

DELIVERING OUR FUTURE: SURVIVAL AND HEALTH FOR EVERY NEWBORN

In 2012, an estimated 2.9 million babies died in the newborn period (during the first 28 days of life).¹ Approximately three-quarters of these deaths occurred within the first week and one third on the day of birth. An additional 1.2 million babies died during labour (intrapartum stillbirths).² Most of these deaths are preventable, however there are many missed opportunities to save lives and prevent disability. Improving care for women and babies is not just the right thing to do - it is highly cost-effective, providing a triple return on investment by preventing maternal deaths, stillbirths, and neonatal deaths. It is also the best test of universal health care in practice. Babies can die within minutes and are our most vulnerable health system users. Harnessing the power of families and communities is essential to a world where newborn deaths are no longer believed to be inevitable.

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What we know

Newborns at the heart of the unfinished business of the Millennium Development Goals

Around 3 million newborns die each year, part of the unfinished business of the Millennium Development Goals, and closely linked to 2.6 million third trimester stillbirths that did not count in the Goals. Yet this unacceptable number of deaths has received insufficient visibility and resources on global and national agendas. Newborn deaths and stillbirths are reducing at a slower rate than under-five deaths and maternal deaths.^{1,2,3} As a result, 44% of all deaths amongst children under age five now occur in the first month of life. The pace of change differs by region, country, and within countries. The heaviest burdens and the slowest reductions are in South Asia and sub-Saharan Africa. The gap between rich and poor countries, and between families within countries, remains unacceptably high. In many countries the poorest households are twice as likely to experience a newborn death compared to the richest households.

The three major causes of newborn deaths - prematurity, childbirth complications, and severe infections - account for

more than 85% of all neonatal deaths globally.⁴ Small babies (those who are preterm, small for gestational age, or both) have the greatest risk of death and disability.^{5,6} Rapid advances have been made in reducing neonatal tetanus, with some progress towards preventing deaths from other infections. However, over 40% of all maternal deaths, stillbirths and neonatal deaths occur during labour or on the day of birth and ensuring quality care at this time remains a challenge. There has been limited, if any, improvement in reducing newborn deaths and disability due to complications of labour and childbirth and complications of preterm birth in the past decade.²

We have the knowledge and tools to prevent many of these deaths. As a part of the Global Strategy for Women's and Children's health, the *Every Newborn* action plan and series in the *Lancet* will focus attention on newborn health and context specific actions for improving care at birth and care of small and sick newborns to invest in human capital.

Every Newborn Action Plan: www.everynewborn.org

What works

The opportunities for improving newborn health are unprecedented. Effective newborn health interventions form one component of integrated health services across the reproductive, maternal, newborn and child and adolescent continuum of care (Figure 1). Within this continuum, three critical areas emerge for preventing newborn deaths and disability: care during labour, childbirth and immediate newborn care, including resuscitation and management of complications; care for the normal newborn (e.g. hygiene, warmth, and breastfeeding); and care for the sick and small newborn. Improving family planning empowers women and reduces newborn death and stillbirths. Preconception care and antenatal care are critical for both women and babies,

including infection prevention and nutrition interventions, and management of pregnancy such as care for women with HIV and prevention of mother-to-child transmission.

The intrinsic link between the survival, health and nutrition of newborns and the mother is well established, with the time around labour and childbirth being the period of highest risk for both. Enabling access to skilled care at birth for all women and newborns, and emergency obstetric and newborn services when complications occur is crucial. Many deaths can be prevented even in settings without access to intensive care. Focused care by skilled health workers who are adequately equipped and supported to deliver essential care can dramatically impact survival – but a sense of urgency is critical in these hours of highest risk.

To save the lives of women and their babies, care must be accessible and affordable. Community health workers and extension workers can play an important role in supporting families to adopt healthy practices, encourage delivery in a health care facility, and ensure timely referral of mothers and newborns if needed. Many countries have incorporated newborn care into the package of services provided at the community level. Mechanisms to engage communities, support families, and mobilise demand for services, such as women's groups and peer counsellors, have been shown to be effective, equitable strategies.

Figure 1

The Reproductive, Maternal, Newborn and Child Health Continuum of Care





Accelerating action to save lives

Despite well-known solutions, critical gaps in coverage, quality of care, equity, and human resources present barriers to saving newborn lives.⁷ The *coverage gap* is the difference between current coverage and full or universal coverage that reaches all families with essential care. While over 80% of women around the world access care at least once during their pregnancy, only half receive four or more visits. Nearly half of births in low-income countries occur without a skilled attendant, placing women and their babies at great risk if complications occur. Even fewer mothers and babies have postnatal contact with providers who can deliver interventions that save lives and promote health. Closing the coverage gap for care around the time of birth requires investment across the health system to reduce barriers to care-seeking and eliminate bottlenecks.

