Improving Newborn and Child Health
A Strategic Framework (2018-2022)
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WHO South-East Asia Region has achieved the Millennium Development Goal (MDG) 4 related to under-5 mortality rate (U5MR) by reaching the level of 39 per 1000 live births in 2016, soon after the target date of December 2015. It is indeed commendable that eight of the 11 Member States of our Region have achieved their respective MDG 4 targets. This achievement increases our optimism to now set our sights on the 2030 targets of Sustainable Development Goal (SDG) 3 as well as the Global Strategy for Women’s, Children’s and Adolescents’ Health (2016–2030) to reduce the U5MR to at least 25 per 1000 live births. We move into the SDGs phase with four of our Member States having already reached this level of U5MR.

However, we realize that we have to continue to work hard to collectively reach the 2030 target as a Region. Moreover, in addition to the mortality reduction, we also need to pay attention to the “Thrive” and “Transform” objectives of the Global Strategy to support health and development of children and adolescents to improve the quality of their life and expand an enabling environment towards transformation of the society. It is recommended that the integrity of the life-course continuum for the 0–18-year age group be followed.

For such a broad developmental agenda, countries need to adopt integrated and multisectoral approaches based on a rights framework. This underlines the importance of designing national newborn–child health strategies in such a way so as to seamlessly link with the maternal health programme on one side and the adolescent health programme on the other.

The Strategic framework for action for newborn and child health and development for the South-East Asian Region provides guidance to Member States on accelerating action during the next 5 years towards further reduction in newborn and U5MR, and progressing towards achieving SDG 2030 targets. The Strategic Framework also focuses on actions for promoting health,
development and well-being of children in line with the “Thrive” and “Transform” objectives of the Global Strategy.

WHO, in collaboration with partners, especially H6 partners who have also contributed to this Strategic Framework, will continue to support Member States to make accelerated progress towards survival, health and development of newborns and children in the Region.

Dr Poonam Khetrapal Singh
Regional Director
WHO Regional Office for South-East Asia
In developing the Strategic framework for action for newborn and child health and development in South-East Asia Region, we have received technical inputs from national programme managers from ministries of health of Member States, members of SEAR-Technical Advisory Group for Women’s and Children’s Health, and representatives of H6 agencies including Joint United Nations Programme on HIV and AIDS (UNAIDS), United Nations Children’s Fund (UNICEF), United Nations Population Fund (UNFPA), United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) and World Bank.

Their contributions are sincerely acknowledged.
ABBREVIATIONS

DALY  disability-adjusted life year
DHS  demographic and health survey
GDP  gross domestic product
GHO  Global Health Observatory
GNI  gross national income
HIV  human immunodeficiency virus
HMIS  health management information system
HW  health worker
IMNCI  Integrated Management of Newborn and Childhood Illness
LBW  low birth weight
MDG  Millennium Development Goal
MICS  multiple indicator cluster survey
NCD  noncommunicable disease
NMR  neonatal mortality rate
ORS  oral rehydration solution
PPP  purchasing power parity
QI  quality improvement
RMNCAH  reproductive, maternal, newborn, child and adolescent health
SBA  skilled birth attendant
SDG  Sustainable Development Goal
USMR  under-5 mortality rate
UHC  universal health coverage
UN IGME  United Nations Inter-agency Group for Child Mortality Estimation
UN Women  United Nations Entity for Gender Equality and the Empowerment of Women
UNAIDS  Joint United Nations Programme on HIV and AIDS
UNFPA  United Nations Population Fund
UNICEF  United Nations Children’s Fund
WHO  World Health Organization
1. Introduction

1.1 Newborn and child health: rationale for accelerated and expanded action

Survival, health and development of the child in the first 5 years of life are a major public health concern and opportunity. As per the United Nations Inter-agency Group for Child Mortality Estimation (UN IGME), ‘Levels & Trends in Child Mortality: Report 2017’, it is estimated that in 2016, 5.6 million under-5 children died globally before their fifth birthday. Around 1.4 million of these deaths occurred in the 11 Member States of World Health Organization (WHO) South-East Asia Region (1).

The Millennium Development Goals (MDGs) aimed to reduce the under-5 mortality rate (USMR) by two thirds between 1990 and 2015 (2). During this period, WHO South-East Asia Region made unprecedented progress in reducing child mortality. However, the Region achieved MDG 4 by reaching the USMR level of 39 per 1000 live births only in 2016. Eight of the 11 Member States of the Region achieved their respective MDG 4 targets in 2016 (1). In addition, four countries have also achieved the global SDG 2030 target of reducing USMR to at least 25 per 1000 live births (1, 3).

The Sustainable Development Goals (SDGs), launched in 2016, reflect the optimism derived from significant achievements made over the past two decades of the MDGs era – Target 3.2 of the SDG 3 health goal “To ensure healthy lives and promote well-being for all at all ages” aims to end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1000 live births (SDG Targets 3.2.1 and 3.2.2) and under-5 mortality to at least as low as 25 per 1000 live births (SDG Target 3.2.1) (3). Furthermore, it emphasizes the need to address uneven progress across and within countries that was observed during the MDGs phase. Various SDG targets accruing from SDG 3 and the means of implementing these are given in Fig. 1.

**IN 2016, 8 OF THE 11 MEMBER STATES ALONG WITH THE REGION ACHIEVED MDG 4.**
**Fig. 1: SDG 3 – targets and means of implementation**

**SDG targets for MDG unfinished and expanded agenda**

**3.1:** Reduce maternal mortality (per 100,000 live births)

**3.2:** End preventable newborn and child deaths

**3.3:** End the epidemics of HIV, TB, malaria and NTDs and combat hepatitis, waterborne and other communicable diseases

**3.7:** Ensure universal access to sexual and reproductive health-care services

**3.8:** Achieve universal health coverage, including financial risk protection, access to quality essential health-care services, medicines and vaccines for all

**New SDG 3 targets**

**3.4:** Reduce mortality from NCDs and promote mental health

**3.5:** Strengthen prevention and treatment of substance abuse

**3.6:** Halve global deaths and injuries from road traffic accidents

**3.9:** Reduce deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

**SDG 3 means of implementation of targets**

**3.a:** Strengthen implementation of Framework Convention on Tobacco Control

**3.b:** Provide access to medicines and vaccines for all, support R&D of vaccines and medicines for all

**3.c:** Increase health financing and health workforce in developing countries

**3.d:** Strengthen capacity for early warning, risk reduction and management of health risks

**Source:** UN SDG Platform: [http://www.un.org/sustainabledevelopment/health/](http://www.un.org/sustainabledevelopment/health/)

HIV – human immunodeficiency virus

TB – tuberculosis

NTD – neglected tropical disease

NCD – noncommunicable disease

R & D – research and development
SDG 3 includes actions to address the unfinished child survival agenda of MDG 4 as well as emerging causes of neonatal and child mortality, focus on quality of life and child development, and address issues like child abuse and harmful practices as well as determinants of health (4, 5). SDG 3 (Fig. 2) calls for a multipronged approach with universal health coverage (UHC) at its heart and is closely linked to other SDGs (3), like SDG 1 (End poverty), SDG 2 (End hunger), SDG 4 (Education), SDG 5 (Gender equality), SDG 6 (Water and sanitation) and SDG 13 (Climate change).

**Fig 2: Sustainable Development Goal 3**
The Global Strategy for Women’s, Children’s and Adolescents’ Health (2016–2030), launched by the UN Secretary General in 2015, is a renewed roadmap to achieve the highest attainable standards of health for all women, children and adolescents (6). Aligned with the SDGs, the Global Strategy sets three main objectives: Survive, Thrive, Transform.

The Global Strategy integrates the recommendations from other global frameworks and action plans like – Every Woman Every Child initiative; Committing to Child Survival: A Promise Renewed (APR) (7); Strategies towards ending preventable maternal mortality (EPMM) (8); Every Newborn: an action plan to end preventable deaths (ENAP) (9); and the Global Action Plan for the Prevention and Control of Pneumonia and Diarrhoea (GAPPD) (10), recommitting global efforts towards maternal, newborn and child survival.

The Survive, Thrive and Transform principle underlines the importance of designing national newborn – child health strategies in such a way that these seamlessly link with maternal health on one side and adolescent health on the other.

**OVER AND ABOVE THE SURVIVAL AGENDA, THE GLOBAL STRATEGY PROVIDES AN ADDITIONAL OPPORTUNITY FOR THE “THRIVE” AND “TRANSFORM” OBJECTIVES, KEEPING IN MIND THE INTEGRITY OF THE LIFE-COURSE CONTINUUM FOR THE 0–18-YEARS AGE GROUP (6).**
1.2 Purpose and scope of the Regional Strategic Framework

The Strategic Framework focuses on actions for promoting health, development and well-being of children in line with the “Thrive” and “Transform” objectives of the Global Strategy. Actions to achieve these objectives are important for all member countries in the Region; however, the countries with low mortality rates would find it more feasible to focus on these right now.

**THIS DOCUMENT PRESENTS A STRATEGIC FRAMEWORK FOR MEMBER STATES OF WHO SOUTH-EAST ASIA REGION FOR FURTHER REDUCING NEWBORN AND U5MR, ACCELERATING ACTION DURING THE NEXT 5 YEARS AND PROGRESSING TOWARDS ACHIEVING THE SDG 2030 TARGETS.**
2. Situation Analysis

2.1 Unfinished MDG work and the new global targets

It must be acknowledged that during the MDG phase, the highest numbers of under-5 children were saved in WHO South-East Asia Region among all WHO regions. India, Bangladesh and Indonesia are among the top 10 countries in the world that saved the most lives; India alone accounted for nearly one third of the total under-5 lives saved worldwide (1, 12). Member States in the Region reported significant progress in reducing child mortality and maternal mortality (12). However, reduction in neonatal mortality has been slower, and will continue to pose a challenge towards achieving SDG 3 targets pertaining to newborn and child mortality. Between the period 1990 and 2016, the 11 countries of the Region have achieved considerable progress in terms of reducing both levels of newborn and child mortality (Tables 1 & 2).

In 2016, the Region contributed to about 1.4 million child deaths, and newborn mortality accounted for more than half (about 59%) of these under-5 deaths. Between 1990 and 2016, Maldives achieved the highest average annual rate of reduction in U5MR with an average reduction rate of 9.6%. Seven countries (Bangladesh, Bhutan, India, Indonesia, Nepal, Thailand and Timor-Leste) experienced reductions between 4% and 6% annually; while three countries (DPR Korea, Myanmar and Sri Lanka) experienced reductions between 3% and 4% annually.

However, under-5 mortality is still high in some countries of the Region. Reaching SDG targets will need more work in these countries. In all countries except India, USMR among females is lower as compared to males. This is reflective of the biological advantage of females. In India, the reverse situation (male USMR 42/1000 live births vs female USMR 44/1000 live births) is probably reflective of gender and social influences.

**NEARLY 1/3RD OF THE TOTAL UNDER-5 LIVES SAVED WORLDWIDE WERE IN INDIA.**
Table 1: Under-5 mortality, MDG 4 status and SDG targets for Member States

<table>
<thead>
<tr>
<th>Country</th>
<th>U5MR (deaths per 1000 live births)</th>
<th>MDG target two thirds reduction (66%) status</th>
<th>Annual rate of reduction (%)</th>
<th>Likelihood of achievement of the U5MR SDG target (25 deaths or less per 1000 live births)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>34</td>
<td>76</td>
<td>5.5</td>
<td>Between 2017 and 2030</td>
</tr>
<tr>
<td>Bhutan</td>
<td>32</td>
<td>75</td>
<td>5.3</td>
<td>Between 2017 and 2030</td>
</tr>
<tr>
<td>DPR Korea</td>
<td>20</td>
<td>53</td>
<td>3.0</td>
<td>Already achieved</td>
</tr>
<tr>
<td>India</td>
<td>43</td>
<td>66</td>
<td>4.1</td>
<td>Between 2017 and 2030</td>
</tr>
<tr>
<td>Indonesia</td>
<td>26</td>
<td>69</td>
<td>4.5</td>
<td>Between 2017 and 2030</td>
</tr>
<tr>
<td>Maldives</td>
<td>9</td>
<td>90</td>
<td>9.2</td>
<td>Already achieved</td>
</tr>
<tr>
<td>Myanmar</td>
<td>51</td>
<td>56</td>
<td>3.2</td>
<td>After 2030</td>
</tr>
<tr>
<td>Nepal</td>
<td>35</td>
<td>75</td>
<td>5.4</td>
<td>Between 2017 and 2030</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>9</td>
<td>57</td>
<td>3.1</td>
<td>Already achieved</td>
</tr>
<tr>
<td>Thailand</td>
<td>12</td>
<td>68</td>
<td>4.3</td>
<td>Already achieved</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>50</td>
<td>71</td>
<td>4.8</td>
<td>After 2030</td>
</tr>
<tr>
<td>South-East Asia Region</td>
<td>39</td>
<td>67</td>
<td>4.3</td>
<td>Between 2017 and 2030</td>
</tr>
<tr>
<td>Global</td>
<td>41</td>
<td>56</td>
<td>3.2</td>
<td>After 2030</td>
</tr>
</tbody>
</table>

Sources: UN IGME 2017, UNICEF State of the World’s Children 2017

Achieved MDG target of two thirds reduction as estimated by UN Inter-agency Group for Child Mortality Estimation (UN IGME) in 2016

Achieved SDG targets 3.2.1 and/or 3.2.2 levels of mortality reduction as estimated by UN Inter-agency Group for Child Mortality Estimation (UN IGME) in 2016

