

Life expectancy at birth and survival rate to age 65

Life expectancy at birth had continued to increase remarkably in Asia-Pacific up until 2019, reflecting sharp reductions in mortality rates at all ages, particularly amongst infants and children (see indicators “Infant mortality” and “Under age 5 mortality” in Chapter 3). These gains in longevity can be attributed to several factors, including rising living standards, better nutrition and improved drinking water and sanitation facilities (see indicator “Water and sanitation” in Chapter 4). Improved lifestyles, better education and enhanced access to health care also play an important role (National Institute on Ageing, National Institutes of Health and WHO, 2011^[1]). The large decline in under age 5 mortality, which reflects important commitment and investment at local, national, and global levels over several decades, is another major drive of the increase of life expectancy (Dicker et al., 2018^[2]).

Life expectancy at birth across low- and lower-middle-income Asia-Pacific countries reached 70.6 years on average in 2019, a gain of almost 3 years since 2010, whereas it reached 75.1 years in upper-middle-income Asia-Pacific countries and territories, a gain of almost 2 years since 2010, similar to the trend observed across OECD countries gained (Figure 3.1). Nonetheless, a very large regional divide persists as, on average, a newborn in Hong Kong (China) is expected to live approximately 20 years more than a newborn in Papua New Guinea. Hong Kong (China), Japan, Macau (China), Singapore, Korea, Australia and New Zealand reported a life expectancy of more than 80 years in 2019. In contrast, Papua New Guinea, Myanmar, Pakistan, Fiji, Lao PDR, India and Nepal had a life expectancy at birth of less than 70 years.

During the COVID-19 pandemic, life expectancy has decreased by one year in lower-middle- and low-income Asia-Pacific countries from 2019 to 2021 (Figure 3.2), while it decreased by 0.4 years in upper-middle-income countries and slightly increased in high-income countries during the same period. In Indonesia, life expectancy at birth decreased by four years from 2019 to 2021, whereas it decreased by 2.5 years in India and the Philippines.

Women have greater percentage of cohort surviving to age 65 (Figure 3.3), regardless of the income level of the country. On average, 79.2% and 84.5% of a cohort of female newborns would survive to age 65 in low- and lower-middle-, and upper-middle-income Asia-Pacific countries and territories, respectively, while only 69.3% and 74.6% of male newborns will survive to age 65 in low- and lower-middle-, and upper-middle-income Asia-Pacific countries and territories, respectively. In Macau (China), Korea, Hong Kong (China), Japan and Singapore more than 94% of female newborns will survive to age 65, whereas in Papua New Guinea, Mongolia, Myanmar, and Fiji, less than 2 out of 3 male newborns will survive to age 65. Many reasons contribute to this gender difference, such as biological differences resulting in slower ageing of immune systems and the later onset of cardiovascular diseases such as heart attacks and strokes amongst females (UNESCAP, 2017^[3]).

Besides life expectancy, another indicator of the population health status is the healthy life expectancy. Higher healthy life expectancy is generally associated with higher life expectancy, and therefore it is longer – on average – for females. On one side, females born in 2019 in Japan, Singapore and Korea are expected to live around 75 years of good health, whereas on the other side, males from the same cohort in Papua New Guinea, Solomon Islands, Pakistan, Mongolia, Fiji, Myanmar, Lao PDR and Cambodia have a healthy life expectancy of less than 60 years (Figure 3.4).

The difference of healthy life years for females born in 2019 between low- and lower-middle-, and upper-middle-income countries and territories across Asia-Pacific is of four years, with 62.9 and 67.1 healthy life years, respectively. This difference is increased to five years when comparing upper-middle-income to high-income countries and territories, which exhibit an average of 72.3 healthy life years for females. Gender gaps amount to 2.8; 3.0; and 2.0 healthy life years for low- and lower-middle-, upper-middle-, and high-income countries and territories across Asia-Pacific, respectively. Men born in 2019 in high-income countries and territories across Asia-Pacific are expected to have ten more years of healthy life than those born in low- and lower-middle-income countries and territories, with an average of 70.2 and 60.2 healthy life years, respectively.

Definition and comparability

Life expectancy at a specific age is the number of additional years that a person of that age can expect to live if current mortality levels observed for higher ages continue for the rest of that person's life. Thus, life expectancy at birth is the number of years that today's newborns would live on average if current age-specific mortality rates were to continue throughout the lifespan of the newborn cohort.

Age-specific mortality rates are used to construct life tables from which life expectancies are derived. The methodologies that countries and territories use to calculate life expectancy can vary somewhat, and these can lead to differences of fractions of a year. Some countries and territories base their life expectancies on estimates derived from censuses and surveys, and not on accurate registration of deaths.

