

CO1: Infant mortality

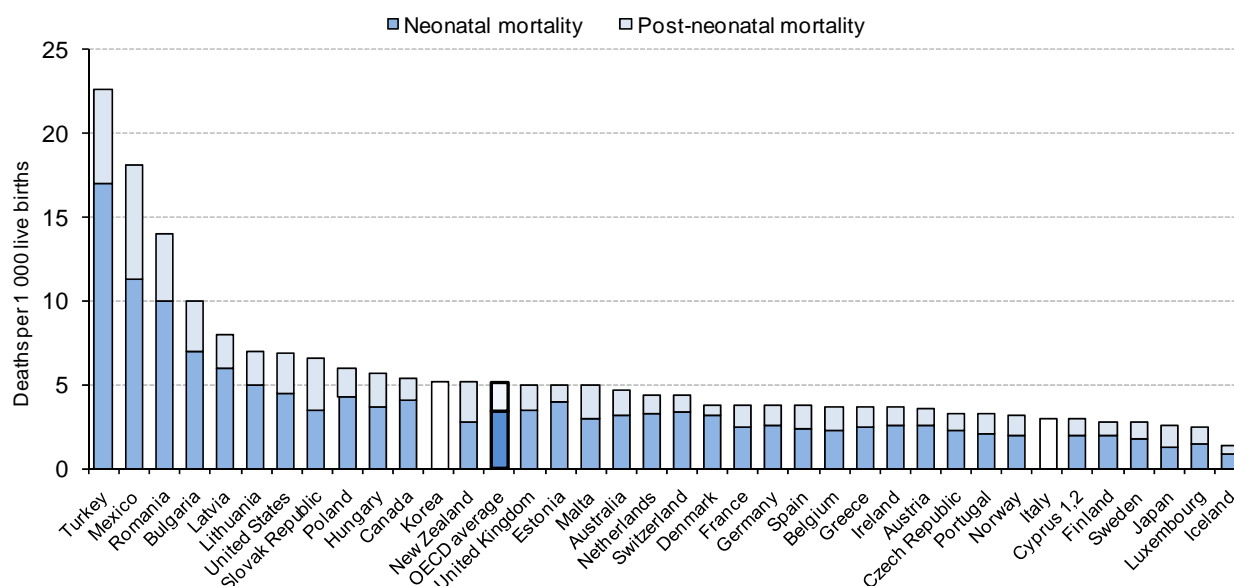
Definitions and methodology

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 not yet 28 days. Post-neonatal mortality refers to the number of infant deaths occurring between 28 days and 11 months of life (inclusive). Data on infant mortality are taken from the OECD Health data and WHO world health statistics.

Key findings

In 2006, infant mortality rates in OECD countries ranged from a low of 1 to 3 deaths per 1 000 live births in Japan, Nordic countries (with the exception of Denmark) and Luxembourg, up to a high of 18 and 23 deaths per 1 000 live births in Mexico and Turkey respectively (Chart CO1.1). Infant mortality rates were also relatively high (more than 6 deaths per 1 000 live births) in the United States and in some Eastern and Central European countries.

Chart CO1.1: Infant mortality rates, 2006*



Source: OECD Health Data 2008 and WHO world health statistics 2008.

*Data refer to 2002 for Korea and 2005 for Belgium, Canada and the US. Data for Italy and Korea cannot be disaggregated into neonatal and post-neonatal.

1) 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 ».

