

Preterm birth (i.e. birth before 37 completed weeks of gestation) is the leading cause of both neonatal death during the first four weeks of life (days 0-28), and death of children under 5 (see indicator “Under age 5 mortality” in Chapter 3). Survivors of preterm births may also face a lifetime of disability, including learning disabilities, and visual and hearing as well as other long-term developmental problems (<https://www.who.int/news-room/fact-sheets/detail/preterm-birth>). However, preterm birth can be largely prevented. Three-quarters of deaths associated with preterm birth can be saved without intensive care facilities. Current cost-effective interventions include antenatal corticosteroids injections for pregnant women of 24-34 weeks of gestational age at risk of preterm delivery, kangaroo mother care, early initiation (initiated within the first hour of birth) and exclusive breastfeeding for the first six months of life and basic care for infections and breathing difficulties (see “Infant mortality” in Chapter 3). Preterm birth rates can be also reduced if women, particularly adolescents, had better access to family planning services and increased empowerment, as well as improved care and nutrition during pregnancy (see indicator “Family planning” in Chapter 4).

An estimated 15 million babies are born preterm worldwide every year, and around 1 million babies died from preterm birth complications in 2015 (WHO, 2018[4]). In the Asia-Pacific region, India, China, Bangladesh, Indonesia and Pakistan reported a particularly large number of preterm births that accounted for over 40% of the 2014 preterm births globally (Chawanpaiboon et al., 2019[5]). Across lower-middle and low income Asia-Pacific countries, almost 11 babies out of 100 were born preterm on average in 2014 while the rate was lower on average in high income and upper-middle income countries and territories (9 and 8 babies per 100 live births, respectively). The preterm birth rate was particularly high in Bangladesh at 19 per 100 live births, followed by India and the Philippines at over 13 per 100 live births (Figure 4.3, left panel). Since 2010, large improvement was made in Nepal, where preterm birth rate had more than halved, reaching the lowest rate in the region at 5 per 100 live births.

Overall, it is estimated that almost 15% of all births worldwide are low birth weight (<2500g), representing around 20.5 million births in 2015; and nearly half of them happened in South Asia (UNICEF, 2019[6]). Beside preterm birth, low birth weight is also an important determinant of child health as it is associated with greater risk of death, poor health, and disabilities. Low birth weight is the result of many factors but largely preventable. Mothers' risk factors include poor nutritional status such as low body-mass index (BMI), being a young mother, smoking or exposure to second hand smoke, excessive alcohol consumption, and history of unnecessary C-section deliveries (UNICEF and WHO, 2019[7]; Blencowe et al., 2019[8]).

On average, one newborn out of ten had low weight at birth across Asia-Pacific countries and territories (Figure 4.3, right panel). There was a significant regional divide between countries and territories in eastern Asia (such as China, Korea DPR, Mongolia and the Republic of Korea) and southern Asia

(such as Bangladesh, India, Nepal, Pakistan, and Sri Lanka). Korea DPR, Mongolia and China had the lowest birth weight rates at 3.1%, 4.6% and 5% respectively, while Pakistan reported the highest rate of 22%.

Since 2000, Bangladesh, Nepal and the Lao PDR made the most progress in reducing low birth weight rates, and lower-middle and low income Asia-Pacific countries and territories achieved a larger decrease compared to upper-middle and high income countries and territories in the region (Figure 4.4). In 2012, the World Health Assembly endorsed the Comprehensive implementation plan on maternal, infant and young child nutrition, which specified a set of six global nutrition targets, and one of the targets aims to a 30% reduction in low birth weight by 2025 (WHO, 2017[9]). Bangladesh, Cambodia, Indonesia, Myanmar and the Philippines have already met this target. Recently, the reduction is slower in China but it achieved one of the lowest birth weight rates in the Asia-Pacific region through rapid and sustained economic growth and improved access to food in many provinces.

Antenatal care can also help women prepare for delivery and understand warning signs during pregnancy and childbirth to avoid low birth weight. Higher coverage of antenatal care was associated with lower share of infants with low birth weight (Figure 4.5), suggesting the significance of antenatal care over infant health status across Asia-Pacific countries and territories. For instance, the Republic of Korea with one of the highest antenatal care coverage (98%) had less than 6 low birthweight infants per 100 live births while Bangladesh with one of the lowest antenatal care coverage (37%) had almost 15 low birthweight infants per 100 live births.

