

CO1.3: Low birth weight

Definitions and methodology

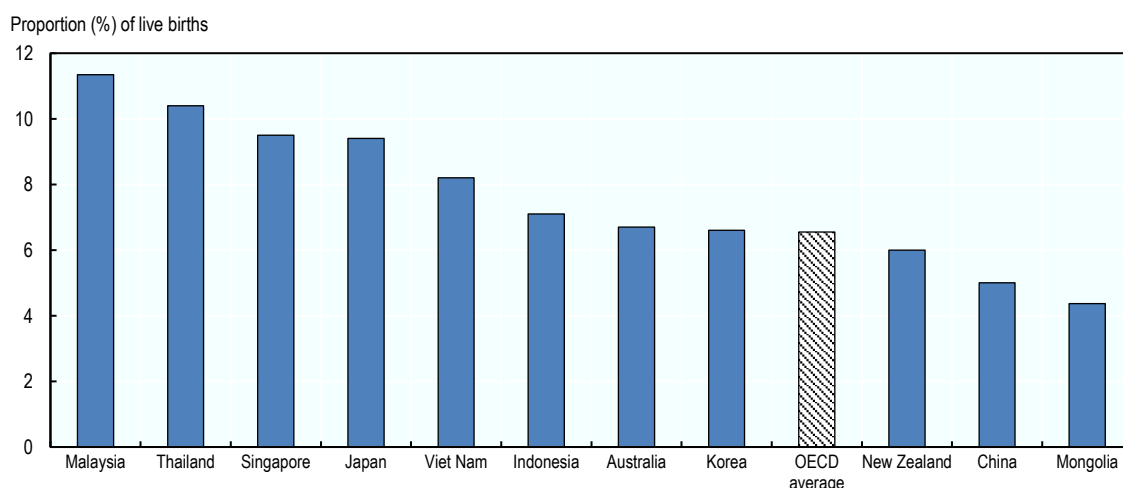
As defined by the World Health Organization (WHO), an infant is considered to have a low birth weight if their weight at birth is less than 2500 grams (5.5 pounds). This threshold is based on epidemiological observations regarding the increased risk of death to the infant and serves as a benchmark for 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 China and New Zealand, for instance, only around 5-6% of births are low-birth-weight births – a share that is lower than the average for OECD countries (6.6%) – while in Mongolia the share is as low as 4.4% of all live births. However, in Japan, Malaysia, Singapore and Thailand, low-birth-weight births are much more frequent. In Japan and Singapore about 9.5% of births are recorded as low-weight births, while in Malaysia and Thailand this rises to as high as 10-11%.

Chart CO1.3.A. **Low birth weight infants as a proportion of total live births, 2019 or latest available year^a**

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



Note: Data for Singapore refers to 2011, for China and Malaysia to 2015, for Indonesia to 2017, and for Australia and OECD average to 2018. The OECD average refers to the unweighted average across 37 OECD member countries with available and comparable data. See OECD Family Database Indicator CO1.3 (<http://www.oecd.org/els/family/database.htm>) for more detail.