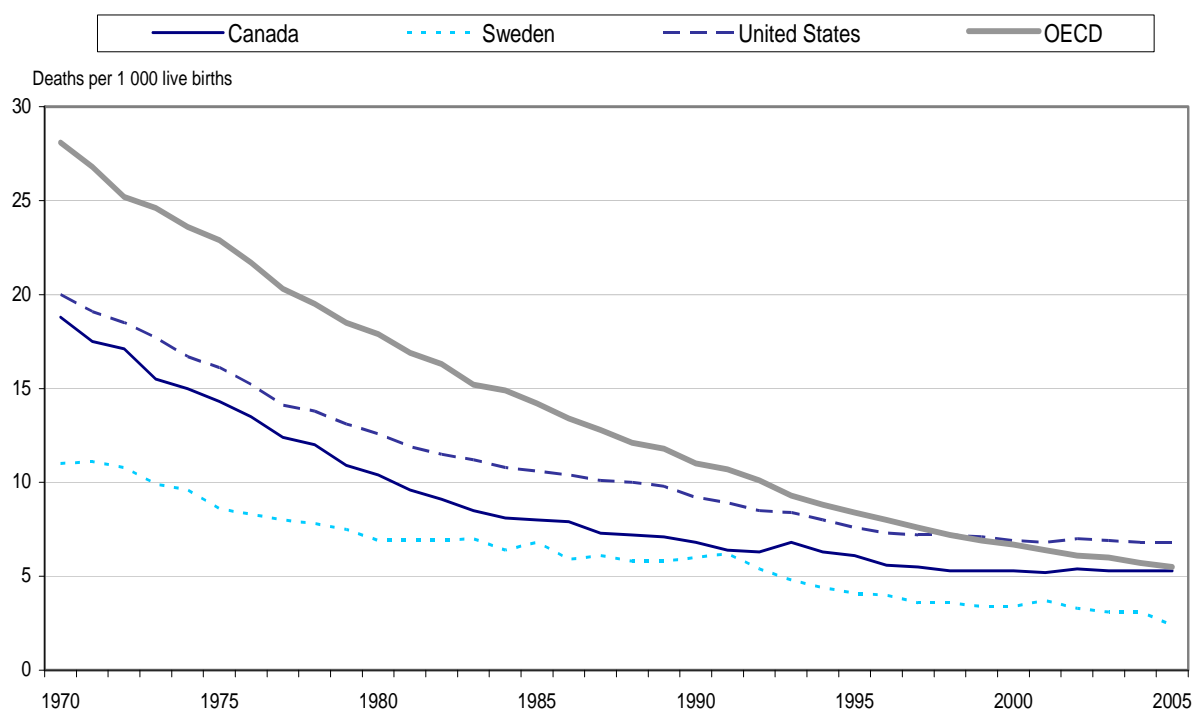
2) Footnote by all the European Union Member States of the OECD and the European Commission: The Republic of Cyprus is recognized by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Other relevant indicators: CO2: Early childhood indicators: Low birth weight and child immunisation; CO3: Breastfeeding rates; CO4: Disease-based indicators: prevalence of diabetes and asthma among children; and, CO5: Obesity among children aged 10.

More than two-thirds of the deaths that occur during the first year of life are neonatal deaths (Chart CO1.1). Congenital malformations, pre-maturity and other conditions arising during pregnancy are the principal 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.

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 CO2a: Low birth weight) leading to a rising number in babies born with low birth weights. As a result, there is an increased risk of neonatal deaths which has contributed in some countries to a leveling-off of the downward trend in infant mortality rates. Indeed, the increase in the birth of very small infants was cited as the main reason for the first increase since the 1950s in infant mortality rates in the United States between 2001 and 2002 (see Chart CO1.2).

Chart CO1.2: Infant mortality rates, selected countries, 1970 - 2005



Source: OECD Health Data 2007

All OECD countries have made remarkable progress in reducing infant mortality over the last 35 years. On average across the OECD, the infant mortality rate was just below 30 deaths per 1 000 live births in 1970, which fell to just over 5 deaths per 1 000 live births in 2005 (Chart CO1.2). Chart CO1.3 shows the decline equates to a cumulative reduction of over 80% since 1970, and in 2006 infant mortality rates were less than 10% of what they were in 1970 in Greece, Iceland, Luxembourg and Portugal.