Main direct causes of under-five deaths

The main direct causes of under-five deaths in South-East Asia are neonatal causes (59%), common illnesses like pneumonia (15%) and diarrhoea (9%). With countries at different levels of mortality, an epidemiological transition in the causes of under-five deaths is evident in SEAR. Birth defects are now a leading cause of under-five deaths (9%).
### Table 2: Neonatal mortality, MDG 4 status and SDG targets for Member States

<table>
<thead>
<tr>
<th>Country</th>
<th>NMR (deaths per 1000 live births)</th>
<th>Decline in NMR slower than USMR (%)</th>
<th>Neonatal share of USMR has increased (%)</th>
<th>Likelihood of achievement of the NMR SDG target (12 deaths or less per 1000 live births)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>20</td>
<td>69</td>
<td>59</td>
<td>Between 2017 and 2030</td>
</tr>
<tr>
<td>Bhutan</td>
<td>18</td>
<td>58</td>
<td>56</td>
<td>Between 2017 and 2030</td>
</tr>
<tr>
<td>DPR Korea</td>
<td>11</td>
<td>48</td>
<td>55</td>
<td>Already achieved</td>
</tr>
<tr>
<td>India</td>
<td>25</td>
<td>56</td>
<td>58</td>
<td>After 2030</td>
</tr>
<tr>
<td>Indonesia</td>
<td>14</td>
<td>53</td>
<td>54</td>
<td>Between 2017 and 2030</td>
</tr>
<tr>
<td>Maldives</td>
<td>5</td>
<td>88</td>
<td>56</td>
<td>Already achieved</td>
</tr>
<tr>
<td>Myanmar</td>
<td>25</td>
<td>48</td>
<td>49</td>
<td>After 2030</td>
</tr>
<tr>
<td>Nepal</td>
<td>21</td>
<td>64</td>
<td>60</td>
<td>Between 2017 and 2030</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>5</td>
<td>62</td>
<td>56</td>
<td>Already achieved</td>
</tr>
<tr>
<td>Thailand</td>
<td>7</td>
<td>67</td>
<td>58</td>
<td>Already achieved</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>22</td>
<td>61</td>
<td>44</td>
<td>After 2030</td>
</tr>
<tr>
<td>South-East Asia Region</td>
<td>23</td>
<td>57</td>
<td>59</td>
<td>After 2030</td>
</tr>
<tr>
<td>Global</td>
<td>19</td>
<td>49</td>
<td>46</td>
<td>After 2030</td>
</tr>
</tbody>
</table>

Achieved SDG targets 3.2.1 and/or 3.2.2 levels of mortality reduction as estimated by UN Inter-agency Group for Child Mortality Estimation (UN IGME) in 2016

**Main direct causes of neonatal deaths**

The main direct causes of neonatal deaths in South-East Asia are preterm birth complications (42%), birth asphyxia (20%) and neonatal infections including sepsis (14%). Underlying causes of neonatal mortality include poverty, low education level in women and adolescent pregnancy (12).
Newborn mortality

Progress in reducing neonatal mortality rate (NMR) has been slower (57% reduction) than U5MR (67% reduction) in the Region. Nonetheless, the U5MR and NMR reduction in the Region is greater than the global reduction of 56% and 49% respectively (Fig. 3).

Fig. 3: Progress in neonatal mortality reduction in South-East Asia Region and the world, 2016

As seen in Table 2, DPR Korea, Maldives, Sri Lanka and Thailand had already reached the 2030 SDG target of 12 neonatal deaths per 1000 live births in 2016. The rising contribution of neonatal mortality to under-5 mortality reflects a faster decline in the mortality rate of older children compared to newborns.

Many neonatal deaths take place within the first 24 hours after birth (9). The concentration of deaths in the first days of life also overlaps with the time during which most mothers die, and points to the importance of improving care during pregnancy, childbirth and in the postnatal period (8).
2.2 Epidemiological transition – shift in causes of under-5 mortality

Between 2000 and 2015, the proportionate mortality causes for newborn mortality have changed. While proportional mortality because of some causes has decreased over years, it is seen that:

- complications of prematurity as the leading cause of newborn deaths increased from 32% to 42% (Fig. 4), and as a cause of under-5 deaths increased from 17% to 26% from 2000 to 2015
- birth defects as a cause of newborn deaths increased from 7% to 12% (Fig. 4), and from 5% to 9% as a cause of under-5 deaths during the same period.

**Fig. 4: Change in the distribution of causes of newborn death in South-East Asia Region from 2000 to 2015**

The underlying causes of preterm birth and low birth weight (LBW) are related to social, economic and cultural factors such as low maternal age and literacy, undernutrition among girls and women, inadequate antenatal care, too early pregnancy (during adolescence) and too frequent pregnancies (13). Interventions targeted at reducing neonatal deaths need to include initiatives that impact health over the continuum of care from before conception to during pregnancy, at the time of childbirth and soon after (14). Half the mortality among newborns could be prevented through maternal health interventions like improving maternal health and nutrition and providing good quality care at childbirth (Fig. 5) (15).
In some countries in South-East Asia where the majority of deliveries still occur at home, a lack of skilled attendance at delivery, including prompt resuscitation, contributes to high newborn mortality rates and severe long-term morbidity due to asphyxia. As per the recent Demographic Health Survey (DHS) and Multi-Indicator Cluster Survey (MICS) reports, skilled attendance at birth is quite low in several Member States: less than 50% in Bangladesh (16) and Timor-Leste (17) as compared to the Democratic People’s Republic of Korea (18), Maldives (19), Sri Lanka (20) and Thailand (21), where it is 99% or more. Despite the high risk immediately after birth, postnatal care has historically not focused on the immediate postnatal period, but much later on a 6-week follow-up visit for mother and baby when first immunizations are due. For countries where data is available, less than half (43%) of newborns receive any postnatal care when compared with 65% of the mothers who were able to receive care during the same period.

**Post-neonatal mortality and morbidity**

Pneumonia and diarrhoea continue to be leading childhood killers; together, they are responsible for one quarter of all deaths (25%) in children under 5 (10). Together, they contribute to the largest share of preventable under-5 deaths in the Region, despite availability of evidence-based interventions – oral rehydration solution (ORS) and zinc for diarrhoea, and antibiotics for pneumonia (22, 23).
Furthermore, within countries, deaths due to pneumonia and diarrhoea continue to be concentrated among the poorest populations. Too few children are benefiting from the key protective, preventive and treatment interventions that save lives. Efforts to scale-up key interventions are ongoing, yet coverage of core preventive and treatment interventions is still limited (Fig. 6). Accelerating further reductions in newborn and child mortality is only possible by scaling-up evidence-based preventive and curative interventions that target the main causes of child deaths with high quality of care and reach the unreached (24). Detailed information on coverage is presented in Annexure 1.

**Fig. 6: Evidence-based interventions for under-5 children in the South-East Asia Region, 2016**

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Coverage Missed Opportunity</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin A supplementation full coverage</td>
<td>62</td>
<td>88</td>
</tr>
<tr>
<td>DPT immunization coverage</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Care-seeking for children with ARI symptoms (%)</td>
<td>53</td>
<td>53</td>
</tr>
</tbody>
</table>

**Source:** Regional weighted averages calculated from the latest DHS available – South-East Asian Region countries, 2011–2016

### 2.3 Equity – socioeconomic disparities

Disparities in newborn and child health in both high and low mortality countries represent a major barrier to sustained progress towards every child’s right to survive and thrive. On average, children born into the poorest 20% of households are almost twice as likely to die before the age of 5 years as those born into the richest 20% in Bangladesh and three times as likely in India (25), Indonesia (26) and Nepal (27). Even in countries that have achieved a low level of child mortality, the survival gap between rich and poor children has slightly widened.

Data on disparities in mortality levels and coverage of interventions are provided in Annexure 1. In many cases, equity gaps have narrowed, but in far too many other cases across the Region, overall progress has done little to narrow the persistent disparities (28). National averages often mask glaring – and sometimes growing – gaps between children from the poorest households and those from the richest households (Fig. 7).
Situation Analysis

Fig. 7: Inequity in child health in the South-East Asia Region, 2016

Wealth inequity

Antenatal care
4+ visits

Skilled birth attendants

DPT3 among 1-year-olds

Postnatal care – 2 days

Antibiotic treatment for U5-ARI

Richest
Poorest

Geographical inequity

Antenatal care
4+ visits

Skilled birth attendants

DPT3 among 1-year-olds

Postnatal care – 2 days

Antibiotic treatment for U5-ARI

Urban
Rural

Education inequity

Antenatal care
4+ visits

Skilled birth attendants

DPT3 among 1-year-olds

Postnatal care – 2 days

Antibiotic treatment for U5-ARI

Secondary education
No education
2.4 Malnutrition in children

Child undernutrition is a major contributor to child mortality, increasing the risk of children dying from pneumonia, diarrhoea and other infections. It is also a major factor in preventing the children from reaching their full human potential (29). Under-5 stunting and wasting are common in the countries of the Region (Fig. 8). The period from pregnancy until 24 months of a child’s life is the window in which there is an opportunity to reduce undernutrition and its adverse effects (30). In addition, the prevalence of babies born with LBW and preterm births is also significant, for which maternal health and nutrition are major factors.

Fig. 8: Child undernutrition (wasting and stunting), low birth weight and prematurity rates in the 11 South-East Asia Region countries

Source: WHO–Global Health Observatory 2015; State of the World’s Children 2016; UNICEF
* as a cause of death among children aged 0–5 years

Countries in the Region have endorsed global nutrition targets for improving maternal, infant and young child nutrition, and are committed to monitoring progress by 2025 (31). Achieving substantial improvements in nutrition is within SDG Goal 2 as well. This will be instrumental in boosting child survival rates across countries of the Region.
2.5 Health of older children

Probability of dying among children aged 5–14 years has been reported for the first time in the child mortality report by UN IGME, 2017 (1). Between 1990 and 2016, the number of deaths in children 6–14 years of age has significantly reduced from 20/1000 in 1990 to 6/1000 in 2017 in the Region (Fig. 9).

Fig. 9: Mortality rate among children aged 6–14 years (deaths per 1000 children)

It is observed that 10–14-year-old children share the burden of some diseases that are also common among under-5s, such as diarrhoea and iron deficiency (Fig. 10). Significant disability-adjusted life years (DALYs) are lost among 10–14 year olds because of mental depression and injuries (35). Availability of dependable data for the age groups 5–9 years and 10–14 years is, however, limited. As data quality improves, the estimates will become more robust and the picture will become clearer. Nonetheless, there are important public health measures that can be taken now to improve survival, health and well-being for older children (5–9-years age group) and adolescents (10–19-years age group).

**IMPORTANT PUBLIC HEALTH MEASURES MUST BE UNDERTAKEN TO IMPROVE LIVES OF OLDER CHILDREN AND ADOLESCENTS.**
2.6 Health system challenges

Health systems in countries of the Region offer disparate levels of service readiness (Table 3). In several cases, it is severely inadequate in terms of the support for care and services for newborn and child health and development. Common health system constraints are related to health financing, human resources for health and essential supplies.

The UHC service coverage index provides a summary for essential evidence-based services across 16 tracer indicators (32). The UHC coverage index ranges from 0% to 100%, implying none to full coverage across a range of services including selected reproductive, maternal, newborn, child and adolescent health (RMNCAH) services (33). For the South-East Asia Region, the International Health Regulations (IHR) compliance in the UHC service

THE REGION FACES CONSTRAINTS RELATED TO FINANCING AND HUMAN RESOURCES IN ITS PATH TO A ROBUST HEALTHCARE SYSTEM.
### Table 3: Health system readiness categories

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<thead>
<tr>
<th>Criteria</th>
<th>Countries</th>
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<td><strong>Countries</strong></td>
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<td><strong>Criteria</strong></td>
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<tr>
<td>This category includes:</td>
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<tr>
<td>• Countries with limited resources and low coverage of care:</td>
<td>Myanmar*</td>
<td>• Ongoing support for health system transformation.</td>
</tr>
<tr>
<td>• GNI (PPP)/GDP (PPP) per capita falls under 2500 (HS 1a) and</td>
<td>Nepal</td>
<td>• Reorient models of care to address emerging challenges and</td>
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<tr>
<td>• less than 2.28 health workers per 10 000 population (HS 1b) or</td>
<td>Timor-Leste</td>
<td>existing inequities.</td>
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<tr>
<td>• SBA &lt; 90% (HS 1c)</td>
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<tr>
<td>• Engineering of their health system in order to build the foundations</td>
<td>DPR Korea</td>
<td>• Rapid health system scale-up to improve performance.</td>
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<tr>
<td>• Significant investments across the health system.</td>
<td>Maldives</td>
<td>• Ensure greater domestic financing sustainability.</td>
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<td><strong>Health system category 3 (HS 3)</strong></td>
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*Myanmar and Bangladesh are currently (in 2017–2018) considered to be a conflict-affected state (C), i.e., countries with an internal or external conflict, which considerably limits the state’s ability to provide health services.

**GNI** – gross national income; **PPP** – purchasing power parity; **GDP** – gross domestic product; **SBA** – skilled birth attendant

coverage index has been replaced with government expenditure on health. Fig. 11 shows that the capacity of countries of the Region to deliver services overall and the disaggregated RMNCAH service delivery capacity within the UHC index are very uneven. This child health strategy envisions a health system that reliably delivers an integrated service package for children, adolescents and women in such a manner that no one is left behind (34). A strong health system should support all essential services necessary for optimal child survival and development (32, 33, 34).

