

CO1.2: Life expectancy at birth

Definitions and methodology

This indicator uses three main measures to capture life expectancy:

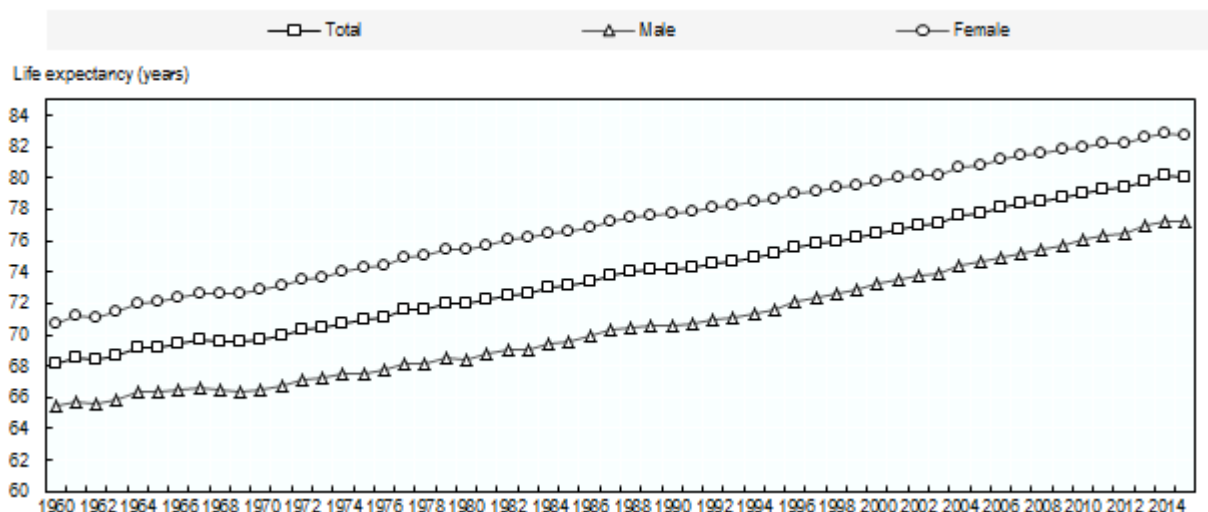
- *Life expectancy at birth*, defined as the average number of years a new-born child would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout their life.
- *Health-adjusted life expectancy (HALE) at birth*, defined as the average number of years that a new-born child can expect to live in "full health" after taking into account years expected to be lived in less than full health due to disease and/or injury.
- *Healthy life years (HLY) at birth*, a measure used across the EU and defined as the average number of years that a new-born child can expect to live in a healthy condition *and* free from disability (also called disability-free life expectancy).

Key findings

OECD countries have made remarkable progress in increasing life expectancies at birth (Chart CO1.2.A). In 2015, the OECD-19 average life expectancy for a new-born girl stood at 82.8 years, just over 12 years longer than the OECD-19 average for a girl born in 1960 (70.7 years). Similarly, in 2015 the OECD-19 average life expectancy for a new-born boy stood at 77.2, also about 12 years longer than the OECD-19 average life expectancy for a boy born in 1960 (65.4 years).

Chart CO1.2.A. Trends in life expectancy at birth by gender, 1960-2015

OECD-19^a unweighted average life expectancy at birth in years



a) Unweighted average for the 19 OECD countries with data available for all years since 1960. These 19 countries are: Australia, Austria, Belgium, the Czech Republic, Estonia, France, Germany, Hungary, Japan, Mexico, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Sweden, Switzerland, Turkey and the United States

Source: [OECD Health Statistics](#)

