

Under age 5 mortality

The under age 5 mortality rate is an indicator of child health as well as the overall development and well-being of a population. As part of their Sustainable Development Goals, the United Nations has set a target of reducing under age 5 mortality to at least as low as 25 per 1 000 live births by 2030 (United Nations, 2015^[1]).

The main causes of death amongst children under age 5 are those occurring in the newborn period (31.6%), lower respiratory infections (13.9%), and diarrhoea (9.1%). Communicable and infectious diseases are continuously some of the leading causes of under age 5 mortality, contribute to about 49% of deaths in children belonging to this age group (Perin et al., 2022^[2]; IGME, 2021^[3]). Malnutrition, as the underlying cause of some of these childhood diseases, is an impediment to the progress towards achieving the SDGs. In view of the importance of improving nutrition to promote health and development, in 2012 the World Health Assembly endorsed a “Comprehensive implementation plan on maternal, infant and young child nutrition”, which specified a set of six global nutrition targets. The UN General Assembly has also proclaimed the UN Decade of Action on Nutrition (2016-25). Oral rehydration therapy is a cheap and effective means to offset the debilitating effects of diarrhoea (WHO/UNICEF, 2006^[4]), and countries and territories could also implement relatively inexpensive public health interventions including immunisation, and provide clean water and sanitation (see indicator “Water and sanitation” in Chapter 4 and “Childhood vaccination” in Chapter 7).

In 2020, 5 million children died worldwide before their fifth birthday and almost one out of ten of these deaths (0.4 million) occurred in the Eastern and South-Eastern Asia regions (IGME, 2021^[3]). The average under age 5 mortality rate across lower-middle- and low-, and upper-middle-income Asia-Pacific countries and territories was 29.4 and 13.0 deaths per 1 000 live births respectively (Figure 3.8). Hong Kong (China), Singapore, Japan, Korea and Australia achieved very low rates of four or less deaths per 1 000 live births, below the average across OECD countries. Mortality rates in Pakistan, Lao PDR, Papua New Guinea, and Myanmar were high at more than 40 deaths per 1 000 live births. Due to its population, India alone accounted for more than 15% (0.78 million) of total under age five deaths in the world.

Whilst under age five mortality has significantly declined in lower-middle- and low-income Asia-Pacific countries and territories, progress varies amongst countries and territories. In China, Cambodia and Mongolia, mortality rate in 2020 was less than one-quarter of the rate reported in 2000 (Figure 3.9). Evidence (WHO, 2015^[5]) suggests that reductions in Cambodia are associated with better coverage of effective preventive and curative interventions such as essential immunisations, malaria prevention and treatment, vitamin A supplementation, birth spacing, early and exclusive breastfeeding and improvements in socio-economic conditions. In order to achieve the SDG target, countries and territories need to accelerate their efforts, for example by scaling effective preventive and curative interventions, targeting the main causes of post-neonatal deaths, namely pneumonia, diarrhoea, malaria and undernutrition, and reaching the most vulnerable newborn babies and children (UNICEF, 2013^[6]). In addition, focused efforts need to be undertaken to improve neonatal survival as more than three-quarters of under age 5 deaths occur in the neonatal period.

As is the case for infant mortality (see indicator “Infant mortality” in Chapter 3), inequalities in under age five mortality rates are widely prevalent (Figure 3.10). Across countries and territories, under age five mortality rates consistently vary based on household income and mother’s education level, and to a certain extent by geographical location. For example, in Lao PDR under age five mortality was more than five times higher amongst children whose mother had no education compared to those whose mother had at least completed secondary education. In Pakistan, Lao PDR and Nepal disparities in under age five mortality according to household income were also large with children in the poorest 20% of the population around three times more likely to die before their fifth birthday than those in the richest 20%. Inequalities in mortality rates based on geographic locations (rural or urban) were considerable in Lao PDR (Figure 3.10). Accelerating reductions in under age 5 mortality will require identifying these populations and tailoring health interventions to effectively address their needs.

Definition and comparability

Under age 5 mortality is defined as the probability of a child born in a given year dying before reaching their fifth birthday and is expressed per 1 000 live births.