**Fig. 11: RMNCAH and UHC service coverage index of essential health services, 2017**

Source: WHO Regional Office for South-East Asia Monitoring Health in the SDGs 2017
3. Regional Strategic Framework

3.1 Vision

All children in the countries of the South-East Asia Region have their rights met for health, development and well-being with equal opportunities, and achieve their full human potential.

3.2 Objectives

Objectives of the Regional Strategic Framework for guiding and assisting countries

- Achieve universal coverage of an essential package of evidence-based interventions to ensure health equity and reduce newborn and child mortality to achieve SDG 3 targets
- Strengthen health system actions for newborn and child survival, health and development through fostering good quality health services across the RMNCAH continuum
- Promote multisectoral approaches to make progress towards the “Survive”, “Thrive” and “Transform” objectives
- Support monitoring, evaluation and research for newborn and child health programmes
3.3 Guiding principles

The Regional Strategic Framework will assist and guide countries to appropriately position child health as a priority and is founded on the guiding principles as given below.

Guiding principles for newborn and child health and development

- Respecting and meeting child rights
- Evidence-based policy and programme
- UHC with equity and good quality of care
- Continuum of care
- Multisectoral approach
- Innovative approaches

Respecting and meeting child rights

The Regional Strategic Framework recommends that countries uphold human rights to attain the highest standard of health and development for all children in all settings, even in the most difficult circumstances. Member States need to reflect child rights in the areas of national policy and legislation, ensuring equality and non-discrimination in service delivery and community participation. They also need to address the underlying determinants of newborn and child health, with accountability at the highest level of government. The Strategic Framework will contribute to implementation of Convention on the Rights of the Child that countries in the Region are committed to and required to periodically report on.

**HUMAN RIGHTS MUST BE UPHELD TO ATTAIN THE HIGHEST STANDARD OF HEALTH AND DEVELOPMENT FOR ALL CHILDREN.**
Evidence-based policy and programme

Global and local evidence: The Regional Strategic Framework strongly recommends that national newborn and child health policies and programmes should be grounded in global and local evidence to ensure good health and developmental outcomes with efficient use and minimal wastage of precious resources. WHO and partners will share the updated global evidence and best practices from elsewhere and also provide opportunities for sharing experiences within the Region to facilitate cross-learning and country-to-country exchanges.

Local epidemiology: Countries are encouraged to improve their understanding of local epidemiology and identify the commonest causes of mortality and morbidity among newborns and children. Based on this information, life-saving evidence-based interventions could be prioritized for immediate effect on mortality reduction. This is especially important since a transition is expected as the countries progressively reduce newborn and child mortality over the next 5 years. Newer conditions like birth defects, injuries, child abuse and neglect will need more attention.

Interventions for development: In addition, interventions for development during early childhood to adolescence need to receive equal, if not higher, attention owing to their huge and immediate benefits for child survival, health and cognitive development as well as long-term potential towards national development.

Community ownership: Planning and implementation of newborn and child health programmes will incorporate promotion of community ownership and participation as a key strategy for the creation and sustenance of demand for good quality services and sustained improvements in family and community practices. This will ensure community support and guidance for efficient implementation of interventions and community oversight over service delivery.

Universal health coverage with equity and good quality of care

The Regional Strategic Framework places emphasis on ensuring equal access to comprehensive interventions for health and development for all newborns and children. This means scaling-up programmes and activities to reach the highest level of coverage, focusing on the settings of low coverage, targeting the poor and marginalized even if overall coverage is high, and especially addressing gender issues that are particularly serious in some countries of the Region.

UHC must ensure that within overall health equity in the countries, equity has to be specific to newborns and children who are a more vulnerable section of the society. Such a focus on newborns and children is crucial as children start getting affected first at the earliest stages of health inequity in a country. All newborn and child health and development services should be made available free of cost with full financial protection. Good quality of care is an essential element of UHC and is especially important for services related to women, newborns and children for ending preventable mortality (Fig.12).

THE IMPACT OF FAILURE TO ENSURE UHC IS GREATEST ON NEWBORNS AND CHILDREN.
Continuum of care

The Regional Strategic Framework recommends following the life-course continuum as well as continuum of care across different levels of health services. The Framework promotes newborn and child health and development through interventions that act across the life-course continuum covering the pre-conception period, pregnancy, childbirth, postnatal period, childhood and adolescence. This approach will ensure that necessary health, nutrition and development inputs are made available at all crucial stages in the life-course that are interlinked, which will have implications for the next stage of life to reach the maximum human potential.

The Framework also recommends a seamless health service delivery for women, newborns and children across community-based health care and health care at primary-, secondary- and tertiary-level health facilities, linked with a functional referral system. Such continuum of care will provide comprehensive care through prevention, health promotion and curative services.
**Multisectoral approach and addressing social determinants**

The Regional Strategic Framework promotes coordination of activities with other development sectors, acknowledging the importance of social (including women empowerment and education), economic and environmental determinants of health to enhance child health and development initiatives.

The Framework promotes integration between health services (maternal health, newborn and child health and nutrition services), social and educational services and environmental protection to ensure coordination, using all contact opportunities to promote health, nutrition and care for development and social protection. Such multisectoral interventions could be developed, delivered, monitored and evaluated with the assistance of in-country partnerships, including community engagement to support national and district health systems in a sustainable way.

**Innovative approaches**

The Regional Strategic Framework will be driven towards implementing interventions through multidimensional, alternative and innovative delivery approaches that are integrated into the health system in a manner that will be responsive to the needs of the community for survival, health and development of newborns and children. Rights-responsive planning will ensure protection of the most vulnerable newborns and children through these innovations. Innovative communication approaches will be used to reach out to families and communities with information and choices to empower them to use services in a timely manner.
4. Strategic Directions

Based on the experience of implementation during the period of the previous regional strategy, three broad implementation gaps have been identified in countries of the Region that have relatively high child mortality.

Coverage and equity gap

Coverage of well-known, evidence-based life-saving interventions for maternal and newborn health has been low, with wide socioeconomic disparities in several countries in the Region. Challenges of scaling-up with equity are largely related to the health system and primarily to health financing, infrastructure and human resources (specifically midwives).

Quality gap

It is a common observation that the evidence-based interventions are often delivered with suboptimal quality, leading to gaps in the expected impact. SDGs, Global Strategy and other global initiatives like Every Newborn Action Plan (ENAP) have identified improving quality of maternal and newborn health services as a priority area, focusing on the time around the childbirth.

Measurement and accountability gap

Health information systems in several countries of the Region need to be strengthened, including birth and death (and cause of death) registration and the health management information system (HMIS). Coverage data that comes from national household surveys such as demographic and health surveys (DHSs)/multiple indicator cluster surveys (MICSs) is only available once every 3–5 years. This weakness leads to difficulties in ongoing monitoring of the health programmes. Counting maternal, newborn and child deaths, stillbirths and measuring coverage of key interventions would strengthen national accountability.

To address these gaps, this Regional Strategic Framework recommends certain strategic directions. Countries are expected to use them flexibly, guided by local contexts and with innovations in implementing national strategies and programmes for newborn and child health and development.
4.1 Strategic direction 1 – strengthening leadership and governance

Leadership

It is critical that national leadership at the highest level has a clear understanding of the political and economic landscape and health systems, and is aware of the local challenges. As countries move forward in the SDGs phase, newborn–child health programmes must remain a priority within UHC for RMNCAH, supported by political will at the highest level and financial commitment with demonstrable accountability. For this, countries need strong monitoring and oversight mechanisms that should include the government at various levels, developmental partners, nongovernmental organizations (NGOs), community-based organizations and civil society.

Health governance

National governments should develop and sustain an adequate techno-managerial capacity in the health ministries to provide strong leadership and governance to the newborn and child health programmes at national and subnational levels. For this they need trained, experienced and committed staff that could provide strong and consistent leadership for programme review, planning and management of implementation and monitoring progress. Ministries of health should develop a specific national strategic plan for newborn and child health and development within the RMNCAH programme with buy-in from all partners and relevant stakeholders and clear elaboration of roles, deliverables and timelines. This should guide development of implementation plans at subnational levels. In many decentralized settings, it would be bottom-up data-based implementation planning. Capacity of programme managers needs to be enhanced for local-level planning using local data, fund mobilization and resource management. Programme managers should undertake periodic review of plans; this will result in taking care of implementation challenges and mid-course corrections.

Data-driven decision-making

Within the South-East Asia Region, countries are in different stages in terms of quality data that can drive evidence-based decision-making. Real-time data would be required to monitor progress and maintain the momentum. It will also require skills of translating and understanding the data to set national priorities and suggest necessary policy-level changes. Data and information on geographical, social and economic disparities should guide the preparation of needs-specific plans and implementation of strategies to reach the underserved areas and unreached populations.
4.2 Strategic direction 2 – scaling-up of proven effective interventions along the continuum of care

Intervention packages

Evidence-based interventions for newborn and child health and development must be scaled-up – especially focusing on the underserved populations so that no one is left behind. There is a global consensus on interventions across the life-course continuum. These are listed in the Global Strategy for Women’s, Children’s and Adolescents’ Health (see Annexure 2).

To end preventable mortality, countries need to prioritize the interventions that address the commonest causes of newborn and child deaths. Currently, there is a focus on neonatal mortality, since its reduction was slower during the MDG phase. Since a large number of newborns and mothers are at risk of dying around the time of birth, it is important to scale-up good quality intranatal care. At the same time, it is important to strengthen care of small babies and sick babies in health facilities as well as postnatal care through home visits. As pneumonia and diarrhoea cause about 24% of under-5 mortality, countries must continue to scale-up prevention and treatment interventions to address these conditions. Other important causes of child mortality and morbidity in the Region include birth defects (congenital anomalies), injuries, drowning and dengue fever that have been seen in several countries of the Region.

In line with the Global Strategy, countries must simultaneously invest in “Thrive” and “Transform” objectives, including interventions for promoting early childhood development, prevention and management of childhood undernutrition and overnutrition, and addressing child abuse and harmful practices like female genital mutilation.

Integrated approaches

The Regional Strategic Framework promotes integration between health services, e.g., maternal health and nutrition/reproductive health, adolescent health and nutrition, newborn and child health; and integration of health services with nutrition services, social and educational services to ensure progress towards the three objectives of “Survive”, “Thrive” and “Transform” included in the Global Strategy. Integrated and convergent approaches have the benefit of continuity and ensure effective use of all contact opportunities with newborns and children to promote their survival, health, nutrition and development as well as social protection.
**Service delivery strategies**

Both short- and long-term planning should include careful consideration for a suitable mix of service delivery channels to support universal coverage of the interventions. The Strategic Framework encourages a right mix of service delivery channels for maximum impact, as given below.

- **Family-oriented community-based services:** These services can be provided on an ongoing basis by trained community health and/or nutrition workers, including through home visits under supportive and ongoing supervision from more skilled health staff.

- **Population-oriented scheduled services:** These services will require skilled health staff to deliver scheduled services, e.g., antenatal and postnatal care, immunization, etc. through outreach of first-level health facilities as well as in school-based settings as applicable.

- **Individual-oriented clinical services:** These services will require health workers (HWs) with advanced skills (qualified nurses, midwives and physicians) to be available on a permanent basis to provide facility-based care at primary, secondary and tertiary (critical care) levels, including childbirth, neonatal and general paediatric care.

**Differentiated implementation**

It is observed that health needs of newborns and children may vary in different parts and populations within the country, as may be the capacity of the health system to deliver the whole range of interventions. Countries may like to consider a differentiated approach based on the epidemiological situation, availability of resources and capacity of the health system to deliver the identified interventions. They may initially select only essential life-saving interventions for populations and areas where health capacity and resources are limited, and add advanced interventions like tertiary care later as more resources become available and health infrastructure improves. In parts of the country that have better health system capacity, they may decide to offer the whole range of health and
development interventions at once. Similarly, countries have to plan specific interventions for some areas where a particular disease is more prevalent compared to other geographical areas. For example, malaria may be prevalent in only some districts in the country.

4.3 Strategic direction 3 – ensuring quality of care

The slow progress towards reduction in newborn and child mortality, as well as low utilization of health-care services in many settings, have been partially attributed to the poor quality of the services provided. Several published and unpublished evidence indicate that potentially life-saving interventions are delivered with insufficient quality. Common quality gaps include lack of inadequate assessment and triage, late treatment, inadequate drug supplies, poor knowledge and usage of evidence-based treatment guidelines, and insufficient clinical monitoring. It is clearly evident that universal coverage will not result in improved outcomes and save lives if the quality of the interventions at different levels of care is poor.

In line with the Regional Framework for improving the quality of care for RMNCAH in South-East Asia, this Strategic Framework reiterates the need for a quality improvement (QI) system. The proposed systematic process entails establishing national and subnational quality cells and defining roles at various levels, and adopting standards of care. Assessing the current quality of care would help in identifying common gaps in quality with reference to the national standards. The Regional Office, with partners, has also prepared a capacity building package for point-of-care quality improvement (POCQI). This simple approach for QI at health facilities will be useful for continuously and incrementally improving services led by health-care teams who are appropriately supported by the health system and ongoing mentoring and supportive supervision by QI coaches.

4.4 Strategic direction 4 – strengthening the health system and infrastructure

Most health-care systems are built around health facilities and a tiered network (primary, secondary and tertiary care facilities linked with a referral system) that provides good quality care. Health facilities are linked to community-based services that are closer to the people.

