

Life expectancy

Highlights

- Life expectancy in Canada is excellent—among the highest in the world.
- Over 90% of Canada's 136 health regions, comprising about 99% of the total population, have life expectancy values within 2.8 years of the overall Canada value.
- The health regions with the lowest life expectancies tend to be in remote regions or northern parts of certain provinces and have significant Aboriginal populations. The lower life expectancies are not associated with any one specific cause; rather, the mortality rates in these regions are higher for most causes of death.
- Mortality patterns are similar for men and women in the low life expectancy health regions.
- Most health regions with higher life expectancy are in and west of Ontario. Mortality rates are generally at least 10% lower for all causes than the Canadian average.
- Consistent with other measures of the health of the population, there is an association with socioeconomic factors: life expectancy increases as the rate of unemployment decreases and the level of education increases.

Life expectancy is a widely used indicator of the health of a population, with a long time series of data being available. This article focuses on life expectancy as a starting point in the discussion of the health of Canadians, while the articles that follow delve into the quality of the population's health.

Analysis of mortality data for the populations of Canada's 136 health regions (see *Definitions* and *Maps*) reveals some disparities in life expectancy. Life expectancy is generally lower in remote regions or northern parts of certain provinces; many of these regions have significant proportions of Aboriginal peoples. Health regions with high life expectancy are generally found in southern urban areas in or west of Ontario.

This article examines life expectancy and focuses on health regions with the lowest and highest life expectancy in the country (see Appendix Table A). For regions with the lowest life expectancy, mortality rates for major causes of death are compared with the national average, noting important differences for Aboriginal and non-Aboriginal populations, as well as for men and women. Other factors that are associated with (but not necessarily the cause of) high and low life expectancy, such as rate of unemployment and level of education attained, are also explored.

Highs and lows in life expectancy

In 1996, life expectancy at birth for Canada as a whole was 78.6 years (see *Definitions*). Compared with other developed countries that are members of the Organisation for Economic Co-operation and

Development (OECD), Canada ranks third in life expectancy, behind Switzerland and Japan.²

Of the 136 health regions in Canada, the vast majority (over 90%) of regions, constituting almost 99% of the total population, had life expectancy

Methods

Data source

This article is based on data from: Statistics Canada, Health Statistics Division, Vital Statistics 1995 to 1997; Statistics Canada, 1996 Census (special tabulations); and Statistics Canada, Demography Division, adjusted 1996 Census population calculated for census subdivisions.

Analytical techniques

Calculation of life expectancy: The program used to calculate life expectancy for this report was based on Chiang's method for abridged life tables.¹ Abridged life tables use five-year age groupings of both population and mortality rate inputs (as opposed to single-year age breakdown). Since there is more variability in the number of events by age in smaller geographic areas and/or areas with small populations, abridged life tables are more suitable for the adaptation to a sub-provincial (health region) level. Chiang's method was chosen because it was relatively straightforward to adapt to the health region level methodology and included a standard error calculation (in this case, addressing the variability of the number of deaths in a given health region from one year to the next).

To determine data ranges shown on the life expectancy maps, a formula called the Jenks' optimization, which is available in MapInfo (a mapping software), was used to identify natural breakpoints in the data values, and was calculated separately for males, females, and both sexes combined. Jenks' method minimizes the sum of the variance within each of the ranges. This option is good at revealing underlying groupings and patterns in the data. While five natural breakpoints were originally calculated, the three middle ranges were collapsed to draw particular attention to those regions with low and high life expectancy.

Mortality data: The mortality data used in the calculation of life expectancy were the 1995, 1996 and 1997 data years linked to health region geography (see note on health region boundaries and data linkage). The same three years of mortality data linked to health region were averaged to create an artificial single year that was then age-standardized using the direct method to produce rates for selected causes of death referred to in this analysis.

Population data: To calculate life expectancy and to produce mortality rates for specific causes of death in the analysis, 1996 Census population counts were used, adjusted for net undercoverage and including population estimates for incompletely enumerated Indian reserves. These data were provided by Demography Division at the census subdivision (CSD) level and subsequently linked to health regions by Health Statistics Division.

Health region boundaries and data linkage: Health region level data were produced through a geo-coding process using correspondence files developed with input from each provincial health ministry, BCStats, and Alberta Treasury. The link between enumeration areas and health regions was first created to provide the best resolution to census geography, and a census subdivision link to health regions was derived from this file (see *Definitions*).

The enumeration area (EA) level correspondence was used to geo-code 1996 mortality data because these records are already linked to EA codes (assigned via postal code of usual residence). The 1995 and 1997 mortality data were geo-coded to health region using the CSD level correspondence (CSD codes are assigned using place name of usual residence). This latter approach is as effective as the EA link for most health regions across Canada, although it is slightly less accurate in the western provinces, where health regions do not always match CSD boundaries. In the few cases where there are boundary differences, only relatively small populations are affected. In terms of health region population counts, CSD level data were used in order to include the post-censal adjustments for 1996 Census under-coverage.

Limitations

In regions where population size is small, there is a greater chance of fluctuations in mortality between years. As such, both mortality rates and life expectancy (which is based on mortality) in these regions can exhibit high variability. Results from these regions should be viewed with caution. Regions with life expectancy values that have an error range equal to or higher than +/- 1.6 years are noted with caution on the accompanying maps. Mortality rates in Région du Nunavik, which has one of the smallest population sizes of all health regions, are noted in the text as requiring cautionary viewing.

values within 2.8 years of the overall Canada value. However, regional disparities were revealed when comparing those regions falling well below (three or more years) and above (at least one year) the Canadian average.

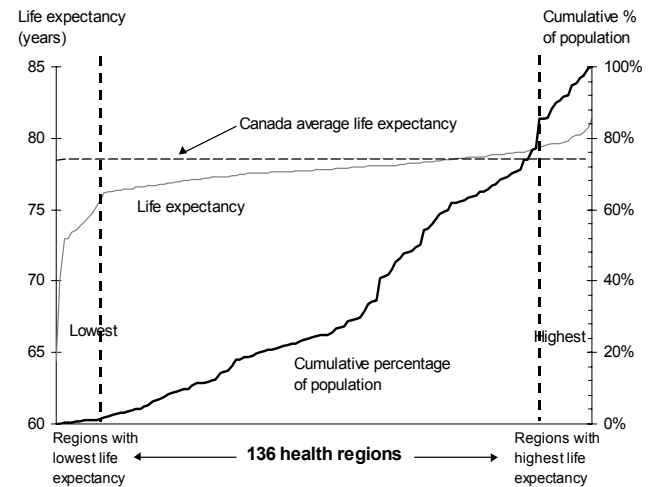
To determine the range of life expectancy values referred to as “low” and “high” in this report, natural breakpoints (using Jenks’ optimization; see *Methods*) were used to classify and group the lowest and highest values of the data series.

Low life expectancy health regions represent only a small fraction of the population (less than 1.5%), but they were identified because they have life expectancy values that are at least three years lower than the overall Canada value, along with mortality rates that are cause for concern (Chart 1). On the other hand, while there are only a small number of regions with high life expectancy, they represent a relatively large proportion of the total population (over 14.5%). They are discussed within the context of their socioeconomic characteristics, since their mortality rates are generally lower.

In 12 health regions, people are not expected to live for more than 75.7 years; these results are roughly equivalent to both the life expectancy for Mexico in 1996² and for Canadians 25 years ago.³ These health regions are located in remote or northern parts of the country, and tend to have significant proportions of Aboriginal peoples. On the other hand, in 13 health regions, people are expected to live at least 79.5 years. These health regions are mostly southern urban communities with populations between 46,000 and 850,000, located in and west of Ontario.

These regional disparities also occur when one compares life expectancy for men and women. For Canada as a whole in 1996, life expectancy at birth was 75.7 years for men and 81.4 years for women.⁴ However, in health regions with low life expectancy for men or women, males are not expected to live for more than 73.0 years and females, not more than 78.0 years—values similar to those of males and females 15 years ago. In contrast, in health regions with high life expectancy for men or women, males are expected to live for more than 76.5 years and females, more than 82.3 years.

Chart 1
Life expectancy at birth and cumulative percentage of population health regions, 1996



Data sources: Canadian Vital Statistics Data Base; Demography Division

Health regions with lowest life expectancy: mortality rates

The 12 health regions with the lowest life expectancy (less than 75.7 years at birth, males and females combined) are: the Yukon Territory, Nunavut, and some of the northern regions of Québec, Ontario, Manitoba and Saskatchewan (Table 1). Aboriginal peoples make up 20% of the population in at least nine of these health regions. In fact, almost half (48%) of the total population (280,166) of these nine regions is Aboriginal. The patterns of mortality rates for both sexes combined are similar to the rates for males and females separately. Further elaboration of male or female mortality rates are made where notable differences were found.

