Situation of Newborn and Child Health in South-East Asia
Situation of Newborn and Child Health in South-East Asia
Progress towards MDG 4
World Health Organization 2014

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Printed in India
Preface

There has been a significant reduction in child mortality in the countries of the South-East Asia Region over the past two decades. Several countries have either achieved or are on track to achieve the Millennium Development Goal 4 target by 2015. This has been possible due to sustained commitment at national level to progressively implement evidence-based lifesaving interventions for newborn and child health.

All the Member States of the South-East Asia Region have made commitments to the United Nations Secretary General’s “Every Woman Every Child” movement to improve the health of women and children and reduce mortality. The countries are also committed to following the recommendations of the Commission for Information and Accountability (COIA) for the Global Strategy for Women’s and Children’s Health to improve monitoring of progress and accountability for child health.

All countries are strengthening the systems for civil registration and periodically conducting national surveys, such as Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS), to collect maternal, newborn and child health and related data, including the 11 core indicators recommended by COIA.

In this document, the WHO Regional Office for South-East Asia has compiled data and information on newborn and child health from all 11 countries to provide recent levels as well as trends over years. The country fact sheets and the Regional compilation also present the disparities in newborn and child health that are observed on account of socioeconomic parameters. Such information is extremely important for not only monitoring the progress of implementation of child health interventions but also for strengthening the planning process for the future.

I am sure the information presented in the document will be found useful by various stakeholders in the Member States of the Region and beyond. I hope the information will also be able to advocate for enhanced and sustained commitment for accelerating progress in the countries towards achieving Millennium Development Goal 4 as well as progress beyond.

Dr Poonam Khetrapal Singh
Regional Director, WHO South-East Asia
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Child Mortality and Nutrition Status

Infant mortality rates (2012)

- Infant mortality rate (IMR) is very high (above 40 per 1000 live births) in India, Myanmar, and Timor-Leste.
- Bangladesh, Indonesia and Nepal have IMR above 25 per 1000 live births.
- Lowest IMR is reported from Maldives, Thailand and Sri Lanka.


Neonatal mortality rates (2012)

- Neonatal mortality rate (NMR) is low in Maldives, 6 per 1000 live births, Thailand (8) and Sri Lanka (6).
- It is highest in India and Myanmar (31 and 26 respectively) amongst all the countries of SEAR.
- Bangladesh, Bhutan, Nepal and Timor-Leste also have higher levels of NMR (above 20).
- Democratic People’s Republic of Korea and Indonesia have moderately high levels of NMR (16 & 15 respectively).

The pattern for under-five mortality rate (U5 MR) is similar to that of IMR, being high (= or >50 per 1000 live births) in India, Myanmar and Timor-Leste. It is moderately high in Democratic People’s Republic of Korea and Indonesia (below 35).

U5 MR is on the lower side in Maldives (11), Thailand (13) and Sri Lanka (12).

A high proportion of under-five children are short for their age in Timor-Leste (58%), followed by Bangladesh, India and Nepal (all above 40%). It is moderately high in Bhutan, Democratic People’s Republic of Korea, Indonesia and Myanmar (all above 30%).

Stunting is on the lower side in Maldives and Sri Lanka (19 & 17% respectively). Thailand has the lowest level for stunting at 12%.


Source: Recent DHSs/MICS.¹

¹For detailed reference on DHSs/MICS, please refer to the country fact sheets.
Countries which have high levels of stunting are also plagued by high levels of underweight children; 35% children in Bangladesh, India and Timor-Leste are underweight.

The level is moderate in Democratic People’s Republic of Korea (19%), Myanmar (23%), Nepal (29%), and Sri Lanka (21%).

The pattern of correspondence with stunting is broken by Bhutan and Indonesia (having 13% & 18%) rates of under-weight. As in case of under-weight, Maldives and Thailand remain at the bottom with 9% and 17%.

**Underweight**

![Graph showing underweight percentages for various countries.](image)

Source: Recent DHS/MICS

**Causes of under-five deaths**

- Acute lower respiratory infections, 21.8
- Diarrhoeal diseases, 11.3
- Measles, 2.8
- Malaria, 0.6
- Others, 5.7
- Injuries, 3.9
- HIV/AIDS, 0.4
- Other noncommunicable diseases, 0.2

**Causes of neonatal deaths**

- Prematurity, 36.7
- Birth asphyxia and birth trauma, 20.0
- Other, 3.4
- Congenital anomalies, 16.5
- Other noncommunicable diseases, 9.0
- Acute lower respiratory infections, 13.9
- Sepsis and other infectious conditions of the newborn, 0.4
- Malaria, 0.2
- Others, 5.7

Regional Factsheet

Coverage of Core Interventions

Neonatal health and related maternal health

Neonates protected against tetanus at birth (2+ TT injections)

- Protection against tetanus at birth (2+ TT injections) varies in all countries in SEAR.
- It is highest in Myanmar and Thailand where more than 80% of the women received two or more TT injections.
- In India, Nepal and Timor-Leste the coverage of neonates against tetanus at birth is moderately high at 70% - 80%.
- The lowest coverage at less than 50% is in Bangladesh, Bhutan, Indonesia and Sri Lanka.
- In Democratic People’s Republic of Korea, data is available only for women whose last birth was protected against neonatal tetanus, which is high.

![Bar Chart](chart1.png)

Source: Recent DHSs/MICS

* Women whose last birth was protected against neonatal tetanus

Deliveries assisted by skilled birth attendants

Proportion of deliveries assisted by SBAs

- More than 95% of all deliveries in Democratic People’s Republic of Korea, Maldives, Sri Lanka and Thailand are assisted by SBAs. Indonesia (79%), Myanmar (71%) and Bhutan (65%) also have a moderately high proportion of deliveries assisted by SBAs.
- India (47%) has moderate levels of deliveries assisted by SBAs, whereas Timor-Leste, Nepal and Bangladesh have few deliveries assisted by SBAs.

![Bar Chart](chart2.png)

Source: Recent DHSs/MICS

5
**Infant and Young Child Nutrition**

Proportion of infants less than age 12 months with breastfeeding initiated within one hour of birth

![Bar chart showing proportions of infants less than age 12 months breastfeeding within one hour of birth.](chart)

Source: Recent DHSs/MICS

- From the data for initiation of early breastfeeding and that for sustaining breastfeeding exclusively for the first six months, it is seen that in some of the countries where there was early initiation, exclusive breastfeeding was not sustained and it declined e.g. Bhutan, Indonesia, Myanmar, Thailand and Timor-Leste.

Proportion of infants less than age 6 months exclusively breastfed

![Bar chart showing proportions of infants less than age 6 months exclusively breastfed.](chart2)

Source: Recent DHSs/MICS

- Wide disparity has been observed in the countries of SEA Region. While Timor-Leste, Sri Lanka and Myanmar have the highest proportions (82%, 80% & 76% respectively) of infants below 12 months who were breastfed within one hour of birth, Democratic People’s Republic of Korea has the lowest percentage (18%).

- Thailand, Nepal, Indonesia, and Bangladesh have about half of the infants breastfed within one hour of birth, whereas Maldives has a slightly higher proportion at 64%.
Regional Factsheet

Except for Democratic People’s Republic of Korea (28%) and Thailand (43%), in almost all other countries in the SEA Region a fairly good percentage (about 60% or above) of infants between the age of 6 and 9 months are started on complementary feeds along with breast milk. The proportion is highest in Sri Lanka (87%), followed by Maldives, Myanmar, Timor-Leste, Indonesia, Bhutan, Nepal and Bangladesh.

Proportion of infants age 6-9 months receiving breast milk and complementary food

- In Democratic People’s Republic of Korea, Bangladesh, Myanmar and Nepal over 90% of infants are administered Vitamin A supplementation. In all other countries (except Maldives – 62%) it is around 50% with Bhutan being lowest at 48%.

Vitamin A supplementation

*Data not available

Source: Recent DHSs/MICS

• Over 90% of children (age 12-23 months) received all the basic vaccinations in Sri Lanka, Myanmar, Maldives, Democratic People’s Republic of Korea, Bhutan and Thailand.

• In Nepal and Bangladesh this was at 87% and 86% levels respectively.

• India with 44% has the lowest level of child population that has been administered the basic vaccinations.

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**Immunization**

Proportion of children age 12-23 months who received all basic vaccinations at any time

![Chart showing the proportion of children who received all basic vaccinations in different countries.](chart)

*Source: Recent DHSs/MICS1*

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**Management of sick children**

**Management of diarrhoea**

Children under age 5 having diarrhoea for whom advice/treatment was sought from health facility/provider

![Chart showing the percentage of children who sought advice/treatment for diarrhoea.](chart)

*Source: Recent DHSs/MICS1*

---

• Sri Lanka, Maldives and Timor- Leste have a higher proportion of children having diarrhoea (82%, 84% & 72%) for whom medical advice/treatment was sought compared with Nepal (38%) and Bangladesh (25%) where a few children were taken to health facility.

• Myanmar, India and Indonesia had more than 50-60% of children with diarrhoea taken to a health facility for treatment.
Only in Bangladesh, Democratic People’s Republic of Korea and Timor-Leste a higher percentage of children (above 70%) having diarrhoea were given ORS. In all other countries this percentage was between 35% and 67% except for India where it was below 30%.

Seeking treatment for children with suspected pneumonia has been quite widespread in Thailand (84%) and Democratic People’s Republic of Korea (80%). It is moderate in Bhutan (74%), Bangladesh (71%), India (69%), Myanmar (69%), Indonesia (66%) and Sri Lanka (58%) while in Nepal, care providers were found to be reluctant to seek medical care.

In Maldives and Timor-Leste, care seeking for treatment for fever (including pneumonia) is high (88% and 73% respectively).

Use of antibiotics for treatment of pneumonia was more in Democratic People’s Republic of Korea compared to Thailand and Bhutan. It is lowest in India amongst the countries for which data are available.

Management of pneumonia

Children under age 5 with suspected pneumonia taken to health care provider and received antibiotics
Data on use of insecticide-treated nets for combating malaria has been sketchy and is available only for Timor-Leste, Sri Lanka and Indonesia. While use of such nets is moderately higher at 41% in Timor-Leste, it is quite low at 3% in Indonesia and at 4% in Sri Lanka. Available data indicates that 8% of the children were given antimalarials for prevention of malaria in India.

Management of malaria

Use of insecticide-treated nets the previous night / given antimalarials

Water and Sanitation

Proportion of population using improved drinking water sources (2011)

- In Bhutan, Democratic People’s Republic of Korea, India, Maldives, Sri Lanka and Thailand more than 90% population is reported to be using improved drinking water sources.
Proportion of population using improved sanitation facilities (2011)

- In Maldives, Sri Lanka and Thailand 90% or more of the population use improved sanitation facilities. In Democratic People’s Republic of Korea over 80% populations use improved sanitation facilities.
- In India and Nepal about one-third of the population has access to improved sanitation facilities.

Birth registration is almost universal in Bhutan, Democratic People’s Republic of Korea, Maldives, Sri Lanka, and Thailand.

- Myanmar, Indonesia and Timor-Leste have more than half of all the births registered.
- Registration is low in India (41%), Nepal (35%) and Bangladesh (10%).

Birth registrations

Social Disparities in Child Survival

Mortality by sex

<table>
<thead>
<tr>
<th>Country</th>
<th>NMR M</th>
<th>IMR M</th>
<th>U5 MR M</th>
<th>NMR F</th>
<th>IMR F</th>
<th>U5 MR F</th>
<th>NMR T</th>
<th>IMR T</th>
<th>U5 MR T</th>
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</thead>
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<tr>
<td>Bangladesh</td>
<td>52 M</td>
<td>47 M</td>
<td>44 M</td>
<td>53 F</td>
<td>48 F</td>
<td>44 F</td>
<td>53 T</td>
<td>47 T</td>
<td>44 T</td>
</tr>
<tr>
<td>Bhutan</td>
<td>48 M</td>
<td>39 M</td>
<td>36 M</td>
<td>52 F</td>
<td>43 F</td>
<td>40 F</td>
<td>52 T</td>
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<td>36 T</td>
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<td>37 F</td>
<td>55 T</td>
<td>40 T</td>
<td>37 T</td>
</tr>
<tr>
<td>India</td>
<td>69 M</td>
<td>58 M</td>
<td>55 M</td>
<td>70 F</td>
<td>59 F</td>
<td>56 F</td>
<td>70 T</td>
<td>59 T</td>
<td>56 T</td>
</tr>
<tr>
<td>Indonesia</td>
<td>56 M</td>
<td>46 M</td>
<td>42 M</td>
<td>56 F</td>
<td>46 F</td>
<td>42 F</td>
<td>56 T</td>
<td>46 T</td>
<td>42 T</td>
</tr>
<tr>
<td>Maldives</td>
<td>54 M</td>
<td>46 M</td>
<td>42 M</td>
<td>54 F</td>
<td>46 F</td>
<td>42 F</td>
<td>54 T</td>
<td>46 T</td>
<td>42 T</td>
</tr>
<tr>
<td>Myanmar</td>
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<td>42 M</td>
<td>38 M</td>
<td>50 F</td>
<td>42 F</td>
<td>38 F</td>
<td>50 T</td>
<td>42 T</td>
<td>38 T</td>
</tr>
<tr>
<td>Nepal</td>
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<td>45 F</td>
<td>40 F</td>
<td>52 T</td>
<td>45 T</td>
<td>40 T</td>
<td>52 T</td>
<td>45 T</td>
<td>40 T</td>
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<tr>
<td>Sri Lanka</td>
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<td>54 M</td>
<td>48 M</td>
<td>62 F</td>
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<td>48 F</td>
<td>62 T</td>
<td>54 T</td>
<td>48 T</td>
</tr>
<tr>
<td>Thailand</td>
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<td>50 M</td>
<td>63 F</td>
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<td>50 F</td>
<td>63 T</td>
<td>56 T</td>
<td>50 T</td>
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<tr>
<td>Timor-Leste</td>
<td>76 M</td>
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<td>62 M</td>
<td>76 F</td>
<td>69 F</td>
<td>62 F</td>
<td>76 T</td>
<td>69 T</td>
<td>62 T</td>
</tr>
</tbody>
</table>

Note: NMR = Neoculopathy Mortality Rate, IMR = Infant Mortality Rate, U5 MR = Under-five Mortality Rate.
Mortality by residence

Mortality by mother's education
Mortality by mother's age

Mortality by wealth quintile

Per cent

U5 MR
IMR
NMR

L= Lowest quintile
H= Highest quintile

Bangladesh  Bhutan  DPR  Korea  India  Indonesia  Maldives  Myanmar  Nepal  Sri Lanka  Thailand  Timor-Leste
Mortality by previous birth interval spacing

Source: Recent DHS/MICS
There is only marginal difference in the proportion of underweight children based on gender. While in most countries of SEA Region more male children are undernourished, in Bangladesh, India and Thailand undernourishment is more prevalent in females.

Place of residence, mothers’ education and family wealth play major roles in the nutritional status of children. However, the difference varies across the three differentials widely.

Undernourishment across all countries is higher in rural areas being 1.2 times more in Sri Lanka to two times in Democratic People’s Republic of Korea.
Proportion of underweight children - by mother’s education

- A higher proportion of children are undernourished whose mothers have not received any education compared to children of educated mothers.
- Poverty is the most critical determinant of the nutritional status of children. The differential ranges from 1.5-5 times.
Proportion of children (12 to 24 months old) who received all vaccinations anytime before survey - by sex

Proportion of children (12 to 24 months old) who received all vaccinations anytime before survey - by residence
Proportion of children (12 to 24 months old) who received all vaccinations anytime before survey - by mother's education

* In case of Myanmar, differentials for Mothers' Education cover 'Primary' level of education in place of 'No Education'.

Proportion of children (12 to 24 months old) who received all vaccinations anytime before survey- by wealth quintile

- Differentials are minimal in countries where the immunization rate is high.
- Gender has marginal impact on the immunization levels in India, Indonesia and Timor-Leste, the difference due to residence, mothers’ education and family wealth is wider being highest due to mothers’ education (3.8 times in Indonesia and 2.9 times in India).
- Coverage among poorest children is more in Maldives and Thailand.
- Immunization level is higher in urban areas across all countries, except for Maldives, Sri Lanka, Thailand and Timor-Leste.
Gender has a little influence on the treatment of diarrhoea by ORS in all other countries except Nepal where 1.3 times less female children received ORS. On the other hand more female children in Timor-Leste were given ORS compared to the male children (in all other countries, reverse was the case).

Place of residence too has little impact on the treatment of children with ORS. While urban children were more advantaged in most countries, more rural children in Indonesia, Thailand, and Timor-Leste received ORS compared to those residing in urban areas.
Mothers’ education impacted the treatment of children with ORS in India, Indonesia, Myanmar and Thailand. While children of educated mothers were more cared for in most countries, children in Bhutan and Thailand were less cared for by their educated mothers (for treatment of diarrhoea with ORS).

Family wealth is the other important indicator for treatment of children having diarrhoea with ORS mainly in India and Myanmar (2.3 times more than the poorest families in India and 1.4 times more in Myanmar). While more poorest than the wealthiest families in Bhutan, Indonesia and Thailand administered ORS to their sick children, in all other countries a higher proportion of wealthiest families treated their sick children with ORS compared to the poorest families.
Regional Factsheet

Proportion of children under age 5 with symptom of ARI who received antibiotics—by sex

In six (Bangladesh, Bhutan, India, Maldives, Myanmar and Nepal) of the 10 countries in the SEA Region for which data is available, more male children were given antibiotics for treatment of ARI. In the other four countries (Democratic People's Republic of Korea, Sri Lanka, Thailand and Timor-Leste), more female children were given antibiotics than the male children.

In all countries (with the exception of Timor-Leste) more children living in the urban areas were given antibiotics than the rural children. While the difference was marginal in most nations, it was 1.3 times in India and Nepal and 1.2 times in Bhutan.

*Includes data for any fever (fever due to ARI, malaria, diarrhoea etc.).
Proportion of children under age 5 with symptom of ARI who received antibiotics—mothers’ education

Percentage of children under age 5 with symptom of ARI who received antibiotics—by wealth quintile

*Impact of mothers’ education and family wealth was more pronounced than the other differentials. In all the countries, mothers educated beyond secondary level are more likely to get their sick children treated with antibiotics than those who are not educated. The differential varied from 1.1 times (for Democratic People’s Republic of Korea, Maldives, Thailand and Timor-Leste) to 2.6 times for India for which national values are also low.

*Family wealth has similar impact on the treatment with antibiotics as the mothers’ education. In all but two countries (Sri Lanka and Thailand), wealthier families are more likely to treat the sick child with antibiotics and this differential varies from 1.1 times for Myanmar, Sri Lanka and Thailand to 3.2 times for India.

Source: Recent DHSs/MICSs

*Includes data for any fever (fever due to ARI, malaria, diarrhoea etc.).

**Differentials for Mothers’ Education cover ‘Secondary’ and ‘Higher’ levels of education in place of ‘No Education’ and ‘Secondary +’.

***Differentials for Mothers’ Education cover ‘Primary’ level of education in place of ‘No Education’.
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✓ Differentials by Geographical Regions
✓ Differentials in Newborn and Child Health
**Selected Demographic Indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (000)</td>
<td>148,692¹</td>
</tr>
<tr>
<td>Total under-five population (000)</td>
<td>14,707¹</td>
</tr>
<tr>
<td>Annual births (000)</td>
<td>3,038¹</td>
</tr>
<tr>
<td>Birth registration (%)</td>
<td>10¹</td>
</tr>
<tr>
<td>Neonatal mortality rate (per 1000 live births)</td>
<td>24²</td>
</tr>
<tr>
<td>Annual number of neonatal deaths</td>
<td>76,000²</td>
</tr>
<tr>
<td>Post Neonatal Mortality rate</td>
<td>10³</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>33³</td>
</tr>
<tr>
<td>Annual number of infant deaths</td>
<td>102000³</td>
</tr>
<tr>
<td>Under-five mortality rate (per 1000 live births)</td>
<td>41²</td>
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<tr>
<td>Annual under-five deaths</td>
<td>127,000²</td>
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<tr>
<td>Crude birth rate</td>
<td>22.6³</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>2.3³</td>
</tr>
</tbody>
</table>

Source:  

**Birth registration, 2000-2010**

- A small proportion of births are registered. Registration of births is slightly higher in urban areas as compared to rural.

Child Mortality and Nutritional Status

Trends in neonatal, infant and under-five mortality rates, 1990 to 2012

- Fewer neonates are dying now. Neonatal mortality decreased by 50% over the two decades between 1990 and 2012—more than 2% per year.
- Between 1990 and 2012, infant mortality declined by 67 and under-five mortality by 103 points.
- Millennium Development Goal (MDG 4) target for under-five mortality rate has already been achieved by Bangladesh.

Under-five mortality rate in rural areas is 10% higher than in urban areas, while neonatal and infant mortality rates are similar in rural and urban areas.

Mortality rates by residence

- Under-five mortality rate in rural areas is 10% higher than in urban areas, while neonatal and infant mortality rates are similar in rural and urban areas.

**Distribution of neonatal deaths by day of life**

Of the 273 surveyed neonatal deaths for 2011 DHS in Bangladesh:

- 37% occurred on day 0;
- 50% occurred on days 0 and 1; and
- 81% occurred during the first week of life.

The first week of life is the riskiest for newborns. Most deaths during the neonatal period occur at home and are often unregistered.


**Perinatal mortality rate**

For 5-year period preceding the survey

<table>
<thead>
<tr>
<th>Number of stillbirths</th>
<th>232</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of early neonatal deaths</td>
<td>220</td>
</tr>
<tr>
<td>Perinatal mortality rate</td>
<td>50</td>
</tr>
</tbody>
</table>

• Neonatal causes, acute lower respiratory infections and diarrhoea are major causes of death among under-five children.
• Most neonatal deaths are caused by complications of prematurity, infections, birth asphyxia and trauma and congenital anomalies.

At the national level, two in five children are stunted and underweight.

Since 2004, stunting among children has declined by 10 percentage points and underweight by seven percentage points.

Wasting increased by one percentage point during the period 2004 to 2011.

The prevalence of stunting increases with age from 18% of children less than 6 months to 52% of children between ages 18-23 months and decreases thereafter.

The percentage of children who are underweight increases sharply with age and peaks at 42.9% among children between ages 36-47 months.

Source:
The last birth was protected against neonatal tetanus for nine out of ten mothers.

Neonates protected against tetanus at birth

- 90% of women whose last birth was protected against neonatal tetanus.
- 42% of women received 2+ TT injections.

Coverage of Core Interventions
Newborn health and related maternal health

Trends in proportion of women who received antenatal care

- About three in ten women do not receive any antenatal care. Only one-fourth of women make more than four ANC visits.
- There is a gradual increase in the number of ANC visits during the last decade.

*The value is for 2-3 visits

Source:
Deliveries assisted by skilled birth attendants

Trends in proportion of deliveries assisted by skilled birth attendants

![Trends in proportion of deliveries assisted by skilled birth attendants](image)

- Three in ten deliveries are assisted by skilled birth attendants (SBA).
- The proportion of deliveries assisted by SBAs has tripled during the period between 1993 and 2011.

Proportion of births by person providing assistance during childbirth

- More than half of births in Bangladesh are assisted by untrained traditional birth attendants, and 4% deliveries are assisted by relatives, friends or neighbours.
- About one-third births are assisted by qualified health professionals.


• Almost half of children are breastfed within one hour of birth, which increased from 9% in 1993 to 47% in 2011.

Infant and Young Child Nutrition

Trends in proportion of infants less than age 12 months who were initiated into breastfeeding within one hour of birth

<table>
<thead>
<tr>
<th>Year</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-94</td>
<td>9</td>
</tr>
<tr>
<td>1996-97</td>
<td>13</td>
</tr>
<tr>
<td>1999-2000</td>
<td>17</td>
</tr>
<tr>
<td>2004</td>
<td>24</td>
</tr>
<tr>
<td>2007</td>
<td>43</td>
</tr>
<tr>
<td>2011</td>
<td>47</td>
</tr>
</tbody>
</table>

Source:

Trends in proportion of infants less than age 6 months who were exclusively breastfed

<table>
<thead>
<tr>
<th>Year</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-1997</td>
<td>45</td>
</tr>
<tr>
<td>1999-2000</td>
<td>46</td>
</tr>
<tr>
<td>2004</td>
<td>42</td>
</tr>
<tr>
<td>2007</td>
<td>43</td>
</tr>
<tr>
<td>2011</td>
<td>64</td>
</tr>
</tbody>
</table>

Source:

• Only a little less than two-thirds of children below 6 months are exclusively breastfed.

