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## Every Newborn

An Executive Summary for *The Lancet's* Series



“A healthy start is central to the human life course, with birth holding the highest risk of death, disability, and loss of development potential, leading to major societal effects.”

## Every Newborn

Following *The Lancet* Neonatal Survival Series in 2005, this Every Newborn Series presents the clearest picture so far of the ongoing slow progress in newborn survival and stillbirths, providing new focus beyond survival, and combining research and reality in countries to set targets

for post-2015 to ensure that every newborn has a healthy start in life. This Series of five papers<sup>1-5</sup> was contributed to by more than 55 experts from 29 institutions in 18 countries, and it provides the evidence base and foundation for the Every Newborn Action Plan.

### Key findings

- **Ending of preventable child deaths:** Accelerated change for child survival, health, and development needs more focus on a healthy start to life. With 2.9 million newborn babies dying annually, accounting for 44% of deaths in children younger than 5 years of age, progress has been slow and is now impeding change for child survival worldwide. Closely linked to this situation are the 2.6 million babies stillborn every year, almost half of which occur during labour.
- **Prioritisation of birth day risk:** The day of birth is the most dangerous for mothers and their babies, and results in more than 40% of maternal and newborn deaths and stillbirths. The cost of inaction devastates families and societies, and causes a major drain on human capital, through death, disability, poor growth, and lost potential for development and economic productivity.
- **Counting of every newborn baby:** One in three babies does not receive a birth certificate before their first birthday. Nearly all of the 5.5 million stillbirths and neonatal deaths each year have neither birth nor death certificates. This situation is indicative of fatalism around newborn deaths and stillbirths, despite the fact that most of these deaths are preventable. Preterm births, intrapartum complications, and infections are the leading causes of neonatal deaths.
- **Investment for a triple return:** Care around the time of birth saves mothers and their newborn babies and prevents stillbirths and disability. By 2025, high coverage of care would save 3 million lives (women, stillbirths, and neonates) every year at an additional running cost of US\$1.15 per person. Interventions delivered around the time of birth have the greatest potential (41% of deaths averted), followed by care of small and ill newborn babies (30%). Community care has a 25–30% effect on neonatal deaths. Meeting unmet need for family planning with modern contraceptives could halve the numbers of neonatal deaths and stillbirths.
- **Targeting of specific health system bottlenecks:** Important impediments to the scale-up of the most effective facility-based care include finance and workforce, especially skilled midwives and nurses. Some low-income and middle-income countries are making remarkable progress, innovating to reach the poorest families with higher quality care at birth and care for small and ill newborn babies.
- **Unprecedented opportunity for progress:** The Every Newborn Action Plan is based on epidemiology, evidence in this Series, and global and country learning, setting a framework to end preventable newborn deaths and stillbirths by 2035 in support of the UN Secretary General's Every Woman Every Child movement. The action plan will also advance standards for quality of care, measurement of births and deaths, and programmatic coverage through increased investment with accountability for results.

## Learning from the past decade—what needs to be done differently?<sup>1</sup>

### Changes, challenges, and progress

An assessment of progress in newborn health in the past decade based on a policy heuristic considered five categories: agenda setting, policy formulation and adoption, implementation, evaluation, and leadership and partnership. Since *The Lancet* Neonatal Survival Series was published a decade ago, substantial progress has been made in terms of evidence-based agenda setting and formation and adoption of policy for newborn health.

However challenges remain: preterm births continue to rise and stillbirths remain largely invisible on the global health agenda. Investments in neonates have been disproportionately low compared with the burden.

Action at the national level has been inconsistent, although increased facility births provide opportunities for change. Closure of gaps in investment, implementation, and accountability are required to safeguard every newborn baby and ensure a healthy start to life.



Paprika

### Definitions

- Neonatal death: a live-born baby who dies within the first 28 days after birth.
- Stillbirth: for international estimates, the WHO definition is all pregnancy losses after 28 weeks of gestation (third trimester) or weighing  $\geq 1000$  g.
- Low birthweight: a baby born weighing  $< 2500$  g. Low birthweight can be due to being born too early (preterm) or term but small for gestational age.