Mortality rates in these 12 regions are higher than the Canadian rate for most causes of death, and particularly for selected chronic diseases, infant mortality, unintentional injury and suicide. However, there are noteworthy differences between regions with predominantly Inuit populations and those with predominantly non-Inuit Aboriginal populations.

Table 1
Health regions with low life expectancy at birth, by Aboriginal share of population and leading causes of death, 1996

	Infant mortality	Diseases of the circulatory system			Cancer		Diseases of respiratory system	Unintentional injury	Suicide
		Total	Cerebro-vascular disease	Ischaemic heart disease	Total	Lung cancer			
More than 20% Aboriginal									
Health Labrador Corporation, Newfoundland	XXX	X	XX	X	X	XX	XXX	XXX	XX
Région des Terres-Cries-de-la-Baie-James, Québec	XXX		X			XX	XXX	XXX	
Northwestern PHU, Ontario	XX	X	X	X	X	X		XXX	XXX
Norman, Manitoba		X	XX		X	X	XXX	XXX	XX
Burntwood/Churchill, Manitoba	XX	XX	XX	X		X	XX	XXX	
Northern HSB, Saskatchewan	XX	X		X	X	X	XX	XXX	XXX
Yukon	X	X			X	XX	X	XXX	XX
Nunavut	XXX				XX	XXX	XXX	XXX	XXX
Région du Nunavik, Québec†	XXX	XX	XXX		X	XXX	XXX	XXX	XXX
Less than 20% Aboriginal									
Timiskaming PHU, Ontario		X	X	X	X	X	X	XX	
Peace RHA, Alberta	XX	X		X	X		X	XXX	XX
Northern Lights RHA, Alberta		XX	XX	XX	X	XX	XX	XXX	X

Data sources: Canadian Vital Statistics Data Base; Demography Division

Note: Mortality rates (except infant mortality) age-standardized to 1991 Canadian population

X Mortality rate 1.1 to 1.4 times higher than national rate

XX Mortality rate 1.5 to 1.9 times higher than national rate

XXX Mortality rate at least 2.0 times higher than national rate

† High variability due to small population and small number of deaths

Comparison of mortality rates among Aboriginal-populated low life expectancy health regions

Of the nine health regions with low life expectancy and more than 20% Aboriginal population, two regions—Région du Nunavik and Nunavut—have predominantly Inuit populations. In the remaining seven regions, the Aboriginal populations are predominantly non-Inuit. While the rates of death due to most causes are often higher than the average Canadian rates in the seven regions with non-Inuit Aboriginal populations, the rates are frequently highest in the two regions with Inuit populations. (The mortality rates for Région du Nunavik should be interpreted with caution because of the small population and small number of deaths.)

Death due to disease

Circulatory disease, cancer and respiratory disease are major causes of death in Canada. Mortality due to circulatory disease was 1.1 to 1.5 times the Canadian rate in six of the health regions with non-Inuit Aboriginal populations, while it was 1.7 times the Canadian rate in Région du Nunavik. Similarly, mortality due to cancer was 1.1 to 1.3 times the Canadian rate in five of the regions with non-Inuit Aboriginal populations, while it was 1.4 and 1.8 times the Canadian rate in Région du Nunavik and Nunavut, respectively. The rates of death due to lung cancer, while higher than the Canadian rate in all of the regions with non-Inuit Aboriginal populations, were also highest in the regions with Inuit populations. Likewise, mortality due to

respiratory disease was 1.3 to 2.5 times the Canadian rate in six of the regions with non-Inuit Aboriginal populations, while it was over 3.5 times the Canadian rate in Région du Nunavik and Nunavut.

Other causes of death

High infant mortality contributes to low life expectancy at birth. In health regions with low life expectancy and more than 20% non-Inuit Aboriginal population, the infant mortality rates were 1.3 to 2.8 times the Canadian rate. The infant mortality rates in Région du Nunavik and Nunavut were over 3.1 times the Canadian rate.

Unintentional injuries are a main cause of death among Aboriginal peoples. For Aboriginal infants, the rate of death due to injury is almost four times the Canadian rate; for preschoolers, it is five times higher; and among teenagers, it is three times higher.⁵ These patterns are reflected in rates of death due to injury in health regions with low life expectancy and more than 20% Aboriginal population. In all nine Aboriginal-populated health regions with low life expectancy at birth, the unintentional injury death rates were over two times the Canadian rate.

Suicide is also a major cause of death among Aboriginal peoples and people living in northern

Table 2
Health regions with low male life expectancy at birth, by Aboriginal share of population and leading causes of death, 1996

	Infant mortality	Diseases of the circulatory system			Cancer		Diseases of respiratory system	Unintentional injury	Suicide
		Total	Cerebro-vascular disease	Ischaemic heart disease	Total	Lung cancer			
More than 20% Aboriginal									
Health Labrador Corporation, Newfoundland	XXX	X	XX	X	X	X	XXX	XXX	XX
Northwestern PHU, Ontario	XX	X		X	X	X		XXX	XXX
Norman, Manitoba		X	XX				XX	XXX	XX
Burntwood/Churchill, Manitoba	XXX	X	XX				X	XXX	
Northern HSB, Saskatchewan	X	X					XX	XXX	XXX
Yukon	XX	X					XX	XXX	XXX
Nunavut	XXX				X		XX	XXX	XXX
Région du Nunavik, Québec†	XXX	XX	XXX		X	XX	XXX	XXX	XXX
Less than 20% Aboriginal									
Region 4, New Brunswick	XX		X		X	XX		XXX	XXX
Région de la Côte-Nord, Québec	XX				X	XX		XXX	XXX
Timiskaming PHU, Ontario		X	XX			X		XX	
Peace RHA, Alberta	XX	X		X	X	X	XX	XXX	XXX
Northern Lights RHA, Alberta		XX	XX	XXX	X	X	XX	XXX	X

Data sources: Canadian Vital Statistics Data Base; Demography Division

Note: Mortality rates (except infant mortality) age-standardized to 1991 Canadian population

X Mortality rate 1.1 to 1.4 times higher than national rate

XX Mortality rate 1.5 to 1.9 times higher than national rate

XXX Mortality rate at least 2.0 times higher than national rate

† High variability due to small population and small number of deaths

and remote communities. All but two of the health regions with low life expectancy and more than 20% Aboriginal population had suicide rates that were 1.5 to 2.9 times the Canadian rate.

Comparison of mortality rates: men and women

The profiles of health regions with the lowest life expectancy at birth for men or women (Tables 2 and 3) are similar to the profile of health regions with the lowest life expectancy overall (Table 1). All but one (Region 4 in New Brunswick, which has one of the lowest life expectancy rates for men at birth) are in the northern parts of some provinces or in the more remote areas of Canada. The population of 8 of the 13 health regions with low life expectancy for men is at least 20% Aboriginal,

as is the population of 9 of the 10 health regions with low life expectancy for women. In many instances, the health regions with low life expectancy for men are also regions with low life expectancy for women. For the most part, causes of death are similar for men and women in these regions. Specific similarities and differences are summarized for regions with predominantly Inuit population (Région du Nunavik and Nunavut), regions with at least 20% non-Inuit Aboriginal population, and regions with less than 20% Aboriginal population.

Région du Nunavik and Nunavut

Mortality due to cancer and respiratory disease was higher than the Canadian rate for both men and women in Région du Nunavik and Nunavut. Death due to cancer was about 1.5 times the Canadian rate

Table 3
Health regions with low female life expectancy at birth, by Aboriginal share of population and leading causes of death, 1996

	Infant mortality	Diseases of the circulatory system			Cancer		Diseases of respiratory system	Unintentional injury	Suicide
		Total	Cerebro-vascular disease	Ischaemic heart disease	Total	Lung cancer			
More than 20% Aboriginal									
Health Labrador Corporation, Newfoundland	XXX	X	XX	XX	X	X	XXX	XXX	--
Région des Terres-Cries-de-la-Baie-James, Québec	XXX	XX	XX	XX	X		XXX	XXX	--
Northwestern PHU, Ontario	X		X	X				XXX	XXX
Norman, Manitoba		X	XX	X	X	XX	XXX	XX	
Burntwood/Churchill, Manitoba	X	XX	X		X	X	XXX	XXX	
Northern HSB, Saskatchewan	XXX	X			X	XX	XX	XXX	XX
Northwestern RHA, Alberta	X		XX					XXX	--
Nunavut	XXX				XX	XXX	XXX	XXX	XXX
Région du Nunavik, Québec†	XXX	XXX		XXX	X	XXX	XXX	XXX	XXX
Less than 20% Aboriginal									
Northern Lights RHA, Alberta	X	X	XX	X	X	XXX	XX	XX	--

Data sources: Canadian Vital Statistics Data Base; Demography Division
Note: Mortality rates (except infant mortality) age-standardized to 1991 Canadian population
 X Mortality rate 1.1 to 1.4 times higher than national rate
 XX Mortality rate 1.5 to 1.9 times higher than national rate
 XXX Mortality rate at least 2.0 times higher than national rate
 † High variability due to small population and small number of deaths
 -- Amount too small to be expressed

among men in both health regions, and almost twice the Canadian rate among women in Nunavut (1.3 times among women in Région du Nunavik). Mortality due to lung cancer was particularly high among women: 2.5 times the Canadian rate in Région du Nunavik and 4.7 times the Canadian rate in Nunavut. Women in these health regions were also about seven times more likely to die of respiratory disease than Canadian women as a whole, while the rates for men in Nunavut and Région du Nunavik were 1.5 times and 3.5 times higher, respectively, than the rate for all Canadian men.

