Roadmap to Accelerate Progress for Every Newborn in Humanitarian Settings 2020 – 2024

Save the Children

World Health Organization

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About Roadmap to Accelerate Progress for Every Newborn in Humanitarian Settings 2020–2024

The Roadmap is designed to further the global commitment to improve the health of the most vulnerable mothers and newborns who live in humanitarian settings. The development of the Roadmap is based on global evidence-based guidance and lessons learned from country-level implementation. Over 100 experts from non-governmental organizations, United Nations agencies, national governments, donors and academic institutions participated in the review of the Roadmap, and more than 50 interviews were conducted with key stakeholders to understand current priorities in maternal and newborn health, gaps in the health system, and partners to leverage in humanitarian settings. Global experts reviewed and finalized the document in a 2019 multi-sectoral meeting and recommended actions to accelerate progress over the next five years.

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The Roadmap is dedicated to Jennifer Schlecht, a devoted advocate for the rights of women and girls in crisis situations. To honor Jennifer and her invaluable contributions, the global health community shall continue to elevate sexual and reproductive health, and maternal and newborn care, as a human right deserved of the most vulnerable in crisis-prone countries and in each and every humanitarian response. We miss you, Jenn.

HRH Princess Sarah Zeid
Patron, Maternal & Newborn Health UNHCR
Special Advisor, Maternal & Child Health and Nutrition, WFP

Acronyms

BCG	Bacille Calmette-Guerin vaccine
BMS	Breast milk substitutes
EmONC	Emergency obstetric and newborn care
ENAP	Every Newborn Action Plan
EPI	Expanded Programme on Immunization
EWEC	Every Woman Every Child
HAI	Hospital-acquired infections
IPC	Infection prevention and control
IYCF-E	Infant and Young Child Feeding in Emergencies
KMC	Kangaroo mother care
MISP	Minimum Initial Service Package
MPDSR	Maternal and perinatal death surveillance and response
SDGs	Sustainable Development Goals
TBA	Traditional birth attendant
WASH	Water, sanitation and hygiene

More Information

Throughout this process, stakeholders participated in drafting a global declaration and an advocacy document that identifies key messages for prioritizing maternal and newborn health in humanitarian settings.

Documents are available at www.healthynewbornnetwork.org/issue/emergencies/

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Introduction

Reaching the Sustainable Development Goals (SDGs) for neonatal mortality and stillbirths by 2030 require prioritizing lifesaving maternal and newborn interventions and supporting health workers during humanitarian crises.

Women and children are **14** times more likely than men to die during a natural disaster*(1)*. In fragile and humanitarian settings, an estimated **500** women and girls die from complications of pregnancy and childbirth every day*(2)*. Newborns are uniquely vulnerable; reliant on specialized care and dependent on the health of mothers who are impacted by crisis. For too long, newborns have been overlooked in humanitarian response efforts. Essential newborn interventions remain underfunded and few interventions are designed with the mother in mind. Improving newborn survival requires a renewed focus on the unique needs of children born into crisis and a commitment to strengthening maternal and newborn health in humanitarian settings. The perinatal period represents a critically important time of risk for mothers and their newborns*(3)*.

India, Nigeria, Pakistan, Ethiopia and Democratic Republic of Congo are the top five countries with the greatest number of neonatal deaths*(4)*. More than **80%** of the high-mortality countries have suffered either a recent conflict, recurring natural disasters, or both*(5)*. Among the 49 countries that experienced an acute or protracted humanitarian crisis in the past five years, **75%** fall short of the SDGs for neonatal mortality*(6)*. Countries facing conflict have the highest rates of neonatal mortality and stillbirths; alarmingly at 39 deaths per 1000 live births or higher*(7)*.

The *Global Strategy for Women, Children, and Adolescents' Health 2016-2030* aims to reduce newborn mortality to 12 per 1000 live births in all countries by 2030, and this is aligned with the target for Sustainable Development Goal 3.

This goal requires urgent action in fragile and humanitarian settings.

Almost 70% of neonatal deaths and 40% of maternal deaths and stillbirths are preventable, including in most challenging situations.

Humanitarian settings are diverse because of varying baseline mortality, economic development, health system capacity, population dynamics, and local burden of disease. People affected by crises may include vulnerable populations, such as refugees, internally displaced persons, migrants, or local populations. They may live in remote rural areas or camps, but increasingly they reside in urban areas. Communities, including the health care system, hosting displaced populations often lack the will or capacity to meet the basic needs of the population. The challenges in conflict settings are compounded by insecurity and the natural focus of services on preventing infectious disease outbreaks. Humanitarian settings are increasingly protracted, with the average crisis lasting longer than 9 years, and these crises are contributing to a growing number of displaced people*(8)*.

During the preparedness, emergency and recovery phase of a humanitarian response, priorities for newborn health need to be clearly articulated in coordination and advocacy platforms. Global initiatives such as *Every Women Every Child (EWEC)* and *Every Newborn Action Plan* have brought together multi-stakeholder partners to prioritize key actions for reducing newborn mortality by 2030. Better integration of development initiatives that bolster emergency response in preparedness and resilience-building can mitigate the long-term impact of crisis on the health of women and children.

The distinction between a humanitarian and development setting is often unclear, and efforts to improve maternal and newborn health must bridge both situations and be well coordinated. This *Roadmap to Accelerate Progress for Every Newborn in Humanitarian Settings* addresses newborn heath across diverse contexts with recommendations that can be applied generally but may be relevant to some specific contexts more than others.

Newborn health cannot be considered in isolation and must be addressed in the context of maternal health. Any intervention aimed at improving newborn health should be framed in the context of maternal and newborn health. Lessons from previous crises strongly suggest that efforts for maternal and child health often overlook newborn care, including nurturing care, during humanitarian crises. Progress has been made in financing and delivering reproductive, maternal, and child health interventions during crisis, but significant gaps remain in the financing of emergency obstetric and newborn care*(9)*. Therefore, improving newborn survival during humanitarian crises will require a greater focus on newborns as part of the continuum of care.

Taking into account different initiatives currently addressing newborn health and survival, the Roadmap calls for action to accelerate the health of women and their newborns across all contexts and phases of an emergency using a health systems approach. Stakeholders from across humanitarian and development sectors need to be engaged to ensure newborns survive and thrive even in the most difficult circumstances. This includes having a common vision, approach and commitment to expand the quality and coverage of maternal and newborn services in populations affected by acute and protracted conflicts and natural disasters.

The audience for this document is stakeholders from both the development and humanitarian community, from both maternal and newborn health communities, and across sectors of the humanitarian response. This document sets out a vision for how improvements can be made for mothers and newborns in humanitarian settings.

Vision

A world in which mothers and newborns receive the lifesaving health services they need, whoever they are and whatever the emergency situation.

Goals

Goal 1: Eliminate preventable maternal and neonatal deaths in humanitarian settings.

Goal 2: Work towards global targets for reduction of maternal and neonatal mortality and stillbirth.

Goal 3: Ensure newborns thrive by preventing maternal and child morbidity and promoting early childhood development.

During the emergency phase of a humanitarian crisis:

Prevent excess stillbirths and neonatal deaths by reducing mortality to below thresholds defined by context specific pre-crisis or national rates

During the recovery phase of a humanitarian crisis:

Align efforts with global targets for the SDGs to reduce the neonatal mortality rate to 12 per 1,000 live births or less, and reduce the stillbirth rate to 12 per 1,000 total births or less by 2030

Strategic Objectives

The key action areas of the Roadmap are grouped under three overarching strategic objectives articulated by the EWEC Global Strategy as survive, thrive, and transform.

