A DECADE OF CHANGE FOR NEWBORN SURVIVAL

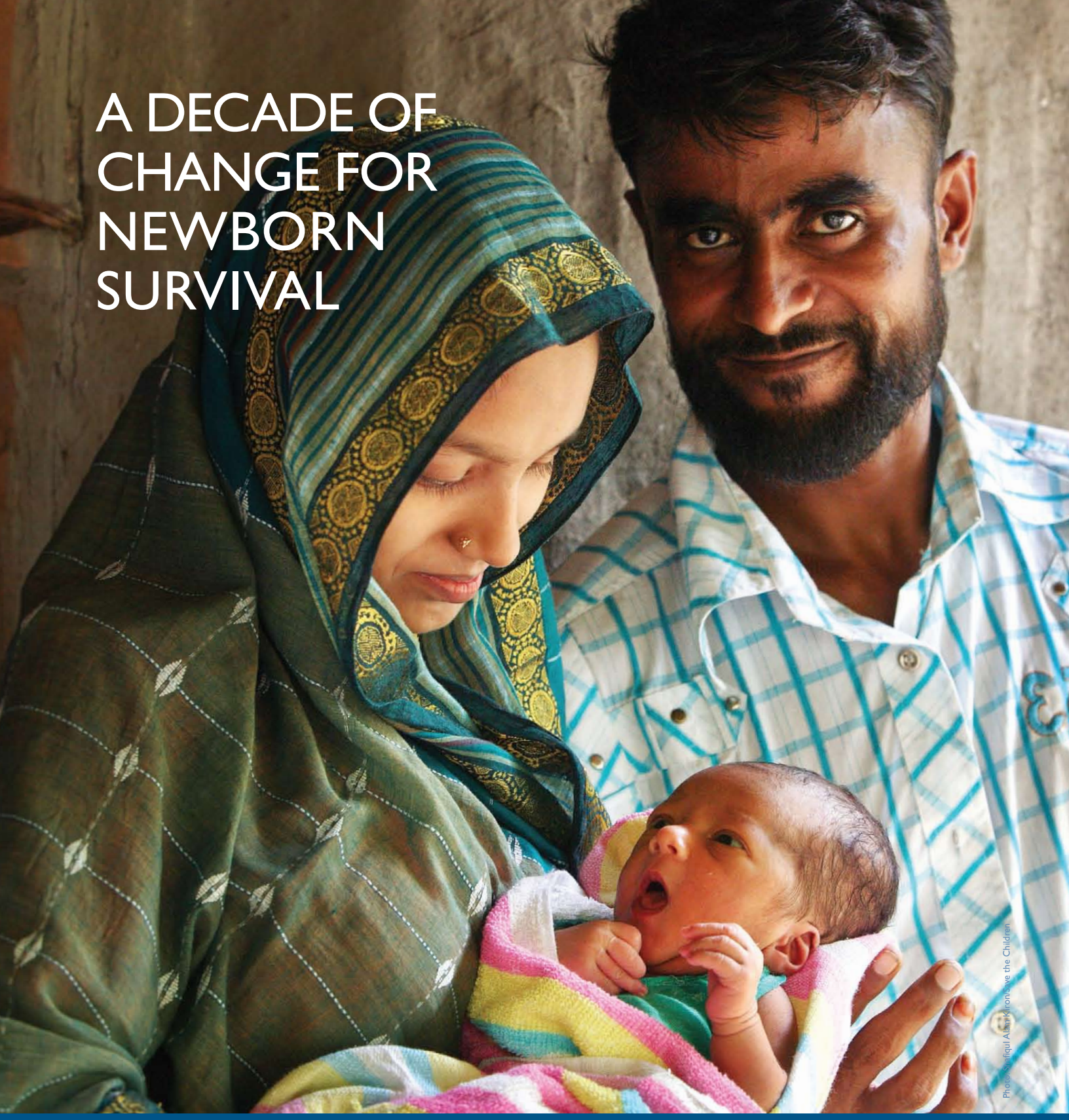

Photo: Saifiqul Alam Khan/Save the Children

Changing The Trajectory For Our Future

Executive Summary | *Health Policy and Planning* | Supplement 3, 2012

Save the Children

SUPPLEMENT ON A DECADE OF CHANGE FOR NEWBORN SURVIVAL

This supplement presents a comprehensive multi-country analysis of the changes in newborn care and survival from 2000-2010 and 5 detailed country case studies in order to better understand the process of taking solutions to scale and how to accelerate progress for reduction of mortality and morbidity. It was authored by **over 60 health experts**, mainly from the countries involved, with contributions from an additional 90 experts and coordinated by Save the Children's Saving Newborn Lives programme. These analyses took over 3 years, using multiple data streams and new approaches to standardizing qualitative data regarding policy and programme change.

The 7 papers in *Health Policy and Planning*:

Newborn survival: changing the **trajectory** over the next decade. Darmstadt GL, Oot DA, Lawn JE. 2012. *Health Policy and Planning*. 27(Suppl. 3): iii1-iii5.

Newborn survival: a **multicountry** analysis of a decade of change. Lawn JE, Kinney MV, Black RE, Pitt C, Cousens S, Kerber K, Corbett E, Moran A, Morrissey CS, Oestergaard MZ. 2012. *Health Policy and Planning*. 27(Suppl. 3): iii6-iii28.

Benchmarks to measure readiness to integrate and **scale up** newborn survival interventions. Moran AC, Kerber K, Pfitzer A, Morrissey CS, Marsh DR, Oot DA, Sitrin D, Guenther T, Gamache N, Lawn JE, Shiffman J. 2012. *Health Policy and Planning*. 27(Suppl. 3): iii29-iii39.

Newborn Survival in **Bangladesh**: a decade of change and future implications. Rubayet S, Shahidullah M, Hossain A, Corbett E, Moran AC, Mannan I, Matin Z, Wall SN, Pfitzer A, Mannan I, Syed U for the Bangladesh Newborn Change and Future Analysis Group. 2012. *Health Policy and Planning*. 27(Suppl. 3): iii40-iii56.

Newborn Survival in **Nepal**: a decade of change and future implications. Pradhan YV, Upreti SR, KC NP, KC A, Khadka N, Syed U, Kinney MV, Adhikari RK, Shrestha PR, Thapa K, Bhandari A, Grear K, Guenther T, Wall SN for the Nepal Newborn Change and Future Analysis Group. 2012. *Health Policy and Planning*. 27(Suppl. 3): iii57-iii71.

Newborn Survival in **Pakistan**: a decade of change and future implications Khan, A, Kinney MV, Hazir T, Hafeez A, Wall SN, Ali N, Lawn JE, Badar A, Khan AA, Uzma Q, Bhutta ZA for the Pakistan Newborn Change and Future Analysis Group. 2012.. *Health Policy and Planning*. 27(Suppl. 3): iii72-iii87.

Newborn Survival in **Malawi**: a decade of change and future implications. Zimba E, Kinney MV, Kachale F, Waltensperger KZ, Blencowe H, Colbourn T, GeorgeJ, Mwansambo C, Joshua M, Chanza H, Nyasulu D, Mlava G, Gamache N, Kazembe A, Lawn JE for the Malawi Newborn Change and Future Analysis Group. 2012. *Health Policy and Planning*. 27(Suppl. 3): iii88-iii103.

Newborn Survival in **Uganda**: a decade of change and future implications. Mbonye AK, Sentongo M, Mukasa GK, Byaruhanga R, Sentumbwe-Mugisa O, Waiswa P, Sengendo HN, Aliganyira P, Nakakeeto M, Lawn JE, Kerber K for the Uganda Newborn Change and Future Analysis Group. 2012. *Health Policy and Planning*. 27(Suppl. 3): iii104-iii117.


Photo credit: The ONE Campaign and Living Proof

For the full supplement and complete list of contributors see visit A Decade of Change for Newborn Survival on the Healthy Newborn Network (www.healthynewbornnetwork.org).

Funding for this supplement was provided by the Bill & Melinda Gates Foundation through Save the Children's Saving Newborn Lives programme.

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DECADE OF CHANGE

HEADLINES FOR NEWBORN SURVIVAL

DEATHS

In 2010, **3.1 million newborns** died in the first month of life, 17% fewer than in 2000. The annual rate of reduction of the neonatal mortality rate (NMR) has accelerated globally since 2000 (2.1%), but remains slower than the rate of reduction for maternal mortality (4.2%) and mortality amongst children aged 1–59 months (2.9%). Reduction in NMR varies by region, with sub-Saharan Africa being left behind. In Asia and Latin America, fertiliy reductions contributed to improved neonatal survival. Newborn deaths from all causes have decreased, notably neonatal tetanus deaths.

AVERAGE ANNUAL MORTALITY REDUCTION

2.1% NEWBORN (<1 MONTH)
2.9% CHILD (1-59 MONTHS)
4.2% MATERNAL

CARE

There are **cost-effective, feasible interventions** to address the main causes of newborn deaths, but wide-scale coverage is lacking and metrics are missing, such as for Kangaroo Mother Care. From 2000 to 2010, births with a skilled attendant have increased by 12 million but quality of care in facilities has not kept pace. Some gains have been made for immediate and exclusive breastfeeding. Coverage of postnatal care remains below 50% in most low-income countries. Contextual factors, including political instability and humanitarian disasters, have impeded progress in many of the highest mortality countries.

BIRTHS WITH SKILLED ATTENDANT

63% IN 2000 ▶ 70% IN 2010

TOTAL FERTILITY RATE

2.8 IN 2000 ▶ 2.5 IN 2010

FUNDING

Funding for newborn care services and practices remains low. For countries with the greatest burden of maternal, newborn and child deaths, **over 40% of health financing is directly out-of-pocket** meaning that the poorest families are at the highest risk of financial catastrophe when mothers or babies have complications. Official development assistance for maternal, newborn, and child health doubled from 2003-2008, yet only 6% of this funding mentioned newborns in 2008 and only **0.1% of these funds exclusively targeted newborns**. National government funding would be the best source of funding but there is currently no standard for tracking national funding for reproductive, maternal, newborn and child health.

HEALTH EXPENDITURE THAT WAS PAID OUT-OF-POCKET

50% IN 2000 ▶ 41% IN 2009

OFFICIAL DEVELOPMENT ASSISTANCE MENTIONING NEWBORNS

$25 MILLIONS IN 2003 ▶ $234 MILLIONS IN 2009

COUNTRY CHANGE

To **understand the variation** between countries, we examined changes in policy and programmes to save newborn lives. NMR in 4 of the 5 countries highlighted has progressed faster than the regional average. Each country had a unique story but common themes emerged. Strong **leadership** and partnerships were critical to develop national strategies, programmes and to ensure **implementation**. Engaging user groups, particularly frontline health workers, has been effective in bringing life-saving newborn care closer to families. These countries also successfully used data and evidence to inform programme design.

NATIONAL REDUCTION IN NEONATAL MORTALITY VARIED FROM ZERO TO 58% REDUCTION IN 10 YEARS

WHY?

FUTURE

These analyses show that **changing the trajectory for newborn survival** is possible even in challenging settings. With the Millennium Development Goals deadline rapidly approaching and neonatal mortality contributing an increasing proportion of under-five mortality, the supplement brings optimism that change is possible. There is an urgent need to scale up care that reduces newborn deaths within the **continuum of care**, more investment, improving frontline worker capacity and changing social norms so that it is no longer acceptable for babies around the world to die of preventable causes.