### Investment

More funding is essential for change to take place in countries. Less than 10% of official development assistance for maternal, newborn, and child health, and less than 4% of child health funding, mentions the

word “newborn”, with only two mentions of “stillbirth”. However, it is a myth to assume that funding “maternal, newborn and child health” will automatically

finance the specific additional investments in skills, commodities, and practices required to reduce newborn deaths (figure 1).

#### What needs to be done differently for newborn babies?

Improved child survival depends on increased investments in newborn babies. Rapid progress is possible if:

- Targets to reduce newborn deaths and stillbirths are in the post-2015 framework with accountability tracking
- Every baby is counted at birth and social norms shift from acceptance of deaths of women or babies as inevitable
- Investments prioritised and increased from national governments and donors
- Interventions are integrated into reproductive, maternal, newborn, and child health and nutrition programmes and implemented at scale so that newborn babies and their mothers receive high-quality care
- Innovation is increased and implementation research is undertaken
- Indicators are used to track intervention coverage, quality, equity, and effect, with accountability for results
- Political action and leadership is intensified, especially in high-burden countries, and leadership is cultivated

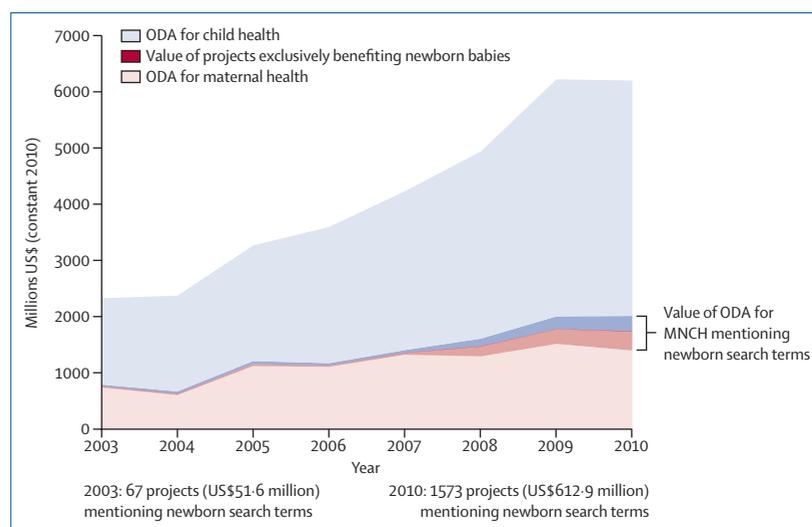


Figure 1: Changes in official development assistance (ODA) for maternal, newborn, and child health as tracked by Countdown to 2015

## Progress, priorities, and potential beyond survival<sup>2</sup>

### Ending newborn deaths in a generation

Since 1990, under-5 and maternal deaths have been halved worldwide owing to the Millennium Development Goals (MDGs). However, the average annual progress for reductions in neonatal mortality rate (2.0%) was much lower than the rate recorded for children aged 1–59 months (3.4%) and maternal mortality (2.6%) during the same period. The estimated 2.6 million stillbirths every year were invisible in the MDGs, and rates of reduction are even slower (around 1%).

Every Newborn sets bold, but achievable, targets for newborn mortality and stillbirths in the next two decades (figure 2). Countries that are already on track should set specific subnational equity targets to reach those left behind, and to maximise development outcomes and minimise disability.

These targets were set through a consultative process with direct inputs from more than 43 governments, 23 global organisations, and more than 2000 individuals and multiple data scenarios for every country aligning with the under-5 mortality targets set by A Promise Renewed in 2035. In consultation, there was a clear

demand for a specific goal for stillbirths to ensure visibility and accountability for progress.

### Priorities based on data

**How many?** 2.9 million newborn babies die and 2.6 million babies are stillborn every year.

**Where?** More than 75% of newborn deaths occur in south Asia and sub-Saharan Africa (figure 3). In 2012, nine countries had a neonatal mortality rate (NMR) of more than 40 deaths per 1000 livebirths, most countries were from sub-Saharan Africa and more than half were affected by conflict.