• Exclusive breastfeeding rate has practically remained constant since 1996 till 2007, and sharply increased afterwards.
Almost all children, 6-59 months old, had received two doses of vitamin A supplement and this proportion increased by 15 percentage points between 2005 and 2008.

*Age 7-9 months


Among children 6-9 months old, seven in ten receive complementary food along with breast milk.

Increasing trend in complementary feeding was observed from 59% to 74% between 1999-2007. However, in 2011 a decline has been observed.

Trends in proportion of children under age 5 receiving two doses of vitamin A during calendar year

- Almost all children, 6-59 months old, had received two doses of vitamin A supplement and this proportion increased by 15 percentage points between 2005 and 2008.

Immunization

Trends in proportion of children age 12–23 months vaccinated

- Eighty-six per cent children, 12-23 months old, had received all the recommended vaccinations.
- Almost all children had received BCG vaccination.
- The level of coverage for three doses of DPT, three doses of polio, and three doses of hepatitis vaccine is above 93%. Coverage is little low for measles vaccination.
- The vaccination coverage has doubled since 1993.

Management of sick children

Management of diarrhoea

Trends in proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider

- Only one-fourth children with diarrhoea were taken to a health facility or a provider for advice or treatment.
Trends in proportion of children under age 5 who had diarrhoea in the past 2 weeks and were treated with ORS

- In 2011, 78% children with diarrhoea, who were brought to a health facility, received ORS.
- The proportion of children receiving ORS increased by 28 percentage points between 1993 and 2011.

Proportion of children under age 5 who had diarrhoea in the past 2 weeks and were given treatment other than ORT

- 29% children under age five who had diarrhoea were given zinc syrup and 20% were given zinc tablets.

Source:

Source:
Management of pneumonia

Trends in proportion of children under age 5 with suspected pneumonia, who were taken to an appropriate health care provider and received antibiotics

- One-third of children with symptoms of ARI were taken to a health facility or a medically trained provider for treatment and 71% received antibiotics as treatment from various sources.


Care-seeking for suspected pneumonia by type of health provider

- A substantial number of children with suspected pneumonia were taken to a traditional unqualified doctor (29%), and pharmacy (22%), 17% such children did not seek any treatment.

Use of insecticide-treated bed nets
Data not available

Water and sanitation

Proportion of population using improved drinking water sources

- 83% population is using improved drinking water sources.
- The coverage of urban and rural populations is quite similar.

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)

Proportion of population using improved sanitation facilities

- Slightly more than half of the total population is using improved sanitation facilities.

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)
Coverage across life-course

Coverage of interventions across the life-course continuum

• Around three in ten mothers receive skilled care before, during and immediately after birth which can allow for early detection and management of problems leading to neonatal mortality.

• Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may cause death or serious illness to the baby. Only three out of ten births took place in health facilities.

Missed opportunities for the delivery of lifesaving interventions

- Low coverage for interventions during pregnancy and immediately surrounding birth, such as visits for antenatal care, services of skilled birth attendants, ensuring early initiation of breastfeeding and early postnatal check on health of the mother and newborn are the missed opportunities which have the potential for achieving higher levels of coverage and prevention of deaths.
- Focused interventions in the form of campaigns or outreach services, such as vitamin A supplementation, immunization and distribution of ORS packets have resulted in higher levels of coverage.
- In comparison, those interventions that require 24-hour access to skilled health providers, such as treatment of childhood pneumonia or diarrhoea also have a large potential to contribute to saving of precious lives.

## Socio-economic Differentials

### Demographic and Social Differentials for Newborn and Child Health

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
<th>Differentials</th>
<th>Mother's age (years)</th>
<th>Wealth quintiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Child's sex</td>
<td>Mother's education</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>No education</td>
</tr>
<tr>
<td>Neonatal mortality rate</td>
<td>32</td>
<td>39</td>
<td>26</td>
<td>32</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>43</td>
<td>48</td>
<td>37</td>
<td>55</td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>53</td>
<td>57</td>
<td>50</td>
<td>71</td>
</tr>
<tr>
<td>Stunting, %</td>
<td>41</td>
<td>41</td>
<td>42</td>
<td>51</td>
</tr>
<tr>
<td>Underweight, %</td>
<td>36</td>
<td>34</td>
<td>39</td>
<td>49</td>
</tr>
<tr>
<td>Protection against neonatal tetanus (2+ TT)</td>
<td>42</td>
<td>42</td>
<td>-</td>
<td>42</td>
</tr>
<tr>
<td>Deliveries assisted by SBAs, %</td>
<td>32</td>
<td>-</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>Early initiation of breastfeeding, %</td>
<td>47</td>
<td>48</td>
<td>46</td>
<td>47</td>
</tr>
<tr>
<td>Median duration of breastfeeding, (months)</td>
<td>3.5</td>
<td>3.4</td>
<td>3.5</td>
<td>2.9</td>
</tr>
<tr>
<td>Children receiving all basic vaccinations, %</td>
<td>86</td>
<td>87</td>
<td>85</td>
<td>76</td>
</tr>
<tr>
<td>Children with diarrhea brought to health facility/ provider, %</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>19</td>
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<tr>
<td>Children with diarrhea treated with ORS, %</td>
<td>78</td>
<td>82</td>
<td>72</td>
<td>79</td>
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<tr>
<td>Children with symptoms of ARI taken to health facility/provider, %</td>
<td>35</td>
<td>40</td>
<td>29</td>
<td>25</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility/provider and given antibiotics, %</td>
<td>71</td>
<td>76</td>
<td>66</td>
<td>63</td>
</tr>
</tbody>
</table>

### Remarks

- **Mother’s education is a major determinant of newborn and child health.** If the mothers are not educated, their children are considerably disadvantaged compared to those whose mothers are educated beyond secondary level:
  - Infants and children under-five years are almost twice more likely to die early.
  - They are also likely to be twice more stunted, and three times more underweight.
  - They are breastfed for half the median duration.
  - They are twice less likely to be taken to a health facility or provider when sick with diarrhoea or have symptoms of ARI.

- **Child mortality is linked directly to the age of the mother in as much as those born to younger mothers (< 20 years) are 1.8 to 1.5 times more likely to die as neonates, infants and under-five children compared to those born to older mothers in the age group 20 – 29 years.

- Children born in poor families are at a higher risk of death as compared to those born in rich families.

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Socio-economic Differentials

Differentials in Newborn and Child Health

Differentials in neonatal, infant and under-five mortality rates

Differentials in nutritional status of children
Differentials in the deliveries by SBAs

<table>
<thead>
<tr>
<th>Mother's education</th>
<th>Wealht quintile</th>
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</thead>
<tbody>
<tr>
<td>13 No Edn</td>
<td>12 Lowest</td>
</tr>
<tr>
<td>32 (20-34 years)</td>
<td>32 Lowest</td>
</tr>
<tr>
<td>32 (&lt;20 years)</td>
<td>64 Highest</td>
</tr>
</tbody>
</table>

Deliveries assisted by SBAs

Differentials in immunization of children

<table>
<thead>
<tr>
<th>Mother's education</th>
<th>Wealht quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Edn</td>
<td>77 Lowest</td>
</tr>
<tr>
<td>Sec+</td>
<td>76 Lowest</td>
</tr>
<tr>
<td>86</td>
<td>94 Highest</td>
</tr>
</tbody>
</table>

Children receiving all basic vaccinations

Differentials in care seeking for children with symptoms of ARI

<table>
<thead>
<tr>
<th>Mother's education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 No Edn</td>
<td>25 Lowest</td>
</tr>
<tr>
<td>35</td>
<td>35 Lowest</td>
</tr>
<tr>
<td>58 Sec+</td>
<td>58 Highest</td>
</tr>
</tbody>
</table>

Children with symptoms of ARI brought to health facility/provider

Differentials in care-seeking by children sick with diarrhoea

<table>
<thead>
<tr>
<th>Mother's education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 No Edn</td>
<td>79 No Edn</td>
</tr>
<tr>
<td>25</td>
<td>78 Lowest</td>
</tr>
<tr>
<td>41 Sec+</td>
<td>88 Sec+</td>
</tr>
</tbody>
</table>

Children sick with Diarrhoea

### Differentials by Geographical Regions

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Place of Residence</th>
<th>Division</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>NMR</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>IMR</td>
<td>42</td>
<td>43</td>
</tr>
<tr>
<td>U5MR</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>Stunting %</td>
<td>36</td>
<td>43</td>
</tr>
<tr>
<td>Underweight %</td>
<td>28</td>
<td>39</td>
</tr>
<tr>
<td>Neonates protected against tetanus (2+ TT) %</td>
<td>47</td>
<td>40</td>
</tr>
<tr>
<td>Deliveries by SBA %</td>
<td>54</td>
<td>25</td>
</tr>
<tr>
<td>Initiation of breastfeeding within one hour after birth %</td>
<td>44</td>
<td>48</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding (Months)</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Immunization %</td>
<td>87</td>
<td>86</td>
</tr>
<tr>
<td>% with diarrhoea for whom treatment was sought from a health facility</td>
<td>45</td>
<td>20</td>
</tr>
<tr>
<td>% with diarrhoea who received ORS</td>
<td>84</td>
<td>76</td>
</tr>
<tr>
<td>% with suspected pneumonia for whom treatment was sought from a health facility</td>
<td>54</td>
<td>31</td>
</tr>
<tr>
<td>% with suspected pneumonia who received antibiotics*</td>
<td>78</td>
<td>70</td>
</tr>
</tbody>
</table>

List of Country Indicators

Selected Demographic Indicators
✓ Selected demographic indicators
✓ Birth registration

Child Mortality and Nutritional Status
✓ Trends in neonatal, infant and child mortality rates
× Distribution of neonatal deaths by day of life
✓ Causes of under-five and neonatal deaths
✓ Nutritional status of children by age
✓ Mortality rates by residence
× Perinatal mortality
✓ Trends in nutritional status of children

Coverage of Core Interventions
Newborn health and related maternal health
✓ Proportion of neonates protected against tetanus at birth
✓ Trends in proportion of deliveries assisted by skilled birth attendants
× Trends in proportion of women receiving antenatal care
× Proportion of births by persons providing assistance during childbirth

Infant and Young Child Nutrition
✓ Proportion of infants who started breastfeeding within one hour of birth
✓ Proportion of infants age 6-9 months receiving breast milk and complementary food
× Proportion of children <6 months exclusively breastfed
✓ Proportion of children age 6-59 months receiving two doses of vitamin A during calendar year: trends

Immunization
✓ Trends in immunization coverage

Management of Sick Children
Management of diarrhoea
× Proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider: trends
× Proportion of children under age 5 with diarrhoea who were given treatment other than ORT
✓ Proportion of children under age 5 with diarrhoea who received ORS & ORT
✓ Care-seeking for suspected pneumonia by type of health provider

Management of pneumonia
✓ Proportion of children under age 5 with symptoms of pneumonia for whom advice or treatment was sought from a health facility or provider and received antibiotics
× Malaria treatment

Management of malaria
× Use of insecticide-treated bed nets
✓ Proportion of population using improved sanitation facilities

Water and Sanitation
✓ Proportion of population using improved drinking water
✓ Missed opportunities for the delivery of lifesaving interventions

Coverage across life-course
✓ Coverage of interventions across the continuum of care in life course
✓ Differentials in Newborn and Child Health

Socio-economic Differentials
✓ Demographic and Social Differential for Newborn and Child Health
✓ Differentials by Geographical Regions
# BHUTAN

## Selected Demographic Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population (000)</td>
<td>726¹</td>
</tr>
<tr>
<td>Total under-five population (000)</td>
<td>71¹</td>
</tr>
<tr>
<td>Annual births (000)</td>
<td>15¹</td>
</tr>
<tr>
<td>Birth registration (%)</td>
<td>100¹</td>
</tr>
<tr>
<td>Neonatal mortality rate (per 1000 live births)</td>
<td>21²</td>
</tr>
<tr>
<td>Annual number of neonatal deaths</td>
<td>0⁻²</td>
</tr>
<tr>
<td>Post neonatal mortality rate</td>
<td>NA</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>36²</td>
</tr>
<tr>
<td>Annual number of infant deaths</td>
<td>1,000²</td>
</tr>
<tr>
<td>Under-five mortality rates (per 1000 live births)</td>
<td>45²</td>
</tr>
<tr>
<td>Annual under-five deaths</td>
<td>1,000²</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>20¹</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>2.4¹</td>
</tr>
</tbody>
</table>


# Number of deaths is less than 1,000
NA: Not Available

## Birth registration, 2000-2010

- Birth registration is universal in Bhutan with 100% registration in both rural and urban areas.

![Birth registration chart](Childinfo.org/birth_registration_tables.php, accessed 25 Oct 2012)
Child Mortality and Nutritional Status
Newborn health and related maternal health

Trends in neonatal, infant and under-five mortality rates, 1990 to 2012

- Between the period 1990 to 2012, infant and under-five mortality declined by 56 and 86, respectively.
- The under-five mortality target is likely to be achieved
- There is 50% reduction in neonatal deaths between 1990 and 2012.

Most neonatal deaths are caused by complications of prematurity, infections, birth asphyxia and trauma and congenital anomalies.

Neonatal causes, acute lower respiratory infections and diarrhoea are major causes of death among under-five children.

BHUTAN

- At the national level, 34% children under-five are short for their age or stunted, while 13% are underweight.
- Level of stunting declined between 1988 and 2010 by 22 percentage points. While the proportion of underweight children has decreased from 38% to 13%, wasting has actually gone up to 6% from 4% in 1988.

Trends in nutritional status of children under age 5

- Stunting level increases steadily, peaking at 40% for the age group 36-47 months and decreases thereafter.
- Underweight prevalence remains practically constant at about 11% till the age group 12-23 months and increases thereafter till the age group 36-47 months to 15% before reducing again to 13% for the age group 48-59 months.

Nutritional status of children by age

Coverage of Core Interventions
Newborn health and related maternal health

Neonates protected against tetanus at birth

- The last birth for almost seven out of ten mothers was protected against neonatal tetanus.

Deliveries assisted by skilled birth attendants

- Since 1994, births attended to by skilled birth attendants have increased by almost six times.

Trends in proportion of deliveries assisted by skilled birth attendants


**Infant and Young Child Nutrition**

Proportion of infants less than age 12 months who were initiated into breastfeeding within one hour of birth

- Nearly three in five children are breastfed within one hour of birth.

![Chart showing data](source)


---

Proportion of infants less than age 6 months exclusively breastfed, and those age 6-23 months receiving breast milk and complementary food

- Although 59% babies start breastfeeding within one hour after birth in Bhutan, about 50% children below 6 months are exclusively breastfed.

- Of the infants between 6-23 months of age, 72% were being given appropriate complementary food besides the breast milk.

![Chart showing data](source)

**Immunization**

**Trends in immunization coverage-2010**

- The level of coverage for all vaccines, namely, BCG, three doses of DPT, and three doses of polio vaccine, measles and three doses of hepatitis B is almost universal (more than 90%).

- Vitamin A supplementation is at a lower level (48%) compared to other countries in the Region.

- Forty-eight per cent of under-five children received two doses of vitamin A during 2007. Vitamin A supplementation increased by three percentage points between 2006 and 2007.

Management of Sick Children

Management of diarrhoea

Proportion of children under age 5 with diarrhoea who were given ORS and any ORT

- Children under-five who had diarrhoea were given ORS and ORT for treatment of diarrhoea. While 61% received ORS, 81% received any ORT.


Management of pneumonia

Trends in proportion of children under age 5 with suspected pneumonia, who were taken to an appropriate health care provider and received antibiotics

- While 7% of children had symptoms of pneumonia, 74% of these children were taken to a health care facility/provider for treatment.

- Forty-nine per cent of the children with suspected pneumonia were given antibiotics for treatment.


Use of insecticide-treated nets

Data not available
Water and Sanitation

Proportion of population using improved drinking water sources

- Almost the entire population have access to improved drinking water sources.

Proportion of population using improved sanitation facilities

- Seventy four per cent of urban and 29% of rural population is using improved sanitation facilities.
Coverage across life-course

Coverage of interventions across the life-course continuum

Missed opportunities for the delivery of lifesaving interventions

Coverage of interventions immediately surrounding birth, such as ensuring early initiation of breastfeeding and treatment of diarrhoea are the missed opportunities which have the potential for achieving higher levels of coverage and prevention of deaths.

Only outreach interventions in the form of campaigns or home visits, such as immunization, ANC visits and protection against neonatal tetanus have resulted in higher levels of coverage.

In addition, those interventions that require 24-hour access to skilled health providers, such as treatment of childhood pneumonia or diarrhoea also have a large potential to contribute to saving of precious lives. Micronutrient supplementation for vitamin A is another missed opportunity which needs to be addressed for better health of the infants and children.

### Socio-economic Differentials

#### Demographic and Social Differentials for Newborn and Child Health

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
<th>Differentials</th>
<th>Child's sex</th>
<th>Mother's education</th>
<th>Mother's age (years)</th>
<th>Wealth quintiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>No education</td>
<td>Secondary+</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>47</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>54</td>
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<td>Under-five mortality rate</td>
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<tr>
<td></td>
<td>79</td>
<td>58</td>
<td></td>
<td></td>
<td>77</td>
<td>31</td>
</tr>
<tr>
<td>Stunting, %</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>33</td>
<td>34</td>
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<td>37</td>
<td>23</td>
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<tr>
<td>Underweight, %</td>
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<tr>
<td></td>
<td>13</td>
<td>12</td>
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<td>Wasting, %</td>
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<tr>
<td>Protection against neonatal tetanus</td>
<td>49</td>
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<td></td>
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<tr>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td>44</td>
<td>63</td>
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<tr>
<td>Deliveries assisted by SBAs, %</td>
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</tr>
<tr>
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<td>-</td>
<td>-</td>
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<td>54</td>
<td>94</td>
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<tr>
<td>Early initiation of breastfeeding, %</td>
<td>59</td>
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<td>57</td>
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<tr>
<td>Median duration of exclusive breastfeeding, %</td>
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<td>2</td>
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<td>Children receiving all basic vaccinations, %</td>
<td>91</td>
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<tr>
<td>Children with diarrhoea brought to health facility/ provider, %</td>
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</tr>
<tr>
<td>Children with diarrhoea treated with ORS, %</td>
<td>61</td>
<td></td>
<td></td>
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<td>61</td>
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<td></td>
<td>61</td>
<td>61</td>
<td></td>
<td></td>
<td>62</td>
<td>55</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility/ provider, %</td>
<td>74</td>
<td>76</td>
<td>72</td>
<td>75</td>
<td>84</td>
<td>-</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility/ provider and given antibiotics, %</td>
<td>49</td>
<td>50</td>
<td>47</td>
<td>42</td>
<td>67</td>
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</tbody>
</table>

#### Remarks

- Mother's education is a major determinant of newborn and child health. If the mothers are not educated, their children are considerably disadvantaged compared to those whose mothers are educated beyond secondary level:
  - Infants and children under age five are almost two and a half times more likely to die early.
  - They are also likely to be one and a half times more stunted or underweight.
  - Infants are exclusively breastfed for lesser than the median duration.

- Family's wealth plays an important role in child survival, particularly in the duration of breastfeeding, which is important for prevention of childhood infections.
**Socio-economic Differentials**

**Differentials in Newborn and Child Health**

Differentials in neonatal, infant and under-five mortality rates

- **Mother's education**
  - 24% Sec+ 47% No Edn
  - 28% Highest 47% Lowest

- **Wealth quintile**
  - 31% Sec+ 69% No Edn
  - 39% Highest 69% Lowest

Differentials in nutritional status of children

- **Mother's education**
  - 23% Sec+ 37% No Edn
  - 21% Highest 34% Lowest

- **Wealth quintile**
  - 8% Sec+ 14% No Edn
  - 7% Highest 13% Lowest

Differentials in the deliveries assisted by SBAs

- **Mother's education**
  - 54% No Edn 65% Sec+
  - 34% Lowest 65% Highest

- **Wealth quintile**
  - 34% Lowest 94% Highest
Differentials in ORS treatment of children with diarrhoea

<table>
<thead>
<tr>
<th>Mother's education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per cent</td>
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<tr>
<td>55 Sec+</td>
<td>56 Highest</td>
</tr>
<tr>
<td>61 No Edn</td>
<td>60 Lowest</td>
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</table>

Children receiving ORS for treatment of diarrhoea

Differentials in care seeking for children having symptoms of ARI and given antibiotics

<table>
<thead>
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<th>Mother's education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per cent</td>
</tr>
<tr>
<td>42 No Edn</td>
<td>41 Lowest</td>
</tr>
<tr>
<td>67 Sec+</td>
<td>66 Highest</td>
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Children with symptoms of ARI

<table>
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<tr>
<th>Place of residence</th>
<th>Indicators</th>
<th>NMR</th>
<th>IMR</th>
<th>U5MR</th>
<th>Stunting %</th>
<th>Underweight %</th>
<th>Neomates protected against tetanus %</th>
<th>Deliveries by SBA %</th>
<th>Initiation of breastfeeding within one hour after birth (%)</th>
<th>Median duration of exclusive breastfeeding (months)</th>
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<tbody>
<tr>
<td>Rural</td>
<td>BHUTAN</td>
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</table>

**Differentials by Geographical Regions**

- Thimphu
- Paro
- Mongar
- Phuntsholing
- Punakha
- Samtse
- Sarpang
- Samdrup
- Sandup
- Pemagatshel
- Trashiyangtse
- Trongsa
- Tsirang
- Wangdue
- Zhemgang
- Thimphu
- Paro
- Mongar
- Phuntsholing
- Punakha
- Samtse
- Sarpang
- Samdrup
- Sandup
- Pemagatshel
- Trashiyangtse
- Trongsa
- Tsirang
- Wangdue
- Zhemgang
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<th>Indicators</th>
<th>Place of residence</th>
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<th>Dagana</th>
<th>Gasa</th>
<th>Ha</th>
<th>Haa</th>
<th>Lhuntse</th>
<th>Mongar</th>
<th>Paro</th>
<th>Pemagatshel</th>
<th>Punakha</th>
<th>Samdrup</th>
<th>Samtse</th>
<th>Sarpang</th>
<th>Thimphu</th>
<th>Trashigang</th>
<th>Trashi Yangtse</th>
<th>Trongsa</th>
<th>Tiraang</th>
<th>Wangdue</th>
<th>Zhonggang</th>
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<tbody>
<tr>
<td>Immunization %</td>
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<tr>
<td>% with diarrhoea for whom treatment was sought from a health facility</td>
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<tr>
<td>% with diarrhoea who received ORS</td>
<td></td>
<td>64</td>
<td>60</td>
<td>53</td>
<td>47</td>
<td>63</td>
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<td>60</td>
<td>85</td>
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<td>53</td>
<td>68</td>
<td>76</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>% with suspected pneumonia for whom treatment was sought from a health facility</td>
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<td>74</td>
<td>74</td>
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</tr>
<tr>
<td>% with suspected pneumonia who received antibiotics*</td>
<td></td>
<td>58</td>
<td>47</td>
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</tbody>
</table>

DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA
List of Country Indicators

Selected Demographic Indicators
✓ Selected demographic indicators
✓ Birth registration

Child Mortality and Nutrition Status
✓ Trends in neonatal, infant and under-five mortality rates
✓ Distribution of neonatal deaths by day of life
✓ Causes of under-five and neonatal deaths
✓ Nutritional status of children by age
✗ Mortality rates by residence
✗ Perinatal mortality rate
✓ Trends in nutritional status of children

Coverage of Core Interventions
Newborn health and related maternal health
✓ Trends proportion of neonates protected against neonatal tetanus
✓ Trends in Proportion of deliveries assisted by skilled birth attendants
✗ Incident of low birth weight babies.

