | <b>0.8</b>                          | <b>9.8</b>                                | <b>7.7</b>            | <b>2.1</b>                          |
| Primary                                     | 6.7                    | 4.5                   | 2.3                                 | 3.4                          | 2.6                   | 0.8                                 | 8.5                                       | 6.5                   | 2.1                                 |
| Agriculture                                 | 8.2                    | 5.3                   | 3.0                                 | 3.7                          | 2.8                   | 0.9                                 | 9.2                                       | 7.1                   | 2.2                                 |
| Other                                       | 6.2                    | 4.2                   | 2.0                                 | 3.3                          | 2.5                   | 0.8                                 | 8.3                                       | 6.3                   | 2.0                                 |
| Utilities                                   | 9.2                    | 6.9                   | 2.3                                 | 4.5                          | 3.6                   | 0.8                                 | 11.2                                      | 9.1                   | 2.1                                 |
| Construction                                | 7.8                    | 5.3                   | 2.5                                 | 3.7                          | 2.9                   | 0.8                                 | 9.4                                       | 7.3                   | 2.1                                 |
| Manufacturing                               | 8.7                    | 5.9                   | 2.8                                 | 4.1                          | 3.2                   | 0.9                                 | 10.2                                      | 8.1                   | 2.1                                 |
| Durable                                     | 8.7                    | 5.8                   | 2.8                                 | 3.9                          | 3.1                   | 0.8                                 | 9.7                                       | 7.7                   | 2.0                                 |
| Non-durable                                 | 8.8                    | 6.0                   | 2.8                                 | 4.4                          | 3.5                   | 1.0                                 | 11.1                                      | 8.7                   | 2.4                                 |
| <b>Service-producing</b>                    | <b>8.9</b>             | <b>6.4</b>            | <b>2.5</b>                          | <b>4.1</b>                   | <b>3.3</b>            | <b>0.8</b>                          | <b>10.3</b>                               | <b>8.2</b>            | <b>2.1</b>                          |
| Trade                                       | 8.1                    | 5.7                   | 2.4                                 | 3.7                          | 2.9                   | 0.8                                 | 9.3                                       | 7.3                   | 2.0                                 |
| Wholesale                                   | 7.5                    | 5.1                   | 2.5                                 | 3.4                          | 2.7                   | 0.8                                 | 8.6                                       | 6.6                   | 1.9                                 |
| Retail                                      | 8.3                    | 5.9                   | 2.4                                 | 3.9                          | 3.0                   | 0.8                                 | 9.7                                       | 7.6                   | 2.1                                 |
| Transportation and warehousing              | 8.7                    | 6.5                   | 2.2                                 | 4.9                          | 4.1                   | 0.8                                 | 12.2                                      | 10.1                  | 2.1                                 |
| Finance, insurance, real estate and leasing | 8.3                    | 5.8                   | 2.5                                 | 3.5                          | 2.8                   | 0.7                                 | 8.9                                       | 7.0                   | 1.8                                 |
| Finance and insurance                       | 8.6                    | 6.0                   | 2.5                                 | 3.7                          | 2.9                   | 0.7                                 | 9.1                                       | 7.3                   | 1.8                                 |
| Real estate and leasing                     | 7.1                    | 4.8                   | 2.3                                 | 3.1                          | 2.4                   | 0.7                                 | 7.8                                       | 5.9                   | 1.9                                 |
| Professional, scientific and technical      | 7.6                    | 4.8                   | 2.8                                 | 2.6                          | 1.9                   | 0.7                                 | 6.6                                       | 4.8                   | 1.8                                 |
| Business, building and support services     | 10.0                   | 7.1                   | 2.9                                 | 4.2                          | 3.3                   | 0.9                                 | 10.6                                      | 8.3                   | 2.4                                 |
| Educational services                        | 9.7                    | 7.0                   | 2.6                                 | 4.2                          | 3.3                   | 0.9                                 | 10.6                                      | 8.3                   | 2.3                                 |
| Health care and social assistance           | 10.8                   | 8.6                   | 2.2                                 | 5.7                          | 4.9                   | 0.8                                 | 14.3                                      | 12.3                  | 2.0                                 |
| Information, culture and recreation         | 7.6                    | 5.4                   | 2.2                                 | 3.7                          | 2.9                   | 0.8                                 | 9.3                                       | 7.3                   | 2.0                                 |
| Accommodation and food services             | 6.8                    | 5.0                   | 1.8                                 | 3.2                          | 2.5                   | 0.7                                 | 8.1                                       | 6.3                   | 1.8                                 |
| Other services                              | 8.3                    | 5.6                   | 2.8                                 | 3.8                          | 2.8                   | 1.0                                 | 9.5                                       | 7.1                   | 2.4                                 |
| Public administration                       | 11.3                   | 8.0                   | 3.3                                 | 4.9                          | 3.7                   | 1.2                                 | 12.2                                      | 9.3                   | 2.9                                 |
| Federal                                     | 14.2                   | 9.9                   | 4.3                                 | 6.0                          | 4.4                   | 1.6                                 | 15.0                                      | 11.0                  | 4.0                                 |
| Provincial                                  | 11.4                   | 8.2                   | 3.2                                 | 5.0                          | 4.0                   | 1.0                                 | 12.5                                      | 10.0                  | 2.5                                 |
| Local, other                                | 7.9                    | 5.6                   | 2.2                                 | 3.5                          | 2.7                   | 0.8                                 | 8.7                                       | 6.7                   | 2.0                                 |

