## 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).

The main causes of death among children under five include pneumonia (17%), preterm birth complications (15%), intrapartum-related complications (10%), diarrhoea (9%) and malaria (7%). Undernutrition, suboptimal breastfeeding and zinc deficiency are overlapping risk factors of children diarrhoea and pneumonia – the leading infectious causes of childhood morbidity and mortality (Fischer Walker et al., 2013; WHO and UNICEF, 2013). More than three-fourth of under age 5 deaths occur in the neonatal period.

Childhood malnutrition is the underlying cause of death in an estimated 35% of all deaths among children under the age of five. Malnutrition is an impediment to the progress towards achieving the SDGs. In view of the importance of improving nutrition to promote heath 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).

In 2016, 5.6 million children died worldwide before their fifth birthday and slightly less than 40% of these deaths (2.2 million) occurred in the Eastern and Southern Asia regions (UNICEF, 2017). The average under age 5 mortality rate across lower-middle and low, and upper middle income Asia-Pacific countries was 35.9 and 13.1 deaths per 1 000 live births respectively (Figure 3.6). Hong Kong, China; Singapore; Japan; the Republic of 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, the Lao PDR, Myanmar and Papua New Guinea were high, in excess of 50 deaths per 1 000 live births. These countries also had the highest infant mortality in the region. Due to their population, India alone accounted for 19% (1.1 million) of total under age 5 deaths in the world.

Whilst under age 5 mortality has declined by an average of 50% in lower-middle and low income Asia-Pacific countries, progress varies significantly among countries. Countries such as Myanmar, China and Cambodia reported a drop of 70% or more. Evidence (WHO, 2014a) 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. These efforts also resulted in a 67% decline in maternal mortality between 2000 and 2015 (see indicator "Maternal mortality" in Chapter 3). In order to achieve the SDG target, countries 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).

As is the case for infant mortality (see indicator "Infant mortality" in Chapter 3), inequalities in under age 5 mortality rates also exist within countries (Figure 3.7). Across countries, under age 5 mortality rates consistently vary based on household income and mother's education, and to a certain extent by geographical location. For example, in Viet Nam under age 5 mortality was almost six times higher among children whose mother had no education compared to those whose mother had more than secondary education. Inequality by education was also large in Cambodia and Mongolia. In Cambodia, Lao PDR and Myanmar disparities in under age 5 mortality according to income were also large with children in the poorest 20% of the population three times more likely to die before their fifth birthday than those in the richest 20%. Inequalities in mortality rates based on geographic locations were relatively small – except for Cambodia and Lao PDR (Figure 3.7). To accelerate reductions in under age 5 mortality, populations in need should be identified in each national context and health interventions need targeted to them effectively.

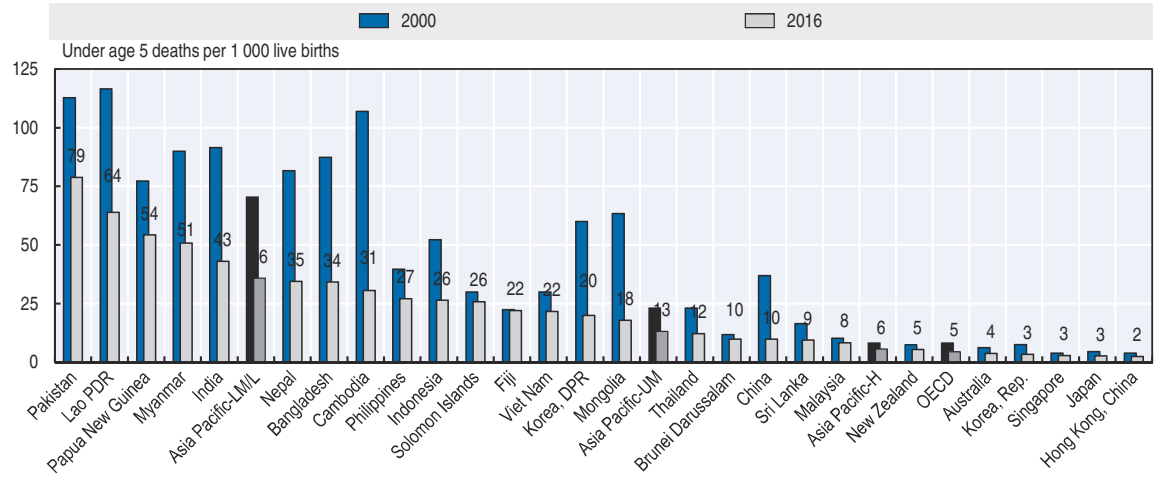
### Definition and comparability

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. Since under age 5 mortality is derived from a life table, it is, strictly speaking, not a rate but a probability of death.