Infant and Young Child Nutrition
✓ Proportion of infants who started breastfeeding within one hour of birth
✓ Median duration of exclusive breastfeeding
✓ Trends in proportion of children age 6-59 months receiving two doses of vitamin A during calendar year
✗ Proportion of children less than age 5 months who were exclusively breastfed
✓ Proportion of children age 6 – 8 months who were breastfeeding and consuming complementary food

Immunization
✓ Proportion of children age 12-23 months who were vaccinated

Management of Sick Children
Management of diarrhoea
✗ Proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider
✗ Proportion of children under age 5 with diarrhoea who were given treatment other than ORT
✓ Proportion of children under age 5 with diarrhoea who received ORS & ORT

Management of pneumonia
✓ Proportion of children under age 5 with symptoms of pneumonia for whom advice or treatment was sought from a health facility or provider and received antibiotics
✗ Care-seeking for suspected pneumonia by type of health provider

Management of malaria
✗ Use of insecticide-treated bed nets
✗ Malaria treatment

Water and Sanitation
✓ Proportion of population using improved drinking water
✓ Proportion of population using improved sanitation facilities

Coverage across life-course
✓ Coverage of interventions across the continuum of care in life course
✓ Missed opportunities for the delivery of lifesaving interventions

Socio-economic Differentials
✓ Demographic and Social Differential for Newborn and Child Health
✓ Differentials by Geographical Regions
✓ Differentials in Newborn and Child Health
**Selected Demographic Indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (000)</td>
<td>24,346¹</td>
</tr>
<tr>
<td>Total under-five population (000)</td>
<td>1,704¹</td>
</tr>
<tr>
<td>Births (000)</td>
<td>348¹</td>
</tr>
<tr>
<td>Birth registration (%)</td>
<td>100¹</td>
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<tr>
<td>Neonatal mortality rate (per 1000 live births)</td>
<td>16²</td>
</tr>
<tr>
<td>Annual number of neonatal deaths</td>
<td>5,000²</td>
</tr>
<tr>
<td>Post neonatal mortality rate</td>
<td>na</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>23²</td>
</tr>
<tr>
<td>Annual number of infant deaths</td>
<td>8,000²</td>
</tr>
<tr>
<td>Under-five mortality rates (per 1000 live births)</td>
<td>29²</td>
</tr>
<tr>
<td>Annual number of under-five deaths</td>
<td>10,000²</td>
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<tr>
<td>Crude birth rate</td>
<td>14¹</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>2.0¹</td>
</tr>
</tbody>
</table>

**Source:**

**Birth registration**

- Birth registration is universal in Democratic People's Republic of Korea, both in the urban and rural areas.

Child Mortality and Nutritional Status

Trends in neonatal, infant and under-five mortality, 1990 to 2012

- Between 1990 and 2000 there was an increase in under-five mortality rates by 14 and thereafter it started declining.
- The MDG target for under-five deaths is 15, which may be difficult to achieve with the present trend.
- There has been a steady decline in neonatal mortality from 1990 to 2012 from 21 to 16.

Causes of under-five deaths

- Neonatal causes, acute lower respiratory infections and diarrhoea are major causes of death among under-five children.

Most neonatal deaths are caused by complications of prematurity, infections, birth asphyxia and trauma and congenital anomalies.

• At the national level one-third children are considered to be stunted while about one-fifth are underweight.

• Between 1998 and 2009 the prevalence of stunting reduced by 30 and underweight by 42 percentage points, whereas wasting reduced gradually from 17% to 5%.

Trends in nutritional status of children under age 5


Nutritional status of children by age


• The prevalence of stunting increases with the age of the child.

• Proportion of underweight children increases with age and peaks at 24-35 months and remains constant thereafter.

• Wasting is low till the age of 5 months and thereafter remains in the range of 4.8 to 6.2.
Coverage of Core Interventions

Newborn health and related maternal health

Trends in proportion of neonates protected against tetanus

- Last birth for nine out of ten children was protected against tetanus.
- Tetanus protection of neonates decreased from 90% in 1990 to about 30% in 1998 and thereafter gradually increased to 91% in 2008.

Incidence of low birth weight babies

Proportion of babies born with low weight (< 2500g) at birth

- Incidence of low birth weight in Democratic People’s Republic of Korea is rather low. Of the 91% of neonates who were weighed at birth, only 5.7% weighed less than 2500g.


**Deliveries assisted by skilled birth attendants**

Trends in proportion of deliveries assisted by skilled birth attendants

- All deliveries in Democratic People’s Republic of Korea are assisted by medically skilled personnel.

![Graph showing trends in proportion of deliveries assisted by skilled birth attendants](image)

Source:

---

**Infant and young child nutrition**

Proportion of infants initiated into breastfeeding within one hour of birth

- Only 18% children are breastfed within one hour of birth.

![Graph showing proportion of infants initiated into breastfeeding within one hour of birth](image)

While about 89% children below 5 months are exclusively breastfed, only a little over one-fourth are given complementary foods along with breast milk in the age group 6-8 months.

Median duration of exclusive breastfeeding


Proportion of infants less than 5 months exclusively breastfed, and 6-8 months who are breastfeeding and consuming complementary foods

- Ninety-eight out of 100 children between 6 and 59 months were administered two doses of vitamin A during the calendar year 2008, which was only marginally less than the 2006 and 2007 levels (100%).

**Immunization**

**Immunization coverage**

- Immunization coverage is high in Democratic People’s Republic of Korea.
- While the level of coverage for BCG is 98%, and three doses of polio and measles 99%, the coverage is slightly lower for the three doses of DPT and Hepatitis B (both at 93%).

Management of sick children

Management of diarrhoea

Proportion of children under age 5 suffering from illnesses (diarrhoea and symptoms of ARI)

- About 14% children suffer from diarrhoea, and 6% had symptoms of ARI.

Proportion of children under age 5 who had diarrhoea in the past two weeks and were treated with ORS and ORT

- 74% children with diarrhoea received ORS.
- Over 90% children with diarrhoea received ORT.

Management of pneumonia

Proportion of children under age 5 with suspected pneumonia taken to an appropriate health-care provider, 2000–2007

- Eight in 10 children with symptoms of ARI were taken to a health-care facility or a medically trained health-care provider for treatment.
- 70% of children with suspected pneumonia receive antibiotics.


Use of insecticide-treated nets

Data not available

Water and Sanitation

Proportion of population using improved drinking water sources

- Over 98% of the population use improved drinking water sources.

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)
Proportion of population using improved sanitation facilities

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of population using improved sanitation facilities</td>
<td>87.9</td>
<td>72.5</td>
<td>81.8</td>
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</tbody>
</table>

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)

Coverage across life-course

Coverage of interventions across the-life course continuum

- More than 80% persons in Democratic People’s Republic of Korea have access to improved sanitation facilities.

- Pregnancy and delivery support is at a very high level in Democratic People’s Republic of Korea (more than 94% for 4+ ANC visits, skilled attendance at birth and deliveries in health facilities. Postnatal care and early breastfeeding are low.

Source:
Missed opportunities for the delivery of lifesaving interventions

- Low coverage of interventions immediately surrounding birth, such as ensuring early initiation of breastfeeding and early postnatal check on health of the mother and newborn are the missed opportunities which have the potential for achieving higher levels of coverage and prevention of deaths.

# Socio-economic Differentials

Demographic and Social Differentials for Newborn and Child Health

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<th>Indicator</th>
<th>Total</th>
<th>Differentials</th>
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<th>Wealth Quintiles</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
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<td>&lt; 20</td>
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<td>Highest</td>
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<td>Neonatal mortality rate</td>
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<tr>
<td>Stunting, %</td>
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<td>32</td>
<td>33</td>
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<td>Wasting, %</td>
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<td>Protection against neonatal tetanus</td>
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<td>Deliveries assisted by SBAs, %</td>
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<td>Early initiation of breastfeeding, %</td>
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<tr>
<td>Median duration of exclusive breastfeeding (months)</td>
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<td>Children receiving all basic vaccinations, %</td>
<td>93</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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</tr>
<tr>
<td>Children with diarrhoea brought to health facility/ provider, %</td>
<td>-</td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>Children with diarrhoea treated with ORS, %</td>
<td>74</td>
<td>75</td>
<td>73</td>
<td>72</td>
<td>82</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility/ provider, %</td>
<td>80</td>
<td>78</td>
<td>82</td>
<td>77</td>
<td>90</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Children with suspected pneumonia who received antibiotics</td>
<td>88</td>
<td>86</td>
<td>89</td>
<td>85</td>
<td>95</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Remarks

- Differentials are generally narrow

- Mother’s education is a determinant which affects newborn and child health to some extent in Democratic People’s Republic of Korea. If the mothers are educated to secondary level, their children are somewhat disadvantaged compared to those whose mothers are educated to a higher level:
  - Children are less likely to be taken to a health facility or provider when sick with symptoms of ARI and given antibiotics.

- However, children born to such women are breastfed for 1.6 times longer duration compared to those born to women educated to higher levels.

- There is no data on the neonatal, infant and child mortality, newborn and child health and family’s wealth.

---

* Percentage or proportion is calculated on fewer than 25 unweighted cases

* For age group 20-34 years

Socio-economic Differentials

Differentials in Newborn and Child Health

Differentials in nutritional status of children

- Stunting
- Underweight
- Wasting

Differentials in the deliveries assisted by SBAs
Differentials in care of children sick with diarrhoea

Differentials in care-seeking for children with symptoms of ARI and given antibiotics

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Place of Residence</th>
<th>Province</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>NMR</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IMR</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>U5MR</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stunting %</td>
<td>23</td>
<td>45</td>
</tr>
<tr>
<td>Underweight %</td>
<td>13</td>
<td>27</td>
</tr>
<tr>
<td>Neonates protected against tetanus</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deliveries by SBA %</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Initiation of breastfeeding within 1 hour after birth %</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding (months)</td>
<td>4.7</td>
<td>6.6</td>
</tr>
<tr>
<td>Immunization %</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>% with diarrhoea for whom treatment was sought from a health facility</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>% with diarrhoea who received ORS</td>
<td>75</td>
<td>73</td>
</tr>
<tr>
<td>% with suspected pneumonia for whom treatment was sought from a health facility*</td>
<td>85</td>
<td>74</td>
</tr>
<tr>
<td>% with suspected pneumonia who received antibiotics</td>
<td>93</td>
<td>80</td>
</tr>
</tbody>
</table>

*0-2 years

# List of Country Indicators

## Selected Demographic Indicators
- Selected demographic indicators
- Birth registration

## Child Mortality and Nutritional Status
- Trends in neonatal, infant and child mortality rates
- Mortality rates by residence
- Distribution of neonatal deaths by day of life
- Perinatal mortality
- Causes of under-five and neonatal deaths
- Trends in nutritional status of children
- Nutritional status of children by age

## Coverage of Core Interventions

### Newborn health and related maternal health
- Proportion of neonates protected against tetanus at birth
- Trends in proportion of deliveries assisted by skilled birth attendants
- Trends in proportion of women receiving antenatal care
- Proportion of births by persons providing assistance during childbirth

### Infant and Young Child Nutrition
- Proportion of infants who started breastfeeding within one hour of birth
- Trends in proportion of children age <6 months exclusively breastfed
- Children under age 5 using antimalarials
- Proportion of children age 6-9 months receiving breast milk and complementary food
- Proportion of children age 6-59 months receiving breast milk and complementary food two doses of vitamin A during calendar year: trends

### Immunization
- Trends in immunization coverage

### Management of Sick Children

#### Management of diarrhoea
- Proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider: trends
- Proportion of children under age 5 with diarrhoea who received ORS: trends
- Proportion of children under age 5 with diarrhoea who were given treatment other than ORT
- Care-seeking for suspected pneumonia by type of health provider

#### Management of pneumonia
- Proportion of children under age 5 with symptoms of pneumonia for whom advice or treatment was sought from a health facility or provider and received antibiotics: trends

#### Management of malaria
- Use of insecticide-treated bed nets
- Children under age 5 using antimalarials

### Water and Sanitation
- Proportion of population using improved drinking water
- Proportion of population using improved sanitation facilities
- Missed opportunities for the delivery of lifesaving interventions

### Coverage across life-course
- Coverage of interventions across the continuum of care in life-course

### Socio-economic Differentials
- Demographic and Social Differentials for Newborn and child health
- Differentials in Newborn and Child Health
- Differentials by Geographical Regions
**Selected Demographic Indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (000)</td>
<td>1,224,614&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Total under-five population (000)</td>
<td>127,979&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Annual births (000)</td>
<td>27,165&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Birth registration (%)</td>
<td>41&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Neonatal mortality rate (per 1000 live births)</td>
<td>31&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Annual number of neonatal deaths</td>
<td>779,000&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Post-neonatal mortality rate</td>
<td>18&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>44&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Annual number of infant deaths</td>
<td>1097,000&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Under-five mortality rate (per 1000 live births)</td>
<td>56&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Annual number of under-five deaths</td>
<td>1414,000&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>23.1&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>2.7&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

**Source:**

---

**Birth registration**

Only 41% of the births are registered in India. More births are registered in the urban areas compared to the rural areas.

Child Mortality and Nutritional Status

Trends in neonatal, infant and under-five mortality, 1990 to 2012

- About 1414000 children die every year before their fifth birthday.
- Between 1990 and 2012, infant mortality declined by 44 and under-five mortality by 70 points.
- Reduction in under-five mortality rate is slow and it may not be possible to achieve the target of MDG 4 of 42 if this trend continues.
- Neonatal mortality has decreased by 20 points between 1990 and 2012 from 51 to 31.

Distribution of neonatal deaths by day of life

Of the 2169 surveyed neonatal deaths by NFHS in India in 2005–06:
- 32% occurred on day 0;
- 49% on days 0 and 1; and
- 78% during the first week of life.
• Perinatal mortality rate consists of stillbirth rate and early neonatal mortality rate. Per 1000 pregnancies of more months duration

• NFHS3 reported that perinatal mortality rate was 48.5 per 1000 pregnancies in total, showing a higher rate among women living in rural areas as compared to those living in urban areas, which is 2/3 of rural area.

Neonatal, infant and under-five mortality rates by residence

• Neonatal, infant and under-five mortality rates are about 1.5 times higher for the rural areas compared to the urban areas.

- Neonatal causes, acute lower respiratory infections and diarrhoea are major causes of death among under-five children.
- Most neonatal deaths are caused by complications of prematurity, infections, birth asphyxia and trauma and congenital anomalies.

### Trends in nutritional status of children under age 5, 1992 to 2006

- Since 1992, there has been a marginal reduction in stunting among children, having declined by only four percentage points, whereas wasting has increased by two percentage points. The proportion of children who are underweight has, however, reduced by 11 percentage points.

### Nutritional status of children by age, 2005-06

- The prevalence of stunting shows increasing trend with age; it increases from 20% at <6 months of age, gradually increasing to 58% for 18-23 month age group, and thereafter decreases to 50% for 48-59 month-old children.

- The percentage of children who are underweight increases sharply with age and peaks at 46% among children who are 18-23 months old and thereafter gradually reduces to 45% for 48-59 month-old children.
• The last birth of three out of four mothers was protected against neonatal tetanus.

• The proportion of neonates protected against tetanus increased by 22 percentage points from 1992-1993 to 2005-2006.

Coverage of Core Interventions

Newborn health and related maternal health

Trends in proportion of neonates protected against tetanus at birth
(2+ TT injection)


Deliveries assisted by skilled birth attendants

Trends in proportion of deliveries assisted by skilled birth attendants


• Nearly half of deliveries are assisted by skilled birth attendants (SBAs).

• The proportion of deliveries assisted by SBAs has increased steadily between the periods 1992-93 and 2005-06 from 34 to 47 per cent.
Proportion of live births by person providing assistance during childbirth

- More than one-third births in India are assisted by dais or untrained traditional birth attendants, and one-sixth deliveries are assisted by relatives or friends.

Infant and Young Child Nutrition

Trends in proportion of infants less than age 12 months with breastfeeding initiated within one hour of birth

- One-fourth infants are breastfed within one hour of birth, which has increased from 10% in 1992-1993 to 25% in 2005-2006.
- There has been a gradual increase in early initiation of breastfeeding. However, in absolute terms the coverage for early initiation of breastfeeding is rather low and requires focused intervention to increase coverage.

Sources:
Although breastfeeding is almost universal in India, only 46% children below 6 months are exclusively breastfed. There was an increase in exclusive breastfeeding practices by almost 20 percentage points during the period 1998-1999 and 2005-2006.

Proportion of infants less than age 6 months who were exclusively breastfed

Trends in proportion of infants age 6-9 months receiving breast milk and complementary food

- Proportion of infants receiving complementary feeds besides breast feed reduced marginally from 63% in 1998-1999 to 57% in 2005-2006.
More than half the children between 6-59 months of age had received two doses of vitamin A supplement. After falling from 64% in 2005 to 33% in 2007, the proportion of children receiving vitamin A supplement increased to 54% in 2008.

**Immunization**

**Trends in proportion of children aged 12-23 months vaccinated**

- Four in 10 children between 12-23 months of age had received all the recommended vaccinations.
- The level of coverage for BCG, and three doses of polio vaccine is about 78%, and that for three doses of DPT and measles vaccination is about 58%.
- There was an increase of nine percentage points in vaccination coverage during the 14-year period from 1992 to 2006.

Sources:

Management of sick children

Management of diarrhoea

Trends in proportion of children under age 5 who had diarrhoea in the past two weeks and were treated with ORS

- Although 60% of children having diarrhoea were brought to a health facility/provider, 26% were given ORS.

![Bar chart showing trends in proportion of children treated with ORS]


Proportion of children under age 5 who had diarrhoea in the past two weeks and were given treatment other than ORT

- Nearly one in six children was given antibiotics, over one third given other medicines and one fourth was given home remedies. Zinc supplements were very low at 0.3% only.

![Bar chart showing proportion of children treated with different medications]

Management of pneumonia

Trends in proportion of children under age 5 who had suspected pneumonia in the past two weeks and were taken to an appropriate health-care provider and received antibiotics

- While two-thirds of children with symptoms of ARI were taken to a health facility or a medically trained provider for treatment, only one-eighth received antibiotics.

<table>
<thead>
<tr>
<th>Year</th>
<th>Taken to appropriate health provider</th>
<th>Received antibiotics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>66</td>
<td>33</td>
</tr>
<tr>
<td>1998-99</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>2005-06</td>
<td>69</td>
<td>13</td>
</tr>
</tbody>
</table>

Sources:

Use of insecticide-treated bed nets

Data not available

Management of malaria

Per cent febrile children under age 5 using antimalarials*

- Proportion of under-five febrile children who received antimalarials decreased from 12% in 2000 to 8% in 2005-06.

<table>
<thead>
<tr>
<th>Year</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 MICS</td>
<td>12</td>
</tr>
<tr>
<td>2005-2006 NFHS</td>
<td>8</td>
</tr>
</tbody>
</table>

* subnational areas at risk of malaria transmission

Source:
INDIA

Water and Sanitation

Proportion of population using improved drinking water sources, 2008

- Ninety two per cent of the population is using improved drinking water sources. Access to improved drinking water sources is higher in urban areas in comparison to rural population.

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)

Proportion of population using improved sanitation facilities, 2008

- Slightly over one in three persons is using improved sanitation facilities.
- Urban population is 2.5 times more likely to have access to improved sanitation facilities than rural population.

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)
**Coverage across life-course**

Coverage of interventions across the life-course continuum

- A little over one-third of mothers receive skilled care before birth and less than half of the mothers have the benefit of skilled attendance during the birth. Care immediately after the birth which can allow for early detection and management of problems leading to maternal and neonatal mortality is low.

- Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may cause deaths or serious illness to the baby and the mother. Only 39% of births take place in health facilities.

Low coverage of interventions immediately surrounding birth, such as the services of skilled birth attendants, ensuring early initiation of breastfeeding and early postnatal check on health of the mother and newborn are the missed opportunities which have the potential for achieving higher levels of coverage and prevention of deaths.

In addition, those interventions that require 24-hour access to skilled health providers, such as treatment of childhood pneumonia or diarrhoea also have a large potential to contribute to saving of precious lives.

It seems there is sub-optimal effect of the outreach interventions like campaigns or home visits for improving vitamin A supplementation, immunization and controlling diarrhoea through distribution of ORS packets. However, coverage for protection against neonatal tetanus has been steadily increasing from 54% in 1992-93 to 76% in 2005-06.

**Socio-economic Differentials**

Demographic and Social Differentials for Newborn and Child Health

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
<th>Child’s sex</th>
<th>Mother’s education</th>
<th>Mother’s age (years)</th>
<th>Wealth Quintiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>No education</td>
<td>Secondary+</td>
</tr>
<tr>
<td>Neonatal mortality rate</td>
<td>39</td>
<td>41</td>
<td>37</td>
<td>46</td>
<td>20</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>57</td>
<td>56</td>
<td>58</td>
<td>70</td>
<td>26</td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>74</td>
<td>70</td>
<td>79</td>
<td>95</td>
<td>30</td>
</tr>
<tr>
<td>Stunting, %</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>57</td>
<td>22</td>
</tr>
<tr>
<td>Underweight, %</td>
<td>43</td>
<td>42</td>
<td>43</td>
<td>52</td>
<td>18</td>
</tr>
<tr>
<td>Wasting, %</td>
<td>20</td>
<td>21</td>
<td>19</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>Protection against neonatal tetanus</td>
<td>76</td>
<td>-</td>
<td>-</td>
<td>64</td>
<td>95</td>
</tr>
<tr>
<td>Deliveries assisted by SBAs, %</td>
<td>47</td>
<td>-</td>
<td>-</td>
<td>26</td>
<td>91</td>
</tr>
<tr>
<td>Early initiation of breastfeeding, %</td>
<td>25</td>
<td>25</td>
<td>24</td>
<td>17</td>
<td>35</td>
</tr>
<tr>
<td>Median duration of breastfeeding, (months)</td>
<td>2</td>
<td>2.1</td>
<td>1.9</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Children receiving all basic vaccinations, %</td>
<td>44</td>
<td>45</td>
<td>42</td>
<td>26</td>
<td>75</td>
</tr>
<tr>
<td>Children with diarrhoea brought to health facility/ provider, %</td>
<td>60</td>
<td>62</td>
<td>58</td>
<td>55</td>
<td>71</td>
</tr>
<tr>
<td>Children with diarrhoea treated with ORS, %</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>18</td>
<td>50</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility/provider, %</td>
<td>69</td>
<td>72</td>
<td>66</td>
<td>66</td>
<td>79</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility/provider and given antibiotics, %</td>
<td>13</td>
<td>13</td>
<td>12</td>
<td>9</td>
<td>23</td>
</tr>
</tbody>
</table>

* For age group 20-34


**Remarks**

- **Mother’s education is a major determinant of newborn and child health. If the mothers are not educated, their children are considerably disadvantaged compared to those whose mothers are educated beyond secondary level:**
  - Newborns are twice more likely to die in the first month.
  - Infants and children under-five are almost three times more likely to die early.
  - They are also likely to be two and a half times more stunted or be underweight.
  - They tend to be breastfeed for lesser than the median duration.
  - They are less likely to be taken to a health facility or provider when sick with diarrhoea or have symptoms of ARI.