1. Absent workers divided by total.

2. Hours absent divided by hours usually worked.

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

Source: Statistics Canada, Labour Force Survey.

**Table 4 Absence rates for full-time employees by occupation, 2007, excluding maternity leave**

|   | Incidence <sup>1</sup> |                       |                                     | Inactivity rate <sup>2</sup> |                       |                                     | Days lost per worker in year <sup>3</sup> |                       |                                     |
|---|------------------------|-----------------------|-------------------------------------|------------------------------|-----------------------|-------------------------------------|---|-----------------------|-------------------------------------|
|   | Total                  | Illness or disability | Personal or family responsibilities | Total                        | Illness or disability | Personal or family responsibilities | Total                                     | Illness or disability | Personal or family responsibilities |
| <b>All occupations</b>                    | <b>8.8</b>             | <b>6.2</b>            | <b>2.5</b>                          | <b>4.1</b>                   | <b>3.2</b>            | <b>0.8</b>                          | <b>10.2</b>                               | <b>8.1</b>            | <b>2.1</b>                          |
| Management                                | 6.2                    | 4.2                   | 2.0                                 | 2.6                          | 1.9                   | 0.6                                 | 6.4                                       | 4.8                   | 1.6                                 |
| Business, finance and administrative      | 10.1                   | 7.1                   | 3.0                                 | 4.2                          | 3.3                   | 0.9                                 | 10.5                                      | 8.3                   | 2.1                                 |
| Professional                              | 7.8                    | 5.5                   | 2.3                                 | 2.9                          | 2.2                   | 0.7                                 | 7.3                                       | 5.5                   | 1.8                                 |
| Financial and administrative              | 8.9                    | 6.0                   | 2.8                                 | 3.8                          | 2.9                   | 0.8                                 | 9.4                                       | 7.3                   | 2.1                                 |
| Clerical                                  | 11.2                   | 8.0                   | 3.2                                 | 4.7                          | 3.8                   | 0.9                                 | 11.8                                      | 9.5                   | 2.3                                 |
| Natural and applied sciences              | 8.0                    | 5.0                   | 2.9                                 | 3.0                          | 2.1                   | 0.9                                 | 7.4                                       | 5.2                   | 2.2                                 |
| Health                                    | 10.7                   | 8.8                   | 1.9                                 | 6.3                          | 5.5                   | 0.8                                 | 15.6                                      | 13.7                  | 1.9                                 |
| Professional                              | 6.8                    | 4.9                   | F                                   | 2.6                          | 2.1                   | F                                   | 6.6                                       | 5.2                   | F                                   |
| Nursing                                   | 10.3                   | 8.6                   | 1.7                                 | 6.5                          | 5.7                   | 0.8                                 | 16.2                                      | 14.3                  | 1.9                                 |
| Technical                                 | 10.6                   | 8.5                   | 2.1                                 | 6.0                          | 5.1                   | 0.9                                 | 15.1                                      | 12.8                  | 2.3                                 |
| Support staff                             | 12.7                   | 10.7                  | 2.1                                 | 7.8                          | 7.0                   | 0.7                                 | 19.5                                      | 17.6                  | 1.9                                 |
| Social and public service                 | 9.9                    | 7.1                   | 2.8                                 | 4.4                          | 3.4                   | 1.0                                 | 11.1                                      | 8.5                   | 2.6                                 |
| Legal, social and religious               | 10.5                   | 7.5                   | 3.0                                 | 5.0                          | 3.9                   | 1.1                                 | 12.4                                      | 9.6                   | 2.8                                 |
| Teachers and professors                   | 9.5                    | 6.8                   | 2.7                                 | 4.0                          | 3.1                   | 1.0                                 | 10.1                                      | 7.6                   | 2.5                                 |
| Secondary and elementary                  | 11.0                   | 8.0                   | 2.9                                 | 4.8                          | 3.7                   | 1.1                                 | 12.0                                      | 9.2                   | 2.7                                 |