1) SURVIVE

End preventable deaths

2) THRIVE

Ensure health and wellbeing

3) TRANSFORM

Expand enabling environments

1) SURVIVE

End preventable deaths

- **Strengthen the maternal-**newborn dyad in humanitarian crises
- **Expand access** to dignified and quality care during pregnancy, delivery and post-partum
- **Deliver appropriate care** for small and sick newborns
- **Register every birth** and count every newborn death and stillbirth

2) THRIVE

Ensure health and wellbeing

- **Strengthen linkages** with key humanitarian sectors across the continuum of care
- **Facilitate coordination** across the humanitarian-development nexus

3) TRANSFORM

Expand enabling environments

- **Empower communities** and governments through partnerships that promote innovative and sustainable services
- **Explore innovative approaches** and conduct research to support service delivery in humanitarian settings
- **Increase the visibility** of newborns in humanitarian settings
-

Guiding Principles

- Evidence-informed
- Newborn deaths and stillbirths are preventable
- Mothers & newborns are rights holders
- Respectful maternal & newborn care
- Family-centered care
- Newborns do better with their caregivers
- Newborns & stillbirths in humanitarian settings count
- Accountability
- Context-specific innovations
- High-quality care that meets the needs of communities
- Empowering women & girls improves newborn survival
- Gender equality
- Health system strengthening
- Preparedness and resilience improve sustainability
- Invest in health care providers
- Human resources for health

What can we do to save newborn lives and prevent stillbirths in fragile and humanitarian settings?

Key Action Areas for Newborn Health in Humanitarian Settings

1 Strengthen the mother-newborn dyad in humanitarian crises

Humanitarian settings are often characterised by disrupted access to services, and delayed or insufficient international and national assistance that may be unable to reach mothers who are the most underserved. The mother is the best chance for the newborn's survival. Protecting the mother-baby dyad is crucial in any setting, particularly during humanitarian responses, to ensure skin-to-skin care, early and exclusive breastfeeding, and a nurturing environment for early childhood development. However, the importance of this relationship is often underestimated or overlooked, and simple, essential lifesaving interventions are often de-prioritised during humanitarian response despite their cost-effectiveness. Interventions risk being counterproductive if the mother-newborn dyad is weakened because care can become compromised, even if the initial interventions appeared to be effective. The dyad is often compromised in emergencies, which is reflected in the increased rate of maternal death and orphaned newborns. In such situations, permanent, nurturing alternatives must be found as soon as possible.

ACTIONS Keep newborns with their mothers and caregivers for the most reliable source of warmth, feeding and protection in crises

Models of care that keep newborns with their mothers and caregivers, such as kangaroo mother care (KMC) and family-centered care, are evidence-based, cost-effective and feasible in any setting. Maternal and newborn services should be designed to minimize separation of mother and baby from birth, during the postnatal period and during referral in cases of neonatal health complications. Focus on the mother-newborn dyad should be ensured at every level, including leadership and governance, clinical care, referral pathways, and monitoring and evaluation. Where keeping a newborn with their mother is impossible, efforts should be made to quickly ensure a sustainable caregiver for the newborn.

ACTIONS Protect, promote and support early and exclusive breastfeeding in humanitarian settings

Disruption of breastfeeding in humanitarian settings is particularly dangerous because access to safe water and sanitation is often compromised. Promotion of and support for early initiation and exclusive breastfeeding are lifesaving interventions that should be a priority during humanitarian response for all newborns*(10-16)*. A key priority must be to create a safe and enabling environment to promote early and exclusive breastfeeding in facilities and the community. This includes supplies for breastmilk expression, storage and alternative feeding methods; training of health workers; advocacy media communication; and psychosocial and peer-to-peer support. Breast milk substitute (BMS) provision should be limited to medical needs*(17)* and linked to a context-specific, coordinated package of care and skilled support to ensure adequate water, sanitation and hygiene*(18)*. Existing initiatives should be built upon Netcode*(19)* and the baby-friendly hospital initiative.*(20)*

2 Expand access to dignified and quality care during pregnancy, delivery, and post-partum

The focus in humanitarian settings should be on providing quality, equitable and culturally acceptable care that is relevant to the setting, promotes maximum benefits, and is potentially sustainable. Evidence-based interventions during pregnancy, delivery and post-partum should be implemented and include timely access to comprehensive emergency obstetric and newborn care from the initial onset of an emergency (*see Box 1*). These must be delivered by an adequate number of health workers who have the necessary training, support and resources. Preparedness is key to this being done efficiently and cost-effectively.

Provide access to emergency obstetric and newborn care around the time of birth

Basic emergency obstetric and newborn care is an immediate priority in all emergencies, with preparation to rapidly transition to comprehensive health services. Services must be accessible to all, ensuring that populations who would otherwise lack access are not 'left behind'. Contextual factors in humanitarian and fragile settings, such as insecurity, heavily influence access to labour, delivery and emergency care. Mothers must be empowered with information on their individual level of risk during pregnancy and they should have contingency plans to address unpredictable disruptions to care.

BOX 1.

Basic and comprehensive emergency obstetric and newborn care (EmONC)

The *Inter-Agency Field Manual on Reproductive Health in Humanitarian Settings* (IAFM) includes the following list of essential interventions:

Ensure basic EmONC at all health centres. This means that staff are skilled and have the resources to:

1. Administer parenteral antibiotics for treatment of sepsis
2. Administer uterotonic drugs (i.e., parental oxytocin or misoprostol tablets) for treatment of postpartum hemorrhage and administer intravenous tranexamic acid in addition to standard care for women with clinically diagnosed postpartum hemorrhage
3. Administer parenteral anticonvulsant drugs (i.e. magnesium sulfate) to manage severe preeclampsia and eclampsia
4. Perform assisted vaginal delivery (e.g. vacuum extraction)
5. Manually remove the placenta
6. Remove retained products of conception after delivery or an incomplete abortion
7. Perform basic neonatal resuscitation (e.g. with bag and mask)

Ensure comprehensive EmONC at hospitals. This means that staff are skilled and have the resources to support interventions 1-7 above plus:

8. Perform surgery (e.g. caesarean section)
9. Perform safe blood transfusion observing universal infection prevention precautions

Strengthen and scale up essential newborn care

Essential newborn care interventions should be prominent in national policies and guidelines, health assessments, donor proposals, humanitarian response plans and supply lists for facility- and community-based programmes. Every health worker who provides newborn care and is deployed to an emergency setting should have the capacity to deliver lifesaving and time-sensitive interventions immediately after birth. These interventions are described in the *Newborn Health in Humanitarian Settings Field Guide* (*see Box 2*).

BOX 2.