- **Child mortality is linked directly to the age of the mother in as much as those born to younger mothers (< 20 years) are 1.6 times more likely to die as neonates, infants and under-five children compared to older mothers in the age group 20-29 years.**

- **Family’s wealth plays an important role in child survival.**
Socio-economic Differentials

Differentials in Newborn and Child Health

Differentials in neonatal, infant and under-five mortality rates

<table>
<thead>
<tr>
<th>Mother's Education</th>
<th>Mother's Age</th>
<th>Wealth Quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Sec+ 39</td>
<td>34 (20-29 years) 39</td>
<td>46 No Edn 48 Lowest</td>
</tr>
<tr>
<td>57 70 No Edn</td>
<td>57 70Lowest</td>
<td>74 95 No Edn</td>
</tr>
<tr>
<td>66 (20-29 years) 74</td>
<td>66 74 95 (20 Years)</td>
<td>74 95 (20 Years)</td>
</tr>
<tr>
<td>34 Highest 74</td>
<td>74 101 Lowest</td>
<td>74 101 Lowest</td>
</tr>
</tbody>
</table>

Per cent
0 10 20 30 40 50 60 70 80 90 100 110 120

Neonatal Mortality Rate Analog
Infant Mortality Rate Analog
Under-five Mortality Rate Analog

Differentials in nutritional status of children

<table>
<thead>
<tr>
<th>Mother's Education</th>
<th>Mother's Age</th>
<th>Wealth Quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 Sec+ 48</td>
<td>25 Highest 48</td>
<td>57 No Edn 60 Lowest</td>
</tr>
<tr>
<td>43 52 No Edn</td>
<td>43 52 Lowest</td>
<td>57 52 Lowest</td>
</tr>
<tr>
<td>13 Sec+ 20</td>
<td>13 Highest 20</td>
<td>23 No Edn 25 Lowest</td>
</tr>
</tbody>
</table>

Per cent
0 10 20 30 40 50 60 70 80 90 100

Stunting Analog
Underweight Analog
Wasting Analog
Differentials in the deliveries assisted by SBAs

Differentials in immunization of children

Differentials in care-seeking for children sick with diarrhoea
Differentials in care-seeking for children with symptoms of ARI and given antibiotics

## Differentials by Geographical Regions

### Place of Residence

<table>
<thead>
<tr>
<th>Place of States</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>86%</td>
<td>38%</td>
</tr>
<tr>
<td>Assam</td>
<td>85%</td>
<td>37%</td>
</tr>
<tr>
<td>Bihar</td>
<td>86%</td>
<td>38%</td>
</tr>
<tr>
<td>Chhatisgarh</td>
<td>85%</td>
<td>37%</td>
</tr>
<tr>
<td>Delhi</td>
<td>85%</td>
<td>37%</td>
</tr>
<tr>
<td>Goa</td>
<td>86%</td>
<td>38%</td>
</tr>
<tr>
<td>Gujrat</td>
<td>86%</td>
<td>38%</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>85%</td>
<td>37%</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>86%</td>
<td>38%</td>
</tr>
<tr>
<td>Kerala</td>
<td>86%</td>
<td>38%</td>
</tr>
<tr>
<td>Karnataka</td>
<td>85%</td>
<td>37%</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>85%</td>
<td>37%</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>86%</td>
<td>38%</td>
</tr>
<tr>
<td>Orissa</td>
<td>86%</td>
<td>38%</td>
</tr>
<tr>
<td>Punjab</td>
<td>86%</td>
<td>38%</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>85%</td>
<td>37%</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>86%</td>
<td>38%</td>
</tr>
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</table>

### Indicators

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Rural</th>
<th>Urban</th>
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</thead>
<tbody>
<tr>
<td>Neonates protected against tetanus (%)</td>
<td>86%</td>
<td>38%</td>
</tr>
<tr>
<td>Delivers by SBA (%)</td>
<td>74%</td>
<td>36%</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding (months)</td>
<td>30.22</td>
<td>21.59</td>
</tr>
<tr>
<td>Immunization (%)</td>
<td>58%</td>
<td>39%</td>
</tr>
<tr>
<td>% with suspected pneumonia who received who received antibiotics</td>
<td>78%</td>
<td>66%</td>
</tr>
</tbody>
</table>

*Percentage not shown: based on fewer than 25 unweighted cases*
INDONESIA
**List of Country Indicators**

### Selected Demographic Indicators
- Selected demographic indicators
- Birth registration

### Mortality and Morbidity
- Neonatal, infant and under-five mortality rates: trends
- Mortality rates by residence
- Distribution of neonatal deaths by day of life
- Perinatal mortality rate: trends
- Causes of under-five deaths
- Causes of neonatal deaths
- Trends in nutritional status of children
- Nutritional status of children by age

### Coverage of Core Interventions

#### Newborn health and related maternal health
- Proportion of neonates protected against neonatal tetanus (2+ TT injections): trends
- Proportion of births by person providing assistance during childbirth
- Proportion of deliveries assisted by skilled birth attendants: trends

#### Infant and young child feeding
- Proportion of infants less than age 12 months who started breastfeeding within one hour of birth: trends
- Median duration of exclusive breastfeeding
- Proportion of children age 6-59 months receiving two doses of vitamin A during calendar year: trends
- Proportion of children less than age 6 months who were exclusively breastfed: trends
- Median duration of exclusive breastfeeding
- Proportion of children age 6-59 months receiving two doses of vitamin A during calendar year: trends

#### Immunization
- Proportion of children age 12-23 months who were vaccinated
- Proportion of children under age 5 with diarrhoea who received ORS: trends

#### Management of Sick Children

##### Management of diarrhoea
- Proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider: trends
- Proportion of children under age 5 with diarrhoea who were given treatment other than ORT
- Proportion of children under age 5 with diarrhoea who received ORS: trends
- Proportion of children under age 5 with diarrhoea who were exclusively breastfed: trends

##### Management of pneumonia
- Proportion of children under age 5 with symptoms of pneumonia for whom advice or treatment was sought from a health facility or provider and received antibiotics: trends
- Care-seeking for suspected pneumonia by type of health provider

##### Management of malaria
- Use of insecticide-treated bed nets
- Malaria treatment

#### Water and Sanitation
- Proportion of population using improved drinking water
- Proportion of population using improved sanitation facilities
- Missed opportunities for the delivery of lifesaving interventions

### Coverage across life-course
- Coverage of interventions across the continuum of care in life-course
- Differentials in Newborn and Child Health

### Socio-economic Differentials
- Demographic and Social Differential for Newborn and Child Health
- Differentials by Geographical Regions
## Selected Demographic Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Total population (000)</td>
<td>239,871¹</td>
</tr>
<tr>
<td>Total under-five population (000)</td>
<td>21,579¹</td>
</tr>
<tr>
<td>Annual births (000)</td>
<td>4,372¹</td>
</tr>
<tr>
<td>Birth registration (%)</td>
<td>53¹</td>
</tr>
<tr>
<td>Neonatal mortality rate (per 1000 live births)</td>
<td>15²</td>
</tr>
<tr>
<td>Annual number of neonatal deaths</td>
<td>72,000²</td>
</tr>
<tr>
<td>Post-neonatal mortality rate</td>
<td>15³</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>26³</td>
</tr>
<tr>
<td>Annual number of infant deaths</td>
<td>125,000²</td>
</tr>
<tr>
<td>Under-five mortality rate (per 1000 live births)</td>
<td>31²</td>
</tr>
<tr>
<td>Annual under-five deaths</td>
<td>152,000²</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>20.9⁵</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>2.6⁶</td>
</tr>
</tbody>
</table>

**Source:**

### Birth registration, 2007

- Although birth registration is recognised as one of the rights of children in Indonesia, registration is not high. Overall, 53% births are registered. Birth registration is 1.7 times more likely for children born in cities than those born in villages.

Child Mortality and Nutrition Status

Trends in neonatal, infant and under-five mortality, 1990 to 2012

- Mortality rates in the rural areas are about 1.7 times those prevailing in the urban areas.
- 152000 children die every year before their fifth birthday.
- Between 1990 and 2012, infant mortality declined by 36 and under-five mortality by 53 points.
- The under-five mortality rate reduction is on track for achievement of the MDG 4 goal of 28 by 2015.
- Fewer neonates are dying today; neonatal mortality has halved from 1990 levels.

Mortality rates by residence

- Mortality rates in the rural areas are about 1.7 times those prevailing in the urban areas.
- 152000 children die every year before their fifth birthday.
- Between 1990 and 2012, infant mortality declined by 36 and under-five mortality by 53 points.
- The under-five mortality rate reduction is on track for achievement of the MDG 4 goal of 28 by 2015.
- Fewer neonates are dying today; neonatal mortality has halved from 1990 levels.

Perinatal mortality rate

- Perinatal mortality rate consists of stillbirth rate and early neonatal mortality rate. The DHS survey in 2007 reported that perinatal mortality rate was 25 per 1000 pregnancies, showing a slightly higher rate among women living in rural areas.


Distribution of neonatal deaths by day of life

Of the 308 neonatal deaths surveyed for DHS in Indonesia in 2007:
- 36% occurred on day 0;
- 58% on days 0 and 1; and
- 88% during the first week of life.

• Perinatal mortality rate has marginally increased from 24 to 25 during the period 2002-03 to 2007 (period between the two DHSs).

• While number of stillbirths increased by 18%, number of early neonatal deaths increased by 8% during 2002-03 to 2007.

• Neonatal causes, acute lower respiratory infections, injuries and diarrhoea are major causes of death among under-five children.

• Most neonatal deaths are caused by complications of prematurity, infections, birth asphyxia, trauma and congenital anomalies.

• At the national level, 37% children under-five are short for their age or stunted, 18% are underweight and 14% are wasted.

Nutritional status of children under age 5, 2007

(Based on the WHO Child Growth Standards 2006)


Coverage of Core Interventions

Newborn health and related maternal health

Trends in proportion of neonates protected against tetanus at birth (2+ TT injections)

• For 50% of mothers, their last birth was protected against neonatal tetanus.
• Protection against neonatal tetanus has remained practically at the same level since 1997.

Deliveries assisted by skilled birth attendants

Trends in proportion of deliveries assisted by skilled birth attendants

- More than three-fourths of deliveries are assisted by skilled birth attendants (SBA).
- Since 1997, births attended to by medically trained providers have increased by 30%.

Distribution of live births by person providing assistance during childbirth

- Among 73% of deliveries were assisted by medical professionals, 59% were assisted by a nurse/midwife, 14% by a doctor.
- One in four deliveries in Indonesia was assisted by untrained traditional birth attendants.

**Infant and Young Child Nutrition**

Trends in proportion of infants less than age 12 months with breastfeeding initiated within one hour of birth

- Less than 50% children are breastfed within one hour of birth, which increased from 8% in 1997 to 44% in 2007.


Trends in proportion of infants less than age 6 months who were exclusively breastfed

- Although breastfeeding is widespread, exclusive breastfeeding till the age of 6 months is on the decline, having decreased from 40% to 32% during 2002 to 2007.

• Among children between age 6-9 months, 75% receive complementary food.

• Complementary feeding among children between age 6–9 months has reduced in the last decade from 81% in 1997 to 75% in 2007.


Trends in proportion of children 6-59 months receiving two doses of Vitamin A during the calendar year

• Eighty-eight percent children between age 6-59 months received vitamin A supplement, which increased only by 12 percentage points between 2005 and 2008.

**Immunization**

Proportion of children 12-23 months vaccinated

- Six in 10 children between 12-23 months had received all the recommended vaccinations.

- The coverage of BCG, three doses of polio and measles is above 70%, while the coverage of three doses of DPT is lower (67%).


**Management of sick children**

Management of diarrhoea

Trends in proportion of children under age 5 having diarrhoea for whom advice or treatment was sought from a health facility or provider

- Fifty per cent of children with diarrhoea were taken to a medically trained health facility/provider for advice or treatment. This figure has remained similar over the last one and a half decades.

Trends in proportion of children under age 5 who had diarrhoea in the past two weeks and were treated with Oral Rehydration Salts (ORS) solution

• While 61% children with diarrhoea received any form of ORT, only 35% were given ORS.

• The proportion of children sick with diarrhoea receiving ORS or ORT declined between 1997 and 2002-03 and remained at the same levels thereafter.

Proportion of children under age 5 who had diarrhoea in the past two weeks and were given treatment other than ORT

• Almost 50% children were given some pills/syrup, while 17% children were given nothing for treating their diarrhoea.

Management of pneumonia
Proporion of children under age 5 who had symptoms of pneumonia for whom advice or treatment was sought from a health facility or provider and received antibiotics: Trends

- While 66% children with symptoms of ARI were taken to a health facility or a medically trained provider for treatment, data for those who received antibiotics are not available.

Use of insecticide-treated bednets
Proporion of children under age 5 who slept under an insecticide-treated net the previous night

- Only three in 100 children under age 5 sleep under insecticide-treated nets as protection against malaria.
**Water and Sanitation**

**Proportion of population using improved drinking water sources**

- Population coverage for improved drinking water sources in urban areas is 1.25 times higher than in rural areas.

![Bar chart showing proportion of population using improved drinking water sources in urban and rural areas. Urban: 92.8%, Rural: 75.5%, Total: 84.3%. Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013).]

**Proportion of population using improved sanitation facilities**

- Proportion of urban population having access to improved sanitation facilities is 1.7 times that of rural population.

![Bar chart showing proportion of population using improved sanitation facilities in urban and rural areas. Urban: 73.4%, Rural: 43.5%, Total: 58.7%. Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013).]
### Coverage across life-course

Coverage of interventions across the life-course continuum

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-pregnancy</td>
<td>61</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>82</td>
</tr>
<tr>
<td>Birth</td>
<td>73</td>
</tr>
<tr>
<td>Postnatal</td>
<td>70</td>
</tr>
<tr>
<td>Infancy</td>
<td>66</td>
</tr>
<tr>
<td>Contraceptive prevalence rate</td>
<td>44</td>
</tr>
<tr>
<td>ANC 4+</td>
<td>44</td>
</tr>
<tr>
<td>Skilled attendant at birth</td>
<td>46</td>
</tr>
<tr>
<td>Delivery in a health facility</td>
<td>46</td>
</tr>
<tr>
<td>PNC (within 2 days)</td>
<td>70</td>
</tr>
<tr>
<td>Breastfeeding initiated within 1 hour of birth</td>
<td>59</td>
</tr>
<tr>
<td>Immunization</td>
<td>35</td>
</tr>
<tr>
<td>Oral rehydration for diarrhoea</td>
<td>32</td>
</tr>
<tr>
<td>Care-seeking for pneumonia</td>
<td>35</td>
</tr>
<tr>
<td>Exclusive breastfeeding (for first 6 months)</td>
<td>32</td>
</tr>
</tbody>
</table>

- Coverage of the core interventions across the continuum of care is quite variable
- Coverage of ORS in diarrhoea, Breastfeeding rates and institutional delivery rates are quite low.

Missed opportunities for the delivery of lifesaving interventions

Low coverage of interventions immediately surrounding birth, such as ensuring delivery in a health facility, early initiation of breastfeeding, exclusive breastfeeding for 6 months, timely treatment of diarrhoea with ORS, etc. are some of the missed opportunities which have the potential for achieving higher levels of coverage and prevention of deaths. On the other hand the coverage by services for ANC visits, presence of skilled birth attendants during delivery and early post-natal checkup is quite high and have been helpful for saving lives.

In addition, those interventions that require 24-hour access to skilled health providers, such as treatment of childhood pneumonia or diarrhoea also have a large potential to contribute to saving of precious lives.

Outreach intervention in the form of campaigns or home visits for vitamin A supplementation has resulted in higher level of coverage.

**Remarks**

- Mother's education is major determinant of newborn and child health. If the mother is not educated, their children are considerably disadvantaged compared to those whose mothers are educated beyond secondary level.
- Newborns are almost three times more likely to die in the first month.
- Infants and children under-five are also three times more likely to die early.
- Infants and children under-five are also three times more likely to die early.
- They are twice less likely to be taken to a health facility or provider when sick with diarrhoea or have symptoms of ARI.
- However children born to such mothers are likely to be exclusively breastfed for longer duration but still <6 months.

**Family's wealth plays an important role in the survival of mother and child.**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Child's sex</th>
<th>Male</th>
<th>Female</th>
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<th>Secondary+</th>
<th>&lt; 20</th>
<th>20-29</th>
<th>Lowest</th>
<th>Highest</th>
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</thead>
<tbody>
<tr>
<td>Neonatal mortality rate</td>
<td>19</td>
<td>24</td>
<td>21</td>
<td>19</td>
<td>19</td>
<td>14</td>
<td>14</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>44</td>
<td>43</td>
<td>55</td>
<td>73</td>
<td>73</td>
<td>24</td>
<td>24</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>37</td>
<td>46</td>
<td>94</td>
<td>42</td>
<td>42</td>
<td>72</td>
<td>72</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>Stunting (%)</td>
<td>18</td>
<td>18</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Weighting (%)</td>
<td>14</td>
<td>14</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Protection against neonatal tetanus (%)</td>
<td>50</td>
<td>75</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Delivery assisted by SKAs (%)</td>
<td>44</td>
<td>43</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Early initiation of breastfeeding (%)</td>
<td>0.7</td>
<td>0.7</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding (months)</td>
<td>0.7</td>
<td>0.7</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
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<tr>
<td>Children receiving all basic vaccinations (%)</td>
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<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Children with diarrhoea brought to health facility (%)</td>
<td>51</td>
<td>51</td>
<td>52</td>
<td>52</td>
<td>52</td>
<td>52</td>
<td>52</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>Children with diarrhoea treated with ORS (%)</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility (%)</td>
<td>66</td>
<td>66</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility and given antibiotics (%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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</table>

## Socio-economic Differentials

### Differentials in Newborn and Child Health

### Differentials in neonatal, infant and under-five mortality rates

<table>
<thead>
<tr>
<th></th>
<th>Neonatal Mortality Rate</th>
<th>Infant Mortality Rate</th>
<th>Under-five Mortality Rate</th>
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</thead>
<tbody>
<tr>
<td><strong>Mother’s education</strong></td>
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<td></td>
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</tr>
<tr>
<td>14 Sec</td>
<td>19</td>
<td>39 No Edn</td>
<td></td>
</tr>
<tr>
<td>16 (20-29 years)</td>
<td>19</td>
<td>30 (&lt; 20 years)</td>
<td></td>
</tr>
<tr>
<td><strong>Mother’s age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Highest</td>
<td>19</td>
<td>27 Lowest</td>
<td></td>
</tr>
<tr>
<td>26 Highest</td>
<td>34</td>
<td>56 Lowest</td>
<td></td>
</tr>
<tr>
<td><strong>Wealth quintile</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Highest</td>
<td>19</td>
<td>27 Lowest</td>
<td></td>
</tr>
<tr>
<td>26 Highest</td>
<td>34</td>
<td>56 Lowest</td>
<td></td>
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</tbody>
</table>

### Deliveries assisted by SBAs

<table>
<thead>
<tr>
<th></th>
<th>Deliveries assisted by SBAs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother’s education</strong></td>
<td></td>
</tr>
<tr>
<td>32 No Edn</td>
<td>73</td>
</tr>
<tr>
<td>63 (&lt; 20 years)</td>
<td>73</td>
</tr>
<tr>
<td>75 (20-34 years)</td>
<td>73</td>
</tr>
</tbody>
</table>

### Sources

Differentials in immunization of children

Differentials in care-seeking for children sick with diarrhoea

Differentials in care-seeking for children with symptoms of ARI

### Differentials by Geographical Regions

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Place of Residence</th>
<th>Province</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
</tr>
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<td>IMR</td>
<td>31</td>
<td>45</td>
</tr>
<tr>
<td>U5MR</td>
<td>38</td>
<td>60</td>
</tr>
<tr>
<td>Stunting %</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Underweight %</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Neonates protected against tetanus %</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Deliveries by SBA %</td>
<td>88</td>
<td>63</td>
</tr>
<tr>
<td>Initiation of breastfeeding within one hour after birth %</td>
<td>42</td>
<td>46</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding (months)</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Immunization %</td>
<td>68</td>
<td>52</td>
</tr>
</tbody>
</table>
### Differentials by Geographical Regions

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Place of Residence</th>
<th>Province</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with diarrhoea for whom treatment was sought from a health facility %</td>
<td>Urban</td>
<td>NAD</td>
</tr>
<tr>
<td>% with diarrhoea who received ORS</td>
<td>Urban</td>
<td>NAD</td>
</tr>
<tr>
<td>% with suspected pneumonia for whom treatment was sought from a health facility</td>
<td>Urban</td>
<td>NAD</td>
</tr>
<tr>
<td>% with suspected pneumonia who received antibiotics*</td>
<td>Urban</td>
<td>NAD</td>
</tr>
</tbody>
</table>

MALDIVES
List of Country Indicators

Selected Demographic Indicators
✓ Selected demographic indicators
✓ Birth registration

Child Mortality and Nutrition Status
✓ Neonatal, infant and under-five mortality rates: trends
✓ Mortality rates by residence
✓ Distribution of neonatal deaths by day of life
✓ Perinatal mortality rate
✓ Causes of under-five deaths
✓ Causes of neonatal deaths
✓ Trends in nutritional status of children
✓ Nutritional status of children by age

Coverage of Core Interventions
Newborn health and related maternal health
✓ Proportion of neonates protected against neonatal tetanus (2+ TT injections)
✓ Proportion of deliveries assisted by skilled birth attendants
✓ Proportion of births by person providing assistance during childbirth
Infant and young child nutrition
✓ Proportion of infants less than age 12 months who were started breastfeeding within one hour of birth
✓ Median duration of exclusive breastfeeding
✓ Proportion of children less than age 6 months started breastfeeding within one hour who were exclusively breastfed
✓ Proportion of children age 6-59 months receiving two doses of vitamin A during calendar year: trends
✓ Proportion of children less than age 6 months who were exclusively breastfed
✓ Proportion of children age 6 – 9 months who were breastfeeding and consuming complementary food

Immunization
✓ Proportion of children age 12-23 months who were vaccinated
✓ Proportion of children under age 5 with diarrhoea who received ORS & ORT

Management of Sick Children
Management of diarrhoea
✓ Proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider
✓ Proportion of children under age 5 with diarrhoea who were given treatment other than ORT
✓ Proportion of children under age 5 with diarrhoea who received ORS & ORT

Management of pneumonia
✓ Proportion of children under age 5 with symptoms of pneumonia for whom advice or treatment was sought from a health facility or provider and received antibiotics
✓ Care-seeking for suspected pneumonia by type of health provider

Management of malaria
✓ Use of insecticide-treated bed nets
✓ Malaria treatment

Water and Sanitation
✓ Proportion of population using improved drinking water
✓ Proportion of population using improved sanitation facilities

Coverage across life-course
✓ Coverage of interventions across the continuum of care in life-course
✓ Missed opportunities for the delivery of lifesaving interventions

Socio-economic Differentials
✓ Demographic and Social Differential for Newborn and Child Health
✓ Differentials in Newborn and Child Health
### Selected Demographic Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (000)</td>
<td>316¹</td>
</tr>
<tr>
<td>Total under-five population (000)</td>
<td>26¹</td>
</tr>
<tr>
<td>Annual births (000)</td>
<td>5¹</td>
</tr>
<tr>
<td>Birth registration (%)</td>
<td>93¹</td>
</tr>
<tr>
<td>Neonatal mortality rate (per 1000 live births)</td>
<td>6²</td>
</tr>
<tr>
<td>Annual number of neonatal deaths</td>
<td>0²⁻³⁻*</td>
</tr>
<tr>
<td>Post-neonatal mortality rate</td>
<td>4³</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>9²</td>
</tr>
<tr>
<td>Annual number of infant deaths</td>
<td>0²⁻³⁻*</td>
</tr>
<tr>
<td>Under-five mortality rates (per 1000 live births)</td>
<td>11²</td>
</tr>
<tr>
<td>Annual number of under-five deaths</td>
<td>0²⁻³⁻*</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>24.7³</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>2.5³</td>
</tr>
</tbody>
</table>

* Annual number of neonatal and infant deaths are less than 1,000

**Source:**

### Birth registration, 2009

- Almost all births in Maldives are registered.

• Between 1990 and 2012, infant mortality declined by 59 and under-five mortality by 83.

• The MDG target for under-five mortality is 31, which has been achieved.

• Neonatal mortality has reduced considerably from 34 in 1990 to 6 in 2012. This has contributed significantly to the achievement of MDG target for U5MR well before 2015.