In Région du Nunavik, mortality due to circulatory disease was 1.5 times the Canadian rate among men, and almost twice the Canadian rate among women. In particular, death due to stroke was high among men, while death due to ischaemic heart disease was high among women. In Nunavut, mortality due to circulatory disease was below the Canadian rate among men, and on par with the Canadian rate among women.

Unlike most health regions with low life expectancy, death due to suicide is high among women as well as men in Région du Nunavik and Nunavut. Furthermore, the highest suicide rates among Canadian men are found in these two regions.

Male and female infant mortality were also high in these regions, more than twice the Canadian rate. Female infant mortality was higher than male infant mortality in Nunavut, but the opposite was the case in Région du Nunavik.

Low life expectancy health regions with non-Inuit Aboriginal population

In health regions with low life expectancy for men or women and more than 20% non-Inuit Aboriginal population, mortality due to circulatory disease and respiratory disease was (for the most part) higher than the Canadian rate for both men and women, and higher among women than among men. Mortality due to respiratory disease in most of these regions was especially high: 1.3 to 2.2 times the Canadian rate among men, and 1.8 to 2.9 times the Canadian rate among women. Mortality due to circulatory disease in most of these regions was also high: 1.1 to 1.4 times the Canadian rate among men,

and 1.2 to 1.8 times the Canadian rate among women. Five of the seven health regions had rates of death due to cancer among women that were slightly higher than the Canadian average, but this pattern was not reflected among men.

Mortality due to unintentional injury was many times the Canadian rate among both men and women in these health regions. However, death due to suicide was, with a few exceptions, higher than the Canadian rate only among men.

Male and female infant mortality was higher than the Canadian rate in all the health regions except Norman, Manitoba.

Low life expectancy health regions with less than 20% Aboriginal population

With one exception, regions with low life expectancy among men and less than 20% Aboriginal population had overall cancer mortality rates that were higher than the corresponding Canadian average. Mortality due to lung cancer was especially high—1.3 to 1.9 times the Canadian rate. In most of these regions, mortality due to circulatory disease among men was roughly equal to the Canadian rate, but several regions had high rates of death due to stroke or ischaemic heart disease.

As in regions with more than 20% Aboriginal population, mortality due to unintentional injury and suicide was high among men in regions with less than 20% Aboriginal population.

In the one health region with low life expectancy among women and less than 20% Aboriginal population, Northern Lights Regional Health Authority in Alberta, mortality for women was higher than the Canadian rate for all causes of death except suicide.

Factors associated with high and low life expectancy

Health regions where either men or women or both are expected to live longer have several common characteristics. These include, in addition to lower mortality rates for all causes of death, such factors as lower rates of unemployment and higher levels of educational attainment.

High life expectancy health regions generally have large populations and small geographic areas, while health regions with lower life expectancy tend to

have small populations and cover large geographic areas. Greater variability in the mortality rates among the low life expectancy regions is expected

Table 4
Socioeconomic characteristics of health regions with high life expectancy, 1996

	Unemployment rate	Youth unemployment rate (ages 15-24)	High school graduates (ages 25-29)	Postsecondary graduates (ages 25-54)	Below low-income cut-off† (total)	Below low-income cut-off† (younger than 18)	Housing affordability‡
Region 1, New Brunswick (F)	X	√	√	X	√	√	√
Region 6, New Brunswick (F)	X	X	X	X	X	X	√
Ottawa-Carleton PHU, Ontario (T,M)	√	=	√	√	=	=	=
Peel PHU, Ontario (T,M)	√	√	√	√	√	√	X
York PHU, Ontario (T,M,F)	√	√	√	√	√	√	X
Halton PHU, Ontario (T,M,F)	√	√	√	√	√	√	√
Wellington-Dufferin-Guelph PHU, Ontario (M)	√	√	√	√	√	√	√
Central, Manitoba (M)	√	√	X	X	√	√	√
South Eastman, Manitoba (T,M,F)	√	√	X	X	√	√	√
Weyburn SA, Saskatchewan (F)	√	√	X	X	√	√	√
Swift Current SA, Saskatchewan (T,M,F)	√	√	X	X	√	√	√
Rosetown SA, Saskatchewan (T,M)	√	√	X	X	√	√	√
Headwaters HA, Alberta (M)	√	√	X	√	√	√	√
Calgary RHA, Alberta (M)	√	√	√	√	=	=	√
South Okanagan Similkameen, British Columbia (T,M,F)	=	=	X	√	√	√	=
South Fraser Valley, British Columbia (T,M)	√	√	X	=	√	√	X
Vancouver, British Columbia (F)	=	√	√	√	X	X	X
Burnaby, British Columbia (T,M,F)	√	√	√	√	X	X	X
North Shore, British Columbia (T,M,F)	√	√	√	√	√	√	X
Richmond, British Columbia (T,M,F)	√	√	√	√	X	X	X
Victoria, British Columbia (T,M)	√	√	√	√	√	√	X

Data source: 1996 Census of Canada

Note: T, M and F indicate high life expectancy for total, male and/or female population, respectively, in health region.

√ more than 1 percentage point better than national rate

X more than 1 percentage point worse than national rate

= within 1 percentage point of national rate

† Percentage of population or of children younger than 18 in families spending 54.7% or more of their income on basic necessities in 1995; a low percentage indicates fewer people in straitened circumstances.

‡ Percentage of owners or renters spending 30% or more of total household income on major payments or gross rent; a low percentage indicates a large proportion of owners or renters who can afford their dwelling.

because of their small population size, and conversely, less variability in the high life expectancy regions with larger population size.

Mortality rates in high life expectancy regions

Chronic disease (circulatory, cancer and respiratory) mortality rates in most of the high life expectancy health regions were lower than the average Canada rates by at least 10%, and similarly lower for infant mortality, unintentional injury deaths and suicides. These mortality results held for males, females and both sexes combined. While there was some variation in how much mortality rates in each of these regions differed from the respective average Canada rates, no clear patterns emerged in the relationship between specific causes of death and high life expectancy.

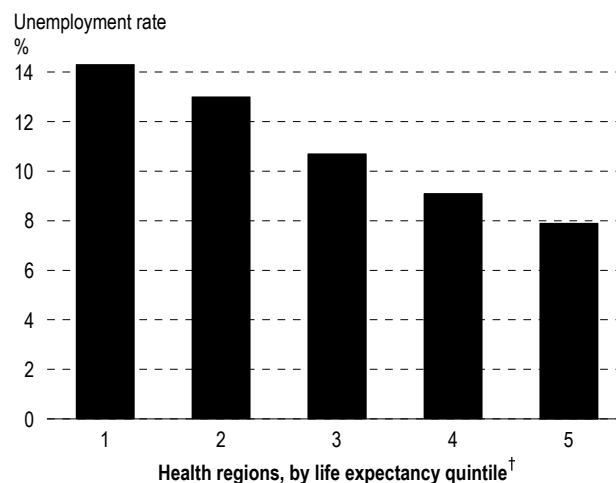
Rate of unemployment

Life expectancy at birth increases as the rate of unemployment decreases (Chart 2). The health regions with high life expectancy at birth all had overall unemployment rates in 1996 that were either equal to or much lower than the Canadian rate of 10.1% (Table 4). This was also true of youth unemployment. On the other hand, the unemployment rate was 1 to 10 percentage points higher than the Canadian rate in all but one of the health regions with low life expectancy and more than 20% Aboriginal population (Table 5).

Level of education

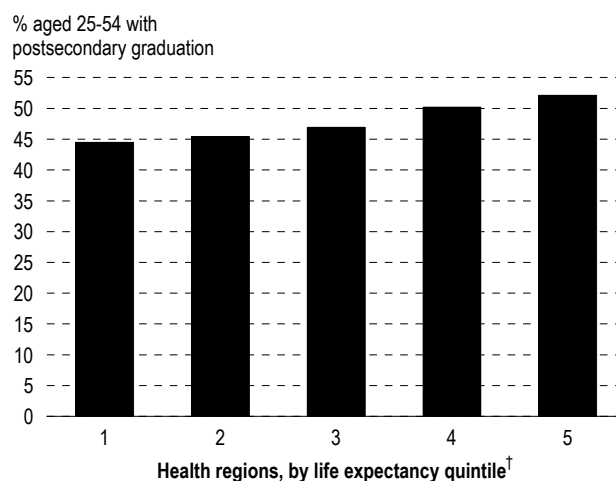
Life expectancy at birth also increases as the proportion of the population aged 25 to 54 with a postsecondary degree increases (Chart 3). Of the 13 health regions with high life expectancy at birth, 9 had a proportion of postsecondary graduates that was higher than the proportion for Canada as a whole (Table 4). By contrast, all the health regions with low life expectancy and more than 20% Aboriginal population had a lower proportion of high school graduates aged 25 to 29 and, with the exception of two regions, a much lower proportion of postsecondary graduates than Canada as a whole (Table 5).

