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**PURPOSE OF THIS DOCUMENT**

This internal measurement resource document provides a list of the latest available data and tools for maternal and newborn health as of November 2017. The aim of this document is to inform Save the Children staff on how to access relevant data to support their programmes and advocacy. All country, region and global newborn-related estimates are available on Healthy Newborn Network (Box 1) in a downloadable excel spreadsheet with data sources at:

[www.healthynewbornnetwork.org/page/newborn-numbers](http://www.healthynewbornnetwork.org/page/newborn-numbers)

**HEALTHY NEWBORN NETWORK**

Healthy Newborn Network (HNN) is an online community dedicated to addressing critical knowledge gaps in newborn health. Easy access to reliable newborn health data is fundamental towards helping decision-makers allocate resources effectively and prioritize implementation efforts to improve access and quality of care for mothers and babies.

Newborn Numbers on HNN aims to improve the understanding and use of data in decision making for newborn health. It includes the global burden of newborn deaths including when, when and why newborns are dying as well as solutions for preventing deaths and resources available for action on newborn health.

The page hosts the most centralized and trusted location for accessing the latest global, regional and national estimates related to newborn health. By synthesizing information gathered from the major global resources, Newborn Numbers includes mortality estimates, cause of death data, coverage of care for key newborn-health related interventions, contextual indicators, human resources and financing indicators. A comprehensive database can be downloaded with an extensive list of indicators for 193 countries.

HNN synthesizes information gathered from the major global resources, such as:

- Global Health Repository (World Health Organization)
- UN Inter-agency Group for Child Mortality Estimation (childmortality.org)
- Countdown to 2030 (countdown2030.org)
- UNICEF’s State of the World’s Children (unicef.org/sowc)
- Global Health Atlas (who.int/globalatlas)
- National health accounts (who.int/health-accounts)

**Data visualization**

The interactive data visualization tool, a new feature on HNN, allows users to easily and quickly make graphs with over 50 newborn-related indicators. The multi-dimension query functionality of the tool makes it easy to select multiple indicators and countries from cross-country comparisons. You can also download a sub-set of data into excel to create your own graphs. The heat maps visually demonstrate cross country comparisons of indicators.

Access the most recent global, regional and national level data on newborn-related health indicators at:

[www.healthynewbornnetwork.org/page/newborn-numbers](http://www.healthynewbornnetwork.org/page/newborn-numbers)
MATERNAL AND NEWBORN HEALTH ESTIMATES

Resources

All country, region and global estimates are available at in a downloadable excel spreadsheet with data sources at: www.healthynewbornnetwork.org/page/newborn-numbers

Neonatal mortality estimates

The United Nations Inter-agency Group for Child Mortality Estimation (UN IGME) produces annual updates of levels and trends in child mortality rates, including newborn mortality. Estimates are available for global, regional and national levels from 1990 to 2016. The most recent estimates (October 2017) are available through a data visualization tool that shows the estimates, confidence intervals and data inputs at childmortality.org.

Child mortality estimates are annually published by the UN IGME as well as the Institute for Health Metrics and Evaluation (IHME). UN IGME and IHME estimation approaches differ with respect to the construction of databases and the pre-processing of data, trend fitting procedures, inclusion and exclusion of data series, and additional adjustment procedures. Save the Children recommends using UN IGME estimates because these undergo a validation process with the national governments.

National household surveys, such as DHS and MICS, also measure neonatal mortality estimates and are often used as primary data source for neonatal mortality estimates at national level.

Causes of under-5 and neonatal mortality


Stillbirths

In 2015, the Stillbirth Epidemiology Reference Group, London School of Tropical Hygiene and Medicine (LSHTM), worked with WHO to collate all available data, undergo country consultation, then publish national, regional and global estimates of stillbirth rates, with trends from 2000 in The Lancet, available at: www.thelancet.com/pdfs/journals/langlo/PID2214-109X(15)00275-2.pdf. UN IGME has committed to taking forward stillbirth estimation in the future.

Maternal mortality

The Maternal Mortality Estimation Inter-Agency Group (MMEIG) updated global, national, regional and county estimates of maternal mortality ratio (maternal deaths per 100,000 live births) in 2015, including current levels and trends since 2000. The report is available at: www.who.int/reproductivehealth/publications/monitoring/maternal-mortality-2015/en/

Low birth weight (LBW)

UNICEF, WHO and LSHTM are generating the first systematic estimates of LBW levels and trends for national regional and global levels for release in early 2018 (currently undergoing country consultation). Global, national and regional estimates of LBW were last published in 2004 at the following report: www.unicef.org/publications/files/low_birthweight_from_EY.pdf
Resources

Preterm birth


Group B Streptococcus (GBS)

An interagency group has developed the first global, regional and national estimates of the prevalence of GBS disease in pregnant women, which is linked to occurrence of stillbirth and maternal and neonatal mortality. Estimates of the burden of GBS and associated outcomes were released in November 2017 and published in Clinical Infectious Diseases available here: academic.oup.com/cid/issue/65/suppl_2/379721-4589584

GLOBAL INITIATIVES WITH MATERNAL NEWBORN MEASUREMENT RESOURCES

Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs), adopted in 2015, include a set of 17 goals and 169 accompanying targets, of which health is covered in the 3rd goal (Ensure healthy lives and promote well-being for all at all ages - By 2030 end preventable deaths of newborns and under-5 children). Indicators were identified through consultation with partners and include several related to maternal and newborn health.