Essential Newborn Care

The *Newborn Health in Humanitarian Settings Field Guide (NBFG)* includes the following list of essential interventions:

- **Thermal care:** Drying, warming, skin-to-skin contact, delayed bathing
- **Infection prevention:** Clean birth practices, handwashing, and clean cord/ skin/eye care. Use of chlorhexidine for cord care is recommended for newborns born at home and in settings where the neonatal mortality rate is above 30 deaths per 1000 live births
- **Initiation of breathing:** Thorough drying, clearing the airway only if needed, stimulation through rubbing the back, and basic neonatal resuscitation using a self-inflating bag and mask for babies who do not spontaneously breathe
- **Feeding support:** Skin-to-skin contact, support for immediate and exclusive breastfeeding, and not discarding colostrum (or first milk)
- **Monitoring:** Frequent assessment for danger signs of serious infections and other conditions that require extra care outside the household or health post
- **Postnatal care checks:** Three postnatal checks during the first month: on Day 1 (the first 24 hours, which are the most critical), Day 3 and between Days 7-14. After birth, every effort should be made to reach babies born at home as soon as possible
- **Preventive interventions:** Delayed cord clamping, vitamin K and topical ocular prophylaxis within the first hour of life, and vaccinations within the first week of life

Establish a referral system that is flexible and resilient to health system shocks

During emergencies, reliable transportation and communication systems must be available, using community participation and leadership where possible, to facilitate timely referral of mothers and newborns when danger signs are detected pre-, during, and post-pregnancy. Communities and health workers must be educated on danger signs and referral mechanisms. Emergency care protocols should include stabilization prior to referral and for management during transfer. These protocols should include transferring the mother and baby together, if postpartum, preferably in skin-to-skin contact to prevent hypothermia.

Establish the Minimum Initial Service Package for facility- and community-based care at the onset of an emergency

The Minimum Initial Service Package (MISP) for reproductive health should be complemented with specific interventions to address neonatal asphyxia, infection and prematurity. Substantial evidence exists for the most effective interventions aimed at reducing neonatal mortality, with interventions during the intrapartum and early postnatal period having the greatest impact*(21)*. The *Newborn Health in Humanitarian Settings Field Guide* summarises these WHO evidence-based *guidelines(22)* and highlights the most critical health services for every newborn in community-based settings, primary health facilities, and hospitals. This starts with quality antenatal care, including counselling, screening, supplementation, and prevention of vertically transmitted and non-communicable diseases, and continues with prompt treatment of complications and adequate postnatal follow up for health promotion and linkage to treatment and other services. This minimum service package should be integrated into national preparedness and response plans, donor funding opportunities, and standards of care delivered by healthcare organizations.

Ensure universal access to prevention and treatment of malaria, tetanus, syphilis and HIV

Progress in humanitarian settings is crucial to achieving global strategies on malaria*(23)*, syphilis*(24)* and HIV*(25)* as well as the Maternal-Neonatal Tetanus Elimination initiative*(26)*. To prevent adverse outcomes from malaria in pregnancy, agencies should ensure coverage of long-lasting insecticide-treated nets and intermittent preventive treatment in pregnancy. For tetanus, the focus must be on prevention via maternal vaccination, clean delivery, and strengthening routine Expanded Programme on Immunization (EPI). Reporting neonatal tetanus cases, as part of routine disease surveillance, provides a useful indicator for monitoring access to clean delivery and antenatal vaccination coverage.

Surveillance should also be strengthened for congenital syphilis, with linkage to prevention and treatment approaches during pregnancy. The global strategy on HIV*(25)* aims for no infant to be born with HIV; this applies to humanitarian contexts as much as any other. Prevention in fragile and humanitarian settings should encompass voluntary counselling and testing, post-exposure prophylaxis in the case of sexual violence, antiretroviral treatment, universal testing during antenatal care and/or labour and delivery, testing and prophylaxis for newborns, and counselling on infant feeding. Emergency preparedness plans should include mechanisms to ensure uninterrupted supplies to prevent mother-to-child transmission.

Procure and preposition lifesaving maternal and newborn commodities

The *Newborn Health in Humanitarian Settings Field Guide* and the *Inter-agency Field Guide for Reproductive Health* provide a list of essential medicines and commodities to support safe delivery and newborn survival during emergencies. These supplies can be procured through UNICEF and UNFPA, and they should be integrated in the national essential medicines list and supply lists of healthcare organizations. Commodities should be contextualized to align with national policies and chosen with consideration of the local context. Preparedness planning should include pre-positioning supplies that are needed in settings that are deemed to be fragile or at risk of a humanitarian emergency*(27)*.

Ensure access to care for women and newborns wherever and whoever they are

All interventions should uphold the right to health for all; ensuring no woman or child is left behind. Special attention should be paid to vulnerable groups such as the displaced, refugees, and migrants. The principle of universal health coverage means that care should not be limited by the requirement to prove identity, residency, or immigration status, or due to fear of financial hardship.

Situational assessments should be carried out to identify where women and newborns can safely access services, and security procedures should be accounted for. Innovative strategies are needed to reach rural and urban settings, and the link between different points of care should be strengthened while investing in the quality of care at referral facilities in host communities.

Ensure respectful maternal and newborn care in humanitarian response

Promote a culture of respectful maternal and newborn care as a common agenda*(28)* aimed at saving lives and relieving suffering and distress for both the mother and the newborn. Respectful care includes supporting the woman's choices during labour and delivery, keeping the mother and her child together when possible, and avoiding unnecessary pain or harm including providing palliative care where appropriate. Raise awareness among humanitarian workers and within maternal and newborn programs about the importance of respectful care using trainings, guidelines, and protocols. Create mechanisms for monitoring disrespect and abuse by giving service users opportunities to provide feedback. Inclusion and employment of female health workers should be promoted where they are scarce, and local health workers, particularly midwives, should be employed wherever possible. Ensure that all women are permitted a birth companion when accessing health services. Efforts should be made to have a community dialogue early in the humanitarian response to explore context-specific factors that improve the acceptability of services.

Gather data to monitor quality of care and coverage of essential newborn interventions

Quality of care is instrumental for reducing maternal and newborn morbidity and mortality. Reporting on humanitarian interventions often focuses on quantity rather than quality, and there is little published data to assess service provision during humanitarian crisis. The risk of poor quality of care in fragile and humanitarian settings is high due to numerous challenges, including recruitment of an adequately resourced, trained, and supervised health workforce. Some interventions, such as controlled oxytocin*(29)* and instrumental and surgical interventions, can pose a greater risk of harm if poorly implemented, and these should receive greater supervision*(30)*.

Intrapartum monitoring of fetal well-being is particularly challenging in humanitarian settings and requires close supervision. Quality intrapartum monitoring is required to detect fetal distress and direct interventions to prevent intrapartum stillbirths and asphyxia when appropriate to intervene for fetal indications. It is particularly important that inappropriate intervention is avoided if it may place the mother at greater risk in future pregnancies and if access to family planning and obstetric care is unpredictable. Organisations must therefore review their interventions to ensure they are based on appropriate indications, and adapt recommendations based on context-specific risks and realistic quality of monitoring. Quality should be promoted according to established standards*(31)* and measures such as context-specific training, supportive supervision, peer support, mentoring and feedback. Key interventions such as neonatal resuscitation should include mandatory pre-service training with ongoing refresher trainings. Innovative tools for remote supervision and training such as telemedicine, use of mobile devices (m-health), and internet-based platforms (e-health) should be explored and evaluated in humanitarian contexts. Agencies should monitor and share data to promote support for quality improvement initiatives.

Data from programme assessments, as recommended by the Global Health Cluster, should be used to monitor gaps in service delivery. This includes where and who is primarily affected and what barriers prevent access to essential newborn care. Standardized indicators on coverage of newborn-specific interventions across the health sector should be captured with different data collection platforms and tools. These data should be reported into the overarching humanitarian coordination platform, such as the health cluster or the reproductive health working group, where all actors can access data for public health action. Strengthen national data systems, in collaboration with *Countdown to 2030*, to ensure robust and usable data on coverage of essential newborn care are collected and reported to monitor trends, assess quality of delivered interventions, and evaluate impact and accountability of all concerned and relevant stakeholders.