| Other                                     | 6.1                    | 4.1                   | 2.1                                 | 2.5                          | 1.7                   | 0.7                                 | 6.2                                       | 4.4                   | 1.9                                 |
| Culture and recreation                    | 7.7                    | 5.3                   | 2.4                                 | 2.7                          | 2.0                   | 0.6                                 | 6.6                                       | 5.0                   | 1.6                                 |
| Sales and service                         | 7.8                    | 5.7                   | 2.1                                 | 3.8                          | 3.0                   | 0.8                                 | 9.6                                       | 7.6                   | 1.9                                 |
| Wholesale                                 | 6.3                    | 4.1                   | 2.3                                 | 2.4                          | 1.8                   | 0.6                                 | 6.0                                       | 4.5                   | 1.5                                 |
| Retail                                    | 7.7                    | 5.6                   | 2.0                                 | 3.8                          | 3.0                   | 0.8                                 | 9.4                                       | 7.5                   | 1.9                                 |
| Food and beverage                         | 6.8                    | 5.1                   | 1.8                                 | 3.6                          | 2.8                   | 0.8                                 | 9.0                                       | 7.0                   | 2.0                                 |
| Protective services                       | 7.9                    | 6.0                   | 1.9                                 | 4.3                          | 3.4                   | 1.0                                 | 10.8                                      | 8.4                   | 2.4                                 |
| Childcare and home support                | 10.5                   | 7.6                   | 2.9                                 | 4.2                          | 3.4                   | 0.8                                 | 10.5                                      | 8.5                   | 2.1                                 |
| Travel and accommodation                  | 8.9                    | 6.7                   | 2.2                                 | 4.6                          | 3.8                   | 0.8                                 | 11.5                                      | 9.4                   | 2.1                                 |
| Trades, transport and equipment operators | 8.5                    | 6.0                   | 2.5                                 | 4.4                          | 3.6                   | 0.9                                 | 11.1                                      | 8.9                   | 2.2                                 |
| Contractors and supervisors               | 6.0                    | 4.0                   | 2.0                                 | 2.4                          | 1.8                   | 0.6                                 | 6.1                                       | 4.6                   | 1.5                                 |
| Construction trades                       | 9.3                    | 6.4                   | 2.8                                 | 4.6                          | 3.6                   | 1.1                                 | 11.6                                      | 8.9                   | 2.6                                 |
| Other trades                              | 8.3                    | 5.7                   | 2.6                                 | 4.1                          | 3.2                   | 0.9                                 | 10.1                                      | 8.0                   | 2.2                                 |
| Transport equipment operators             | 7.8                    | 5.7                   | 2.1                                 | 5.0                          | 4.1                   | 0.8                                 | 12.4                                      | 10.3                  | 2.0                                 |
| Helpers and labourers                     | 10.1                   | 7.3                   | 2.7                                 | 5.2                          | 4.2                   | 1.0                                 | 13.0                                      | 10.5                  | 2.4                                 |
| Occupations unique to primary industry    | 6.8                    | 4.5                   | 2.3                                 | 3.5                          | 2.7                   | 0.8                                 | 8.9                                       | 6.7                   | 2.1                                 |
| Occupations unique to production          | 10.0                   | 7.1                   | 2.9                                 | 5.1                          | 4.1                   | 1.0                                 | 12.8                                      | 10.4                  | 2.5                                 |
| Machine operators and assemblers          | 9.8                    | 6.9                   | 2.8                                 | 5.0                          | 4.0                   | 1.0                                 | 12.4                                      | 10.0                  | 2.4                                 |
| Labourers                                 | 10.8                   | 7.8                   | 3.0                                 | 5.7                          | 4.7                   | 1.1                                 | 14.4                                      | 11.7                  | 2.7                                 |