Health facilities

Health facilities form the core of health systems. They are designed to provide both preventive and curative care at the primary and referral (secondary and tertiary) levels. A systematic assessment of the health facility network should include what interventions are being delivered, availability and practice of national standards and guidelines, adequacy of the health workforce and essential skills, supplies of equipment and expendables and effective monitoring and supervision systems. Based on such assessments, hospital services can be strengthened.
COUNTRIES SHOULD UNDERTAKE A SYSTEMATIC ASSESSMENT OF THE HEALTH FACILITY NETWORK.

Health facilities must also have uninterrupted supply of electricity and water and adequate hygiene and sanitation as per the Global WASH guidelines. As the countries reach low mortality levels, there would be a need to augment critical care facilities for mothers, newborns and children. The communities being served by the facilities should be given a strong role in the management of the facilities as they can promote timely care-seeking and provider responsiveness, particularly to the poor and marginalized.

Fig. 13: Estimated impact of community and facility care on neonatal deaths assuming increasing coverage of facility care

Source: Bhutta et al. Lancet 2014

Strong referral system

The referral system between the community and the chain of health facilities should function efficiently along with free-of-cost emergency transport that is critical for saving lives. Use of information technology-based solutions could be considered to strengthen the referral system, such as communication between health facilities and establishing 24/7 call centres for ensuring transportation from any area to the designated health facilities.

Community-based health care

Community case management of common childhood illnesses in settings is an option for geographical areas where access to health facilities is difficult or poor. Detection and management of diarrhoea, pneumonia and malaria by trained and supported community HWs has been used in integration with primary care. Similarly, there is evidence of the effectiveness of community-based management of neonatal infections (when referral is not possible), but there is a need for at-scale implementation within the health system.
Health workforce management

Countries should assess and review human resources requirements for effective and timely implementation of the national newborn and child health programmes. The health workforce must be appropriately educated (pre-service), deployed and trained (in-service), compensated, supervised, supported with job aids, protocols and opportunities for continuous professional development, and provided with necessary authority. A strong cadre of midwives and nurses would be important to strengthen good quality services for women, newborns and children.

Supportive supervision

Despite evidence that supportive supervision is critical for effective functioning of health systems and effective services, most health systems have not been able to sustain effective supportive supervision systems. The national review and planning process should critically examine experiences and consider successful examples for replication and scaling-up. Countries should explore innovative solutions to address this stubborn problem.

Essential supplies and logistics management

Uninterrupted supply of essential equipment, medicines, vaccines, and supplies must be ensured to effectively deliver evidence-based interventions for newborns and children in health facilities and community services.

Newborn and child health during emergencies

It is well known that delivery of essential health services in case of a sudden and huge demand on the health system such as during natural disasters or disease outbreaks is critical. In disaster situations, newborns and children are one of the most vulnerable populations. In their national plans, countries should ensure that newborn and child health services are well protected – including preparedness, and improved response and recovery time including capacity building of the health workforce and referral for specialized services. Community participation should be ensured to strengthen resilience of the health system to sustain preventive and curative services for newborns and children during emergency situations.

Sustainable financing for health

National action plans for newborn and child health should be fully costed and linked to adequate and consistent levels of funding from government and external sources. The aim would be to increase budgetary expenditure on health to reduce out-of-pocket expenses and prevent catastrophic expenditure by individuals. This would require ministries of health of the countries to work with the finance ministries and develop policies and plans for health-care financing (fig.14). Fig.14 shows the pattern of health expenditures by financing resources indicating a need to augment domestic resources. Strong political commitment will be critical for achieving and sustaining adequate financing for equitable coverage and good quality services so that no woman, newborn or child is left behind. Along with increased government fund allocation, the low-resources countries of the Region may require substantial external funding. Funding mechanisms like the Global Fund, GAVI, the Vaccine Alliance, and Global Financing Facility should be appropriately leveraged by eligible countries. Public–private partnerships for financing should be utilized as per the local context in countries. Resource flows for newborn and child health should be tracked as part of national health accounts.
4.5 Strategic direction 5 – empower and engage families and community

Countries should consider developing newborn and child health communication strategies with three main objectives: (i) advocacy and increasing awareness about newborn–child health and development among key stakeholders (political leadership, policy-makers, donors, managers, technical experts and the community); (ii) improving healthy practices for newborn and child health among families and the community; (iii) increasing the demand for newborn and child health services by reaching parents, families and the community through multiple channels.

Family and community empowerment is an effective strategy to enable and encourage optimal newborn and child care, feeding practices and cognitive development. This is in recognition of the fact that most newborn–child care occurs in homes and will require that the families and communities be provided with information, counselling and choices. Parents make critical decisions on child care (including care-seeking for illness) on a
daily basis. They should have the information they need to make the right decisions and also to know what to expect and demand from the health services. Participatory engagement with community groups and partnership with community-based organizations will be important. Apart from health and nutrition interventions, early childhood development is likely to benefit from parenting programmes that focus on enhancing the skills of parents to provide appropriate and responsive care and stimulation to their young children right from birth, as well as on protection from injuries and harm. Newborn and child health and development programmes must encourage and ensure equal involvement of fathers in child-rearing. Community-based HWs will need skills in counselling and community mobilization and will have to be supported through well-developed implementation plans and supervisory systems.

4.6 Strategic direction 6 – factors beyond the health sector

RMNCAH should be a “whole government” matter since factors like social and economic policies and investment in public services (education, social protection, water, hygiene and sanitation, transport infrastructure, etc.), child protection policies (early marriage, birth and death registration) and food security policy, etc. have an important direct or indirect impact on the health of women, children and adolescents. It is understood that many of the necessary actions will be beyond the direct influence of the ministry of health. However, the health sector should constantly engage and encourage other sectors and government ministries/departments to undertake these actions to address the determinants of maternal, newborn and child health and development.

4.7 Strategic direction 7 – creating and fostering new and existing partnerships

Partnerships in health will be important to improve governments’ capacity to implement high quality newborn and child health and development programmes and mobilize the required resources. Leadership by the national government and coordinated partnership could lead to establishment of common goals and a clear definition of roles and responsibilities, which may include advocacy, community mobilization, training and skill development, health-care delivery, monitoring and review and research. In line with the Regional H6 (WHO, UNICEF, UNFPA, UNAIDS, UN Women and World Bank) Partnership, national H6 platforms would be a good option for supporting national governments in implementation of the Global Strategy. Contextually appropriate partnerships with the private sector should be explored to complement government efforts. Considering that private health care is strong in some countries in the Region, a trust-based partnership between the government and private health-care systems should be explored.
5. Guidance on Implementation

Some of the persisting concerns of missed opportunities that need special attention by countries are discussed below. In addition, new priorities related to communicable and noncommunicable conditions are emerging that need attention from countries, especially those that have already achieved low newborn and child mortality status.

5.1 Newborn care in integration with maternal care

Newborn health and survival are closely linked with health and nutrition status of women right from the pre-conception period. Hence, it is essential to offer an integrated approach for service delivery and maintain the continuum of health care across the life-course. Since prevalence of LBW is high in the Region, it is important to invest in health and nutrition of adolescent girls that will have a positive intergenerational effect. Good quality antenatal, intranatal and postnatal care is key to the survival of mothers and newborns.

Coverage of postnatal care for mothers and newborns has remained low, and countries should focus to eliminate this missed opportunity for saving lives. Countries should pay attention to scaling-up the underutilized newborn interventions like kangaroo mother care and simplified treatment of newborn sepsis when referral is not possible.

These community-based initiatives will require a careful assessment of needs, feasibility and costs, and the introduction of these services will necessitate large capacity building efforts in most countries, especially where the training or introduction of community-based HWs will be involved. In this area, proven mechanisms to maintain the skills of these service providers will be utilized. Opening up communication channels between the informal and formal health system will be necessary. For this to occur, partnerships between the private health sector and governments should be considered, and institutional and legal barriers addressed.

5.2 Birth defects

Birth defects are a major cause of death and long-term disability among infants and children. These diminish productivity and quality of life, and cause significant social stigma, discrimination and economic burden. Birth defects can cause lifelong impairment and may need costly medical or surgical treatment that may not be available or affordable, and ultimately require long-term care by families, communities and health systems. A Regional Strategic Framework for prevention and control of birth defects has been formulated in consultation with
Member States. The Strategic Framework recommends an integrated approach for prevention and management of common birth defects through existing RMNCAH, nutrition and immunization programmes. Regional birth defects surveillance has been set up in selected hospitals across countries to understand the burden of various birth defects.

**Birth defects: an abnormality of body structure or function present since birth**

### 5.3 Early childhood development

The Sustainable Development Goals and the UN Secretary-General’s Global Strategy for Women’s, Children’s and Adolescents’ Health have embraced young children’s development, seeing it as key to the transformation that the world seeks to achieve by 2030.

Evidence synthetized in the third Lancet series (2016) has provided us with guidance to take this agenda forward. Four messages stood out:

- Investments must start early
- Families and communities must be at the centre
- The health sector has an important role to play
- Multisectoral action is essential

In response, Nurturing Care Framework, developed by WHO, UNICEF and the World Bank with support from the Partnership for Maternal, Newborn and Child Health (PMNCH) and the ECD Action Network (ECDAN), has been launched in May 2018.
The Framework will guide action – with a particular focus on the period from pregnancy to age 3 years. As is known, in these earliest years, the health sector is uniquely positioned to provide support for nurturing care. It not only has a great reach to caregivers and children in the critical period from pregnancy to age 3 years, it also delivers many of the interventions that are essential for nurturing care and early childhood development, through programmes for WASH, Nutrition, Immunization, Management of Childhood Illness, Mental Health, Violence and Injury Prevention, and Gender Equity and Rights, to name a few. Over and above the health care provided to mothers and newborns, the child development component will mainly involve training of frontline health workers and supporting them to transfer skills to caregivers and families for stimulation of 0–3-year-old children through age-appropriate play and communication. This will best happen in partnerships with nutrition workers, community-based organizations, women/parents groups and nongovernmental institutions who would work together to educate and support families for early childhood development. Mass media could also be used to enhance parents’ knowledge and practices.

5.4 Post-neonatal mortality: management of childhood illness

Refocus on childhood pneumonia and diarrhoea

Pneumonia and diarrhoea are responsible for about 25% of under-5 deaths in the Region. Prevention and management of these conditions at all levels of care must be strengthened and scaled-up. Countries have been implementing Integrated Management of Newborn and Childhood Illness (IMNCI) as the main vehicle of child health programmes. As new evidence emerges, IMNCI should be updated with the latest guidelines and strengthened for acute respiratory infections (ARI) management and simplified antibiotic treatment of suspected newborn sepsis when referral is not possible.

Complementarity of pneumonia and diarrhoea interventions

Source: Adapted from PATH: Tackling the deadliest diseases for the world’s poorest children.
As learnt from the global strategic review of IMNCI implementation, there have been several internal (health system) and external (donors and development partners) impediments to sustained implementation in the countries. As per the global review report, only countries with strong ministerial leadership and political commitment were able to engage in the unified, country-led planning necessary to support scaling-up. It was found that IMNCI was better implemented when: (i) the health system context was favourable; (ii) a systematic approach to planning and implementation was used; and (iii) political commitment allowed for institutionalization. Countries should follow these success factors while scaling-up the implementation of IMNCI.

Training of health-care providers, supportive supervision and related health system strengthening within the IMNCI framework must be systematically scaled-up and expanded across the continuum of care from the community to the first-level and referral-level facilities. Strengthening of inpatient paediatric care including QI approaches in hospitals is especially important, as implementation of IMNCI at community and first levels results in increased referral of children with serious illnesses.

In areas where access to first-level care is still difficult or inadequate, utilization of community HWs and volunteers is possible with support from a legal and policy mandate for treatment of children with use of antibiotics, zinc, ORS and antimalarial medications for management of childhood pneumonia, diarrhoea and malaria. This approach needs concurrent monitoring for effectiveness and acceptance by the community. Countries that have already introduced this approach should review their performance and plan scaling-up. Similarly, in line with the recent evidence, community management of severe pneumonia with antibiotics should be considered and subsequently scaled-up.

**Infant and young child feeding, micronutrient supplementation, nutrition counselling for mothers**

Persistent childhood undernutrition needs particular attention by the countries that continue to have a high prevalence of wasting and stunting among under-5 children. In addition to scaling-up interventions of breastfeeding as well as infant and young child, sustained behaviour change communication, close engagement with communities and multisectoral approaches will be required. This includes integration of nutrition-sensitive interventions like women’s empowerment, agriculture, food systems, education, employment and social protection. Safety nets, along with these core interventions, would accelerate the rate of reduction of undernutrition in developing countries.
Management of severe acute malnutrition in children

Severe acute malnutrition is a life-threatening condition requiring urgent treatment. Children affected by severe acute malnutrition can be easily identified by community-based HWs. Children with uncomplicated forms of severe acute malnutrition could be treated in the community with appropriate locally made energy-dense food and ready-to-use therapeutic foods as per the national policy. WHO has a training package for HWs, which can be used by countries to strengthen treatment of severe acute malnutrition with complications in hospitals to improve the children’s chances of survival.

Strengthening immunization programmes and newer vaccines

Countries must continue to strengthen routine immunization efforts to achieve a high district-level coverage of 90%. Maternal and neonatal tetanus elimination status must be sustained. Coverage of newly introduced vaccines (Hib, PCV, rotavirus) and second dose of measles/measles–rubella vaccination has to be progressively expanded. Effective ways of delivering immunization services through outreach and fixed services are needed. Efforts must be strengthened to integrate immunization services with the delivery of other essential interventions such as vitamin A supplementation for children, deworming, antenatal care services, provision of insecticide-treated bed nets, promotion of water, hygiene and sanitation practices, prevention from indoor air pollution, and timely seeking of health care.

