

## Article

# Retirement, health and employment among those 55 plus

*by Jungwee Park*

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## Standard symbols for Statistics Canada

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The following standard symbols are used in Statistics Canada publications:

- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0** true zero or a value rounded to zero
- 0<sup>s</sup>** value rounded to 0 (zero) where a meaningful distinction exists between true zero and the value rounded
- P** preliminary
- r** revised
- x** suppressed to meet the confidentiality requirements of the *Statistics Act*
- E** use with caution
- F** too unreliable to be published

# Retirement, health and employment among those 55 plus

*Jungwee Park*

**F**or older workers, control over the timing and circumstances of their retirement is crucial to their economic well-being. At the same time, the retention of older workers is a significant issue for policy makers and employers in an aging society. The motivations to remain on the job vary according to the circumstances of older workers and those who remain on the job have different preferences in the workplace than their younger counterparts. Thus, a better understanding of the characteristics of older workers in various stages of retirement may help inform employer practices and public policies.

Since older workers are not a homogeneous group, information on the socio-economic, employment, and health-related characteristics of specific groups will contribute to understanding their labour supply patterns (Wegman and McGee 2004). Retirement decisions are closely associated with workers' capabilities, limitations and needs in the labour market. Older workers' health is an especially important aspect of their labour market activity: some hypothesize that physical and mental health and associated disabilities may be barriers to the employability of older workers (Nauta 2005). Similarly, poor health has been associated with early exits from the labour market (Park 2010).

Many studies, however, treat older workers as a single group with little attention paid to their retirement history. Due to data limitations, retirement experience or partial retirement status were rarely included in analyses. This study attempts to fill the information gap on distinct states of retirement among older workers in terms of their links to health and labour market characteristics. It presents the sociodemographic characteristics of four different retirement situations:

- never retired
- partially retired
- fully retired
- previously retired but returned to work.

The article outlines the characteristics of these four groups and discusses how they are associated with work hours, work patterns and occupation. Most findings are adjusted to account for the differing age and sex characteristics of the groups.

Data originate from the 2009 Canadian Community Health Survey (CCHS) – Healthy Aging, designed to better understand the aging process of Canadians. It contains information on health and well-being, social support and participation, and work and retirement transitions (see *Data source and definitions*). Since the CCHS is a cross-sectional survey, it is not possible to trace the employment and retirement histories of respondents. On the other hand, this data source contains new information on the association between retirement characteristics and the socio-economic and health status of older Canadians. Moreover, some retrospective questions included in the survey are useful in determining past retirement experiences.

## Four retirement groups

Using several CCHS questions on retirement, four mutually exclusive groups of older people were identified:<sup>1</sup> never retired, partially retired, fully retired, and returned workers.

The never-retired are currently in the labour force and have never retired from a job. Partial retirement is based on self-reporting. The retired population includes those who report themselves as completely retired, not in the labour force and receiving 50% or more of their total income from retirement income sources such as Old Age Security (OAS) and the Guaranteed Income Supplement (GIS), the Canada Pension Plan or the Quebec Pension Plan (CPP/QPP), investments, dividends, retirement pensions, superannuation and annuities. Returned workers are currently in the labour force and not retired, either fully or partially, but indicate that they had previously been retired.

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## Data source and definitions

The Canadian Community Health Survey (CCHS) – Healthy Aging is one of the focused-content cycles of the CCHS. The survey was designed to collect new information on the factors, influences and processes that contribute to healthy aging through a multidisciplinary approach including health, social and economic determinants. The survey focuses on the health of Canadians age 45 and over by examining the factors that affect healthy aging, such as general health and well-being, physical activity, use of health care services, social participation, as well as work and retirement transitions.

The CCHS – Healthy Aging targets persons age 45 years and over living in private dwellings in the ten provinces and was conducted between December 2008 and November 2009. Residents of the three territories, persons living on Indian Reserves or Crown lands, those residing in institutions, full-time members of the Canadian Forces and residents of certain remote regions are excluded from this survey. In total, 41,496 of the selected households were in-scope for the survey. Out of this sample, 33,517 agreed to participate in the survey, resulting in an overall household-level response rate of 81% (Statistics Canada 2010). This study includes those age 55 to 84 and provides complete information on retirement. Those who never worked for pay are excluded. The retirement status of those age 75 to 84 was measured using the information on income sources and self-reported retirement status since the CCHS asked the question on working status only to respondents age 74 and younger the previous week. For the calculation of retirement age, respondents indicating they had retired before age 40 were excluded. The final sample size for the analysis was 19,774.

