

1. HEALTH STATUS

1.8. Infant mortality

Infant mortality, the rate at which babies of less than one year of age die, reflects the effect of economic and social conditions on the health of mothers and newborns as well as the effectiveness of health systems.

In 2007, infant mortality rates in OECD countries ranged from a low of two to three deaths per 1 000 live births in Japan, Nordic countries (with the exception of Denmark), Ireland and Luxembourg, up to a high of 16 and 21 deaths per 1 000 live births in Mexico and Turkey respectively (Figure 1.8.1). Infant mortality rates were also relatively high (six or more deaths per 1 000 live births) in the United States and in some eastern and central European countries. Excluding Turkey and Mexico, the average across the remaining 28 OECD countries was 3.9 in 2007.

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 principal factors contributing to neonatal mortality in developed countries. With an increasing number of women deferring childbearing and the rise in multiple births linked with fertility treatments, the number of pre-term births has tended to increase (see Indicator 1.9 “Infant health: low birth weight”). In a number of higher-income countries, this has contributed to a leveling-off of the downward trend in infant mortality rates over the past few years. The increase in the birth of very small infants was the main reason for the first increase since the 1950s in infant mortality rates in the United States between 2001 and 2002. 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.

All OECD countries have achieved remarkable progress in reducing infant mortality rates from the levels of 1970, when the average was approaching 30 deaths per 1 000 live births (Figure 1.8.3). This equates to a cumulative reduction of over 80% since 1970. Portugal has seen its infant mortality rate reduced by more than 7% per year on average since 1970, going from the country with the highest rate in Europe to an infant mortality rate among the lowest in the OECD in 2007 (Figure 1.8.2). Large reductions in infant mortality rates

have also been observed in Korea and Luxembourg. On the other hand, the reduction in infant mortality rates has been slower in the Netherlands and the United States. Infant mortality rates in the United States used to be well below the OECD average (and median), but they are now above average (Figure 1.8.3).

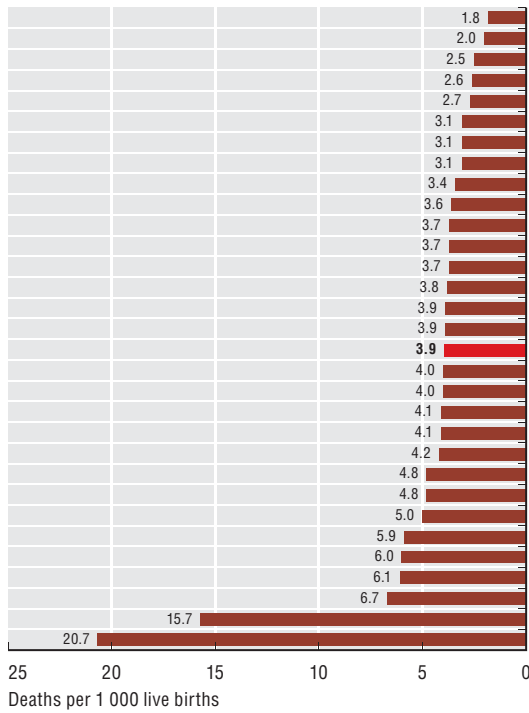
Numerous studies have used infant mortality rates as a health outcome to examine the effect of a variety of medical and non-medical determinants of health (e.g. Joumard *et al.*, 2008). Although most analyses show an overall negative relationship between infant mortality and health spending, the fact that some countries with a high level of health expenditure do not necessarily exhibit low levels of infant mortality, has led some researchers to conclude that more health spending is not necessarily required to obtain better results (Retzlaff-Roberts *et al.*, 2004). A body of research also suggests that many factors beyond the quality and efficiency of the health system, such as income inequality, the social environment, and individual lifestyles and attitudes, influence infant mortality rates (Kiely *et al.*, 1995).