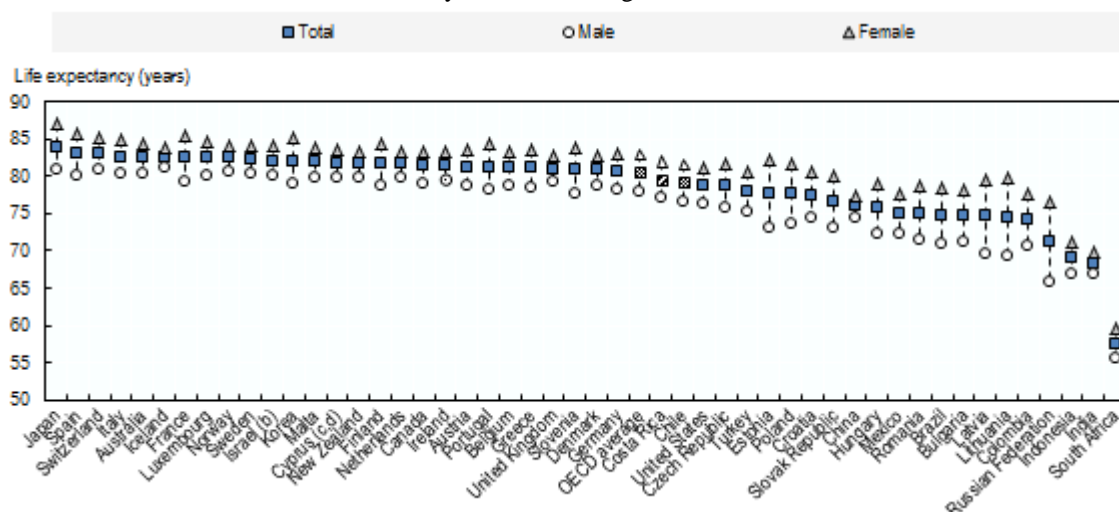
Other relevant indicators: CO1.1: Infant mortality rate; CO1.6: Disease-based indicators: prevalence of diabetes and asthma among children; CO1.7: Obesity among children aged 10 and CO1.8: Regular smokers among 15 year olds by gender.

Girls tend to live longer than boys, but the extent of the gender gap has varies across countries and across time. Since 1960, the OECD average gender gap in life expectancy has widened slightly. Whereas in 1960 a new-born girl could expect to live, on average across OECD countries with available data, around 5.3 years longer than a new-born boy, in 2015 the difference was on average 5.5 years. However, trends have changed over time. While the gender gap increased substantially during the 1960s, 1970s and 1980s (reaching a peak of 7.2 years in 1992), it has narrowed during the last 25 years. This “narrowing” pattern reflects in part a reduction in gender difference in risky behaviours such as smoking and alcohol use (see CO1.8).

In 2015, female life expectancy at birth ranged from 77.7 years in Mexico to 87.1 years in Japan. Girls born in France, , Korea, , Spain and Switzerland could also expect to live particularly long lives (more than 85 years). For boys, life expectancy at birth ranged from a low of 69.7 years in Latvia to a high of 81.2 years in Iceland. Cross-country differences, though still high, have declined over the past 50 or so years. This reduction is mainly due to important gains in life expectancy in countries like Korea, Mexico and Turkey (29.7, 17.5 and 29.7 years since 1960, respectively). Catch-up gains in these countries are partly explained by substantial declines in infant mortality rates (see CO1.1).

Chart CO1.2.B. Life expectancy at birth by gender, 2015 or latest available year^a

Average number of years a new-born infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life



a) Data for Canada are for 2011, and for Chile and Mexico to 2016.

b) The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

c) Footnote by Turkey: The information in this document with reference to « Cyprus » relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognizes the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Turkey shall preserve its position concerning the “Cyprus issue”;

d) Footnote by all the European Union Member States of the OECD and the European Commission: The Republic of Cyprus is recognized by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