Chart 2
Unemployment rate, by quintile of life expectancy at birth, health regions, 1996



Data sources: 1996 Census of Canada; Demography Division
[†] Population represented by each quintile: Quintile 1 - 2,017,040; Quintile 2 - 4,002,060; Quintile 3 - 3,995,338; Quintile 4 - 8,770,043; Quintile 5 - 10,062,334

Chart 3
Percentage of population aged 25 to 54 with postsecondary graduation, by quintile of life expectancy at birth, health regions, 1996



Data sources: 1996 Census of Canada; Demography Division
[†] Population represented by each quintile: Quintile 1 - 2,017,040; Quintile 2 - 4,002,060; Quintile 3 - 3,995,338; Quintile 4 - 8,770,043; Quintile 5 - 10,062,334

Other socioeconomic factors

There is no consistent pattern of association between higher life expectancy at birth and the overall level of income or cost of housing in health regions. While some health regions with high life expectancy at birth had fewer persons with incomes

Table 5
Socioeconomic characteristics of health regions with low life expectancy, 1996

	Unemployment rate	Youth unemployment rate (ages 15-24)	High school graduates (ages 25-29)	Postsecondary graduates (ages 25-54)	Below low-income cut-off† (total)	Below low-income cut-off† (younger than 18)	Housing affordability‡
Health Labrador Corporation, Newfoundland (T,M,F)	X	X	X	√	√§	√§	√§
Region 4, New Brunswick (M)	X	X	X	X	X	X	√
Région de la Côte-Nord, Québec (M)	X	X	X	X	√	√	√
Région des Terres-Cries-de-la-Baie-James, Québec (T,F)	X	X	X	X
Northwestern PHU, Ontario (T,M,F)	X	X	X	X	√§	√§	√§
Timiskaming PHU, Ontario (T,M)	X	X	X	X	√	=	√
Norman, Manitoba (T,M,F)	X	X	X	X	√§	√§	√§
Burntwood/Churchill, Manitoba (T,M,F)	X	X	X	X	√§	√§	√§
Northern Health Services Branch, Saskatchewan (T,M,F)	X	X	X	X	X§	X§	√§
Peace RHA, Alberta (T,M)	√	X	X	X	√	√	√
Northern Lights RHA, Alberta (T,M,F)	√	=	X	√	√	√	√
Northwestern RHA, Alberta (F)	√	X	X	X	√§	√§	√
Yukon (T,M)	X	=	X	√	√§
Nunavut (T,M,F)	X	X	X	X	√§
Région du Nunavik, Québec (T,M,F)	X	X	X	X	√§	√§	√§

Data source: 1996 Census of Canada

Note: T, M and F indicate low life expectancy for total, male and/or female population, respectively, in health region.

√ more than 1 percentage point better than national rate

X more than than 1 percentage point worse than national rate

= within 1 percentage point of national rate

† Percentage of population or of children younger than 18 in families spending 54.7% or more of their income on basic necessities in 1995; a low percentage indicates fewer people in straitened circumstances.

‡ Percentage of owners or renters spending 30% or more of total household income on major payments or gross rent; a low percentage indicates a large proportion of owners or renters who can afford their dwelling.

§ Non-reserve population

.. Figures not available

below the low-income cut-off than the average for Canada as a whole, or more affordable housing than in Canada as a whole, this was not true for all health regions with high life expectancy at birth (Table 4).

Concluding remarks

Life expectancy at birth is considerably lower in remote northern health regions than in the rest of Canada. The population of many of these regions includes a significant proportion of Aboriginal people. Several health regions with low life expectancy, however, have a population that is less than 20% Aboriginal.

While mortality due to major chronic disease is higher in the health regions with a large proportion of Aboriginal people, there are important variations. In these regions, mortality due to major chronic disease is higher among women than among men. Furthermore, the rates are generally higher in the two regions with predominantly Inuit population, compared with regions with predominantly non-Inuit Aboriginal population.

The higher rates of mortality due to circulatory disease, cancer and respiratory disease in health regions with a large proportion of Aboriginal people are cause for concern. The high rate of death due

Definitions

Life expectancy at birth is the number of years a person would be expected to live from the day he or she is born, based on mortality statistics at the time of birth (using five-year age groupings). In this article, life expectancy at birth is based on mortality statistics for the years 1995 to 1997 and is referred to as 1996 life expectancy.

Leading causes of death include diseases of the circulatory system, cerebrovascular disease, ischaemic heart disease, cancer, lung cancer, and diseases of the respiratory system. *Diseases of the circulatory system* are all diseases of the heart and blood vessels. These include *cerebrovascular disease* (any disease affecting an artery within and supplying blood to the brain, such as stroke) and *ischaemic heart disease* (narrowing or obstruction of the arteries to the heart, resulting in reduced blood supply to the heart). *Cancer* refers to all forms of cancer, including *lung cancer*. *Diseases of the respiratory system* refers to diseases of the breathing passages and lungs, such as pneumonia and bronchitis.

Infant mortality rates measure the number of deaths of infants aged less than one year for every 1,000 live births.

Aboriginal peoples include First Nations people, Métis and Inuit.

Health regions are defined by provincial governments as the administrative areas of responsibility for regional health boards or areas of interest to health care authorities.

An *enumeration area (EA)* is the geographic area canvassed by one census representative and is the smallest standard geographic area for which census data are reported.

Census subdivision (CSD) is a general term applying to municipalities (as determined by provincial legislation) or their equivalent (for example, Indian reserves and unorganized territories).

to lung cancer and respiratory disease among Inuit women is particularly alarming. It is likely that this high mortality is associated with smoking. In 1997, the rate of smoking among adults in the Aboriginal population was double the rate for Canada as a whole.⁴

The high rate of infant mortality in health regions with a large proportion of Aboriginal people is consistent with other findings. Infant mortality is twice as high among First Nations people as in the Canadian population as a whole.⁴ The rate of mortality is especially high for First Nations infants in the postneonatal period. The main causes of death in that period are sudden infant death

syndrome, congenital anomalies and respiratory conditions such as bronchitis and pneumonia.

The risk of death due to suicide is high among men in almost all regions with low male life expectancy. In a few health regions, notably Région du Nunavik and Nunavut, mortality due to suicide is high among women as well as men. While most of the regions with high rates of suicide among men are in the north, one is in the south of Canada (Region 4 in New Brunswick). It, like other regions with low life expectancy, is characterized by rates of unemployment that are higher than the average in Canada and levels of education that are lower than the average in Canada.

The association between low life expectancy and higher rates of unemployment and lower levels of education indicates that non-medical factors may play a role. A similar association among lower level of income, lower level of education, poorer health and chronic illness has been observed among adults in Canada as a whole. ●

