

STATUS OF PRETERM AND LOW BIRTH WEIGHT DEMOGRAPHICS, RISK FACTORS AND **HEALTH SYSTEM RESPONSIVENESS IN USAID'S 23 MCH PRIORITY COUNTRIES**

AFGHANISTAN I BANGLADESH I DR CONGO I ETHIOPIA I GHANA I HAITI I INDIA I INDONESIA I KENYA I LIBERIA I MADAGASCAR I MALAWI MALI I MOZAMBIQUE I NEPAL I NIGERIA I PAKISTAN I RWANDA I SENEGAL I SOUTH SUDAN I TANZANIA I UGANDA I ZAMBIA

WHERE ARE THE MOST PRETERM BIRTHS?

BABIES BORN PRETERM PER YEAR IMPAIRED PRETERM SURVIVORS PER YEAR











RISK FACTORS

Average across countries





Hypertension in women



Obesity in women of childbearing age 20%



Birth interval <24 months

12% where data are available ADOLESCENT BIRTH RATE PER 1,000 GIRLS LOW BIRTH WEIGHT RATE PRETERM BIRTH RATE AFGHANISTAN NO DATA **BANGLADESH** DR CONGO **ETHIOPIA GHANA** HAITI INDIA **INDONESIA KENYA** LIBERIA MADAGASCAR MALAWI MALI MOZAMBIQUE **NEPAL** NIGERIA **PAKISTAN RWANDA** SENEGAL **SOUTH SUDAN** NO DATA TANZANIA UGANDA ZAMBIA 150 100 50 0 10% 30% 5% 15% 25% 0 20% RMNCAH plans include **HEALTH INFORMATION HEALTH POLICY** 13/17 **COMMUNITY ENGAGEMENT** preterm component Birthweight captured in health Policy for kangaroo 19/22 management information 20/23 mother care system Preterm included in national RMNCAH behaviour change 3/14 Policy for antenatal Gestational age captured in 17/23 strategy corticosteroids use 7/21 health management information system Policy for safe oxygen use 0/23 and CPAP

REPRODUCTIVE HEALTH & CARE DURING PREGNANCY At least 1 antenatal care visit 82% 4+ antenatal care visits 50%

The numerator refers to the number of countries responding "yes". The denominator refers to the number of countries for which data are available **BIRTH & POSTNATAL CARE** Births attended by skilled attendant 57% Infants weighed at birth 49% PNC within 2 days (newborns) 30%







Average across countries where data are available



Average across countries where data are available



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In 2015 Every Preemie—SCALE developed country profiles highlighting the status of preterm birth and low birth weight prevention and care in USAID's 23 priority maternal and child health countries. These countries represent more than 70 percent of maternal and child deaths globally. Complications due to preterm birth (births less than 37 weeks gestation), followed by infectious diseases and complications during labor and delivery are the leading direct causes of death among children under five years of age. The majority of under-five deaths are largely preventable. Prematurity and low birth weight – babies weighing less than 2,500 grams at birth – are also major indirect contributors to newborn and child deaths as well as disability and non-communicable diseases globally (e.g. diabetes). Among 21 countries where data were available, 21 percent of babies are low birth weight. This summary profile and individual country profiles are available online at www.everypreemie.org/country-profiles/.

This 23-country summary profile provides an overview of demographic indicators, and health risk and health services data relevant to preterm birth and low birth weight (see data sources below). Data presented highlight risk factors associated with both preterm birth and low birth weight including adolescent birth rate, and birth intervals less than 24 months. Adolescent pregnancy can increase the chances of stillbirth, neonatal and maternal death and disability by as much as 50 percent. Across the 23 countries the average adolescent birth rate is 106 per 1000 girls aged 15-19 years with the highest rate in Mali at 178. Birth-to-pregnancy intervals of less than twelve months also increase the risk for poor maternal and newborn outcomes. For these reasons, spacing pregnancies at least two years apart is recommended. Twelve percent of births in these 23 countries have a birth interval less than 24 months.

Among the 23 USAID priority countries there are approximately 8.7 million babies who are born too soon each year. Direct preterm birth complications account for 767,000 deaths of children under five annually, or approximately 2,100 each day. Of those who survive just over 200,000 have moderate to severe impairment including cerebral palsy, and cognitive, hearing and vision difficulties.