**When?** The time of labour and the day of birth is when 46% of all maternal deaths and 40% of all stillbirths and neonatal deaths occur. About three-quarters of all neonatal deaths occur during the first week of life, with 1 million babies dying on the day they are born.

**Which causes of death should we focus on?** In 2012, complications from preterm births, intrapartum-related disorders or birth asphyxia, and infections (especially sepsis, meningitis, and pneumonia) were the main causes of neonatal deaths.

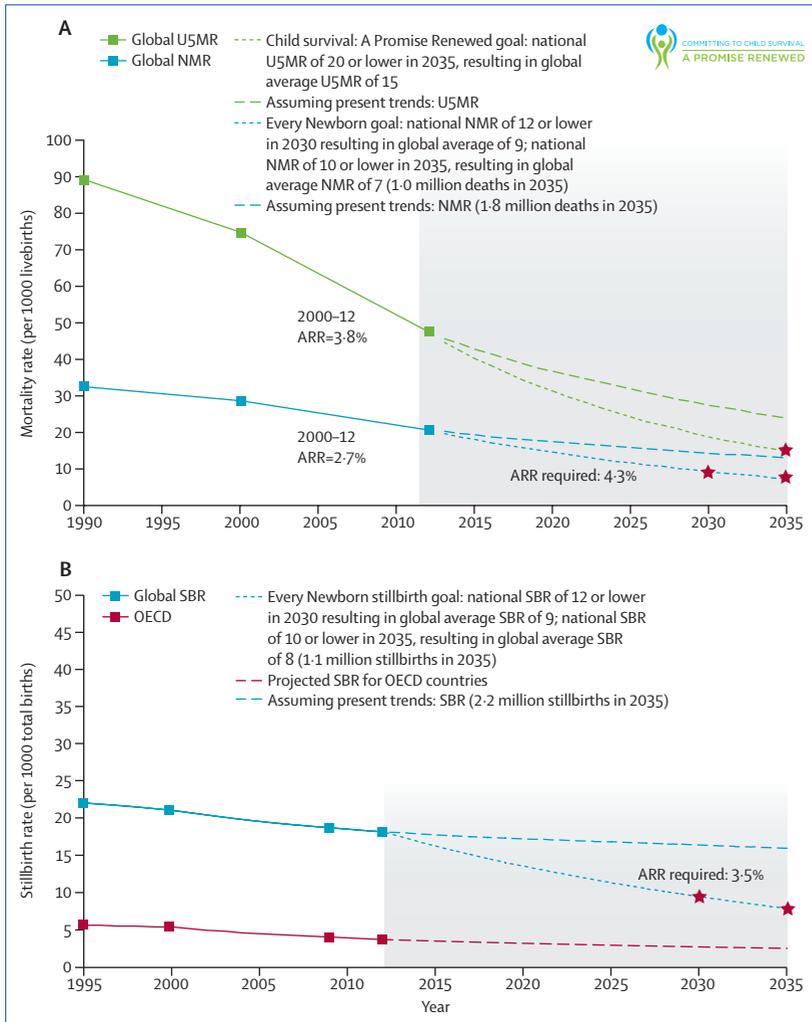


Figure 2: Progress, projections, and goals to 2015 and beyond (U5MR=under-5 mortality rate. NMR=neonatal mortality rate. SBR=stillbirth rate. ARR=annual reduction rate)

Every newborn counts

About a third of babies do not have a birth certificate by their first birthday, with the countries with the highest mortality rates having the lowest coverage of both birth and death registrations (figure 3). Worldwide, nearly all of the 5.5 million stillbirths and neonatal deaths each year are never recorded and represent societal and health worker acceptance of the issue. Birth and death registrations provide nationally representative, timely data, and also represent a shift in social norms by the counting of every newborn and stillbirth. Global momentum to improve civil and vital registration is important, and the human face of this is represented by those who at present are counted the least: newborn babies and stillbirths.

**Why focus on small babies?** Small babies face the highest risk of death in utero, during the neonatal period, and throughout childhood. More than 80% of neonatal deaths in sub-Saharan Africa and south Asia occur in small babies, and many could be prevented with simple newborn care. Small babies are also at a raised risk of longer term complications, including stunting, loss of human capital, and non-communicable diseases.

