# CO1.2: Life expectancy at birth

*Definitions and methodology*

This indicator uses two measures to capture life expectancy:

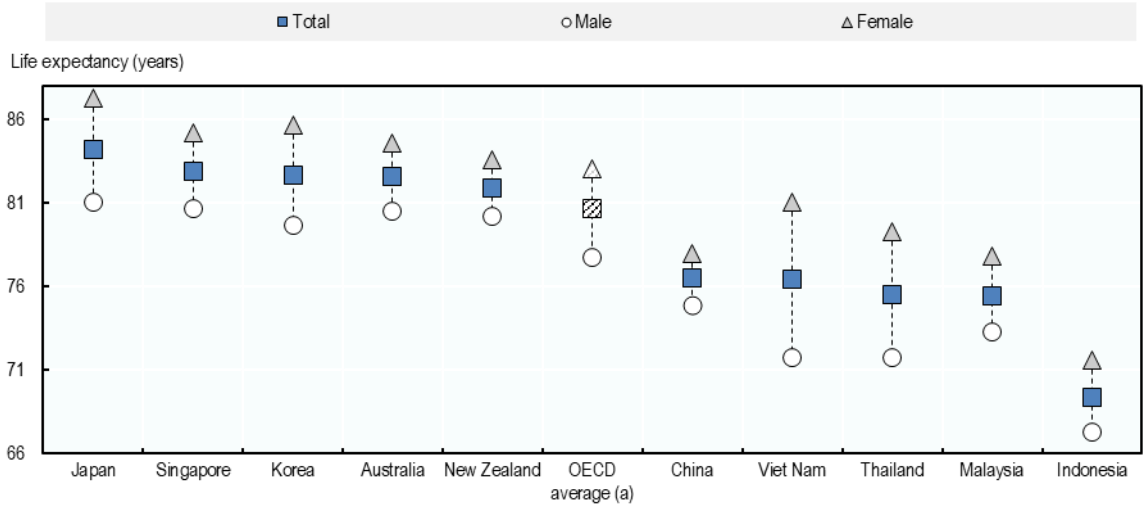
- *Life expectancy at birth*, defined as the average number of years a new-born child would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout their life.
- *Health-adjusted life expectancy (HALE) at birth*, defined as the average number of years that a 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.

Data on life expectancy at birth come either from OECD Health Statistics or from the World Bank, while data on HALE at birth come from the World Health Organization (WHO) Global Health Observatory.

*Key findings*

Current life expectancies for new-born children vary considerably across the covered Asia/Pacific countries (Chart CO1.2.A). In five of the covered countries (Australia, Japan, Korea, Singapore and New Zealand), current life expectancies are relatively high. In these countries, new-born children can expect to live at least until the age of 82 – above the average for OECD countries (81). However, current life expectancies at birth are lower in China, Malaysia, Thailand and Viet Nam – in these countries, new-born children can expect to live until around age of 75-77 – and are much lower in Indonesia at about 69 years.

Chart CO1.2.A. **Life expectancy at birth by gender, 2017**
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) The OECD average refers to the unweighted average across OECD member countries with available and comparable data. See OECD Family Database Indicator CO1.2 (http://www.oecd.org/els/family/database.htm) for more detail.

Sources: Australia, China, Indonesia, Korea, Japan and New Zealand: OECD Health Statistics; OECD average: OECD Family Database Indicator CO1.1; Malaysia, Singapore, Thailand and Viet Nam: World Bank Open Data

*Other relevant indicators*: SF2.1 Fertility rates; CO1.1 Infant mortality; CO1.3 Low birth weight; CO1.4 Vaccination rates.

Across countries, girls tend to have higher life expectancies than boys, though the extent of the gap varies (Chart CO1.2.A). The largest current gender gaps in life expectancy are in Japan, Korea, and Thailand, where life expectancy at birth is about 6 or 7 years higher for girls than for boys, and especially in Viet Nam, where a new-born girl can expect to live not far off 10 years longer than a new-born boy. The smallest gender gaps are in New Zealand (3.4 years) and China (3.1 years).