3 Deliver appropriate care for small and sick newborns

Ensuring care for small and sick newborns can significantly reduce neonatal mortality rates and ensure these children thrive later in life. Standards of care and evidence-based interventions need to be adapted to fit within the health system of fragile and humanitarian settings. Complete guidance on small and sick newborns can be found in the WHO/UNICEF document *Survive and thrive: Transforming care for every small and sick newborn*, which is fully aligned with the other major initiatives this document is built upon.

Train and support staff to care for small and sick newborns

Ensuring that all staff are trained in essential newborn care is the first priority in the early stages of a humanitarian response. When escalating the levels of care, a greater number of staff with specialist training, especially in high quality nursing, in neonatal care is required. Basic standards and acceptable provider-to-patient ratios must be carefully considered and established when making decisions on the complexity of care.

Prioritise treatment of the main causes of neonatal mortality

Ensure antibiotic treatment is available to treat newborns with possible severe bacterial infection. Where possible, this should be provided in facilities. When referral is not possible, the option of providing antibiotic treatment in the community, according to WHO guidelines, should be considered*(32)*. Ensure staff are trained on neonatal resuscitation to address asphyxia and implement KMC, feeding support and monitored oxygen for premature babies.

Provide appropriate facility-based care for small and sick newborns

Facility-based care for small and sick newborns is highly variable in humanitarian settings. This is highlighted by a lack of context-specific guidance on which core interventions are appropriate in different contexts. Efforts should be made to avoid missed opportunities to provide less intensive, high impact interventions. In settings with low health system capacity, the priority should be essential newborn care for all neonates. Cost-effective and sustainable interventions should be implemented for those born small or sick, such as KMC and cup feeding, that can be supported by trained health workers including midwives. There is a need to develop standards for newborn care; outlining which interventions to prioritise depending on the context, baseline mortality, and facility delivery rates. The current work on signal functions for small and sick newborns should be adapted for humanitarian settings.

Prevent hospital-acquired infections

Humanitarian and fragile settings are challenging environments to ensure adequate quality of care, and in these circumstances neonatal interventions such as uncontrolled oxygen in preterm newborns can easily cause harm*(30)* leading to retinopathy of prematurity and blindness*(33)*. Similarly, poor infection prevention and control practices can cause avoidable infections and the development of antimicrobial resistance. Hospital-acquired infections (HAI) are common in low-resource settings*(34)* and outbreaks of multi-resistant

infections have been detected in neonatal facilities in humanitarian settings when microbiology has been available*(35)*. Healthcare organizations should develop mechanisms for monitoring the minimum infection prevention and control (IPC) standards and surveillance tools for HAI that are user-friendly and adapted to settings when microbiological facilities are unavailable.

Guidelines for IPC and water, sanitation and hygiene (WASH) should include an explicit focus on maternal and newborn care, including integration with essential newborn care practices. New technologies should be carefully considered and introduced, on the condition that they are accompanied by adequate IPC guidelines and training and practice can be maintained and monitored.

Prevent inappropriate use of antibiotics

Access to appropriate antibiotics for neonatal sepsis is a primary concern in humanitarian settings. However, inappropriate antibiotic therapy in humanitarian and fragile settings is also a growing concern especially when poor IPC and WASH facilitate greater spread of antibiotic resistance*(35-40)*. Antibiotic stewardship encourages evidence-based prescribing in order to combat the overuse of antibiotics and prevent antimicrobial resistance. This requires greater consideration in protracted crises and settings where regulatory frameworks are weak or compromised or when drug donations are inappropriate and unmonitored*(41,42)*. Humanitarian and fragile settings should be included in the WHO Global Action Plan on Antimicrobial Resistance*(43)*, and WHO guidelines on drug donations should be reinforced with antibiotic donations carefully considered based on known microbiological epidemiology and the risk of introducing resistance.

Develop protocols for managing complex conditions when access to definitive care is impossible

Definitive care—the recommended treatment for management of a disease or condition—might be unavailable for many newborn conditions including congenital abnormalities. It is important to develop local protocols with alternative solutions for addressing the needs of newborns with complex conditions in humanitarian settings, which are in line with global standards, local context and resources. In all cases, there should be respectful approaches to care, counselling of parents, relief of suffering and palliative care, and prevention during future pregnancies where possible (e.g. folic acid for neural tube defects).

Prepare for infectious disease outbreaks

Pregnant or lactating women and newborns face unique challenges during infectious disease outbreaks. Preparedness and response planning for humanitarian interventions should include awareness among health workers about the prevention of infection among this population and appropriate care guidelines should be developed at the onset of the outbreak. Data and research to inform the outbreak response should not exclude pregnant women and newborns.

4 Register every birth and count every newborn death and stillbirth

Newborn deaths and stillbirths are often under-reported in humanitarian responses*(44)*. Their importance is often diminished when aggregated within the under-five emergency mortality threshold. Many mortality surveys and publications neglect to mention newborn deaths and stillbirths. Interventions also tend to focus on the post-neonatal under-five period. Additionally, the misclassification of newborn deaths and stillbirths can impact the accuracy of estimates.

SPOTLIGHT

Humanitarian worker in South Sudan

What caught our attention is our weekly mortality and surveillance data, and we realized the number of deaths had gone up! It is very unlikely that newborns are prioritized in humanitarian settings because responders focus on food, water, and primary health care.

Recognise and guarantee the rights of newborns including birth registration and legal status

Newborns born in humanitarian and fragile settings may face barriers to legal status and citizenship, which is often due to discrimination against race, ethnicity, religion, language or minority status. This can lead to barriers when accessing care. Newborns should be recognised as rights holders including the right to be registered and to health, according to the United Nations Convention on the Rights of the Child and the International Covenant on Economic Social and Cultural Rights.

Improve reporting of neonatal deaths, stillbirths, and proportion of under-five deaths among newborns

Mortality statistics are often limited by under-reporting and misclassification of neonatal deaths and stillbirths*(44,45)*. All births, newborn deaths, and stillbirths should be counted. This can be accomplished through improved training and quality assurance to encourage better reporting, including distinguishing between stillbirths and neonatal deaths. Ensure that neonatal deaths are disaggregated in surveys and surveillance. Innovative methods of surveillance and surveys should also be explored to improve data quality.

Implement maternal and perinatal death surveillance and response (MPDSR) where possible

Maternal and perinatal death review, as well as verbal autopsy, is a powerful tool to improve public health prevention and response at referral level facilities when used appropriately. MPDSR requires capacity and training, adaptation to different legal and cultural environments, national guidelines, and multi-stakeholder engagement inclusive of communities*(46)*. As part of quality of care improvement efforts, adapt and implement tools to conduct mortality audits and reviews of stillbirths and maternal and neonatal deaths where possible. Implementation research is also needed to monitor context-specific barriers and facilitators and outcomes for MPDSR.

5 Strengthen linkages with key humanitarian sectors across the continuum of care

Gains in maternal and newborn health rely heavily on investments in other sectors such as family planning, nutrition, immunization, mental health, and WASH. The maternal and newborn community must take a multi-sectoral approach and engage other actors as core partners to achieve improvements, and other sectors should explore how their services can be improved to meet the needs of mothers and newborns.

Increase routine training on newborn care for managers and health providers

Trainings on maternal and newborn health should include sessions relevant for program managers and supportive staff to understand the key lifesaving maternal and newborn interventions that should be included in program proposals. Program managers should also lead the development of action plans that highlight key gaps and activities for maternal and newborn health, including medical equipment and supplies.

