The South Asia Health Atlas was produced by Alyssa Sharkey, Meika Bhattachan, Sufang Guo and Douglas Noble. The following individuals provided valuable contributions: Diane Summers, Andreas Hasman, Aishath Shahula Ahmed, Anoop Singh Gurung, Ariel Higgins Steele, Fazil Ahmad, Gamini Jayakody, Satish Kumar Gupta, Mamadou Diallo and Trang Ho Morton.

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Photographs Asad Zaidi (cover page, page 17), Roger LeMoyne (page 2)
Graphic design EKbana Solutions
Printer Jagadamba Press, Lalitpur, Nepal

UNICEF South Asia would like to acknowledge the support of Gavi, The Vaccine Alliance for our ongoing immunisation work and of the Bill & Melinda Gates Foundation for our ongoing work to save newborns.
Foreword

It is with great pleasure that I am writing this foreword to the South Asia Health Atlas. This Atlas does two important things for public health policy makers.

First, it highlights the importance of tackling newborn deaths and ensuring children are fully immunised. Newborn death rates are too high in South Asia and we must not let up in our quest to ensure that no family experiences the tragedy of losing a newborn baby. We also know that life is more than just surviving. Increasingly we talk about surviving, thriving and transforming. Immunisation offers an unrivalled opportunity to allow children to thrive. It is still, perhaps, the best public health intervention we have ever had. Not only does it prevent disease and the ensuing suffering and cost to families, it also allows children to play and be healthy, maybe being part of a local early childhood development centre. The cost issue is also real for families, not just the cost of seeking care for vaccine preventable diseases, but costs also constitute time, travel and lost employment income. The Atlas highlights the fact that challenges relating to newborn health and under-immunisation remain in the region.

Second, this Atlas highlights the usefulness of geospatial mapping for policy making. In today’s world policy makers are inundated with information. Reports, policy briefs, data, and more data! It is frequently difficult to prioritise and make evidence based decisions. Mapping of deprivations and potential correlates offers a fast and accessible picture of the problems we face. Be it the associations between adolescent birth rates and newborn deaths, or immunisation and under five deaths, mapping offers a quick insight to the problems in a highly visual way and allows us to highlight public health problems in an engaging and informative manner.

I trust you will find these maps useful, be it for discussions with policy makers or in other meetings or online. I look forward to working with you in partnership to continue to improve the lives of children in South Asia.

Jean Gough
Regional Director, ROSA
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Regional maps

The regional maps included in the *South Asia Health Atlas* show the big problems and the differences between nations. South South cooperation is increasingly important and allows cross-country learning about successes in South Asia. Nepal, Bangladesh and Bhutan have made remarkable progress in immunisation given the other challenges they face in public health. It shows what can be done when there is detailed attention to strengthening the immunisation system. In the *Atlas* we use the third dose of diphtheria, pertussis and tetanus vaccine (DPT3) as an insight into overall immunisation rates. The rationale for this is that if a child is brought to the health centre three times within the first year of life to receive DPT, she has probably received her other recommended vaccines as well. Measurement of DPT3 also provides an insight into the overall strength of the health system. About one in seven children in South Asia remain under-immunised, and whilst issues such as poor demand play a part, many of the problems could be solved by better planning and management of health systems.

Newborn death rates are high in most South Asia countries and the region as a whole is off-track to achieve the sustainable development goal target by 2030. Pakistan, Afghanistan and India have the biggest challenges and annual rates of reduction in these three countries need to see very significant improvements in the next few years. Solutions are not generally expensive, such as the application of chlorhexidine to the umbilical cord to prevent infections or early initiation of breastfeeding, but they also require systems for training healthcare workers, procurement of supplies and monitoring interventions over time as well as taking corrective actions where needed.

In this part of the *Atlas* we have used the relatively under-used technique of ring mapping to highlight associations. It shows what increasing immunisation rates could mean for under five death rates of children in South Asia, and the possible links between child marriage, female literacy and newborn death rates. Our maps also show that countries with the highest newborn death rates struggle the most with financing the health system and staffing it with the skilled professionals needed for sustainable change over time.
Newborns in a UNICEF supported health centre in Jalalabad province, Afghanistan
In 2015, more than 5 million children in South Asia did not receive their third dose of DPT3.