To account for the survey design effects, coefficients of variation and p-values were estimated and significance tests were performed using the bootstrap method. The significance level was set at  $p < 0.05$ .

**Shift work** refers to anything other than a regular daytime schedule (evening, night, rotating or split shifts).

**The self-employed** are those who worked mainly in their own businesses or professional practices, or on their own farms.

**Occupation** was collapsed into three groups: white collar (management; professional; technologist, technician or technical occupation; and administrative, financial or clerical), sales or service, and blue collar (trades, transport or equipment operator; farming, forestry, fishing or mining; and processing, manufacturing or utilities).

**Self-perceived health:** excellent, very good, good, fair or poor. Respondents who answered that their health was fair or poor were considered to have negative self-perceived health.

**Self-perceived mental health:** excellent, very good, good, fair or poor. Respondents who answered that their mental health was fair or poor were considered to have negative self-perceived mental health.

**Life satisfaction:** very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, or very dissatisfied. Respondents who answered very dissatisfied or dissatisfied were considered to have life dissatisfaction.

**Self-perceived life stress:** response categories for the amount of stress experienced most days included: not at all stressful, not very stressful, a bit stressful, quite a bit stressful, or extremely stressful. Respondents who answered “quite a bit” or “extremely” stressful were classified as having high self-perceived life stress.

**Self-perceived work stress** at the main job or business in the past 12 months was measured by asking whether most days at work were not at all stressful, not very stressful, a bit stressful, quite a bit stressful, or extremely stressful. Respondents who answered quite a bit or extremely stressful were classified as having high self-perceived work stress.

**Functional health indicators** provide a description of an individual’s overall functional health based on the following attributes: vision, hearing, ambulation (ability to get around), cognition (memory and thinking) and pain (for more information, see Feeny et al. 2002).

**Daily smokers** were defined as those who smoked cigarettes every day.

**Heavy drinking** was measured by asking respondents the number of times in the past year they had had 5 or more alcoholic drinks on one occasion. Having done so at least once per month (or 12 or more times in the past year for cycle 1) was classified as heavy monthly drinking.

**Physical inactivity** was based on total accumulated energy expenditure (EE) during leisure time. EE was calculated using the reported frequency and duration of all of a respondent’s leisure-time physical activities in the three months before the interview and the metabolic energy demand (MET value) of each activity, which was independently established. Respondents with high or moderate EE (1.5 or more) were considered **physically active**, while those with low EE (less than 1.5) were considered **inactive** (for more information, see Statistics Canada 1995 and Stephens et al. 1986).

**Body mass index (BMI)** is calculated by dividing weight in kilograms by height in metres squared. **Obesity** is defined by a BMI of 30 or more.

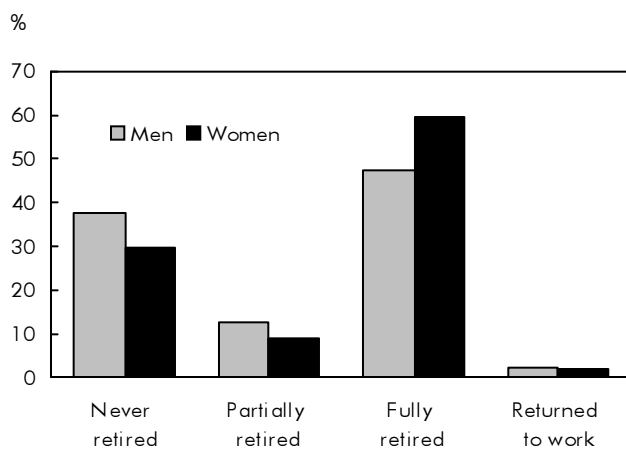
**Nutritional risk** measures whether respondents are at high nutritional risk. The questions ask about respondents’ eating habits on a typical day. They are based on an 8-item nutritional risk screening index (SCREEN II-AB) designed to identify risk for impaired nutritional states of older adults in community living. Each response category for each item is assigned a score. The maximum score for all summed items is 48, with a cut-off point of  $< 38$ , indicating high nutritional risk (for more information, see Keller et al. 2005, and Beath and Keller 2007).