UP TO 75% OF NEWBORN DEATHS CAN BE PREVENTED WITH SCALED UP CARE

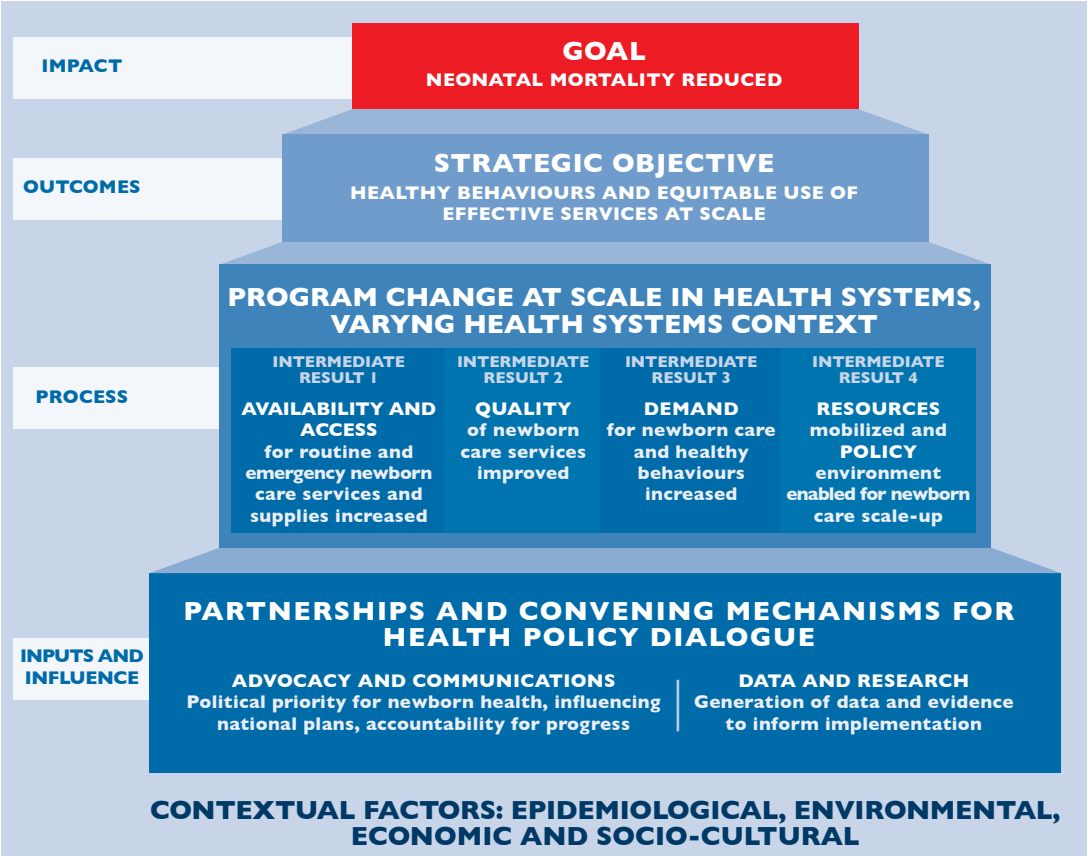
2000 | 2010

NEWBORN SURVIVAL - A FRAMEWORK FOR ACTION AND ANALYSIS

This supplement includes an editorial, a multi-country analysis, a description and results of a qualitative tool developed, and 5 detailed country case studies. These analyses examine neonatal mortality reduction from 2000 to 2010, considering associated changes in coverage of care and funding, as well as qualitative markers of health system and policy change, in order to identify common pathways to scale and potential accelerators and constraints. The evaluation applied a systems analysis approach, examining changes in mortality, health behaviors, interventions coverage, health system change, and inputs including funding using the Save the Children's Saving Newborn Lives programme result framework. Authors used comparable quantitative data sources as well as standard qualitative tools, including:

- a policy and programme timeline and
- a set of 27 Scale-up Readiness Benchmarks, that assess national progress towards programme readiness for implementation at scale for newborns.

FRAMEWORK



OBJECTIVES OF THE SUPPLEMENT

OBJECTIVE 1
Assess changes in neonatal mortality and causes of neonatal death

OBJECTIVE 2
Evaluate factors that may have contributed to mortality change including coverage of key health interventions and contextual factors

OBJECTIVE 3
Analyze funding flows (national funding and official development assistance)

OBJECTIVE 4
Examine policy and programme changes and inputs to identify pivotal events that may have contributed to scale up of newborn care

OBJECTIVE 5
Examine quantitative and qualitative data over time across multiple countries and consider implications for reducing neonatal mortality and scaling up of coverage of care in order to identify potential accelerators and constraints to inform future priorities for newborn care and public health more broadly

Data and Analyses: Multi-country, multi-factor analysis of neonatal mortality reductions, Policy and Programme Timeline and Scale-up Readiness Benchmarks

For more information see Lawn JE, Kinney MV, Black RE, Pitt C, Cousens S, Kerber K, Corbett E, Moran A, Morrissey CS, Oestergaard MZ.2012. Newborn survival: a multi-country analysis of a decade of change. *Health Policy and Planning*. 27(Suppl. 3): iii6-iii28.

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DECADE OF CHANGE

NEWBORN SURVIVAL BY THE NUMBERS

CHILD DEATHS UNDER THE AGE OF 5 YEARS

HIGHEST 10 BY NEONATAL MORTALITYRATES

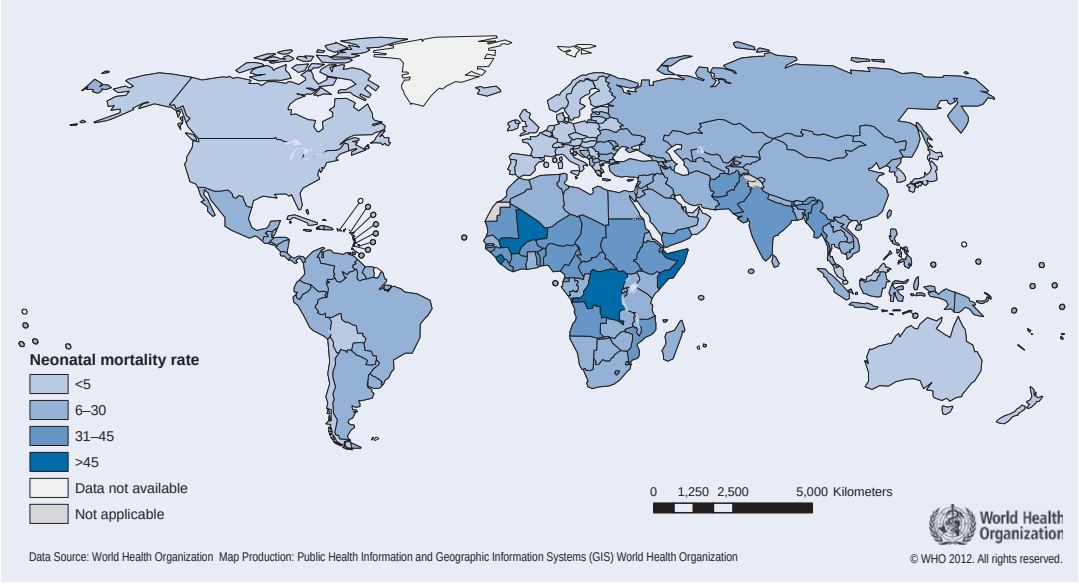
2000		2010	
SIERRA LEONE	53	SOMALIA	52
MALI	52	MALI	48
SOMALIA	52	DR CONGO	46
DR CONGO	48	SIERRA LEONE	46
ANGOLA	47	AFGHANISTAN	45
NIGERIA	46	CENTRAL AFRICAN REP	43
BURUNDI	46	BURUNDI	42
MOZAMBIQUE	45	ANGOLA	41
LIBERIA	45	PAKISTAN	41
PAKISTAN	45	CHAD	41

HIGHEST 10 BY NUMBERS OF NEWBORN DEATHS

	2000	2010
INDIA	1	1
CHINA	2	4
NIGERIA	3	2
PAKISTAN	4	3
BANGLADESH	5	7
DR CONGO	6	5
ETHIOPIA	7	6
INDONESIA	8	8
BRAZIL	9	(14)
AFGHANISTAN	10	9
SUDAN	(12)	10

*In 2010 Sudan pre-cession

NEONATAL MORTALITY RATES, 2010



Data Source: World Health Organization Map Production: Public Health Information and Geographic Information Systems (GIS) World Health Organization

FASTEST PROGRESS FOR NEWBORN SURVIVAL
(MORTALITY REDUCTION FROM 2000-2010)

SUB-SAHARAN AFRICA	SOUTHERN ASIA	DEVELOPED REGIONS	OTHER REGIONS
Botswana (38%)	Iran (34%)	Estonia (58%)	Oman (53%)
Namibia (35%)	Bangladesh (33%)	Belarus (55%)	Turkey (51%)
Rwanda (32%)	Nepal (3%)	Greece (55%)	El Salvador (46%)
Malawi (29%)	Bhutan (27%)	Slovenia (48%)	Peru (45%)
Tanzania (28%)	Sri Lanka (24%)	Ireland (47%)	Egypt (45%)

GLOBAL NEONATAL MORTALITY

PER 1,000 LIVE BIRTHS

28 IN 2000 ▶ 23 IN 2010

NEONATAL DEATHS

3.7 MILLION IN 2000 ▶ 3.1 MILLION IN 2010

ADDRESSING FERTILITY AND RISK OF NEONATAL DEATH RESULTS IN FASTER PROGRESS

NIGERIA

MORE NEONATAL DEATHS IN 2000 COMPARED TO 2010

BIRTHS ↑ 1.1 MILLION

DEATHS ↑ BY 6%

BRAZIL

MOVED OUT OF HIGHEST 10 BETWEEN 2000 AND 2010

BIRTHS ↓ 0.6 MILLION

DEATHS ↓ BY 49%

SOUTHERN ASIA

PROPORTION OF UNDER-FIVE DEATHS THAT ARE NEWBORN DEATHS

46% IN 2000 ▶ 49% IN 2010

SUB-SAHARAN AFRICA

PROPORTION OF UNDER-FIVE DEATHS THAT ARE NEWBORN DEATHS

30% IN 2000 ▶ 37% IN 2010

150 YEARS

UNTIL AFRICA'S NEWBORNS HAVE THE SAME SURVIVAL CHANCE AS BABIES IN US OR UK

DECADE OF CHANGE

NEWBORN SURVIVAL BY THE NUMBERS

DEVELOPED REGION
3% REDUCTION PER YEAR

CONSISTENTLY RAPID NEONATAL MORTALITY REDUCTION ACROSS COUNTRIES

STRONGEST PREDICTORS OF NMR CHANGE:
- INCREASED NATIONAL INCOME
- REDUCED FERTILITY

OTHER REGIONS
3.2% REDUCTION PER YEAR

VARIABLE CHANGE IN MORTALITY REDUCTION ACROSS COUNTRIES

STRONGEST PREDICTORS OF NMR CHANGE:
- REDUCED FERTILITY
- BASELINE LEVEL OF NEONATAL MORTALITY

SUB-SAHARAN AFRICA
1.5% REDUCTION PER YEAR

MORTALITY REDUCTION SO SLOW THAT IT IS DIFFICULT TO ANALYZE WHAT FACTORS RELATED TO CHANGE.

UNDERSTANDING NEONATAL MORTALITY CHANGE

In some countries, newborns face a more certain future than 10 years ago, yet in other countries very little has changed. The rate and causes of NMR reduction differed across regions. According to the multi-country multi-factor analysis in the supplement, countries that have achieved increases in contraceptive use, and concurrent reductions in fertility, have made more progress. However, progress for NMR reduction cannot currently be attributed to increased change in coverage of care due both to slow changes in coverage and the lack of coverage data for some important interventions such as kangaroo mother care.