In Afghanistan and the Democratic Republic of the Congo 37 percent and 27 percent of births, respectively, are too closely spaced. Maternal complications such as hypertension and obesity also significantly increase the likelihood for poor birth outcomes including preterm birth. Overall, 29 percent of women across these countries have hypertension with the highest percent in Mali, Ethiopia and the Democratic Republic of the Congo. One fifth of women are obese with forty percent of women aged 15-49 in both Ghana and Pakistan reported as obese.

Because preterm birth is intricately tied to a woman's reproductive health lifecycle, it can provide valuable insights into the health and well-being of women, and the quality of health care they receive before, during, and after pregnancy. Unfortunately many women are accessing and receiving minimal or poor quality health care services. Many conditions such as those listed above can be effectively managed prior to and throughout a woman's pregnancy thus lowering the likelihood of compromised birth outcomes. While 82 percent of women across the priority countries attend at least one antenatal care (ANC) visit, only half attend four or more visits. At the same time, only 57 percent of women are accessing skilled care at birth with a high of 91 percent in Rwanda and a low of 15 percent in Ethiopia. Skilled health practitioners can provide life-saving care to mothers and their neonates within the first critical moments after birth, including resuscitation for babies born too soon.

As the global dialogue around newborn health advances, many countries are responding and including preterm care components in their national reproductive, maternal, newborn and child health policies and standards of care. Skin-to-skin contact for thermal care of the preterm neonate (often referred to as Kangaroo Mother Care) is included in the majority of national policies across these countries. Roughly 50 percent of countries include both magnesium sulfate for preeclampsia/eclampsia and the use of antenatal corticosteroids for fetal lung maturation in their clinical standards or guidelines, while over 60 percent include tocolytics. Other essential preterm components of care that need greater attention include vaginal birth preference, CPAP for respiratory distress syndrome and the safe use of oxygen in preterm and low birth weight neonates.

To build the momentum for improved child health established during the Millennium Development Goal era (2000-2015), more needs to be done to prevent preterm birth and low birth weight and to improve outcomes for small babies going forward. Please use this summary profile to advocate for this critical issue and to inspire the change that will save thousands of lives and improve health for generations to come.

- ¹ UNFPA, Girlhood, Not Motherhood: Preventing Adolescent Pregnancy, New York, 2015.
- $^2\ http://www.who.int/maternal_child_adolescent/documents/birth_spacing.pdf.\ Published\ 2006.$

DEFINITIONS AND DATA SOURCES

PRETERM BIRTHS AND DEATHS

Preterm birth rate	Probability of baby being born alive before 37 completed weeks of pregnancy, expressed per 100 live births. [5]
Low birth weight rate	Percentage of infants weighing less than 2500g at birth. [1]
Preterm births	Number of babies born alive before 37 completed weeks of pregnancy. [5]
Impaired preterm survivors	Number of preterm babies who survive with moderate or severe neurodevelopmental impairment. [6]
Direct preterm child deaths per year	Number of deaths amongst children under 5 years of age directly due to preferm birth complications [7]

COVERAGE OF CARE

At least 1 antenatal care visit	Percentage of women attended by any provider at least once during pregnancy. [9]
4+ antenatal care visits	Percentage of women attended by any provider at least four times during pregnancy. [9]
Births attended by skilled attendant	Percentage of births attended by skilled heath personnel (doctors, nurses or midwives). [9]
Infants weighed at birth	Percentage of babies weighed at the time of birth. [9]
PNC within 2 days (newborns)	The percentage of last-born newborns in the 5 years preceding the survey who received PNC during the first 2 days after birth. [9]

RISK FACTORS FOR PRETERM BIRTH

Adolescent birth rate	Number of births per 1,000 adolescent girls aged 15–19. [1]
Birth interval <24 months	Percentage of women with two live births within 24 months. [9]
Female obesity	Percentage of women age 15-49 with a body mass index (expressed as the ratio of weight in kilograms to the square of height in meters [kg/m2]) of more than 25.0 kg/m2. [11]
Hypertension in women	Percentage of adult women with raised blood pressure (systolic blood pressure ≥140 OR diastolic blood pressure ≥90), or using antihypertensive medication. [11]
Household solid fuel for indoor cooking	Percentage of households using solid fuel for cooking indoors. [9]

