

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

Factors such as the health of the mother, maternal care especially at birth, immediate newborn care, breastfeeding status, preterm birth and birth weight are important determinants of infant mortality (see Indicators 2.2 “Preterm birth and low birthweight” and 3.5 “Pregnancy and birth”), and diarrhoea, pneumonia and undernutrition of both mothers and babies are also the causes of many deaths (see Indicators 2.4 “Child malnutrition” and 2.5 “Adult malnutrition (underweight and overweight)”). Around two-thirds of the deaths that occur during the first year of life in the region are neonatal deaths (i.e. during the first four weeks of life).

Infant mortality can be reduced through cost-effective interventions such as antenatal steroid injections to women in preterm labour to strengthen the babies’ lungs and kangaroo mother care, mothers holding their preterm babies with skin to skin contact and frequent breastfeeding. Early postnatal home visits promoting breastfeeding and clean cord care and care for neonatal infections provided together with treatment of childhood pneumonia, diarrhoea and malaria, also reduce neonatal deaths (UNICEF, 2013). Oral rehydration therapy is a cheap and effective means to offset the debilitating effects of diarrhoea (WHO, 2006a) and countries could also implement relatively inexpensive public health interventions including immunisation, and provide clean water and sanitation (see Indicators 2.6 “Water and sanitation” and 5.1 “Childhood vaccination programmes”).

Countries with higher levels of economic development generally have lower infant mortality rates. In 2012, OECD countries averaged 4 infant deaths per 1 000 live births; among 20 Asian countries, the average was almost 24 deaths (Figure 1.2.1, left panel). Geographically, infant mortality was lower in eastern Asian countries, and higher in South and Southeast Asia. Hong Kong, China; Japan; Singapore; the Republic of Korea and Australia had rates lower than 4 deaths per 1 000 live births in 2012, whereas Pakistan, the Lao PDR, Papua New Guinea, India and Myanmar had rates greater than 40.

Infant mortality rates had fallen dramatically in the Asia/Pacific region since 1990, with many countries experiencing declines of greater than 50% (Figure 1.2.1, right panel). In China and the Republic of Korea, rates had fallen by 70% or more, but falls in the Solomon Islands, Fiji and Papua New Guinea had been less pronounced over recent decades. Although the rate was already low in 1960 in the OECD and Japan, the declining speed was much faster than China, India and Indonesia during the same period

(Figure 1.2.2). Targeted interventions to address neonatal deaths may reduce infant and under-5 mortality in the region even further as most of them are preventable or treatable (UNICEF, 2013).

Across countries, infant mortality rates are higher among poor households with lower mother’s education (Figure 1.2.3). In Myanmar, the Lao PDR and Cambodia, inequality in infant mortality between the highest and lowest wealth levels was largest and the poorest quintile had over three times higher infant mortality than the richest. In the Philippines, the mortality difference was six-fold between mothers with no education and those with secondary and higher education while the disparity based on mother’s education was very small in the Solomon Islands. Urban-rural divides in infant mortality were smaller than the other two factors across countries and in Bangladesh and Viet Nam, the mortality rates were nearly the same between rural and urban areas. In order to have a larger societal impact, countries need to implement public health interventions to target those with poorest outcomes.