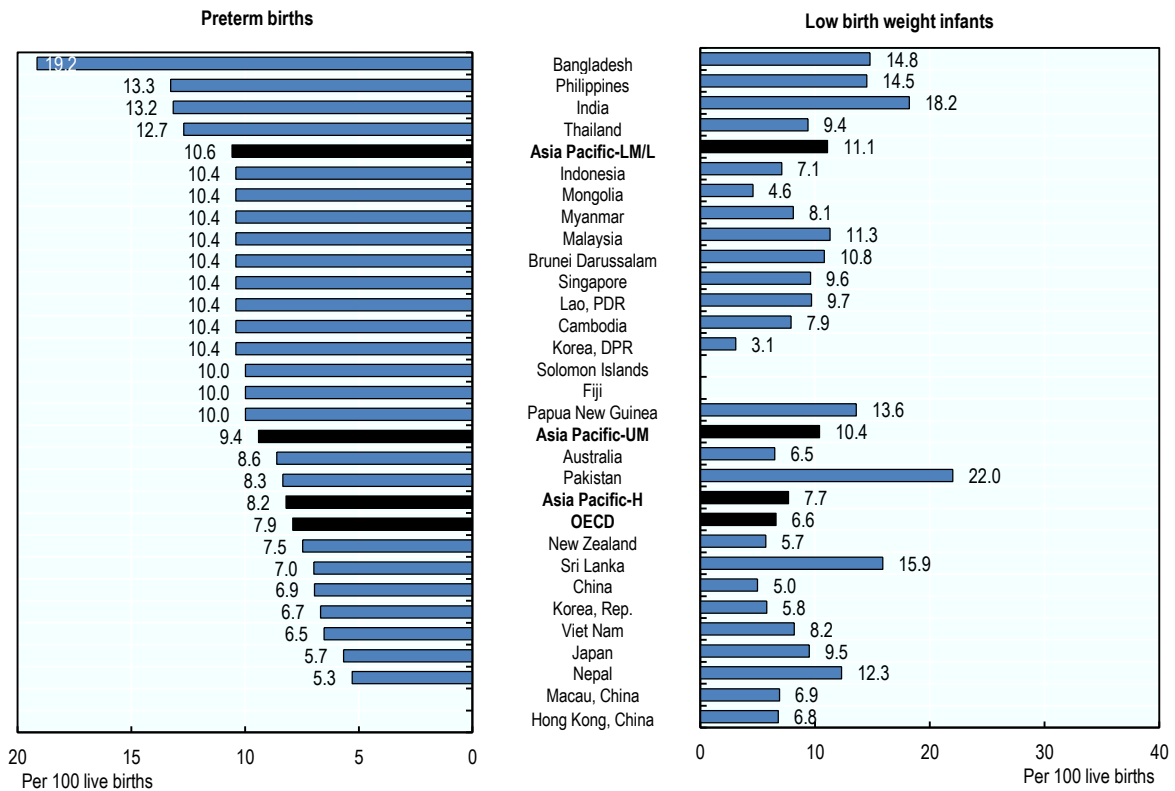
Definition and comparability

Preterm birth is defined as babies born alive before 37 weeks of pregnancy are completed. There are sub-categories of preterm birth based on gestational age: extremely preterm (less than 28 weeks); very preterm (28-32 weeks); moderate to late preterm (32-37 weeks).

Low birth weight is defined by the World Health Organization as the weight of an infant at birth of less than 2 500 grammes (5.5 pounds) irrespective of the gestational age of the infant. This figure is based on epidemiological observations regarding the increased risk of death to the infant and serves for international comparative health statistics.

In developed countries, the main information sources for low birth weight are national birth registers. For developing countries, estimates are primarily derived from mothers participating in national household surveys, as well as routine reporting systems (UNICEF and WHO, 2019[7]; Blencowe et al., 2019[8])

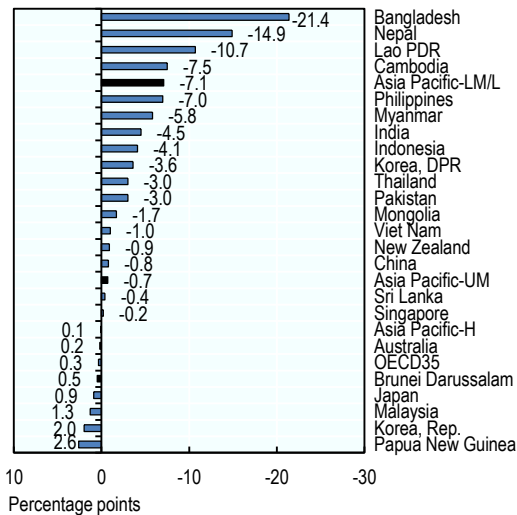
Figure 4.3. Preterm birth rate, 2014 and percentage of low birth weight infants, 2016 (or latest year available)



Source: WHO HRP 2020; WHO GHO 2020; DHS and MICS surveys, various years; OECD Health Statistics 2020; World Bank WDI; Department of Health, Hong Kong, China, 2017; Statistics and Census Service, Macau, China, 2018.

StatLink <https://stat.link/k9xcu0>

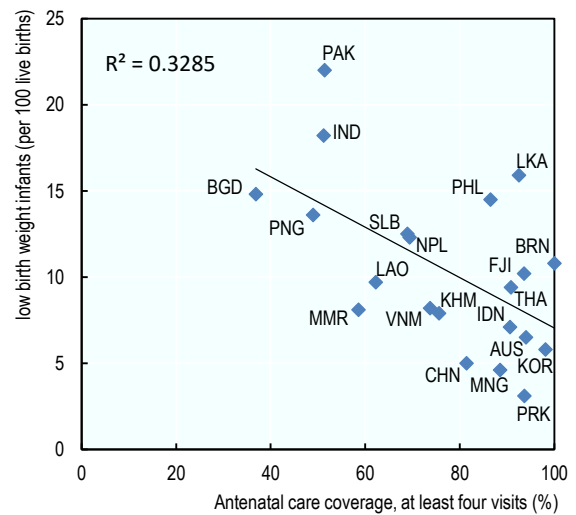
Figure 4.4. Low birthweight, percentage point change, 2000-16 (or latest year available)



Source: WHO GHO 2020; DHS & MICS surveys, various years; UNICEF; WB WDI.

StatLink <https://stat.link/ohvu0d>

Figure 4.5. Antenatal care coverage and low birth weight, latest year available



Source: WHO GHO 2020; DHS & MICS surveys, various years; WB WDI; UNICEF; Department of Health, Hong Kong, China, 2017 and Statistics and Census Service, Macau, China, 2018.

StatLink <https://stat.link/5p9fyg>



From:
Health at a Glance: Asia/Pacific 2020
Measuring Progress Towards Universal Health Coverage

Access the complete publication at:
<https://doi.org/10.1787/26b007cd-en>

Please cite this chapter as:

OECD/World Health Organization (2020), "Preterm birth and low birth weight", in *Health at a Glance: Asia/Pacific 2020: Measuring Progress Towards Universal Health Coverage*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/1b86da10-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

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>.