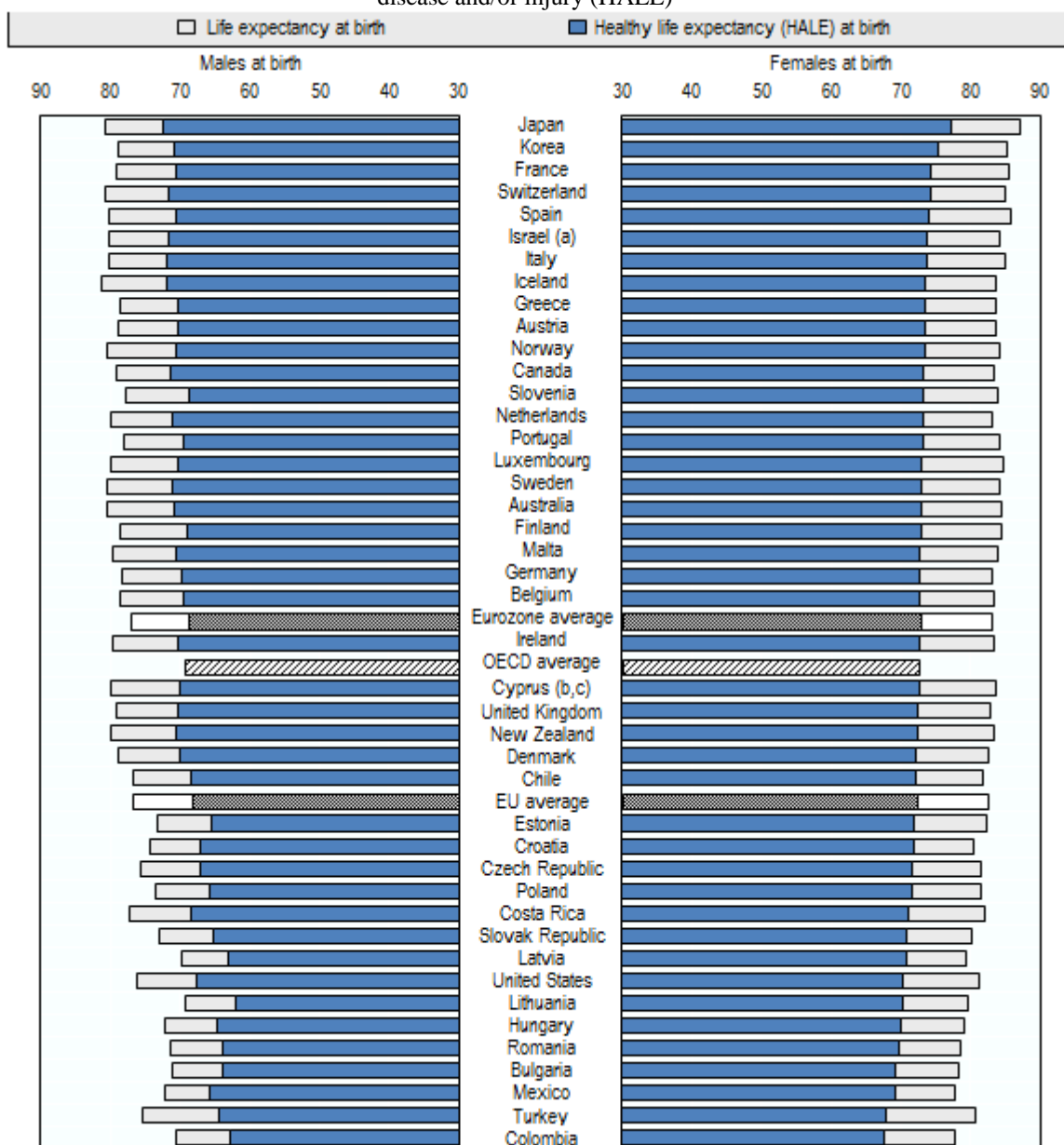
Source: [OECD Health Statistics](#); [Eurostat Health Statistics](#)

Life expectancy does not provide a complete picture of the health status of the population, particularly as extra years of life are not necessarily lived in good health. In 2015, on average across OECD countries, new-born girls and boys could expect to live 73 years and 69 years in good health, respectively (Chart CO1.2.C). This means that, on average, about 11% of the expected lifespan of new-born boys, and about 13% of the expected lifespan of new-born girls, could be limited by disease or injury. Across OECD countries, healthy life expectancy (HALE) is higher for women than for men. However, HALE gender

gaps are generally smaller (at 3.4 years, on average across the OECD) than those for overall life expectancy (5.2 years, on average across the OECD).