Data Source: World Health Organisation and UNICEF 2015 estimates of immunisation coverage
More than one million newborns died in South Asia in 2015. Most of these deaths occurred in India, Pakistan, and Bangladesh.

Data Source: United Nations Inter agency Group for Child Mortality Estimation (UNIGME) 2015
Immunisation coverage in South Asia 2015
Progress in immunisation in South Asia is strong, but many children still do not receive all the lifesaving vaccinations they need
Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.

Data Source: World Health Organization and UNICEF 2015 estimates of immunisation coverage
Immunisation coverage in South Asia in 2015
Countries with higher levels of DPT3 coverage tend to have lower deaths among young children and better female literacy
Immunisation coverage (DPT3)

- 99 (Bhutan, Maldives, Sri Lanka)
- 94 (Bangladesh)
- 91 (Nepal)
- 87 (India)
- 78 (Afghanistan)
- 72 (Pakistan)

Ring Key

- Under 5 mortality per 1000 live births
- Female literacy (%)
- Out-of-pocket expenditure (%)

Data Sources:

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Newborn mortality in South Asia 2015

South Asia must accelerate progress on newborn deaths in order to achieve the 2030 Sustainable Development Goal target of 12 deaths per 1,000 live births
Newborn mortality rate (per 1,000 live births)

- 5 (Maldives, Sri Lanka)
- 18 (Bhutan)
- 22 (Nepal)
- 23 (Bangladesh)
- 28 (India)
- 36 (Afghanistan)
- 46 (Pakistan)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.

Data Source: UNICEF (2016) State of the World's Children
Newborn mortality in South Asia 2015

South Asia countries with high newborn mortality also have problems with adolescent births, child marriage and female literacy
Newborn mortality rate (per 1,000 live births)

- 5 (Maldives, Sri Lanka)
- 18 (Bhutan)
- 22 (Nepal)
- 23 (Bangladesh)
- 28 (India)
- 36 (Afghanistan)
- 46 (Pakistan)

Ring Key

Data Sources:
UNICEF (2016) State of the World's Children;
UNESCO Institute of Statistics Data Centre and United Nations Population Fund World Population Dashboard

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Newborn mortality in South Asia 2015
South Asia countries with high newborn mortality need to ensure skilled healthcare workers support women in pregnancy and at birth
Newborn mortality rate (per 1,000 live births)

- 5 (Maldives, Sri Lanka)
- 18 (Bhutan)
- 22 (Nepal)
- 23 (Bangladesh)
- 28 (India)
- 36 (Afghanistan)
- 46 (Pakistan)

Ring Key

- Antenatal care (%)
  - ≥ 90%
  - 50-89%
  - ≤ 49%

- Skilled attendant at birth (%)

- Early initiation of breastfeeding (%)

Data Source: UNICEF (2016) State of the World's Children

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Newborn mortality in South Asia 2015
Almost all countries in South Asia have not met global aspirations for financing and staffing health systems
Newborn mortality rate (per 1,000 live births)

- 5 (Maldives, Sri Lanka)
- 18 (Bhutan)
- 22 (Nepal)
- 23 (Bangladesh)
- 28 (India)
- 36 (Afghanistan)
- 46 (Pakistan)

Data Sources:

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
A lady health worker speaks with women and their children about the importance of immunization, at the basic health unit in Damuanna Village in Sheikhupura District, in Punjab Province, Pakistan
Issues related to newborns have received renewed focus since the launch of the global Every Newborn Action Plan in 2014. The main causes of newborn deaths can be reduced by increasing antenatal care visits, ensuring a skilled attendant at birth, and promoting early initiation of breastfeeding. Skilled birth attendance and delivery in facilities marry closely to a newborn’s chances of survival.