For sub-Saharan Africa, on average, there has been no statistically significant change in neonatal mortality over the past decade. Without a dramatic change in the trajectory for Africa it is estimated that it will take over 150 years for an African newborn to have the same chance of survival as one born in Europe or North America. In contrast, five African countries have reduced neonatal deaths by over 25%, more than double their neighbours.

There are a handful of countries, mostly middle-income countries in Eastern Europe and Latin America, which have halved neonatal deaths in the last decade, primarily associated with economic progress. Yet, in some countries, especially in South Asia, significant improvements occurred even in the absence of economic progress. Sri Lanka, for example, halved neonatal deaths due to prematurity despite a destabilizing internal conflict and weak economic growth, extending their strong primary care system with effective referral level newborn care. Despite limited economic growth and recurrent political instability, Bangladesh and Nepal are on track to meet MDG 4 and have reduced neonatal mortality by more than the regional average (see country fact cards).

Important lessons emerge, especially around seizing opportunities to integrate newborn care interventions into frontline health worker delivery platforms, especially facility-based maternity care which is already being scaled up (see Malawi and Uganda fact cards). Also to promote community-based newborn care and plan from the start to use platforms that will reach widescale.

CONTRASTING COUNTRIES WITH LOWEST AND HIGHEST RISK OF NEONATAL DEATH CONSIDERING HEALTH SYSTEM CAPACITY

	COUNTRIES WITH LOWEST MORTALITY (NMR ≤5, n=50)	COUNTRIES WITH HIGHEST MORTALITY (NMR ≥45, n=5)
Neonatal deaths	41 700	235 600
Average annual rate of reduction in neonatal mortality	4%	0.6%
Coverage of skilled attendance at birth	100%	42%
Nurses and midwives per 10000 population	664	20
Government spending on health per capita (US$)	$1 800	$8
Out-of-pocket expenditure on health (%)	18%	65%
Caesarean delivery (%)	24%	3%

Data and analyses *Neonatal mortality rates* First ever national time series, published in PLoS Medicine in 2011. Updated to 2010 by World Health Organization. *Multiple linear regression model* A multi-country multi-factor modeling analyses using the elastic net modeling method.
More information see Lawn JE, Kinney MV, Black RE, Pitt C, Cousens S, Kerber K, Corbett E, Moran A, Morrissey CS, Oestergaard MZ. 2012. Newborn survival: a multi-country analysis of a decade of change. *Health Policy and Planning*. 27(Suppl. 3): iii6-iii28.

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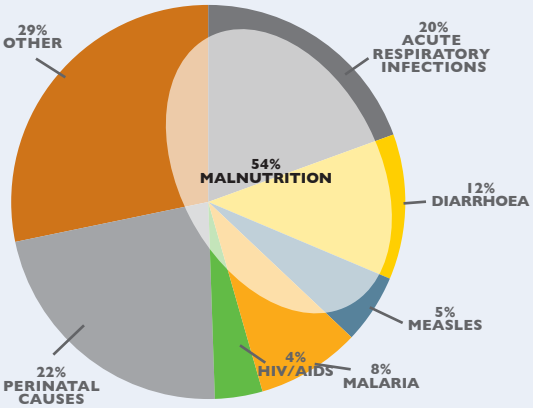
DECADE OF CHANGE

CHANGE IN CAUSES OF NEONATAL DEATH

CAUSES OF DEATH FOR CHILDREN UNDER-FIVE IN 2000



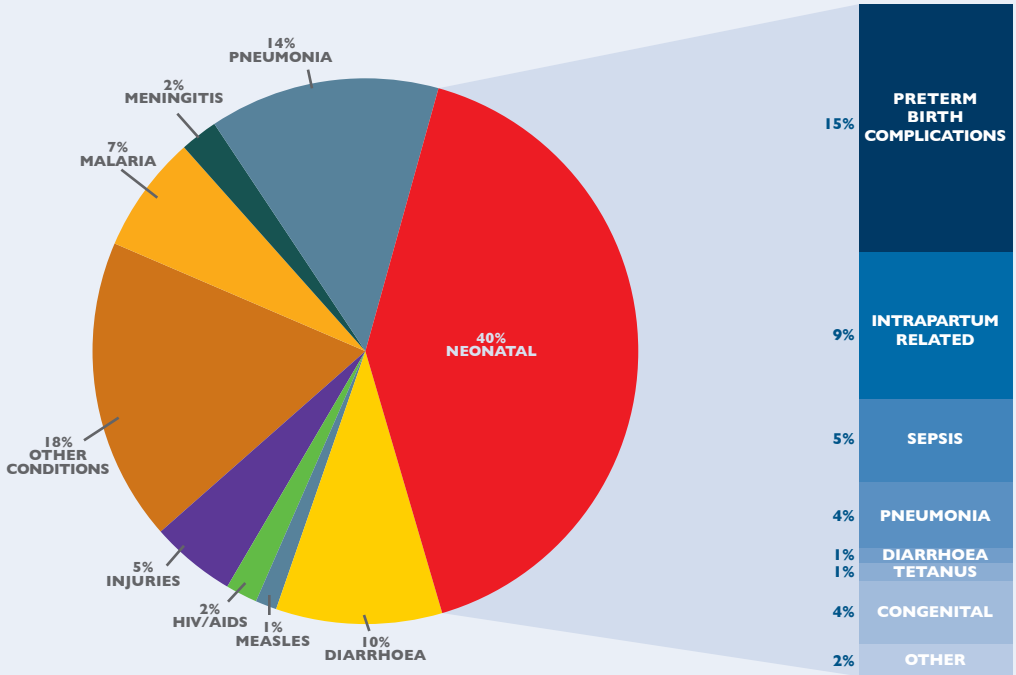
NEWBORNS INVISIBLE IN 2000

Cause of death estimates did not include specific causes within the neonatal period, which were grouped within the categories "perinatal causes" and "other" causes. The two pie charts shown here demonstrate changes in cause of death methodology but should not be used for trend comparison. Understanding causes of neonatal deaths is key to providing solutions.

CHILD CAUSES OF DEATH CATEGORIES AND METHODS OF ESTIMATION HAVE CHANGED OVER TIME

NEWBORNS RECOGNIZED AS OVER 40% OF CHILD DEATHS IN 2010

CAUSES OF DEATH FOR CHILDREN UNDER-FIVE IN 2010



TOP CAUSES OF NEWBORN DEATHS

PRETERM BIRTH COMPLICATIONS

2.0%
ANNUAL RATE OF REDUCTION

1,078,000
DEATHS IN 2010

INTRAPARTUM-RELATED

2.4%
ANNUAL RATE OF REDUCTION

717,000
DEATHS IN 2010

SEVERE INFECTION

(PNEUMONIA, SEPSIS, MENINGITIS, AND DIARRHOEA)

1.4%
ANNUAL RATE OF REDUCTION

767,000
DEATHS IN 2010

TETANUS

9.5%
ANNUAL RATE OF REDUCTION

58,000
DEATHS IN 2010

PROVEN SOLUTIONS TO ADDRESS MAIN CAUSES OF DEATH

PRETERM BIRTH
- Antenatal corticosteroids during preterm labor
- Essential and extra newborn care, including breastfeeding
- Kangaroo mother care
- Case management of babies with complications including infections and respiratory distress syndrome

INTRAPARTUM-RELATED
- Skilled care at the time of birth with access to emergency obstetric care
- Essential and extra newborn care
- Neonatal resuscitation, if necessary

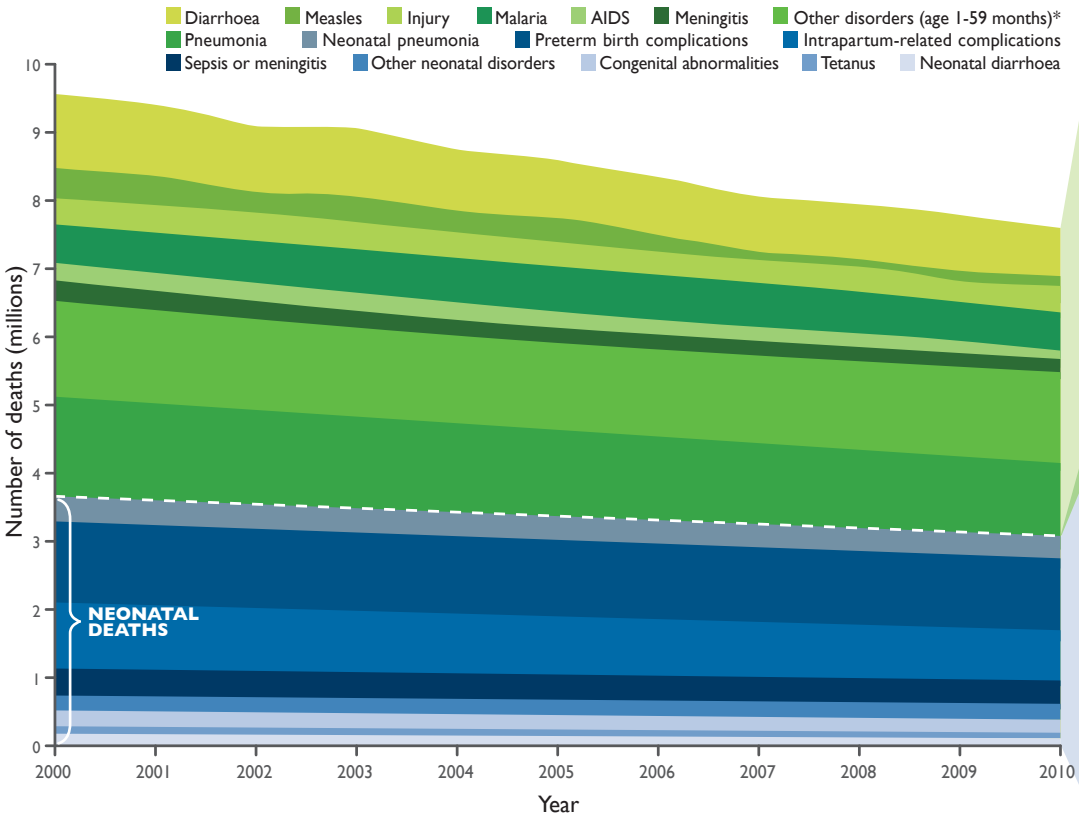
SEVERE INFECTIONS
- Hygienic care during childbirth and during the postnatal period
- Umbilical cord cleansing with chlorhexidine
- Early and exclusive breastfeeding
- Case management with antibiotics and supportive care, if needed

Photo: Lalage Snow/Save the Children

DECADE OF CHANGE

CHANGE IN CAUSES OF NEONATAL DEATH

GLOBAL TRENDS IN CAUSES OF CHILDHOOD DEATHS IN 2000-2010



GOOD NEWS

2 million fewer children under the age of 5 died in 2010 than in 2000, including 609,000 fewer neonatal deaths. Pneumonia, measles, and diarrhoea contributed the most to the overall reduction and tetanus, measles, AIDS, and malaria (in Africa) decreased at rates sufficient to attain MDG 4.

BAD NEWS

The overall rate of reduction is not fast enough to reach MDG 4 with progress being held back by slow decline for the main causes of neonatal deaths, despite effective solutions.
Preterm birth complications only dropped by 2% per year from 2000 to 2010 and are now the second leading cause of **child** deaths.

MATERNAL AND NEONATAL TETANUS ELIMINATION

Since 2000, 14 countries achieved maternal neonatal tetanus elimination. Success has been through **investment in high coverage** of maternal tetanus immunization and **using data to target** high risk districts.

The five country case studies all showed success with tetanus elimination programmes. In some cases these programmes strengthened other maternal, newborn and child health initiatives. While neonatal tetanus reduction is feasible and important, tetanus now accounts for fewer than 2% of neonatal deaths globally and this intervention alone will not result in dramatic NMR reduction going forward.