Chart CO1.2.C. Life expectancy at birth and Health-Adjusted Life Expectancy (HALE) at birth, 2015

Average number of years a new-born infant can expect to live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life (life expectancy at birth), and average number of years that a new-born infant can expect to live in "full health" after taking into account years expected to be lived in less than full health due to disease and/or injury (HALE)



a) See note b) in Chart CO1.2.C

b) See note c) in Chart CO1.2.C

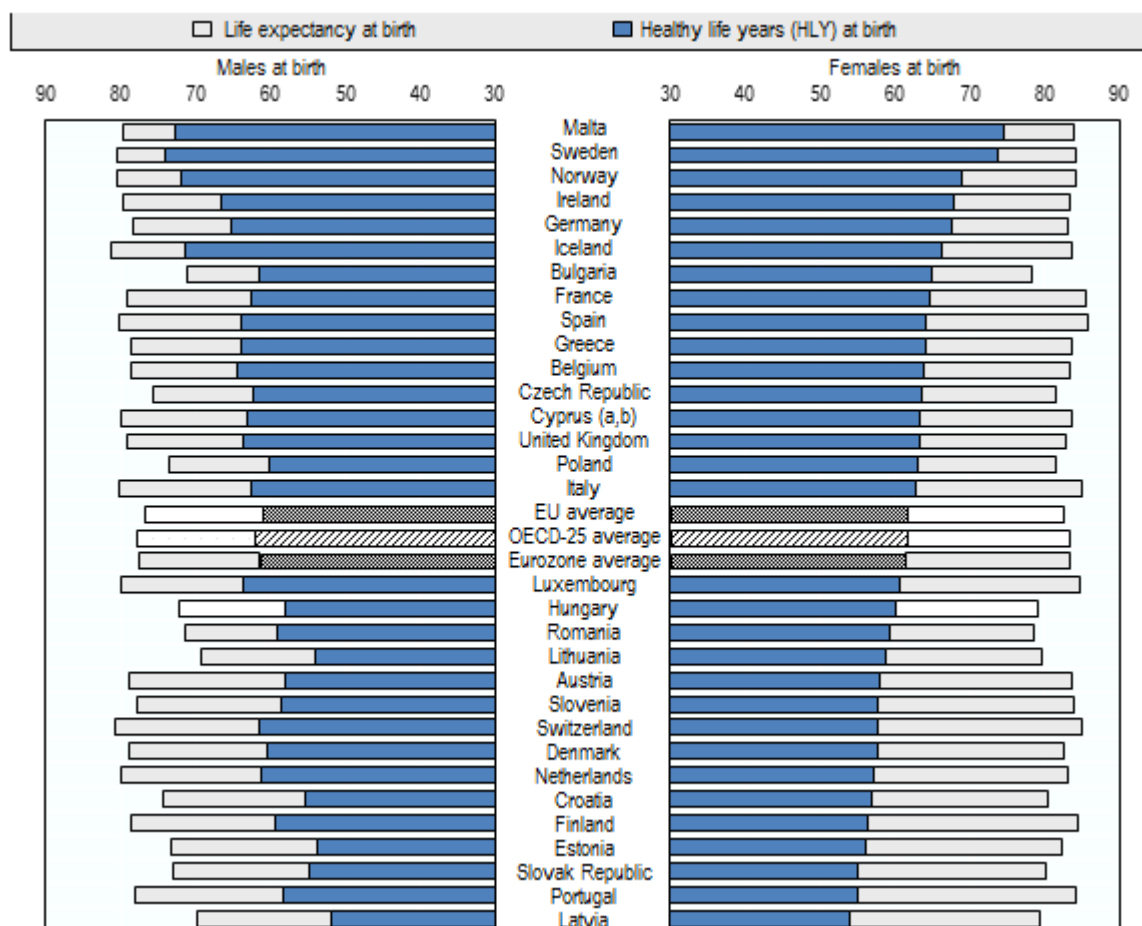
c) See note d) in Chart CO1.2.C

Source: [WHO Global Health Observatory](http://www.who.int/globalhealthobservatory)

Estimates of Healthy Life Years (HLY), a measure used across the EU, indicate that both new-born girls and new-born boys in European OECD countries can expect to live approximately 61.8 years free from disabilities that limit their daily activities. The relatively small gender gap here thus suggests that, although women in European countries will live longer lives, these may not necessarily be lives of greater quality. There remains, however, substantial variation in expected Healthy Life Years across countries. While in both Norway and Sweden both boys and girls can expect to live around 70 years or more in good health and free from disability, in Estonia and the Slovak Republic the number of years a new-born can expect to live free of disability is around 55 years or less.

Chart CO1.2.D. Life expectancy at birth and healthy life years (HLY) at birth, 2015

Average number of years a newborn infant can expect to live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life (life expectancy at birth), and average number of years that a newborn infant can expect to live in a healthy condition and free from disability (HLY)



a) See note c) in Chart CO1.2.C

b) See note d) in Chart CO1.2.C

Source: Eurostat

Comparability and data issues