Child Mortality and Nutritional Status

Trends in neonatal, infant and under-five mortality, 1990 – 2012

<table>
<thead>
<tr>
<th>Years</th>
<th>NMR</th>
<th>IMR</th>
<th>USMR</th>
<th>MDG Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>94</td>
<td>68</td>
<td>45</td>
<td>31</td>
</tr>
<tr>
<td>1995</td>
<td>34</td>
<td>11</td>
<td>6</td>
<td>31</td>
</tr>
<tr>
<td>2000</td>
<td>23</td>
<td>9</td>
<td>6</td>
<td>31</td>
</tr>
<tr>
<td>2005</td>
<td>23</td>
<td>9</td>
<td>6</td>
<td>31</td>
</tr>
<tr>
<td>2010</td>
<td>23</td>
<td>9</td>
<td>6</td>
<td>31</td>
</tr>
<tr>
<td>2012</td>
<td>23</td>
<td>9</td>
<td>6</td>
<td>31</td>
</tr>
<tr>
<td>2015</td>
<td>23</td>
<td>9</td>
<td>6</td>
<td>31</td>
</tr>
</tbody>
</table>


Mortality rates by residence (for the 10-year period 2000-2009)

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neonatal</td>
<td>20</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Infant</td>
<td>23</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>Under-five</td>
<td>23</td>
<td>28</td>
<td>17</td>
</tr>
</tbody>
</table>

*Total mortality values are for the five-year period 2005-09 whereas urban and rural mortality rates are for the ten-year period 2000-2009.

Distribution of neonatal deaths by day of life

Of 39 surveyed neonatal deaths for MDHS 2009,

- 51% of the deaths occurred before day 1
- 74% occurred between day zero and day 1
- 91.5% of the deaths occurred during the first week of life.

Perinatal mortality rate, stillbirths and early neonatal deaths

<table>
<thead>
<tr>
<th>Parameter</th>
<th>MDHS 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of stillbirths¹</td>
<td>34</td>
</tr>
<tr>
<td>Number of early neonatal deaths²</td>
<td>35</td>
</tr>
<tr>
<td>Perinatal mortality rate³</td>
<td>18</td>
</tr>
</tbody>
</table>

1. Stillbirths are fetal deaths in pregnancies lasting seven or more months.
2. Early neonatal deaths are deaths at age 0-6 days among live-born children
3. The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months’ duration, expressed per 1,000.

- Neonatal causes, acute lower respiratory infections, injuries and diarrhoea are major causes of death among under-five children.
- Most neonatal deaths are caused by, congenital anomalies, complications of prematurity, infections, birth asphyxia and birth trauma.

Nutritional status of children under age 5, by sex

- At the national level, 19% children under five years are stunted, while 17% are underweight.
- There is no significant difference in levels of stunting, wasting and underweight between male and female children.

Nutritional status of children by age

- Stunting increases with the age of the child through the first year of life (from 15% among children less than 6 months to 24% among children age 9-11 months) before declining slightly to 22% between 12-17 months and then increasing to 25% for children age 18-23 months.
- Highest level of wasting is observed for children under 6 months (16%). Highest proportions of underweight children are in the categories of children aged 24-35 months (21%).

MALDIVES

Coverage of Core Interventions
Newborn health and related maternal health
Neonates protected against tetanus at birth

- The last child born to six out of ten mothers was protected against neonatal tetanus.

![Bar chart showing the proportion of mothers given 2 or more TT injections.](chart.png)


Deliveries assisted by skilled birth attendants

Proportion of deliveries assisted by skilled birth attendants

- Almost all births take place in health facilities and are assisted by skilled birth attendants.

![Bar chart showing the proportion of deliveries assisted by skilled birth attendants.](chart.png)

Distribution of live births by person providing assistance during childbirth

- More than 80% deliveries are assisted by doctors and 14% by nurse and midwife.

Infant and Young Child Nutrition

Proportion of infants who were initiated into breastfeeding within one hour of birth

- More than 64% children are breastfed within one hour of birth.

• The median duration of exclusive breastfeeding is 2.2 months as against the recommended six months.

Median duration of exclusive breastfeeding


Proportion of infants less than age 6 months exclusively breastfed and infants between 6-9 months who were given complementary foods along with breastfeeding


• Although 64% of children are initiated into breastfeeding early in Maldives, only 48% below 5 months are exclusively breastfed.

• Among children between the age of 6-9 months, a high proportion (82%) receive complementary food along with breastfeeding.
Immunization

Proportion of children age 12-23 months vaccinated

- About 93% children between the age of 12-23 months had received all basic vaccinations.
- The coverage for BCG, three doses of polio, DPT vaccine and measles is almost universal.
- Coverage is only slightly lower (92%) for the hepatitis B vaccine.

Proportion of children age 6-59 months receiving two doses of vitamin A during calendar year

- Three in five children between the ages of 6-59 months received two doses of vitamin A supplement in 2007.
- Vitamin A supplementation has almost doubled from 32% to 62% in just one year (2006 to 2007).
Management of sick children

Management of diarrhoea

Proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider and given ORT and ORS

- About 84% children with diarrhoea were taken to a medically trained health provider for advice or treatment.
- While 57% children with diarrhoea received ORS, 84% were given ORT.

Management of pneumonia

Proportion of children under age 5 with fever for whom advice or treatment was sought from a health facility or provider and given antibiotics

- Twenty-nine per cent of children below 5-years had fever and of them about 84% were taken to a health facility or a medically trained provider for treatment.
- As per 2001 MICS data, 22% children with symptoms of ARI were taken to a health facility or a medically trained provider for advice/treatment.
- Less than 1% children had symptoms of ARI according to the MDHS 2009.

Source:

Use of insecticide-treated nets
Data not available

Water and Sanitation

Proportion of population using improved drinking water sources

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per cent</td>
<td>98.6</td>
<td>99.5</td>
<td>97.9</td>
</tr>
</tbody>
</table>

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)

- Over 98% of the population uses improved drinking water sources with almost the entire urban population and 98% of the rural population having access to improved drinking water sources.

Proportion of population using improved sanitation facilities

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per cent</td>
<td>98</td>
<td>97.5</td>
<td>98.3</td>
</tr>
</tbody>
</table>

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)

- Access to improved sanitation facilities is almost universal.
**Coverage across life-course**

**Coverage of interventions across the life-course continuum**

<table>
<thead>
<tr>
<th></th>
<th>Pre-pregnancy</th>
<th>Pregnancy</th>
<th>Birth</th>
<th>Postnatal</th>
<th>Infancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraceptive prevalence rate</td>
<td>35</td>
<td>85</td>
<td>93</td>
<td>67</td>
<td>93</td>
</tr>
<tr>
<td>ANC 1+</td>
<td></td>
<td>93</td>
<td>95</td>
<td>64</td>
<td>57</td>
</tr>
<tr>
<td>Skilled attendant at birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>84</td>
</tr>
<tr>
<td>Delivery in a health facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC (within 2 days)</td>
<td></td>
<td></td>
<td></td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>Breastfeeding initiated within 1 hour of birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral rehydration for diarrhoea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care-seeking for fever</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusive breastfeeding for first 5 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Over 85% mothers receive skilled antenatal care and 95% skilled care at birth which helps in early detection and management of problems.

- However, there is scope to improve timely delivery of postnatal care, exclusive breastfeeding and management of diarrhoea.
Although there is a high level of coverage of interventions around the time of birth to take care of the mothers’ and neonates’ health, there are missed opportunities in the areas of exclusive breastfeeding for 6 months, ORS treatment for diarrhoea, vitamin A supplementation and protection of mothers against neonatal tetanus (2 plus injections).

Improvements could also be effected in the early initiation of breastfeeding and timely post-natal care.

## Socio-economic Differentials

### Demographic and Social Differentials for Newborn and Child Health

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
<th>Child's sex</th>
<th>Mother's education</th>
<th>Mother's age (years)</th>
<th>Wealth quintiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>No education</td>
<td>Secondary+</td>
</tr>
<tr>
<td>Neonatal mortality rate</td>
<td>10</td>
<td>18</td>
<td>15</td>
<td>32</td>
<td>7</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>14</td>
<td>24</td>
<td>21</td>
<td>41</td>
<td>13</td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>17</td>
<td>29</td>
<td>25</td>
<td>47</td>
<td>14</td>
</tr>
<tr>
<td>Stunting, %</td>
<td>19</td>
<td>20</td>
<td>17</td>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td>Underweight, %</td>
<td>17</td>
<td>18</td>
<td>17</td>
<td>27</td>
<td>12</td>
</tr>
<tr>
<td>Wasting, %</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Protection against neonatal tetanus</td>
<td>59</td>
<td>-</td>
<td>-</td>
<td>54</td>
<td>84</td>
</tr>
<tr>
<td>Deliveries assisted by SBAs, %</td>
<td>95</td>
<td>-</td>
<td>-</td>
<td>85</td>
<td>99</td>
</tr>
<tr>
<td>Early initiation of breastfeeding, %</td>
<td>64</td>
<td>63</td>
<td>65</td>
<td>69</td>
<td>61</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding (months)</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
<td>1.6</td>
<td>2</td>
</tr>
<tr>
<td>Children receiving all basic vaccinations, %</td>
<td>93</td>
<td>93</td>
<td>92</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td>Children with diarrhoea brought to health facility/provider, %</td>
<td>84</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Children with diarrhoea treated with ORS, %</td>
<td>57</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Children with fever taken to health facility/provider, %</td>
<td>84</td>
<td>83</td>
<td>86</td>
<td>78</td>
<td>97</td>
</tr>
<tr>
<td>Children with fever taken to health facility/provider and given antibiotics, %</td>
<td>88</td>
<td>89</td>
<td>87</td>
<td>86</td>
<td>92</td>
</tr>
</tbody>
</table>

### Remarks

- Mother’s education is a major determinant of newborn and child health. If the mothers are not educated, their children are considerably disadvantaged compared to those whose mothers are educated beyond secondary level:
  - Newborns are four and a half times more likely to die in the first month.
  - Infants and children below five years are over three times more likely to die early.
  - They are also likely to be twice more stunted, be underweight or thin (wasted).
  - Infants and children are less likely to be breastfed for lesser than the median duration.
  - They are also likely to be breastfed for lesser than the median duration.
  - Infants and children are less likely to be taken to a health facility or provider when having fever.
  - Child mortality is linked directly to the age of the mother in as much as those born to younger mothers (< 20 years) are twice more likely to die as neonates and one and a half times during infancy and later compared to older mothers in the age group 20 – 29 years.
  - Family’s wealth plays an important role in mother and child survival.

Socio-economic Differentials
Differentials in Newborn and Child Health

Differentials in neonatal, infant and under-five mortality rates

Differentials in nutritional status of children
Differentials in the deliveries assisted by SBAs

- Mother’s education
  - 95% (high education)
  - 85% (no education)
  - 93% (20-year-olds)
- Mother’s age
  - 95% (20–34 years)
- Wealth quintile
  - 99% (highest)
  - 89% (lowest)

Deliveries assisted by SBAs

Differentials in immunization of children

- Mother’s education
  - 93% (high education)
  - 89% (no education)
- Wealth quintile
  - 93% (highest)
  - 89% (lowest)

Basic immunization

Differentials in care-seeking for children with fever and given antibiotics

- Mother’s education
  - 87% (high education)
  - 86% (no education)
- Wealth quintile
  - 88% (highest)
  - 80% (lowest)

Brought to health facility/provider

Given antibiotics

## Differentials by Geographical Regions

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Place of Residence</th>
<th>Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>NMR</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>IMR</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>U5MR</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>Perinatal mortality rate</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>Stunting %</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Underweight %</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Neonates protected against tetanus %</td>
<td>77</td>
<td>52</td>
</tr>
<tr>
<td>Deliveries by SBA %</td>
<td>99</td>
<td>93</td>
</tr>
<tr>
<td>Initiating of breastfeeding within 1 hour after birth %</td>
<td>60</td>
<td>66</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding (months)</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Immunization %</td>
<td>91</td>
<td>94</td>
</tr>
<tr>
<td>% with diarrhoea for whom treatment was sought from a health facility</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>% with diarrhoea who received ORS</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>% with suspected pneumonia</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

List of Country Indicators

Selected Demographic Indicators
✓ Selected demographic indicators
✓ Birth registration

Child Mortality and Nutrition Status
✓ Neonatal, infant and under-five mortality rates: trends
✓ Mortality rates by residence
× Perinatal mortality rate
✓ Causes of under-five deaths
✓ Causes of neonatal deaths
✓ Malnutrition among children under 5
✓ Nutritional status of children by age
× Underweight prevalence: trends

Coverage of Core Interventions
Newborn health and related maternal health
✓ Proportion of neonates protected against neonatal tetanus (2+ TT injections)
✓ Proportion of births by person providing assistance during childbirth
✓ Proportion of deliveries assisted by skilled birth attendants: trends

Infant and young child nutrition
✓ Proportion of infants less than age 12 months who were started breastfeeding within one hour of birth: trends
× Median duration of exclusive breastfeeding
✓ Proportion of children age 6-59 months receiving two doses of vitamin A during calendar year: trends
✓ Proportion of children less than age 6 months who were exclusively breastfed
✓ Proportion of children age 6 – 9 months who were breastfeeding and consuming complementary food

Immunization
✓ Proportion of children age 12-23 months who were vaccinated
✓ Proportion of children under age 5 with diarrhoea who received ORT

Management of Sick Children
Management of diarrhoea
✓ Proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider
✓ Proportion of children under age 5 with diarrhoea who were given treatment other than ORT: trends
✓ Care-seeking for suspected pneumonia by type of health provider
× Malaria treatment

Management of pneumonia
✓ Proportion of children under age 5 with symptoms of pneumonia for whom advice or treatment was sought from a health facility or provider and received antibiotics: trends

Management of malaria
× Use of insecticide-treated bed nets

Water and Sanitation
✓ Proportion of population using improved drinking water
✓ Proportion of population using improved sanitation facilities

Coverage across life-course
✓ Coverage of interventions across the continuum of care in life-course
✓ Missed opportunities for the delivery of lifesaving interventions

Socio-economic Differentials
× Demographic and social differentials for newborn and Child Health
✓ Differentials by Geographical Regions
✓ Differentials in Newborn and Child Health
## Selected Demographic Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (000)</td>
<td>47,963¹</td>
</tr>
<tr>
<td>Total under-five population (000)</td>
<td>3,956¹</td>
</tr>
<tr>
<td>Annual births (000)</td>
<td>830¹</td>
</tr>
<tr>
<td>Birth registration (%)</td>
<td>72¹</td>
</tr>
<tr>
<td>Neonatal mortality rate (per 1000 live births)</td>
<td>26²</td>
</tr>
<tr>
<td>Annual number of neonatal deaths</td>
<td>24,000²</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>41²</td>
</tr>
<tr>
<td>Annual number of infant deaths</td>
<td>38,000²</td>
</tr>
<tr>
<td>Under-five mortality rate (per 1000 live births)</td>
<td>52²</td>
</tr>
<tr>
<td>Annual number of under-five deaths</td>
<td>48,000²</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>17.29³</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>2.03¹</td>
</tr>
</tbody>
</table>


### Birth registration

- Seventy-two per cent of births are registered. One and half times more urban births are registered than rural births.

Child Mortality and Nutritional Status

Trends in neonatal, infant and under-five mortality, 1990 to 2012

- Neonatal mortality rate has declined from 41 (1990) to 26 (2012).
- Between 1990 and 2012, infant mortality rate declined by 35 points.
- The under-five mortality rate declined steadily from 106 in 1990 to 52 in 2012. The target for 2015 (MDG) is 35; achievement of which at the present rate of progress appears to be difficult.

Mortality rates by residence

- Rural mortality rates are 1.7 times more than the urban mortality rates.


• Neonatal causes, acute lower respiratory infections and diarrhoea are major causes of death among under-five children.

• Most neonatal deaths are caused by complications of prematurity, infections, birth asphyxia and birth trauma and congenital anomalies.

Malnutrition among children under age 5


- More than one-third children are stunted and almost one-fourth are underweight in Myanmar. Eight per cent are too thin for their height or wasted.

Trends in under weight prevalence in children under age 5


- The proportion of underweight children has been going down steadily since 1995 as per MICS data based on NCHS/WHO reference while the proportion of underweight children based on 2006 WHO reference remained constant in 2000 and 2003 and decreased by 7 percentage point in 2009.
Nutritional status of children by age 5, 2009-10


Coverage of Core Interventions

Newbron health and related maternal health

Neonates protected against tetanus at birth

- 92% of neonates were protected against tetanus at birth; 90% of women received two or more tetanus toxoid injections during their last pregnancy.

- Prevalence of stunting among children under 6 months increases from 14% to 44% for the age group 24-35 months and thereafter decreases slightly to taper off at 41% for the 48-59 month age group.

- Underweight prevalence in children increases gradually from 10.1% among the age group up to 6 months to 30% for the age group 48-59 months.

- It is apparent that both stunting and underweight prevalence increase with the age of the child.
Deliveries assisted by skilled birth attendants

Trend in proportion of live births attended to by skilled birth attendants

- About seven in 10 deliveries are assisted by skilled birth attendants.
- Births attended by medically-trained providers increased from 46% in 1991 by 1.5 times till 2009.

Distribution of live births by person providing assistance during child birth

- 36% of live births are attended by midwives.
- Qualified doctors helped in 28% of the deliveries in Myanmar.
- TBAs attended 17.7% live births.


**Infant and Young Child Nutrition**

Proportion of infants less than age 12 months who were started breastfeeding within one hour of birth

- About three-fourth of women initiated breastfeeding within one hour of birth.

![Initiation of breastfeeding within 1 hour of birth](chart)


Proportion of infants less than age 6 months exclusively breastfed and infants 6–9 months of age receiving breast milk and complementary food

- Despite high proportion with early initiation breastfeeding, only one in four children between age 0-6 months, are exclusively breastfed.
- Four out of five children between the age 6-9 months are given complementary food besides the breast milk.

![Exclusive BF (0-6 months) and Complementary feeding (6-9 months)](chart)

• Ninety-four per cent children aged 6–59 months received two doses of vitamin A supplement, which remained static from 2005 to 2008.

Trends in proportion of children age 6–59 months receiving two doses of vitamin A during calendar year


Immunization

Proportion of children age 12–23 months who received all basic vaccinations


• Almost all children aged 12–23 months received all the recommended vaccinations.
Management of sick children

Management of diarrhoea

Proportion of children under age 5 who had diarrhoea taken to a health facility/provider and given ORS packets for treatment

- Half of the children having diarrhoea are taken to a health facility/health provider for treatment.
- 61% received ORS.

Trends in proportion of children under age 5 who had diarrhoea in the past two weeks and were treated with ORT or increased fluids with continued feeding

- During 2000 to 2007, ORT for children suffering from diarrhoea had increased by 24 points (from 48% to 72%), which decreased to 50% in 2009 (as per MICS 2009-10).

Source:

Sixty-nine per cent children with symptoms of ARI were taken to a health facility or a medically-trained provider for treatment.

There has been an increase of 21% during the nine-year period from 2000 to 2009.

Management of pneumonia
Trends in proportion of children under age 5 with suspected pneumonia taken to an appropriate health-care provider

Proportion of children under age 5 who had suspected pneumonia in the past two weeks and were taken to an appropriate health-care provider and given antibiotics

While 69% of children suspected to be having symptoms of pneumonia were taken to a health facility/provider for treatment, 34% were given antibiotics for treatment.

Use of insecticide-treated bed nets
Data not available

Source:
Water and Sanitation

Proportion of population using improved drinking water sources

- More than 84% of the population has access to safe drinking water.
- There is a marked difference in the use of improved drinking water sources by urban and rural populations.

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)

Proportion of population using improved sanitation facilities

- Seventy-seven per cent of the population is using improved sanitation facilities. Urban population has distinctly more access to improved sanitation facilities compared to the rural population.

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)
There is a significant variation in coverage of effective interventions across the life-course. Contraception, institutional deliveries, postnatal care and exclusive breastfeeding need be expanded.
Missed opportunities for the delivery of lifesaving interventions

- Considering that high coverages have been achieved for immunization and Vitamin A supplementation, low coverage for exclusive breastfeeding, institutional deliveries and management of children with diarrhoea and pneumonia represent various missed opportunities for saving the lives of children.

Source:
Remarks

- Mother's education is a major determinant of the newborn and child health. If the mothers are educated only up to primary level, their children are considerably disadvantaged compared to those whose mothers are educated beyond secondary level:
  - Infants and children under-five years are almost 1.5 times more likely to die early.
  - They are also likely to be almost twice more stunted or be underweight.
  - They are less likely to be taken to a health facility or provider when sick with diarrhoea or have symptoms of ARI.
- Child mortality is linked directly to the age of the mother in as much as those born to younger mothers (15-19 years) are 1.4 times more likely to die as neonates, compared to older mothers in the age group 20 – 29 years.
- Family’s wealth plays an important role in mother and child survival.

### Socio-economic Differentials

#### Demographic and Social Differentials for Newborn and Child Health

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
<th>Child’s sex</th>
<th>Mother’s education</th>
<th>Mother’s age (years)</th>
<th>Wealth quintiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male Female</td>
<td>Primary Secondary+</td>
<td>15-19 20-29</td>
<td>Lowest Highest</td>
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<tr>
<td>Neonatal mortality rate#</td>
<td>34</td>
<td>39</td>
<td>29</td>
<td>32 35</td>
<td>43 34</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>38</td>
<td>42</td>
<td>33</td>
<td>43 27</td>
<td>- -</td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>46</td>
<td>50</td>
<td>42</td>
<td>51 33</td>
<td>- -</td>
</tr>
<tr>
<td>Stunting, %</td>
<td>35</td>
<td>37</td>
<td>33</td>
<td>50* 27</td>
<td>- -</td>
</tr>
<tr>
<td>Underweight, %</td>
<td>23</td>
<td>23</td>
<td>22</td>
<td>32* 18</td>
<td>- -</td>
</tr>
<tr>
<td>Wasting, %</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>9* 8</td>
<td>- -</td>
</tr>
<tr>
<td>Protection against neonatal tetanus (2 or more TT injections)</td>
<td>90</td>
<td>-</td>
<td>-</td>
<td>73*</td>
<td>94</td>
</tr>
<tr>
<td>Deliveries assisted by SBAs, %</td>
<td>71</td>
<td>-</td>
<td>-</td>
<td>47 85</td>
<td>59 69**</td>
</tr>
<tr>
<td>Early initiation of breastfeeding, %</td>
<td>76</td>
<td>-</td>
<td>-</td>
<td>68 81</td>
<td>- -</td>
</tr>
<tr>
<td>Median duration of breastfeeding, (months)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Children receiving all basic vaccinations, %</td>
<td>97</td>
<td>97</td>
<td>98</td>
<td>91</td>
<td>99</td>
</tr>
<tr>
<td>Children with diarrhoea brought to health facility/ provider, %</td>
<td>51</td>
<td>54</td>
<td>47</td>
<td>45</td>
<td>80</td>
</tr>
<tr>
<td>Children with diarrhoea treated with ORS, %</td>
<td>60</td>
<td>61</td>
<td>60</td>
<td>49*</td>
<td>67</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility/ provider, %</td>
<td>69</td>
<td>70</td>
<td>69</td>
<td>57**</td>
<td>73</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility/ provider and given antibiotics, %</td>
<td>34</td>
<td>36</td>
<td>32</td>
<td>26</td>
<td>41</td>
</tr>
</tbody>
</table>

* Mothers were ‘Not educated’ ** For age group 20-24,


Socio-economic Differentials

Differentials in Newborn and Child Health

Differentials in neonatal, infant and under-five mortality rates

<table>
<thead>
<tr>
<th>Mother’s education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 Primary</td>
<td>52 Lowest</td>
</tr>
<tr>
<td>35 Sec+</td>
<td>49 Highest</td>
</tr>
<tr>
<td>34 (20-29 years)</td>
<td>43 (15-19 years)</td>
</tr>
<tr>
<td>34</td>
<td>43 Primary</td>
</tr>
<tr>
<td>34</td>
<td>38</td>
</tr>
<tr>
<td>27 Sec+</td>
<td>33 Lowest</td>
</tr>
<tr>
<td>38</td>
<td>33 Highest</td>
</tr>
<tr>
<td>38</td>
<td>46</td>
</tr>
<tr>
<td>46</td>
<td>62 Lowest</td>
</tr>
<tr>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>17 Highest</td>
<td>46</td>
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<td>33 Highest</td>
<td>46</td>
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<tr>
<td>13 Highest</td>
<td>46</td>
</tr>
<tr>
<td>Per cent</td>
<td>0</td>
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</tbody>
</table>

Differentials in nutritional status of children

<table>
<thead>
<tr>
<th>Mother’s education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 Sec+</td>
<td>50 No Edn</td>
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<tr>
<td>35</td>
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<tr>
<td>35</td>
<td>21 Highest</td>
</tr>
<tr>
<td>18 Sec+</td>
<td>32 No Edn</td>
</tr>
<tr>
<td>23</td>
<td>33 Lowest</td>
</tr>
<tr>
<td>23</td>
<td>14 Highest</td>
</tr>
<tr>
<td>8</td>
<td>10 Lowest</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>Highest</td>
</tr>
</tbody>
</table>

Differentials in the deliveries assisted by SBAs

<table>
<thead>
<tr>
<th>Mother’s education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>47 Primary</td>
<td>96 Highest</td>
</tr>
<tr>
<td>85 Sec+</td>
<td>96 Highest</td>
</tr>
<tr>
<td>71</td>
<td>85 Sec+</td>
</tr>
<tr>
<td>71</td>
<td>51 Lowest</td>
</tr>
<tr>
<td>59 (15-19 years)</td>
<td>51 Lowest</td>
</tr>
<tr>
<td>69 (20-24 years)</td>
<td>51 Lowest</td>
</tr>
<tr>
<td>71</td>
<td>51 Lowest</td>
</tr>
</tbody>
</table>
Differentials in immunization of children

![Graph showing immunization differentials by wealth quintile and mother's education.]