Yet, overall deliveries with skilled birth attendance are less than 50 percent in Afghanistan and Bangladesh, and between 50 percent and 60 percent in India, Nepal, and Pakistan. The maps show how these gaps are accentuated even further in the lowest performing geographical areas, for example ranging from 1.1 percent in Nooristan Province to 84.5 percent in Kabul Province, Afghanistan. Universal health coverage is clearly needed. But, that does not mean doing the same for everyone. The most deprived areas need a disproportionate focus, in terms of budgetary support, human resources and infrastructure.

In addition, 5.1 million of 19 million under-immunised children globally live in South Asia. Inequities in immunisation among different geographical areas are also commonplace, ranging from, for example, 27.1 percent in Balochistan to 91.2 percent in ICT Islamabad, Pakistan. Improving immunisation systems relies not just on remunerated and motivated vaccinators close to the people who need vaccines, but also infrastructure for vaccine storage and delivery that requires ongoing monitoring and training to ensure the highest possible standards. Planning is key and the ‘reaching every community’ (REC) approach offers an excellent opportunity for ensuring careful planning and monitoring. Behaviour change is also needed, and communication for development interventions in immunisation can help – too often we don’t know enough about why a vaccine is not being given, or why it is refused.

The maps bring to life the issues and in this section we burrow into the detail country by country with the lowest reliable geographical data available. This enables highlighting the deprivations within nations, both for the key areas of immunisation and newborn death rates, and underlying contributing factors. Geographical inequities are commonplace, and some of the gaps are very wide despite solutions being well known.
Afghanistan
Antenatal care coverage in Afghanistan by province

Most women do not receive the recommended four antenatal care visits during pregnancy
Antenatal care coverage at least 4 times (%)

- **below 15**
- **15 - 29**
- **30 - 45**
- **No data**

*Data Source: Afghanistan Demographic and Health Survey Key Indicators Report (2015)*

*Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.*
Skilled birth attendance in Afghanistan by province

Women in the eastern part of the country are more likely to benefit from a skilled provider at birth
Data Source: Afghanistan Demographic and Health Survey Key Indicators Report (2015)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
DPT3 vaccination coverage in Afghanistan by province

Immunisation coverage among children ages 12-23 months varies widely across the country
Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.

Data Source: National Immunisation Coverage Survey Afghanistan (2013)
Skilled birth attendance in Bangladesh by division

Most women still do not benefit from having a skilled provider at birth
Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Early initiation of breastfeeding in Bangladesh by division

Only between 40 to 60 percent of newborns are breastfed within one hour of birth across the country
Early initiation of breastfeeding (%)  

<table>
<thead>
<tr>
<th>Range</th>
<th>Color</th>
</tr>
</thead>
<tbody>
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<tr>
<td>40 - 44</td>
<td>Red</td>
</tr>
<tr>
<td>45 - 49</td>
<td>Orange</td>
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<td>50 - 54</td>
<td>Light Orange</td>
</tr>
<tr>
<td>55 - 59</td>
<td>Light Yellow</td>
</tr>
</tbody>
</table>

Data Source: Bangladesh Demographic and Health Survey 2014 (March 2016 version)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Newborn mortality rate in Bangladesh by division

No division has yet met the Sustainable Development Goal target of 12 deaths per 1000 live births
Neonatal mortality rate (per 1,000 live births)

- 20 - 24
- 25 - 29
- 30 - 34
- 35 - 39
- 40 - 44

Data Source: Bangladesh Demographic and Health Survey 2014 (March 2016 version)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
DPT3 vaccination coverage in Bangladesh by division

Across the country, immunisation has been a huge success
DPT3 vaccination

90 - 94

94 - 99

Data Source: Bangladesh EPI Coverage Evaluation Survey (2014)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Bhutan
Antenatal care coverage in Bhutan by dzongkhag

The majority of women receive the recommended four antenatal care visits during pregnancy.
Antenatal care coverage at least 4 times (%)

- **56 - 59**
- **60 - 69**
- **70 - 79**
- **80 - 89**
- **90 and above**

Data Source: Bhutan Multiple Indicator Survey (2010)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Skilled attendant at birth in Bhutan by dzongkhag

Access to a skilled provider at birth varies widely across the country
Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.

