

CO1.3: Low birth weight

Definitions and methodology

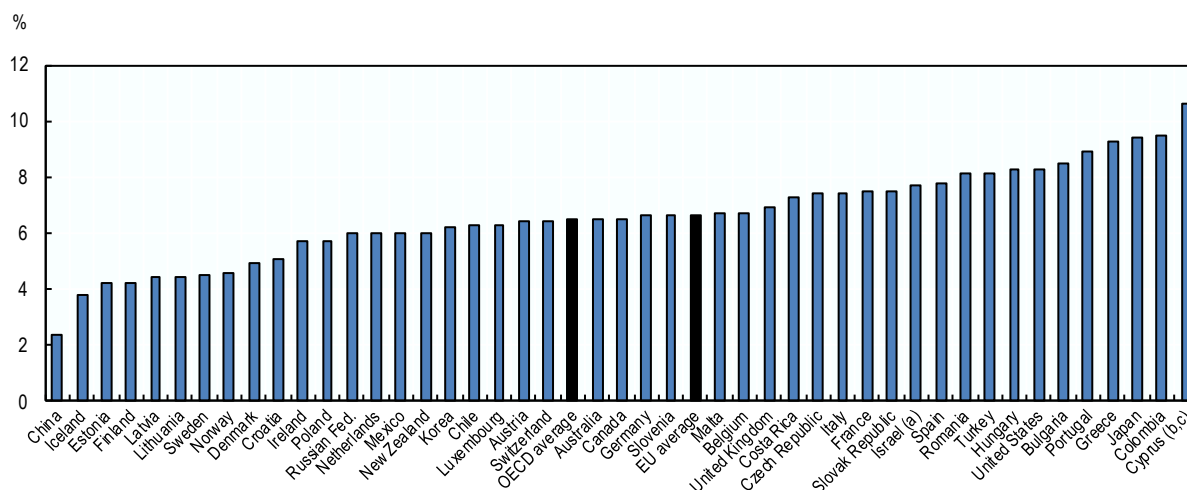
Following the World Health Organization (WHO) definition, an infant is considered to have a low birth weight if their weight at birth is less than 2500 grams (5.5 pounds). This threshold is based on epidemiological observations regarding the increased risk of death to the infant and serves as a benchmark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

Key findings

On average across OECD countries about 6.5% of live births are recorded as low-weight births, but this rate varies considerably from country to country. Rates of low-weight births are lowest in the Nordic and Baltic OECD countries (Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, Sweden), where in all cases around or less than 5% of live births are recorded as 'low weight'. By contrast, rates are far higher in Greece and Japan, where low-weight births make up around 9.4% of live births.

Chart CO1.3.A. Low birth weight infants as a proportion of total live births, 2017 or latest available

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



Notes: Data for China, Colombia and Costa Rica refer to 2012, for Germany and Malta to 2013, for Bulgaria, Croatia, Cyprus, Romania and Russian Federation to 2015, and for Australia, Belgium, Chile, France, Japan, Netherlands and Sweden to 2016. Exact definitions of low birth weight and of live births may differ slightly across countries. (For more details, see OECD Health Statistics: Definitions, Sources and Methods.)

a. 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.

b. 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";

c. 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.

