

**Birth weight is a strong indicator of maternal health care and nutritional status as well as new-born's chances for survival, growth, long-term health and psychosocial development.** Babies who are undernourished in the womb are in great risk of dying during their early months and years. Those who do survive are likely to have an increased risk of disease, an impaired immune system and remain undernourished throughout their lives. Children born underweight are also likely to have cognitive disabilities (Sutton and Darmstadt, 2013). Poor nutrition both before and during pregnancy is recognized as an important cause of low birth weight. Research has shown that improved food quality and quantity consumption during pregnancy effectively reduces low birth weight. Other factors such as infections, hypertension, smoking, poverty and poor socio-economic status also affect birth weight.

**Low birth weight is a major public health problem in developing countries.** South Asia has the highest incidence of low birth weight and accounts for more than half of the world's low birth weight babies (UNICEF Childinfo, 2013). In 2011, Sri Lanka, Nepal, Bangladesh and Pakistan had the highest number of low birth weight infants in the Asia/Pacific region (Figure 7.7, Panel A).

**The rate of low infant birth weight is declining in the Asia/Pacific region.** Despite the slow decline, improved maternal and child health policies contributed to decreasing the number of infants born underweight. Overall, the region improved by 11% over ten years (Figure 7.7, Panel B). China, Myanmar and Viet Nam reduced the number of underweight infants by 75% or more (Figure 7.8). The data also suggest that Fiji, Indonesia, the Republic of Korea, the OECD countries (on average), Samoa and Pakistan experienced an increase. Except for Pakistan where economic development has stalled, the increase in low birth weight reflects advances in medical technology and greater survival chances of babies born prematurely, which exerts upward pressure on the incidence of low birth weight among infants.

**Low birth weight infants are at much higher risk of mortality than infants with normal weight at birth.** The highest number of underweight babies is in Pakistan reaching up to 59 deaths per 1 000 births in 2011 (Figure 7.9).

### Definition and measurement

Low birth weight is defined by the World Health Organization as the weight of an infant at birth of less than 2 500 grams (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. The number of low birth weights is then expressed as a percentage of total live births.

There are issues with the data reliability data in developing countries, where almost 60% of babies are not weighted at birth; deliveries often take place in homes and small clinics that do not weigh or report babies (UNICEF/WHO, 2004). In these countries, low birth weight estimates are primarily derived from mothers participating in national household surveys, as well as routine reporting systems (Channon et al., 2011). Trend analysis of low birth weight across countries is difficult due to lack of comparable estimates over time.

### Further reading

- Channon, A., S. Padmadas and J. McDonald (2011), "Measuring Birth Weight in Developing Countries: Does the Method of Reporting in Retrospective Surveys Matter?", *Maternal and Child Health Journal*, Vol. 15, No. 1, pp. 12-18.
- Sutton, P.S. and G.L. Darmstadt (2013), "Preterm Birth and Neurodevelopment: A Review of Outcomes and Recommendations for Early Identification and Cost-effective Interventions", *Journal of Tropical Pediatrics*, Vol. 59, No. 4, pp. 258-265.
- UNICEF Child Info (2013), "Monitoring the Situation of Children and Women, Low Birthweight", [www.childinfo.org/low\\_birthweight\\_table.php](http://www.childinfo.org/low_birthweight_table.php).
- UNICEF/WHO (2004), *Low Birthweight: Country, Regional and Global Estimates*, Tessa M. Wardlaw (ed.), United Nations Children's Fund and the World Health Organization, New York/Geneva.

Figure 7.7. Low birth weight

Panel A. Low birth weight infants, 2011 (or nearest year)  
Percentage of newborns weighing less than 2 500 g