1. Absent workers divided by total.

2. Hours absent divided by hours usually worked.

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

Source: Statistics Canada, Labour Force Survey.

**Table 5 Absence rates for full-time employees by workplace size, job tenure, job status and union coverage, 2007, excluding maternity leave**

|  | Incidence <sup>1</sup> |                                 |  | Inactivity rate <sup>2</sup> |                                 |  | Days lost per worker in year <sup>3</sup> |                                 |  |
|--|------------------------|---------------------------------|--|------------------------------|---------------------------------|--|---|---------------------------------|--|
|  | Total                  | Own<br>Illness or<br>disability | Personal<br>or family<br>respon-<br>sibilities | Total                        | Own<br>Illness or<br>disability | Personal<br>or family<br>respon-<br>sibilities | Total                                     | Own<br>Illness or<br>disability | Personal<br>or family<br>respon-<br>sibilities |
|  | %                      |                                 |  | %                            |                                 |  | days                                      |                                 |  |
| <b>Workplace size</b>                              |                        |                                 |  |                              |                                 |  |   |                                 |  |
| <b>Both sexes</b>                                  | <b>8.8</b>             | <b>6.2</b>                      | <b>2.5</b>                                     | <b>4.1</b>                   | <b>3.2</b>                      | <b>0.8</b>                                     | <b>10.2</b>                               | <b>8.1</b>                      | <b>2.1</b>                                     |
| Under 20 employees                                 | 7.7                    | 5.2                             | 2.4  | 3.5                          | 2.7                             | 0.8  | 8.8                                       | 6.8                             | 2.0  |
| 20 to 99 employees                                 | 8.9                    | 6.2                             | 2.7  | 4.0                          | 3.1                             | 0.9  | 10.0                                      | 7.8                             | 2.2  |
| 100 to 500 employees                               | 9.4                    | 6.8                             | 2.6  | 4.5                          | 3.6                             | 0.8  | 11.2                                      | 9.1                             | 2.1  |
| Over 500 employees                                 | 9.6                    | 7.2                             | 2.4  | 4.7                          | 3.9                             | 0.9  | 11.8                                      | 9.7                             | 2.1  |
| <b>Job tenure</b>                                  |                        |                                 |  |                              |                                 |  |   |                                 |  |
| <b>Both sexes</b>                                  | <b>8.8</b>             | <b>6.2</b>                      | <b>2.5</b>                                     | <b>4.1</b>                   | <b>3.2</b>                      | <b>0.8</b>                                     | <b>10.2</b>                               | <b>8.1</b>                      | <b>2.1</b>                                     |
| 1 to 12 months                                     | 7.9                    | 5.4                             | 2.5  | 3.1                          | 2.3                             | 0.8  | 7.8                                       | 5.7                             | 2.0  |
| Over 1 to 5 years                                  | 8.7                    | 6.0                             | 2.6  | 3.8                          | 2.9                             | 0.9  | 9.5                                       | 7.3                             | 2.2  |
| Over 5 to 9 years                                  | 9.2                    | 6.4                             | 2.8  | 4.5                          | 3.5                             | 1.0  | 11.2                                      | 8.7                             | 2.6  |
| Over 9 to 14 years                                 | 9.1                    | 6.3                             | 2.8  | 4.4                          | 3.5                             | 0.9  | 10.9                                      | 8.7                             | 2.2  |
| Over 14 years                                      | 9.2                    | 7.0                             | 2.2  | 4.9                          | 4.2                             | 0.7  | 12.2                                      | 10.5                            | 1.7  |
| <b>Job status</b>                                  |                        |                                 |  |                              |                                 |  |   |                                 |  |
| <b>Both sexes</b>                                  | <b>8.8</b>             | <b>6.2</b>                      | <b>2.5</b>                                     | <b>4.1</b>                   | <b>3.2</b>                      | <b>0.8</b>                                     | <b>10.2</b>                               | <b>8.1</b>                      | <b>2.1</b>                                     |
| Permanent  | 8.9                    | 6.3                             | 2.6  | 4.2                          | 3.3                             | 0.9  | 10.4                                      | 8.3                             | 2.1  |
| Non-permanent                                      | 7.7                    | 5.3                             | 2.4  | 3.3                          | 2.5                             | 0.8  | 8.3                                       | 6.3                             | 2.0  |
| <b>Union coverage</b>                              |                        |                                 |  |                              |                                 |  |   |                                 |  |
| <b>Both sexes</b>                                  | <b>8.8</b>             | <b>6.2</b>                      | <b>2.5</b>                                     | <b>4.1</b>                   | <b>3.2</b>                      | <b>0.8</b>                                     | <b>10.2</b>                               | <b>8.1</b>                      | <b>2.1</b>                                     |
| Union member or covered<br>by collective agreement | 10.6                   | 8.1                             | 2.5  | 5.6                          | 4.6                             | 1.0  | 14.0                                      | 11.6                            | 2.4  |
| Non-unionized                                      | 7.8                    | 5.3                             | 2.5  | 3.4                          | 2.6                             | 0.8  | 8.4                                       | 6.4                             | 2.0  |