Data Source: Bhutan Multiple Indicator Survey (2010)
Early initiation of breastfeeding in Bhutan by dzongkhag

There is wide variation across the country among newborns that are breastfed within one hour of birth
Early initiation of breastfeeding (%)

- **35 - 49**
- **50 - 64**
- **65 - 79**
- **80 - 90**

Data Source: Bhutan Multiple Indicator Survey (2010)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
India
Antenatal care coverage in India by state

Women living in the north and eastern parts of the country are less likely to receive the recommended four antenatal care visits during pregnancy.
Antenatal care coverage at least 4 times (%)

- **below 25**
- **25 - 49**
- **50 - 74**
- **75 - 89**
- **no data**

Data Source: Rapid Survey on Children (RSOC) 2013-14 National Report

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Skilled birth attendance in India by state
Women in the northern and eastern parts of the country are less likely to benefit from a skilled provider at birth
Early initiation of breastfeeding in India by state
There is wide variation across the country among newborns that are breastfed within one hour of birth
Early initiation of breastfeeding (%)

- **below 30**
- **30 - 49**
- **50 - 69**
- **70 - 89**
- **90 and above**
- **no data**

*Data Source: Rapid Survey on Children (RSOC) 2013-14 National Report*

*Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.*
Newborn mortality rate in India by state
Babies born in a few states in the southern part of the country are more likely to survive their first 28 days of life
### DPT3 vaccination (%) coverage in India by state

Efforts must be made to reach children in the northern and eastern parts of the country with lifesaving immunisations.
DPT3 vaccination (%)

- 35 - 49
- 50 - 64
- 65 - 79
- 80 - 89
- 90 and above
- no data

Data Source: Rapid Survey on Children (RSOC) 2013-14 India Factsheets

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Maldives
Skilled birth attendance in Maldives by region

Most women benefit from having a skilled provider at birth
Skilled attendant at birth (%)

Data Source: Maldives Demographic and Health Survey (2009)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Early initiation of breastfeeding in Maldives by region

Efforts should be made to ensure all newborns benefit from being breastfed within one hour of birth.
Early initiation of breastfeeding (%)

- 59.6
- 60
- 62.1
- 68.4
- 70.8
- 74.2

Data Source: Maldives Demographic and Health Survey (2009)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Newborn mortality rate in Maldives by region

A newborn’s chance of survival is twice as high in some regions of the country
Neonatal mortality rate (per 1,000 live births)

Data Source: Maldives Demographic and Health Survey (2009)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Nepal
Antenatal care coverage in Nepal by region

Many women still do not receive the recommended four antenatal care visits during pregnancy
Antenatal care coverage at least 4 times (%)

- **30 - 39**
- **40 - 49**
- **50 - 59**
- **60 - 69**
- **70 - 75**

Data Source: Nepal Multiple Indicator Cluster Survey 2014

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Skilled birth attendance in Nepal by region

Women in the far west, mid-west and eastern regions are less likely to benefit from a skilled provider at birth
Skilled attendant at birth (%)  
- **below 30** 
- **30 - 44** 
- **45 - 59** 
- **60 - 75**  

Data Source: Nepal Multiple Indicator Cluster Survey 2014  

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Early initiation of breastfeeding in Nepal by region

Many newborns do not benefit from being breastfed within one hour of birth
Early initiation of breastfeeding (%)

- **below 30**
- **30 - 44**
- **45 - 59**
- **60 - 75**

Data Source: Nepal Multiple Indicator Cluster Survey 2014

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Newborn mortality rate in Nepal by region
There is wide variation in a newborn’s chance of survival across the country
Neonatal mortality rate (per 1,000 live births)

- below 10
- 10 - 19
- 20 - 29
- 30 - 39
- 40 - 59
- 60 - 69

Data Source: Nepal Multiple Indicator Cluster Survey 2014

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
DPT3 vaccination coverage in Nepal by region

Efforts to improve immunisation coverage should target the most deprived children
DPT3 Vaccination (%)
Pakistan
Antenatal care coverage in Pakistan by region