**Beyond survival?** Every year, an estimated 19 million newborn babies face life-threatening conditions, including preterm birth, intrapartum-related brain insults, severe bacterial infection, and pathological jaundice. At least 1.5 million newborn babies survive with long-term disabilities every year.

The triple challenge for newborns

In many cases, the countries with the highest neonatal mortality rates also have the highest number of deaths and the slowest progress for reducing neonatal mortality. At present rates of progress, it will be more than a century before a baby born in Africa has the same chance of survival as one born in a high-income country; this is three-times longer than it took in high-income countries before the advent of intensive care, despite the possibility of more rapid progress now given new evidence and many feasible innovations.

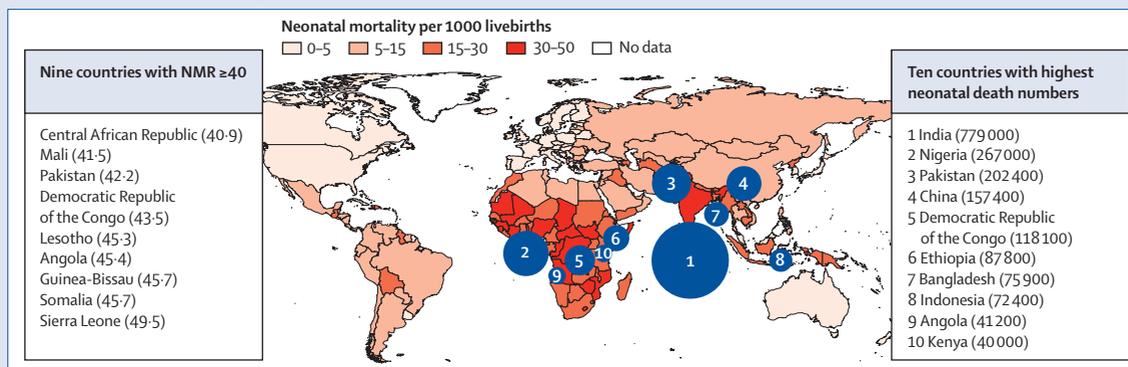


Figure 3: Variation between countries in neonatal mortality in 2012

## Ending preventable newborn and maternal deaths, plus stillbirths<sup>3</sup>

Based on systematic reviews, the Lives Saved Tool (LiST) was updated to estimate the effect and annual incremental running costs of increased coverage of care on stillbirths and maternal and newborn deaths in 75 Countdown high-burden countries.

### Packages of care that save the most lives

**Care around the time of birth** (41% of total effect) including skilled care and emergency obstetric care, immediate care for every newborn baby (breastfeeding support, cord and thermal care), and newborn resuscitation (figure 4) could prevent 1.5 million maternal and newborn deaths and stillbirths by 2025.

**Care of small and ill newborn babies** (30% of total effect) could achieve the next highest effect, preventing almost 600 000 newborn deaths by 2025. This result is possible without intensive care (figure 4), through kangaroo mother care, prevention or management of neonatal sepsis, neonatal jaundice, and neonatal encephalopathy after intrapartum hypoxia.

**A lifecycle approach**, especially meeting unmet need for family planning, could lead to large reductions in

### How many lives will be saved and at what cost?

By 2020, closure of the quality gap through the provision of effective care for all women delivering in facilities, and their newborn babies, could prevent an estimated 113 000 maternal deaths, 531 000 stillbirths, and 1.325 million newborn deaths, at an annual running cost of about US\$0.91 per person. By 2025, high coverage of preconception, antenatal, intrapartum, and postnatal interventions at an annual running cost of US\$5.65 billion (additional cost of US\$1.15 per person) could avert 54% of maternal deaths, 33% of stillbirths, and 71% of newborn deaths. This achievement would be a triple return on investment that amounts to US\$1928 for each life saved. Meeting of unmet need for family planning would be synergistic, contributing to around a halving in births and therefore deaths.