**Social Support** measures four categories of social support:

- **emotional or informational support**—the expression of positive affect, empathetic understanding, and the encouragement of expression of feelings; the offering of advice, information, guidance or feedback
- **tangible support**—the provision of material aid or behavioural assistance
- **positive social interaction**—the availability of other persons with whom to positively interact
- **affection**—involving expressions of love and affection.

Higher scores indicate higher levels of social support (for more information, see Sherbourne and Stewart 1991).

**Sense of belonging to local community** was measured using answers falling into four categories: very strong, somewhat strong, somewhat weak, or very weak. Respondents who answered very strong or somewhat strong were classified as having high community belonging.

**Chart A More men age 55 to 84 in labour force than women**

Source: Canadian Community Health Survey (CCHS) – Healthy Aging, 2009.

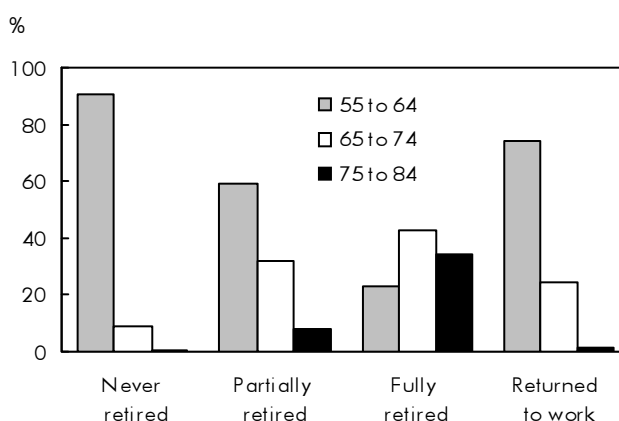
### Women more likely to be retired

The demographic make-up of the four retirement groups varied considerably. Compared with women age 55 and over, a higher proportion of similarly aged men was still attached to the labour force. While 60% of women were fully retired and out of the labour force, just under one-half of men were in similar circumstances (Chart A). Men were more likely than women to be never-retired (38% versus 30%) and partially retired (13% versus 9%). Less than 3% of both women and men reported returning to work from retirement.

Among those who had never retired, the majority was under the age of 65 (Chart B). Almost three-quarters of those who returned to work were between the ages of 55 and 64. Many may have taken early retirement before returning to the labour force.

About one-third of partial retirees were age 65 to 74. Barely 1% of the never-retired, 8% of the partially retired and 2% of returnees were age 75 and over, whereas more than one-third of the fully retired belonged to this age group.

Since the four retirement groups differ by age and sex, most inter-group comparisons in this study are tested on age–sex standardized rates.<sup>2</sup> The adjusted statistics are used to determine whether differences exist in certain variables after controlling for age and sex. It is

**Chart B Majority of the never-retired under age 65**

Source: Canadian Community Health Survey (CCHS) – Healthy Aging, 2009.

particularly important to eliminate the age–group effect when comparing conditions potentially affected by age, like health.

### Retirees at bottom of income distribution

The fully retired were more likely than the never-retired to be in lower income quintiles (Table 1). Almost 60% of retirees (55% of men and 62% of women) belonged to the lowest two income quintiles compared with less than 30% of those who never retired (24% of men and 30% of women [data not shown]). Moreover, more than 40% of the retired reported that they had less than \$25,000 in savings and investments.<sup>3</sup>

These data indicate that a sizeable minority of older workers may continue working out of necessity. On the other hand, financially secure and well-educated older workers are also more likely to remain employed (Uppal 2010). And there seems to be a ready market for their skills. More than one-third of returned workers were among the highest income quintile compared with only 8% of those who were fully retired.

