

CO1.3: Low birth weight

Definitions and methodology

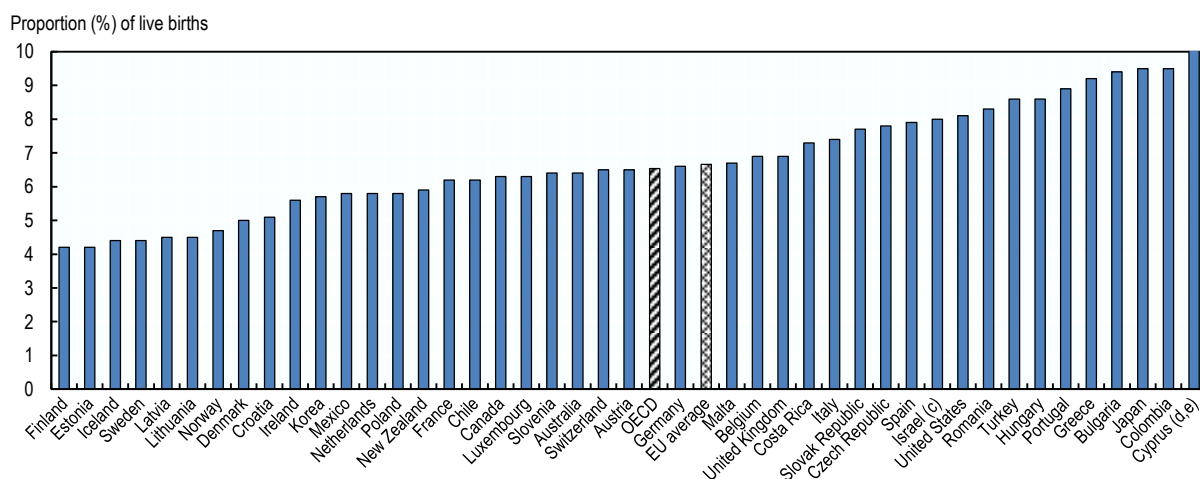
As defined by the World Health Organization (WHO), an infant is considered to have a low birth weight if their weight at birth is less than 2 500 grams (5.5 pounds). This threshold is based on epidemiological observations regarding the increased risk of death to the infant and serves as a benchmark for 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, 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 9.0-9.5% of live births.

Chart CO1.3.A. Low birth weight infants as a proportion of total live births, 2015 or latest available year^a

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



a) Data for Cyprus refer to 2007, Colombia and Costa Rica refer to 2011, the Netherlands refer to 2012, Canada, Germany, and Malta to 2013, and Lithuania, Croatia, France, Chile, Australia, Belgium, Romania, Bulgaria, Japan to 2014.

b) [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](#)

c) 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.

d) 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";

e) 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.

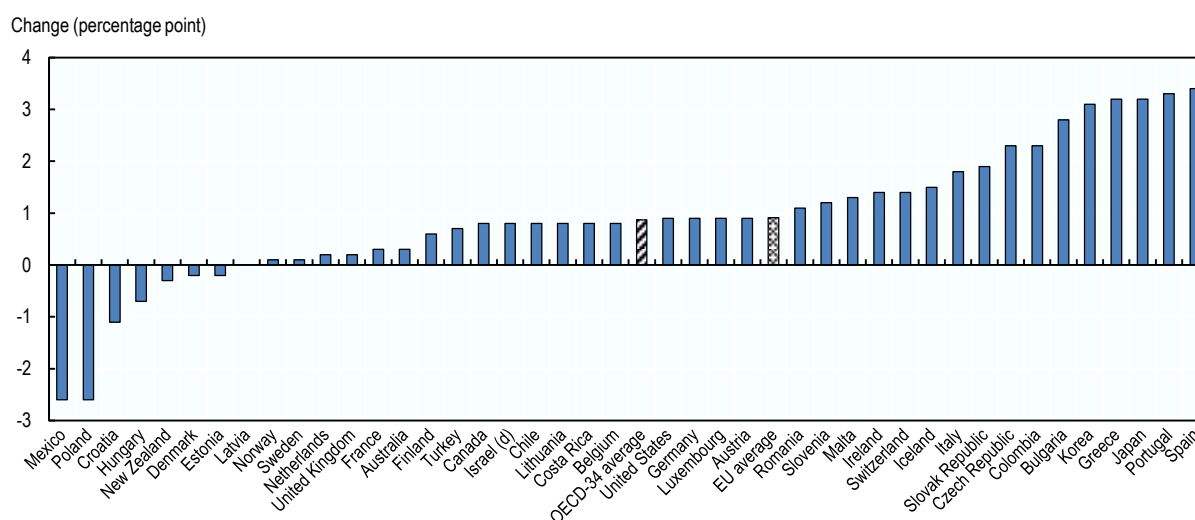
Source: [OECD Health Statistics: European Community Health Indicators \(ECHI\), accessed through the HEIDI data tool](#)

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), with the exception of Hungary, Mexico, Poland and New Zealand where it has decreased, and Latvia, Norway and Sweden, where it has remained fairly stable. The reasons for this increase include: (i) increase in the number of multiple births, partly as a result of the rise in fertility treatments; (ii) the increased 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^a to 2015 or latest available year^b

Percentage point change in the number of live births weighing less than 2500 grams^c as a proportion (%) of total live births between 1990 and 2015 (or latest available year)



a) Data for Malta refer to 1989, for Estonia to 1992, for France and Korea to 1993, for Mexico to 1995, for Turkey to 1998.

b) Data for Cyprus refer to 2007, Colombia and Costa Rica refer to 2011, the Netherlands refer to 2012, Canada, Germany, and Malta to 2013, and Lithuania, Croatia, France, Chile, Australia, Belgium, Romania, Bulgaria, Japan to 2014.

c) see note b) to Chart CO1.3.A

d) see note c) to Chart CO1.3.A

Source: [OECD Health Statistics: European Community Health Indicators \(ECHI\), 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](#)).

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 Data: www.oecd.org/health/healthdata, *OECD Health at a Glance 2017*; 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.