By 2035, with universal coverage, which meets the targets for neonatal mortality rate and stillbirth rate, and also includes increased use of modern contraceptives to address unmet need for family planning, more than 4 million lives would be saved every year. Most of the effect (82%) is due to facility-based care that, although more expensive, also has a greater effect.

child deaths (47%) and stillbirths (64%). Antenatal and postnatal preventive care, including support for breastfeeding, are also important. Achieving equitable high coverage of facility care and healthy home behaviours requires community approaches such as women's groups and home visits. In difficult-to-reach contexts, specific curative care is an evidence based option.

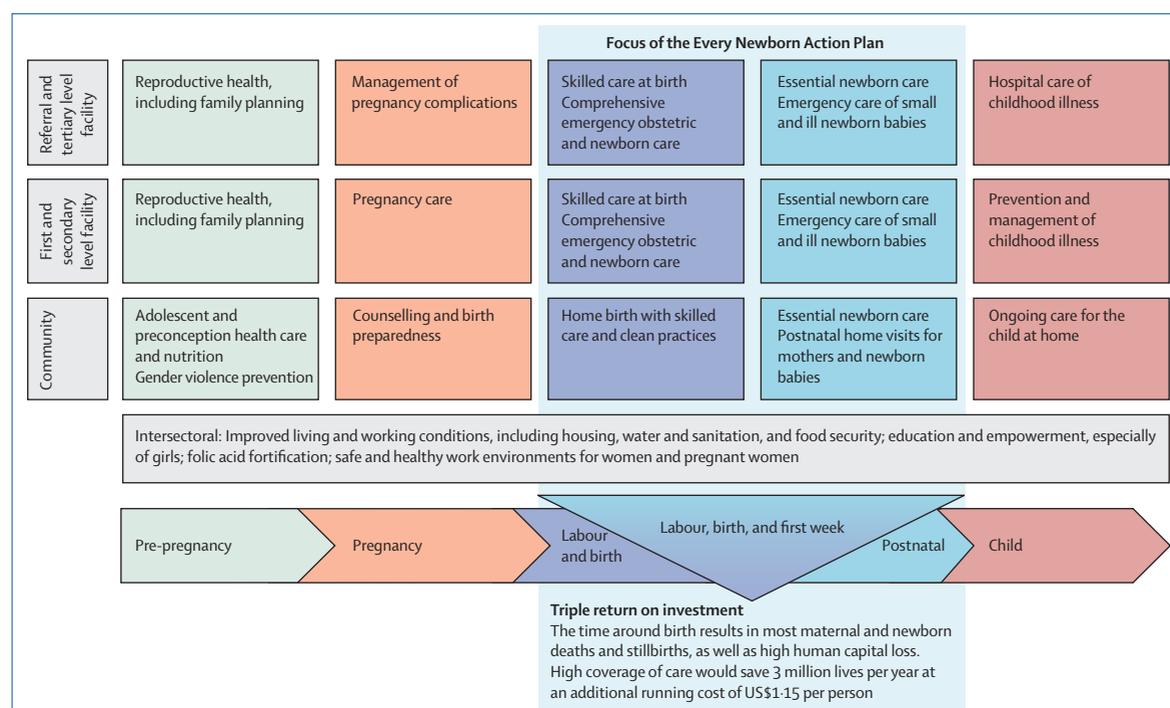


Figure 4: The continuum of care showing the focus of the Every Newborn Action Plan on birth and care of small and ill newborn babies

## Reaching every woman and newborn with high-quality care<sup>4</sup>

We undertook systematic assessments of health system bottlenecks constraining the scale-up of care at birth and for small and ill newborn babies. The assessments involved more than 600 experts, identifying 2465 bottlenecks and solutions in eight countries (>50% of the burden) (figure 5).

### Context-specific health systems constraints

High-burden countries have similar health system challenges, particularly for financing (notably higher out-of-pocket expenditure) and health workforce (low health workforce density of doctors and midwives). Context-specific health data are important since an intervention might be perceived feasible in some

countries but challenging in others. For example, kangaroo mother care was judged highly feasible in African countries but challenging in Asia.