Although income is closely related to current employment status, that may not be the case for wealth. Almost two-thirds of fully or partially retired workers were mortgage-free homeowners compared with about one-half of the never-retired and returnees. The implicit income generated by home equity is an

**Table 1 Population age 55 to 84 by selected sociodemographic characteristics and retirement status, 2009**

	Never retired	Partially retired	Fully retired	Returned to work
<b>Income quintile</b>			%	
First	10.0	16.3**	31.5*	5.9E*
Second	16.4	20.0**	27.7*	18.0E
Third	20.1	20.3	19.2	17.3
Fourth	23.8	21.8	13.8*	24.0
Fifth	29.7	21.5*	7.8*	34.9
<b>Source of personal income</b>				
Earnings	93.0	41.8*	1.5*	77.4*
Transfers	1.7	7.4**	25.6*	F
Savings	1.2	45.3*	70.1*	16.8E*
Other income	2.7	4.2 <sup>E</sup>	2.9	F
No income	1.4 <sup>E</sup>	F	F	F
<b>Home ownership</b>				
Mortgage paid off	47.6	62.9*	66.7*	50.3
Mortgaged	36.9	24.1*	11.6*	38.3
Rent	13.3	11.0*	18.3**	8.8E*
Other	1.2 <sup>E</sup>	1.4 <sup>E</sup>	2.2**	F
<b>Educational attainment</b>				
Less than high school graduation	15.2	17.5	35.8*	12.5 <sup>E</sup>
High school graduation	20.1	18.0	17.3**	18.6
Some postsecondary education	6.1	5.7	4.7**	4.1 <sup>E</sup>
Postsecondary degree	58.7	58.9	42.3*	64.8
<b>Marital status</b>				
Married/common-law	79.1	79.0	67.9*	77.7
Divorced/separated	11.8	9.2**	8.4**	13.5
Widowed	3.9	6.6**	19.7*	4.9E**
Never married	5.2	5.2	4.0**	3.9 <sup>E</sup>
<b>Family type</b>				
Unattached individual	15.1	17.8*	25.8*	14.8
Couple without children	49.8	61.8**	57.7**	57.1
Couple with children	22.3	12.6*	6.2*	17.4 <sup>E</sup>
Single parent	4.3	2.4E**	3.5**	3.8 <sup>E</sup>
Other	8.5	5.3**	6.9**	6.9 <sup>E</sup>
<b>Visible minority</b>	15.0	5.3*	7.5*	F
<b>Immigrant</b>	30.7	21.0*	24.6*	17.9E*

\* significantly different from the never-retired before and after age–sex adjustment ( $p < 0.05$ )

\*\* significantly different from the never-retired before but not after age–sex adjustment ( $p < 0.05$ )

Source: Canadian Community Health Survey (CCHS) – Healthy Aging.

important source of economic well-being for homeowners. Mortgage-free home ownership may thus partially compensate for the income reduction due to full or partial retirement.<sup>4</sup>

The main source of income tends to differ among the four groups. Not surprisingly, the never-retired rely mainly on earnings including wages, salaries and self-employment income. Similarly, almost 80% of returnees reported earnings as their main source of personal income.

The main income sources of the completely retired were savings, including pension benefits (70%) and government transfers (26%), like OAS and GIS. Women retirees tend to rely on transfers more than men (32% versus 17%). The proportion of savings in personal income for men was 78% while that for women was 63%.

The income of partial retirees comes from a combination of employment earnings and personal savings including dividends and interest, benefits

from CPP/QPP, job-related retirement pensions and RRSPs.

### Returnees have highest levels of education

Those who returned to work had the highest average level of educational attainment. Among this group, 65% had postsecondary degrees compared with 42% of the fully retired. Only 13% of returned workers had less than a high school education compared to 36% of retirees. These differences were statistically significant after adjusting for age and sex. Thus, it is not merely a result of the relatively younger average age of returned workers. A relatively high level of human capital is an advantage for those wishing to come out of retirement and re-enter the workforce. Other research shows that returned workers tend to have valuable skills and experience gained from previous employment (Schellenberg et al. 2005).

Fully retired groups showed significantly higher rates of being widowed even after controlling for age composition. With similar controls in place, fully retired women were most likely to live alone. Of the fully retired, 20% were widowed and more than one-quarter were unattached individuals compared with 4% and 15%, respectively, for those who never retired.

Compared with the retired, a higher proportion of employed women were married or living common-law. Unlike younger cohorts, married women over the age of 55 were more likely to work than single women the same age.

The proportion of immigrants was highest in the never-retired group (31%). Similarly, the proportion of visible minority workers was high-

est among those who never retired (15%). This corresponds with data on retirement age. Among workers fully retired in 2009, the members of visible minority groups and immigrant workers had retired, on average, two years later than other retirees.

