

CO1.1: Infant and child mortality

Definitions and methodology

This indicator presents information on infant mortality through three main measures:

- i. The *infant mortality rate*, defined as the number of deaths of children aged less than one in a given year per 1000 live births.
- ii. The *neonatal mortality rate*, defined as the number of deaths of children aged less than 28 days in a given year per 1000 live births.
- iii. The *post-neonatal mortality rate*, defined as the number of deaths of children aged between 28 days and one year in a given year per 1000 live births.

The infant mortality rate is equivalent to the sum of the neonatal and post-neonatal mortality rates. Data come either from OECD Health Statistics or from the UN Inter-agency Group for Child Mortality Estimation.

Information on child mortality is presented through one measure:

- i. The *child mortality rate* (sometimes also called the under-five mortality rate), defined as the probability of a child born in a specific year dying before reaching the age of five when subject to current age-specific mortality rates. This probability is expressed as a rate per 1000 live births. Data for all countries come from the UN Inter-agency Group for Child Mortality Estimation.

Key findings

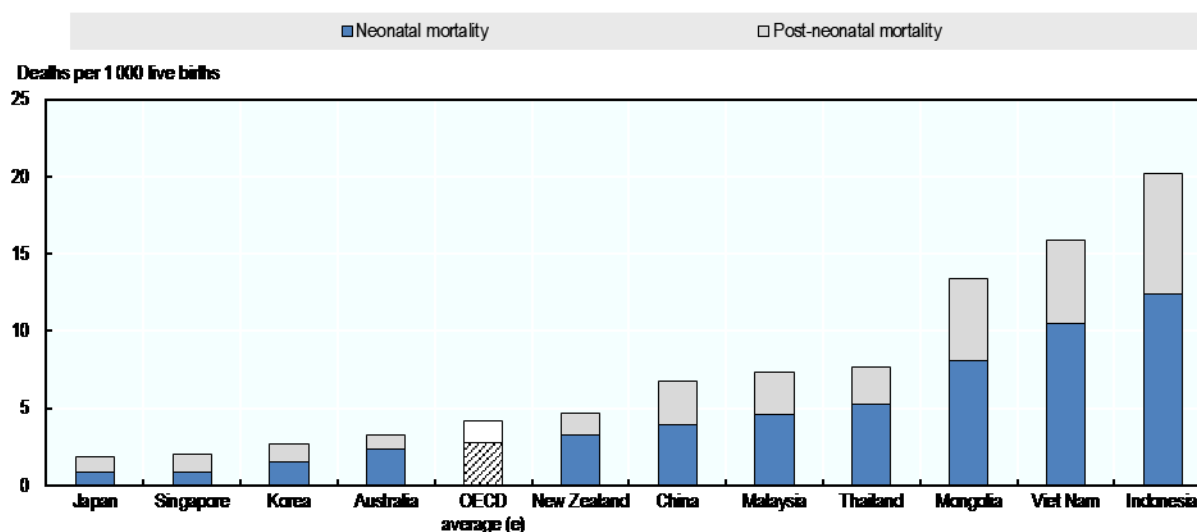
Infant mortality rates are generally low across the covered Asia/Pacific countries, though there is some variation from country to country (Chart CO1.1.A). In most of the covered Asia/Pacific countries infant mortality rates stand at 8 deaths per 1000 live births or less, with the lowest rates, at around 2 deaths per 1000 live births, in Japan and Singapore. The highest infant mortality rates, at above 15 deaths per 1000 live births, are in Viet Nam (15.9 deaths per 1000 live births) and Indonesia (20.2 deaths per 1000 live births).

In most of the covered Asia/Pacific countries, somewhere around one-half to two-thirds of deaths that occur during the first year of life are neonatal deaths, that is, deaths that occur with the first 28 days after birth (Chart CO1.1.A). The share of neonatal deaths among all infant deaths is highest in Australia, where roughly 73% of infant deaths are neonatal deaths, and is lowest in Singapore, where about 43% of infant deaths are neonatal deaths.