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Appendix

Table A
Life expectancy at birth, by health region, 1996

Map code	Health region	Both sexes		Males		Females	
		Life expectancy (years)	95% confidence interval	Life expectancy (years)	95% confidence interval	Life expectancy (years)	95% confidence interval
Newfoundland							
1001	Health and Community Services St. John's Region	77.6	77.2 - 78.0	74.2	73.6 - 74.8	80.8	80.2 - 81.4
1002	Health and Community Services Eastern Region	76.8	76.3 - 77.2	73.9	73.3 - 74.5	80.0	79.3 - 80.6
1003	Health and Community Services Central Region	77.6	77.1 - 78.0	75.4	74.7 - 76.0	80.0	79.3 - 80.7
1004	Health and Community Services Western Region	77.3	76.7 - 77.8	75.0	74.3 - 75.7	79.7	78.9 - 80.5
1005	Grenfell Regional Health Services Board	77.6	76.3 - 79.0	75.9	74.0 - 77.7	79.7	77.8 - 81.7
1006	Health Labrador Corporation	73.4	72.0 - 74.8	69.9	68.1 - 71.8	77.9	75.7 - 80.0
Prince Edward Island							
1101	Prince Edward Island	78.0	77.5 - 78.4	74.5	73.9 - 75.1	81.5	80.9 - 82.1
Nova Scotia							
1201	Western	78.3	77.9 - 78.6	75.5	75.1 - 76.0	81.1	80.6 - 81.5
1202	Central	78.1	77.8 - 78.4	75.2	74.8 - 75.6	80.8	80.4 - 81.2
1203	Northern	77.7	77.3 - 78.1	74.9	74.3 - 75.4	80.6	80.0 - 81.1
1204	Eastern	76.8	76.4 - 77.1	73.7	73.2 - 74.2	79.9	79.4 - 80.4
New Brunswick							
1301	Region 1	78.8	78.4 - 79.2	75.3	74.8 - 75.9	82.3	81.8 - 82.8
1302	Region 2	77.5	77.2 - 77.9	74.7	74.1 - 75.2	80.3	79.7 - 80.8
1303	Region 3	77.9	77.5 - 78.3	74.9	74.4 - 75.5	80.9	80.3 - 81.4
1304	Region 4	76.5	75.7 - 77.2	72.9	71.8 - 74.0	80.1	79.2 - 81.1
1305	Region 5	77.9	76.9 - 78.8	74.1	72.8 - 75.4	81.6	80.4 - 82.8
1306	Region 6	78.9	78.3 - 79.5	75.7	74.9 - 76.5	82.5	81.7 - 83.2
1307	Region 7	77.2	76.5 - 78.0	73.6	72.5 - 74.6	81.3	80.3 - 82.3
Québec							
2401	Région du Bas-Saint-Laurent	78.1	77.7 - 78.4	74.7	74.2 - 75.2	81.5	81.1 - 82.0
2402	Région du Saguenay - Lac-Saint-Jean	76.7	76.4 - 77.0	73.3	72.8 - 73.7	80.2	79.8 - 80.7
2403	Région de Québec	78.1	77.9 - 78.3	74.4	74.1 - 74.6	81.5	81.2 - 81.8
2404	Région de la Mauricie-Bois-Francs	77.4	77.2 - 77.7	73.8	73.4 - 74.1	81.1	80.7 - 81.4
2405	Région de l'Estrie	77.9	77.6 - 78.2	74.5	74.1 - 75.0	81.2	80.7 - 81.6
2406	Région de Montréal-Centre	78.1	78.0 - 78.2	74.8	74.6 - 74.9	81.0	80.8 - 81.1
2407	Région de l'Outaouais	77.1	76.8 - 77.4	74.1	73.7 - 74.5	80.1	79.7 - 80.6
2408	Région de l'Abitibi-Témiscamingue	76.3	75.8 - 76.7	73.1	72.5 - 73.7	79.8	79.2 - 80.4
2409	Région de la Côte-Nord	76.3	75.7 - 76.8	72.6	71.8 - 73.4	80.6	79.8 - 81.3
2410	Région du Nord-du-Québec	76.4	74.7 - 78.1	73.9	71.7 - 76.0	80.0	77.3 - 82.6
2411	Région de la Gaspésie-Îles-de-la-Madeleine	76.7	76.2 - 77.2	73.1	72.3 - 73.8	80.8	80.1 - 81.5
2412	Région de la Chaudière-Appalaches	78.2	77.9 - 78.4	74.6	74.3 - 75.0	81.8	81.5 - 82.2
2413	Région de Laval	78.8	78.5 - 79.1	75.9	75.5 - 76.3	81.4	81.1 - 81.8
2414	Région de Lanaudière	77.4	77.1 - 77.7	74.4	74.0 - 74.8	80.5	80.1 - 80.9
2415	Région de Laurentides	77.3	77.0 - 77.5	74.5	74.1 - 74.8	80.3	79.9 - 80.6
2416	Région de la Montérégie	78.3	78.2 - 78.4	75.4	75.2 - 75.6	81.1	80.9 - 81.3
2417	Région du Nunavik	64.4	62.1 - 66.6	68.8	66.6 - 70.9	71.5	69.3 - 73.7
2418	Région des Terres-Cries-de-la-Baie-James	74.7	72.7 - 76.7	72.8	70.0 - 75.6	76.7	73.9 - 79.5
Ontario							
3526	Algoma Public Health Unit	76.9	76.4 - 77.4	74.1	73.5 - 74.7	79.8	79.2 - 80.4
3527	Brant Public Health Unit	77.9	77.5 - 78.3	75.1	74.5 - 75.7	80.6	80.0 - 81.2
3530	Durham Public Health Unit	78.5	78.2 - 78.7	76.1	75.7 - 76.4	80.7	80.4 - 81.0
3531	Elgin-St Thomas Public Health Unit	77.0	76.4 - 77.5	74.1	73.3 - 74.8	79.8	79.0 - 80.6
3533	Bruce-Grey-Owen Sound Public Health Unit	77.5	77.1 - 77.9	75.1	74.5 - 75.7	80.0	79.4 - 80.5
3534	Haldimand-Norfolk Public Health Unit	77.7	77.2 - 78.2	75.1	74.4 - 75.8	80.3	79.6 - 81.0

Map code	Health region	Both sexes		Males		Females	
		Life expectancy (years)	95% confidence interval	Life expectancy (years)	95% confidence interval	Life expectancy (years)	95% confidence interval
3535	Haliburton, Kawartha, Pine Ridge Public Health Unit	78.5	78.1 - 78.9	76.0	75.5 - 76.6	81.0	80.5 - 81.5
3536	Halton Public Health Unit	80.3	80.0 - 80.5	77.8	77.4 - 78.2	82.5	82.1 - 82.9
3537	Hamilton-Wentworth Public Health Unit	78.0	77.8 - 78.2	75.3	75.0 - 75.7	80.6	80.2 - 80.9
3538	Hastings and Prince Edward Public Health Unit	77.3	76.9 - 77.7	74.3	73.7 - 74.9	80.3	79.7 - 80.8
3539	Huron Public Health Unit	78.6	78.0 - 79.2	75.6	74.7 - 76.5	81.7	80.8 - 82.5
3540	Kent-Chatham Public Health Unit	76.4	76.0 - 76.9	73.5	72.8 - 74.2	79.3	78.6 - 80.0
3541	Kingston, Frontenac, Lennox and Addington Public Health Unit	77.8	77.4 - 78.2	74.8	74.3 - 75.4	80.7	80.2 - 81.2
3542	Lambton Public Health Unit	78.6	78.2 - 79.1	75.7	75.1 - 76.3	81.5	80.9 - 82.1
3543	Leeds, Grenville, Lanark Public Health Unit	77.2	76.8 - 77.5	74.2	73.6 - 74.7	80.2	79.6 - 80.7
3544	Middlesex-London Public Health Unit	78.4	78.2 - 78.7	75.4	75.0 - 75.7	81.4	81.0 - 81.7
3545	Muskoka-Parry Sound Public Health Unit	77.3	76.8 - 77.9	74.1	73.2 - 74.9	80.9	80.1 - 81.7
3546	Niagara Public Health Unit	78.4	78.1 - 78.6	75.7	75.4 - 76.1	80.9	80.5 - 81.2
3547	North Bay Public Health Unit	76.3	75.8 - 76.8	73.5	72.8 - 74.2	79.2	78.5 - 79.9
3549	Northwestern Public Health Unit	73.8	73.2 - 74.5	70.3	69.3 - 71.2	77.8	76.9 - 78.6
3551	Ottawa Carleton Public Health Unit	79.6	79.4 - 79.8	77.1	76.8 - 77.4	81.8	81.5 - 82.0
3552	Oxford Public Health Unit	78.0	77.5 - 78.5	75.6	74.9 - 76.2	80.2	79.5 - 81.0
3553	Peel Public Health Unit	80.1	79.9 - 80.3	77.8	77.5 - 78.1	82.1	81.9 - 82.4
3554	Perth Public Health Unit	79.0	78.5 - 79.6	76.0	75.2 - 76.8	82.0	81.2 - 82.8
3555	Peterborough Public Health Unit	78.5	78.0 - 78.9	76.0	75.3 - 76.6	80.9	80.3 - 81.5
3556	Porcupine Public Health Unit	76.2	75.7 - 76.7	73.2	72.5 - 73.9	79.4	78.7 - 80.2
3557	Renfrew Public Health Unit	78.1	77.6 - 78.5	75.1	74.4 - 75.8	81.0	80.4 - 81.7
3558	Eastern Ontario Public Health Unit	77.3	76.9 - 77.7	74.5	74.0 - 75.0	80.1	79.6 - 80.6
3560	Simcoe Public Health Unit	78.1	77.9 - 78.4	75.4	75.0 - 75.8	80.9	80.5 - 81.2
3561	Sudbury Public Health Unit	76.6	76.3 - 77.0	73.9	73.4 - 74.4	79.5	78.9 - 80.0
3562	Thunder Bay Public Health Unit	76.9	76.5 - 77.3	74.4	73.8 - 75.0	79.4	78.9 - 80.0
3563	Timiskaming Public Health Unit	75.7	74.9 - 76.5	72.8	71.7 - 74.0	78.7	77.6 - 79.8
3565	Waterloo Public Health Unit	78.9	78.6 - 79.1	75.9	75.5 - 76.2	81.7	81.3 - 82.0
3566	Wellington-Dufferin-Guelph Public Health Unit	79.0	78.7 - 79.4	76.6	76.2 - 77.1	81.3	80.9 - 81.8
3568	Windsor-Essex Public Health Unit	77.9	77.6 - 78.2	75.0	74.6 - 75.3	80.7	80.3 - 81.1
3570	York Public Health Unit	80.8	80.5 - 81.0	78.8	78.5 - 79.1	82.6	82.3 - 82.9
3595	City of Toronto Public Health Unit	79.3	79.2 - 79.4	76.3	76.2 - 76.5	82.1	82.0 - 82.3
Manitoba							
4610	Winnipeg	78.1	77.8 - 78.3	75.3	75.0 - 75.6	80.5	80.2 - 80.8
4615	Brandon	78.7	78.0 - 79.5	76.4	75.2 - 77.5	80.9	79.9 - 81.9
4620	North Eastman	77.5	76.6 - 78.4	74.7	73.4 - 76.0	80.8	79.5 - 82.1
4625	South Eastman	79.5	78.8 - 80.2	76.5	75.5 - 77.6	82.8	81.8 - 83.9
4630	Interlake	77.5	76.9 - 78.1	75.1	74.2 - 76.0	80.2	79.3 - 81.1
4640	Central	78.9	78.3 - 79.4	76.6	75.9 - 77.4	81.1	80.4 - 81.9
4650	Marquette	77.8	76.9 - 78.7	74.1	72.7 - 75.5	81.9	80.8 - 83.0
4655	South Westman	77.8	77.0 - 78.7	75.2	74.0 - 76.5	80.5	79.4 - 81.7
4660	Parkland	76.6	75.8 - 77.5	73.8	72.6 - 75.0	79.8	78.6 - 80.9
4670	Norman	74.4	73.3 - 75.5	71.7	70.1 - 73.2	77.5	76.0 - 79.1
4680	Burntwood/Churchill†	73.0	71.9 - 74.1	70.4	68.9 - 71.9	75.6	73.9 - 77.2
Saskatchewan							
4701	Weyburn (A) Service Area	79.2	78.5 - 79.8	76.0	75.0 - 76.9	82.7	81.8 - 83.6
4702	Moose Jaw (B) Service Area	78.7	78.0 - 79.4	75.9	74.9 - 76.9	81.6	80.6 - 82.6
4703	Swift Current (C) Service Area	79.8	79.1 - 80.6	76.8	75.7 - 77.9	83.0	82.1 - 84.0
4704	Regina (D) Service Area	78.1	77.7 - 78.5	74.8	74.3 - 75.3	81.3	80.8 - 81.8
4705	Yorkton (E) Service Area	78.3	77.7 - 79.0	75.6	74.7 - 76.5	81.3	80.4 - 82.2
4706	Saskatoon (F) Service Area	78.9	78.6 - 79.3	76.0	75.6 - 76.5	81.8	81.3 - 82.3
4707	Rosetown (G) Service Area	79.5	78.8 - 80.3	77.2	76.2 - 78.3	81.9	80.9 - 83.0
4708	Melfort (H) Service Area	78.1	77.3 - 78.9	75.1	73.9 - 76.3	81.4	80.3 - 82.5
4709	Prince Albert (I) Service Area	77.7	77.1 - 78.4	75.4	74.5 - 76.3	80.2	79.3 - 81.1
4710	North Battleford (J) Service Area	77.0	76.3 - 77.7	73.5	72.5 - 74.5	81.0	80.1 - 82.0
4711	Northern Health Services Branch (K) Service Area	73.0	71.7 - 74.3	70.6	68.9 - 72.3	76.1	74.1 - 78.0
Alberta							
4801	Chinook Regional Health Authority	78.0	77.5 - 78.4	75.0	74.3 - 75.6	81.1	80.5 - 81.7
4802	Palliser Health Authority	78.6	78.0 - 79.2	75.9	75.1 - 76.7	81.4	80.7 - 82.2