Maternal and neonatal tetanus elimination campaign poster used in Ethiopia

Data and Analyses *Cause of neonatal death time series* The first ever trend analysis for child causes of death over the decade was produced by the Child Health Epidemiology Reference Group (cherg.org), an expert panel formed by the World Health Organization and UNICEF.
More information on methods and results available from Liu et al. 2012 Global, regional, and national causes of child mortality in 2000–2010: an updated systematic analysis. *The Lancet* doi:10.1016/S0140-6736(12)60560-1.
For more information on preterm births see March of Dimes, PMNCH, Save the Children, WHO. 2012. In: Howson CP, Kinney MV, Lawn JE (eds). Born Too Soon: The Global Action Report on Preterm Birth. Geneva: World Health Organization. For more information on tetanus see www.who.int/immunization_monitoring/diseases
For more information: Newborn survival: a multicountry analysis of a decade of change. Lawn JE, Kinney MV, Black RE, Pitt C, Cousens S, Kerber K, Corbett E, Moran A, Morrissey CS, Oestergaard MZ. 2012. Health Policy and Planning. 27(Suppl. 3): iii6-iii28.

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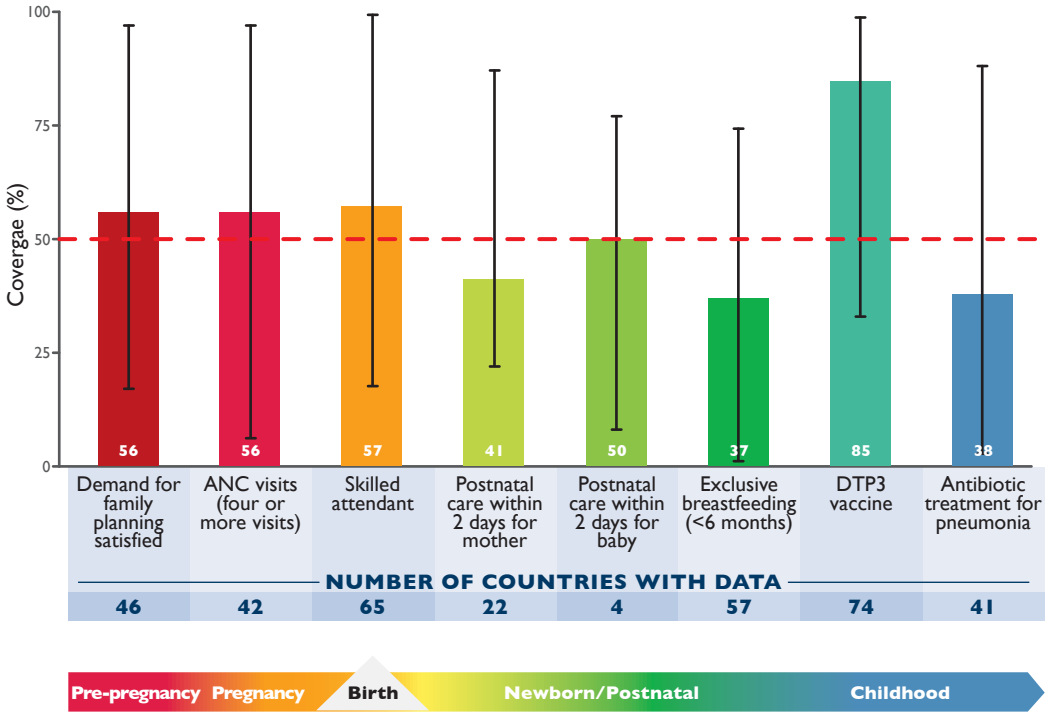
NEWBORN CARE COVERAGE

COVERAGE ALONG THE CONTINUUM OF CARE



Source: Countdown to 2015. Accountability for Maternal, Newborn and Child Survival: An update on progress in priority countries. March 2012. **Note:** median for 75 Countdown priority countries with available data; bars refer to ranges between countries.

Evidence-based strategies to save the lives of women and babies include a menu of interventions, which are usually provided through integrated service delivery packages at different levels along the continuum of care. Global indicators reflect information about the contact point but often not the provision of effective, quality care. For example, a birth with a skilled attendant does not indicate the provision of emergency obstetric care or neonatal resuscitation, if needed.

54 MILLION HOME BIRTHS IN 2010
Who was there?

SUB-SAHARAN AFRICA

SKILLED ATTENDANT AT HOME
3%

TRADITIONAL BIRTH ATTENDANT
23%

OTHER OR ALONE
32%

SOUTH ASIA

SKILLED ATTENDANT AT HOME
10%

TRADITIONAL BIRTH ATTENDANT
40%

OTHER OR ALONE
14%

Source: Darmstadt GL, Lee AC, Cousens S, Sibley L, Bhutta ZA, Donnay F, Osrin D, Bang A, Kumar V, Wall SN, Baqui A, Lawn JE. 2009. 60 million non-facility births: Who can deliver in community settings to reduce intrapartum-related deaths? *Int J Gynecol Obstet.* 107(Suppl. 1): s113-s122.

POSTNATAL CARE

MOST NEWBORNS THAT DIE ARE BORN IN **DEVELOPING COUNTRIES** AND MANY DIE AT HOME.

UP TO ¾ OF ALL NEWBORN DEATHS OCCUR DURING THE **FIRST WEEK OF LIFE.**

ONLY 4 COUNTRIES OUT OF 75 HAVE **NATIONAL TRACKING DATA** FOR POSTNATAL CARE FOR NEWBORNS.

LESS THAN HALF OF NEWBORNS BREASTFED **WITHIN 1 HOUR** OF BIRTH

ALMOST 40% OF NEWBORN DEATHS **COULD BE PREVENTED** WITH COMMUNITY INTERVENTIONS.

THE **2009 WHO/ UNICEF JOINT STATEMENT** REVIEWED EVIDENCE AND ESTABLISHED CONSENSUS ON THE PACKAGE OF HOME VISITS FOR NEWBORN CARE.

DECADE OF CHANGE

NEWBORN CARE COVERAGE

EXAMPLES OF PROVEN SOLUTIONS FOR THE 3 MAIN KILLERS OF NEWBORNS

KANGAROO MOTHER CARE

PRETERM BIRTH:
35% OF NEWBORN DEATHS

Photo: Joshua Roberts/Save the Children

WHAT?

Kangaroo Mother Care can halve deaths amongst babies weighing <2000g at birth through ongoing skin-to-skin contact between mother and baby to ensure warmth, nutrition through support for exclusive breastfeeding, and infection prevention.

WHO?

Nurses, midwives and even patient attendants can support mothers to initiate Kangaroo Mother Care, which can be continued at home after discharge and supported by community health workers and family members.

METRIC?

Not currently measured in any national household survey but being incorporated into health facility assessment tools.

NEONATAL RESUSCITATION

INTRAPARTUM-RELATED:
23% OF NEWBORN DEATHS

Photo: Laerdal

WHAT?

Neonatal resuscitation assists a baby to breathe after birth and can reduce deaths due to intrapartum-related causes by 30%. Evidence-based educational programmes like Helping Babies Breathe are available to teach resuscitation techniques in resource-limited areas. Within one minute of birth, a baby should be breathing well or should be ventilated with a bag and mask.

WHO?

Trained birth attendants, with the goal of having at least one person who is skilled in resuscitation at the birth of every baby.

METRIC?

Not currently measured in any national household surveys but national health facilities assessment tools include questions regarding staff trained and equipment available.

INFECTION CASE MANAGEMENT

SEVERE INFECTION:
23% OF NEWBORN DEATHS

Photo: Jonathan J. Hubschman/Save the Children

WHAT?

In situations where referral to a hospital is not possible, treatment of severe neonatal infections with antibiotic injections can be provided in first-level health facilities on an outpatient basis or through community-based workers. Injectable antibiotics could reduce infection deaths by up to two-thirds.

WHO?

Skilled health workers are best suited to provide outreach and community services but where this is not feasible auxiliary health workers or community health workers can provide these services.

METRIC?

Household surveys capture treatment of pneumonia but this may not be sensitive enough to capture appropriate treatment of neonatal infections. Health facility assessments can also capture availability of drugs and supplies and health worker training.

Data and analyses National household surveys and health facility assessment.

For more information see Lawn JE, Kinney MV, Black RE, Pitt C, Cousens S, Kerber K, Corbett E, Moran A, Morrissey CS, Oestergaard MZ. 2012. Newborn survival: a multi-country analysis of a decade of change. *Health Policy and Planning*. 27(Suppl. 3): iii6-iii28.

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DECADE OF CHANGE

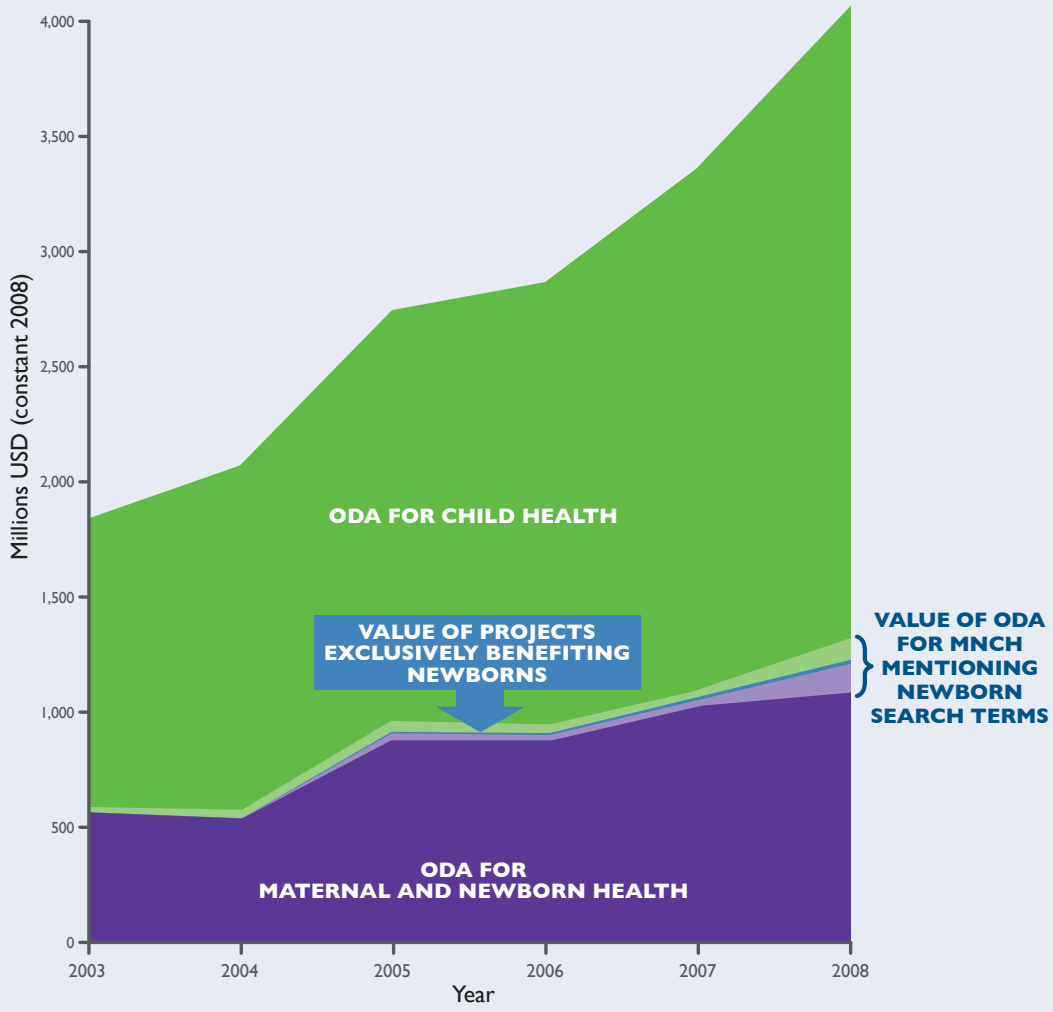
FUNDING FOR NEWBORN SURVIVAL

Since 2000, there has been a significant increase in donor funding for maternal, newborn and child health (MNCH), with more funding marked for child health projects. Between 2003 and 2008, MNCH donor funding more than doubled although some countries experienced significant fluctuation.