<i>Other relevant indicators:</i> SF2.1 Fertility rates; CO1.2 Life expectancy at birth; CO1.3 Low birth weight; CO1.4 Vaccination rates;

Chart CO1.1.A. **Infant mortality^a, neonatal mortality^b, and post-neonatal infant mortality^c rates, 2019 or latest available^d**

Deaths per 1000 live births



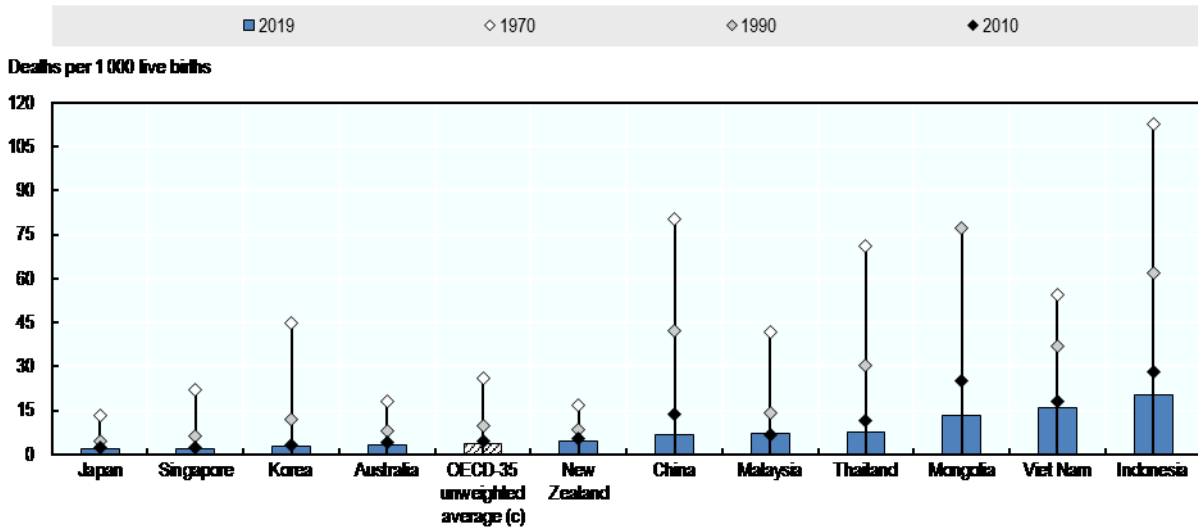
- a) Deaths of children aged less than one year per 1000 live births
- b) Deaths of children aged less than 28 days old per 1000 live births
- c) Deaths of children aged between 28 days and one year of age per 1000 live births
- d) Data for New Zealand refer to 2017.
- e) The OECD average refers to the unweighted average across OECD member countries with available and comparable data. See OECD Family Database Indicator CO1.1 (<http://www.oecd.org/els/family/database.htm>) for more detail.

Sources: [Australia, China, Korea, Indonesia, Japan and New Zealand: OECD Health Statistics](#); [OECD average: OECD Family Database Indicator CO1.1](#); [Malaysia, Singapore, Thailand and Viet Nam: UN Inter-agency Group for Child Mortality Estimation](#).

All covered Asia/Pacific countries have made progress in reducing infant mortality over recent decades (Chart CO1.1.B). In absolute terms, China, Indonesia and Mongolia have made the greatest progress: in China and Thailand, current infant mortality rates are more than 60-deaths-per-1000-live-births lower than they were in 1970; in Indonesia, they are over 90-deaths-per-1000-live-births lower than in 1970. However, many of the other remaining covered Asia/Pacific countries have also seen large declines, too. Infant mortality rates have fallen by at least two-thirds since 1970 in all of the covered countries, with the current rates in China, Korea and Singapore less than one-tenth of what they were in 1970.

Child mortality rates are usually a little higher than infant mortality rates (Chart CO1.1.C). Among the covered Asia/Pacific countries, the highest child mortality rates are in Viet Nam (20 deaths per 1000 live births) and Indonesia (24 deaths per 1000 live births), and the lowest in Japan and Singapore (under 3 deaths per 1000 live births). Just as for infant mortality, child mortality rates have fallen sharply in recent decades. The largest declines can again be found in China, Indonesia and Thailand (decreases of 141-, 103- and 90-deaths-per-1000-live-births since 1970, respectively), but in all the covered Asia/Pacific countries child mortality rates have fallen by at least three-quarters since 1970.