There are large geographic disparities across the country with respect to antenatal care utilisation
Antenatal care coverage at least 4 times (%)

- 12.2
- 24
- 30.9
- 38.5
- 44.4
- 82.1
- no data

Data Source: Pakistan Demographic and Health Survey (2012-13)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Skilled birth attendance in Pakistan by region
Too many women living outside of Islamabad do not benefit from having a skilled provider at birth
Skilled attendant at birth (%)

- 17.8
- 43.7
- 48.3
- 52.5
- 60.5
- 88.1
- no data

Data Source: Pakistan Demographic and Health Survey (2012-13)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Early initiation of breastfeeding in Pakistan by region
The vast majority of women initiate breastfeeding within one hour of birth
Data Source: Pakistan Demographic and Health Survey (2012-13)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Newborn mortality rate in Pakistan by region

Babies born in the southern part of the country are less likely to survive their first 28 days of life
**Neonatal mortality rate (per 1,000 live births)**

- **63**
- **54**
- **41**
- **39**
- **26**
- **no data**

*Data Source: Pakistan Demographic and Health Survey (2012-13)*

*Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.*
DPT3 vaccination coverage in Pakistan by region

Immunisation coverage among children ages 12-23 months varies widely across the country
Data Source: Pakistan Demographic and Health Survey (2012-13)

Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.
Sri Lanka
Skilled birth attendance in Sri Lanka by district

There is variation in access to a skilled provider at birth across the country
Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.

Data Source: Sri Lanka Annual Health Bulletin (2014)
Newborn mortality rate in Sri Lanka by district

In a few districts, the newborn mortality rate is twice as high as it is in some others
Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.

DPT3 vaccination coverage in Sri Lanka by district

Across the country, immunisation has been a huge success
Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations.

Data Source: Sri Lanka Annual Health Bulletin (2014)
Methodology

The 2016 South Asia Health Atlas includes data from both national and sub-national areas, as well as measures of intervention coverage, social determinants of health and health financing. Explanations of how data were categorised, and definitions and data sources used are included below.

Categorisation of indicators on regional maps

To facilitate interpretation of regional maps that show multiple indicators relating to immunisation and newborn mortality, we have used “traffic light” categories. These categories represent good progress (green), moderate progress (yellow) and limited progress (red) towards universal coverage, improved social determinants or towards meeting global standards for health financing.

Progress on social determinants such as adolescent births and child marriage was considered good if the status was less than 10 percent, moderate if between 10 and 39, and limited if 40 and above. Mortality among children under 5 years of age (U5MR) was categorised only slightly differently, with good representing 10 or below because U5MR in Sri Lanka (10) and Maldives (9) is so much lower than the other countries.

As per the World Health Organisation’s recommendations, the standard used for health workers (i.e., physicians, nurses and midwives) was 23 per 10,000 population, and the standard used for out-of-pocket expenditure was less than 20 percent of total health expenditures.1,2 Similarly, the standard used for government expenditure on health as a percent of gross domestic product (GDP) was at least 3 percent.3 Countries were categorised as either having met (green) or not met (red) these financing standards.

The table above provides a summary of the categories used for each indicator on the regional ring maps.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Traffic light category</th>
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<tbody>
<tr>
<td>Adolescent births per 1000 women ages 15-19 years</td>
<td>9 and below 10 to 39 40 and above</td>
</tr>
<tr>
<td>Antenatal care (%)</td>
<td>90 and above 50 to 89 49 and below</td>
</tr>
<tr>
<td>Child marriage (%)</td>
<td>9 and below 10 to 39 40 and above</td>
</tr>
<tr>
<td>Early initiation of breastfeeding (%)</td>
<td>90 and above 50 to 89 49 and below</td>
</tr>
<tr>
<td>Female literacy (%)</td>
<td>90 and above 50 to 89 49 and below</td>
</tr>
<tr>
<td>Government expenditure on health as a percent of GDP (%)</td>
<td>3 or more Not applicable Below 3</td>
</tr>
<tr>
<td>Health workers per 10,000 population</td>
<td>23 and above Not applicable 22 and below</td>
</tr>
<tr>
<td>Out of pocket expenditure (% of total health expenditures)</td>
<td>19 and below Not applicable 20 and above</td>
</tr>
<tr>
<td>Skilled attendant at birth (%)</td>
<td>90 and above 50 to 89 49 and below</td>
</tr>
<tr>
<td>Under-5 mortality per 1,000 live births</td>
<td>10 and below 11 to 39 40 and above</td>
</tr>
</tbody>
</table>
Colour categorisation on country maps