Map code	Health region	Both sexes		Males		Females	
		Life expectancy (years)	95% confidence interval	Life expectancy (years)	95% confidence interval	Life expectancy (years)	95% confidence interval
4803	Headwaters Health Authority	79.3	78.7 - 80.0	76.9	75.9 - 77.8	81.9	80.9 - 82.8
4804	Calgary Regional Health Authority	79.2	79.0 - 79.4	76.7	76.4 - 77.0	81.6	81.3 - 81.8
4805	Health Authority #5	77.6	76.8 - 78.4	75.2	74.1 - 76.4	80.0	78.9 - 81.1
4806	David Thompson Regional Health Authority	78.3	77.9 - 78.7	75.9	75.3 - 76.5	80.8	80.2 - 81.4
4807	East Central Health Authority	77.9	77.4 - 78.4	74.7	74.0 - 75.4	81.5	80.8 - 82.2
4808	WestView Regional Health Authority	77.8	77.1 - 78.4	74.8	73.9 - 75.6	81.2	80.3 - 82.1
4809	Crossroads Regional Health Authority	77.6	76.7 - 78.6	75.2	73.9 - 76.4	80.3	78.9 - 81.6
4810	Capital Health Authority	79.1	78.8 - 79.3	76.3	76.0 - 76.6	81.6	81.3 - 81.9
4811	Aspen Regional Health Authority	77.7	77.1 - 78.3	75.2	74.5 - 76.0	80.7	79.8 - 81.5
4812	Lakeland Regional Health Authority	77.7	77.1 - 78.2	75.0	74.3 - 75.7	80.7	80.0 - 81.5
4813	Mistahia Regional Health Authority	77.7	77.0 - 78.4	74.9	74.0 - 75.8	80.9	80.0 - 81.9
4814	Peace Regional Health Authority	73.6	72.2 - 74.9	69.7	67.9 - 71.5	78.5	76.5 - 80.4
4815	Keeweenok Lakes Regional Health Authority	77.1	75.6 - 78.6	74.8	72.8 - 76.9	80.0	77.7 - 82.2
4816	Northern Lights Regional Health Authority	74.2	72.9 - 75.5	71.4	69.8 - 73.0	78.0	75.5 - 80.4
4817	Northwestern Regional Health Authority	77.2	75.1 - 79.2	76.2	73.3 - 79.1	78.2	75.3 - 81.0
British Columbia							
5901	East Kootenay	78.7	78.1 - 79.3	76.1	75.2 - 77.0	81.4	80.6 - 82.3
5902	West Kootenay-Boundary	77.6	77.0 - 78.2	74.8	73.9 - 75.6	80.8	80.0 - 81.6
5903	North Okanagan	78.8	78.3 - 79.3	76.4	75.6 - 77.1	81.4	80.7 - 82.0
5904	South Okanagan Similkameen	80.2	79.9 - 80.6	77.4	76.9 - 77.9	83.2	82.7 - 83.6
5905	Thompson	77.0	76.5 - 77.5	74.2	73.5 - 74.8	80.0	79.4 - 80.7
5906	Fraser Valley	78.7	78.3 - 79.0	76.1	75.6 - 76.6	81.3	80.8 - 81.7
5907	South Fraser Valley	79.6	79.4 - 79.8	77.2	76.8 - 77.5	82.0	81.7 - 82.3
5908	Simon Fraser	78.7	78.4 - 79.0	76.1	75.6 - 76.5	81.2	80.7 - 81.6
5909	Coast Garibaldi	78.2	77.6 - 78.9	75.6	74.7 - 76.5	81.1	80.2 - 82.0
5910	Central Vancouver Island	78.3	77.9 - 78.6	75.4	74.9 - 75.9	81.3	80.8 - 81.7
5911	Upper Island/Central Coast	77.7	77.2 - 78.2	75.5	74.8 - 76.2	80.1	79.4 - 80.8
5912	Cariboo	76.4	75.7 - 77.1	73.5	72.6 - 74.5	79.7	78.8 - 80.7
5913	North West	77.5	76.8 - 78.2	75.5	74.6 - 76.4	79.9	78.9 - 80.8
5914	Peace Liard	77.2	76.4 - 77.9	75.0	74.0 - 76.1	79.7	78.6 - 80.8
5915	Northern Interior	76.6	76.0 - 77.2	73.9	73.1 - 74.6	79.8	79.0 - 80.6
5916	Vancouver	78.5	78.3 - 78.8	74.6	74.3 - 75.0	82.5	82.2 - 82.9
5917	Burnaby	79.7	79.3 - 80.0	76.6	76.1 - 77.1	82.6	82.1 - 83.1
5918	North Shore	80.4	80.1 - 80.8	78.2	77.7 - 78.7	82.5	82.0 - 82.9
5919	Richmond	81.4	81.0 - 81.8	78.5	77.9 - 79.1	84.0	83.4 - 84.6
5920	Capital	79.7	79.5 - 80.0	77.2	76.8 - 77.6	82.0	81.7 - 82.4
Yukon Territory							
6001	Yukon Territory	75.3	74.1 - 76.4	72.3	70.8 - 73.7	79.4	77.6 - 81.3
Northwest Territories							
6101	Northwest Territories	76.7	75.4 - 77.9	74.6	72.9 - 76.2	79.2	77.3 - 81.0
Nunavut							
6201	Nunavut	70.1	68.3 - 71.8	67.8	65.8 - 69.8	71.2	68.7 - 73.7

Data sources: Canadian Vital Statistics Data Base; Demography Division

† Due to the small population of Churchill, Manitoba (map code 4690), this health region has been grouped with Burntwood (map code 4680).