Definition and deviations

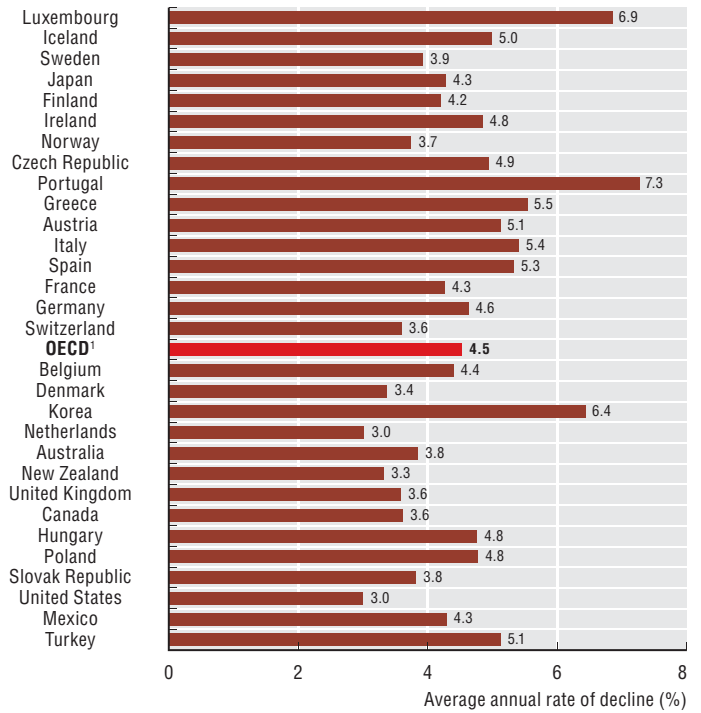
The infant mortality rate is the number of deaths of children under one year of age in a given year, expressed per 1 000 live births. Neonatal mortality refers to the death of children under 28 days.

Some of the international variation in infant and neonatal mortality rates may be due to variations among countries in registering practices of premature infants. Most countries have no gestational age or weight limits for mortality registration. Minimal limits exist for Norway (to be counted as a death following a live birth, the gestational age must exceed 12 weeks) and in the Czech Republic, France, the Netherlands and Poland a minimum gestational age of 22 weeks and/or a weight threshold of 500 g is applied.

1.8.1 Infant mortality rates, 2007 (or latest year available)

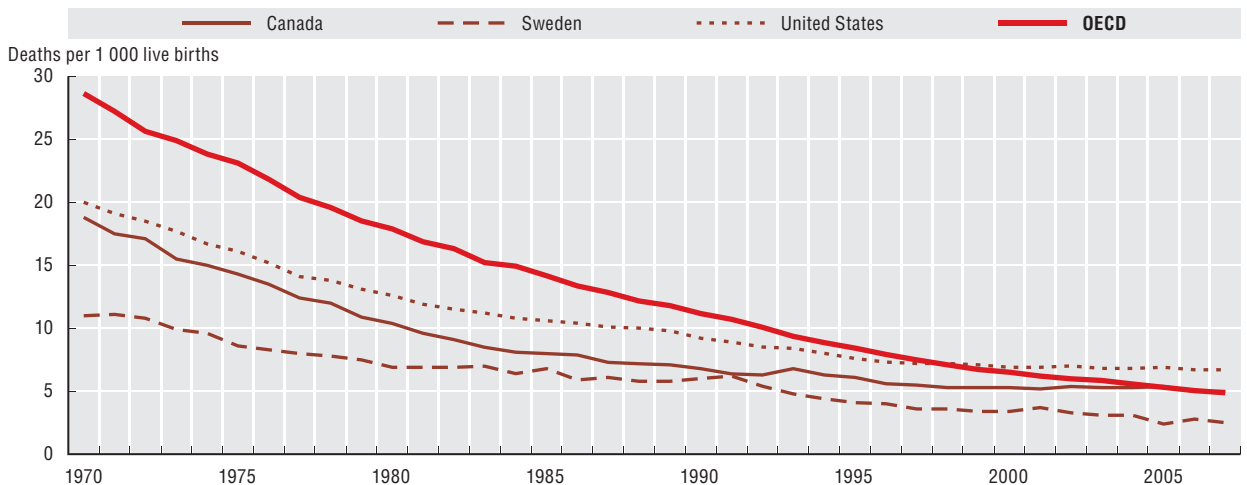


1.8.2 Decline in infant mortality rates, 1970-2007 (or nearest year)



1. Because of their high rates, Mexico and Turkey are excluded from the OECD average.

1.8.3 Infant mortality rates, selected OECD countries, 1970-2007



Source: OECD Health Data 2009.

StatLink <http://dx.doi.org/10.1787/717581042734>



From:
Health at a Glance 2009
OECD Indicators

Access the complete publication at:
https://doi.org/10.1787/health_glance-2009-en

Please cite this chapter as:

OECD (2009), "Infant mortality", in *Health at a Glance 2009: OECD Indicators*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/health_glance-2009-10-en

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