### Never retired most likely to work full time

In general, partial retirement equates to part-time work. Almost 70% of partial retirees worked part time—less than 30 hours per week—compared with only 11% of the never-retired (Table 2). More than 1 in 5 returnees also worked part time (22%). Of those who never retired, 31% worked more than 40 hours per week, as did 28% of returned workers. On the other hand, only 8% of partial retirees worked more than 40 hours per week.

Non-standard work arrangements were also more prevalent among the partially retired and returnee groups. More than one-third of

those who had returned to the labour force from retirement worked as shift workers compared to 21% of the never-retired.

Partial retirement may occur in the main job before retirement as some employers have transitional programs offering reduced hours or responsibilities. More often, it involves a job change or a transition into self-employment (Honig and Hanoch 1985). The partially retired had a significantly higher rate of self-employment than those who had never retired (43% versus 24%). They may have chosen the self-employment path to stay involved in the labour market. Many partial retirees may also prefer self-employment as it usually provides more flexibility and imposes fewer constraints on the timing of retirement (Uppal 2011).

Almost two-thirds of returned workers held white-collar jobs (see *Data source and definitions*), which was significantly higher than the rates for the never-retired and partially retired groups. The high

**Table 2 Population age 55 to 74<sup>1</sup> by selected labour market characteristics and retirement status, 2009**

	Never retired	Partially retired	Returned to work
<b>Work hours per week</b>		%	
Less than 30	11.1	68.8*	21.7 <sup>E*</sup>
30 to 40	58.3	23.6*	50.3
More than 40	30.6	7.6*	28.0
<b>Shift work</b>	21.1	32.5*	36.0*
<b>Self-employed</b>	23.7	42.6*	32.8*
<b>Occupation</b>			
White collar	56.5	54.1	64.4*
Sales/services	20.0	24.8**	20.8
Blue collar	23.6	21.1	14.7*

\* significantly different from the never-retired before and after age–sex adjustment ( $p < 0.05$ )

\*\* significantly different from the never-retired before but not after age–sex adjustment ( $p < 0.05$ )

1. The CCHS collects the information on labour market characteristics for individuals age 45 to 74. Source: Canadian Community Health Survey (CCHS) – Healthy Aging.

incidence of white-collar jobs among returned workers is consistent with their higher levels of educational attainment.

Overall, the work arrangements of the never-retired 55 and over are similar to those of workers age 45 to 54. Similar proportions of each group were self-employed, working shifts or in full-time jobs, and their occupational distributions were nearly identical.

### Retirees have poorer health

Health varies by retirement status. The fully retired population has lower health status, according to several measures, than groups still attached to the labour force. Health status includes information based both on a five-category scale of self-perceived health and

the number of chronic conditions. The number of chronic conditions<sup>5</sup> was included to capture the effect of objective health status and minimize potential biases of self-assessed health (Park 2010).

Even after adjusting for age differences, a higher proportion of retirees had multiple chronic conditions. More than one-half had at least three chronic conditions and one-quarter had five or more conditions (Table 3). Retired women were more likely than retired men to have chronic conditions. Almost 60% of women reported three or more chronic conditions compared with 49% of men. One-half of all retired women reported having high blood pressure (50%) or arthritis (48%) (see *Most prevalent chronic conditions*).

**Table 3 Population age 55 to 84 by selected health indicators and retirement status, 2009**

	Never retired	Partially retired	Fully retired	Returned to work
			%	
<b>Health status</b>				
3 or more chronic conditions	26.4	34.4**	52.5*	29.2***
5 or more chronic conditions	6.3	8.1	21.4*	9.5 <sup>E</sup>
Negative self-perceived health	11.6	10.5	23.6*	4.7 <sup>E*</sup>
Negative self-perceived mental health	3.8	3.4	6.0*	F
Life dissatisfaction	8.4	6.9	10.8*	5.6 <sup>E</sup>
High self-perceived life stress	25.2	11.9*	10.9*	23.7 <sup>E</sup>
High self-perceived work stress	31.4	12.8*	..	23.0*
<b>Functional problem</b>				
Memory and cognition	20.0	20.8	28.4*	19.1
Hearing	1.7	3.2 <sup>E*</sup>	6.0*	F
Walking	1.6	2.4 <sup>E</sup>	12.0*	F
Vision	79.2	79.3	82.3*	81.1
Pain	22.5	22.3	29.9*	20.2
<b>Health behaviour</b>				
Daily smoking	16.7	11.0*	11.2**	11.2 <sup>E*</sup>
Heavy drinking	5.8	5.2	2.7**	3.0 <sup>E**</sup>
Physical inactivity	14.9	16.0	36.7*	10.5 <sup>E**</sup>
Obesity	22.1	21.4	20.6	26.6 <sup>E</sup>
High nutritional risk	35.9	33.2	35.2	29.9
<b>Community support and participation</b>				
Community belonging	33.9	29.1**	31.2*	36.1***
Participation in volunteer/charity activity (weekly or more)	68.9	78.2*	76.6*	78.9**
<b>Social support</b>			mean score	
Emotional support (out of maximum 32)	27.2	27.2	26.8*	28.1
Tangible support (16)	13.5	13.6	13.4	13.7
Affection (12)	10.7	10.8	10.5*	10.8
Positive social interaction (16)	13.9	13.9	13.6*	14.1

