

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 (PDF)

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:

Numerator

1. Rates used by Statistics Canada to calculate life expectancy are calculated with data that excludes the following:
 - a. Births to mothers who are not residents of Canada
 - b. Births to mothers who are residents of Canada whose province or territory of residence was unknown
 - c. Deaths of non-residents of Canada
 - d. Deaths of residents of Canada whose province or territory of residence was unknown
 - e. 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 February 2020.

Statistics Canada. [Methods for Constructing Life Tables for Canada, Provinces and Territories](#). 2019.

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 February 2020.

Availability of Data Sources and Results

Demography division, Statistics Canada, OECD, Vital Statistics - Death Database, Statistics Canada, Statistics Canada, Table 13-10-0389-01: Life expectancy, at birth and at age 65, by sex, three-year average, Canada, provinces, territories, health regions and peer groups; OECD Health Statistics, 2016.

Type of Year:

Calendar

Available Data Years

First Available Year:

2015

Last Available Year:

2017

Geographic Coverage

All provinces/territories

Reporting Level

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 \(PDF\)](#)

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 2018 health region boundaries. For complete Canada coverage, each northern territory represents a health region.

Due to improvements in methodology and timeliness, the duration of data collection has been shortened compared with previous years. As a result, there may have been fewer deaths captured by the time of the release. The 2017 data is therefore considered preliminary.

Trending Issues

Estimates based on 3 years of pooled data are available at the regional level from 2000 to 2002 forward, with the most current data being for 2015 to 2017.

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).

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

Comments

Indicator results are also available on

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