Note: This information is available in electronic format on the Talon Web Site at this address:

<http://www.statcan.ca/english/ads/82-003-XPB/letab.htm>

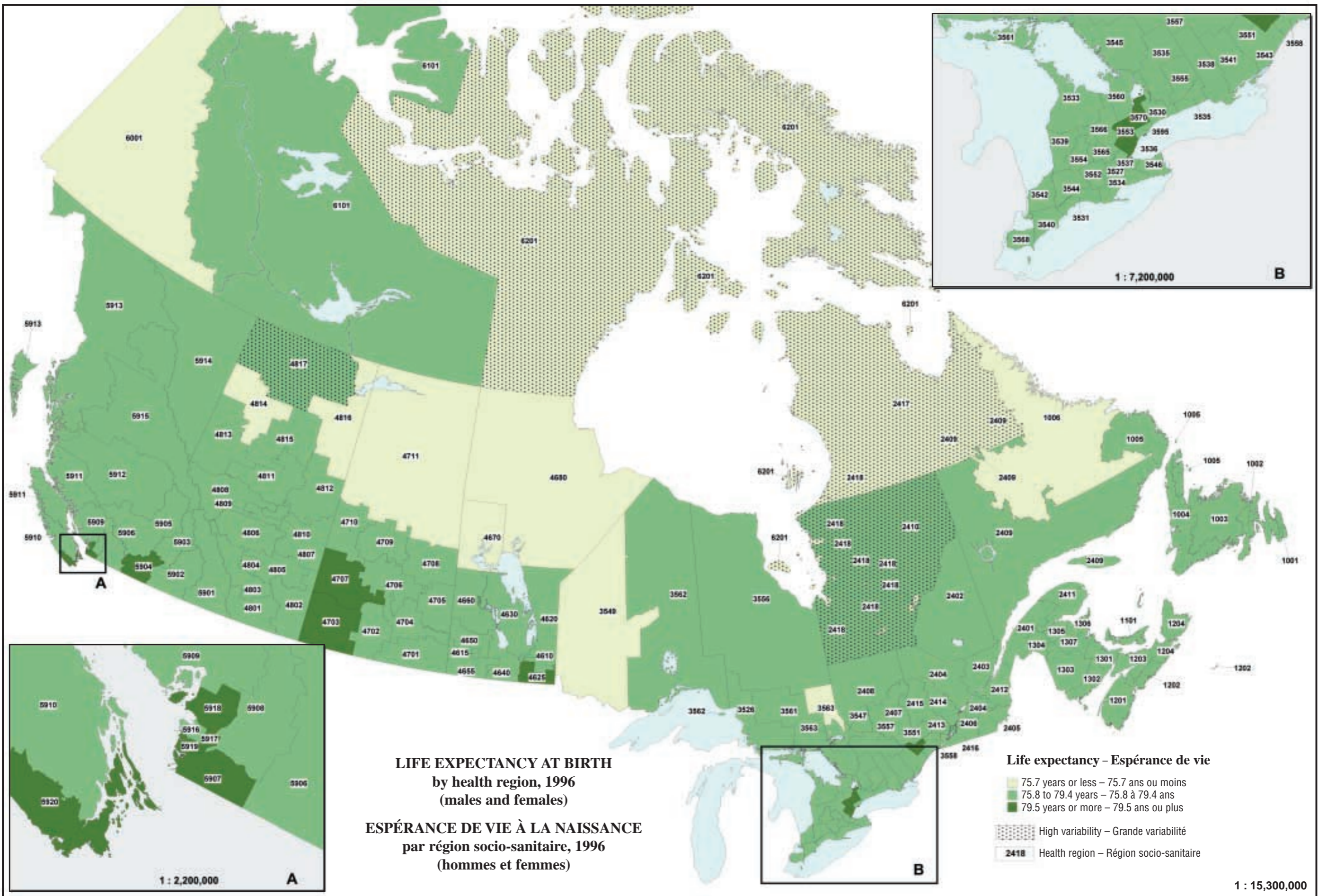
Maps

Map code Health region

Newfoundland	
1001	Health and Community Services St. John's Region
1002	Health and Community Services Eastern Region
1003	Health and Community Services Central Region
1004	Health and Community Services Western Region
1005	Grenfell Regional Health Services Board
1006	Health Labrador Corporation
Prince Edward Island	
1101	Prince Edward Island
Nova Scotia	
1201	Western
1202	Central
1203	Northern
1204	Eastern
New Brunswick	
1301	Region 1
1302	Region 2
1303	Region 3
1304	Region 4
1305	Region 5
1306	Region 6
1307	Region 7
Québec	
2401	Région du Bas-Saint-Laurent
2402	Région du Saguenay-Lac-Saint-Jean
2403	Région de Québec
2404	Région de la Mauricie-Bois-Francs
2405	Région de l'Estrie
2406	Région de Montréal-Centre
2407	Région de l'Outaouais
2408	Région de l'Abitibi-Témiscamingue
2409	Région de la Côte-Nord
2410	Région du Nord-du-Québec
2411	Région de la Gaspésie-Îles-de-la-Madeleine
2412	Région de la Chaudière-Appalaches
2413	Région de Laval
2414	Région de Lanaudière
2415	Région de Laurentides
2416	Région de la Montérégie
2417	Région du Nunavik
2418	Région des Terres-Cries-de-la-Baie-James
Ontario	
3526	Algoma Public Health Unit
3527	Brant Public Health Unit
3530	Durham Public Health Unit
3531	Elgin-St Thomas Public Health Unit
3533	Bruce-Grey-Owen Sound Public Health Unit
3534	Haldimand-Norfolk Public Health Unit
3535	Haliburton, Kawartha, Pine Ridge Public Health Unit
3536	Halton Public Health Unit
3537	Hamilton-Wentworth Public Health Unit
3538	Hastings and Prince Edward Public Health Unit
3539	Huron Public Health Unit
3540	Kent-Chatham Public Health Unit
3541	Kingston, Frontenac, Lennox and Addington Public Health Unit
3542	Lambton Public Health Unit
3543	Leeds, Grenville, Lanark Public Health Unit
3544	Middlesex-London Public Health Unit
3545	Muskoka-Parry Sound Public Health Unit
3546	Niagara Public Health Unit
3547	North Bay Public Health Unit
3549	Northwestern Public Health Unit
3551	Ottawa Carleton Public Health Unit
3552	Oxford Public Health Unit
3553	Peel Public Health Unit
3554	Perth Public Health Unit
3555	Peterborough Public Health Unit
3556	Porcupine Public Health Unit
3557	Renfrew Public Health Unit
3558	Eastern Ontario Public Health Unit
3560	Simcoe Public Health Unit
3561	Sudbury Public Health Unit
3562	Thunder Bay Public Health Unit
3563	Timiskaming Public Health Unit
3565	Waterloo Public Health Unit

Map code Health region

3566	Wellington-Dufferin-Guelph Public Health Unit
3568	Windsor-Essex Public Health Unit
3570	York Public Health Unit
3595	City of Toronto Public Health Unit
Manitoba	
4610	Winnipeg
4615	Brandon
4620	North Eastman
4625	South Eastman
4630	Interlake
4640	Central
4650	Marquette
4655	South Westman
4660	Parkland
4670	Norman
4680	Burntwood
4690	Churchill
Saskatchewan	
4701	Weyburn (A) Service Area
4702	Moose Jaw (B) Service Area
4703	Swift Current (C) Service Area
4704	Regina (D) Service Area
4705	Yorkton (E) Service Area
4706	Saskatoon (F) Service Area
4707	Rosetown (G) Service Area
4708	Melfort (H) Service Area
4709	Prince Albert (I) Service Area
4710	North Battleford (J) Service Area
4711	Northern Health Services Branch (K) Service Area
Alberta	
4801	Chinook Regional Health Authority
4802	Palliser Health Authority
4803	Headwaters Health Authority
4804	Calgary Regional Health Authority
4805	Health Authority #5
4806	David Thompson Regional Health Authority
4807	East Central Health Authority
4808	WestView Regional Health Authority
4809	Crossroads Regional Health Authority
4810	Capital Health Authority
4811	Aspen Regional Health Authority
4812	Lakeland Regional Health Authority
4813	Mistahia Regional Health Authority
4814	Peace Regional Health Authority
4815	Keeweenaw Lakes Regional Health Authority
4816	Northern Lights Regional Health Authority
4817	Northwestern Regional Health Authority
British Columbia	
5901	East Kootenay
5902	West Kootenay-Boundary
5903	North Okanagan
5904	South Okanagan Similkameen
5905	Thompson
5906	Fraser Valley
5907	South Fraser Valley
5908	Simon Fraser
5909	Coast Garibaldi
5910	Central Vancouver Island
5911	Upper Island/Central Coast
5912	Cariboo
5913	North West
5914	Peace Liard
5915	Northern Interior
5916	Vancouver
5917	Burnaby
5918	North Shore
5919	Richmond
5920	Capital
Yukon Territory	
6001	Yukon Territory
Northwest Territories	
6101	Northwest Territories
Nunavut	
6201	Nunavut