\* significantly different from the never-retired before and after age–sex adjustment ( $p < 0.05$ )

\*\* significantly different from the never-retired before but not after age–sex adjustment ( $p < 0.05$ )

\*\*\* significantly different from the never-retired ( $p < 0.05$ ) only after age–sex adjustment

Source: Canadian Community Health Survey (CCHS) – Healthy Aging.





reported that their financial plans for retirement were less than adequate. Moreover, more than one-third reported that they had less than \$25,000 in savings and investments. The never-retired were also less likely to contribute to employer pension plans compared with returned workers and partial retirees.

### Reasons for retirement and return

The groups who had retired at least once—the fully retired, the partially retired and returnees—were asked to choose which of 11 reasons contributed to their decision to retire.<sup>6</sup> The most common reason for retirement was that it was financially possible (Table 5). However, while 46% of the partially retired reported retiring because they were financially able to do so, only 34% of the fully retired and 28% of returnees did so.<sup>7</sup> Men were more likely than women to retire because of financial security: 40% of men stated this reason compared to 29% of women.

Among returnees, one-half indicated financial considerations as a reason for returning to the labour force (Table 6). Women were more likely than men to return to work for financial reasons (57% versus 48%). On the other hand, one-half of returnees also reported they were back on the job because they liked to work or wanted to be active.

**Table 5 Reasons for full or partial retirement,<sup>1</sup> 2009**

	Partially retired	Fully retired	Returned to work
			%
Financially possible	46*	34	28
Completed required years of service	41*	29	26
Wanted to stop work	31	33	20 <sup>E*</sup>
Pursue other activities	23*	13	18 <sup>E*</sup>
Employer incentives	19*	8	15 <sup>E*</sup>
Health/disability	16*	24	14 <sup>E*</sup>
Agreement with spouse/partner	14	16	8 <sup>E*</sup>
Organizational restructuring	12	9	17 <sup>E*</sup>
Caregiving	6 <sup>E</sup>	7	4 <sup>E*</sup>
Mandatory policy	4 <sup>E</sup>	4	F
Other	5 <sup>E</sup>	7	17 <sup>E</sup>

\* significantly different from the retired ( $p < 0.05$ )

1. For those with a single retirement experience.

Source: Canadian Community Health Survey (CCHS) – Healthy Aging.

**Table 6 Reasons for returning to work, 2009**

	%
Like working/being active	52
Financial considerations	52
Interesting work opportunity	30
Do not like retirement	29
Want challenge	25
Want to make contribution	13
Prefer gradual retirement	8
Improvement in health	5
Caregiving duties no longer required	2
Other	5

Source: Canadian Community Health Survey (CCHS) – Healthy Aging.

### Conclusion

Older workers end their employment careers in different ways and for a variety of reasons. Many remain on the job past the point when others retire, some opt for partial retirement, and others who have retired subsequently re-enter the workforce. Many returnees and partial retirees work part time or as shift workers, or are self-employed.

The challenges faced by the four groups are quite different. Many who had never retired were concerned about their financial preparedness for retirement; partial and full retirees had relatively low levels of income; many of the fully retired reported poor health, which may be related to their withdrawal from the labour force; and many returned workers had apparently retired involuntarily.