Other vector-borne diseases

Countries need to establish continuous surveillance systems to detect outbreak of diseases like dengue, chikungunya, etc., and take necessary actions to prevent and manage these diseases.

5.5 Promotion of improved care-seeking practices for sick children

Ongoing education of mothers, caregivers, families and the community about appropriate care-seeking for sick newborns and children with appropriate health services must be strengthened. Multiple communication channels may be used as locally applicable. Emphasis will be placed on care-seeking for complications during pregnancy and delivery, newborn illness, children suffering from pneumonia and diarrhoea as well as malaria in high prevalence areas. Countries will also need to assess, understand and address specific barriers to access for care of sick children.
5.6 Water, sanitation and environmental interventions

Improvements in water and sanitation will require multisectoral cooperation and will be done in conjunction with national-, regional- and district-level government departments. In addition to long-term changes in infrastructure for increasing access to clean drinking water and improved sanitation, a multi-pronged effort will be needed to educate communities to demand such provisions and utilize them. Exposure of children to indoor and outdoor air pollution (second-hand tobacco and biofuels used for cooking) contributes to respiratory illnesses like life-threatening pneumonia and debilitating asthma. In some settings, children are also exposed to environmental hazards like lead, industrial and community waste and agricultural chemicals, to which there is increased vulnerability at this age. Legislation and policy change to restrict use and exposure, community awareness as well as appropriate services need to be strengthened.
6. New and emerging priorities

Several new conditions causing mortality and morbidity among under-5 and older children (5–9 years) and adolescents (10–19 years) are emerging or becoming important in both high-income and low/middle-income countries. In alignment with the Global Strategy, the Regional Strategic Framework recommends that the health prevention, promotion as well as age-appropriate development inputs be seamlessly provided to children from birth to 19 years of age to respect the biological integrity of individuals.

6.1 Injuries and drowning

In the South-East Asia Region, road traffic injuries, drowning, burns and self-inflicted injuries are the leading causes of death among children, especially among the 5–19-years age group. Estimates indicate that injuries, especially road traffic injuries, are among the top 10 causes of death in this age group. Multisectoral approaches are needed to address prevention and management of injuries. Public education, legislation, skill development in children and participation of parents, families and community are required to be undertaken in order to prevent injury-related deaths. Hospital care, trauma care and rehabilitation facilities at scale can help manage childhood injury. Drowning is another important cause of death. Countries need to explore and adapt to innovative strategies for prevention of drowning in children.

INJURIES, ESPECIALLY ROAD TRAFFIC INJURIES, ARE AMONG THE TOP 10 CAUSES OF DEATH IN CHILDREN AGED 5–19 YEARS.
6.2 Noncommunicable diseases

Noncommunicable diseases (NCDs) and conditions, which result from non-infectious and non-transmissible factors, are often caused by modifiable risk factors. As they grow, children are frequent victims of behaviour such as tobacco use, physical inactivity and unhealthy diet, leading to the development of NCDs during childhood or in later life. Childhood obesity is an emerging issue in the Region.

For prevention of NCDs, the main approaches are through public health interventions, including health promotion and disease prevention, combined with suitable legislation and policy interventions. Governments need to promote infant and young child feeding practices, regulate the marketing of junk food, sugary drinks, tobacco products and alcohol to children, and restrict their availability in and around schools and colleges. In addition, treatment facilities for NCDs in children and adolescents need to be appropriately strengthened.

NCD risk factors like use of tobacco and alcohol are initiated during adolescence in several countries and prevention must start during late childhood. Among other NCDs, prevalence of asthma is increasing partly because of air pollution. Childhood cancers are being diagnosed more frequently than earlier, and despite improvements in treatment for some childhood cancers, survival is much lower in resource-poor countries.

CHILDHOOD OBESITY IS AN EMERGING ISSUE IN THE REGION.
7. Monitoring, evaluation and research

The SDGs 2030 agenda is different from the MDGs agenda as it covers a broader set of health issues to include reproductive, maternal, newborn and child health, infectious diseases, NCDs, mental health, road traffic injuries, environmental health consequences, UHC and health systems strengthening.

Monitoring frameworks for SDGs and Global Strategy include targets and indicators for health as well as health-related issues such as nutrition, water, sanitation, air quality, violence, as well as key determinants of health such as education and poverty. Table 4 shows selected SDG targets and indicators related to reproductive, maternal, newborn and child health. In the SDG monitoring framework, there is special emphasis on disaggregated data to be able to measure equity so that no one is left behind. This will need coordination between the health ministry and other ministries, since multisectoral data covering risk factors will also be required. Information on social and demographic determinants of health also will need to be taken into account while monitoring progress.

7.1 Monitoring framework

Appropriate data would be required at input, process outcome and impact levels to monitor progress in implementation and achievement of milestones and targets (Table 4). Measurement of input indicators like human resources, training, standards and guidelines, etc. will help ensure that these inputs are in place in a timely manner so that the strategy can be implemented. Periodic measurement and monitoring of coverage of newborn and child health interventions and outcome and impact measures will help decision-makers and those responsible for implementation measure progress, identify problems and undertake mid-course corrections. Selected indicators will be disaggregated (socioeconomic status, gender, ethnicity, region, etc.) so that comparisons can be made about the impact of different policy and programme measures in different population segments and ensure that no one is being left behind. The data and information should feed into the periodic programme reviews and should result in appropriate modifications in the programme activities. Table 4 gives an example of SDG monitoring framework used in World Health Statistics 2016.

A detailed list of coverage indicators following the Global Strategy monitoring framework also needs to be followed to measure progress (see Annexure 3).

- **Coverage index of essential health services**: This index requires information on selected reproductive, maternal, newborn and child health, infectious diseases, NCDs, service capacity and access.

- **Measure of financial protection against the costs of services**: This includes two indicators – catastrophic health spending and impoverishment due to health-care cost.

- Disaggregated data based on income and wealth, geographical region, ethnicity, migrants, mobile population and refugees, urban poor and women.
### Table 4: Selected SDG targets and indicators related to reproductive, maternal, newborn and child health

| SDG 3.1 | By 2030, reduce the global maternal mortality ratio to less than 70 per 100 000 live births |
| SDG 3.2 | By 2030, reduce under-5 mortality to at least as low as 25 per 1000 live births |
| SDG 3.2 | By 2030, reduce neonatal mortality to at least as low as 12 per 1000 live births |
| SDG 3.9 | By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination |

- **Impact**
  - SDG 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100 000 live births by increasing proportion of births attended by skilled health personnel.
  - SDG 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.
  - SDG 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
  - Others: Model life table systems.

- **Coverage**
  - SDG 2.2: By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.
  - SDG 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
  - SDG 6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
  - SDG 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services.
  - SDG 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.
  - Others: Related to targets in goals on poverty, education, gender, etc.

Measurement levels in 2016 will serve as the baseline and periodic (possibly annual) repeat measurements would be required to monitor progress. National monitoring systems should be built upon existing mechanisms and learn from programmes that already have well-developed monitoring systems, like the Expanded Programme on Immunization.

Monitoring through the HMIS needs to be strengthened since more regular and disaggregated data will be required to measure progress on the indicators set in SDGs and the Global Strategy. Routine monitoring systems should be complemented with periodic surveys like demographic and health survey (DHS)/multiple indicator cluster survey (MICS) that focus on measuring coverage (outcome) and impact (mortality). Resource flows for newborn and child health activities within RMNCAH should be tracked as part of National Health Accounts to understand government health spending on newborn and child health, costs to the health system and out-of-pocket expenses to families.

7.2 Monitoring of quality of care

At present, monitoring of quality of care is mostly limited to evaluation and research efforts. Periodic assessments of the quality of health-care services should be mainstreamed and incorporated as integral components of routine country monitoring systems. Selected process indicators will need to be included in HMIS and surveys.

7.3 Programme review and evaluation

Countries should undertake periodic programme review and evaluation every 3 to 5 years. These evaluations and reviews will critically examine newborn and child health interventions in terms of inputs, outputs, outcomes (coverage and equity) and impacts (mortality, nutrition and equity). Data from existing large-scale population-based surveys, like DHS or MICS, should be used for this purpose and complemented with some specifically designed surveys. The surveys should be conducted with assistance from independent third-party institutions. The programme reviews should use standard tools and involve country, regional and international experts to identify best practices and constraints, and recommend strategies to overcome them. Costs for programme reviews and evaluation should be budgeted in the implementation plans so that these are undertaken regularly without dependence on external resources.
7.4 Research

Research is an essential element in the development of a country’s health system and improvements in health. With competing demands on resources that are almost always limited, it is important that health policies and programmes be guided by scientific evidence and are cost-efficient.

Appropriate policy

Countries in the Region are encouraged to adopt appropriate policies for strengthening in-country capacity for health research, developing multisectoral research systems, guiding and supporting research for newborn and child health and ensuring adequate research funding.

Research funding and capacity

Countries should allocate adequate resources to support in-country research on key newborn and child health issues. Resources should be used to provide direct support for research, and also to develop and sustain research skills and capacity, particularly by supporting national institutions. A culture of research and scientific evidence needs to be created so that research could improve policy, planning and programming.

Research gaps and priority setting

The limited resources and research capacity can best serve the national newborn and child health plan if countries initiate a process of systematic identification of research gaps in relation to the plan, and prioritize areas of research, particularly when using public funds. As part of the priority-setting process, countries should consider and invest especially in operational research to improve health-care service delivery and research for demand-side determinants.
Operational research

Operational research will be conducted in order to improve service delivery for the interventions outlined in this strategy. Such research will investigate and seek to identify implementation barriers and improve intervention delivery at multiple levels across community, first-level facilities, and referral facilities. Studies conducted may be on a small scale but designed to provide sufficient information so as to benefit the implementation of this strategy.

Understanding demand-side determinants

Research may be carried out to better understand demand for services from caregivers, families and the community to ascertain ways to improve use of services. Important factors for the study are listed below.

- **Care-seeking behaviour of caregivers and families**: Research will assist in ascertaining preferences of caregivers, family and community for the health care of newborns and children and identify the need for awareness raising, marketing, or potential partnership with other types of health-care providers.
- **Areas in which the community could be actively engaged in the delivery of health interventions (including health promotion, education, advocacy and building community support)**.
- **Service delivery models most suited and acceptable to the community**: Research will seek to identify the culturally appropriate and innovative methods of intervention delivery.
8. Expected roles and responsibilities for implementation of Regional Strategic Framework

8.1 Member countries

The government of each country will lead adoption of the Regional Strategic Framework to the national context to strengthen newborn and child health programmes. In doing so, it will need to consider several actions.

- **Develop or strengthen national policy for newborn and child health and development**: Supportive national policy will be the instrument for discharging national commitment and accountability to progress towards achieving the targets for SDG 3 and Global Strategy.
Expected roles and responsibilities for implementation of Regional Strategic Framework

- **Prepare national and subnational plans:** National strategic plan and implementation at subnational levels (state, province and district) is to be prepared for achieving UHC of newborn health, related maternal health and child health and development.

- **Capacity building:** Strengthen national and subnational capacity for scaling-up prioritized interventions with equity and good quality; for effective implementation; and to conduct monitoring to track progress.

- **Strengthen health system:** Strengthen all six blocks of the health system for effective coverage and appropriate service delivery options at the lowest possible cost.

- **Coordinate a multisectoral response:** The ministry of health should take on a stewardship role to mount multisectoral actions to support newborn and child health and development and coordinate with programmes within the health ministry like immunization and nutrition as well as other ministries like water, sanitation, education and social development.

- **Communication and social mobilization:** A sustained and strategic communication plan is needed for advocacy, behaviour change and social mobilization in support of the newborn and child health and development programme. Such a plan will ensure that consistent and appropriate messages for interventions reach the target audience in a culturally acceptable manner. The communication plan should be monitored to make sure that the activities are leading to the desired empowerment of families and communities for appropriate healthy practices, and to seek timely health care when required.

- **Multidimensional partnership:** Ministry of health should undertake strategic advocacy for fostering a partnership with relevant national and international agencies, donors and private sector to attain synergy for resource mobilization and support for effective implementation of the newborn and child health and development programme.

- **Strengthen monitoring and evaluation:** Countries will develop a framework for monitoring and evaluation to track technical and financial progress in newborn and child health.

- **Documentation:** It will be important to document best practices, lessons learnt and successful experiences for application within the country to improve programme implementation as well as share with other countries in the Region for cross learning.

- **Operational research:** Countries should build research capacity and undertake research, including operational research in priority areas to improve policy, planning, implementation and scaling-up of cost-effective child health and development interventions.
8.2 WHO and partners

WHO and partners will on their part need to take various actions.

- Advocate with national governments for political will, commitment and accountability; ensure supportive national policies and plans for newborn and child survival, health and development; and undertake effective implementation in adopting the approaches outlined in the Regional Strategic Framework.

- Provide technical support and build capacity in countries to scale-up implementation of newborn and child health and development interventions and QI. Strengthen the health system, improve monitoring and supervision mechanisms and undertake communication for advocacy, behaviour change and social mobilization. All these actions are aimed at achieving UHC to progress towards achieving the 2030 targets.

- Support countries and build capacity to conduct periodic programme reviews and evaluations to identify, document and disseminate best practices in implementing these interventions. Undertake research on identified priorities, including operational research.