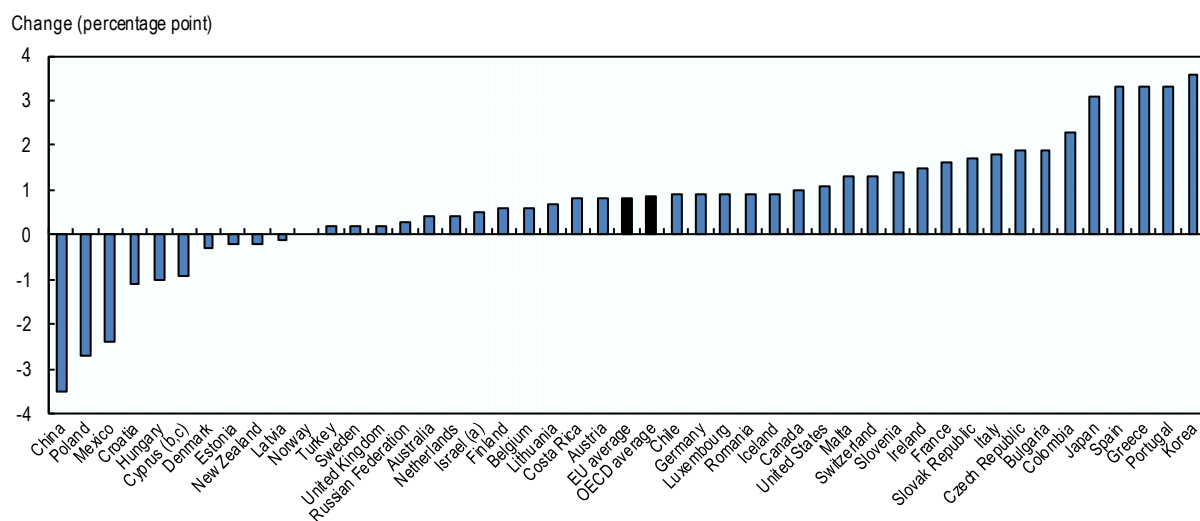
Source: [OECD Health Statistics: European Community Health Indicators \(ECHI\), accessed through the HEIDI data tool](http://OECD Health Statistics: European Community Health Indicators (ECHI), accessed through the HEIDI data tool)

Other relevant indicators: CO1.1: Infant mortality rates; CO1.5: Breastfeeding rates; CO1.6: Disease-based indicators: Prevalence of diabetes and asthma among children; and CO1.7: Obesity among children aged 10

The prevalence of low-birth-weight infants has increased in most OECD countries since 1990 (Chart CO1.3.B). The exceptions are Hungary, Mexico, and Poland, where it has decreased, and Denmark, Estonia, Latvia, New Zealand, Norway, Sweden, Turkey and the United Kingdom, where it has remained fairly stable. The reasons for the general increase in low-weight births include: (i) increases in the number of multiple births, partly as a result of the rise in fertility treatments; (ii) increases in the age of mothers at childbirth; and (iii) an increase in smoking among young women from the 1970s onwards, as for example in Japan (Ohmi, et al, 2001). Despite the increase in the number of low-birth-weight infants, medical care for new-borns has been particularly successful in reducing infant mortality (see indicator CO1.1).

Chart CO1.3.B. Changes in low birth weight infants as a proportion of total live births, 1990 to 2017 or latest available

Percentage point change in the number of live births weighing less than 2500 grams as a proportion (%) of total live births between 1990 and 2017 (or latest available year)



Note: The start year for Estonia and Malta refers to 1992, for France and Korea to 1993, for Mexico to 1995, for Turkey to 1998, for China to 1999 and for Cyprus to 2007. The end year for China, Colombia and Costa Rica refer to 2012, for Germany and Malta to 2013, for Bulgaria, Croatia, Cyprus, Romania and Russian Federation to 2015, and for Australia, Belgium, Chile, France, Japan, Netherlands and Sweden to 2016. Exact definitions of low birth weight and of live births may differ slightly across countries. (For more details, see OECD Health Statistics: Definitions, Sources and Methods.)

a. See note a to Chart CO1.3.A

Source: [OECD Health Statistics: European Community Health Indicators \(ECHI\)](http://oe.cd/fdb), accessed through the HEIDI data tool

Comparability and data issues

The majority of the data comes from birth registers, except for the Netherlands, where data is taken from a national health survey (for more details see [OECD Health Statistics: Definitions, Sources and Methods](http://oe.cd/fdb)).

National population data mask differences in outcomes across different population groups. Comparisons of different population groups within countries suggest that the proportion of low birth weight infants might also be influenced by differences in education, income and associated living conditions. In the United States there are marked differences between ethnic groups in the proportion of low birth weight infant. Large differences have also been observed, for example, when considering the indigenous and non-indigenous populations in Australia and Mexico.

Sources and further reading:

OECD Health Statistics: www.oecd.org/health/healthdata

OECD Health at a Glance 2019;

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*, 30: pp. 1269-71.