Table of indicators by goal: unsdsn.org/wp-content/uploads/2015/05/150612-FINAL-SDSN-Indicator-Report-Table-1.pdf


Global Strategy for Women’s, Children’s and Adolescents’ Health

The Global Strategy for Women’s, Children’s and Adolescents’ Health (2016-2030) has a joint monitoring framework for measuring progress that incorporates the recommended ENAP and EPMM indicators:


Every Newborn Action Plan (ENAP)

ENAP developed a set of core 10 core and 10 additional coverage and process indicators for tracking progress in newborn health through an extensive consultation process with technical experts. The 10 core indicators include three standard impact level indicators (neonatal mortality, maternal mortality ratio, stillbirth rate), three indicators on coverage of care (skilled birth attendance, early postnatal care, essential newborn care), and four indicators of coverage for newborns at risk of complications (antenatal corticosteroids, neonatal resuscitation, treatment of serious neonatal infections, KMC). The indicators and a roadmap towards improved measurement were published in September 2015:


Research to validate new indicators is underway in 3 countries and research on birth history modules in 5 sites. More information on ENAP metrics available here: https://www.healthynewbornnetwork.org/issues/global-initiatives/enap-metrics/

Ending Preventable Maternal Mortality (EPMM)

An interagency group recommended 12 maternal health indicators for global monitoring and reporting by all countries and four priority areas for further indicator development. These indicators were harmonized with the ENAP core metrics described above for a joint global maternal newborn monitoring framework linked to tracking progress towards the Sustainable Development Goals (SDGs) and the Every Woman Every Child, see more below. Indicators were published in 2016 and are available at: https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-016-1035-4
IMPORTANT WORLD HEALTH ORGANIZATION RESOURCES

**Global Health Observatory**

The Global Health Observatory (GHO) is WHO's gateway to health-related statistics providing an online portal with country data and statistics and WHO's analyses to monitor global, regional and country situation and trends. GHO covers WHO's global health priorities including all country statistics and health profiles related to maternal and newborn health available within WHO. Available at: [apps.who.int/gho/data/node.home](apps.who.int/gho/data/node.home)

**Maternal & Newborn, Child and Adolescent Health Policy indicators**

WHO conducts periodic global surveys to track adoption of recommended national health policies and guidelines related to maternal, newborn, child, and adolescent health. Four rounds of surveys have been completed between 2009 and 2016 and data are available for 98 indicators from 122 countries in the database. Data can be accessed here and used to develop maps, dashboards and graphs: [who.int/test/forms/mncah](who.int/test/forms/mncah)

**World Health Organization list of 100 indicators**

In 2015 WHO released a standard set of 100 indicators prioritized by the global community – with the aim of aligning information requirements and reducing collection and reporting burden on countries. The WHO list is aligned with the SDG health related indicators and includes majority of ENAP core indicators. Available at: [www.who.int/healthinfo/indicators/2015/en/](www.who.int/healthinfo/indicators/2015/en/). *Note: list is currently under review.*

HOUSEHOLD/POPULATION-BASED SURVEY TOOLS

**Demographic and Health Surveys (DHS)**

Demographic and Health Surveys (DHS) are nationally-representative household surveys that provide data for a wide range of monitoring and impact indicators in the areas of population, health, and nutrition. The DHS standard questionnaire now includes questions across the continuum of care for mothers and newborns, including antenatal care, care at time of birth, pre and post-discharge contacts for mothers and newborns, content of postnatal care for newborns, and newborn care practices (immediate skin-to-skin, early initiation of breastfeeding). Latest core modules available here: [https://dhsprogram.com/publications/publication-dhsq7-dhs-questionnaires-and-manuals.cfm](https://dhsprogram.com/publications/publication-dhsq7-dhs-questionnaires-and-manuals.cfm)


DHS provides an online data visualization tool called STATcompiler available at [www.statcompiler.com](www.statcompiler.com)

**Multiple Indicator Cluster Surveys (MICS)**

Multiple Indicator Cluster Surveys (MICS) produce statistically sound and internationally comparable estimates of a range of indicators in the areas of health, education, child protection and HIV/AIDS. The MICS questionnaire, like DHS, spans the continuum of care for mothers and newborns and now includes questions on the first pre-discharge and the first post-discharge postnatal contacts for mothers and newborns after birth, the content of postnatal care for newborns, as well as newborn care practices.