ODA disbursement for MNCH that mentioned newborns in project descriptions increased nine-fold from $26 million to $239 million for the 68 Countdown to 2015 priority countries. However, this represents only 6.1% of the total MNCH ODA.

Just 0.1% (US$5.49 million) of ODA disbursement exclusively benefiting newborns.

CHANGES IN OFFICIAL DEVELOPMENT ASSISTANCE FOR MNCH FOR 68 COUNTDOWN TO 2015 PRIORITY COUNTRIES, 2003-2008



Analysis of ODA mentioning newborns
A search of the Creditor Reporting System database was undertaken for any mention of the word 'newborn' or a derivative, and also for 23 terms referring to newborn-specific interventions. All projects identified were classified according to whether projects:
1. Mention newborns, but may also benefit other populations
2. Exclusively benefit newborns

OFFICIAL DEVELOPMENT ASSISTANCE (ODA)
AVERAGE FOR COUNTDOWN PRIORITY COUNTRIES

ODA FOR HEALTH PER CAPITA
$4.30 IN 2003 ▶ $9.50 IN 2008

ODA FOR CHILD HEALTH PER CHILD
$5.80 IN 2003 ▶ $15.90 IN 2008

VALUE OF ODA FOR MNCH WHICH MENTIONS NEWBORN
$0.38 MILLION IN 2003 ▶ $3.51 MILLION IN 2008

ODA FOR MATERNAL AND NEWBORN HEALTH PER LIVE BIRTH
$14.00 IN 2003 ▶ $31.00 IN 2008

VALUE OF ODA EXCLUSIVELY BENEFITING NEWBORN
$0.00 MILLION IN 2003 ▶ $0.07 MILLION IN 2008

ALL FUNDING DATA IN CONSTANT 2008 USD

FUNDING FOR NEWBORN SURVIVAL

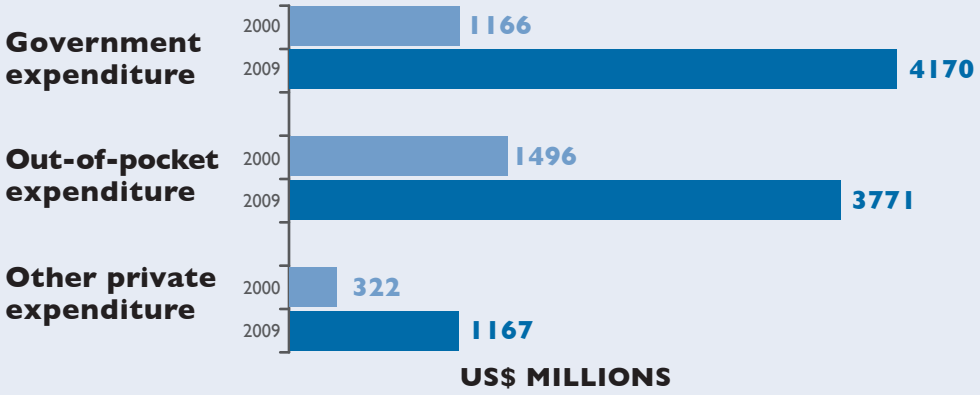
DECADE OF CHANGE

For most countries, national sources provide the majority of health financing, either from government, families or private sector.

Tracking resources nationally for reproductive, maternal, newborn and child health (MNCH) remains limited. Some countries have begun to track this funding, but measurements are not consistent, standard or comparable across time or countries.

Many governments are increasingly investing in health; however, the most vulnerable families often still have to pay directly for health care. Even though the proportion of out-of-pocket expenditure has decreased since 2000, over 40% of the cost of health services came out of families' pockets.

NATIONAL HEALTH FUNDING CHANGES IN COUNTDOWN PRIORITY COUNTRIES (UNWEIGHTED MEDIAN)



NATIONAL FUNDING FOR HEALTH

AVERAGE FOR COUNTDOWN PRIORITY COUNTRIES

HEALTH EXPENDITURE THAT WAS PAID BY GOVERNMENT

39% IN 2000 ▶ 46% IN 2009

HEALTH EXPENDITURE THAT WAS PAID OUT-OF-POCKET

50% IN 2000 ▶ 41% IN 2009

GOVERNMENT EXPENDITURE ON HEALTH AS % OF TOTAL GOVERNMENT EXPENDITURE

8% IN 2000 ▶ 9% IN 2009


Photo: Andrew Biraj/Save the Children

"IF SEEKING MATERNAL CARE FOR WOMEN IS PERCEIVED AS NOT WORTH THE COST, NEWBORNS ARE EVEN MORE VULNERABLE AND LESS LIKELY TO BE VALUED."

- Khan et al. 2012. Newborn survival in Pakistan. Health Policy and Planning

Data and Analyses National health financing: World Health Organization's National Health Accounts Official Development Assistance for MNCH: special analysis of the Organization for Economic Co-operation and Development's Creditor Reporting System database using search terms (Pitt et al. 2010. Countdown to 2015: assessment of official development assistance to maternal, newborn and child health, 2003-2008. *The Lancet.* 376:1485-96) with analysis for newborn

For more information: Lawn JE, Kinney MV, Black RE, Pitt C, Cousens S, Kerber K, Corbett E, Moran A, Morrissey CS, Oestergaard MZ. 2012. Newborn survival: a multi-country analysis of a decade of change. *Health Policy and Planning*. 27(Suppl. 3): iii6-iii28.

Save the Children

BENCHMARKING SYSTEM READINESS FOR NEWBORN CARE SCALE UP

DECADE OF CHANGE

HEADLINE MESSAGES

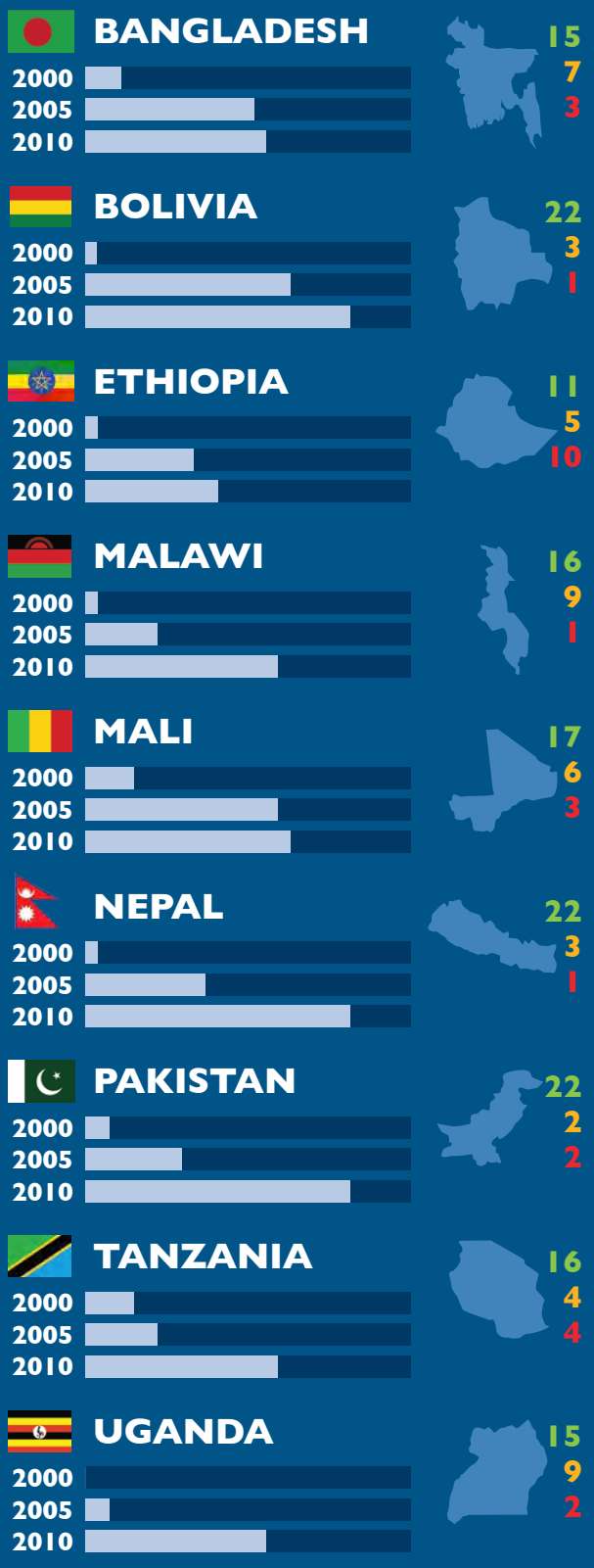
- Interventions exist to improve neonatal survival, but **policy attention is recent** and in order to scale-up these interventions they need to be integrated within existing health system packages at facility and community level.
- A list of **27 benchmarks** was developed to assess status and changes in national readiness to implement newborn care interventions. Achievement of these benchmarks at three time points—2000, 2005 and 2010—was assessed by national teams in nine countries.
- These nine countries have shown **significant progress** in attention to and policy change for newborn survival over the last decade, especially since 2005. By 2010, three of the nine countries achieved 75% of the benchmarks and an additional five achieved more than 50% of the benchmarks.
- The concept of 'scale-up readiness' is a **helpful marker** to assess progress along the pathway to implementation at scale, and may be adapted for other global health initiatives.

WHAT ARE THE SCALE-UP READINESS BENCHMARKS?

27 'sentinel' benchmarks that measure the degree to which health systems and national programmes are prepared to deliver interventions for newborn survival at scale. Benchmarks were determined as achieved, partially achieved or not achieved based on national stakeholder consensus and systematic document review.