Advocate for newborn health in the planning and coordination of the response

The design and provision of temporary, semi-permanent, and permanent facilities should consider the needs of mothers and newborns. This includes adequate space for breastfeeding, breastmilk expression, KMC, and management of sick newborns. Every effort should be made to minimize overcrowding of maternity wards to reduce the risk of HAI among newborns. Communities should also be consulted on the design of culturally acceptable facilities and staffing.

SPOTLIGHT

Humanitarian worker in Rohingya Crisis

Targeted violence against the Rohingya community in Myanmar has resulted in distrust of public health services. Community health workers have strengthened trust through community engagement and support to facilitate uptake of services. Newborns face challenges in receiving postnatal care since women are also encouraged to stay indoors for 40 days after birth. Reaching women in this context with critical information depends on effective community-based programming.

Integrate care in community health programs particularly in settings with low rates of institutional delivery

Humanitarian settings often disrupt continuous access to facility-based care. When this happens, community-based services are an essential mechanism to maintain or increase coverage of interventions. Community health programs can be resilient to disruptions resulting from insecurity*(47)* and can stimulate demand for facility-based care*(48)*. During humanitarian emergencies, maternal and newborn care can be integrated into existing community-based platforms, such as integrated community case management programs. This requires consideration of national programs and thoughtful investment in community health worker training, supplies, and supportive supervision.

Link mothers to family planning services

Integration of family planning during antenatal and postnatal care can improve newborn outcomes by encouraging early initiation and exclusive breastfeeding and improving spacing between pregnancies. Reproductive, maternal, newborn, and child health organisations should build partnerships and share data to maximise opportunities. Partnership with initiatives such as Family Planning 2020 can expand collaboration with non-humanitarian and country level actors to promote integration of services.

Leverage existing nutrition interventions so newborns can have a healthy start

Food security can be a major challenge in humanitarian and fragile settings. Improving maternal and newborn health begins with ensuring access to food and maternal nutritional counselling and support, in addition to iron and folic acid supplementation. Humanitarian actors should ensure that maternal, infant and young child nutrition interventions are delivered as an integrated package of maternal, newborn and child health interventions. These interventions include support for early initiation of breastfeeding; protection, promotion and support of exclusive breastfeeding during the first six months of life; and recognition, diagnosis and treatment of maternal acute malnutrition prenatally and postnatally. In the first days and weeks after birth, breastfeeding counselling and support for exclusive breastfeeding are crucial to the mother and the newborn.

Newborn care is also integral to infant and young child feeding programmes, based on the 2017 Operational Guidance on Infant and Young Child Feeding in Emergencies (IYCF-E)*(18)*. A partnership with the nutrition sector is required to achieve effective monitoring of inappropriate donations of BMS, and the inappropriate use of feeding equipment such as bottles and teats. Maternal, newborn and child health interventions should be integrated in nutrition and community health funding proposals to ensure growth and development monitoring and the continuum of care between the newborn and infant period. Linkages with IYCF safe spaces like mother baby areas and IYCF-E corners should be in place to ensure that both the mother and the newborn receive ongoing support and nutritional care. Further research is needed to address the evidence gap in re-lactation strategies and management of malnutrition under six months of age*(49)* and to develop relevant preparedness policies.

SPOTLIGHT

Humanitarian worker in Indonesia

During the 2006 earthquake in Yogyakarta, Indonesia, BMS donations were uncontrolled and widespread. In a study of 831 children aged 0-23 months, 75% of households had received donated infant formula, which was associated with more than double the risk of diarrhoea. This demonstrated how inappropriate BMS donations in emergencies can undermine child health.

Incorporate routine EPI activities in postnatal care

Programs providing maternal and newborn care in humanitarian settings often occur in parallel to routine EPI activities and this creates missed opportunities for vaccination of newborns and young infants. Health partners should coordinate EPI activities and postnatal care between maternity and immunization programs, particularly for vaccines given at birth in high-incidence settings or in the newborn period, including those for hepatitis B, Bacille Calmette-Guerine (BCG) for tuberculosis, and polio. Delivery of early vaccinations and other injections should be harmonised with the promotion of early and exclusive breastfeeding. Staff in routine EPI activities should be trained to promote essential newborn care and recognize and refer sick newborns.

Integrate a nurturing care framework to improve early childhood development

Children born in humanitarian crises are at high risk of adverse developmental outcomes, with potential negative intergenerational consequences*(50)*. Interventions should be considered through the lens of WHO's 2018 document *Nurturing Care for Early Childhood Development: A Framework for Helping Children Survive and Thrive to Transform Health and Human Potential(51)*. The framework details the policies, programmes and services needed to promote child development, and this framework is relevant to the humanitarian sector. Nurturing care enables communities and caregivers to promote the health and nutrition of their children and creates opportunities for early learning through stimulation and responsive and supportive interactions*(51)*. Programs should take a holistic approach by empowering caregivers with the needed resources and skills to provide developmentally supportive care, and newborn services can be linked to these early childhood development programs*(51)*.

Link with WASH partners to minimize the risk of infection

Newborns are particularly vulnerable to infections related to poor water and sanitation, particularly when breastfeeding is compromised or when traditional practices include provision of water. Mothers and caregivers of newborns should be a priority audience in WASH activities, and interventions should be specifically tailored to their needs in the community and health facility. There is a need to develop and disseminate IPC- and WASH-specific standards for maternity wards in humanitarian settings.

Promote maternal mental health and psychosocial support

Humanitarian crises are often associated with significant distress. Within established referral protocols, pregnant and lactating women should be prioritized for psychosocial services for their own mental health and the potential impact on their newborn's health due to disrupted breastfeeding. Maternal and newborn health programs should be linked to mental health support for a full range of scenarios including but not limited to psychiatric disorders, post-traumatic stress disorder, depression, sexual violence, and pregnancy or neonatal loss. Responses may include non-clinical and innovative approaches, such as women's groups and peer-to-peer support.

Engage with child protection services and pathways

Child protection challenges are complex and context specific, which requires agencies and stakeholders to share experiences, learning, guidance and information where appropriate. Addressing child protection requires communication and coordination between agencies to link health services with child protection pathways. Newborns should be included in strategies that establish minimum standards for child protection in humanitarian response*(52)*.

Implement conditional cash transfers for social protection

Challenges and competing priorities faced by pregnant women, new mothers, and caregivers in humanitarian and fragile settings may undermine their capacity to provide care for their newborns, particularly small or sick newborns requiring prolonged care. Innovative approaches such as enhanced cash or in-kind transfers that are sensitive to the needs of mothers and newborns should be the focus of further implementation research.

6 Facilitate coordination across the humanitarian-development nexus

Although mortality may decline after the acute phase of a humanitarian crisis*(53)*, the need for maternal and newborn health services continues. In protracted crises, the distinction between humanitarian response and development can become blurred. Collaboration between the two approaches can lead to better outcomes, reduce risks and build upon the comparative advantages of a diverse range of actors. Care must be taken, however, as development is sometimes considered inherently political; keeping the distinction between 'humanitarian' and 'development' activities may in some contexts help humanitarian organisations to maintain neutrality.

Transition from the MISP to comprehensive reproductive health services when rebuilding the national package of health services

There is often a delayed transition from the MISP to comprehensive reproductive health services once the acute phase of the emergency is over. Coordination and planning across the humanitarian-development nexus should improve the transition to comprehensive reproductive health services.