All tools can be found here: [mics.unicef.org/tools](mics.unicef.org/tools)
Resources

Knowledge Practices and Coverage Survey (KPC)  
ICF Macro

The Knowledge Practices and Coverage Survey (KPC) is a small population based survey originally developed by JHU and used by grantees of USAID’s Child Survival and Health Grants Program (CSHGP) since 1991. It is compatible with DHS, MICS, international efforts such as Roll Back Malaria and information that is crucial to USAID technical areas. The KPC tool was recently updated and a specific module on maternal newborn care is forthcoming.

www.mcsprogram.org/resource/knowledge-practice-coverage-tool/

HEALTH FACILITY ASSESSMENT TOOLS

Service Availability and Readiness Assessment (SARA)  
WHO

The Service Availability and Readiness Assessment (SARA) is designed to assess and monitor the service availability and readiness of the health sector and to generate evidence to support the planning and managing of a health system. Includes a section on service availability for maternal and newborn health.

www.who.int/healthinfo/systems/sara_introduction/en/index.html

Service Provision Assessment (SPA)  
Measure DHS

The Service Provision Assessment (SPA) survey provides a comprehensive overview of a country’s health service delivery. Includes a section on delivery and newborn care in the inventory questionnaire, as well as additional questions related to services for newborns.

www.measuredhs.com/What-We-Do/Survey-Types/SPA.cfm

Emergency Obstetric And Neonatal Care Needs Assessment  
Averting Maternal Death And Disability (AMDD), Columbia University

Emergency Obstetric and Neonatal Care (EmONC) Needs Assessment provides details for planning to address gaps or problems in EmONC services. The tool has been revised to include more information on newborn services and quality of care. www.mailman.columbia.edu/research/averting-maternal-death-and-disability-amdd/toolkit

Maternal and Newborn Quality of Care Surveys  
Maternal And Child Health Integrated Program (MCHIP)

These health facility surveys focus on the frequency and quality of interventions that address the direct causes of maternal and newborn deaths and can be key sources of information for policymakers and other stakeholders in country.

www.mchip.net/QoCsurveys

ROUTINE HEALTH INFORMATION SYSTEMS

Maternal and Newborn Tracer HMIS indicators  
WHO/LSHTM/UNICEF

WHO are partners have proposed a limited set of facility-based tracer indicators for maternal newborn health collected via Health Management Information Systems (HMIS). These indicators will be reported at national level and capture service delivery statistics primarily, with guidance on how to generate and use population-based denominators as appropriate. Candidate indicators are undergoing review by partners and final versions will published as part of WHO Health App Series RMNCH Module, including manual and DHIS2 Module with dashboards/scorecards in 2018-19.
Resources

District Health Information System (DHIS2)  University of Oslo

DHIS2 is a free, open-sourced, web-based software available in 8 languages that is used by more than 60 countries as the platform for their national health information systems for data management and analysis purposes, for health program monitoring and evaluation, as facility registries and service availability mapping, for logistics management and for mobile tracking of pregnant mothers in rural communities. For more information and resources visit: www.dhis2.org/

INTERVENTION SPECIFIC MEASUREMENT RESOURCES

Chlorhexidine (CHX)  PATH; CHX Working Group

The Chlorhexidine Working Group (CWG), an interagency working group with PATH as Secretariat, promotes the scale up of CHX globally and compiles and disseminates resources to support countries in this effort. Performance indicators and other tools to measure process and coverage of chlorhexidine for prevention of neonatal infection are available here:

- General resources (healthynewbornnetwork.org/issue/chlorhexidine-for-umbilical-cord-care/)
- Indicators (www.healthynewbornnetwork.org/hnn-content/uploads/Performance-Indicators-CHX.pdf)

Kangaroo Mother Care (KMC)  KMC Acceleration Partnership (KAP)

The KMC Acceleration Partnership (KAP), a multi-stakeholder partnership with Save the Children as Secretariat, works to address barriers to effective implementation of KMC globally and accelerate uptake of KMC. A measurement framework and 10 core indicators to measure progress towards scale up of KMC was developed by the KMC Acceleration Partnership (KAP) and the ENAP metrics stream and is available at: jogh.org/documents/issue201702/jogh-07-020801.pdf

More resources from the KAP available here: www.healthynewbornnetwork.org/issue/kangaroo-mother-care/

Treatment of Possible Serious Bacterial Infection (PSBI)  WHO/SC/USAID

A measurement framework and indicators for management of PSBI in sick young infants 0-2 months was developed by WHO, Save the Children, USAID and partners and is anticipated to be released soon. Resources for PSBI are available here: www.healthynewbornnetwork.org/issue/treatment-of-possible-severe-bacterial-infection/

Neonatal Resuscitation

Recommended process and coverage indicators for management of newborns who do not breathe at birth were published as part of ENAP recommended metrics: bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/1471-2393-15-S2-S8