Country maps are based on availability of data and include measures of antenatal care coverage, early initiation of breastfeeding, skilled attendant at birth, newborn mortality and immunisation coverage. Due to large variations among South Asia countries, the data for each specific map have been categorised based on the national range of data obtained for each indicator. This was done in order to highlight sub-national progress and challenges.

Indicators for which there was limited sub-national variation are shown with much less colour variation and fewer categories in the Atlas. For example, in cases where the estimates were quite good across all sub-national areas (such as for immunisation coverage in Bangladesh), we felt that the map should illustrate the strong progress that has already been made.
Indicator definitions

Adolescent birth rate: Number of births per 1,000 adolescent girls aged 15–19

Antenatal care: Percentage of women (aged 15–49) attended by any provider at least four times

Child marriage: Percentage of women 20–24 years old who were first married or in a union before they were 18 years old

DPT3: Percentage of children ages 12-23 months who received three doses of diphtheria, pertussis and tetanus vaccine by the age of 12 months

Early initiation of breastfeeding: Percentage of infants who are put to the breast within one hour of birth

Female literacy: Percentage of female population aged 15 years and over who can both read and write with understanding a short simple statement on his/her everyday life. Generally, ‘literacy’ also encompasses ‘numeracy’, the ability to make simple arithmetic calculations

Government expenditure on health as a percent of GDP: Public expenditures on health services as a percent of the gross domestic product (GDP) which is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output. Gross domestic product per capita is GDP divided by midyear population

Health workers per 10,000 population: The total number of physicians, midwives and nurses per 10,000 population

Neonatal mortality rate: Probability of dying during the first 28 completed days of life, expressed per 1,000 live births

Out of pocket expenditure: Share of total current expenditure on health paid by households out-of-pocket, expressed as a percentage of total current expenditure on health

Skilled attendant at birth: Percentage of births attended by skilled heath personnel (doctor, nurse or midwife)

Under-5 mortality rate: Probability of dying between birth and exactly 5 years of age, expressed per 1,000 live births
Data sources and notes

National data presented in regional maps


**Sub-national data presented in country maps**

Sub-national data included in the *Atlas* are those identified as the most recent and valid by UNICEF regional office staff in collaboration with country office colleagues. Most of these data are based on population-based household surveys (such as Demographic and Health Surveys or Multiple Indicator Cluster Surveys). Data representing coverage in Sri Lanka and Maldives (DPT3 only) are based on administrative records.

It should be noted that data in some settings within the region, particularly those obtained in insecure geographic areas, are difficult to collect and verify.

**Afghanistan**


Provincial-level estimates for Zabul have not been reported due to small sample size.


DPT3 coverage is based on crude coverage (history and card) among children ages 12 to 23 months.

**Bangladesh**


DPT3 coverage is based on crude coverage among children ages 12 to 23 months.
**Bhutan**
Data on antenatal care, skilled attendant at birth and early initiation of breastfeeding for Gasa Dzongkhag are based on only 25-49 unweighted cases.

**India**
DPT3 coverage is based on vaccination card or mother’s report among children ages 12 to 23 months.

**Maldives**

**Nepal**
Estimates based on 25–49 unweighted cases include: antenatal care, skilled attendant at birth, early initiation of breastfeeding in Western Mountain, and DPT3 in Central Mountain. The DPT3 estimate for Western Mountain is based on fewer than 25 unweighted cases. DPT3 coverage is based on vaccination card or mother’s report among children ages 12 to 23 months.
**Pakistan**
DPT3 coverage is based on vaccination card or mother’s report among children ages 12 to 23 months.

**Sri Lanka**