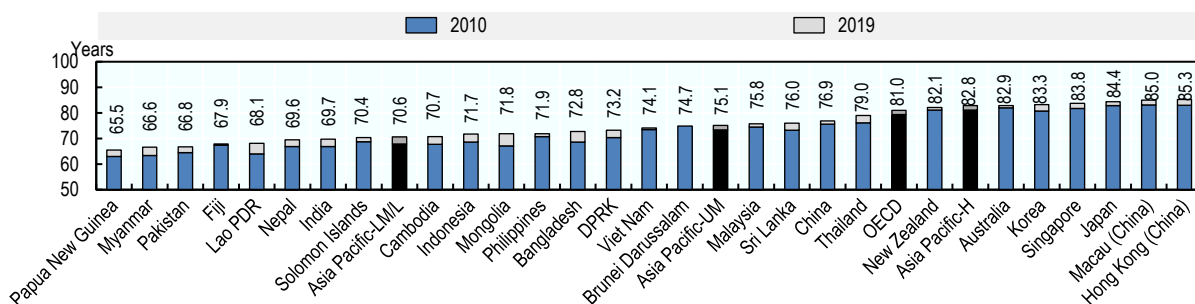
Survival to age 65 refers to the percentage of a cohort of newborns that would survive to age 65, if subject to current age-specific mortality rates.

Healthy life expectancy at birth measures the number of years in full health that a newborn can expect.

References

- Dicker, D. et al. (2018), "Global, regional, and national age-sex-specific mortality and life expectancy, 1950–2017: a systematic analysis for the Global Burden of Disease Study 2017", *The Lancet*, Vol. 392/10159, pp. 1684-1735, [https://doi.org/10.1016/S0140-6736\(18\)31891-9](https://doi.org/10.1016/S0140-6736(18)31891-9). [2]
- National Institute on Ageing, National Institutes of Health and WHO (2011), *Global Health and Ageing*. [1]
- UNESCAP (2017), *Inequality in Asia and the Pacific in the era of the 2030 agenda for sustainable development*. [3]

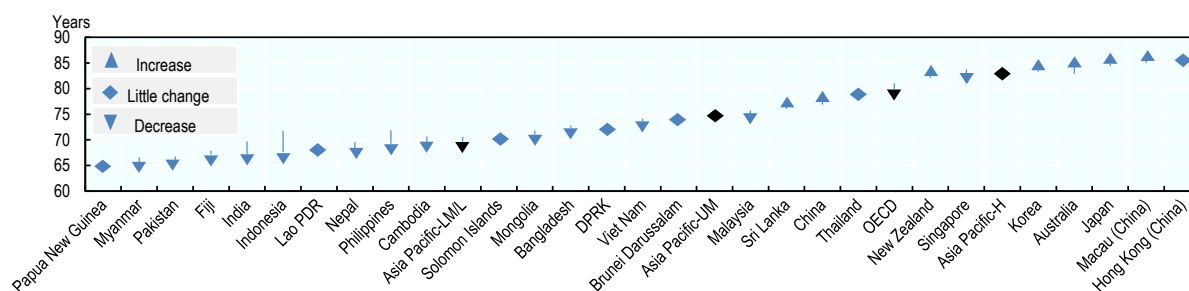
Figure 3.1. Life expectancy at birth, 2000 and 2019



Source: OECD Health Statistics 2022; United Nations World Population Prospects 2022.

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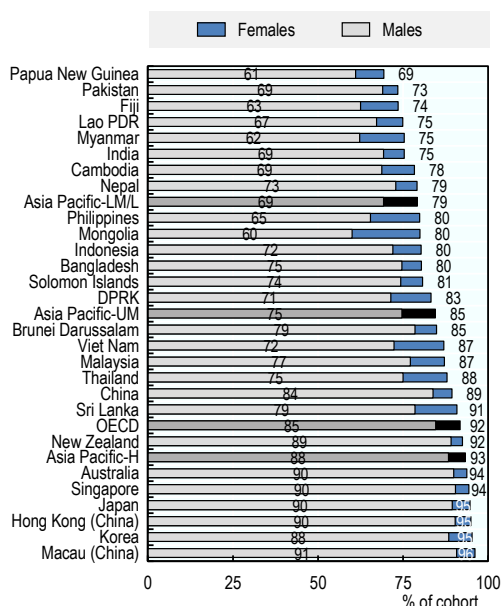
Figure 3.2. Changes in life expectancy at birth, 2019 and 2021



Source: OECD Health Statistics 2022; United Nations World Population Prospects 2022.

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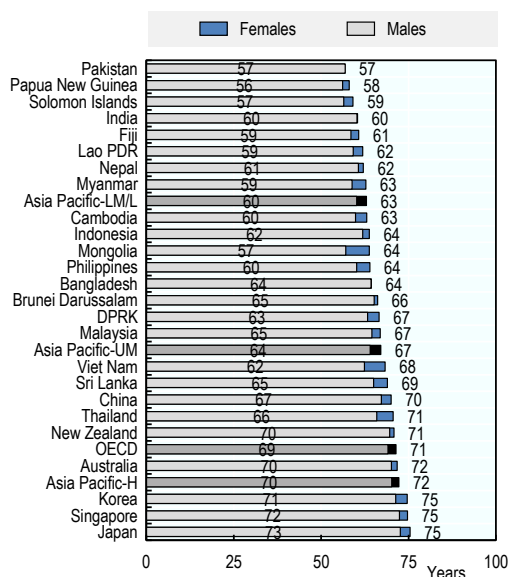
Figure 3.3. Survival to age 65 (% of cohort), by sex, 2020



Source: The World Bank World Development Indicators Online.

StatLink <https://stat.link/xhgk2s>

Figure 3.4. Healthy life expectancy at birth by sex, 2019



Source: WHO GHO 2022.

StatLink <https://stat.link/codsbx>



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