- Bring evidence and successful experiences from other regions, and provide opportunities for sharing experiences and best practices among countries in the Region.

- Facilitate coordination and collaboration among partner organizations at Regional and country levels like the H6 (WHO, UNICEF, UNFPA, UN Women, UNAIDS and World Bank) platform.
Too many newborns and children die, or are unable to reach their full human potential, due to preventable and treatable factors. Improving newborn–child health and development in South-East Asia is critical for the future of the Region. To achieve SDG targets, it is essential to reach all women, newborns and children through high-impact, good quality interventions with maximum coverage.

This Regional Strategic Framework proposes the implementation of cost-effective, evidence-based interventions that target the major causes of child mortality and morbidity, hampering child survival, health and development in the countries of the Region. It recommends interventions that address existing and emerging child health priorities.

The Strategic Framework recommends a life-course and continuum of care approach. It integrates activities across health and development sectors and promotes multisectoral approaches. Equity, good quality health care and the right of every newborn and child to health and development have been taken as the key guiding principles. Member countries must develop national policies and plans to prioritize interventions and implementation strategies, as well as provide resources to achieve child health and development goals. Monitoring and evaluation will be important for tracking progress in line with the global and regional monitoring frameworks for Global Strategy and SDGs. Leadership and primary responsibility lies with national governments, but progress will only occur through collaboration and cooperation with multiple partners including WHO, UN agencies and other partners.

9. Conclusion
References


6. Global Strategy


31. Global nutrition action plan


# Annexure 1: Regional situation of newborn and child health

## Table 5: Basic child health indicators

<table>
<thead>
<tr>
<th>Countries</th>
<th>Under-5 mortality rank</th>
<th>Under-5 mortality rate</th>
<th>Under-5 mortality by sex 2016</th>
<th>Mortality rate among children aged 5–14 years</th>
<th>Infant mortality rate (under 1 year of age)</th>
<th>Neonatal mortality rate</th>
<th>Annual number of births (thousands)</th>
<th>Annual number of neonatal deaths (thousands)</th>
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Source: Recent DHS/MICS - Bangladesh 2014; Bhutan 2011; DPRK 2009; India 2016; Indonesia 2012; Maldives 2011; Myanmar 2016; Nepal 2011; Sri Lanka 2005-06; Thailand 2016; Timor-Leste 2010
### Table 6: Coverage of childhood interventions

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<th>Countries</th>
<th>Antenatal care (%)</th>
<th>Delivery care (%)</th>
<th>Postnatal health check (%)</th>
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1SEAR – South-East Asia Region values estimated by taking latest DHS/MICS available and using weighted mean for the Region

Source: Recent DHS/MICS - Bangladesh 2014; Bhutan 2011; DPRK 2009; India 2016; Indonesia 2012; Maldives 2011; Myanmar 2016; Nepal 2011; Sri Lanka 2005-06; Thailand 2016; Timor-Leste 2010
### Table 7: Disparities by residence (rural – urban)

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<sup>1</sup> SEAR – South-East Asia Region values estimated by taking latest DHS/MICS available and using weighted mean for the Region

Source: Recent DHS/MICS - Bangladesh 2014; Bhutan 2011; DPRK 2009; India 2016; Indonesia 2012; Maldives 2011; Myanmar 2016; Nepal 2011; Sril Lanka 2005-06; Thailand 2016; Timor-Leste 2010
Table 8: Disparities by household wealth

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$^1$ SEAR – South-East Asia Region values estimated by taking latest DHS/MICS available and using weighted mean for the Region

Source: Recent DHS/MICS - Bangladesh 2014; Bhutan 2011; DPRK 2009; India 2016; Indonesia 2012; Maldives 2011; Myanmar 2016; Nepal 2011; Sri Lanka 2005-06; Thailand 2016; Timor-Leste 2010
### Table 9: Immunization

<table>
<thead>
<tr>
<th>Countries</th>
<th>Immunization coverage (%)</th>
<th>Protection at birth (PAB) against Tetanus</th>
<th>Vitamin A supplementation full coverage (%)</th>
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1 SEAR – South-East Asia Region values estimated by taking latest DHS/MICS available and using weighted mean for the Region

Table 10: Child nutrition indicators

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<tr>
<th>Countries</th>
<th>Low birthweight (%)</th>
<th>Early initiation of breastfeeding (%)</th>
<th>Exclusive breastfeeding &lt;6 months (%)</th>
<th>Introduction to semi-solid or soft foods 6-8 months (%)</th>
<th>Minimum acceptable diet 6-23 months (%)</th>
<th>Breast-feeding at age 2 (%)</th>
<th>Stunting Moderate &amp; severe (%)</th>
<th>Overweight Moderate &amp; severe (%)</th>
<th>Wasting Moderate &amp; severe Severe (%)</th>
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1 SEAR – South-East Asia Region values estimated by taking latest DHS/MICS available and using weighted mean for the Region

Source: Recent DHS/MICS - Bangladesh 2014; Bhutan 2011; DPRK 2009; India 2016; Indonesia 2012; Maldives 2013; Myanmar 2016; Nepal 2011; Sri Lanka 2005-06; Thailand 2016; Timor-Leste 2010
Table 11: Early childhood education

<table>
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<tr>
<th>Countries</th>
<th>Attendance in early childhood education</th>
<th>Learning materials at home</th>
<th>Children with inadequate supervision</th>
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¹ SEAR – South-East Asia Region values estimated by taking latest DHS/WCS available and using weighted mean for the Region.
Table 13: Global strategy indicators

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<th>Transform</th>
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¹ SEAR – South-East Asia Region values estimated by taking latest DHS/MICS available and using weighted mean for the Region
### Table 14: Health systems indicators

<table>
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<th>Countries</th>
<th>Population below international poverty line of US$1.90 per day (%)</th>
<th>National monetary child poverty (%)</th>
<th>ODA inflow in millions USS</th>
<th>ODA inflow as a % of recipient GNI</th>
<th>Share of household income (% 2009–2013*)</th>
<th>General government health expenditure as a % of general government expenditure</th>
<th>Total net official assistance to medical research and basic health per capita (constant 2014 US$), by recipient country</th>
<th>Skilled health professionals density (per 10,000 population)</th>
<th>Average of 13 International Health Regulations core capacity scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>19</td>
<td>–</td>
<td>2,570</td>
<td>2015</td>
<td>1</td>
<td>21</td>
<td>42</td>
<td>5.7</td>
<td>2015</td>
</tr>
<tr>
<td>Bhutan</td>
<td>2</td>
<td>–</td>
<td>97</td>
<td>2015</td>
<td>5</td>
<td>18</td>
<td>46</td>
<td>8.0</td>
<td>2015</td>
</tr>
<tr>
<td>DPR Korea</td>
<td>–</td>
<td>–</td>
<td>131</td>
<td>–</td>
<td>–</td>
<td>131</td>
<td>–</td>
<td>1.13</td>
<td>2010–2016</td>
</tr>
<tr>
<td>India</td>
<td>21</td>
<td>–</td>
<td>3,163</td>
<td>2015</td>
<td>0</td>
<td>20</td>
<td>44</td>
<td>5.0</td>
<td>2015</td>
</tr>
<tr>
<td>Indonesia</td>
<td>8</td>
<td>17</td>
<td>-43</td>
<td>2015</td>
<td>0</td>
<td>18</td>
<td>47</td>
<td>5.7</td>
<td>2015</td>
</tr>
<tr>
<td>Maldives</td>
<td>7</td>
<td>–</td>
<td>27</td>
<td>2015</td>
<td>1</td>
<td>17</td>
<td>45</td>
<td>26.6</td>
<td>2015</td>
</tr>
<tr>
<td>Myanmar</td>
<td>–</td>
<td>–</td>
<td>1,169</td>
<td>2015</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>3.6</td>
<td>2015</td>
</tr>
<tr>
<td>Nepal</td>
<td>15</td>
<td>–</td>
<td>1,216</td>
<td>2015</td>
<td>6</td>
<td>20</td>
<td>42</td>
<td>11.2</td>
<td>2015</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2</td>
<td>–</td>
<td>427</td>
<td>2015</td>
<td>1</td>
<td>18</td>
<td>47</td>
<td>11.2</td>
<td>2015</td>
</tr>
<tr>
<td>Thailand</td>
<td>0</td>
<td>–</td>
<td>59</td>
<td>2015</td>
<td>0</td>
<td>18</td>
<td>45</td>
<td>13.3</td>
<td>2015</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>47</td>
<td>48</td>
<td>212</td>
<td>2015</td>
<td>8</td>
<td>22</td>
<td>41</td>
<td>2.4</td>
<td>2015</td>
</tr>
<tr>
<td>SEAR†</td>
<td>18</td>
<td>–</td>
<td>9029</td>
<td>–</td>
<td>19</td>
<td>43</td>
<td>–</td>
<td>5</td>
<td>2015</td>
</tr>
</tbody>
</table>

*SEAR – South-East Asia Region values estimated by taking latest DHS/MICS available and using weighted mean for the Region*
Annexure 2: List of evidence-based health interventions for women’s, children’s and adolescents’ health – Global Strategy (2016–2030)

<table>
<thead>
<tr>
<th>WOMEN (including pre-pregnancy interventions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Information, counselling and services for comprehensive sexual and reproductive health including contraception</td>
</tr>
<tr>
<td>• Prevention, detection and treatment of communicable and non-communicable disease and sexually transmitted and reproductive tract infections including HIV, TB and syphilis</td>
</tr>
<tr>
<td>• Iron/folic acid supplementation (pre-pregnancy)</td>
</tr>
<tr>
<td>• Screening for and management of cervical and breast cancer</td>
</tr>
<tr>
<td>• Safe abortion (wherever legal), post-abortion care</td>
</tr>
<tr>
<td>• Prevention of, and response to, sexual and other forms of gender-based violence</td>
</tr>
<tr>
<td>• Pre-pregnancy detection and management of risk factors (nutrition, obesity, tobacco, alcohol, mental health, environmental toxins) and genetic conditions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PREGNANCY (antenatal care)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Early and appropriate antenatal care (four visits), including identification and management of gender-based violence</td>
</tr>
<tr>
<td>• Accurate determination of gestational age</td>
</tr>
<tr>
<td>• Screening for maternal illness</td>
</tr>
<tr>
<td>• Screening for hypertensive disorders</td>
</tr>
<tr>
<td>• Iron and folic acid supplementation</td>
</tr>
<tr>
<td>• Tetanus immunization</td>
</tr>
<tr>
<td>• Counselling on family planning, birth and emergency preparedness</td>
</tr>
<tr>
<td>• Prevention of mother-to-child transmission of HIV, including with antiretrovirals</td>
</tr>
<tr>
<td>• Prevention and treatment of malaria including insecticide-treated nets and intermittent preventive treatment in pregnancy</td>
</tr>
<tr>
<td>• Smoking cessation</td>
</tr>
<tr>
<td>• Screening for and prevention and management of sexually transmitted infections (syphilis and hepatitis B)</td>
</tr>
<tr>
<td>• Identification and response to intimate partner violence</td>
</tr>
<tr>
<td>• Dietary counselling for healthy weight gain and adequate nutrition</td>
</tr>
<tr>
<td>• Detection of risk factors for, and management of, genetic conditions</td>
</tr>
<tr>
<td>• Management of chronic medical conditions (e.g., hypertension, pre-existing diabetes mellitus)</td>
</tr>
<tr>
<td>• Prevention, screening and treatment of gestational diabetes, eclampsia and pre-eclampsia (including timely delivery)</td>
</tr>
<tr>
<td>• Management of obstetric complications (preterm premature rupture of membranes, macrosomia, etc.)</td>
</tr>
<tr>
<td>• Antenatal corticosteroids for women at risk of birth from 24–34 weeks of gestation when appropriate conditions are met</td>
</tr>
<tr>
<td>• Management of mal-presentation at term</td>
</tr>
</tbody>
</table>

(Continued)
**CHILDBIRTH**

- Facility-based childbirth with a skilled birth attendant
- Routine monitoring with partograph with timely and appropriate care
- Active management of third stage of labour
- Management of prolonged or obstructed labour including instrumental delivery and caesarean section
- Caesarean section for maternal/foetal indications
- Induction of labour with appropriate medical indications
- Management of post-partum haemorrhage
- Prevention and management of eclampsia (including with magnesium sulphate)
- Detection and management of women with, or at risk of, infections (including prophylactic use of antibiotics for caesarean section)
- Screening for HIV (if not already tested) and prevention of mother-to-child transmission
- Hygienic management of the cord at birth, including use of chlorhexidine where appropriate

**POSTNATAL (mother)**

- Care in the facility for at least 24 hours after an uncomplicated vaginal birth
- Promotion, protection and support of exclusive breastfeeding for 6 months
- Management of post-partum haemorrhage
- Prevention and management of eclampsia
- Prevention and treatment of maternal anaemia
- Detection and management of post-partum sepsis
- Family planning advice and contraceptives
- Routine post-partum examination and screening for cervical cancer in appropriate age group
- Screening for HIV and initiation or continuation of antiretroviral therapy
- Identification of, and response to, intimate partner violence
- Early detection of maternal morbidities (e.g., fistula)
- Screening and management for post-partum depression
- Nutrition and lifestyle counselling, management of inter-partum weight
- Postnatal contact with an appropriately skilled health-care provider, at home or in the health facility, around day 3, day 7 and at 6 weeks after birth