Differentials in care-seeking for children sick with diarrhoea

![Graph showing care-seeking behaviors by wealth quintile and mother's education.]

Differentials in care-seeking for children with symptoms of ARI and given antibiotics

![Graph showing care-seeking behaviors for ARI symptoms by wealth quintile and mother's education.]


### Differentials by Geographical Regions

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Place of Residence</th>
<th>State/Division</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>NMR*</td>
<td>22</td>
<td>37</td>
</tr>
<tr>
<td>IMR</td>
<td>25</td>
<td>43</td>
</tr>
<tr>
<td>USMR</td>
<td>29</td>
<td>53</td>
</tr>
<tr>
<td>Stunting %</td>
<td>27</td>
<td>38</td>
</tr>
<tr>
<td>Underweight %</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td>Neonates protected against tetanus (2+ TT injections) %</td>
<td>92</td>
<td>89</td>
</tr>
<tr>
<td>Deliveries by SBA %</td>
<td>90</td>
<td>63</td>
</tr>
<tr>
<td>% Initiation of breastfeeding within one hour after birth</td>
<td>81</td>
<td>74</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding (months)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Immunization %</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>% with diarrhoea for whom treatment was sought from a health facility</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>% with diarrhoea who received ORT</td>
<td>57</td>
<td>47</td>
</tr>
<tr>
<td>% with suspected pneumonia for whom treatment was sought from a health facility</td>
<td>74</td>
<td>67</td>
</tr>
</tbody>
</table>

List of Country Indicators

**Selected Demographic Indicators**
- Selected demographic indicators
- Birth registration

**Child Mortality and Nutritional Status**
- Neonatal, infant and under-five mortality rates: trends
- Mortality rates by residence
- Distribution of neonatal deaths by day of life
- Perinatal mortality rate
- Causes of under-five deaths
- Causes of neonatal deaths
- Trends in nutritional status of children
- Nutritional status of children by age

**Coverage of Core Interventions**
**Newborn health and related maternal health**
- Proportion of neonates protected against neonatal tetanus (2+ TT injections)
- Proportion of deliveries assisted by skilled birth attendants: trends
- Proportion of births by person providing assistance during childbirth

**Infant and young child feeding**
- Proportion of infants less than age 12 months who were started breastfeeding within one hour of birth: trends
- Median duration of exclusive breastfeeding
- Proportion of children less than age 6 months who were exclusively breastfed: trends
- Proportion of children age 6 – 9 months who were breastfeeding and consuming complementary food: trends
- Proportion of children age 6-59 months receiving two doses of vitamin A during calendar year: trends

**Immunization**
- Proportion of children age 12-23 months who were vaccinated: trends
- Proportion of children under age 5 with diarrhoea who received ORS & ORT

**Management of Sick Children**
**Management of diarrhoea**
- Proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider: trends
- Proportion of children under age 5 with diarrhoea who were given treatment other than ORT
- Proportion of children under age 5 with diarrhoea who received ORS & ORT

**Management of pneumonia**
- Proportion of children under age 5 with symptoms of pneumonia for whom advice or treatment was sought from a health facility or provider and received antibiotics: trends
- Care-seeking for suspected pneumonia by type of health provider

**Management of malaria**
- Use of insecticide-treated bed nets
- Malaria treatment

**Water and Sanitation**
- Proportion of population using improved drinking water

**Coverage across life-course**
- Coverage of interventions across the continuum of care in-life-course
- Missed opportunities for the delivery of lifesaving interventions

**Socio-economic Differentials**
- Demographic and Social Differentials for Newborn and Child Health
- Differentials by Geographical Regions
- Differentials in Newborn and Child Health
### Selected Demographic Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (000)</td>
<td>29,959¹</td>
</tr>
<tr>
<td>Total under-five population (000)</td>
<td>3,506¹</td>
</tr>
<tr>
<td>Annual births (000)</td>
<td>724¹</td>
</tr>
<tr>
<td>Birth registration (%)</td>
<td>42³</td>
</tr>
<tr>
<td>Neonatal mortality rate (per 1000 live births)</td>
<td>24²</td>
</tr>
<tr>
<td>Annual number of neonatal deaths</td>
<td>14,000²</td>
</tr>
<tr>
<td>Post-neonatal mortality rate</td>
<td>13³</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>34²</td>
</tr>
<tr>
<td>Annual number of infant deaths</td>
<td>19,000²</td>
</tr>
<tr>
<td>Under-five mortality rate (per 1000 live births)</td>
<td>42²</td>
</tr>
<tr>
<td>Annual number of under-five deaths</td>
<td>24,000²</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>24.3³</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>2.6³</td>
</tr>
</tbody>
</table>

Source:  

### Birth registration

- Only 42% of births are registered and are more likely for children born in cities than those born in villages.

Child Mortality and Nutritional Status

Trends in neonatal, infant and under-five mortality rates, 1990–2012

- Between 1990 and 2012, infant mortality declined by 65 points and under-five mortality by 100 points.
- Under-five mortality rate is 42, and (MDG) 4 target of 47 by 2015 has been achieved.
- Neonatal mortality declined by 29 points during 1990 and 2012.

Mortality rates by residence

- The Child mortality is significantly higher in rural areas.


Distribution of neonatal deaths by day of life

Of the 176 surveyed neonatal deaths for Nepal DHS 2011:
- 53% occurred on the first day of life;
- 88% occurred during the first week of life.

Most deaths during the neonatal period occur at home and are often unregistered. Only two-fifth of births are registered in Nepal.


Perinatal mortality rate

- Perinatal mortality rate has been declining steadily over the last one and a half decades.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of stillbirths</td>
<td>NA</td>
<td>156</td>
<td>126</td>
<td>53</td>
</tr>
<tr>
<td>Number of early neonatal deaths</td>
<td>NA</td>
<td>182</td>
<td>129</td>
<td>149</td>
</tr>
<tr>
<td>Perinatal mortality rate</td>
<td>52</td>
<td>47.4</td>
<td>45</td>
<td>37</td>
</tr>
</tbody>
</table>


1. Stillbirths are fetal deaths in pregnancies lasting seven or more months.
2. Early neonatal deaths are deaths at age 0-6 days among live-born children.
3. The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months’ duration, expressed per 1,000.*
• Neonatal causes, acute lower respiratory infections and diarrhoea are major causes of death among under-five children.

• Most neonatal deaths are caused by complications of prematurity, infections, birth asphyxia and trauma and congenital anomalies.


• At the national level, 41% children under five years are considered to be short for their age or stunted, while 29% are underweight.

• From 1996 to 2001, stunting increased by 8% but then decreased in 2006 to 49% and to 41% in 2011.

• There is a downward trend in the proportion of underweight children, from 47% in 1996 to 29% in 2011.

• The proportion of stunting marginally decreases to 17% among children aged 9-11 months, and thereafter increases with age, with the highest at 53% among children aged 36-47 months.

• The percentage of children who are underweight increases gradually and maximizes at 37% among children 18-23 months and reduces to 30% from 24 months onwards.

Coverage of Core Interventions

Newborn health and related maternal health

Neonates protected against tetanus at birth

• In Nepal, seven out of ten mothers received two or more TT injections as protection against neonatal tetanus.
**Deliveries assisted by skilled birth attendants**

Trends in proportion of deliveries assisted by skilled birth attendants

- Only around 36% deliveries are assisted by skilled birth attendants (SBA).
- However, this proportion increased by more than three and half times during the period 1996 to 2011.

**Infant and Young Child Nutrition**

Trends in proportion of infants less than age 12 months with breastfeeding initiated within one hour of birth

- Almost half of the neonates are breastfed within one hour of birth. This increased by two and half times during the period 1996 - 2011.

NEPAL

• Exclusive breastfeeding practice for children less than 6 months improved in 2000, slid below the 1996 level in 2006 but has again improved to 70% in 2011.

Trends in proportion of infants less than age 6 months exclusively breastfed


Median duration of exclusive breastfeeding


• The median duration of exclusive breastfeeding is 4.2 months as against the recommended 6 months.

• Median period of exclusive breastfeeding is highest (6.5, being higher than the recommended period) in the Far Western sub-region and lowest at 2.3 months in the Eastern and Eastern Hill sub-regions.
• Among children between 6–9 months, about seven out of ten receive complementary food.

• Complementary feeding among children aged 6–9 months has practically remained constant at about 70% throughout the period from 1996 to 2011.

Trends in proportion of infants age 6–9 months receiving breast milk and complementary food


Trends in proportion of children under age 5, receiving two doses of vitamin A during a calendar year

• Ninety-three per cent of children between 6–59 months received two doses of vitamin A supplement during the calendar year which decreased by three percentage points between 2005 and 2008.

Immunization

Trends in proportion of children age 12-23 months vaccinated

- Four-fifth of children between 12-23 months had received all the basic vaccinations.
- The level of coverage for BCG, three doses of DPT and three doses of polio vaccine is above 90%, while for measles, the coverage is a little lower (88%).
- Vaccination coverage doubled from 1996 to 2011.


Management of sick children

Management of diarrhoea

Trends in proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider

- About 38% of children who had diarrhoea were taken to a health facility for treatment, which has increased by 2.7 times since 1996.
Proportion of children under age 5 who had diarrhoea in the past two weeks and were treated with ORT and ORS

- While half of children with diarrhoea received any ORT, 39% were given ORS.


Proportion of children under age 5 who had diarrhoea in the past two weeks and were given treatment other than ORT

- 13% children with diarrhoea received unnecessary antibiotics and only 6% received, the recommended treatment with zinc. 30% children with diarrhoea did not receive any treatment.

Management of pneumonia

Trends in proportion of children under age 5 who had fever with symptoms of pneumonia in the past two weeks and were taken to an appropriate health-care provider and received antibiotics

- Of the 50% children who had symptoms of pneumonia were and taken to a health facility or a medically trained provider for treatment, 37% received antibiotics.
- The proportion of children taken to a health facility or trained provider increased steadily from 18% in 1996 to 42% in 2011 showing an increased awareness amongst caregivers to obtain health services.

Use of insecticide-treated bed nets

Data not available

Water and Sanitation

Proportion of population using improved drinking water sources

- Nearly 90% of both urban and rural populations are using improved drinking water sources.

Proportion of population using improved sanitation facilities

- About one-third of the population is using improved sanitation facilities.
- The coverage of rural population using improved sanitation facilities is three-fifths that of the urban population.

Coverage across life-course

Coverage of interventions across the life-course continuum

- Less than four in ten mothers receive skilled care during and immediately after birth. If this increases, it can help in early detection and management of problems leading to maternal and neonatal mortality. There is also scope for increasing antenatal care for expectant mothers.
- Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may cause deaths or serious illness to the baby. Only 35% of births took place in health facilities and 65% were delivered at home.

Missed opportunities for the delivery of lifesaving interventions

- Lack of timely interventions immediately surrounding birth, such as delivery in the health facility, providing the services of skilled birth attendants, ensuring early initiation of breastfeeding and early postnatal check on health of the mother and newborn are the missed opportunities which have the potential for achieving higher levels of coverage and prevention of deaths, if improved.

- There is also scope for improvement in care-seeking and appropriate treatment when children have diarrhoea or have fever or symptoms of ARI.

### Socio-economic Differentials

Demographic and Social Differentials for Newborn and Child Health

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>No education</th>
<th>Secondary+</th>
<th>&lt; 20</th>
<th>20-29</th>
<th>Lowest</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neonatal mortality rate</td>
<td>33</td>
<td>37</td>
<td>33</td>
<td>40</td>
<td>20</td>
<td>51</td>
<td>32</td>
<td>37</td>
<td>19</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>46</td>
<td>54</td>
<td>52</td>
<td>62</td>
<td>31</td>
<td>60</td>
<td>49</td>
<td>61</td>
<td>32</td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>54</td>
<td>63</td>
<td>62</td>
<td>73</td>
<td>32</td>
<td>78</td>
<td>57</td>
<td>75</td>
<td>36</td>
</tr>
<tr>
<td>Stunting, %</td>
<td>41</td>
<td>41</td>
<td>40</td>
<td>48</td>
<td>26</td>
<td>-</td>
<td>-</td>
<td>56</td>
<td>26</td>
</tr>
<tr>
<td>Underweight, %</td>
<td>29</td>
<td>30</td>
<td>28</td>
<td>38</td>
<td>13</td>
<td>-</td>
<td>-</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>Wasting, %</td>
<td>11</td>
<td>12</td>
<td>10</td>
<td>13</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Protection against neonatal tetanus</td>
<td>70</td>
<td>-</td>
<td>-</td>
<td>60</td>
<td>87</td>
<td>73</td>
<td>71</td>
<td>50</td>
<td>88</td>
</tr>
<tr>
<td>Deliveries assisted by SBAs, %</td>
<td>36</td>
<td>-</td>
<td>-</td>
<td>19</td>
<td>76</td>
<td>42</td>
<td>36</td>
<td>11</td>
<td>82</td>
</tr>
<tr>
<td>Early initiation of breastfeeding, %</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>35</td>
<td>53</td>
<td>-</td>
<td>-</td>
<td>40</td>
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<tr>
<td>Median duration of breastfeeding, (months)</td>
<td>4.2</td>
<td>4.4</td>
<td>4.1</td>
<td>5.2</td>
<td>2.8</td>
<td>-</td>
<td>-</td>
<td>4.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Children receiving all basic vaccinations, %</td>
<td>87</td>
<td>88</td>
<td>86</td>
<td>78</td>
<td>92</td>
<td>-</td>
<td>-</td>
<td>85</td>
<td>96</td>
</tr>
<tr>
<td>Children with diarrhea brought to health facility/provider, %</td>
<td>38</td>
<td>41</td>
<td>34</td>
<td>34</td>
<td>35</td>
<td>-</td>
<td>-</td>
<td>33</td>
<td>37</td>
</tr>
<tr>
<td>Children with diarrhea treated with ORS, %</td>
<td>39</td>
<td>43</td>
<td>34</td>
<td>39</td>
<td>39</td>
<td>-</td>
<td>-</td>
<td>39</td>
<td>36</td>
</tr>
<tr>
<td>Children with fever taken to health facility/provider %</td>
<td>42</td>
<td>43</td>
<td>41</td>
<td>33</td>
<td>45</td>
<td>-</td>
<td>-</td>
<td>30</td>
<td>46</td>
</tr>
<tr>
<td>Children with fever taken to health facility/provider and given antibiotics, %</td>
<td>32</td>
<td>32</td>
<td>31</td>
<td>28</td>
<td>37</td>
<td>-</td>
<td>-</td>
<td>23</td>
<td>31</td>
</tr>
</tbody>
</table>

* For age group 20-34.

# Includes fever due to ARI, diarrhea, malaria etc.

Remarks:

- Mother’s education is a major determinant of the newborn and child health. If the mothers are not educated, their children are considerably disadvantaged compared to those whose mothers are educated beyond secondary level.

  - Neonates and infants are twice more likely to die.
  - Children under-five years are almost two and a half times more likely to die early.

- They are also likely to be twice more stunted and three times underweight.

- Deliveries four are times less likely to be assisted by the SBAs, and less likely to be initiated to breastfeeding early.

- They are less likely to be given antibiotics while having fever (including symptoms of ARI).

- However they are likely to be exclusively breastfeed for longer duration when compared with those born to the mothers educated beyond secondary levels.

- Child mortality is linked directly to the age of the mother in as much as those born to younger mothers (< 20 years) are 1.6 times more likely to die as neonates, infants and under-five children compared to older mothers in the age group 20–29 years.

- Family’s wealth plays an important role in mother and child survival.

Socio-economic Differentials

Differentials in Newborn and Child Health

Differentials in neonatal, infant and under-five mortality rates

<table>
<thead>
<tr>
<th>Mother's education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Sec+</td>
<td>33</td>
</tr>
<tr>
<td>32 (20-29 years)</td>
<td>33</td>
</tr>
<tr>
<td>31 Sec+</td>
<td>46</td>
</tr>
<tr>
<td>49 (20-29 Years)</td>
<td>46</td>
</tr>
<tr>
<td>32 Sec+</td>
<td>54</td>
</tr>
<tr>
<td>57 (20-29 years)</td>
<td>54</td>
</tr>
<tr>
<td>36 Highest</td>
<td>75 Lowest</td>
</tr>
</tbody>
</table>

Mother's education

<table>
<thead>
<tr>
<th>Mother's age</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 (20-29 years)</td>
<td>33</td>
</tr>
<tr>
<td>49 (20-29 Years)</td>
<td>46</td>
</tr>
<tr>
<td>57 (20-29 years)</td>
<td>54</td>
</tr>
<tr>
<td>36 Highest</td>
<td>75 Lowest</td>
</tr>
</tbody>
</table>

Mother's age

<table>
<thead>
<tr>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
</tr>
<tr>
<td>Lowest</td>
</tr>
</tbody>
</table>

Wealth quintile

Differentials in nutritional status of children

<table>
<thead>
<tr>
<th>Mother's education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 Sec+</td>
<td>41</td>
</tr>
<tr>
<td>13 Sec+</td>
<td>29</td>
</tr>
<tr>
<td>10 Highest</td>
<td>29</td>
</tr>
<tr>
<td>7 Highest</td>
<td>11</td>
</tr>
</tbody>
</table>

Mother's education

<table>
<thead>
<tr>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
</tr>
<tr>
<td>Lowest</td>
</tr>
</tbody>
</table>

Wealth quintile

Per cent

- Stunting
- Infant Mortality Rate
- Under-Five Mortality Rate
Differentials in the deliveries assisted by SBAs

<table>
<thead>
<tr>
<th>Mother’s education</th>
<th>Wealth quintile</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Edn</td>
<td>Lowest</td>
<td>11</td>
</tr>
<tr>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>76 Sec+</td>
<td>Highest</td>
<td>82</td>
</tr>
<tr>
<td>36 (20-34 years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42 (&lt;20 years)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Differentials in immunization of children

<table>
<thead>
<tr>
<th>Mother’s education</th>
<th>Wealth quintile</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Edn</td>
<td>Lowest</td>
<td>85</td>
</tr>
<tr>
<td>36</td>
<td>36</td>
<td>87</td>
</tr>
<tr>
<td>76 Sec+</td>
<td>Highest</td>
<td>96</td>
</tr>
<tr>
<td>85 (Lowest)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>96 (Highest)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Differentials in care-seeking for children sick with diarrhoea

<table>
<thead>
<tr>
<th>Mother’s education</th>
<th>Wealth quintile</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Edn</td>
<td>Lowest</td>
<td>36</td>
</tr>
<tr>
<td>36</td>
<td>36</td>
<td>89</td>
</tr>
<tr>
<td>76 Sec+</td>
<td>Highest</td>
<td>93</td>
</tr>
<tr>
<td>36 (20-34 years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42 (&lt;20 years)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Children sick with diarrhoea

- Brought to health facility/provider
- Treated with ORS
Differentials in care seeking for children having fever and given antibiotics

## Differentials by Geographical Regions

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Place of Residence</th>
<th>Ecological zones</th>
<th>Sub-regions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td>Mountain</td>
</tr>
<tr>
<td>NMR</td>
<td>25</td>
<td>36</td>
<td>46</td>
</tr>
<tr>
<td>IMR</td>
<td>38</td>
<td>55</td>
<td>73</td>
</tr>
<tr>
<td>U5MR</td>
<td>45</td>
<td>64</td>
<td>87</td>
</tr>
<tr>
<td>Stunting%</td>
<td>27</td>
<td>42</td>
<td>53</td>
</tr>
<tr>
<td>Underweight%</td>
<td>17</td>
<td>30</td>
<td>36</td>
</tr>
<tr>
<td>Neonates protected against tetanus%</td>
<td>81</td>
<td>67</td>
<td>63</td>
</tr>
<tr>
<td>Deliveries by SBA%</td>
<td>73</td>
<td>32</td>
<td>19</td>
</tr>
<tr>
<td>Initiation of breastfeeding within one hour after birth%</td>
<td>51</td>
<td>44</td>
<td>51</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding (month)</td>
<td>3.4</td>
<td>4.3</td>
<td>3.2</td>
</tr>
<tr>
<td>Immunization%</td>
<td>90</td>
<td>87</td>
<td>88</td>
</tr>
<tr>
<td>% with diarrhoea for whom treatment was sought from a health facility</td>
<td>43</td>
<td>38</td>
<td>36</td>
</tr>
<tr>
<td>% with diarrhoea who received ORS</td>
<td>44</td>
<td>39</td>
<td>35</td>
</tr>
<tr>
<td>% with suspected pneumonia for whom treatment was sought from a health facility</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>% with suspected pneumonia who received antibiotics</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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List of Country Indicators

Selected Demographic Indicators
✓ Selected demographic indicators

Child Mortality and Nutritional Status
✓ Neonatal, infant and under-five mortality rates: trends
✓ Distribution of neonatal deaths by day of life
✓ Causes of under-five deaths
✓ Trends in nutritional status of children

Birth registration

✓ Mortality rates by residence
✓ Perinatal mortality rate
✓ Causes of neonatal deaths
✓ Nutritional status of children by age

Coverage of Core Interventions

Newborn health and related maternal health
✓ Proportion of neonates protected against neonatal tetanus (2+ TT injections)
✓ Proportion of deliveries assisted by skilled birth attendants: trends

✓ Proportion of births by person providing assistance during childbirth

Infant and young child feeding
✓ Proportion of infants less than age 12 months who were started breastfeeding within one hour of birth: trends
✓ Median duration of exclusive breastfeeding
✓ Proportion of children age 6-59 months receiving two doses of vitamin A during calendar year: trends

Breakdown of exclusions:
✓ Proportion of children less than age 6 months who were exclusively breastfed: trends
✓ Proportion of children age 6 – 9 months who were breastfeeding and consuming complementary food: trends

Immunization
✓ Proportion of children age 12-23 months who received all basic vaccinations at any time before the survey: trends

✓ Proportion of children age 12-23 months who were vaccinated

Management of Sick Children

Management of diarrhoea
✓ Proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider: trends
✓ Proportion of children under age 5 with diarrhoea who were given treatment other than ORT

✓ Proportion of children under age 5 with diarrhoea who received ORS & ORT

Management of pneumonia
✓ Proportion of children under age 5 with symptoms of pneumonia for whom advice or treatment was sought from a health facility or provider and received antibiotics

✓ Care-seeking for suspected pneumonia by type of health provider

Management of malaria
✓ Use of insecticide-treated bed nets

✓ Malaria treatment

Water and Sanitation
✓ Proportion of population using improved drinking water

✓ Proportion of population using improved sanitation facilities

Coverage across life-course
✓ Coverage of interventions across the continuum of care in life-course

✓ Missed opportunities for the delivery of lifesaving interventions

Socio-economic Differentials
✓ Demographic and Social Differentials for Newborn and Child Health
✓ Differentials by Geographical Regions

✓ Differentials in Newborn and Child Health
Almost all births are registered. There is a minor difference in the birth registration of children in cities and villages. However, birth registration is slightly lower in the estates.
Child Mortality and Nutritional Status

Trends in neonatal, infant and under-five mortality rates, 1990-2012

- Under-five mortality decreased from 21 (1990) to 10 (2012) and is on track to achieve MDG of 7 by 2015.