BENCHMARKS ACHIEVED OVER TIME (OUT OF 27)

BENCHMARK STATUS IN 2010* ACHIEVED / PARTIALLY ACHIEVED / NOT ACHIEVED



*May not add up to 27 due to missing or not applicable data

DECADE OF CHANGE

BENCHMARKING SYSTEM READINESS FOR NEWBORN CARE SCALE UP

CATEGORIES OF BENCHMARKS

SCALE UP READINESS: REACHING EVERY MOTHER AND NEWBORN

AGENDA SETTING

BENCHMARKS INCLUDE:

- National needs assessment conducted
- Local evidence generated
- Local evidence disseminated
- Convening mechanism established
- Focal person identified within the Ministry of Health
- Key indicators included in surveys

POLICY FORMULATION

BENCHMARKS INCLUDE:

- Policies endorsed
- Policies integrated
- Behaviour change strategy formulated
- Injectable antibiotics for newborns on essential drug list at primary level
- HMIS includes key indicators
- National targets established
- Total expenditure on reproductive, maternal, newborn and child health
- Costed implementation plan

Photo: Michael Bisceglie/Save the Children

POLICY IMPLEMENTATION

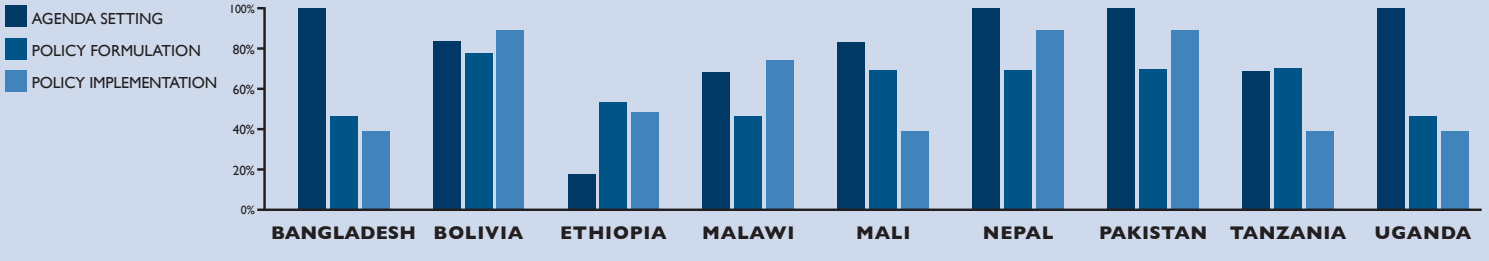
BENCHMARKS INCLUDE:

- In-service training for community / facility cadres
- Pre-service education for community/facility cadres
- Supervision system established at primary level
- Protocols for sick newborns in place at district level
- IMCI adapted to include 1st week of life
- Midwives /community cadre / primary level cadre authorized to resuscitate babies
- Community cadre / primary level cadre authorized to administer injectable antibiotics
- Cadre identified for home-based maternal and newborn care

PROGRESS BY BENCHMARK CATEGORY

By 2010, more countries had made progress in agenda setting compared with the other categories. Bangladesh, Nepal, Pakistan, Uganda, Bolivia and Mali had all achieved at least 80% of agenda setting benchmarks by 2010. Progress had also been made in policy formulation with 5 countries achieving at least 70% of benchmarks. There was variation in achievement of policy implementation benchmarks, ranging from 88% of benchmarks in three countries to 38% of benchmarks in Bangladesh, Uganda, Tanzania and Mali. In some countries, ensuring newborn survival was on the national agenda preceded policy formulation and implementation (i.e. Bangladesh, Nepal, Pakistan and Uganda), while in other countries, policy formulation and implementation preceded agenda-setting (i.e. Malawi and Ethiopia). This finding reinforces the non-linear nature of the policy process and highlights the importance of adapting to local contexts and utilizing windows of opportunity.

PERCENT OF BENCHMARKS ACHIEVED BY CATEGORY IN 2010



For more information on the process of setting and selecting benchmarks, see Moran AC, Kerber K, Pfitzer A, Morrissey CS, Marsh DR, Oot DA, Sitrin D, Guenther T, Gamache N, Lawn JE, Shiffman J. 2012. Benchmarks to measure readiness to integrate and scale up newborn survival interventions. *Health Policy and Planning*. 27(Suppl. 3): iii29-iii39

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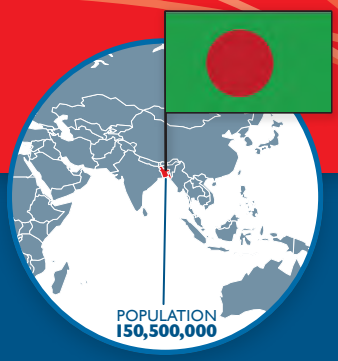
NEWBORN SURVIVAL IN BANGLADESH

DECADE OF CHANGE



HEADLINE MESSAGES

MDG4

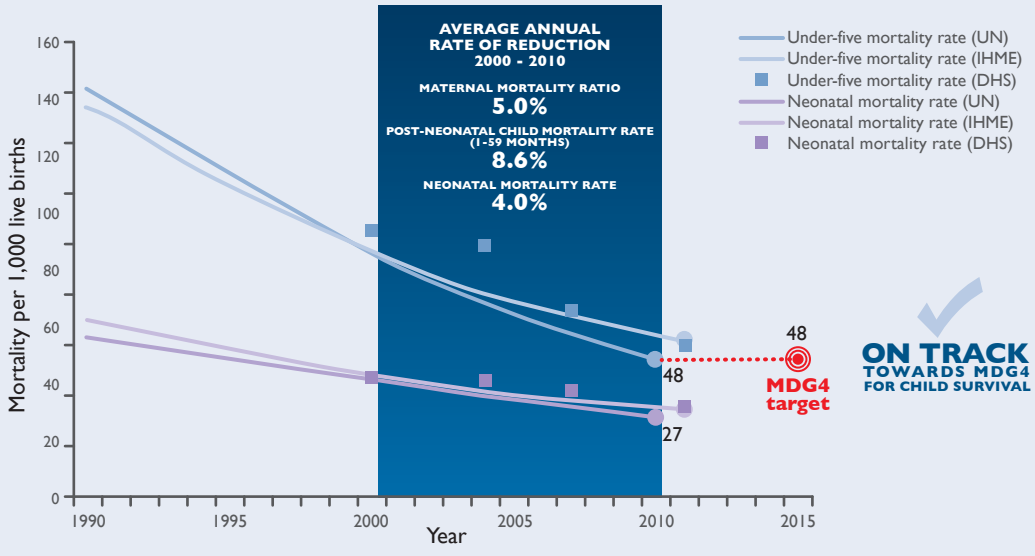
Bangladesh is on track for Millennium Development Goal 4, and has made more progress in reducing neonatal deaths than most low-income countries. The **neonatal mortality decline** in the last decade is double the regional and global averages (2.0% and 2.1% per year, respectively); however, the decline for children 1–59 months was double this rate.

Over the last decade, extensive changes have occurred in health policy related to newborn care, including a National Neonatal Health Strategy. Civil society and academics have played key roles, alongside the government. Local and global data and evidence have been influential, but **pathways between research and action** are non-linear due to a complex health system and a diversity of policies and programmes.

The initial focus for newborn care was primarily through **community-based initiatives**. 80% of pregnant women live in rural areas, but models to service the growing urban poor population are urgently needed as well.

Priorities to further accelerate progress for newborn survival include greater consistency in standards of practice to deliver a comprehensive evidence-based package of health services. More systematic focus on accessibility and **quality of care in facilities**, especially for the vulnerable, would save both mothers and babies.

PROGRESS TOWARDS MILLENNIUM DEVELOPMENT GOAL 4 FOR CHILD SURVIVAL



70,000 NEWBORN LIVES COULD BE SAVED IN 2015 WITH UNIVERSAL COVERAGE OF HIGH-IMPACT INTERVENTIONS

4%

ANNUAL REDUCTION IN MORTALITY RATE

NEONATAL MORTALITY PER 1,000 LIVE BIRTHS
41 IN 2000 ▶ 27 IN 2010

NEWBORN DEATHS
143,000 IN 2000 ▶ 83,000 IN 2010

UNDER-FIVE DEATHS THAT WERE NEONATAL
48% IN 2000 ▶ 57% IN 2010

HEALTH EXPENDITURE THAT WAS PAID OUT-OF-POCKET

58% IN 2000 ▶ 65% IN 2009

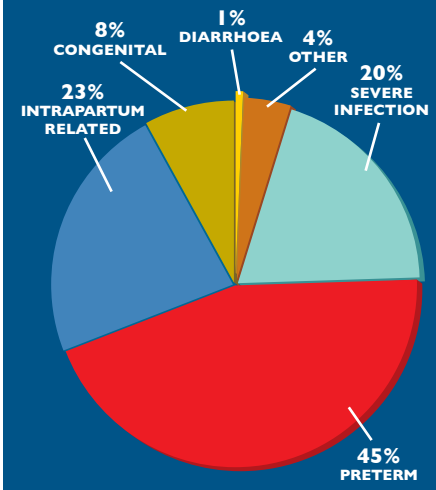
OFFICIAL DEVELOPMENT ASSISTANCE

CHILD HEALTH ODA - PER CHILD
$2.30 IN 2003 ▶ $4.90 IN 2008
113% INCREASE

MATERNAL & NEWBORN HEALTH ODA - PER LIVE BIRTH
$10.38 IN 2003 ▶ $15.20 IN 2008
46% INCREASE

% OF ODA FOR MNCH MENTIONING "NEWBORN"
15% IN 2003 ▶ 14% IN 2008

CAUSES OF NEONATAL DEATH



DECADE OF CHANGE

NEWBORN SURVIVAL IN BANGLADESH

What happened and what was learned?

Bangladesh has been a pioneer for improving newborn survival. Over the last decade, newborn survival has evolved as a national health priority, and it is unlikely that the country would be on track to reach MDG 4 without the progress already made for newborn survival. Several high-profile champions have had major influence. Attention for community initiatives and considerable donor funding also appear to have contributed. There have been some increases in coverage of key interventions, such as skilled attendance at birth and postnatal care; however these remain low and reach less than one-third of families.

Going forward

Future gains for newborn survival in Bangladesh rest upon increased implementation at scale and greater consistency in content and quality of programmes and services. As coverage of health services increases, a notable gap remains in quality of facility-based care. Community-based programmes have mainly been implemented in the north but the new national health sector development programme aims to scale up nationally. Even moderate increases in outreach interventions (20%), such as postnatal care, could save up to 7000 newborn lives in 2015.

Pathways to scale up in Bangladesh

A National Neonatal Health Strategy comprised of global and local evidence was developed to guide newborn health programming. Following the integration of newborn health into policy, professional bodies in Bangladesh worked collaboratively to develop and pilot technical modules that were then endorsed by the government and used to train thousands of service providers throughout the country. Additionally, informed advocacy from a diverse group of partners served as an effective mechanism for advancing maternal and newborn care, particularly at community level. The National Health Sector Development Programme has the potential for addressing the gaps in coverage and quality of care, if implemented consistently across the country.

CONTEXT

High percentage of rural population

Low literacy rate and high **poverty**

Lack of skilled health workers

Frequent **changes in government leadership**

HEALTH CONTEXT

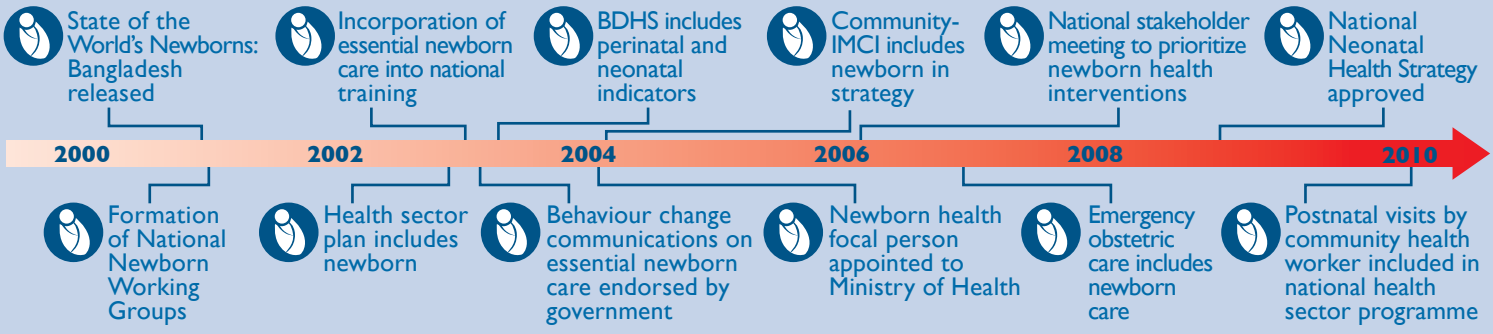
5.8
HEALTH WORKERS
PER 1,000 POPULATION (2005)

BIRTHS THAT TOOK PLACE IN A FACILITY

8% IN 2000 ▶ **29%** IN 2011

Photo: Colin Crowley/Save the Children

Key moments for newborn survival in policies and programmes



For more information see Newborn Survival in Bangladesh: a decade of change and future implications. Rubayet S, Shahidullah M, Hossain A, Corbett E, Moran AC, Mannan I, Matin Z, Wall SN, Pfitzer A, Mannan I, Syed U for the Bangladesh Newborn Change and Future Analysis Group. 2012. Health Policy and Planning. 27(Suppl. 3): iii40-iii56.