The *quality gap* is the difference between coverage of basic care and provision of the most effective interventions through client-friendly services. Programmes to improve quality of care and address missed opportunities particularly around the time of birth and to identify and treat sick and small newborns have the potential for massive impact and can serve as sensitive indicators of overall health system quality and performance. However, very little routine information is collected on quality of newborn care services and therefore limits the ability to evaluate efforts to reduce such quality gaps.

The *equity gap* – the difference between the care received by the most vulnerable families compared to the least vulnerable – remains hidden within averages. Poverty, inequality, and fragile or conflict-affected settings undermine care for mothers, newborns and children. Low education levels, gender discrimination and a lack of empowerment prevent women from seeking health care and making the best choices for themselves and their children's health. Closing this gap requires intersectoral actions such as expanding educational programmes, improving living and working conditions, increasing access to clean water and adequate sanitation, and progress towards universal health coverage.

The current *gap in human resources* for newborn care is one of the biggest challenges to overcome. 40 million women give birth each year without support from a midwife or other skilled health worker; 2 million of these women give birth completely alone.⁸ Ensuring the availability of a skilled and equipped health worker during and after a birth depends on a functioning health system available 24/7. There is an even greater gap for workers skilled in care of small and sick newborns. No country has achieved major reductions of newborn deaths without a focus on preterm baby care.

Rapidly accelerating progress will require task shifting and innovation in service delivery and technology, as well as major investment in equitably deployed, skilled human resources and essential commodities (Box 1).

Box 1

Health workers and essential supplies needed to achieve universal coverage and quality of care

Access to high quality healthcare is a human right. Improved access to life-saving commodities and well-supported health workers is necessary to reach every woman and newborn and reduce inequities. Four cost-effective and evidence-based, but often overlooked commodities for newborn health include corticosteroid injections for women with threatened preterm labour to improve lung maturation in preterm babies; resuscitation devices to help babies breathe; chlorhexidine to prevent umbilical infections; and injectable antibiotics to treat newborn sepsis. Universal coverage of these four products in high-mortality countries could save around 1 million newborn lives, many on the first day and most in the first week.⁷ These products, which cost between USD 13 cents and \$6 each are ready for scale-up now within appropriate packages. Other newborn health interventions involving behavioural change, such as kangaroo mother care and early and exclusive breastfeeding, would save many more lives. In order to effectively deliver care and promote healthy behaviours, skilled health workers, particularly midwives and neonatal nurses, are urgently needed.

Strategic communication is needed to change social norms, promote optimal health behaviours, and increase access. Education and information are crucial for empowering parents, families and communities to demand quality care at birth and for small and sick newborns. Evidence has shown the power of engaged families, community leaders, women's groups, and community workers in turning the tide for better health outcomes for newborns (Box 2).



Photo: World Vision / Claudia Martinez

Box 2

Parent groups and women's groups for social change

Parents and communities can be a powerful force for advocacy and behaviour change. Increasingly, parents are organising to raise awareness, facilitate health professional training and public education, and improve quality of care.¹⁰ Parent groups are uniquely positioned to support each other as well as bring visibility to newborn health and survival to motivate action amongst government, professional organizations, civil society, and the business community.

Women's groups, specifically those that involve participatory learning and action, can have a dramatic effect in reducing both maternal and newborn mortality in low- and middle-income countries, leading to better home care practices, social support, enhanced decision-making skills, gender empowerment, increased care-seeking, and stronger community cohesion to tackle major barriers, such as transport or financing of emergency care.¹¹

Useful resources

- Every Newborn Action Plan: www.everynewborn.org
- Healthy Newborn Network: www.healthynewbornnetwork.org
- Countdown to 2015: www.countdown2015mnch.org
- WHO Department of Maternal, Newborn, Child, and Adolescent Health: www.who.int/maternal_child_adolescent/topics/newborn/en/

Conclusion

Reduction of global newborn mortality is achievable through accelerated scale-up of what is known to work. The key ingredients are in place with effective interventions, but more investment is needed to equip and support health workers and increase involvement and integration amongst a diversity of partners within reproductive, maternal, newborn and child health and beyond. Efforts must focus on evidence-based country plans, transparency and mutual accountability, and global communication and social mobilisation.⁴ This is an important time for newborns, with unprecedented attention and opportunity to focus on making a difference for the world's most vulnerable. Rapid change is possible and the *Every Newborn* movement provides an important opportunity for action. We all have a role to play in leading this change for survival and a healthy birth for every woman and every newborn.

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Available on-line at <http://portal.pmnch.org/>

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