**LIFE EXPECTANCY AT BIRTH
by health region, 1996
(males and females)**

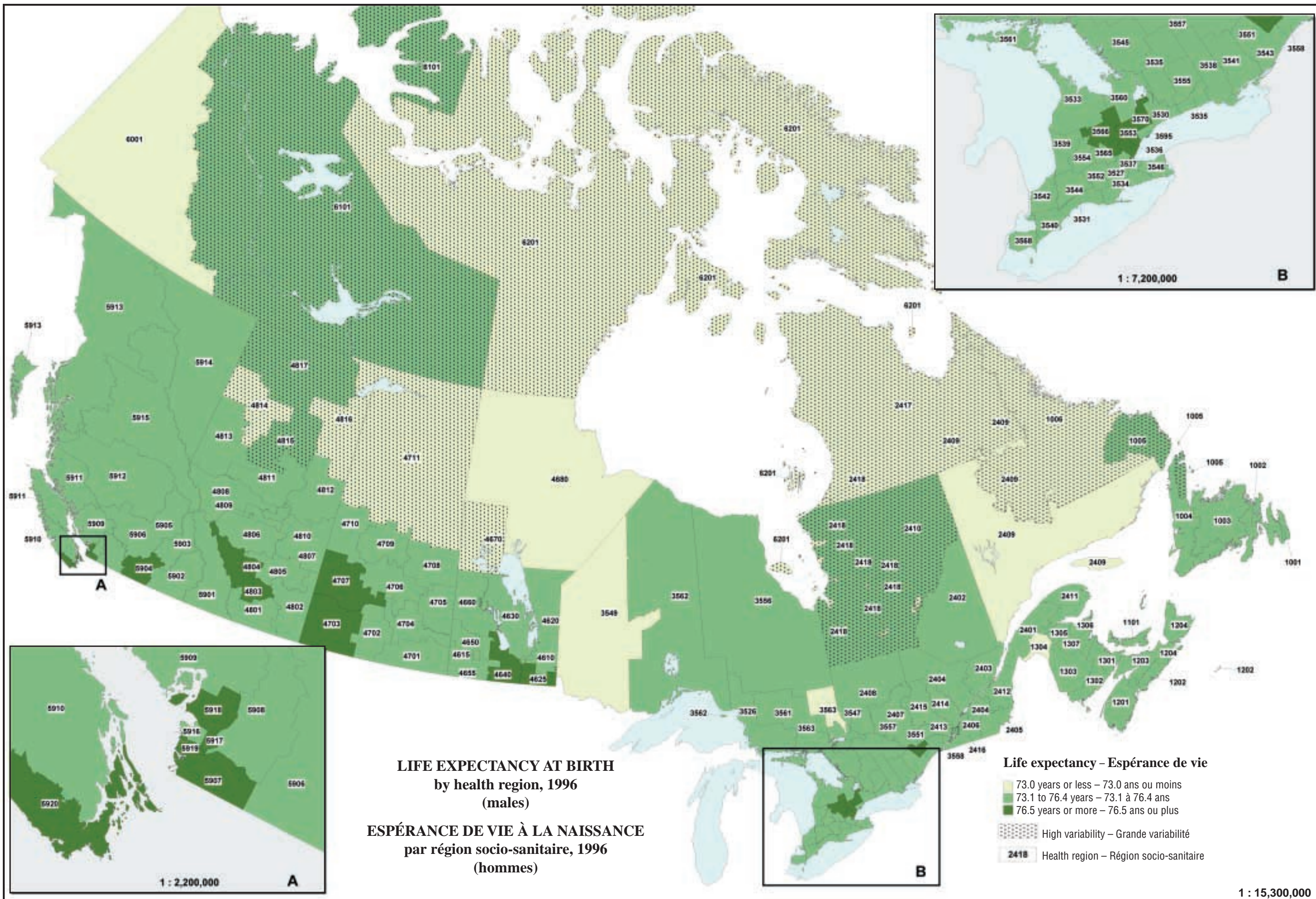
**ESPÉRANCE DE VIE À LA NAISSANCE
par région socio-sanitaire, 1996
(hommes et femmes)**

Life expectancy – Espérance de vie

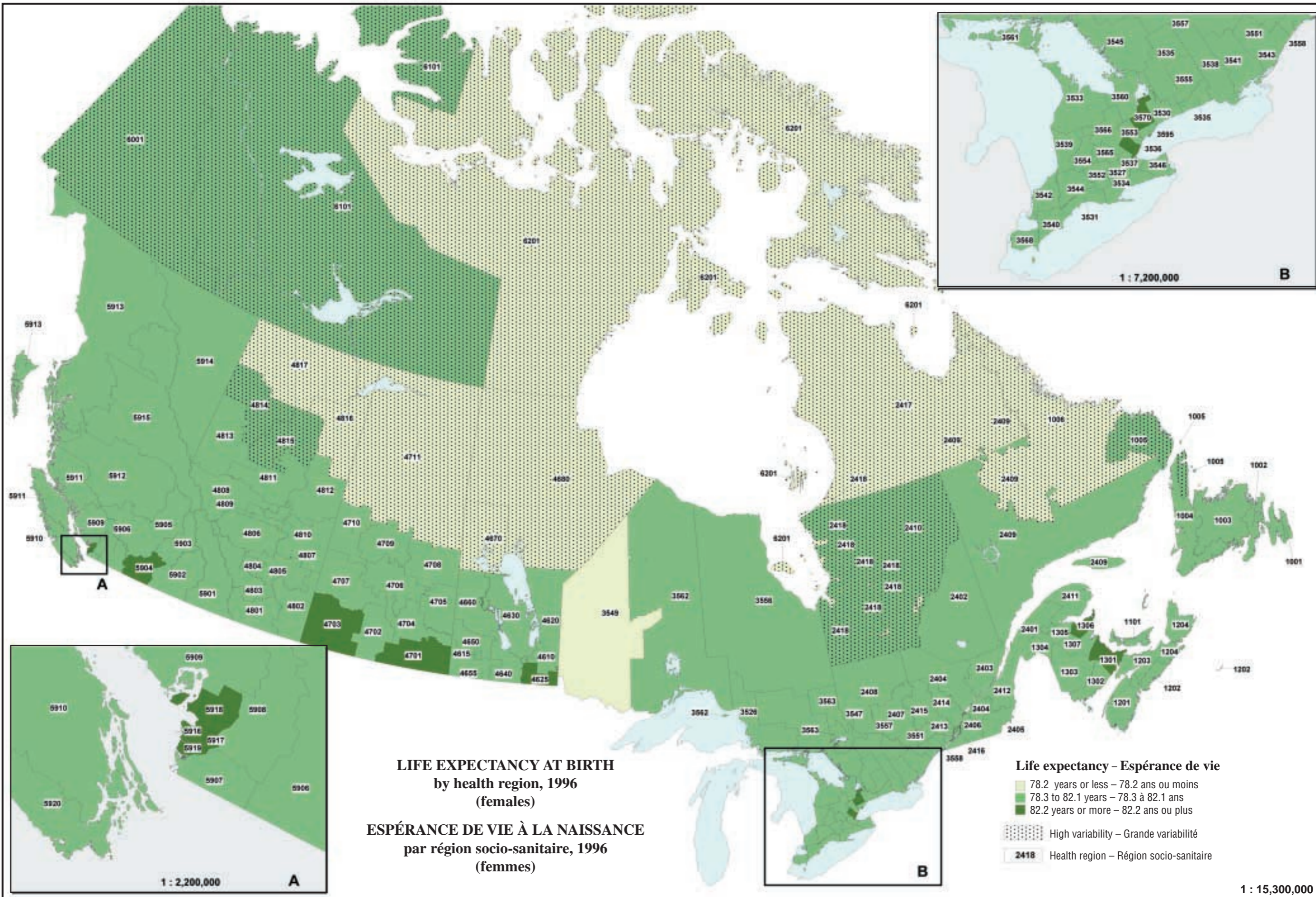
- 75.7 years or less – 75.7 ans ou moins
- 75.8 to 79.4 years – 75.8 à 79.4 ans
- 79.5 years or more – 79.5 ans ou plus

- High variability – Grande variabilité
- 2418 Health region – Région socio-sanitaire

Source: Health Statistics Division. Produced by Geography Division, Statistics Canada, 1999.
 Division des statistiques sur la santé. Préparé par la Division de la géographie, Statistique Canada, 1999.



Source: Health Statistics Division. Produced by the Geography Division, Statistics Canada, 1999.
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