### Crucial interventions with major bottlenecks

Some interventions have several bottlenecks—management of preterm births, inpatient care of ill and small newborn babies, and management of severe infections. Others, for example essential newborn care, have few major bottlenecks but might rely on behavioural changes by families and health workers.

### Rapidly progressing countries

Specific strategies can overcome bottlenecks and improve access to and quality of care, including workforce planning to increase numbers and upgrade specific skills, task sharing, and incentives for rural health workers (Malawi); dynamic leadership including innovation and community empowerment (Nepal); and financial protection such as health insurance, conditional cash transfers, and performance-based financing (Peru). If all countries achieved the same rate of progress for newborn survival as their rapid progressing regional neighbour, then the Every Newborn target for 2035 would be met.

#### Every Mother Every Newborn quality of care—an evidence-based package for change

As a milestone from the Every Newborn Action Plan and the maternal goal-setting process, many partners will work together to develop a mother and baby friendly quality improvement initiative including global standards. The focus will be on the crucial time periods of labour, childbirth, and the first week of life, and promotion of respectful care. The priority will be to close the quality gap for facility-based care for women and babies while strengthening links with communities. Norms and standards will be specified and metrics for tracking quality will be a key component. Learning from the Baby Friendly Hospital Initiative, mortality audit processes, and other quality improvement experiences will inform national ownership and sustainability.

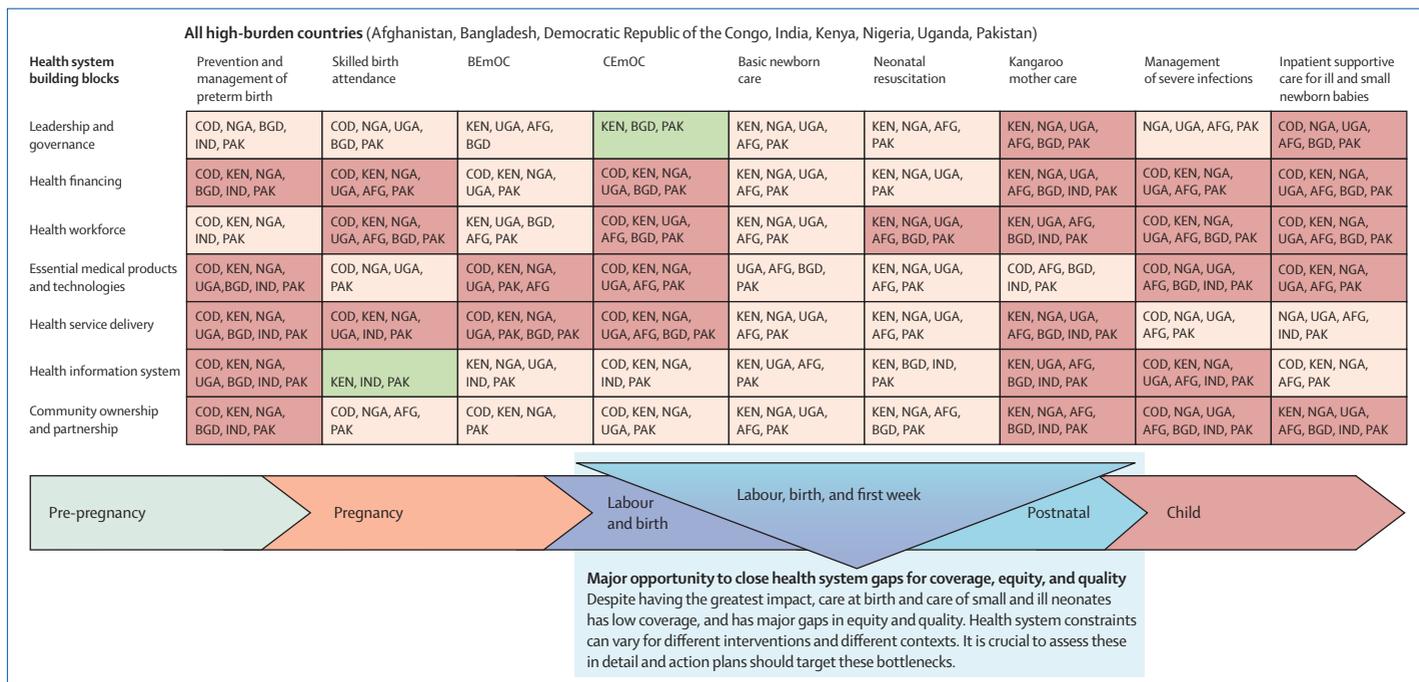


Figure 5: Country assessment of health system bottlenecks for scale-up of care at birth and care of small and ill newborn babies (green=1–3 countries, orange=4–5 countries, red=6–8 countries)