All covered Asia/Pacific countries have seen considerable gains in life expectancies at birth over the past four or five decades (Table CO1.2.A). Across all covered countries, current life expectancies at birth are at least 10 years longer than they were in 1960 (or in the earliest year with available data), with the largest gains made in Korea (an increase of 20 years since 1970), Indonesia and Thailand (21 years since 1960), and especially China (33 years since 1960).

Table CO1.2.A. **Trends in life expectancy at birth, 1960-2017**
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

| | 1960 | 1965 | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OECD-35 average (a) | 68.5 | 69.2 | 70.1 | 71.1 | 72.5 | 73.6 | 74.7 | 75.6 | 77.0 | 78.3 | 79.6 | 80.6 | 80.8 | 80.9 |
| Australia | 70.9 | 71.0 | 70.8 | 72.7 | 74.6 | 75.6 | 77.0 | 77.9 | 79.3 | 80.9 | 81.8 | 82.5 | 82.5 | 82.6 |
| China | 43.8 | 49.6 | 59.1 | 63.9 | 66.9 | 68.5 | 69.4 | 70.3 | 72.0 | 74.1 | 75.3 | 76.2 | 76.3 | 76.5 |
| Indonesia | 48.7 | 51.7 | 54.6 | 57.3 | 59.6 | 61.6 | 63.3 | 65.0 | 66.3 | 67.2 | 68.2 | 69.1 | 69.3 | 69.4 |
| Japan | 67.8 | 70.3 | 72.0 | 74.3 | 76.1 | 77.6 | 78.9 | 79.6 | 81.2 | 82.0 | 82.9 | 83.9 | 84.1 | 84.2 |
| Korea | .. | .. | 62.3 | 64.3 | 66.2 | 68.9 | 71.7 | 73.8 | 76.0 | 78.2 | 80.2 | 82.1 | 82.4 | 82.7 |
| Malaysia | 59.5 | 62.2 | 64.4 | 66.4 | 68.0 | 69.5 | 70.7 | 71.8 | 72.8 | 73.5 | 74.2 | 75.1 | 75.3 | 75.5 |
| New Zealand | .. | 71.2 | 71.5 | 72.1 | 73.2 | 74.0 | 75.5 | 76.8 | 78.4 | 79.8 | 80.8 | 81.7 | 81.7 | 81.9 |
| Singapore | 65.7 | 67.1 | 68.3 | 70.2 | 72.2 | 73.9 | 75.3 | 76.3 | 78.0 | 80.0 | 81.5 | 82.7 | 82.8 | 82.9 |
| Thailand | 54.7 | 57.1 | 59.4 | 62.0 | 64.4 | 67.9 | 70.3 | 70.2 | 70.6 | 72.1 | 73.9 | 75.1 | 75.3 | 75.5 |
| Viet Nam | 59.0 | 62.0 | 59.6 | 61.5 | 67.6 | 69.0 | 70.5 | 72.0 | 73.3 | 74.3 | 75.1 | 76.1 | 76.3 | 76.5 |