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

See indicator "Infant mortality" in Chapter 3 for definition of rate ratios.

## 3.6. Under age 5 mortality rates, 2000-2016 (or nearest year)




*Source:* UN IGME Child report 2017; The Hong Kong council of social service.

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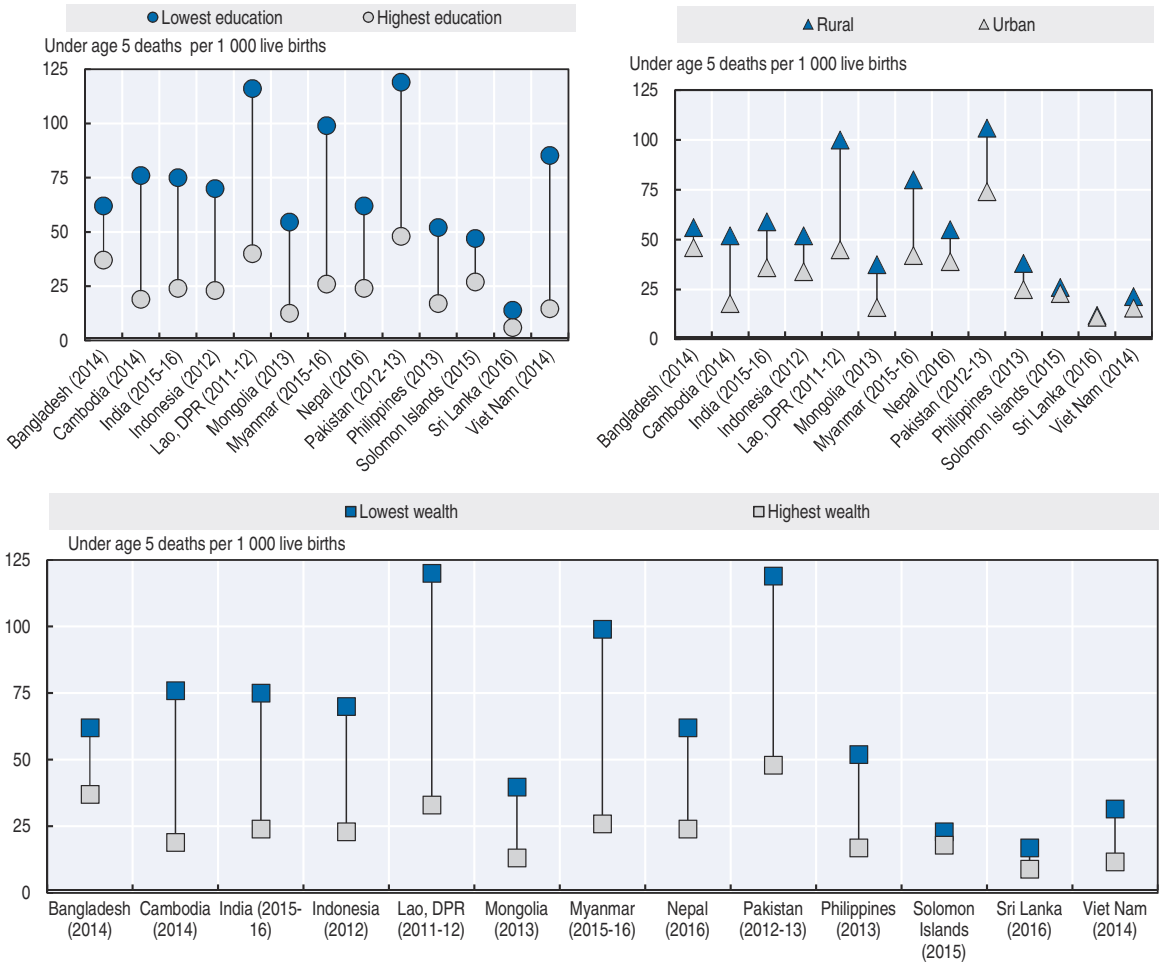
## 3.7. Under age 5 mortality rates by socio-economic and geographic factor, selected countries and years




*Source:* DHS and MICS surveys, various years.

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