Mortality rates by residence

- Mortality rates are highest in the estates.
- Neonatal and infant mortality rates in rural areas are two and a half times the urban rate, whereas they are three times in the estates. However, under-five mortality rate in rural areas is only 1.2 times the urban rate and 1.7 times in the estates.


**Perinatal mortality rate**

<table>
<thead>
<tr>
<th>Perinatal mortality rate</th>
<th>Number of stillbirths</th>
<th>Number of early neonatal deaths</th>
<th>Perinatal mortality rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>62</td>
<td>57</td>
<td>17</td>
</tr>
</tbody>
</table>

- Perinatal mortality rate is low at 17 per 1000.
- While there is some variation in perinatal mortality rates amongst urban, rural and residents of estates, the variation is more pronounced between mothers belonging to poorest and richest quintiles (being half of the value for the poorest mothers).

1. Stillbirths are fetal deaths in pregnancies lasting seven or more months.
2. Early neonatal deaths are deaths at age 0-6 days among live-born children
3. The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months’ duration, expressed per 1,000.

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Causes of under-five deaths

- Neonatal causes, acute lower respiratory infections, injuries and diarrhoea are major causes of death among under-five children.

- Most neonatal deaths are caused by complications of prematurity, infections, birth asphyxia and birth trauma and congenital anomalies.

Trends in nutritional status of children under age 5, 1993 to 2007

- At the national level, 17% children under-five years are considered to be short for their age or stunted, while 21% are underweight.
- From 1993 to 2006-2007, stunting decreased by seven percentage points.
- The proportion of underweight children declined by 17 percentage points.

(Trends in nutritional status of children under age 5, by their age

- The prevalence of stunting increases with age from 10% among children less than 6 months to 23% among children between 18-23 months; it decreases thereafter.
- The percentage of children who are underweight increases gradually and maximizes between 48-59 months.

(Based on WHO child growth standards)


(Based on WHO child growth standards)

• The last birth for nine out of 10 mothers was protected against neonatal tetanus and only 48% women received two or more tetanus toxoid injections.

Coverage of Core Interventions

Newborn health and related maternal health

Neonates protected against tetanus at birth

92%

Women whose last birth was protected against neonatal tetanus

48%

Women receiving 2+ TT injection

Proportion of neonates protected against tetanus at birth, 2006-07


Deliveries assisted by skilled birth attendants

Trends in proportion of deliveries assisted by skilled birth attendants

• Almost all deliveries are assisted by skilled birth attendants (SBA) in Sri Lanka.

• Since 1993, births attended to by medically trained providers have increased by five percentage points.


**Infant and Young Child Nutrition**

Proportion of infants less than age 12 months who were initiated into breastfeeding within one hour of birth

- Eight in 10 children are breastfed within one hour of birth.

![Graph showing proportion of infants initiated into breastfeeding within 1 hour of birth]


---

Trends in proportion of infants age 6 months who were exclusively breastfed

- Breastfeeding is almost universal in Sri Lanka and 76% children below 6 months are exclusively breastfed. There has been a steep rise in the exclusive breastfeeding rate from 1993 onwards.

![Graph showing trends in proportion of infants age 6 months exclusively breastfed]

• Among children age 6-9 months, almost nine in 10 children receive complementary food along with breastfeeding.

Trends in proportion of infants age 6-9 months receiving breastmilk and complementary food


Trends in proportion of children under age 5 receiving two doses of vitamin A during calendar year

• Fifty-one per cent of children age 9-59 months had received two doses of vitamin A supplement.

• Proportion of children who had received two doses of vitamin A supplement reduced by 10% in the period 2005 to 2006.

**Immunization**

Trends in proportion of children age 12-23 months who received all basic vaccinations at any time before the survey (according to vaccination card)

- Ninety-one per cent of children aged 12-23 months had received all the recommended vaccinations.
- The proportion of fully-immunized children increased from 1987 to 1993, after which it declined slightly.

The coverage of BCG and three doses of DPT and three doses of polio vaccine is almost 100%.

Coverage is little low (97%) for the measles vaccine. Only 0.3% children between 12-23 months had not received any childhood vaccinations.

**Proportion of children age 12-23 months vaccinated**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>67</td>
<td>95</td>
<td>94</td>
<td>91</td>
</tr>
<tr>
<td>DPT 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polio 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Management of Sick Children**

**Management of diarrhoea**

Trends in proportion of children with under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider

- Over 80% of children with diarrhoea were taken to a medically-trained health provider for advice or treatment. This proportion increased by ten percentage points in the period from 2000 to 2006-2007.

![Bar chart showing trends in proportion of children with diarrhoea for whom advice or treatment was sought from a health facility or provider.](chart)

**Proportion of children under age 5 who had diarrhoea in the past two weeks and were treated with any ORT and ORS**

- While 51% of children with diarrhoea received ORS, 68% were given either form of ORT.

![Bar chart showing proportion of children treated with ORT and ORS.](chart)
Management of pneumonia

Proportion of children under age 5 who had suspected pneumonia in the past two weeks and were taken to an appropriate health-care provider

- Fifty-eight per cent children with symptoms of ARI were taken to a health-care facility or to a medically-trained health-care provider for treatment.
- No data for treatment of children with symptoms of ARI by antibiotics is available.

Management of Malaria

Use of insecticide-treated bed nets

Proportion of children under age 5 who slept under a mosquito net the previous night

- While 64% children slept under a mosquito net in Sri Lanka, only 4% slept under an insecticide-treated net.
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Water and Sanitation

Proportion of population using improved drinking water sources

- Almost the entire urban population has access to improved drinking water whereas the rural and total population have slightly over 90% coverage.

![Bar chart showing the proportion of population using improved drinking water sources.]

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)

Proportion of population using improved sanitation facilities

- Rural population has 10% better access to improved sanitation facilities than the urban population.

![Bar chart showing the proportion of population using improved sanitation facilities.]

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)
Coverage across life-course

Coverage of interventions across the life-course continuum

- Over 90% mothers receive skilled care before, during and immediately after birth which helps in early detection and management of problems which may lead to maternal and neonatal mortality.

- Coverage of contraception and management of children with diarrhoea and pneumonia needs improvement.

Although there are high levels of services provided around the birth to take care of the mothers’ and neonates’ health, there are missed opportunities in the areas of care-seeking for ARI, ORS treatment for diarrhoea, vitamin A supplementation and protecting the mothers against neonatal tetanus (2 plus injections).

## Socio-economic Differentials

### Demographic and Social Differentials for Newborn and Child Health

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Total</th>
<th>Child’s sex</th>
<th>Mother’s education</th>
<th>Mother’s age (years)</th>
<th>Wealth Quintiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>No education</td>
<td>Secondary+</td>
</tr>
<tr>
<td>Neonatal mortality rate</td>
<td>11</td>
<td>16</td>
<td>12</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>15</td>
<td>21</td>
<td>16</td>
<td>33</td>
<td>17</td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>21</td>
<td>26</td>
<td>19</td>
<td>44</td>
<td>19</td>
</tr>
<tr>
<td>Stunting, %</td>
<td>17</td>
<td>18</td>
<td>17</td>
<td>41</td>
<td>10</td>
</tr>
<tr>
<td>Underweight, %</td>
<td>21</td>
<td>22</td>
<td>20</td>
<td>36</td>
<td>13</td>
</tr>
<tr>
<td>Wasting, %</td>
<td>15</td>
<td>16</td>
<td>13</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>Protection against neonatal tetanus</td>
<td>48</td>
<td>-</td>
<td>-</td>
<td>43</td>
<td>52</td>
</tr>
<tr>
<td>Deliveries assisted by SBAs, %</td>
<td>99</td>
<td>-</td>
<td>-</td>
<td>94</td>
<td>99</td>
</tr>
<tr>
<td>Early initiation of breastfeeding, %</td>
<td>80</td>
<td>79</td>
<td>81</td>
<td>78</td>
<td>77</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding (months)</td>
<td>4.5</td>
<td>4.4</td>
<td>4.6</td>
<td>3.3</td>
<td>4.6</td>
</tr>
<tr>
<td>Children receiving all basic vaccinations, %</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>81</td>
<td>97</td>
</tr>
<tr>
<td>Children with diarrhoea brought to health facility/ provider, %</td>
<td>82</td>
<td>80</td>
<td>83</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Children with diarrhoea treated with ORS, %</td>
<td>51</td>
<td>53</td>
<td>49</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility/ provider, %</td>
<td>58</td>
<td>60</td>
<td>56</td>
<td>67*</td>
<td>60</td>
</tr>
</tbody>
</table>

### Remarks

- Mother’s education is a major determinant of newborn and child health. If the mothers are not educated, their children are considerably disadvantaged compared to those whose mothers are educated beyond secondary level:
  - Newborns are 1.5 times more likely to die in the first month.
  - Infants and children below five years are twice more likely to die early.
  - They are 1.4 times less likely to be exclusively breastfed for longer duration.
- Child mortality is linked directly to the age of the mother in as much as those born to younger mothers (≤ 20 years) are one and a half times more likely to die as neonates and 1.2 times as infants. The under-five mortality remains at the same level irrespective of the age of the mother.

*For the age group 20-34 years.

*This includes data for fever on account of infections including ARI, malaria and diarrhoea

*Primary Education
Socio-economic Differentials

Differentials in Newborn and Child Health

Differentials in neonatal, infant and under-five mortality rates


Differentials in nutritional status of children

Differentials in the deliveries by SBAs

<table>
<thead>
<tr>
<th>Mother’s education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Edn</td>
<td>Lowest 36 Highest 60 Sect+ 58 67 Primary Edn</td>
</tr>
<tr>
<td>Sec+</td>
<td>36 Highest 60 Sect+ 58 67 Primary Edn</td>
</tr>
</tbody>
</table>

Differentials in immunization of children

<table>
<thead>
<tr>
<th>Mother’s education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Edn</td>
<td>Lowest 36 Highest 60 Sect+ 58 67 Primary Edn</td>
</tr>
<tr>
<td>Sec+</td>
<td>36 Highest 60 Sect+ 58 67 Primary Edn</td>
</tr>
</tbody>
</table>

Differentials in care-seeking for children with symptoms of ARI and given antibiotics

<table>
<thead>
<tr>
<th>Mother’s education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Edn</td>
<td>Lowest 36 Highest 60 Sect+ 58 67 Primary Edn</td>
</tr>
<tr>
<td>Sec+</td>
<td>36 Highest 60 Sect+ 58 67 Primary Edn</td>
</tr>
</tbody>
</table>

### Differentials by Geographical Regions

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Place of Residence</th>
<th>District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban vs Rural</td>
<td>Colombo</td>
<td>Gampaha</td>
</tr>
<tr>
<td></td>
<td>Kalutara</td>
<td>Kandy</td>
</tr>
<tr>
<td></td>
<td>Matara</td>
<td>Nawara Eliya</td>
</tr>
<tr>
<td></td>
<td>Galle</td>
<td>Matale</td>
</tr>
<tr>
<td></td>
<td>Hambantota</td>
<td>Batticaloa</td>
</tr>
<tr>
<td></td>
<td>Ampara</td>
<td>Trincomale</td>
</tr>
<tr>
<td></td>
<td>Kurunegala</td>
<td>Puttalam</td>
</tr>
<tr>
<td></td>
<td>Anuradhapura</td>
<td>Polonnaruwa</td>
</tr>
<tr>
<td></td>
<td>Badulla</td>
<td>Moneragala</td>
</tr>
<tr>
<td></td>
<td>Ratnapura</td>
<td>Kegalle</td>
</tr>
</tbody>
</table>

#### IMR
- Urban: 10
- Rural: 19
- Estate: 29

#### U5MR
- Urban: 19
- Rural: 23
- Estate: 33

#### Stunting %
- Urban: 14
- Rural: 16

#### Underweight %
- Urban: 17
- Rural: 21

#### Neonates protected against tetanus (2+ TT injections)%
- Urban: 54
- Rural: 47

#### Deliveries by SBA %
- Urban: 99
- Rural: 99

#### Median duration of exclusive breastfeeding (month)
- Urban: 3.6
- Rural: 4.7

#### Immunization %
- Urban: 96
- Rural: 97

#### % with diarrhoea for whom treatment was sought from a health facility

#### % with diarrhoea who received ORS

#### % with suspected pneumonia for whom treatment was sought from a health-care facility

#### % with suspected pneumonia who received antibiotics

*No data for treatment of ARI with antibiotics is available*

List of Country Indicators

Selected Demographic Indicators
✓ Selected demographic indicators

Child Mortality and Nutritional Status
✓ Trends in neonatal, infant and child mortality rates
✓ Distribution of neonatal deaths by day of life
✓ Causes of under-five and neonatal deaths
✓ Nutritional status of children by age

Coverage of Core Interventions
Newborn health and related maternal health
✓ Proportion of neonates protected against tetanus at birth
✓ Trends in proportion of deliveries assisted by skilled birth attendants

Infant Young Child Nutrition
✓ Proportion of infants who started breastfeeding within one hour of birth
✓ Proportion of infants age 6-9 months receiving breast milk and complementary food

Immunization
✗ Trends in immunization coverage
✓ Proportion of children age 12-23 months who were vaccinated

Management of Sick Children
Management of diarrhoea
✗ Proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider: trends
✗ Proportion of children under age 5 with diarrhoea who were given treatment other than ORT: trends

Management of pneumonia
✓ Proportion of children under age 5 with symptoms of pneumonia for whom advice or treatment was sought from a health facility or provider and received antibiotics: trends

Management of malaria
✗ Use of insecticide-treated bed nets

Water and Sanitation
✓ Proportion of population using improved drinking water

Coverage across life-course
✓ Coverage of interventions across the continuum of care in life-course

Socio-economic Differentials
✓ Demographic and Social Differentials for Newborn and Child Health
✓ Differentials by Geographical Regions

 ✓ Birth registration

✗ Mortality rates by residence
✗ Perinatal mortality
✓ Trends in nutritional status of children

✗ Trends in proportion of women receiving antenatal care
✗ Proportion of births by persons providing assistance during childbirth

✓ Proportion of children <6 months exclusively breastfed
✗ Proportion of children age 6-59 months receiving two doses of vitamin A during calendar year: trends

✓ Proportion of children under age 5 with diarrhoea who received ORS & ORT

✓ Care-seeking for suspected pneumonia by type of health provider

✗ Malaria treatment

✓ Proportion of population using improved sanitation facilities

✓ Missed opportunities for the delivery of lifesaving interventions

✓ Differentials in Newborn and Child Health
# Selected Demographic Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (000)</td>
<td>69,122¹</td>
</tr>
<tr>
<td>Total under-five population (000)</td>
<td>4,361¹</td>
</tr>
<tr>
<td>Annual births (000)</td>
<td>838¹</td>
</tr>
<tr>
<td>Birth registration (%)</td>
<td>99¹</td>
</tr>
<tr>
<td>Neonatal mortality rate (per 1000 live births)</td>
<td>8²</td>
</tr>
<tr>
<td>Post-neonatal mortality rate</td>
<td>na</td>
</tr>
<tr>
<td>Annual number of neonatal deaths</td>
<td>6,000²</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>11²</td>
</tr>
<tr>
<td>Annual number of infant deaths</td>
<td>8,000³</td>
</tr>
<tr>
<td>Under-five mortality rates (per 1000 live births)</td>
<td>13²</td>
</tr>
<tr>
<td>Annual under-five deaths</td>
<td>9,000²</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>12¹</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>1.6¹</td>
</tr>
</tbody>
</table>

**Source:**


## Birth registration, 2000-2009

- Almost all births in rural and urban areas are registered.

---

![Graph showing birth registration rates](image)
Child Mortality and Nutritional Status

Trends in neonatal, infant and under-five mortality, 1990 to 2012

- About 9000 children die every year before their fifth birthday.
- Between 1990 and 2012 under-five mortality and infant mortality rates reduced by 25 points and 20 points respectively.
- MDG 4 target for 2015 for under-five mortality rate has been achieved.
- Neonatal mortality rate also decreased by 8 points over the 20-year period.

Causes of under-five deaths

- Neonatal causes, acute lower respiratory infections, injuries and diarrhoea are major causes of death among under-five children.
- Most neonatal deaths are caused by complications of prematurity, infections, birth asphyxia and birth trauma and congenital anomalies.


Seven per cent Thai children aged less than five years are reported to be underweight.

Since 1987, the proportion of underweight children has reduced by 67 percentage points.

The prevalence of stunting and underweight peaks in the age group 12-23 months and decreases thereafter till the age group of 24-35 months.

However, stunting and underweight among children in the age group 24-35 months gradually increases up to the age group of 48-59 months.

The prevalence of underweight children has reduced by 67 percentage points.

Proportion of children under age 5 who are malnourished, by age


Trends in proportion of children under age 5 who are underweight

2. Other National Survey, 1993

Proportion of children under age 5 who are underweight

Source: 2006 WHO Growth Standards
NCHS/WHO Reference Population

2. Other National Survey, 1993
Coverage of Core Interventions

Neonatal health and related maternal health

Neonates protected against tetanus at birth

- The last birth for nine out of 10 mothers was protected against neonatal tetanus, while 80% received two or more TT injections during the last pregnancy.

Deliveries assisted by skilled birth attendants

Trends in proportion of deliveries assisted by skilled birth attendants

- A high percentage of deliveries are assisted by skilled birth attendants (SBAs), though there is a slight drop in coverage in the 2005-06 survey from the 2000 coverage.
- The high level of coverage is perhaps due to the high proportion of deliveries in health facilities.

• About 50% of children are breastfed within one hour of birth.

Infant and Young Child Nutrition

Proportion of infants less than 12 months who were initiated into breastfeeding within one hour of birth


Trends in proportion of infants less than 6 months who were exclusively breastfed

• Although 50% of children were initiated into breastfeeding immediately after birth, exclusive breastfeeding rate is very low in Thailand (only 5.4% children below 6 months are exclusively breastfed).

Proportion of infants age 6-9 months of age receiving breast milk and complementary food


Immunization

Trends in proportion of children age 12-23 months who were vaccinated

- Around 90% children between 12-23 months had received all the recommended vaccinations.
- The level of coverage for BCG, three doses of DPT, three doses of polio vaccine, and measles is above 90%.
- Coverage is marginally lower (88%) for hepatitis B vaccine.


Management of diarrhoea

Proportion of children under 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider

No data available
• 8.7% of the children under-five years had diarrhoea. Most occurrence of diarrhoea was in the age groups 0-11 months and 12-23 months (10.7% and 15%, respectively).

• While 68% children with diarrhoea received either form of ORT, 67% were given ORS.

Proportion of children under age 5 who had diarrhoea in the past 2 weeks and were treated with ORS/ORT

Management of pneumonia

Proportion of children under age 5 with suspected pneumonia, who were taken to an appropriate health care provider and received antibiotics

• Eighty-four per cent children with symptoms of ARI were taken to a health-care facility or a medically-trained health-care provider for treatment, and 65% of these received antibiotics.
Care-seeking for suspected pneumonia by type of health/care facility/service provider

- A large proportion of children with suspected pneumonia were taken to a public health facility. However, one-third were taken to any private health facility/physician, while a small proportion were taken to a pharmacy (2%).


Use of insecticide-treated bed nets

Data not available

Water and Sanitation

Proportion of population using improved drinking water sources (2011)

- More than 95% of urban and rural population have access to safe drinking water sources.

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)
Proportion of population using improved sanitation facilities (2011)

- Over 95% rural and 88% urban populations are using improved sanitation facilities.

Coverage across life-course

Coverage of interventions across the life-course continuum

- Coverage for early and exclusive breastfeeding are low.

THAILAND

Missed opportunities for the delivery of lifesaving interventions

- Low coverage of early initiation of breastfeeding, and providing exclusive breastfeeding for the first 6 months are the missed opportunities which have the potential for achieving higher levels of coverage and prevention of deaths.
- Longer duration of exclusive breastfeeding in line with the WHO recommendations of 6 months and giving ORS for the treatment of diarrhoea can go a long way to improve child survival.

## Socio-economic Differentials

### Demographic and Social Differentials for Newborn and Child Health

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
<th>Child's sex</th>
<th>Mother's education</th>
<th>Mother's age (years)</th>
<th>Wealth quintiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>No education</td>
<td>Secondary+</td>
</tr>
<tr>
<td>Neonatal mortality rate</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>11</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>13</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stunting, %</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td>Underweight, %</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Wasting, %</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Protection against neonatal tetanus</td>
<td>81</td>
<td>-</td>
<td>-</td>
<td>73</td>
<td>81</td>
</tr>
<tr>
<td>Delivered assisted by SBAs, %</td>
<td>97</td>
<td>-</td>
<td>-</td>
<td>81</td>
<td>99</td>
</tr>
<tr>
<td>Early initiation of breastfeeding, %</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>Median duration of breastfeeding, (months)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Children receiving all basic vaccinations, %</td>
<td>90</td>
<td>91</td>
<td>88</td>
<td>88</td>
<td>89</td>
</tr>
<tr>
<td>Children with diarrhea brought to health facility/provider, %</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Children with diarrhea treated with ORS, %</td>
<td>67</td>
<td>68</td>
<td>66</td>
<td>86</td>
<td>66</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility/provider, %</td>
<td>84</td>
<td>83</td>
<td>85</td>
<td>88</td>
<td>84</td>
</tr>
<tr>
<td>Children with symptoms of ARI taken to health facility/provider and given antibiotics, %</td>
<td>65</td>
<td>64</td>
<td>66</td>
<td>71</td>
<td>64</td>
</tr>
</tbody>
</table>

### Remarks

- Mother's education is a major determinant of newborn and child health. If mothers are not educated, their children are considerably disadvantaged compared to those whose mothers are educated beyond secondary level:
  - Children under-five are likely to be 1.8 times more stunted and twice more underweight or thin (wasted).
  - Children are less likely to be taken to a health facility or provider when sick with symptoms of ARI, and for diarrhoea treated with ORS.
- Family's wealth plays an important role in mother and child survival.