The results indicate that employers and policy makers cannot treat older workers as a homogenous group. Many older workers will have difficulty remaining on the job due to poor health, even if they are not financially ready to retire. Economic conditions will force some into retirement before they are ready, and they will be likely to look for opportunities to continue their careers. Others will stay on the job as long as they can to improve their financial security in their senior years. Many would prefer a more

## Most prevalent chronic conditions

For men age 55 to 84, the most prevalent chronic condition was high blood pressure (33% for the employed and 46% for the retired) (Table 7). For employed women, arthritis was the most prevalent (34%) chronic condition. Other common conditions reported by older workers include back problems, diabetes, heart disease, thyroid conditions, osteoporosis, migraines, cataracts and asthma. The five most prevalent chronic conditions for the retired include high blood pressure, arthritis, back problems, heart disease and cataracts.

**Table 7 Most prevalent chronic conditions among population age 55 to 84,<sup>1</sup> 2009**

	Employed			Retired		
	All	Men	Women	All	Men	Women
	%					
High blood pressure	<b>32</b>	<b>33</b>	<b>31</b>	<b>48</b>	<b>46</b>	<b>50</b>
Arthritis	<b>27</b>	<b>21</b>	<b>34</b>	<b>41</b>	<b>34</b>	<b>48</b>
Back problems	<b>24</b>	<b>23</b>	<b>24</b>	<b>29</b>	<b>27</b>	<b>30</b>
Diabetes	<b>11</b>	<b>13</b>	8	17	<b>21</b>	15
Heart disease	<b>9</b>	<b>12</b>	6	<b>20</b>	<b>26</b>	16
Thyroid condition	<b>9</b>	4	<b>16</b>	14	7	19
Osteoporosis	8	2	<b>15</b>	17	5	<b>27</b>
Migraine headaches	8	5	12	5	3	7
Cataracts	7	6	7	<b>21</b>	17	<b>23</b>
Asthma	6	5	8	9	7	10
Anxiety disorder	5	3	6	5	3	6
Bowel disorder	5	3	7	7	4	9
Stomach or intestinal ulcers	4	3	5	5	4	5
Urinary incontinence	4	2	5	10	8	12
Cancer	3	3	3	5	5	4

1. Five most prevalent conditions for each group appear in **bold**.  
Source: Canadian Community Health Survey (CCHS) – Healthy Aging.

gradual transition into retirement by way of reduced or more flexible hours. And finally, some are financially and psychologically prepared for retirement and thus unlikely to be enticed back into the labour market.

## Perspectives

### Notes

- The questions are both subjective and objective. If subjective and objective retirement indicators of a respondent conflict with each other, the data are excluded from analysis—the number of excluded cases is less than 4% of the sample for each group. Since partial retirement is a subjective concept, all individuals who self-report partial retirement are considered partial retirees.
- Adjusted rates have no direct meaning in themselves. They are meaningful only in comparison with other similarly computed rates. Tables in this article present non-adjusted rates as well as results of significance tests based on adjusted rates.
- The value of the principal residence and any employer pension plans were excluded.
- When estimates of the services provided by the equity invested in housing are added to traditional estimates of income, the income of retirement-age households is increased by 10% to 13% for those age 60 to 69 and by 12% to 15% for those age 70 and over (Brown et al. 2010).
- The number of chronic conditions was calculated based on respondents' answers to questions about whether they had been diagnosed by professionals as having any of the following chronic conditions: asthma, arthritis, osteoporosis, high blood pressure, back problems, migraine headaches, chronic bronchitis, emphysema, chronic obstructive pulmonary disorder (COPD), diabetes, stroke, heart disease, cancer, stomach or intestinal ulcers, urinary incontinence, Alzheimer's disease or other dementia, bowel disorder/Crohn's disease or colitis, Parkinson's disease, thyroid conditions, cataracts, glaucoma, mood disorders, and anxiety disorders.
- Retirement for health reasons may be underestimated. Older retirees who retired due to health problems might have died in the meantime and not be included in the survey.
- To obtain reasons for partial retirement, cases with multiple retirement experiences were excluded in Table 5.