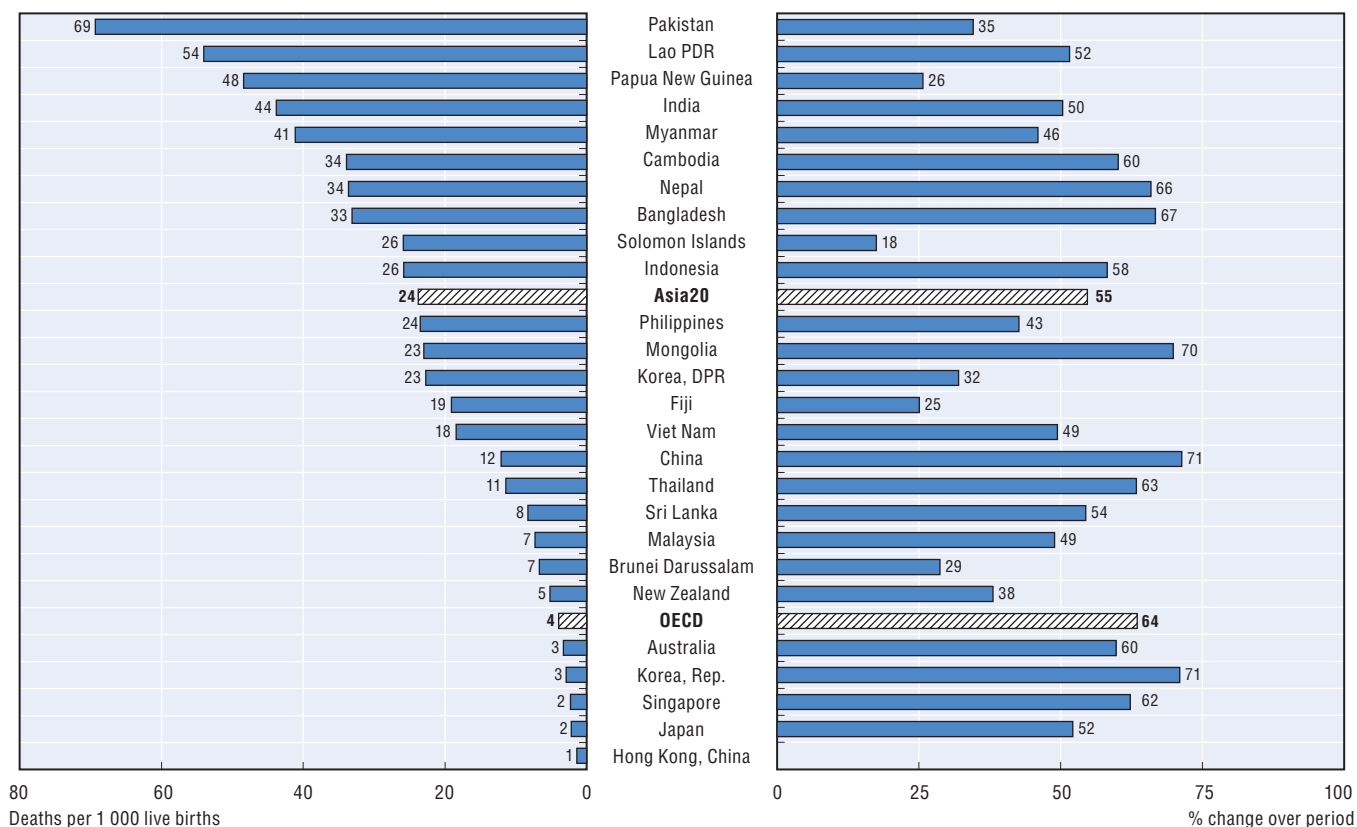
Definition and comparability

The infant mortality rate is defined as the number of children who die before reaching their first birthday in a given year, expressed per 1 000 live births.

The rate ratios describe the variation in infant mortality associated with a specific variable (i.e. wealth, place of residence and education level of the mother). A rate ratio related to wealth refers to the infant mortality rate for the lowest quintile divided by the one for the highest quintile in the distribution of wealth in the population in study. A rate ratio related to the place of residence is the infant mortality rate for households living in rural areas divided by the one for households living in urban areas. A rate ratio related to the education level of mother is the infant mortality rate for mothers with lowest education level divided by the value for mothers with highest education level in the country.

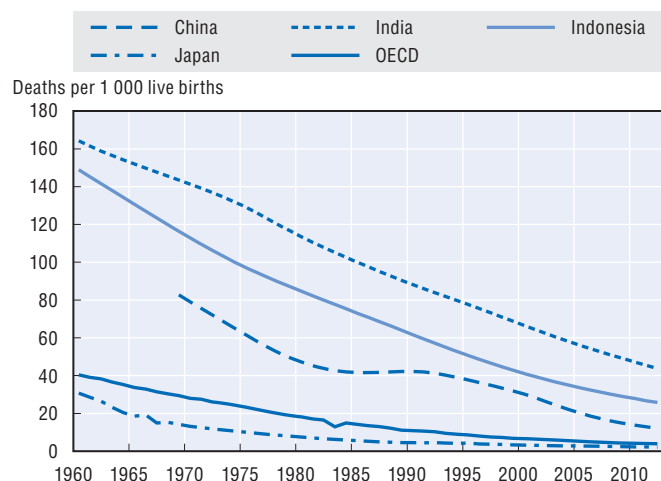
Some countries base their infant mortality rates on estimates derived from censuses, surveys and sample registration systems, and not on accurate and complete registration of births and deaths. Differences among countries in registering practices for premature infants may also add slightly to international variations in rates. Infant mortality rates are generated by either applying a statistical model or transforming under-5 mortality rates based on model life tables.

1.2.1. Infant mortality rates, 2012 and decline, 1990-2012



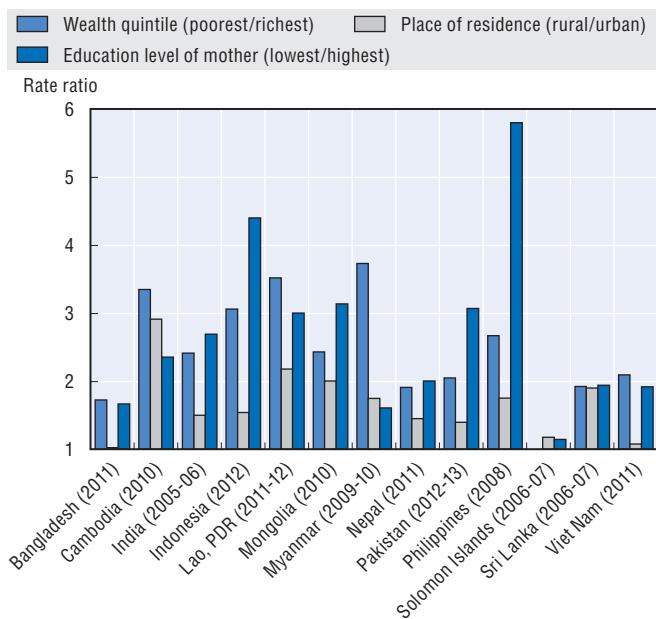
Source: OECD Health Statistics 2014; UN Inter-agency Group for Child Mortality Estimation (IGME) Childinfo; UN Demographic Yearbooks.

1.2.2. Infant mortality rates, selected countries, 1960-2012



Source: OECD Health Statistics 2014; UN IGME Childinfo.

1.2.3. Infant mortality rate ratios by socio-economic and geographic factor, selected countries and years



Source: Demographic and Health Survey (DHS) and Multiple Indicator Cluster Survey (MICS) 2005-13.

StatLink <http://dx.doi.org/10.1787/888933152523>



From:
Health at a Glance: Asia/Pacific 2014
Measuring Progress towards Universal Health Coverage

Access the complete publication at:
https://doi.org/10.1787/health_glance_ap-2014-en

Please cite this chapter as:

OECD/World Health Organization (2014), "Infant mortality", in *Health at a Glance: Asia/Pacific 2014: Measuring Progress towards Universal Health Coverage*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/health_glance_ap-2014-6-en

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.