Strengthen collaboration between national governments and humanitarian and development actors where possible

Humanitarian and development actors and national governments often function with parallel coordination mechanisms and limited communication or integration. In protracted situations, collaboration in coordination platforms, especially during activities such as joint assessments and gap analyses, and when developing national health strategies is crucial for maternal and newborn health.

Implement an Every Newborn Action Plan

The Every Newborn Action Plan (ENAP) provides a framework, including indicators and targets, for newborn health that is increasingly being adopted by countries affected by a humanitarian crisis. Countries should ensure that maternal and newborn care are included in national emergency preparedness plans, and these plans should include newborn interventions that should be implemented and a dedicated budget in case of a humanitarian crisis. Communication and coordination, including sharing of information and tools, between the development and humanitarian sectors can align humanitarian activities to address national and global targets for newborn health.

Ensure sustained funding for protracted emergencies

Explore innovative financing and engagement of donors who traditionally provide development assistance. Maternal and newborn health is particularly sensitive to weak health systems during the transition from the humanitarian to development phase. Humanitarian and development funding should be integrated and sustained with longer funding cycles.

7 Empower communities and governments through partnerships that promote innovative and sustainable services

Communities play a significant role in the provision of newborn health services especially when there is limited access to health facilities. Humanitarian actors can reinforce linkages between the different levels of care in partnership with the community. Strong leadership by national and local governments, particularly during emergency preparedness, can contribute to rapid improvements in maternal and newborn survival during crisis. This leadership is vital towards maintaining sustainable progress. Governments can develop policies and allocate resources to ensure mothers, pregnant women and newborns receive the care they need during an emergency.

SPOTLIGHT

Humanitarian worker in Philippines

In the case of a disaster, positioning essential newborn care as a preparedness intervention is the main lesson we learned. This includes having a national health policy in place, mapping service delivery capacity, defining training capacities among local health workers, and having an emergency information system in case records are destroyed.

ACTIONS Integrate newborn care in national policies and strategies

Key actions from the *Global Strategy for Women's, Children's and Adolescent's Health* should be adopted in national strategies and policies in humanitarian and fragile settings. Governments should ensure that newborn care is addressed in national policies and integrated in national curricula for midwifery and nursing training institutions, health information systems and essential medicines list.

ACTIONS Invest in the public health system to prevent newborn deaths and stillbirths during an emergency

Strengthen resilience at national and sub-national levels by integrating priority maternal and newborn health interventions in preparedness and response plans. Response plans and maternal and newborn health guidelines can be promoted through forums that bring together national, local, international humanitarian and development actors.

Standard operating procedures should be in place for:

1. National plans on provision of maternal and newborn services
2. Availability of a skilled health workforce for newborn care including regular training and task sharing
3. Infrastructure for maternity wards
4. Essential medicines and commodities
5. Universal access to services at each level of care
6. Community-based newborn services
7. Health information system with a minimum set of maternal and newborn indicators
8. Safe referral and transportation system for mothers, pregnant women and newborns
9. Guaranteeing human rights and safeguarding dignity
10. Counselling on re-lactation and newborn feeding in adherence with the WHO International Code for BMS

Invest in training and supportive supervision for health workers

Training, support, and adequate resources must be put in place in order for frontline health workers– from midwives, nurses and community health workers to the physicians and specialist nurses in referral hospitals to the support staff who keep emergency responses running– to do their jobs effectively. In the long term, such investments are vital for building up health systems, in anticipation of the time that stability is achieved, and affected countries return to the normal tasks of delivering health care.

Invest in women's health groups and community health workers

Community engagement can be a powerful method to increase trust and cooperation among host and crisis-affected populations. This can build trust towards emergency responder and help the dissemination of information about maternal and newborn care. Ensuring sufficient numbers of community health workers are trained, equipped and adequately supervised can promote activities and retention. Where they already exist or can be created, women's health groups can promote uptake of antenatal care, facility deliveries, postnatal care, breastfeeding support, and family planning. Engage with other community networks (e.g. adolescents, religious leaders and health committees) to promote maternal and newborn health and reinforce linkages with health facilities along the referral continuum. Although evidence does not support having traditional birth attendants (TBAs) conduct deliveries, engaging TBAs to strengthen recognition and referral for danger signs can be beneficial. Further research should be conducted in humanitarian settings on the training and supervision of lay health workers and to explore how to engage women's health groups in maternal and newborn care.

Promote a family-centred approach

Family-centred care includes minimizing separation of the mother and newborn and creating a supportive environment for families to care for their newborns in the health facility and their community. This approach should be used to create enabling environments for families to care for their newborns by adapting facility-based care where possible and with enhanced support in the community in the form of nutrition, in-kind support, WASH, and social protection.

Engage the community on ethical issues

Maternal and newborn care in humanitarian and fragile settings often presents difficult ethical decisions, such as treatment for extremely low birth weight babies, congenital anomalies, palliative care, and caesarean sections for fetal indications, in regions with potentially unsustainable access to comprehensive emergency obstetric care. Promote discussion with women and their communities and families about ethical issues to encourage joint ownership of ethical frameworks between communities and health actors. The establishment of 'ethical committees' should be considered, including local women, and integrating these within decision-making processes at the health cluster level.

Amplify the role of communities in the delivery of maternal and newborn health services; recognizing they are both the immediate and long-term responders in humanitarian settings.

Partner with the private sector to encourage accountability and equity

The private sector is an important partner in humanitarian response when interventions are properly supervised and regulated according to high procurement standards. Perverse incentives which lead to inappropriate interventions, such as high rates of caesarean sections, should be actively monitored and limited. Accountability mechanisms should be in place for private sector providers for maternal and newborn care, while avoiding conflicts of interest as recommended by the independent accountability panel of *Every Woman Every Child*.

Invest in training and supportive supervision for health workers

Training, support, and adequate resources must be put in place in order for frontline health workers– from midwives, nurses and community health workers to the physicians and specialist nurses in referral hospitals to the support staff who keep emergency responses running– to do their jobs effectively. In the long term, such investments are vital for building up health systems, in anticipation of the time that stability is achieved, and affected countries return to the normal tasks of delivering health care.

8 Explore innovative approaches and conduct research to support service delivery in humanitarian settings

Evidence from various settings has identified effective newborn interventions that reduce mortality across the continuum of care. However, limited information exists on the implementation of these interventions in humanitarian contexts. Using methodology developed by the Child Health and Nutrition Research Initiative, a research agenda has been used to generate priority questions to improve newborn survival in humanitarian settings*(54)*. Further implementation research is needed to understand the models of care best suited for contexts with limited health system capacity, including cost implications. Innovation, with support from global partnerships, can provide novel opportunities to reach populations with limited accessibility and to build the capacity of local institutions.

Disseminate scientific evidence to encourage uptake of newborn interventions

At the global level, findings from studies that highlight evidence-based interventions for newborns should be shared widely using the Healthy Newborn Network and other relevant platforms. Implementing partners and UN agencies should be responsible for the timely dissemination of findings to policymakers in humanitarian and fragile settings to ensure rapid uptake and scale up of evidence-based interventions in a responsive and contextualized manner.

Invest in implementation research to inform the delivery of evidence-based interventions in diverse contexts

Evidence-based interventions tested in resource-limited settings are can be highly applicable to humanitarian settings. This includes community-based newborn care, chlorhexidine for cord care (if newborn mortality is greater than 30 deaths per 1,000 livebirths)*(55-58)*, simplified antibiotic regimens at the community level when referral is not possible*(59,32)*, KMC*(60-62)*, and others. Implementation studies are needed to understand factors that influence the success or failure of evidence-based interventions when they are translated to practice in humanitarian settings.