HEALTH WORKFORCE

Clinical standards for preterm care at hospital level Number of 10 critical elements of preterm care (antenatal corticosteroids, tocolytics, magnesium sulphate, antibiotics for preterm premature rupture of membranes, no antibiotics with intact membranes, vaginal birth preference, kangaroo mother care, continuous positive airway pressure for respiratory distress, safe oxygen therapy, surfactant) included in national clinical standards or guidelines. [13]
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HEALTH POLICY

RMNCAH plan includes preterm components	Yes: RMNCAH strategy includes mention of any critical elements of preterm care. / No: No mention of any critical elements of preterm care. [13]
Policy for KMC	Yes: National policy recommends Kangaroo Mother Care for low birth weight newborns. / No: National policy does not recommend Kangaroo Mother Care for low birth weight newborns. [14]
Policy for ACS use	Yes: National policy recommends use of antenatal corticosteroids for preterm labor. / No: National policy does not recommend use of antenatal corticosteroids for preterm labor. [14]
Policy for safe oxygen use and CPAP	Yes: National policy specifies safe oxygen use when continuous positive airway pressure is administered. / No: National policy does not specify safe oxygen use. [13]

HEALTH INFORMATION

Birthweight captured in health management information system	Place to capture birthweight on facility registers, or in annual health sector reports, where forms or registers were not available. [13]
Gestational age captured in health management information system	Place to capture gestational age in weeks, on facility registers, or in annual health sector reports, where forms or registers were not available. [13]

COMMINITY ENGAGEMENT

OOMMONTH EN	MINGENIEN	
Preterm included in RMNCAH behaviour		Yes: Messages regarding preterm birth are included in national strategy. No: National behavior change strategy does not include preterm birth messages OR no national behavior change strategy. [13]

DATA SOURCES:

- 1. UNICEF. State of the World's Children 2015. New York: UNICEF; 2014.
 2. WHO, UNICEF, UNFPA, The World Bank, United Nations Population Division. Trends in Maternal Mortality: 1990 to 2013. Geneva: WHO; 2014.
 3. Cousens S, Blencowe H, Stanton C, Chou D, Ahmed S, Steinhardt L, et al. National, regional, and worldwide estimates of stillbirth rates in 2009 with trends since 1995: a systematic analysis. Lancet
- 2011,377:1319-1330.

 4. UNI Inter-Agency Group for Child Mortality Estimation. Levels & trends in child mortality New York: UNICEF, WHO, World Bank; 2014.

 5. Blencowe H, Cousens S, Oestergaard MZ, Chou D, Moller AB, Narwal R, et al. National, regional, and worldwide estimates of preterm birth rates in the year 2010 with time trends since 1990 for selected countries: a systematic analysis and implications. Lancet 2012,379:2162-2172.

 6. Blencowe H, Lee AC, Cousens S, Bahalim A, Narwal R, Zhong N, et al. Preterm birth-associated neurodevelopmental impairment estimates at regional and global levels for 2010. Pediatr Res 2013,74 Suppl 1:17-34.

 7. Liu L, Oza S, Hogan D, Perin J, Rudan I, Lawn JE, et al. Global, regional, and national causes of child mortality in 2000-13, with projections to inform post-2015 priorities: an updated systematic analysis. Lancet 2014.

 8. Data from latest national service provision assessment or service availability and readiness assessment.

 9. Data from latest national household survey.

 10. UNAIDS. Children and AIDS: sixth stocktaking report Geneva: UNAIDS; 2013.

 11. WHO. Global Health Observatory Data. Geneva: World Health Organization; 2014.

 12. WHO. Global Health Morkforce. Geneva: World Health Organization; 2014.

 13. Data from Every Preemie-SCALE country stakeholder interviews and document review; 2015.

 14. UNICEF and WHO. Countdown to 2015. A decade of tracking progress for maternal, newborn and child survival: the 2015 report. Geneva: World Health Organization, 2015.