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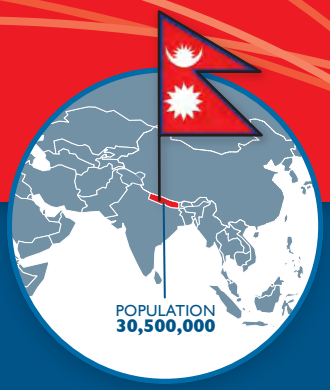
DECADE OF CHANGE

NEWBORN SURVIVAL IN NEPAL



HEADLINE MESSAGES

MDG4

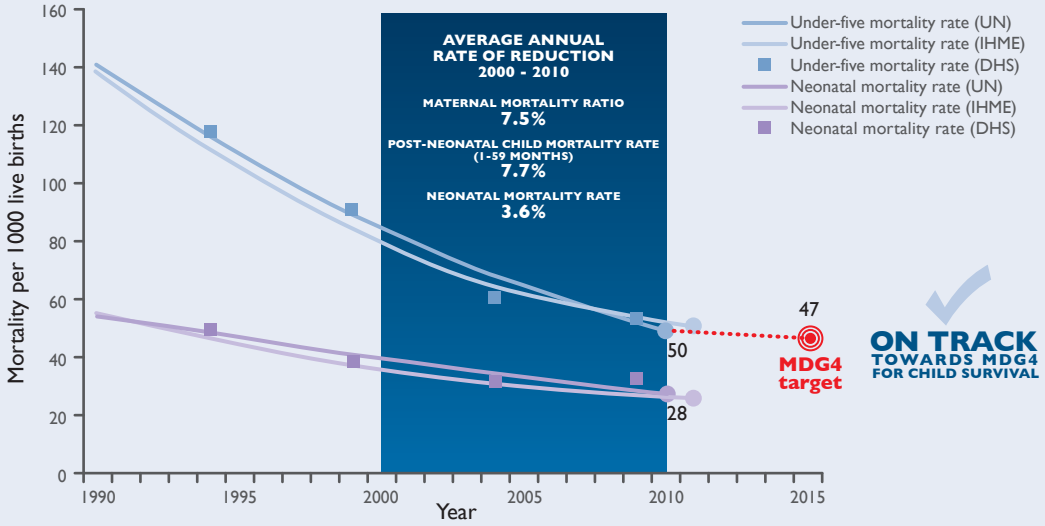
Nepal is **on track to meet Millennium Development Goal 4** for child survival. From 2000 to 2010, neonatal mortality declined by 30% though recent national survey data indicate stagnation. The decline is greater than the average in Southern Asia but half the national reductions in maternal and post-neonatal under-five mortality. Neonatal deaths now account for over 60% of under-five deaths.

Increased attention and **priority for newborn survival** facilitated changes in polices, programmes, information systems and communication platforms. These began with a specific focus on newborn care with the intent to then integrate these with maternal and child health services and the wider health system.

The Government of Nepal used **global and local evidence** to inform a national newborn health strategy and to design the Community-Based Newborn Care Package, which was implemented initially in 10 of 75 districts with plans to expand to 35 districts by mid-2013.

Rapid expansion of community care combined with an increase in facility births offer **potential for scale up** and accelerated impact, but quality of care in facilities is a critical priority for improving both maternal and neonatal health.

PROGRESS TOWARDS MILLENNIUM DEVELOPMENT GOAL 4 FOR CHILD SURVIVAL



16,000 NEWBORN LIVES COULD BE SAVED IN 2015 WITH UNIVERSAL COVERAGE OF HIGH-IMPACT INTERVENTIONS

3.6%

ANNUAL REDUCTION IN MORTALITY RATE

NEONATAL MORTALITY PER 1,000 LIVE BIRTHS

41 IN 2000 ▶ 28 IN 2010

NEWBORN DEATHS

32,000 IN 2000 ▶ 20,000 IN 2010

UNDER-FIVE DEATHS THAT WERE NEONATAL

47% IN 2000 ▶ 56% IN 2010

HEALTH EXPENDITURE THAT WAS PAID OUT-OF-POCKET

68% IN 2000 ▶ 47% IN 2009

OFFICIAL DEVELOPMENT ASSISTANCE

CHILD HEALTH ODA - PER CHILD

$3.83 IN 2003 ▶ $7.22 IN 2008

89% INCREASE

MATERNAL & NEWBORN HEALTH ODA - PER LIVE BIRTH

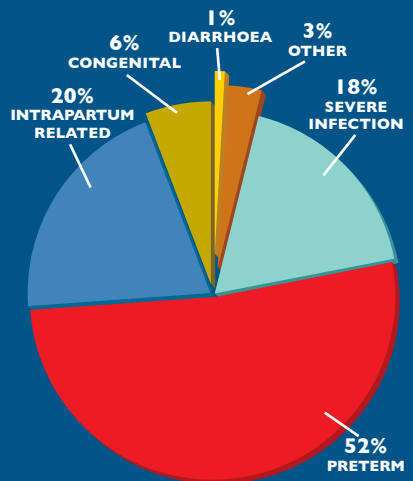
$10.66 IN 2003 ▶ $39.04 IN 2008

266% INCREASE

% OF ODA FOR MNCH MENTIONING "NEWBORN"

0% IN 2003 ▶ 8% IN 2008

CAUSES OF NEONATAL DEATH



NEWBORN SURVIVAL IN NEPAL

What happened and what was learned?

Each year, nearly 35,000 Nepali children die before their fifth birthday with almost two-thirds of these deaths occurring in the first month of life, the neonatal period.

Nepal is recognized as a global leader for newborn survival having developed a national newborn health strategy early in the decade and scaling up programmes for newborn health, including the Birth Preparedness Package and Community-Based Newborn Care Programme. The high level of attention on newborn survival was facilitated by the formation of a network of champions including representatives from both maternal and child health sectors, who made the issue a priority and moved quickly to implement solutions based on evidence. Openness for early adoption of innovation has been a factor in rapid change for maternal, newborn and child survival.

Going forward

As newborn survival increasingly becomes institutionalized, it is evident that the issue remains a priority for the government. With women accessing facility-based care during pregnancy and childbirth, there is a need for more attention on the quality of care provided. With plans to more fully integrate the newborn health packages into maternal and child health programmes, the country is posed to change the future for the 724,000 Nepali babies born each year.

Nepal Neonatal Health Strategy

Nepal was the first low-income country to develop a national newborn-specific strategy, which identified and prioritized cost-effective, evidence-based interventions while considering the capacity of the community, and other levels of the health system. The strategy provided a platform for newborn survival to move from attention towards institutionalization and implementation. Between 2005 and 2010, a number of community-based interventions were piloted, and a comprehensive community-based package for newborn health was developed and will be integrated into maternal and child health programmes. The standalone newborn strategy ensured adequate attention for newborn survival at all levels of government as well as among civil society and development partners.

CONTEXT

Emerging from
11 years of civil war

Transitional phase has
impacted ability to implement programmes

Lowest GNI per capita
in the Southern Asia region
(US$480 per capita)

HEALTH CONTEXT

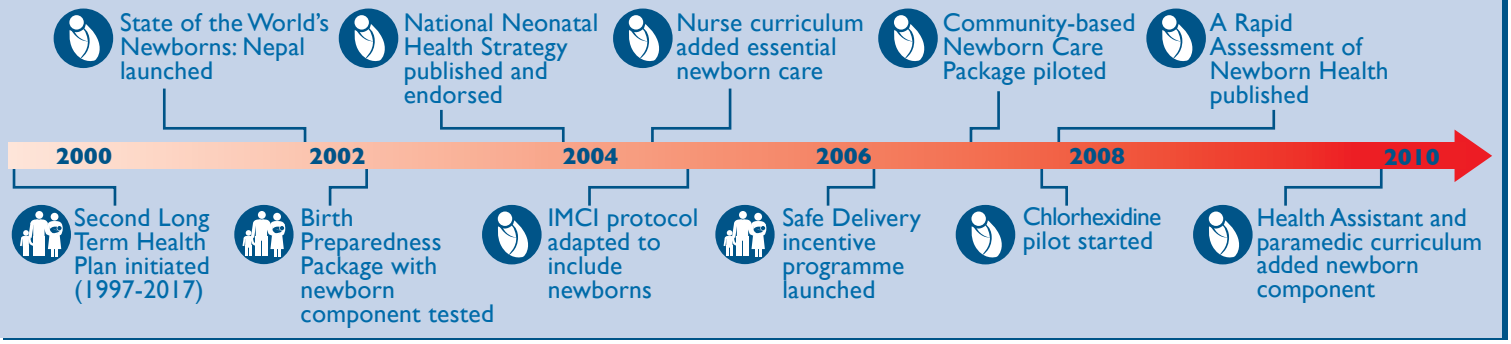
6.7
HEALTH WORKERS
PER 1,000 POPULATION (2004)

BIRTHS THAT TOOK PLACE IN A FACILITY

9% IN 2000 ▶ **28%** IN 2010

Photo: Jonathan J. Hubschman/Save the Children

Key moments for newborn survival in policies and programmes



For more information see Newborn Survival in Nepal: a decade of change and future implications. Pradhan YV, Upreti SR, KC NP, KC A, Khadka N, Syed U, Kinney MV, Adhikari RK, Shrestha PR, Thapa K, Bhandari A, Grear K, Guenther T, Wall SN for the Nepal Newborn Change and Future Analysis Group. 2012. *Health Policy and Planning*. 27(Suppl. 3): iii57-iii71.

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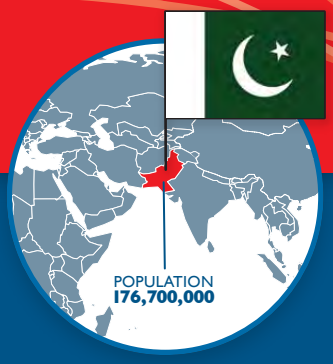
DECADE OF CHANGE

NEWBORN SURVIVAL IN PAKISTAN



HEADLINE MESSAGES

MDG4

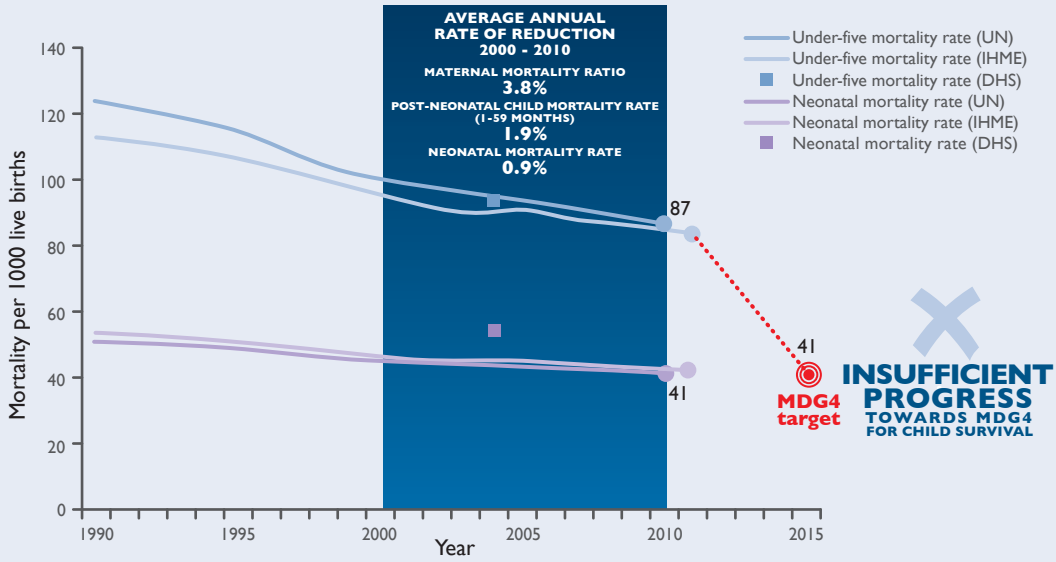
Pakistan has the world's **third highest number of newborn deaths** each year (194 000 deaths in 2010). Between 2000 and 2010, neonatal mortality declined by only 0.9% whilst maternal and child deaths after the first month reduced more significantly.