1. Absent workers divided by total.

2. Hours absent divided by hours usually worked.

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

Source: Statistics Canada, Labour Force Survey.

**Table 6 Absence rates for full-time employees by province, region and census metropolitan area (CMA), 2007, excluding maternity leave**

|                                   | Incidence <sup>1</sup> |                       |                                     | Inactivity rate <sup>2</sup> |                       |                                     | Days lost per worker in year <sup>3</sup> |                       |                                     |
|-----------------------------------|------------------------|-----------------------|-------------------------------------|------------------------------|-----------------------|-------------------------------------|---|-----------------------|-------------------------------------|
|                                   | Total                  | Illness or disability | Personal or family responsibilities | Total                        | Illness or disability | Personal or family responsibilities | Total                                     | Illness or disability | Personal or family responsibilities |
| <b>Province and region</b>        |                        | %                     |                                     |                              | %                     |                                     |   | days                  |                                     |
| <b>Both sexes</b>                 | <b>8.8</b>             | <b>6.2</b>            | <b>2.5</b>                          | <b>4.1</b>                   | <b>3.2</b>            | <b>0.8</b>                          | <b>10.2</b>                               | <b>8.1</b>            | <b>2.1</b>                          |
| Atlantic                          | 8.7                    | 6.5                   | 2.3                                 | 4.3                          | 3.6                   | 0.7                                 | 10.8                                      | 9.0                   | 1.8                                 |
| Newfoundland and Labrador         | 7.6                    | 5.7                   | 1.9                                 | 3.9                          | 3.3                   | 0.6                                 | 9.8                                       | 8.2                   | 1.6                                 |
| Prince Edward Island              | 7.6                    | 5.3                   | 2.3                                 | 3.4                          | 2.7                   | 0.6                                 | 8.4                                       | 6.8                   | 1.6                                 |
| Nova Scotia                       | 9.7                    | 7.2                   | 2.5                                 | 4.8                          | 4.0                   | 0.8                                 | 12.0                                      | 9.9                   | 2.1                                 |
| New Brunswick                     | 8.6                    | 6.3                   | 2.2                                 | 4.2                          | 3.5                   | 0.7                                 | 10.5                                      | 8.8                   | 1.8                                 |
| Quebec                            | 9.4                    | 6.8                   | 2.6                                 | 4.8                          | 3.9                   | 0.9                                 | 12.0                                      | 9.8                   | 2.2                                 |
| Ontario                           | 8.5                    | 5.8                   | 2.7                                 | 3.7                          | 2.9                   | 0.9                                 | 9.3                                       | 7.2                   | 2.2                                 |
| Prairies                          | 8.9                    | 6.3                   | 2.6                                 | 3.8                          | 3.0                   | 0.9                                 | 9.6                                       | 7.5                   | 2.1                                 |
| Manitoba                          | 9.8                    | 7.0                   | 2.8                                 | 4.3                          | 3.5                   | 0.9                                 | 10.8                                      | 8.7                   | 2.2                                 |
| Saskatchewan                      | 9.5                    | 6.8                   | 2.8                                 | 4.2                          | 3.3                   | 0.9                                 | 10.5                                      | 8.3                   | 2.2                                 |
| Alberta                           | 8.4                    | 5.9                   | 2.5                                 | 3.6                          | 2.8                   | 0.8                                 | 9.0                                       | 6.9                   | 2.1                                 |