Socio-economic Differentials

Differentials in Newborn and Child Health

Differentials in nutritional status of children

Differentials in the deliveries assisted by SBAs

Differentials in immunization of children
Differentials in care-seeking for children with symptoms of ARI and given antibiotics

![Graph showing differentials in care-seeking for children with symptoms of ARI and given antibiotics.](image)

Differentials in care-seeking for children sick with diarrhoea

![Graph showing differentials in care-seeking for children sick with diarrhoea.](image)

## Differentials by Geographical Regions

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Place of Residence</th>
<th>Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>NMR</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IMR</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>U5MR</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stunting %</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Underweight %</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Neonates protected against tetanus %</td>
<td>79</td>
<td>81</td>
</tr>
<tr>
<td>Deliveries by SBA %</td>
<td>99</td>
<td>97</td>
</tr>
<tr>
<td>Initiation of breastfeeding within 1 hour after birth %</td>
<td>44</td>
<td>52</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding %</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Percentage of 0-5 months children exclusively breastfed (months)</td>
<td>3.5</td>
<td>6.2</td>
</tr>
<tr>
<td>Immunization %</td>
<td>87</td>
<td>91</td>
</tr>
<tr>
<td>% with diarrhoea for whom treatment was sought from a health facility</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>% with diarrhoea who received ORS</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>% with suspected pneumonia for whom treatment was sought from a health-care facility</td>
<td>80</td>
<td>85</td>
</tr>
<tr>
<td>% with suspected pneumonia who received antibiotics*</td>
<td>68</td>
<td>64</td>
</tr>
</tbody>
</table>

TIMOR-LESTE
List of Country Indicators

Selected Demographic Indicators
✓ Selected demographic indicators
✓ Birth registration

Child Mortality and Nutritional Status
✓ Neonatal, infant and under-five mortality rates: trends
✓ Mortality rates by residence
✓ Distribution of neonatal deaths by day of life
✓ Perinatal mortality rate
✓ Causes of under-five deaths
✓ Causes of neonatal deaths
✓ Trends in nutritional status of children
✓ Nutritional status of children by age

Coverage of Core Interventions
Newborn health and related maternal health
✓ Proportion of neonates protected against neonatal tetanus (2+ TT injections)
✓ Proportion of deliveries assisted by skilled birth attendants: trends
✓ Proportion of births by person providing assistance during childbirth
✓ Proportion of children less than age 6 months who were exclusively breastfed: trends

Infant and young child feeding
✓ Proportion of infants less than age 12 months who started breastfeeding within one hour of birth
✓ Median duration of exclusive breastfeeding
✓ Proportion of children age 6–59 months receiving two doses of vitamin A during calendar year: trends
✓ Proportion of children age 6–9 months who were breastfeeding and consuming complementary food: trends

Immunization
✓ Proportion of children age 12-23 months who were vaccinated: trends
✓ Proportion of children under age 5 with diarrhoea who received ORS: trends
✓ Malaria treatment

Management of Sick Children
Management of diarrhoea
✓ Proportion of children under age 5 with diarrhoea for whom advice or treatment was sought from a health facility or provider: trends
✓ Proportion of children under age 5 with diarrhoea who were given treatment other than ORT
✓ Care-seeking for suspected pneumonia by type of health provider

Management of pneumonia
✓ Proportion of children under age 5 with symptoms of pneumonia for whom advice or treatment was sought from a health facility or provider and received antibiotics: trends

Management of malaria
✓ Use of insecticide-treated bed nets
✓ Malaria treatment

Water and Sanitation
✓ Proportion of population using improved drinking water
✓ Proportion of population using improved sanitation facilities

Coverage across life-course
✓ Coverage of interventions across the continuum of care in life-course
✓ Missed opportunities for the delivery of lifesaving interventions

Socio-economic Differentials
✓ Demographic and Social Differentials for Newborn and Child Health
✓ Differentials in Newborn and Child Health
✓ Differentials by Geographical Regions
Selected Demographic Indicators

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (000)</td>
<td>1,124¹</td>
</tr>
<tr>
<td>Total under-five population (000)</td>
<td>193¹</td>
</tr>
<tr>
<td>Annual births (000)</td>
<td>44¹</td>
</tr>
<tr>
<td>Birth registration (%)</td>
<td>55¹</td>
</tr>
<tr>
<td>Neonatal mortality rate (per 1000 live births)</td>
<td>24²</td>
</tr>
<tr>
<td>Annual number of neonatal deaths</td>
<td>1,000²</td>
</tr>
<tr>
<td>Post-neonatal mortality rate</td>
<td>23³</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>48³</td>
</tr>
<tr>
<td>Annual number of infant deaths</td>
<td>2,000²</td>
</tr>
<tr>
<td>Under-five mortality rate (per 1000 live births)</td>
<td>57²</td>
</tr>
<tr>
<td>Annual number of under-five deaths</td>
<td>2,000²</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>33.2³</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>5.7³</td>
</tr>
</tbody>
</table>


Birth registration

- A little over half of all births are registered in Timor-Leste. Birth registration is marginally more likely for children born in the rural than those born in the urban areas.

Child Mortality and Nutritional Status

Trends in neonatal, infant and under-five mortality rates, 1990 to 2012

- Between 1990 and 2012 infant mortality rate decreased by 81 and under-five mortality rate by 114.
- The MDG target (2015) for under-five mortality is 57, which has been achieved although USMR remains high.
- Neonatal mortality rate declined by half in the last two decades.

Mortality rates by residence

- Child mortality is higher in rural areas.

Distribution of neonatal deaths by day of life

![Distribution of neonatal deaths by day of life](image)

Based on 209 neonatal deaths

<table>
<thead>
<tr>
<th>Age at death (Number of days)</th>
<th>Number of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>30</td>
</tr>
<tr>
<td>2-3</td>
<td>19</td>
</tr>
<tr>
<td>4-7</td>
<td>8</td>
</tr>
<tr>
<td>8-14</td>
<td>7</td>
</tr>
<tr>
<td>15-21</td>
<td>4</td>
</tr>
<tr>
<td>22-30</td>
<td>6</td>
</tr>
<tr>
<td>31-40</td>
<td>2</td>
</tr>
<tr>
<td>41-50</td>
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</tr>
<tr>
<td>51-60</td>
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</tr>
<tr>
<td>61-70</td>
<td>0.5</td>
</tr>
<tr>
<td>71-80</td>
<td>0</td>
</tr>
<tr>
<td>81-90</td>
<td>0.5</td>
</tr>
<tr>
<td>91-100</td>
<td>1</td>
</tr>
<tr>
<td>101-200</td>
<td>1.5</td>
</tr>
<tr>
<td>201-300</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Of 209 surveyed neonatal deaths for TLDHS 2009-10%:

- 30% occurred before day 1;
- 49% occurred between day zero and day 1;
- 82.5% occurred during the first week of life

It is, therefore, apparent that the first week of life is the riskiest period of a neonate's life.


Perinatal mortality rate, stillbirths and early neonatal deaths

For 5-year period preceding the survey

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of stillbirths(^1)</td>
<td>22</td>
</tr>
<tr>
<td>Number of early neonatal deaths(^2)</td>
<td>158</td>
</tr>
<tr>
<td>Perinatal mortality rate(^3)</td>
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</tr>
</tbody>
</table>

1. Stillbirths are fetal deaths in pregnancies lasting seven or more months
2. Early neonatal deaths are deaths at age 0-6 days among live-born children
3. The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months’ duration, expressed per 1000.

Causes of under-five deaths

- Neonatal causes, acute lower respiratory infections, Injuries and diarrhoea are major causes of death among under-five children.

Causes of neonatal deaths

- Most neonatal deaths are caused by complications of prematurity, infections, birth asphyxia, birth trauma and congenital anomalies.

TIMOR-LESTE

Trends in nutritional status of children under age 5

- About 58% children under-five years are reported to be short for their age or stunted, while 45% are underweight.
- During the period 2003 to 2009, the proportion of stunted children went up by 9%, whereas underweight children remained at the similar level.
- Wasting increased by 53% from 12% to 19%.

Coverage of Core Interventions

Newborn health and related maternal health

Neonates protected against tetanus at birth

- Three out of four (76%) mothers received 2 or more TT injections and 80% had their last birth protected against tetanus.


TIMOR-LESTE

Deliveries assisted by skilled birth attendants

Trends in proportion of live births attended to by skilled birth attendants

- Only about one-third deliveries are assisted by skilled birth attendants (SBAs).
- The proportion of deliveries assisted by SBAs increased by 1.7 times during the period 2003 and 2009.

![Graph showing trends in proportion of live births attended to by skilled birth attendants from MICS 2002 to DHS 2009-10]

Source:

Distribution of live births by person providing assistance during childbirth

- About half of the births are assisted by relatives and friends and about 26% are assisted by nurses/midwives and 18% by traditional birth attendants (TBAs).
- Only 3% births are assisted by qualified doctors.

![Bar chart showing distribution of live births by person providing assistance during childbirth]

Infant and Young Child Nutrition

Proportion of infants less than 12 months who were initiated into breastfeeding within one hour of birth

- Overall, four-fifth of the children were initiated in to early breastfeeding.

![Bar chart showing the proportion of infants initiated into breastfeeding within one hour of birth.


Median duration of exclusive breastfeeding

- The median duration of exclusive breastfeeding is longest in Aileu (5.5 months) and shortest in Dili (1.6 months) as against the national value of 2.5 months.

![Bar chart showing the median duration of exclusive breastfeeding.

• More than half the children less than six months were exclusively breastfed. This proportion increased by 21 percentage points since the year 2003.

• Among children between age 6-9 months, four in five received complementary food along with breastfeeding.

Trends in proportion of infants less than 6 months exclusively breastfed, and of those aged 6-9 months who were breastfeeding and given complementary foods


Trends in proportion of children age 6-59 months receiving two doses of vitamin A during a calendar year

• Fifty per cent children between 6-59 months received two doses of vitamin A supplement, which increased by 15 percentage points between 2005 and 2007.
**Immunization**

Trends in proportion of children age 12–23 months who were vaccinated at any time before the survey

- Fifty-three per cent children between 12–23 months received all the basic vaccinations.
- The coverage for polio vaccination is less than that for other vaccines.
- Vaccination coverage tripled from 18% during the period 2003 to 53% 2009-10.

**Management of sick children**

Management of diarrhoea

Trends in proportion of children under age 5 having diarrhoea for whom advice or treatment was sought from a health-care provider and were given ORS

- There is a four-fold increase in percentage of children having diarrhoea for whom treatment was sought from a healthcare facility/provider.
- Of those for whom treatment was sought, over 70% were given ORS.
Management of pneumonia
Proportion of children under 5 having fever (including suspected pneumonia – symptoms of ARI) taken to appropriate health provider for treatment/prescribed antibiotics

- Of the 19% children who had fever over 70% are taken to a healthcare facility/provider for treatment. Of these 2.1% had symptoms of ARI.
- Of those taken to the health care facility/provider, 36% were prescribed antibiotics for treatment.


Prevention and Management of Malaria
Use of insecticide-treated bednets

Proportion of children under age 5 who slept under an insecticide-treated bednet (ITN) the previous night

- About two-fifths children under 5 year slept under an insecticide-treated bednet the night before the survey. This practice is 13% higher in urban areas in comparison to rural areas.

One in five children had fever. Of these, 6% were prescribed antimalarial drugs and only 2% took the drug the same day or the next day after onset of fever.

Only 69% of the population has access to safe drinking water sources.

The urban population has higher access than the rural population.

Water and Sanitation

Proportion of population using improved drinking water sources

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)
• Only 39% of the population has access to improved sanitation facilities.
• While 68% of the urban population has access to improved sanitation facilities, only 27% of the rural population has such access.

Source: Progress on Sanitation and Drinking Water 2013 Update; WHO and UNICEF Joint Monitoring Programme (JMP 2013)

Coverage across life-course

Coverage of interventions across the life-course continuum

• Less than 3 in ten mothers receive skilled care during and immediately after birth. If this increases, it can help in early detection and management of problems leading to maternal and neonatal mortality.
• Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may cause death or serious illness to the baby. Only 22% of births took place in health facilities, and 78% were delivered at own home or someone else’s home.

Missed opportunities for the delivery of lifesaving interventions

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Coverage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation of breastfeeding within 1 hour of birth</td>
<td>82</td>
</tr>
<tr>
<td>Given breastmilk with complementary feeding</td>
<td>80</td>
</tr>
<tr>
<td>Protection against neonatal tetanus (2+ TT injections)</td>
<td>76</td>
</tr>
<tr>
<td>Care-seeking for fever (including symptoms of ARI)</td>
<td>73</td>
</tr>
<tr>
<td>Care-seeking for diarrhea</td>
<td>72</td>
</tr>
<tr>
<td>Given ORS for diarrhoea treatment</td>
<td>71</td>
</tr>
<tr>
<td>ANC 4+ visits</td>
<td>55</td>
</tr>
<tr>
<td>All basic vaccinations</td>
<td>53</td>
</tr>
<tr>
<td>Exclusive breastfeeding for 6 months</td>
<td>52</td>
</tr>
<tr>
<td>Vitamin A supplementation</td>
<td>50</td>
</tr>
<tr>
<td>Given antibiotics for fever (including symptoms of ARI)</td>
<td>36</td>
</tr>
<tr>
<td>Contraception prevalence rate</td>
<td>30</td>
</tr>
<tr>
<td>Deliveries assisted by SBAs</td>
<td>30</td>
</tr>
<tr>
<td>PNC (within 2 days)</td>
<td>25</td>
</tr>
<tr>
<td>Deliveries in health facilities</td>
<td>22</td>
</tr>
</tbody>
</table>

• Low coverage of interventions immediately surrounding birth, such as deliveries in health facilities, providing services of skilled birth attendants and early postnatal check on health of the mother and newborn are the missed opportunities which have the potential for achieving higher levels of coverage and prevention of deaths.

• Vitamin A supplementation, exclusive breastfeeding for 6 months and providing all basic immunization are the areas which need a little more emphasis for achieving better coverage for the health of neonates and infants.

### Demographic and Social Differentials for Newborn and Child Health

#### Indicator

<table>
<thead>
<tr>
<th>Child’s sex</th>
<th>Mother’s education</th>
<th>Wealth quintiles</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td>No education</td>
<td>Secondary+</td>
</tr>
<tr>
<td>Normal mortality rate</td>
<td>19</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>2.5</td>
<td>2.3</td>
<td>2.8</td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>8.2</td>
<td>8.1</td>
<td>8.2</td>
</tr>
<tr>
<td>Protection against tetanus (2+ TT injections)</td>
<td>76</td>
<td>54</td>
<td>55</td>
</tr>
<tr>
<td>Early initiation of breastfeeding (%)</td>
<td>32</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>Median duration of breastfeeding (months)</td>
<td>2.5</td>
<td>2.3</td>
<td>2.8</td>
</tr>
<tr>
<td>Children receiving all basic vaccinations (%)</td>
<td>53</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>Children with diarrhea treated with ORS (%)</td>
<td>72</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Children with fever incl. symptoms of ARI treated with antibiotics (%)</td>
<td>73</td>
<td>74</td>
<td>73</td>
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</tbody>
</table>

#### Socio-economic Differentials

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
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<th>Female</th>
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<th>Highest</th>
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<tr>
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<td>8.0</td>
<td>8.9</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Under-five mortality rate</td>
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<td>33</td>
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<td>33</td>
<td>-</td>
<td>-</td>
<td>32</td>
</tr>
<tr>
<td>Protection against tetanus (2+ TT injections)</td>
<td>76</td>
<td>54</td>
<td>55</td>
<td>47</td>
<td>57</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Early initiation of breastfeeding (%)</td>
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<td>33</td>
<td>32</td>
<td>33</td>
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<td>-</td>
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<tr>
<td>Median duration of breastfeeding (months)</td>
<td>2.5</td>
<td>2.3</td>
<td>2.8</td>
<td>2.7</td>
<td>2.2</td>
<td>-</td>
<td>-</td>
<td>3.1</td>
</tr>
<tr>
<td>Children receiving all basic vaccinations (%)</td>
<td>53</td>
<td>54</td>
<td>51</td>
<td>47</td>
<td>58</td>
<td>-</td>
<td>-</td>
<td>43</td>
</tr>
<tr>
<td>Children with diarrhea treated with ORS (%)</td>
<td>72</td>
<td>72</td>
<td>72</td>
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<td>72</td>
<td>-</td>
<td>-</td>
<td>59</td>
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<tr>
<td>Children with fever incl. symptoms of ARI treated with antibiotics (%)</td>
<td>73</td>
<td>74</td>
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<td>75</td>
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<td>59</td>
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Socio-economic Differentials

Differentials in Newborn and Child Health

Differentials in neonatal, infant and under-five mortality rates

<table>
<thead>
<tr>
<th>Mother's education</th>
<th>Wealth quintile</th>
<th>Mortality rates</th>
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<tbody>
<tr>
<td>9 Sec+</td>
<td>Highest 22</td>
<td>0 10 20 30 40 50 60 70 80 90 100 120</td>
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<tr>
<td>27 No Edn</td>
<td>Lowest 24</td>
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</tr>
<tr>
<td>26 (20-29 years)</td>
<td>Highest 22</td>
<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>35 (&lt; 20 years)</td>
<td>Lowest 24</td>
<td>Under - Five Mortality Rate</td>
</tr>
<tr>
<td>Mother's age (20-29 years)</td>
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<td>61 No Edn</td>
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<tr>
<td>Mother's education</td>
<td>Wealth quintile</td>
<td>Mortality rates</td>
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<tr>
<td>45</td>
<td>Lowest 62</td>
<td>Neonatal Mortality Rate</td>
</tr>
<tr>
<td>58 (20-29 years)</td>
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<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>74 (&lt; 20 Years)</td>
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<td>Under - Five Mortality Rate</td>
</tr>
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<td>Mother's age (&lt; 20 years)</td>
<td>45</td>
<td>61 No Edn</td>
</tr>
<tr>
<td>Wealh quintile</td>
<td>Mortality rates</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>69 Sec+</td>
<td>0 10 20 30 40 50 60 70 80 90 100 120</td>
</tr>
<tr>
<td>90 No Edn</td>
<td>103 (&lt; 20 Years)</td>
<td>Neonatal Mortality Rate</td>
</tr>
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<td>64</td>
<td>83 (20-29 years)</td>
<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>103 (&lt; 20 Years)</td>
<td>87 Lowest</td>
<td>Under - Five Mortality Rate</td>
</tr>
<tr>
<td>Mother's education</td>
<td>Wealth quintile</td>
<td>Mortality rates</td>
</tr>
<tr>
<td>11 Sec+</td>
<td>Highest 35</td>
<td>0 10 20 30 40 50 60 70 80 90 100 120</td>
</tr>
<tr>
<td>19</td>
<td>Lowest 16</td>
<td>Neonatal Mortality Rate</td>
</tr>
<tr>
<td>21 No Edn</td>
<td>Highest 35</td>
<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>49 Lowest</td>
<td>Lowest 16</td>
<td>Under - Five Mortality Rate</td>
</tr>
<tr>
<td>Mother's education</td>
<td>Wealth quintile</td>
<td>Mortality rates</td>
</tr>
<tr>
<td>32 Sec+</td>
<td>Highest 47</td>
<td>0 10 20 30 40 50 60 70 80 90 100 120</td>
</tr>
<tr>
<td>45</td>
<td>Lowest 47</td>
<td>Neonatal Mortality Rate</td>
</tr>
<tr>
<td>49 No Edn</td>
<td>Highest 47</td>
<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>49 Lowest</td>
<td>Lowest 47</td>
<td>Under - Five Mortality Rate</td>
</tr>
<tr>
<td>Wealth quintile</td>
<td>Mortality rates</td>
<td></td>
</tr>
<tr>
<td>16 Highest</td>
<td>0 10 20 30 40 50 60 70 80 90 100 120</td>
<td></td>
</tr>
<tr>
<td>21 Lowest</td>
<td>19</td>
<td>Neonatal Mortality Rate</td>
</tr>
<tr>
<td>21 No Edn</td>
<td>Highest 16</td>
<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>21 Lowest</td>
<td>Lowest 16</td>
<td>Under - Five Mortality Rate</td>
</tr>
</tbody>
</table>

Differentials in nutritional status of children

<table>
<thead>
<tr>
<th>Mother's education</th>
<th>Wealth quintile</th>
<th>Mortality rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>42 Sec+</td>
<td>Highest 47</td>
<td>0 10 20 30 40 50 60 70 80 90 100 120</td>
</tr>
<tr>
<td>58</td>
<td>Lowest 47</td>
<td>Neonatal Mortality Rate</td>
</tr>
<tr>
<td>63 No Edn</td>
<td>Highest 47</td>
<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>58</td>
<td>Lowest 47</td>
<td>Under - Five Mortality Rate</td>
</tr>
<tr>
<td>63 Lowest</td>
<td>35 Highest</td>
<td>Stunting</td>
</tr>
<tr>
<td>45</td>
<td>49 No Edn</td>
<td>Underweight</td>
</tr>
<tr>
<td>49 Lowest</td>
<td>19</td>
<td>Wasting</td>
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<td>Wealth quintile</td>
<td>Mortality rates</td>
</tr>
<tr>
<td>32 Sec+</td>
<td>Highest 35</td>
<td>0 10 20 30 40 50 60 70 80 90 100 120</td>
</tr>
<tr>
<td>45</td>
<td>Lowest 35</td>
<td>Neonatal Mortality Rate</td>
</tr>
<tr>
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<td>Highest 35</td>
<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>49 Lowest</td>
<td>Lowest 35</td>
<td>Under - Five Mortality Rate</td>
</tr>
<tr>
<td>Wealth quintile</td>
<td>Mortality rates</td>
<td></td>
</tr>
<tr>
<td>35 Highest</td>
<td>0 10 20 30 40 50 60 70 80 90 100 120</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>49 Lowest</td>
<td>Stunting</td>
</tr>
<tr>
<td>49 Lowest</td>
<td>19</td>
<td>Underweight</td>
</tr>
<tr>
<td>19</td>
<td>16 Highest</td>
<td>Wasting</td>
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</table>
TIMOR-LESTE

Differentials in the deliveries assisted by SBAs

<table>
<thead>
<tr>
<th>Mother’s education</th>
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<tr>
<td>Mother’s age</td>
<td>32 (20-34 years)</td>
<td>30</td>
<td>69 Highest</td>
</tr>
<tr>
<td>Wealth quintile</td>
<td>11 Lowest</td>
<td>30</td>
<td>Highest</td>
</tr>
</tbody>
</table>

Differentials in immunization of children

<table>
<thead>
<tr>
<th>Mother’s education</th>
<th>47 No Edn</th>
<th>53</th>
<th>58 Sec+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother’s age</td>
<td>45 (20-34 years)</td>
<td>Highest</td>
<td></td>
</tr>
<tr>
<td>Wealth quintile</td>
<td>43 Lowest</td>
<td>53</td>
<td>45 Highest</td>
</tr>
</tbody>
</table>

Differentials in care-seeking for children sick with diarrhoea

<table>
<thead>
<tr>
<th>Mother’s education</th>
<th>68 No Edn</th>
<th>72</th>
<th>85 Sec+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother’s age</td>
<td>72 (20-34 years)</td>
<td>71</td>
<td>85 Highest</td>
</tr>
<tr>
<td>Wealth quintile</td>
<td>71 Lowest</td>
<td>71</td>
<td>71 Highest</td>
</tr>
</tbody>
</table>

Brought to health facility/provider
Treated with ORS
Children sick with Diarrhoea
Differentials in care-seeking for children with symptoms of fever (including ARI) and given antibiotics

<table>
<thead>
<tr>
<th>Mother's education</th>
<th>Wealth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Edn 33%</td>
<td>34 Lowest</td>
</tr>
<tr>
<td>Sec+ 36%</td>
<td>36</td>
</tr>
<tr>
<td>68 No Edn 73%</td>
<td>59 Lowest</td>
</tr>
<tr>
<td>87 Sec+ 83%</td>
<td>83 Highest</td>
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</table>

## Differentials by Geographical Regions

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Place of Residence</th>
<th>Districts</th>
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<tbody>
<tr>
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<td>Urban</td>
<td>Rural</td>
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<tr>
<td>IMR</td>
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<td>61</td>
</tr>
<tr>
<td>U5MR</td>
<td>61</td>
<td>87</td>
</tr>
<tr>
<td>Stunting%</td>
<td>49</td>
<td>61</td>
</tr>
<tr>
<td>Underweight%</td>
<td>35</td>
<td>47</td>
</tr>
<tr>
<td>Neonates protected against tetanus (2+ TT injections)%</td>
<td>77</td>
<td>75</td>
</tr>
<tr>
<td>Deliveries by SBA%</td>
<td>59</td>
<td>21</td>
</tr>
<tr>
<td>Initiation of breastfeeding within one hour after birth%</td>
<td>84</td>
<td>81</td>
</tr>
<tr>
<td>Median duration of exclusive breastfeeding (months)</td>
<td>2</td>
<td>2.7</td>
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<tr>
<td>Immunization%</td>
<td>48</td>
<td>54</td>
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<tr>
<td>% with diarrhoea for whom treatment was sought from a health-care facility</td>
<td>69</td>
<td>74</td>
</tr>
<tr>
<td>% with diarrhoea who received ORS</td>
<td>65</td>
<td>74</td>
</tr>
<tr>
<td>% with suspected pneumonia for whom treatment was sought from a health-care facility</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The Situational Analysis is a compilation of factsheets on newborn and child health for the Member States in the South-East Asia Region of WHO. It has been prepared by undertaking an in-depth review of the most recent national household surveys like Demographic and Health Surveys and Multiple Indicator Cluster Surveys, other national reports, and international data wherever available. The information covers the demographic indicators, mortality, nutrition status, and coverage of the core interventions for newborn and child health, as well as water and sanitation situation. It also highlights the existing socio-economic disparities in newborn and child health in relation of mortality and intervention coverage levels.

The publication reflects the progress in newborn and child health at the country and regional levels towards achievement of the MDG 4. The information would be useful for programme managers, policy makers, development partners, donors and other related stakeholders in reviewing the situation and for advocating for enhanced investment in the newborn and child health programmes in order to accelerate progress towards MDG 4 for reducing under-five mortality by two thirds by 2015.