Explore training frameworks for task-sharing

Humanitarian situations are frequently associated with severe human resources shortages, meaning task-shifting becomes inevitable. Legal frameworks often prevent task-sharing, which may or may not always be appropriate. Emergency preparedness plans should consider capacity building to allow for the expansion of the roles of health workers to ensure adequate coverage of essential interventions during crisis. Partnerships with community-based midwives, through training and task-shifting strategies that include proper monitoring, can increase access to care when facility-based services are disrupted.

Evaluate the use of new technologies in humanitarian settings

Several new technologies adapted to low-resource settings are relevant in certain humanitarian settings (e.g. bubble continuous positive airway pressure, low flow oxygen metres, upright resuscitators, color-coded thermometers, IV drip rate regulators, point of care testing, light-emitting diodes phototherapy, low cost incubators, and oxygen delivery mechanisms). However, interventions that increase the complexity of care can have unintended consequences on competing priorities and quality of basic care such as essential newborn care or infection prevention and control*(63)*. The evidence base for existing technologies may not always apply to low-cost adaptations; therefore, introduction of new technology should carefully consider the context including existing human resources, IPC standards, and sustainability and whether adapted technologies offer the expected benefits of the original intervention. Procedures should evaluate locally adapted equipment to ensure it is achieving the desired effect and not causing unanticipated harm. Implementation research can assess the outcomes, cost-effectiveness, and impact of new technologies on competing priorities in humanitarian settings.

Leverage digital advances to strengthen the capacity of health workers

Digital technologies such as mHealth, eHealth, telemedicine and telemonitoring are becoming available and have the potential to improve communication, training, quality of care, task-shifting and data collection in difficult-to-reach locations. Digitization can also provide access to decision-making support and specialist advice. In planning the implementation of maternal and newborn care, digital technology should be assessed for its ability to increase quality, capacity, competency and cost reduction.

9 Increase the visibility of newborns in humanitarian settings

Experience suggests that newborn health is often missed as a priority during a humanitarian response and is often regarded as a 'development sector' activity to be left until the later stage of the emergency. Publicizing high maternal and neonatal mortality rates and stillbirth estimates and gaps and priorities in newborn care is essential for galvanizing attention (*see Box 5*). Ultimately, it is hoped that this will lead to improved program funding and wider implementation and integration of newborn services in the affected communities. Civil society organizations, including humanitarian actors, community members and local government leaders, should be involved early on to help define needs and existing resources for newborn health. This participatory process can formalize contributions to the health system and promote supportive attitudes towards preventing newborn mortality and stillbirths.

SPOTLIGHT

Humanitarian worker in Iraq

The first thing is having an evidence-based advocacy plan to influence national counterparts and to use it to plan and monitor activities. We inserted newborn health-related indicators in the health management information system, and we used this information very loudly and tactfully in every meeting.

ACTIONS Elevate newborn health on the agenda of humanitarian response planning, prioritization and coordination

Humanitarian health actors need to assess the extent to which humanitarian response planning has included newborn health priorities throughout the phases of the emergency. This should include during coordination between agencies, representation of newborn health at the health cluster level, and ensuring that guidelines and standard operating procedures and monitoring and evaluation frameworks address maternal and newborn health.

ACTIONS Define and communicate alert levels for neonatal mortality and stillbirths in every crisis

Emergency mortality thresholds exist for overall populations and under-fives, notably the crude mortality rate and the under-five morality rate. However, no specific definitions exist for emergency thresholds or unacceptable rates for neonatal mortality, stillbirths and maternal deaths. Each humanitarian response should consider defining and communicating alert levels of neonatal mortality, stillbirths and maternal deaths, based on on pre-crisis or national level estimates.

ACTIONS Ensure maternal and newborn indicators are central to decision-making across the humanitarian-development nexus

Maternal and neonatal mortality rates are useful indicators of the strength of the health system, and these rates can be used as important indicator of the level of assistance required. This data should be considered alongside crude and under-five mortality rates and factored in the decision-making process related to humanitarian assistance and ongoing health system support.

Encourage positive attitudes toward newborn survival in emergencies

As documented throughout this report, most newborn deaths can be prevented with cost-effective, lifesaving interventions even in difficult circumstances. Field experience strongly suggests that there is often limited awareness of the preventability of newborn deaths and an overreliance on highly medicalised care, while essential newborn care is overlooked and undervalued. In the community, messaging campaigns about lifesaving newborn care can improve social perceptions and norms about newborn survival and inspire behaviour change.

Partnership, Participation, & Financing

To effectively implement the *Global Strategy for Women, Children, and Adolescents' Health 2016-2030* and achieve the SDGs, the global community must continue to advocate, innovate, expand, coordinate, and push forward a progressive agenda aimed at ensuring high quality health care for the most vulnerable populations—every mother and newborn—in these especially challenging environments. New sources of funding and innovative financing mechanisms are needed to support the acute phase of an emergency in addition to multi-year planning in protracted situations. The role of national governments should be enhanced to ensure sustainability through the allocation of financial resources for maternal and newborn care in the context of the humanitarian-development nexus. Decision makers need to commit to collective action to address newborn survival in humanitarian and fragile settings.

The existing workstream on newborn health in humanitarian settings within ENAP should be expanded to include humanitarian actors such as UNHCR, Save the Children, Inter-agency Working Group for Reproductive Health in Crises (IAWG), Global Health Cluster, and other relevant bodies who are empowered to oversee progress and hold partners accountable. This workstream should coordinate efforts related to the provision of guidance, resource mobilisation, measuring progress, advocacy and awareness raising, liaison with key initiatives, and technical assistance.

Partnerships to Leverage Newborn Survival

Global policymakers

- Strengthen policy guidance on integrating maternal and newborn health services in national and regional emergency preparedness, response, and recovery plans.
- Integrate newborn health indicators in cross-sectoral coordinated needs assessments and monitoring frameworks.
- Strengthen guidance to address the needs of pregnant women and newborns in surveillance, prevention, and response activities during infectious disease outbreaks
- Engage private sector and professional societies to innovate and implement healthcare technology and training resources in humanitarian and fragile settings.
- Strengthen guidance to address the needs of pregnant women and newborns in surveillance, prevention, and response activities during infectious disease epidemics
- Engage private sector and professional societies to innovate and implement healthcare technology and training resources in humanitarian and fragile settings.

Implementing organizations

- Implement priority newborn health interventions, consistent with global guidance, at the onset of humanitarian emergencies.
- Build capacity of healthcare providers through training, mentoring, or similar performance improvement approaches to ensure they have competencies in all seven signal functions of basic emergency obstetric, essential newborn care, and care for small and sick newborns, which are underpinned by respectful maternity care.
- Preposition supplies to ensure life-saving commodities are available at onset of humanitarian emergencies.
- Challenge organizational norms to strengthen collaboration between maternal and newborn health and other priority sectors, and between humanitarian and development actors
- Engage in respectful partnerships with communities to promote newborn health services and behaviors.
- Partner with academic institutions to strengthen the evidence base of effective interventions, including community-based approaches for newborn health in humanitarian settings.
- Collect data and report on field implementation of maternal and newborn care interventions.
- Partner with academic institutions to build evidence of effective community-based approaches for newborn health in humanitarian settings.

