Infant health

Infant mortality, the rate at which babies and children of less than one year of age die, is the most fundamental measure of infant health. In OECD countries, around two-thirds of the deaths that occur during the first year of life are neonatal deaths (i.e. during the first four weeks). Birth defects, prematurity and other conditions arising during pregnancy are the main factors contributing to neonatal mortality in developed countries. For deaths beyond a month (post-neonatal mortality), there tends to be a greater range of causes – the most common being SIDS (sudden infant death syndrome), birth defects, infections and accidents.

In most OECD countries infant mortality is low and there is little difference in rates (Figure 3.13). In 2015, the average in OECD countries was less than four deaths per 1 000 live births. Turkey and Mexico still have comparatively high infant mortality at above ten deaths per 1 000 live births.

In some large partner countries (India, South Africa and Indonesia), infant mortality remains above 20 deaths per 1 000 live births, although in these three countries infant mortality has reduced considerably in recent decades. Indeed, infant mortality has fallen significantly in all OECD and partner countries, with reductions since 1990 particularly large in Slovenia, Estonia, Poland, Korea and China.

Despite this progress in reduced infant mortality, increasing numbers of low birth weight infants is a concern in some OECD countries. In a number of countries, this has contributed to a levelling-off of the downward trend in infant mortality over the past few years. On average, one in 15 babies born in the OECD (or 6.5% of all births) weighed less than 2 500 grams at birth in 2015 (Figure 3.14). In almost all OECD countries, the proportion of low birth weight infants has increased over the past two decades, mainly due to increases in pre-term births (Euro-Peristat, 2013). Korea, Spain, Portugal, Greece and Japan have seen large increases (50% or more) of low birth weight babies since 1990, although the proportions remain below the OECD average in Korea.

Low birth weight can occur as a result of restricted foetal growth or from pre-term birth. Low birth weight infants have a greater risk of poor health or death, require a longer period of hospitalisation after birth, and are more likely to develop significant disabilities. Risk factors for low birth weight include maternal smoking, excessive alcohol consumption, poor nutrition, low body mass index, lower socio-economic status, having had in-vitro fertilisation treatment and multiple births, and a higher maternal age.

The increased use of delivery management techniques such as induction of labour and caesarean delivery, which have increased the survival rates of low birth weight babies, may also explain the rise in low birth weight infants. Despite the widespread use of a 2 500 grams limit for low birth weight, physiological variations in size occur across different countries and population groups, and these need to be taken into account when interpreting differences (Euro-Peristat, 2013).

Comparisons of different population groups within countries indicate that both infant mortality and the proportion of low birth weight infants may be influenced by differences in education level, income and associated living conditions. For example, in the United States, black women are more likely to give birth to low birth weight infants, with an infant mortality more than double that for white women (NCHS, 2015). Similar differences have also been observed among the indigenous and non-indigenous populations in Australia, Mexico and New Zealand, reflecting the disadvantaged living conditions of many of these mothers.

Definition and comparability

The infant mortality rate is the number of deaths of children under one year of age, expressed per 1 000 live births. Some of the international variation in infant mortality rates is related to variations in registering practices for very premature infants. While some countries register all live births including very small babies with low odds of survival, several countries apply a minimum threshold of a gestation period of 22 weeks (or a birth weight threshold of 500 g) for babies to be registered as live births (Euro-Peristat, 2013). To remove this data comparability limitation, the data presented in this section are based on a minimum threshold of 22 weeks of gestation period (or 500 grams birth weight) for a majority of OECD countries that have provided these data. However, the data for some countries (e.g., Canada and Australia) continue to be based on all registered live births, resulting in some over-estimation.

Low birth weight is defined by the World Health Organization as the weight of an infant at birth of less than 2 500 grams (5.5 pounds) irrespective of the gestational age of the infant. This threshold is based on epidemiological observations regarding the increased risk of death to the infant and serves for international comparative health statistics. The number of low birth weight births is expressed as a percentage of total live births.

References


NCHS – National Centre for Health Statistics (2016), Health, United States, 2015, with Special Feature on Racial and Ethnic Health Disparities, NCHS, Hyattsville, United States.
### 3.13. Infant mortality, 2015 and change 1990-2015 (or nearest year)

![Graph showing infant mortality rates](image)


[StatLink](http://dx.doi.org/10.1787/888933602462)

### 3.14. Low birth weight infants, 2015 and change 1990-2015 (or nearest year)

![Graph showing low birth weight rates](image)


[StatLink](http://dx.doi.org/10.1787/888933602481)