CO1.3: Low birth weight

Definitions and methodology

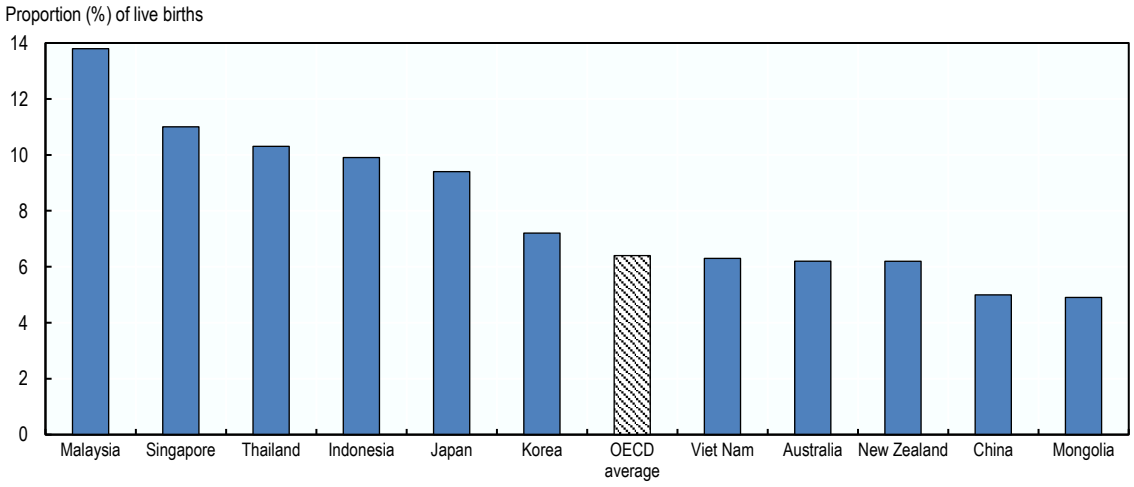
As defined by the World Health Organization (WHO), an infant is considered to have a low birth weight if their weight at birth is less than 2500 grams (5.5 pounds). This threshold is based on epidemiological observations regarding the increased risk of death to the infant and serves as a benchmark for international comparisons. The proportion of low-birth-weight infants is thus calculated as the number of live births weighing less than 2500 grams divided by the total number of live births.

Key findings

The share of live births that are recorded as low-birth-weight births varies somewhat across the covered Asia/Pacific countries (Chart CO1.3.A). In some of the covered countries, the prevalence of low-birth-weight births is comparatively low. In 2021, in China and New Zealand, for instance, only around 5% of births were low-birth-weight births – a share that is lower than the average for OECD countries (6.4%) – while in Mongolia the share was as low as 4.9% of all live births. However, in Indonesia, Malaysia, Singapore, and Thailand, low-birth-weight births are much more frequent. In Indonesia, Singapore, and Thailand about 10-11% of births are recorded as low-weight births, while in Malaysia this was as high as 14% in 2021.

Chart CO1.3.A. **Low birth weight infants as a proportion of total live births, 2021 or latest available year[a]**

Number of live births weighing less than 2500 grams as a proportion (%) of total live births



Note: Note: Data for non-OECD countries refer to 2020. The OECD average refers to the unweighted average across 38 OECD member countries with available and comparable data.