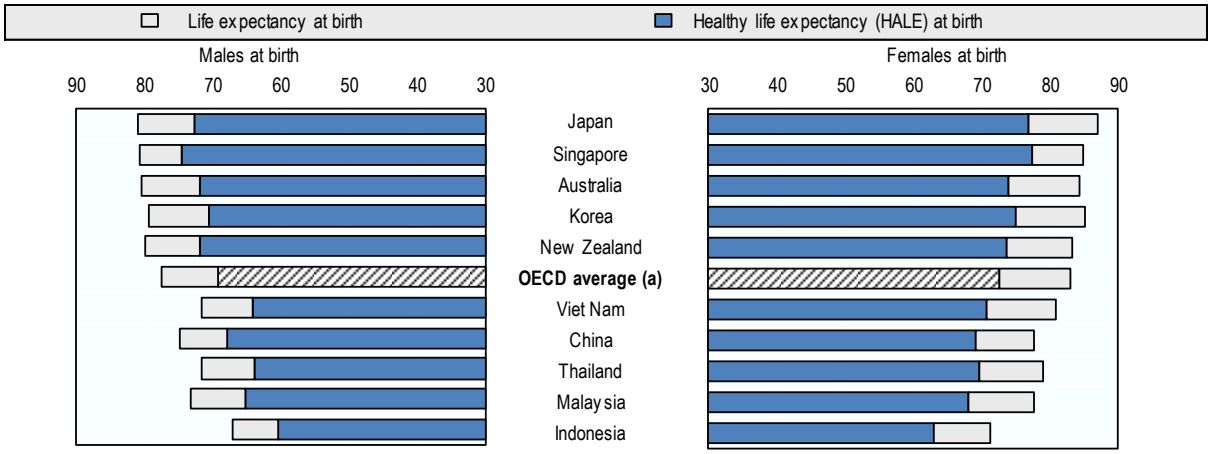
a) The OECD-35 average refers to the unweighted average across the 35 OECD member countries with available and comparable data for the whole period; ; it excludes Latvia with no data available from 1970. See OECD Family Database Indicator CO1.2 (http://www.oecd.org/els/family/database.htm) for more detail.

Sources: Australia, China, Indonesia, Korea, Japan and New Zealand: OECD Health Statistics; OECD average: OECD Family Database Indicator CO1.1; Malaysia, Singapore, Thailand and Viet Nam: World Bank Open Data

Life expectancy does not however provide a complete picture of the health status of the population, especially if extra years of life are not lived in good health. In Asia/Pacific countries as also in OECD countries, 'health-adjusted' life expectancy at birth – that is, the number of years a new-born infant can expect to leave in full health – is often much shorter than actual life expectancy, especially for new-born girls (Chart CO1.2.B). The smallest differences are in Singapore, where 'health-adjusted' life expectancies at birth are 6 years shorter than actual life expectancies for boys and 7.5 years shorter for girls. The largest differences are in Australia – where the health-adjusted life expectancies at birth is 8.6 years shorter than the actual life expectancy for boys, and 10.5 years shorter for girls.

Chart CO1.2.B. **Life expectancy at birth and Health-Adjusted Life Expectancy (HALE) at birth, 2016**

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" by taking into account years lived in less than full health due to disease and/or injury (HALE)




a) The OECD average refers to the unweighted average across OECD member countries with available and comparable data. See OECD Family Database Indicator CO1.2 (http://www.oecd.org/els/family/database.htm) for more detail.

Sources: WHO Global Health Observatory

*Comparability and data issues*

The data on life expectancy at birth shown in Chart CO1.2.A and Table CO1.2.A are taken from two sources: OECD Health Statistics for OECD member countries (plus China and Indonesia), and the World Bank Open Data Database for all other countries. In both cases the data are originally collected from national statistical offices or from data published by other international organisations, such as the United Nations Population Division. It is possible that some of the international variation in life expectancy at birth may be due to differences between countries in the registering of deaths or recording of mortality rates (see here for more details on the data collected and published by OECD Heath Statistics). For the data published by OECD Health Statistics, life expectancy at birth for the total population is estimated by the OECD Secretariat using the unweighted average of life expectancies for men and women.

The data on life expectancy and Healthy Life Expectancy (HALE) at birth shown in Chart CO1.2.B 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.

*Sources and further reading*: OECD Health Statistics, http://www.oecd.org/els/health-systems/health-data.htm, World Health Organization Global Health Observatory, http://www.who.int/gho/en/; World Bank Open Data Database, https://data.worldbank.org/; OECD/WHO (2018), *Health at a Glance: Asia/Pacific 2018: Measuring Progress towards Universal Health Coverage*, OECD Publishing, Paris.
http://dx.doi.org/10.1787/health_glance_ap-2018-en