Table CO1.1: Infant Mortality rates, 1970 – 2006*

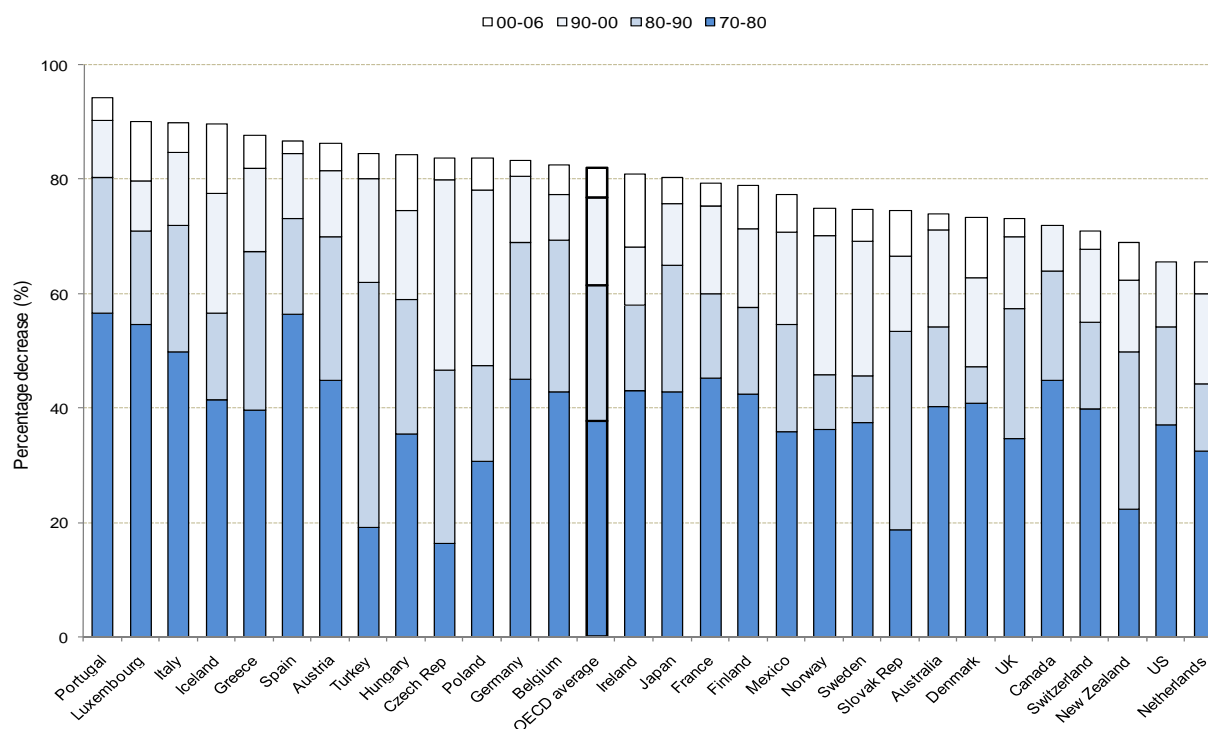
Countries	1970	1980	1990	2000	2006
Australia	17.9	10.7	8.2	5.2	4.7
Austria	25.9	14.3	7.8	4.8	3.6
Belgium	21.1	12.1	6.5	4.8	3.7
Canada	18.8	10.4	6.8	5.3	5.4
Czech Republic	20.2	16.9	10.8	4.1	3.3
Denmark	14.2	8.4	7.5	5.3	3.8
Finland	13.2	7.6	5.6	3.8	2.8
France	18.2	10.0	7.3	4.5	3.8
Germany	22.5	12.4	7.0	4.4	3.8
Greece	29.6	17.9	9.7	5.4	3.7
Hungary	35.9	23.2	14.8	9.2	5.7
Iceland	13.3	7.8	5.8	3.0	1.4
Ireland	19.5	11.1	8.2	6.2	3.7
Italy	29.0	14.6	8.2	4.5	3
Japan	13.1	7.5	4.6	3.2	2.6
Korea	45.0	-	-	-	5.2
Luxembourg	25.0	11.4	7.3	5.1	2.5
Mexico	79.4	51.0	36.2	23.3	18.1
Netherlands	12.7	8.6	7.1	5.1	4.4
New Zealand	16.7	13.0	8.4	6.3	5.2
Norway	12.7	8.1	6.9	3.8	3.2
Poland	36.7	25.5	19.3	8.1	6.0
Portugal	55.5	24.2	11.0	5.5	3.3
Slovak Republic	25.7	20.9	12.0	8.6	6.6
Spain	28.1	12.3	7.6	4.4	3.8
Sweden	11.0	6.9	6.0	3.4	2.8
Switzerland	15.1	9.1	6.8	4.9	4.4
Turkey	145.0	117.5	55.4	28.9	22.6
United Kingdom	18.5	12.1	7.9	5.6	5.0
United States	20.0	12.6	9.2	6.9	6.9
OECD average	28.7	17.9	11.0	6.7	5.2

Source: OECD Health Data 2008.

Notes: *Data refer to 2002 for Korea and 2005 for Belgium, Canada and the US.

Chart CO1.3 shows that the largest reductions in infant mortality rates in OECD countries took place between 1970 and 1980, when the number of infant deaths decreased by 40 % on average. Since 1980, infant deaths have continued to decline but at a decreasing rate, except for the Czech Republic, the Slovak Republic and Turkey, where the largest reductions occurred between 1980 and 1990.

Chart CO1.3: Decline in infant mortality rates, 1970 to 2006



Source: OECD Health Data 2008

Comparability and data issues

Data on infant mortality has been taken from two sources: the OECD Health Data for OCED countries and the WHO world health statistics for non-OECD countries. The year of reference is 2006, except for Korea (2002), Belgium, Canada and the US (2005); WHO neo-natal mortality rates refer to 2004 and post-neonatal mortality rates to 2006.

Some of the international variation in infant and neonatal mortality rates may be due to variations among countries in the registration of premature deaths of infants (whether they are reported as live births or fetal deaths). In several countries, such as in the United States, Canada, Japan and the Nordic countries, very premature babies with relatively low odds of survival are registered as live births. This increases mortality rates compared with other countries that register them as foetal deaths instead of live births.

Sources and further reading: OECD Health database: www.oecd.org/health/healthdata and OECD Health at a Glance 2008.