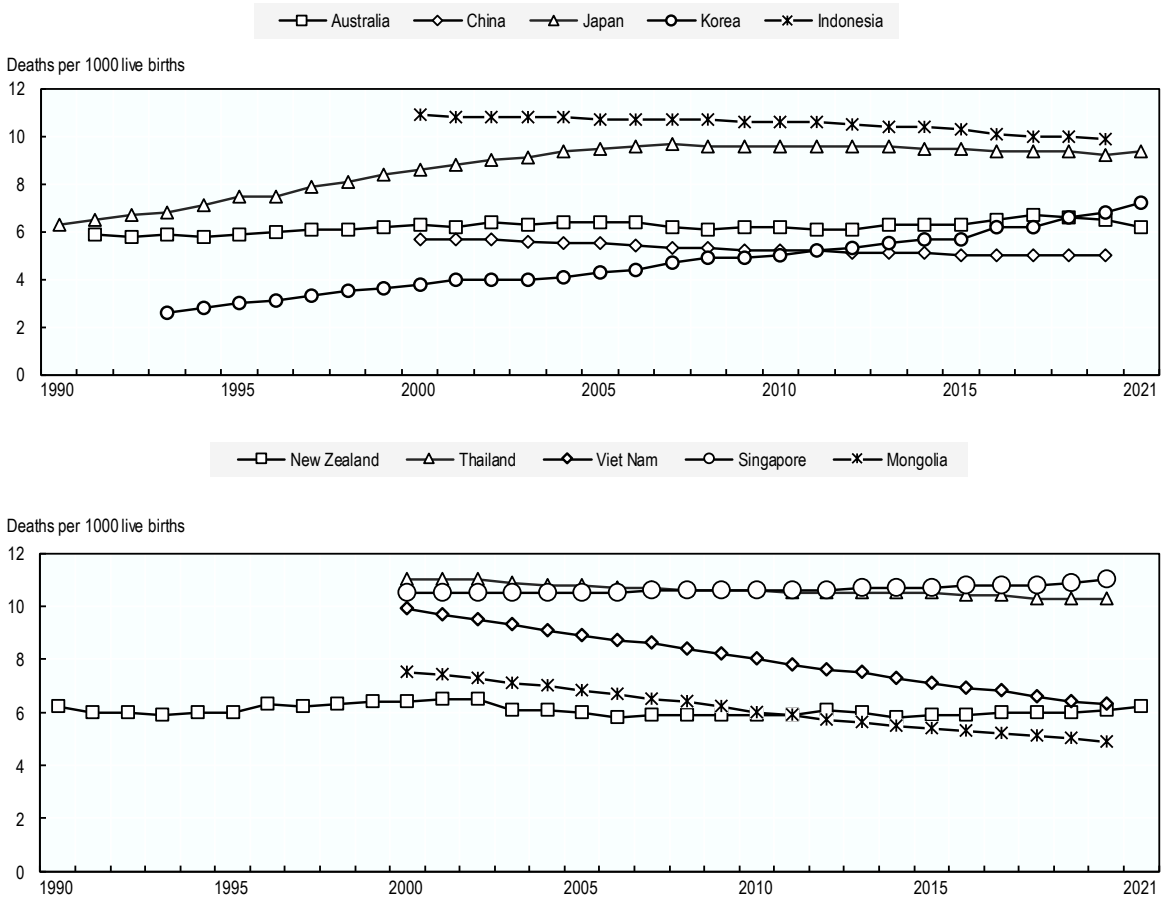
Sources: Australia, Korea, Japan, New Zealand, and OECD average: OECD Health Statistics; China, Indonesia, Singapore, Thailand, Viet Nam, Malaysia, and Mongolia: WHO Low Birthweight Indicator.

Other relevant indicators: SF2.1 Fertility rates; SF2.3 Age of mothers at childbirth and age-specific fertility; CO1.1 Infant mortality; CO1.2 Life expectancy at birth

Trend data on low-weight births suggests that the frequency of low-weight births has either remained fairly stable or increased in many Asia/Pacific countries in recent years (Chart CO1.3.B). In both Australia and New Zealand, for example, the current share of low-birth-weight births is roughly the same (within half a percentage point or so) of what it was at the start of the 1990s, while in Japan and Korea the share of births that are low-weight births has increased by three to four percentage points over roughly the same period. In Japan at least, this increase is likely related to increases in the frequency of pre-term births and increases in the number of multiple births (itself partly related to the rise of fertility treatments), among other factors (Ohmi et al., 2001; Takimoto et al., 2005). The exceptions to these trends are Mongolia and Viet Nam, where the share of births that are low-weight births has decreased over the last two decades or so by around 3-4%.

Chart CO1.3.B. **Trends in low birth weight infants as a proportion of total live births, 1990-2021**

Number of live births weighing less than 2500 grams as a proportion (%) of total live births



Sources: Australia, Korea, Japan, New Zealand, and OECD average: OECD Health Statistics; China, Indonesia, Singapore, Thailand, Viet Nam, Malaysia, and Mongolia: WHO Low Birthweight Indicator..

Comparability and data issues

The data used in this indicator come mainly from OECD Health Statistics and from the WHO Global Health Observatory. The data are originally collected from birth registers or hospital records, or household surveys. Many births may take place at home rather than in a hospital, especially in developing countries, and as a result, may not be recorded in official statistics. To the extent that a hospital birth reflects higher income and therefore better nutrition, the disproportionate absence of home births from official statistics may lead to an underestimation of the number of low-birth-weight infants. More information on the methods of data collection used by OECD Health Statistics can be found here, and more detail on the data estimated by the WHO can be found here.

Sources and further reading: Ohmi, H., K. Hirooka, A. Hata and Y. Mochizuki (2001), "Recent trend of increase in proportion of low birthweight infants in Japan", *International Journal of Epidemiology*, Vol. 30: pp. 1269-71; Takimoto, H., Yokoyama, T., Yoshiike, N., and Fukuoka, H. (2005), "Increase in low-birth-weight infants in Japan and associated risk factors, 1980–2000", *Journal of Obstetrics and Gynaecology Research*, Vol. 31, No. 4, pp. 314-322; OECD Health Statistics, http://www.oecd.org/els/health-systems/health-data.htm, OECD Child Well-Being Portal, Child Well-Being Outcomes, https://www.oecd.org/els/family/child-well-being/data/outcomes/, World Health Organization Global Health Observatory, http://www.who.int/gho/en/; OECD/WHO (2022), *Health at a Glance: Asia/Pacific 2022:*, OECD Publishing, Paris. https://doi.org/10.1787/c7467f62-en.