## ■ References

- Beath, Heather and Heather H. Keller. 2007. "Nutrition screen showed good agreement when self- and interviewer administered." *Journal of Clinical Epidemiology*. Vol. 60. p. 1085-1089.
- Brown, W. Mark, Feng Hou and Amélie Lafrance. 2010. *Incomes of Retirement-age and Working-age Canadians: Accounting for Home Ownership*. Statistics Canada Catalogue no. 11F0027M – No. 064. Economic Analysis Research Paper Series. Ottawa. 42 p.  
<http://www.statcan.gc.ca/pub/11f0027m/11f0027m2010064-eng.pdf> (accessed January 4, 2011).
- Feeny, David, William Furlong, George W. Torrance, Charles H. Goldsmith, Zenglong Zhu, Sonja DePauw, Margaret Denton and Michael Boyle. 2002. "Multiattribute and single-attribute utility functions for the Health Utilities Index Mark 3 System." *Medical Care*. Vol. 40, no. 2. p. 113-128.
- Honig, Marjorie and Giora Hanoch. 1985. "Partial retirement as a separate mode of retirement behavior." *The Journal of Human Resources*. Vol. 20, no. 1. Winter. p. 21-46.  
<http://www.jstor.org/stable/pdfplus/145783.pdf?acceptTC=true> (accessed January 5, 2011).
- Keller, H.H., R. Goy and S.-L. Kane. 2005. "Validity and reliability of SCREEN II (Seniors in the Community: Risk Evaluation for Eating and Nutrition, Version II)." *European Journal of Clinical Nutrition*. Vol. 59. p. 1149-1157.  
<http://www.nature.com/ejcn/journal/v59/n10/pdf/1602225a.pdf> (accessed January 5, 2011).
- Nauta, Aukje. 2005. *Health and Employability of Older Workers*. European Working Conditions Observatory. <http://www.eurofound.europa.eu/ewco/2005/04/NL0504NU02.htm> (accessed January 5, 2011).
- Park, Jungwee. 2010. "Health factors and early retirement among older workers." *Perspectives on Labour and Income*. Vol. 11, no. 6. June. Statistics Canada Catalogue no. 75-001-X. p. 5-13.  
<http://www.statcan.gc.ca/pub/75-001-x/2010106/pdf/11275-eng.pdf> (accessed January 4, 2011).
- Schellenberg, Grant, Martin Turcotte and Bali Ram. 2005. "Post-retirement employment." *Perspectives on Labour and Income*. Vol. 6, no. 9. September. Statistics Canada Catalogue no. 75-001-X. p. 14-17.  
<http://www.statcan.gc.ca/pub/75-001-x/10905/8622-eng.pdf> (accessed January 4, 2011).
- Sherbourne, Cathy Donald and Anita L. Stewart. 1991. "The MOS Social Support Survey." *Social Science & Medicine*. Vol. 32, no. 6. p. 705-714.  
<http://cmcd.sph.umich.edu/assets/files/Repository/Women%20Take%20Pride/The%20MOS%20Social%20Support%20Survey.pdf> (accessed January 5, 2011).
- Statistics Canada. 2010. *Canadian Community Health Survey (CCHS) – Healthy Aging: User Guide*. Ottawa. 65 p.
- Statistics Canada. 1995. "Appendix F: Derived variables." *National Population Health Survey: 1994–95 Public Use Microdata Files*. Statistics Canada Catalogue no. 82F0001XCB. Ottawa. p. 1-38.  
<http://www.statcan.gc.ca/dli-ild/meta/nphs-ensp/1994/nphs1996-ensp1996-1-eng.pdf> (accessed January 4, 2011).
- Stephens T., C.L. Craig and B.F. Ferris. 1986. "Adult physical activity in Canada: Findings from the Canada Fitness Survey I." *Canadian Journal of Public Health*. Vol. 77, no. 4. July–August. p. 285-290.
- Uppal, Sharanjit. 2011. "Seniors' self-employment." *Perspectives on Labour and Income*. Vol. 23. January. Statistics Canada Catalogue no. 75-001-X. p. 3-14.  
<http://www.statcan.gc.ca/pub/75-001-x/2011001/pdf/11400-eng.pdf> (accessed January 31, 2011).
- Uppal, Sharanjit. 2010. "Labour market activity among seniors." *Perspectives on Labour and Income*. Vol. 11, no. 7. July. Statistics Canada Catalogue no. 75-001-X. p. 5-18.  
<http://www.statcan.gc.ca/pub/75-001-x/2010107/pdf/11296-eng.pdf> (accessed January 4, 2011).
- Wegman, David H. and James P. McGee (eds.). 2004. *Health and Safety Needs of Older Workers*. Committee on the Health and Safety Needs of Older Workers. National Research Council and Institute of Medicine of the National Academies. Washington, DC. The National Academies Press. 320 p.