Panel B. Percentage change, 2001 to 2011

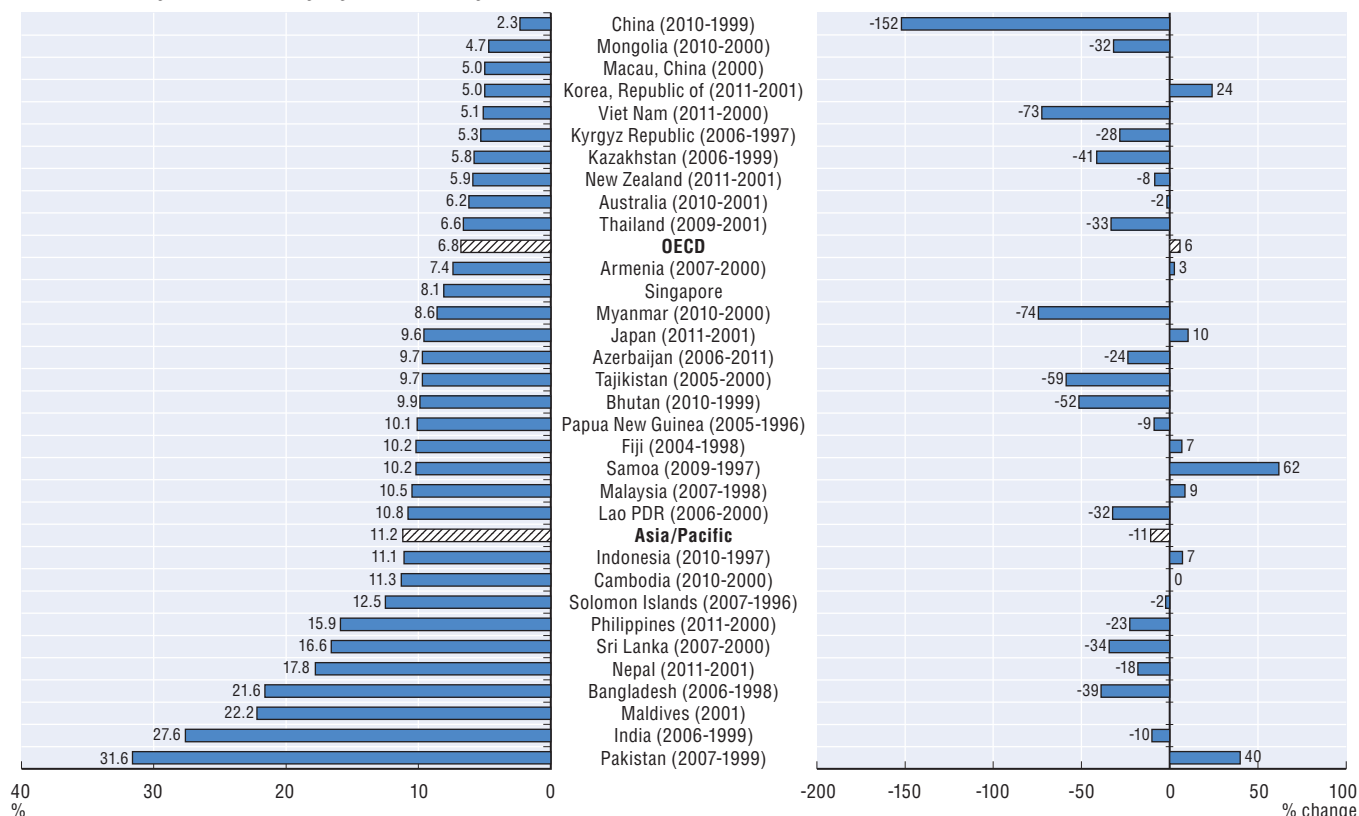
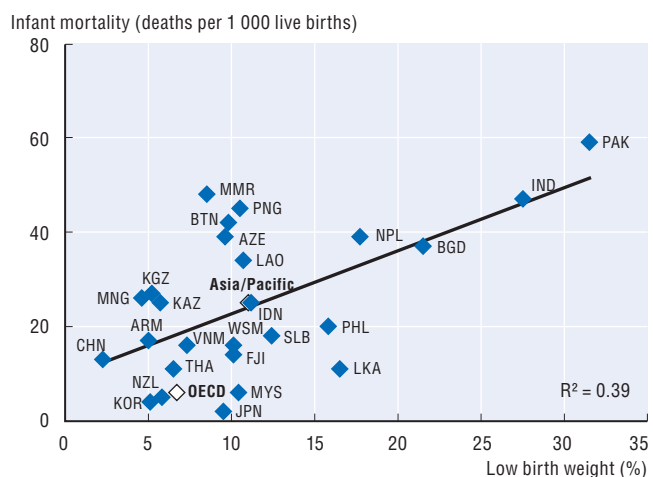
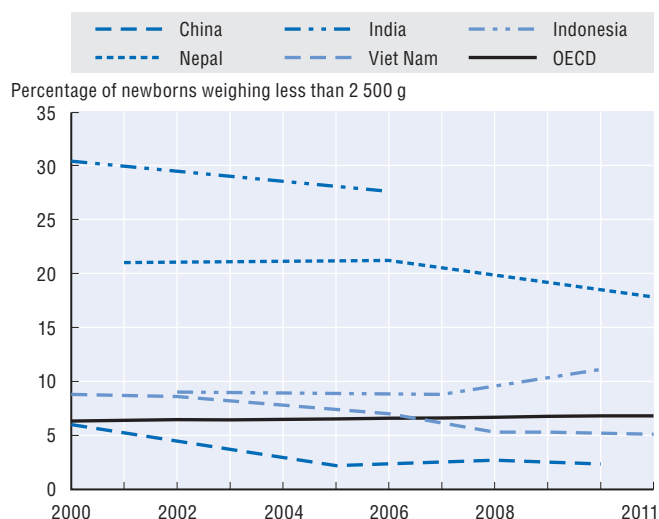


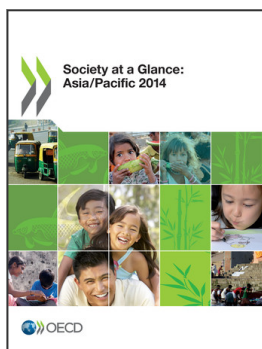
Figure 7.8. Trends in low birth weight infants, selected countries, 2000-11

Figure 7.9. Low birth weight and infant mortality, 2011 (or nearest year available)



Source: OECD Health Data 2013, www.oecd.org/health/healthdata; World Bank, World Development Indicators.

StatLink <http://dx.doi.org/10.1787/888933151148>



**From:**  
**Society at a Glance: Asia/Pacific 2014**

**Access the complete publication at:**  
<https://doi.org/10.1787/9789264220553-en>

**Please cite this chapter as:**

OECD (2014), "Low birth weight", in *Society at a Glance: Asia/Pacific 2014*, OECD Publishing, Paris.

DOI: [https://doi.org/10.1787/soc\\_aag-2014-24-en](https://doi.org/10.1787/soc_aag-2014-24-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 and any 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.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to [rights@oecd.org](mailto:rights@oecd.org). Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at [info@copyright.com](mailto:info@copyright.com) or the Centre français d'exploitation du droit de copie (CFC) at [contact@cfcopies.com](mailto:contact@cfcopies.com).