| British Columbia                  | 8.1                    | 6.1                   | 2.0                                 | 4.0                          | 3.3                   | 0.7                                 | 10.1                                      | 8.2                   | 1.9                                 |
| <b>CMA</b>                        |                        |                       |                                     |                              |                       |                                     |   |                       |                                     |
| <b>Both sexes</b>                 | <b>8.8</b>             | <b>6.2</b>            | <b>2.5</b>                          | <b>4.1</b>                   | <b>3.2</b>            | <b>0.8</b>                          | <b>10.2</b>                               | <b>8.1</b>            | <b>2.1</b>                          |
| All CMAs                          | 8.7                    | 6.2                   | 2.6                                 | 3.9                          | 3.1                   | 0.8                                 | 9.8                                       | 7.7                   | 2.1                                 |
| St. John's                        | 9.0                    | 6.8                   | 2.2                                 | 4.5                          | 3.8                   | 0.7                                 | 11.3                                      | 9.5                   | 1.8                                 |
| Halifax                           | 9.6                    | 7.1                   | 2.4                                 | 4.4                          | 3.6                   | 0.8                                 | 11.0                                      | 9.0                   | 2.0                                 |
| Saint John                        | 9.2                    | 6.6                   | 2.5                                 | 4.5                          | 3.7                   | 0.8                                 | 11.2                                      | 9.2                   | 2.0                                 |
| Saguenay                          | 8.9                    | 6.3                   | F                                   | 4.8                          | 4.0                   | F                                   | 12.0                                      | 9.9                   | F                                   |
| Québec                            | 8.5                    | 6.1                   | 2.5                                 | 4.2                          | 3.4                   | 0.8                                 | 10.6                                      | 8.5                   | 2.1                                 |
| Montréal                          | 9.9                    | 7.1                   | 2.8                                 | 4.7                          | 3.8                   | 0.9                                 | 11.8                                      | 9.5                   | 2.3                                 |
| Trois-Rivières                    | 8.6                    | 6.0                   | F                                   | 4.0                          | 3.1                   | F                                   | 10.0                                      | 7.8                   | F                                   |
| Sherbrooke                        | 8.3                    | 6.2                   | F                                   | 4.4                          | 3.6                   | F                                   | 10.9                                      | 9.1                   | F                                   |
| Gatineau                          | 11.7                   | 8.1                   | 3.6                                 | 5.3                          | 4.0                   | 1.3                                 | 13.3                                      | 10.1                  | 3.3                                 |
| Ottawa                            | 10.8                   | 7.4                   | 3.4                                 | 4.3                          | 3.2                   | 1.1                                 | 10.7                                      | 8.0                   | 2.8                                 |
| Kingston                          | 10.1                   | 6.4                   | 3.6                                 | 4.5                          | 3.2                   | 1.2                                 | 11.2                                      | 8.1                   | 3.1                                 |
| Greater Sudbury/<br>Grand Sudbury | 9.5                    | 6.8                   | F                                   | 4.3                          | 3.4                   | F                                   | 10.8                                      | 8.5                   | F                                   |
| Toronto                           | 7.8                    | 5.2                   | 2.6                                 | 3.4                          | 2.5                   | 0.9                                 | 8.4                                       | 6.3                   | 2.1                                 |
| Hamilton                          | 8.3                    | 5.9                   | 2.4                                 | 3.5                          | 2.9                   | 0.6                                 | 8.7                                       | 7.3                   | 1.5                                 |