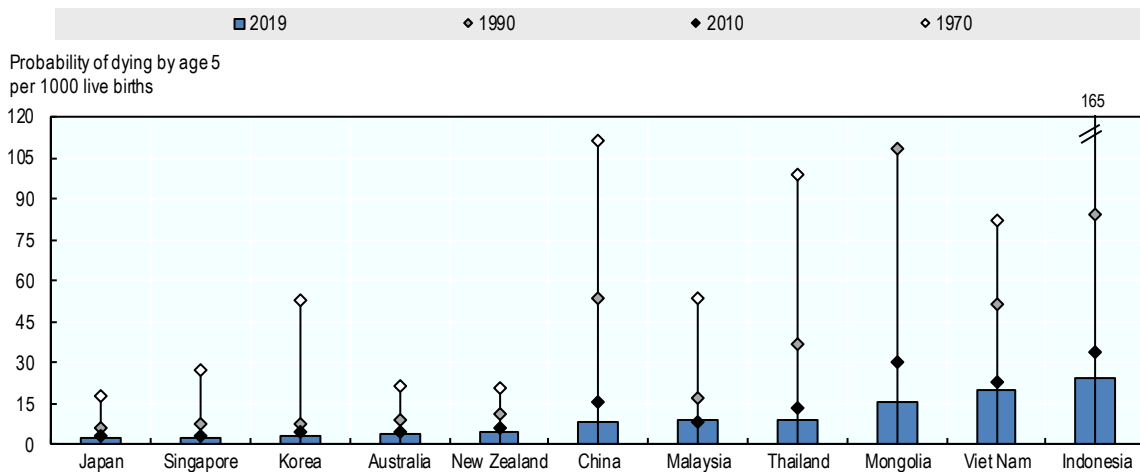
Chart CO1.1.B. **Trends in infant mortality rates, 1970, 1990^a, 2010 and 2019^b**
 Deaths per 1000 live births



a) Data for Korea refer to 1989.
 b) Data for New Zealand refer to 2017.
 b) The OECD-35 average refers to the unweighted average across the 35 OECD member countries with available and comparable data. See OECD Family Database Indicator CO1.1 (<http://www.oecd.org/els/family/database.htm>) for more detail.

Sources: [Australia, China, Indonesia, Korea, Japan and New Zealand: OECD Health Statistics](#); [OECD average: OECD Family Database Indicator CO1.1](#); [Malaysia, Singapore, Thailand and Viet Nam: UN Inter-agency Group for Child Mortality Estimation](#)

Chart CO1.1.C. **Child mortality rates, 1970, 1990, 2010 and 2019**
 Probability of dying by age 5 per 1000 live births



Sources: [All countries: UN Inter-agency Group for Child Mortality Estimation](#)

Comparability and data issues

Data on infant and child mortality come either from OECD Health Statistics, who gather data from national statistical offices, or from the UN Inter-agency Group for Child Mortality Estimation, a collaboration between UNICEF, the United Nations Population Division (UNPD), the World Health Organization (WHO), and the World Bank. Original data sources differ across countries. Figures for some countries (e.g. Australia, Japan, New Zealand and Singapore) are based on records from vital registration systems – the preferred source, since they are based on actual records of events as they occur and they cover entire populations. Figures for other countries (e.g. China, Korea, Thailand and Viet Nam) are based on data from censuses or surveys, or from a mixture of data from vital registration systems and censuses or surveys. Data coming from censuses or surveys may be less reliable than those from vital registration systems (e.g. due to the under-reporting of child deaths). See [here](#) for more detail on the methods of data collection used by OECD Health Statistics, and [here](#) for more detail on the methodology employed by the UN Inter-agency Group for Child Mortality Estimation.

Sources and further reading: OECD Health Statistics, <http://www.oecd.org/els/health-systems/health-data.htm>; World Health Organization (2017), *Global Health Observatory (GHO): Child Health*, http://www.who.int/gho/child_health/en/; UN Inter-agency Group for Child Mortality Estimation, <http://www.childmortality.org/>; OECD/WHO (2020), *Health at a Glance: Asia/Pacific 2020*, OECD Publishing, Paris. <https://doi.org/10.1787/26b007cd-en>