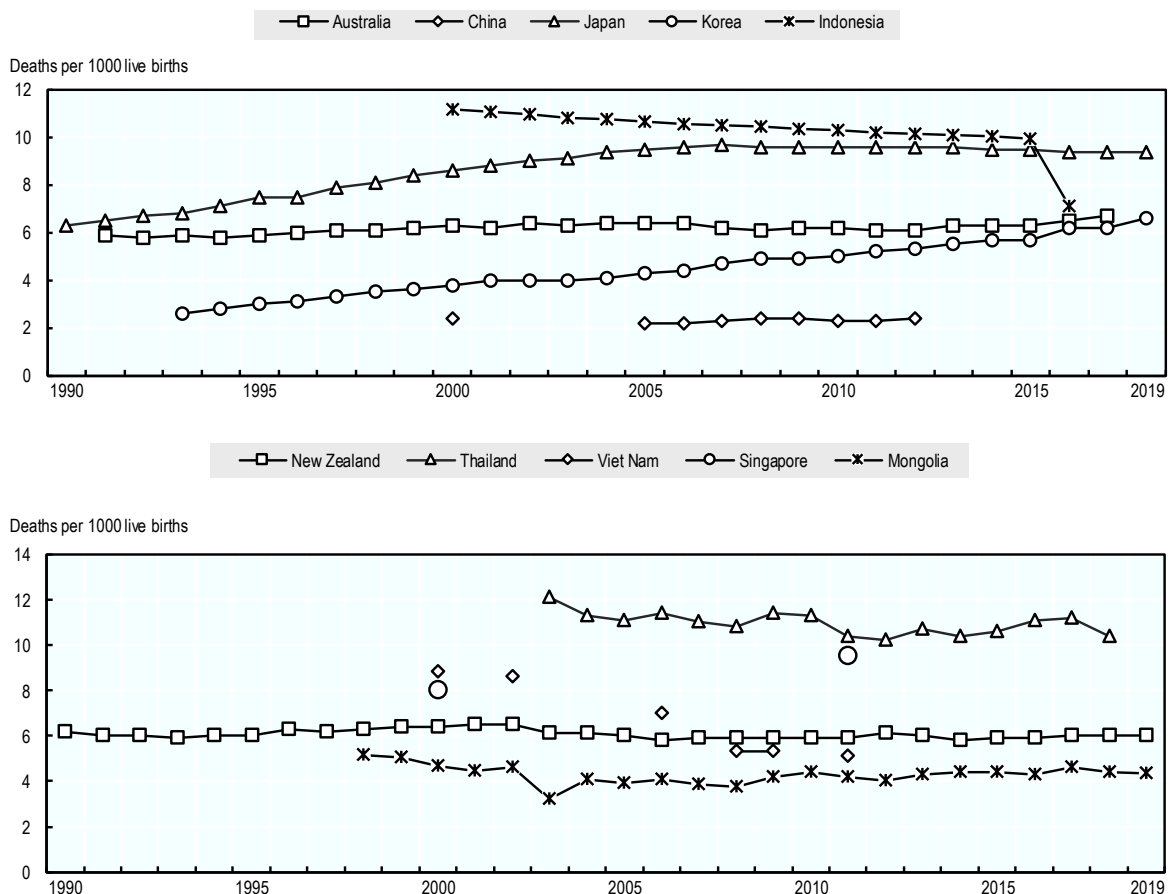
Sources: [Australia, China, Korea, Japan and New Zealand: OECD Health Statistics](#); [OECD average: OECD Family Database Indicator CO1.3](#); China : World Bank Development Indicators, retrieved on July 10, 2021. Last Updated: 06/30/2021; Singapore : World Bank Open Data; Thailand : Public Health Statistics, Ministry of Public Health; Viet Nam: Health Statistics 2019; Malaysia: World Bank Data Mongolia: Calculation using number of live births by birthweight; Statistical Yearbook 2019; Indonesia: Indonesia Demographic and Health Survey (2017).

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 is a little patchy for the covered Asia/Pacific countries but, where available, data suggest 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 Thailand, where the share of births that are low-weight births has fluctuated slightly over the last decade or so but is slightly lower in 2018 (10.4%) than it was in 2003 (12.1%), and Indonesia, where the share of births that are low-weight births has fallen by just more than 4 percentage points since the year 2000, from 11.2% to 7.1%.

Chart CO1.3.B. Trends in low birth weight infants as a proportion of total live births, 1990-2019

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



Sources: [Australia, China, Korea, Japan and New Zealand: OECD Health Statistics; OECD average: OECD Family Database Indicator CO1.3](#); China : World Bank Development Indicators, retrieved on July 10, 2021. Last Updated: 06/30/2021; Singapore : World Bank Open Data; Thailand : Public Health Statistics, Ministry of Public Health; Viet Nam: Health Statistics 2019; Malaysia: World Bank Data; Mongolia: Calculation using number of live births by birthweight, ; Statistical Yearbook 2019; Indonesia: Indonesia Demographic and Health Survey (2017).

Comparability and data issues

The data used in this indicator come mainly from OECD Health Statistics or from the World Bank Open Data Database, with data for Thailand coming from national public health statistics. The data are originally collected from birth registers or hospital records, or sometimes (as is the case for Viet Nam) from household surveys. As the World Bank note in their metadata, especially in developing countries, many births may take place at home rather than in a hospital 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 held by the World Bank 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>, World Health Organization Global Health Observatory, <http://www.who.int/gho/en/>; World Bank Open Data Database, <https://data.worldbank.org/>; OECD/WHO (2020), *Health at a Glance: Asia/Pacific 2020*; OECD Publishing, Paris. <https://doi.org/10.1787/26b007cd-en>.