

Life Expectancy at Birth

Name	Life Expectancy at Birth
Short/Other Names	Not applicable
Description	Number of years a person would be expected to live, starting at birth, if the age- and sex-specific mortality rates for a given reference period were held constant over his or her life span
Interpretation	A higher life expectancy is considered an indicator of better overall health of the population.
HSP Framework Dimension	Health System Outcomes: Improve health status of Canadians
Areas of Need	Not applicable
Geographic Coverage	All provinces/territories
Reporting Level /Disaggregation	International, National, Province/Territory, Region, Neighbourhood Income Quintile
Indicator Results	Accessing Indicator Results on Your Health System: In Depth

Identifying Information

Name Life Expectancy at Birth

Short/Other Names Not applicable

Indicator Description and Calculation

Description Number of years a person would be expected to live, starting at birth, if the age- and sex-specific mortality rates for a given reference period were held constant over his or her life span
Cumulative number of person-years lived, divided by the number of live births in the initial cohort

Calculation: Description A period life table approach is used, applying the age- and sex-specific mortality rates for a given reference period to a hypothetical cohort.

Life tables are usually constructed separately for men and women because of their different mortality rates.

Calculation: Geographic Assignment Place of residence

Calculation: Type of Measurement Average or mean

Calculation: Adjustment Applied None

Calculation: Method of Adjustment Not applicable

Denominator **Description:**
Population in an initial cohort of 100,000 live births

Description:
Cumulative number of person-years lived, for a cohort of 100,000 persons

Age- and sex-specific mortality rates corresponding to the reference period are applied to a hypothetical cohort, typically of 100,000. Starting at birth, the probability of dying at each age or age interval is applied to the number of people surviving to that age or the beginning of the age interval, respectively.

Exclusions:

1. Rates used by Statistics Canada to calculate life expectancy are calculated with data that excludes the following:

- Numerator
- Births to mothers who are not residents of Canada
 - Births to mothers who are residents of Canada whose province or territory of residence was unknown
 - Deaths of non-residents of Canada
 - Deaths of residents of Canada whose province or territory of residence was unknown
 - Deaths for which age or sex of the decedent was unknown

Background, Interpretation and Benchmarks

Rationale Used worldwide, life expectancy at birth is understood as a measure of the general health of a population. By definition, life expectancy is affected by age- and sex-specific mortality rates in a particular reference period.

Interpretation A higher life expectancy is considered an indicator of better overall health of the population.

HSP Framework Dimension Health System Outcomes: Improve health status of Canadians

Areas of Need Not applicable

Targets /Benchmarks Not applicable

Goodyear M, Malhotra N. [Life-tables and their demographic applications](#). Accessed August 16, 2018.

Statistics Canada. [Methods for Constructing Life Tables for Canada, Provinces and Territories](#). 2018.

References

Public Health Agency of Canada Steering Committee on Health-Adjusted Life Expectancy. [Health-Adjusted Life Expectancy in Canada: 2012 Report by the Public Health Agency of Canada](#). 2012.

Statistics Canada. [Health indicators definitions and data sources](#). Accessed August 16, 2018.

Availability of Data Sources and Results

Data Sources 01: [Life expectancy, at birth and at age 65, by sex, three-year average, Canada, provinces, territories, health regions and peer groups](#); OECD Health Statistics, 2015.

Type of Year:

Calendar

Available Data Years

First Available Year:

2011

Last Available Year:

2015

Geographic Coverage

All provinces/territories

Reporting Level

/Disaggregation

International, National, Province/Territory, Region, Neighbourhood Income Quintile

Result Updates

Update Frequency Every year

Web Tool:

Your Health System: In Depth

Indicator Results

URL:

[Accessing Indicator Results on Your Health System: In Depth](#)

Updates

Not applicable

Quality Statement

Caveats and

This indicator does not provide information on the individual causes of deaths or on quality of life.

Limitations

The data is based on 2015 health region boundaries. For complete Canada coverage, each northern territory represents a health region.

The methods for estimating mortality and death probability at advanced ages were changed to better acknowledge characteristics of death in advanced ages, particularly in terms of small sample sizes. These changes apply to the construction of life tables for the period 2005 to 2007 onward. The impact of these changes on life expectancy for Canada as a whole is minimal, with a difference of 0.07 years.

Trending Issues

National estimates are available in 10-year intervals starting in 1920 and annually starting in 1979. Provincial/territorial estimates are available annually from 1979 to 2006. Separate estimates for Nunavut and the Northwest Territories are available annually from 1999 to 2006. From 1979 to 1999, estimates are available for the two territories combined as "Northwest Territories including Nunavut."

Estimates based on three years of pooled data are available at the provincial level from 1992 to 1994 onward; however, the territories are presented as a group for the period between 1992 to 1994 and 1997 to 1999.

Estimates based on three years of pooled data are available at the regional level from 2000 to 2002 forward, with the most current data being for 2014 to 2016.

Life expectancy does not provide information about the quality of life. Other measures have been developed using a composite of morbidity and mortality data. For example, health-adjusted life expectancy (HALE) is the average number of years that an individual is expected to live in a healthy state (PHAC, 2012).

Comments

Indicator results are based on three years of pooled data. The reference point reflects the mid-point of a three-year period.

Indicator results are also available on

- Your Health System: In Brief (<http://yourhealthsystem.cih.ca/inbrief/?lang=en#!/indicators/011/life-expectancy-at-birth>)