**POSTNATAL (newborn)**

- Care in the facility for at least 24 hours after an uncomplicated vaginal birth
- Immediate drying and thermal care
- Neonatal resuscitation with bag and mask
- Early initiation of breastfeeding (within the first hour)
- Hygienic cord and skin care
- Initiation of prophylactic antiretroviral therapy for babies exposed to HIV
- Kangaroo mother care for small babies
### CHILD HEALTH AND DEVELOPMENT

- Exclusive breastfeeding for 6 months; continued breastfeeding and complementary feeding from 6 months
- Dietary counselling for prevention of undernutrition, overweight and obesity
- Responsive caregiving and stimulation
- Routine immunization (including Haemophilus influenzae, pneumococcal, meningococcal and rotavirus vaccines)
- Periodic vitamin A supplementation, where appropriate
- Iron supplementation, where appropriate
- Prevention and management of childhood illnesses including malaria, pneumonia, meningitis and diarrhoea
- Case management of severe acute malnutrition and treatment for wasting
- Management of moderate acute malnutrition (appropriate breastfeeding, complementary feeding; and supplementary feeding, where necessary)
- Comprehensive care of children infected with, or exposed to, HIV
- Case management of meningitis
- Prevention and response to child maltreatment
- Prevention of harmful practices including female genital mutilation
- Care for children with developmental delays
- Treatment and rehabilitation of children with birth defects and disabilities

### ADOLESCENT HEALTH AND DEVELOPMENT

- Routine vaccinations (e.g., human papillomavirus, hepatitis B, diphtheria-tetanus, rubella, measles)
- Promotion of healthy behaviour (e.g., nutrition, physical activity, no tobacco, alcohol or drugs)
- Prevention, detection and management of anaemia, especially for adolescent girls
- Comprehensive sexuality education
- Information, counselling and services for comprehensive sexual and reproductive health including contraception
- Psychosocial support and related services for adolescent mental health and well-being
- Prevention of, and response to, sexual and other forms of gender-based violence
- Prevention of, and response to, harmful practices such as female genital mutilation and early and forced marriage

Continued
- Prevention, detection and treatment of communicable and noncommunicable diseases and sexually transmitted and reproductive tract infections, including HIV, TB and syphilis
- Voluntary medical male circumcision in countries with HIV-generalized epidemics
- Detection and management of hazardous and harmful substance use
- Parent skill training, as appropriate, for managing behavioural disorders in adolescents
- Assessment and management of adolescents who present with unintentional injury, including alcohol-related injury
- Prevention of suicide and management of self-harm/ suicide risks

<table>
<thead>
<tr>
<th>HUMANITARIAN AND FRAGILE SETTINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Develop and use a health and humanitarian risk assessments approach to identify priority needs and focus interventions</td>
</tr>
<tr>
<td>- In the event of humanitarian emergency, ensure deployment of essential health interventions (included above). Adapt, implement and co-ordinate use of the minimum initial service package</td>
</tr>
<tr>
<td>- Pay specific attention to interventions such as: Sexual and gender-based violence prevention, contraceptives (short-acting and long-acting emergency contraceptives), post-exposure prophylaxis</td>
</tr>
<tr>
<td>- Ensuring that policies and practices in emergencies and humanitarian crises promote, protect and support breastfeeding and other essential interventions for women’s, children’s and adolescents’ health, based on context and need</td>
</tr>
</tbody>
</table>
## Annexure 3: Monitoring of newborn and child health - Global Strategy indicators

<table>
<thead>
<tr>
<th>Global Strategy Objective</th>
<th>Indicator</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survive</td>
<td>Maternal mortality ratio (GS Core 1)</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Proportion of births attended by skilled health personnel</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Neonatal mortality rate (GS Core 2)</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Stillbirth rate (GS Core 2)</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Proportion of infants who were breastfed within the first hour of birth</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Proportion of newborns who have postnatal contact with a health provider within 2 days of delivery</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Proportion of women in antenatal care (ANC) who were screened for syphilis during pregnancy</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Under-5 mortality rate (GS Core 4)</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Percentage of children with diarrhoea receiving oral rehydration salts (ORS)</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Proportion of children with suspected pneumonia taken to an appropriate health provider</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Percentage of infants &lt;6 months who are fed exclusively with breast milk</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Percentage of children fully immunized</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Use of insecticide-treated nets (ITNs) in children under 5 (% of children)</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Age-standardized prevalence of current tobacco use among persons aged 15 years and older, by age and sex</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Adolescent mortality rate, by sex</td>
<td>Survey</td>
</tr>
<tr>
<td>Survive</td>
<td>Suicide mortality rate, by age and sex</td>
<td>Survey</td>
</tr>
<tr>
<td>Thrive</td>
<td>Prevalence of stunting among children under 5 years of age (GS Core 5)</td>
<td>Survey</td>
</tr>
<tr>
<td>Thrive</td>
<td>Prevalence of insufficient physical activity among adolescents</td>
<td>Survey</td>
</tr>
<tr>
<td>Thrive</td>
<td>Prevalence of malnutrition (weight for height &gt;+2 or &lt;-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight) (2.2.2)</td>
<td>Survey</td>
</tr>
<tr>
<td>Thrive</td>
<td>Proportion of children aged 6–23 months who receive a minimum acceptable diet</td>
<td>Survey</td>
</tr>
<tr>
<td>Thrive</td>
<td>Adolescent birth rate per 1000 women in that age group (GS Core 6)</td>
<td>Survey</td>
</tr>
<tr>
<td>Thrive</td>
<td>Percentage of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex</td>
<td>Survey</td>
</tr>
<tr>
<td>Thrive</td>
<td>Participation rate in organized learning (one year before the official primary entry age), by sex</td>
<td>Other</td>
</tr>
<tr>
<td>Thrive</td>
<td>Proportion of population with primary reliance on clean fuels and technology (7.1.2)</td>
<td>Survey</td>
</tr>
<tr>
<td>Indicator</td>
<td>Description</td>
<td>Source</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| **Thrive**                                                               | Coverage of essential health services (UHC Index)  
(index based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, noncommunicable diseases and service capacity and access) (GS Core 9) | Other       |
| **Thrive**                                                               | Current country health expenditure per capita (including specifically on RMNCAH) financed from domestic sources (GS Core 10)                                                                                                      | Other       |
| **Thrive**                                                               | Out of-pocket health expenses as % of total health expenditure (GS Core 11)                                                                                                                                                      | Other       |
| **Transform**                                                            | Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum efficiency level in (i) reading and (ii) mathematics, by sex (GS Core 12) | Other       |
| **Transform**                                                            | Proportion of women and girls aged 15–49 years who have undergone female genital mutilation/cutting (FGM/C), by age                                                                                                               | Survey      |
| **Transform**                                                            | Whether or not legal frameworks are in place to promote, enforce and monitor equality and nondiscrimination on the basis of sex                                                                                                                                 | Survey      |
| **Transform**                                                            | Percentage of population using safely managed drinking water services (GS Core 15)                                                                                                                                               | Survey      |
| **Transform**                                                            | Percentage of population using safely managed sanitation services including a hand-washing facility with soap and water                                                                                                                                                     | Survey      |
| **Transform**                                                            | Research and development expenditure as a proportion of GDP (disaggregated by health/RMNCAH)                                                                                                                                       | Survey      |
| **Transform**                                                            | Proportion of children under 5 years of age whose births have been registered with a civil authority, by age (GS Core 16)                                                                                                 | CRVS        |
| **Transform**                                                            | Proportion of indicators at the national level with full disaggregation when relevant to the target (17.18.1) (for indicators from the Global Strategy for Women's, Children's and Adolescents' Health, this indicator would be relevant at regional and global levels too) | Other       |
Annexure 4: Factsheets

BANGLADESH

Newborn survival

MDG NMR Progress (1990 to 2016)

178,678 fewer annual newborn deaths in 2016 than 1990

Newborn share of under-five deaths increased from 45% to 59% (between 1990 and 2016)

62,065 newborns died in 2016 mostly due to preventable causes

Causes of newborn deaths in 2015

30% Prematurity
3% Pneumonia
23% Birth asphyxia/trauma
13% Birth defects
20% Sepsis & other newborn infections
1% Diarrhoea
1% Injuries
6% Others
12% Others

Progress towards SDG Target 3.2.2

By 2030, end preventable deaths of newborns with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births.

Bangladesh is on course to achieve the 2030 SDG target for newborn survival

Source
1 UNIGME Child Mortality Estimates 2017
2 UNIGME 2017 Calculations
3 WHO GHO Causes of Child Mortality 2015
4 UNIGME Child Mortality Estimates 2017
5 Calculations based on UNIGME 2017: ARR calculations
**BANGLADESH**

**Child survival**

**MDG U5MR Progress (1990 to 2016)**

- **76% reduction achieved MDG4**
- **426,000 fewer annual child deaths in 2016 than 1990**

**Wide disparities in under-five mortality across equity stratifiers**

- **1,057,788 children under-five died in 2016 mostly due to preventable causes**
- **1 in 5 children under five died due to pneumonia and diarrhoea alone**

**Causes of under-five deaths in 2015**

- **20% Prematurity**
- **15% Birth asphyxia/trauma**
- **12% Sepsis & other newborn infections**
- **15% Diarrhoea**
- **6% Pneumonia**
- **5% RCHD**
- **5% Measles**
- **4% Other**
- **2% Meningitis/encephalitis**
- **6% Injuries**

**Progress towards SDG Target 3.2.1**

- By 2030, end preventable deaths of children under 5 years of age, with all countries aiming to reduce under-five mortality to at least as low as 25 per 1,000 live births

**Bangladesh is on course to reach the 2030 SDG target for child survival**

**Source**

1. UNIGME Child Mortality Estimates 2017
2. WHO GHO Causes of Child Mortality 2015
3. UNIGME Child Mortality Estimates 2017
4. Bangladesh DHS 2014
5. Calculations based on UNIGME 2017: ARR calculations
**BHUTAN**

Newborn survival

**MDG NMR Progress (1990 to 2016)**

- **58% reduction in NMR**
- **604 fewer annual newborn deaths in 2016 than 1990**

**Causes of newborn deaths in 2015**

- **262 newborns died in 2016 mostly due to preventable causes**
- **1 in 3 children are born too soon making them vulnerable**

**SDG Target 3.2.2**

By 2030, end preventable deaths of newborns with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births.

**Bhutan is on course to achieve the 2030 SDG target for newborn survival**

**Source**

1. UNIGME Child Mortality Estimates 2017
2. UNIGME 2017 Calculations
4. Calculations based on UNIGME 2017: ARR calculations
BHUTAN
Child survival

MDG U5MR Progress (1990 to 2016)³

Wide disparities in under-five mortality across equity stratifiers⁶

Causes of under five deaths in 2015⁷

SDG Target 3.2.1
By 2030, end preventable deaths of children under 5 years of age, with all countries aiming to reduce under-five mortality to at least as low as 25 per 1,000 live births

Bhutan is on course to reach the 2030 SDG target for child survival

Source
1 UNIGME Child Mortality Estimates 2017
2 WHO GHO Causes of Child Mortality 2015
3 UNIGME Child Mortality Estimates 2017
4 WHO GHO Causes of Child Mortality 2015
5 Calculations based on UNIGME 2017: ARR calculations
6 Bhutan MICS 2010
7 Calculations based on UNIGME 2017: ARR calculations
8 MH June 2018-2022
9 WHO June 2018-2022

* Rate of reduction = average annual percentage change
**DPR KOREA**

**Newborn survival**

**MDG NMR Progress (1990 to 2016)**

- **48% reduction in NMR**

- **740,98** fewer annual newborn deaths in 2016 than 1990

**Newborn share of under-five deaths increased from 49% to 55% (between 1990 and 2016)**

- **3754** newborns died in 2016 mostly due to preventable causes

- **1 in 3 children are born too soon making them vulnerable**

**Causes of newborn deaths in 2015**

- Prematurity: 37%
- Birth defects: 19%
- Sepsis & other newborn infections: 12%
- Birth asphyxia/trauma: 20%
- Others: 6%
- Pneumonia: 5%
- Injuries: 1%

**SDG Target 3.2.2**

By 2030, end preventable deaths of newborns with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births.

**DPR Korea is already below the 2030 SDG target for newborn survival**

---

**Source**

1. UNIGME Child Mortality Estimates 2017
2. UNIGME 2017 Calculations
4. UNIGME 2017 Calculations
**SDG Target 3.2.1**

By 2030, end preventable deaths of children under 5 years of age, with all countries aiming to reduce under-five mortality to at least as low as 25 per 1,000 live births

DPR Korea U5MR is already below the 2030 SDG target for child survival

---

**Source**

- UNICEF Child Mortality Estimates 2017
- WHO GHO Causes of Child Mortality 2015
- UNICEF 2017 Calculations
India is on course to achieve the 2030 SDG target for newborn survival.

**MDG NMR Progress (1990 to 2016)**

- **56% reduction in NMR**
- **930,083 fewer annual newborn deaths in 2016 than 1990**
- **Newborn share of under-five deaths increased from 46% to 59% (between 1990 and 2016)**

**Causes of newborn deaths in 2015**

- **44% Prematurity**
- **14% Sepsis & other newborn infections**
- **19% Birth asphyxia/trauma**
- **5% Pneumonia**
- **1% Tetanus**
- **11% Injuries**
- **1% Birth defects**
- **1% Others**
- **3% Diarrhoea**

**SDG Target 3.2.2**

By 2030, end preventable deaths of newborns with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births.