The data on life expectancy at birth shown in Charts CO1.2.A and CO1.2.B have been taken from two sources: OECD Health Statistics for OECD and OECD-key partner countries, and Eurostat for non-OECD European countries. The OECD data comes from national statistics. Some of the international variation in life expectancy at birth may be due to variations among countries in registering mortality rates. Life expectancy at birth for the total population is estimated by the OECD Secretariat for all countries, using the unweighted average of life expectancy of men and women.

Charts CO1.2.C presents data on Life Expectancy and Healthy Life Expectancy (HALE) at birth. Both are taken from the WHO Global Health Observatory, which itself calculates estimates based on life tables constructed by WHO using Sullivan's method. For more information on the data and methods used in the calculation of the HALE data, see the [Global Health Observatory website](#).

Chart CO1.2.D presents data on Life Expectancy and Healthy Life Years (HLY), which have been taken from Eurostat. Life expectancy and HLY are calculated by Eurostat using mortality statistics from Eurostat's demographic database and data on self-reported disability from EU-SILC. The question used for constructing the measure is: "For at least the past six months, to what extent have you been limited because of a health problem in activities people usually do? Would you say you have been: severely limited? / limited but not severely? / not limited at all?". Those answering "severely limited" or "limited but not severely" are considered as living in an 'unhealthy' condition, while those answering "not limited at all" are considered as 'healthy'. For more information on the data and methods used in the calculation of the HLY data, see the [Eurostat website](http://apps.who.int/gho/indicatorregistry/App_Main/view_indicator.aspx?iid=66)http://apps.who.int/gho/indicatorregistry/App_Main/view_indicator.aspx?iid=66.

Sources and further reading: OECD Health database (www.oecd.org/health/healthdata); OECD Health at a Glance 2017; WHO Global Health Observatory (<http://apps.who.int/gho/data/?theme=main>); European Health Expectancy Monitoring Unit (<http://www.ehemu.eu/>); and, Mathers C.D., Murray C.J., and Samson J. (2003) Methods for Measuring Healthy Life Expectancy. In: Murray C.J., Evans D, eds. *Health systems performance assessment: debates, methods and empiricism*. Geneva, World Health Organization, Geneva.