## Call for action—a promise for newborn babies<sup>5</sup>

Building on evidence from this Series and the Every Newborn Action Plan, we call for a renewed commitment to dramatically improve the health and survival of newborn babies and women and end preventable stillbirths in the next two decades—within our generation.

### Goals in the post-2015 development framework

Explicit national and global goals should exist for newborn babies and stillbirths. These targets align with the A Promise Renewed target for children, with interim targets for 2030, and are in support of targets to end preventable maternal mortality. These targets are to reduce national neonatal mortality to fewer than ten deaths per 1000 livebirths and stillbirth rates to fewer than ten per 1000 total births by 2035, resulting in global averages of seven and eight, respectively. Specific subnational equity targets should also be set to reach those left behind, and to maximise development outcomes and minimise disability.

### Implementation and national action

Countries should update their national health strategies to include Every Newborn mortality goals, coverage targets, and milestones. National strategies should relate to existing processes, such as health sector planning and A Promise Renewed, linked to the following five objectives: (1) focus on care at birth for women and their babies, targeting small and ill newborn babies; (2) address quality of care, including through adoption and scale-up of the Every Mother Every Newborn package and addressing health system bottlenecks, especially the shortage of midwives and neonatal nurses, commodities, and robust, lower cost devices; (3) ensure equitable care for the poorest women, including universal financial protection; (4) empower parents to raise their voices, especially women; and (5) establish a monitoring and accountability framework to ensure that every woman and every newborn baby are counted at birth.

### Investment

- Increased investments from governments and donors and more intentional targeting from existing global funds.

- Implementation research and upstream research investments are crucial to accelerate progress.

### Intentional development of technical capacity and leadership

- Strategic development of high-capacity leadership in high-burden countries that includes clinical, public health, and research.
- Enabling parent and women's groups to empower women and ensure that parents' voices are heard by policy makers.

### Milestones

Every Newborn sets milestones for partners and national governments:

- Every Mother Every Newborn quality improvement package with evidence-based norms and standards for quality care for mothers and neonates around birth.
- Global campaign for birth and death registration, to provide data and guarantee every newborn baby the right to care, nutrition, and education, committing to "Count Every Newborn" with a birth certificate, shifting social norms to ensure that babies can and should survive.
- Definition of a comprehensive, evidence-based package to reduce stillbirths. More research and innovation to address stillbirths is crucial.
- An accountability framework that links to the post-2015 architecture, with strong ownership by national governments, as well as tools to ensure parents and communities will hold their leaders accountable for progress.
- Definitions and measurement for the ten core Every Newborn indicators, along with an agenda for countries and partners to increase the frequency and quality of relevant data and link this to programmatic action.



### Parent's voice for change

The voices and actions of affected communities can be the most vocal agents for change, as seen for AIDS and as is now occurring for maternal deaths. Increasingly, parents are making arrangements among themselves to raise awareness, petition governments for policy changes, and call for improved quality of facility health professional training and public education on care for babies, particularly around World Prematurity Day. However, there needs to be deliberate effort to empower and engage the most affected women who are heard the least, especially in communities where the burden is highest.

For more on the [Series](http://www.thelancet.com/series/www.Lancet.com/everynewborn) see <http://www.thelancet.com/series/www.Lancet.com/everynewborn>

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## Linked comments

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More information on what you can do is available from: [www.everynewborn.org](http://www.everynewborn.org) [www.healthynetwork.org](http://www.healthynetwork.org)

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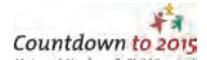
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