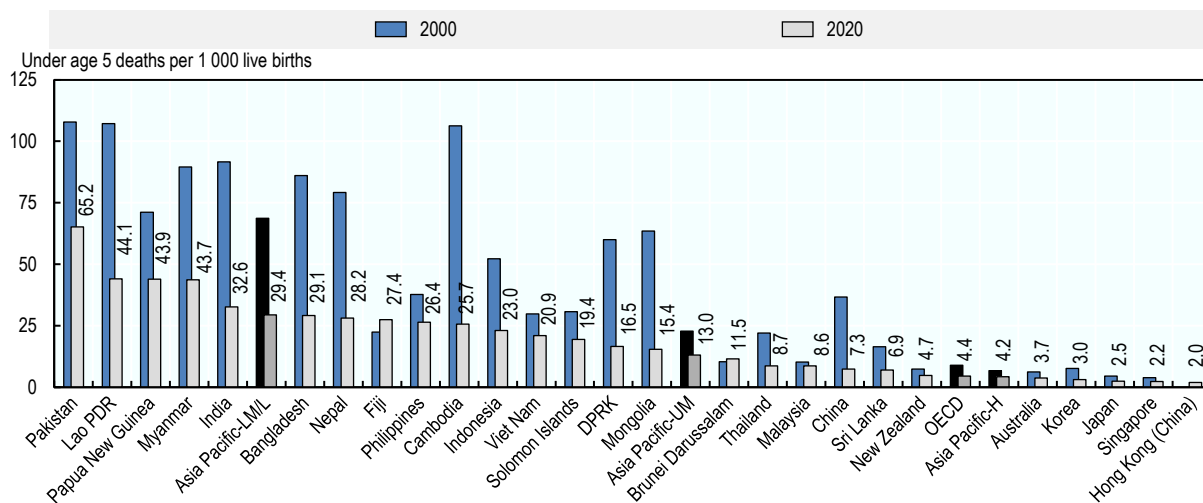
Age-specific mortality rates are used to construct life tables from which under age 5 mortality is derived. Some countries and territories base their estimates on censuses, surveys, and sample registration systems, and not on accurate and complete registration of deaths.

Mortality data are estimated using the UN IGME model, except for Hong Kong (China), for which data are gathered from local sources.

References

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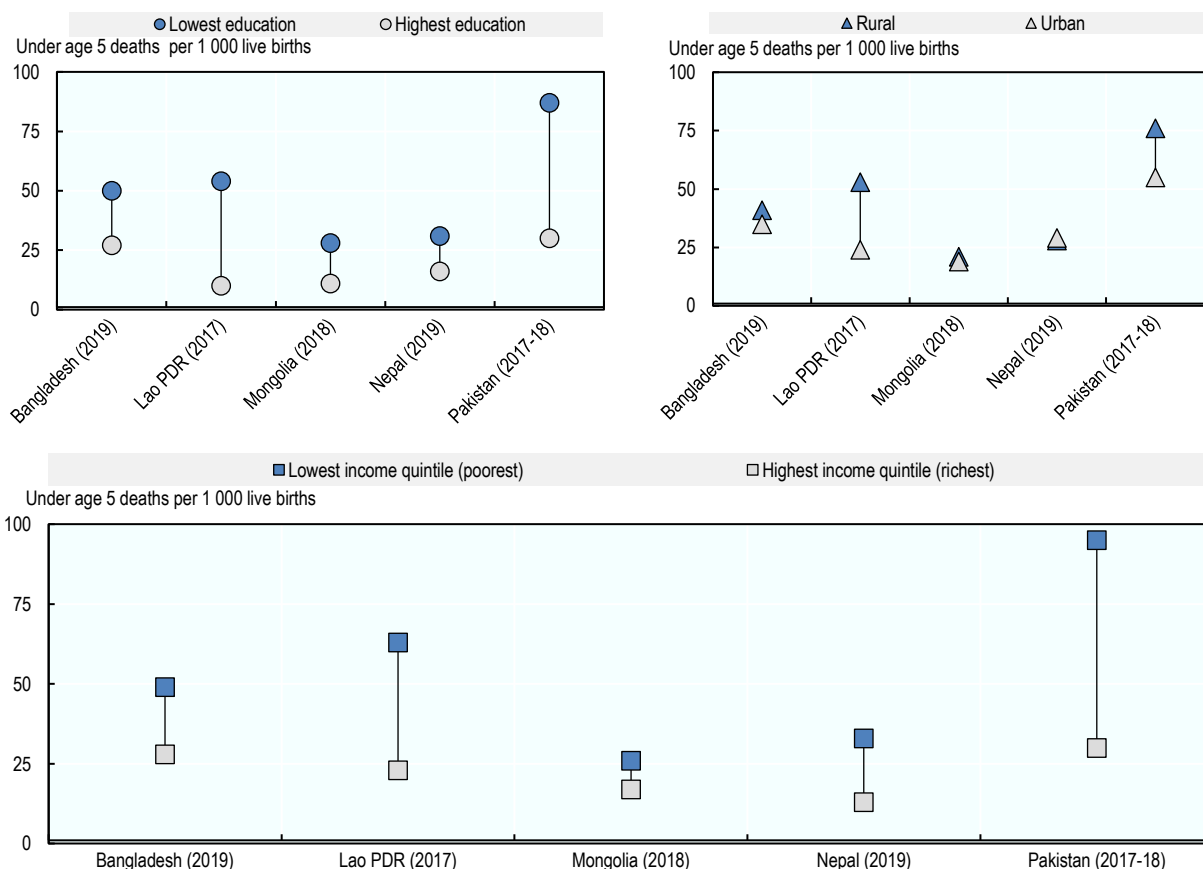
Figure 3.9. Under age 5 mortality rates, 2000 and 2020 (or nearest year)



Source: UN Inter-agency Group for Child Mortality Estimation (IGME) 2021; Hong Kong annual digest of statistics 2021.

StatLink <https://stat.link/gpvsle>

Figure 3.10. Under age 5 mortality rates by socio-economic and geographic factor, selected countries and territories, nearest year



Source: DHS and MICS surveys, various years.

StatLink <https://stat.link/2rjxzs>



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