Donors

- Encourage and fund partnerships that aim to support and enhance the maternal-newborn dyad and local service delivery efforts during emergencies.
- Require reporting on core newborn health indicators when funding health activities from the onset of an emergency.
- Support research activities that build the evidence-base of effective newborn health interventions in humanitarian and fragile settings.
- Expand multi-year, flexible funding to support newborn health across the humanitarian-development nexus and contribute to rapid funding mechanisms for humanitarian emergencies.

MONITORING PROGRESS

Global Milestones

Year	Global Benchmarks
2020	▪ Focal person or global secretariat is established to oversee and monitor implementation of strategy ▪ Existence of a convening mechanism for newborn health in humanitarian and fragile settings ▪ Roadmap is endorsed by Global Health Cluster Strategic Advisory Group ▪ Work plan for newborn health in humanitarian is drafted ▪ Key actions within the strategy are integrated in other priority sectors' action plans ▪ Global targets to track newborn health are refined, as needed, to reflect humanitarian settings and targets are endorsed by global leads
2021	▪ Newborn mortality is disaggregated when reporting child mortality in all humanitarian reporting ▪ Health funding appeals include core newborn indicators and interventions at the onset of an emergency ▪ Joint needs assessments address gaps in newborn health ▪ Humanitarian health agencies designate a focal person for newborn health
2022	▪ Essential drug lists or supply kits include recommended newborn supplies from *Newborn Care Supply Kits for Humanitarian Settings* ▪ Newborn policies are integrated in preparedness plans ▪ Humanitarian health organizations develop policies and guidelines on perinatal death audits ▪ Training protocols for humanitarian health organizations at the community and facility level include newborn care ▪ Work plan for newborn health in humanitarian settings is costed with an identified funding mechanism for the next five years
2023	▪ Humanitarian health organizations adopt and train community-based cadres on newborn care ▪ Every Newborn Action Plans are developed for countries with a humanitarian or fragile setting ▪ At least 55 countries adopt a minimum set of indicators for newborn health in humanitarian settings
2024	▪ Neonatal mortality and stillbirth rate are reduced in 10 humanitarian settings ▪ 15 research studies are conducted (or in progress) on priority questions for maternal, stillborn, or newborn care in humanitarian settings from 2020-2024

Minimum Set of Indicators for Maternal and Newborn Health in Humanitarian Settings

Indicator type (definition)	Indicator type (core/extended)	Settings (acute/protracted)	Type of reporting (facility/population-based)
Impact			
Neonatal mortality: # of deaths in the first 28 days of life / 1000 live births, disaggregated by early neonatal (<7 days after birth) and late neonatal (8-28 days after birth)	Core	Acute, protracted	Facility, population-based
Cause of death by age (days): # of newborn deaths by age and cause of death (preterm, intrapartum, infection, congenital, other)	Core	Acute, protracted	Facility
Stillbirth: # of fetuses and newborns born after 28 weeks gestation or ≥ 1000g with no sign of life life / 1000 live births, disaggregated by fresh and macerated stillbirth	Core	Acute, protracted	Facility, population-based
Maternal mortality: # of maternal deaths / 100,000 livebirths	Core	Acute, protracted	Facility, population-based
Coverage/Outcome			
Perinatal death reviews: # of perinatal death reviews	Extended	Protracted	Facility
Newborn morbidities identified during postnatal care: # of newborns with any health condition attributed to or aggravated by pregnancy and childbirth identified during postnatal care	Extended	Protracted	Facility, population-based
Low birth weight: # of live born neonates with weight < 2500g at birth	Core	Acute, protracted	Facility, population-based
Infants weighed at birth: # of newborns weighed at birth	Extended	Protracted	Facility
KMC at facilities: # of health facilities that provide KMC	Core	Protracted	Facility
Availability of BEmOC facilities # of facilities with delivery services able to provide all 7 signal functions of BEmOC	Core	Acute, protracted	Facility
Availability of CEmOC facilities # of facilities with delivery services able to provide all 9 signal functions of BEmOC	Core	Acute, protracted	Facility
Small and sick newborn care coverage: # of small and sick newborns that received care (KMC, inpatient care, NICU)	Core	Acute, protracted	Facility
Neonatal resuscitation at facilities: # of health facilities with delivery services that are able to provide neonatal resuscitation	Core	Protracted	Facility
Newborn admission to hospital care: # of newborns admitted to KMC or NICU	Core	Acute, protracted	Facility
Possible severe bacterial infection (PSBI) treatment coverage: # of newborns with PSBI that receive treatment	Extended	Protracted	Facility
Hepatitis B birth dose coverage: # of newborns who received Hepatitis B birth dose	Extended	Protracted	Facility
Early initiation of breastfeeding coverage: # of newborns breastfed within 1 hour of birth or prior to discharge	Extended	Protracted	Facility
Postnatal care coverage: # of newborns who had a postnatal care visit within 2 days	Core	Acute, protracted	Facility
Birth registration: # of children registered or with a birth certification	Extended	Protracted	Facility

YEAR ONE ACTION PLAN

During the February 2019 global expert meeting, stakeholders came together and agreed on these key priorities for the next year. The action plan will continue to be updated on an annual basis.

Activities

Strategy launch at upcoming high-level events

TASKS

- Publish paper on process of Newborn Strategy
- Disseminate MNH advocacy paper and advocacy briefer on newborns
- Launch Declaration
- Develop infographics and social media strategy

Identification of entry points in sectors

TASKS

- Develop a 'cheat sheet' of entry points to use during messaging at inter-cluster meetings
- Promote inclusion of maternal and newborn porin joint needs assessments and indicators

Identification of investment priorities during pre-crisis and recovery phase

TASKS

- Improve messaging on investment priorities for pre-crisis and recovery MNH activities
- Integrate MNH priorities in contingency plans and national policies
- Explore alternate funding mechanisms

Improvement of mortality measurement and data collection and use

TASKS

- Disaggregate neonatal mortality in child mortality reports
- Count stillbirths in health information systems
- Harmonize indicators and data collection tools
- Measure broader program implementation

Activities

Advancement of community-based newborn care

TASKS

- Widely utilize and focus community-based interventions on supporting essential newborn care
- Identify and monitor task sharing roles for community-based health workers and traditional birth attendants

Priortisation of facility-based newborn care

TASKS

- Build internal technical skills required for maternal and newborn care in implementing organizations
- Identify referral pathways for levels of care early on and support the referral chain, including those in host communities
- Measure quality of care at health facilities
- Utilise contact with mother to refer for other services including nutrition and mental health support

Use technology and innovative approaches

TASKS

- Train midwives to use portable ultrasound remotely connected to a radiologist to review images
- Set up social media groups for health care providers to share lessons learned
- Produce print materials and low-cost newborn simulators to support Helping Babies Breathe in humanitarian and fragile settings
- Disseminate the Safe Delivery App for training skilled birth attendants on safe delivery and care for small babies

Improve coordination between humanitarian and development actorss

TASKS

- Empower a global focal point or secretariat for newborn care in humanitarian settings to coordinate the strategy execution alongside partners and initiatives
- Influence existing platforms to expand newborn health portfolio in humanitarian settings within the health cluster and ENAP
- Identify focal points at country level within health cluster to work alongside the newborn focal person at Ministries of Health
- Work with Ministries of Health to develop preparedness plans that includes newborn care including through the ENAP
- Use ENAP annual assessments to measure level of preparedness planning at the country level
- Support planning for human resources for health including training programmes

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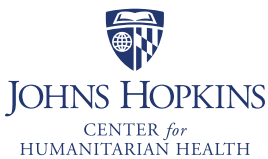

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