**India is on course to achieve the 2030 SDG target for newborn survival**

**Source**

1. UNIGME Child Mortality Estimates 2017
2. UNIGME 2017 Calculations
4. Calculations based on UNIGME 2017: ARR calculations
**INDIA**

**Child survival**

**MDG U5MR Progress (1990 to 2016)**

- **66% reduction achieved MDG4**
- **2315 000 fewer annual child deaths in 2016 than 1990**

**Wide disparities in under-five mortality across equity stratifiers**

<table>
<thead>
<tr>
<th>Year</th>
<th>IMR</th>
<th>U5MR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>41</td>
<td>57</td>
</tr>
<tr>
<td>Rural</td>
<td>34</td>
<td>56</td>
</tr>
</tbody>
</table>

**Causes of under-five deaths in 2015**

- Prematurity: 28%
- Birth asphyxia/trauma: 12%
- Diarrhoea: 10%
- Pneumonia: 15%
- Birth defects: 9%
- Sepsis & other newborn infections: 8%
- Measles: 2%
- Meningitis/encephalitis: 2%
- Other: 7%

**SDG Target 3.2.1**

By 2030, end preventable deaths of children under 5 years of age, with all countries aiming to reduce under-five mortality to at least as low as 25 per 1,000 live births

**India is on course to reach the 2030 SDG target for child survival**

**Source**

1. UNIGME Child Mortality Estimates 2017
2. UNIGME 2017 Calculations
4. India NFHS 2016
5. WHO GHO Causes of Child Mortality 2015
6. UNIGME 2017 Calculations
7. Calculations based on UNIGME 2017: ARR calculations
Indonesia is on course to achieve the 2030 SDG target for newborn survival

SDG Target 3.2.2

By 2030, end preventable deaths of newborns with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births.

Indonesia is on course to achieve the 2030 SDG target for newborn survival

Source
1 UNIGME Child Mortality Estimates 2017
2 UNIGME 2017 Calculations
3 WHO GHO Causes of Child Mortality 2015
4 Calculations based on UNIGME 2017: ARR calculations
**INDONESIA**

**Child survival**

**MDG U5MR Progress (1990 to 2016)**

![Graph showing MDG U5MR Progress (1990 to 2016)](image)

- **69% reduction achieved MDG4**
- **264,000 fewer annual child deaths in 2016 than 1990**

**Wide disparities in under-five mortality across equity stratifiers**

![Graph showing wide disparities in under-five mortality across equity stratifiers](image)

- **34** in Urban
- **52** in Rural
- **23** in Richest
- **70** in Poorest
- **96** in No education
- **32** in Secondary education

**Causes of under-five deaths in 2015**

- **131,074** children under-five died in 2016 mostly due to preventable causes
- **1 in 4** children under five died due to pneumonia diarrhoea alone

**SDG Target 3.2.1**

By 2030, end preventable deaths of children under 5 years of age, with all countries aiming to reduce under-five mortality to at least as low as 25 per 1,000 live births

**Indonesia is on course to reach the 2030 SDG target for child survival**

![Graph showing U5MR Projection](image)

- **2016**: 27
- **2020**: 23
- **2025**: 20
- **2030**: 17

**Source**

1. UNIGME Child Mortality Estimates 2017
2. Indonesia DHS 2012
4. UNIGME 2017 Calculations
5. Calculations based on UNIGME 2017: ARR calculations
MALDIVES
Newborn survival

MDG NMR Progress (1990 to 2016)¹

- 89% reduction in NMR
- 349 fewer annual newborn deaths in 2016 than 1990²

37 newborns died in 2016 mostly due to preventable causes³
Nearly 50% the children are born too soon making them vulnerable³

SDG Target 3.2.2
By 2030, end preventable deaths of newborns with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births

Maldives NMR is already below the 2030 SDG target for newborn survival

Source
¹ UNIGME Child Mortality Estimates 2017
² UNIGME 2017 Calculations
³ WHO GHO Causes of Child Mortality 2015
⁴ UNIGME 2017 Calculations
**MALDIVES**

**Child survival**

**MDG U5MR Progress (1990 to 2016)**

91% reduction achieved MDG4

1000 fewer annual child deaths in 2016 than 1990

**Wide disparities in under-five mortality across equity stratifiers**

<table>
<thead>
<tr>
<th>Urban</th>
<th>Rural</th>
<th>Richest</th>
<th>Poorest</th>
<th>No education</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>28</td>
<td>19</td>
<td>28</td>
<td>47</td>
<td>14</td>
</tr>
</tbody>
</table>

**Causes of under-five deaths in 2015**

- Prematurity: 25%
- Birth asphyxia/trauma: 9%
- Sepsis & other newborn infections: 4%
- Birth defects: 30%
- Diarrhoea: 7%
- Pneumonia: 7%
- Meningitis/encephalitis: 1%
- Other: 2%
- NCDs: 11%
- Other: 5%

**SDG Target 3.2.1**

By 2030, end preventable deaths of children under 5 years of age, with all countries aiming to reduce under-five mortality to at least as low as 25 per 1,000 live births

**Maldives U5MR is already below the 2030 SDG target for child survival**

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**Source**

4 UNIGME Child Mortality Estimates 2017
5 Maldives DHS 2009
6 WHO GHD Causes of Child Mortality 2015
7 UNIGME 2017 Calculations
Myanmar is likely to miss the 2030 SDG target for newborn survival at the current rate.

**SDG Target 3.2.2**

By 2030, end preventable deaths of newborns with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births.

Newborn survival

MDG NMR Progress (1990 to 2016)

- 49% reduction in NMR
- 29,819 fewer annual newborn deaths in 2016 than 1990
- Newborn share of under-five deaths increased from 41% to 48% (between 1990 and 2016).

23,062 newborns died in 2016 mostly due to preventable causes.

1 in 3 children are born too soon making them vulnerable.

Causes of under five deaths in 2015

- Prematurity: 36%
- Sepsis & other newborn infections: 25%
- Birth defects: 13%
- Birth asphyxia/trauma: 12%
- Diarrhoea: 6%
- Injuries: 2%
- Others: 6%
- Pneumonia: 1%
- Others: 2%

**Myanmar is likely to miss the 2030 SDG target for newborn survival at the current rate.**

- NMR Projection
- SDG target: 25
- Last 5 year rate of reduction: 10
- MDG rate of reduction: 15

**Source**

1. UNIGME Child Mortality Estimates 2017
2. UNIGME 2017 Calculations
4. UNIGME 2017 Calculations
Myanmar is on course for the 2030 SDG target for child survival at the current rate

SDG Target 3.2.1
By 2030, end preventable deaths of children under 5 years of age, with all countries aiming to reduce under-five mortality to at least as low as 25 per 1,000 live births

Myanmar is on course for the 2030 SDG target for child survival at the current rate

Source
1UNIGME Child Mortality Estimates 2017
2WHO GHD Causes of Child Mortality 2015
3Myanmar DHS 2016
4UNIGME 2017 Calculations
Nepal is on course to achieve the 2030 SDG target for newborn survival

Newborn share of under-five deaths increased from 42% to 61% (between 1990 and 2016)\(^2\)

By 2030, end preventable deaths of newborns with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births.

Source:
1. UNIGME Child Mortality Estimates 2017
2. UNIGME 2017 Calculations
4. UNIGME Child Mortality Estimates 2017
5. Calculate from UNIGME Child Mortality Estimates 2017
NEPAL
Child survival

MDG U5MR Progress (1990 to 2016)

Wide disparities in under-five mortality across equity stratifiers

Causes of under-five deaths in 2015

SDG Target 3.2.1
By 2030, end preventable deaths of children under 5 years of age, with all countries aiming to reduce under-five mortality to at least as low as 25 per 1,000 live births

Nepal is on course to reach the 2030 SDG target for child survival

Source
1 UNIGME Child Mortality Estimates 2017
2 Nepal DHS 2016
3 UNIGME Child Mortality Estimates 2017
4 WHO GHO Causes of Child Mortality 2015
5 UNIGME Child Mortality Estimates 2017
6 Calculate from UNIGME Child Mortality Estimates 2017
**SRI LANKA**

**Newborn survival**

**SDG Target 3.2.2**

By 2030, end preventable deaths of newborns with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births.

**Sri Lanka NMR is already below the 2030 SDG target for newborn survival**

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**Source**

1. UNICEF Child Mortality Estimates 2017
2. UNICEF 2017 Calculations
SRI LANKA
Child survival

MDG U5MR Progress (1990 to 2016)\(^4\)

55% reduction achieved MDG4

Wide disparities in under-five mortality across equity stratifiers\(^5\)

Causes of under-five deaths in 2015\(^6\)

3028 children under-five died in 2016\(^7\)

1 in 3 children under five died due to birth defects

SDG Target 3.2.1

By 2030, end preventable deaths of children under 5 years of age, with all countries aiming to reduce under-five mortality to at least as low as 25 per 1,000 live births

Sri Lanka NMR is already below the 2030 SDG target for child survival

Source

\(^4\) UNIGME Child Mortality Estimates 2017
\(^5\) Sri Lanka DHS 2016
\(^6\) WHO GHO Causes of Child Mortality 2015
\(^7\) WHO GHO Causes of Child Mortality 2015
**THAILAND**

**Newborn survival**

**SDG Target 3.2.2**

By 2030, end preventable deaths of newborns with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births

**Thailand NMR is already below the 2030 SDG target for newborn survival**

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**MDG NMR Progress (1990 to 2016)**

- **17,537 fewer annual newborn deaths in 2016 than 1990**
- **65% reduction in NMR**
- **5,191 newborns died in 2016**

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**Causes of newborn deaths in 2015**

- **41% Prematurity**
- **6% Sepsis & other newborn infections**
- **12% Birth asphyxia/trauma**
- **27% Birth defects**
- **1% Injuries**
- **4% Pneumonia**
- **6% Others**

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**Source**

1. UNIGME Child Mortality Estimates 2017
2. UNIGME 2017 Calculations
4. UNIGME 2017 Calculations
5. Calculations based on UNIGME 2017: ARR calculations
THAILAND
Child survival

MDG U5MR Progress (1990 to 2016)\(^5\)

65% reduction achieved MDG4

32,000 fewer annual child deaths in 2016 than 1990

By 2030, end preventable deaths of children under 5 years of age, with all countries aiming to reduce under-five mortality to at least as low as 25 per 1,000 live births

Disparities in under-five mortality across equity stratifiers

8807 children under-five died in 2016\(^6\)

1 in 4 children under five died due to birth defects alone

SDG Target 3.2.1

Thailand U5MR is already below the 2030 SDG target for child survival

Causes of under-five deaths in 2015\(^6\)

- Birth defects: 28%
- Prematurity: 24%
- Birth asphyxia/trauma: 7%
- Sepsis & other newborn infections: 3%
- Diarrhoea: 3%
- Pneumonia: 9%
- Birth defects: 28%
- Prematurity: 24%
- Birth asphyxia/trauma: 7%
- Sepsis & other newborn infections: 3%
- Diarrhoea: 3%
- Pneumonia: 9%

Source

\(^5\) UNIGME Child Mortality Estimates 2017
\(^6\) WHO GHO Causes of Child Mortality 2015
\(^7\) WHO GHO Causes of Child Mortality 2015
Timor Leste could achieve the 2030 SDG target for newborn survival.

**SDG Target 3.2.2**

By 2030, end preventable deaths of newborns with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births.

**Timor Leste could achieve the 2030 SDG target for newborn survival**

- **MDG NMR Progress (1990 to 2016)**
  - 62% reduction in NMR
  - 930 fewer annual newborn deaths in 2016 than 1990
  - Newborn share of under-five deaths increased from 33% to 43% (between 1990 and 2016)

- **Causes of newborn deaths in 2015**
  - Prematurity: 21%
  - Birth asphyxia/trauma: 30%
  - Sepsis & other newborn infections: 19%
  - Birth defects: 13%
  - Others: 8%
  - Diarrhoea: 7%
  - Pneumonia: 2%
  - Injuries: 1%

- **NMR Projection**
  - SDG Target: 12 deaths per 1,000 live births
  - Last 5 year rate of reduction:
    - 2016: 25
    - 2018: 23
    - 2020: 22
    - 2022: 21
    - 2024: 20
    - 2026: 19
    - 2028: 18
    - 2030: 17
    - 2032: 16
    - 2034: 15

- **Source**
  - 1 UNIGME Child Mortality Estimates 2017
  - 2 UNIGME 2017 Calculations
  - 3 WHO GHO Causes of Child Mortality 2015
  - 4 UNIGME 2017 Calculations
  - 5 UNIGME 2017 Calculations
  - 6 UNIGME 2017 Calculations

- **Note:** Rate of reduction = average annual percentage change
TIMOR-LESTE
Child survival

MDG U5MR Progress (1990 to 2016)

Wide disparities in under-five mortality across equity stratifiers

2178 children under-five died in 2016 mostly due to preventable causes

1 in 3 children under five died due to pneumonia and diarrhoea alone

SDG Target 3.2.1

By 2030, end preventable deaths of children under 5 years of age, with all countries aiming to reduce under-five mortality to at least as low as 25 per 1,000 live births

Timor Leste is on course to achieve the 2030 SDG target for child survival

USMR Projection

Source

* UNIGME Child Mortality Estimates 2017
* UNIGME 2017 Calculations
* WHO GHO Causes of Child Mortality 2015
* UNIGME Leste DHS 2016
* UNIGME 2017 Calculations
* Rate of reduction = average annual percentage change
Improving Newborn and Child Health
A Strategic Framework (2018-2022)