| St. Catharines-Niagara            | 8.5                    | 6.1                   | 2.4                                 | 4.1                          | 3.3                   | 0.8                                 | 10.2                                      | 8.2                   | 2.1                                 |
| London                            | 9.0                    | 6.7                   | 2.4                                 | 4.2                          | 3.5                   | 0.6                                 | 10.4                                      | 8.9                   | 1.6                                 |
| Windsor                           | 8.9                    | 6.0                   | 2.9                                 | 4.2                          | 3.3                   | 1.0                                 | 10.6                                      | 8.2                   | 2.4                                 |
| Kitchener-Waterloo                | 8.5                    | 5.7                   | 2.9                                 | 3.3                          | 2.6                   | 0.8                                 | 8.3                                       | 6.4                   | 1.9                                 |
| Oshawa                            | 8.5                    | 5.9                   | 2.6                                 | 3.8                          | 3.0                   | 0.8                                 | 9.6                                       | 7.6                   | 2.0                                 |
| Thunder Bay                       | 10.7                   | 8.0                   | F                                   | 5.8                          | 4.8                   | F                                   | 14.6                                      | 12.1                  | F                                   |
| Winnipeg                          | 9.7                    | 7.0                   | 2.6                                 | 4.2                          | 3.4                   | 0.8                                 | 10.5                                      | 8.5                   | 2.0                                 |
| Regina                            | 10.2                   | 7.5                   | 2.7                                 | 4.3                          | 3.5                   | 0.8                                 | 10.7                                      | 8.7                   | 2.0                                 |
| Saskatoon                         | 8.8                    | 6.3                   | 2.5                                 | 3.6                          | 2.8                   | 0.8                                 | 9.0                                       | 7.1                   | 1.9                                 |
| Calgary                           | 7.9                    | 5.7                   | 2.3                                 | 3.3                          | 2.5                   | 0.8                                 | 8.1                                       | 6.2                   | 1.9                                 |
| Edmonton                          | 8.9                    | 6.5                   | 2.4                                 | 4.0                          | 3.2                   | 0.8                                 | 10.0                                      | 8.0                   | 2.0                                 |
| Abbotsford                        | 8.3                    | 6.4                   | F                                   | 4.7                          | 3.9                   | F                                   | 11.7                                      | 9.6                   | F                                   |
| Vancouver                         | 7.2                    | 5.3                   | 1.9                                 | 3.4                          | 2.7                   | 0.7                                 | 8.6                                       | 6.8                   | 1.7                                 |
| Victoria                          | 9.7                    | 7.2                   | 2.5                                 | 4.4                          | 3.5                   | 0.9                                 | 11.1                                      | 8.9                   | 2.2                                 |
| Non-CMAs                          | 8.7                    | 6.2                   | 2.5                                 | 4.4                          | 3.5                   | 0.9                                 | 11.0                                      | 8.9                   | 2.2                                 |
| Urban Centres                     | 9.0                    | 6.6                   | 2.4                                 | 4.4                          | 3.6                   | 0.8                                 | 11.0                                      | 9.0                   | 2.0                                 |

1. Absent workers divided by total.

2. Hours absent divided by hours usually worked.

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

Source: Statistics Canada, Labour Force Survey.