Prior to 2000, safe motherhood and child health programmes were high on the national health policy agenda yet newborn health was overlooked. Since 2000, **integration of newborn care** in Pakistan's health policies and programmes has been considerable. Civil society and academics have linked with government and several research studies have been highly influential.

Devastating humanitarian disasters and destabilizing political environment have affected progress for all health outcomes, but babies are especially vulnerable. Due to societal norms, many women are unable to access care for themselves or their children.

Accelerated progress for newborn survival is possible given the **platforms in place.** However, decentralization of health sector management to provincial level provides threats as well as opportunities. Full coverage of the interventions in place would prevent 84% of newborn deaths and 59% of stillbirths in 2015.

PROGRESS TOWARDS MILLENNIUM DEVELOPMENT GOAL 4 FOR CHILD SURVIVAL



84% OF NEWBORN DEATHS COULD BE PREVENTED IN 2015 WITH UNIVERSAL COVERAGE OF HIGH-IMPACT INTERVENTIONS

0.9%

ANNUAL REDUCTION IN MORTALITY RATE

NEONATAL MORTALITY PER 1,000 LIVE BIRTHS

45 IN 2000 ▶ 41 IN 2010

NEWBORN DEATHS

203,000 IN 2000 ▶ 194,000 IN 2010

UNDER-FIVE DEATHS THAT WERE NEONATAL

45% IN 2000 ▶ 47% IN 2010

HEALTH EXPENDITURE

THAT WAS PAID OUT-OF-POCKET

63% IN 2000 ▶ 57% IN 2009

OFFICIAL DEVELOPMENT ASSISTANCE

CHILD HEALTH ODA - PER CHILD

$2.89 IN 2003 ▶ $5.40 IN 2008

87% INCREASE

MATERNAL & NEWBORN HEALTH ODA - PER LIVE BIRTH

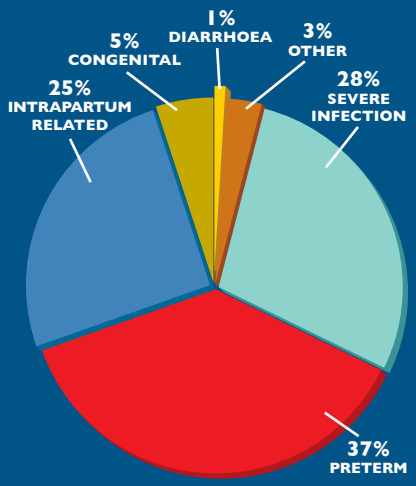
$2.96 IN 2003 ▶ $10.74 IN 2008

263% INCREASE

% OF ODA FOR MNCH MENTIONING "NEWBORN"

1% IN 2003 ▶ 19% IN 2008

CAUSES OF NEONATAL DEATH



NEWBORN SURVIVAL IN PAKISTAN

What happened and what was learned?

Prior to 2000, newborns in Pakistan were invisible and now they are clearly visible in policies, priorities and programmes. Considerable policy change occurred in the last decade including integration of newborn care into existing community-based maternal and child packages delivered by the Lady Health Worker Program. The National Maternal, Newborn and Child Health Program catalyzed newborn services at both facility and community levels. National Maternal, Newborn and Child Health Communication Strategy Framework was developed under the MNCH Program. Despite these advances and success at attracting donor funding, neonatal mortality has not declined at the same pace as other countries in the region. A combination of challenges has prevented progress, such as humanitarian disaster and political instability, policy to programme gaps and demand/supply barriers like geographic and socio-cultural obstacles that prevent care seeking.

Going forward

Recent policy advances and delivery platforms, offer the potential to substantially accelerate progress in reducing neonatal deaths. Yet, civil society will have an important role in ensuring focus on newborn survival in the post devolution scenario. With handing over responsibilities to the provinces, local leadership and innovative models of financing and effective action will be required to maintain and increase systematic efforts for scale up of interventions. If newborn-related health interventions were universally available in Pakistan assuming political and environmental stability, 84% of newborn deaths could be averted in the year 2015 at scale.

Lady Health Worker (LHW) Programme

LHWs are paid community-based outreach workers responsible for essential primary health care services and linking communities to health facilities. With initial focus on maternal and child health, the LHW programme has gradually added newborn health to their services throughout the decade due to evidence based advocacy efforts. Currently, around 93 000 LHWs are working across Pakistan providing maternal and child health services, e.g. antenatal care, birth preparedness, postnatal care and family planning methods to the population. Expansion of the programme may include other newborn interventions, such as neonatal resuscitation; however, more research is needed before these should be considered for inclusion.

CONTEXT

Severe earthquake in 2005

Internally displaced persons crisis in 2008

Massive floods in 2010

HEALTH CONTEXT

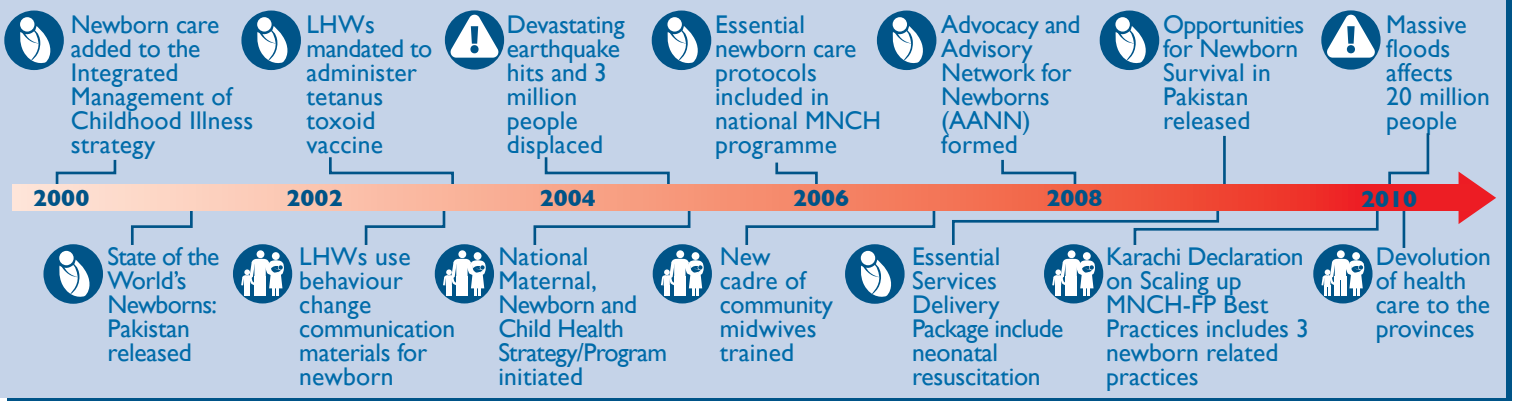
13.7
HEALTH WORKERS
PER 1,000 POPULATION (2004)

BIRTHS THAT TOOK PLACE IN A FACILITY

21% IN 2000 ▶ **34%** IN 2010

Photo: Ian Woolverton/Save the Children

Key moments for newborn survival in policies and programmes



For more information see Newborn Survival in Pakistan: a decade of change and future implications Khan, A, Kinney MV, Hazir T, Hafeez A, Wall SN, Ali N, Lawn JE, Badar A, Khan AA, Uzma Q, Bhutta ZA for the Pakistan Newborn Change and Future Analysis Group. 2012. *Health Policy and Planning*. 27(Suppl. 3): iii72-iii87.

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NEWBORN SURVIVAL IN MALAWI

DECADE OF CHANGE

HEADLINE MESSAGES

MDG4

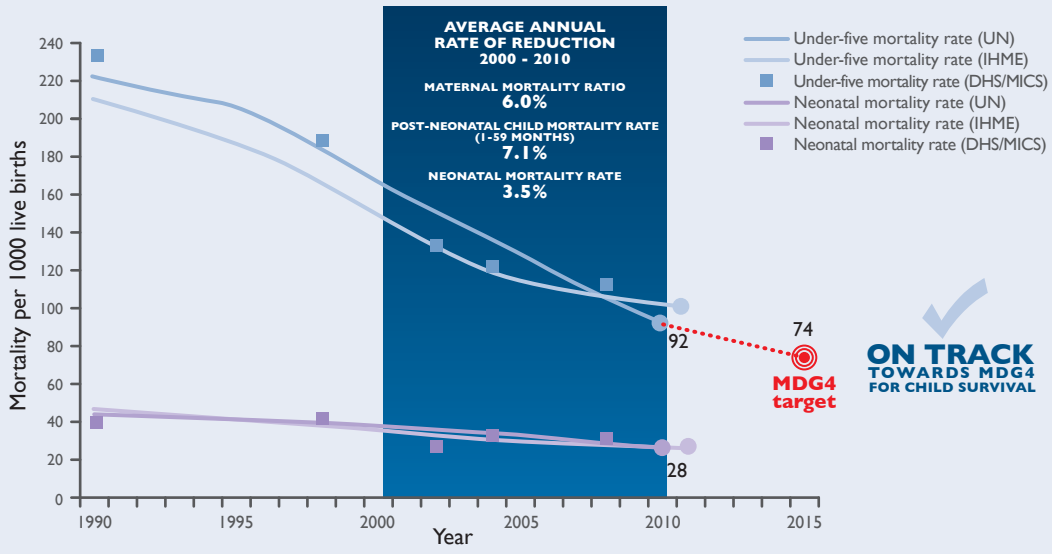
Malawi has **accelerated progress** between 2000 and 2010 in reducing under-five mortality after the first month of life and maternal mortality, but less progress in neonatal mortality reduction; yet the latter is still faster than the regional average (1.5% per year).

A comprehensive national health sector approach provided an evidence-based and consistent framework within which to **integrate newborn survival** programmes.

The initial focus for newborn care in Malawi was at facility level. The recently launched **Community-Based Maternal and Newborn Care package** bridges community and facility level care as well as maternal, newborn and child health, HIV/AIDS and malaria, but coverage is still low. Gaps in quality of care at birth must be addressed to maximize mortality reduction for mothers and babies.

Consistent high level political commitment to maternal health provided a programmatic and policy platform for a small network of newborn survival technical experts to integrate high impact **newborn care interventions,** despite very limited newborn-specific funding.

PROGRESS TOWARDS MILLENNIUM DEVELOPMENT GOAL 4 FOR CHILD SURVIVAL



16,000 NEWBORN LIVES COULD BE SAVED IN 2015 WITH UNIVERSAL COVERAGE OF HIGH-IMPACT INTERVENTIONS

3.5%
ANNUAL REDUCTION IN MORTALITY RATE

NEONATAL MORTALITY PER 1,000 LIVE BIRTHS
38 IN 2000 ▸ 27 IN 2010

NEWBORN DEATHS
18,700 IN 2000 ▸ 17,700 IN 2010

UNDER-FIVE DEATHS THAT WERE NEONATAL
23% IN 2000 ▸ 29% IN 2010

HEALTH EXPENDITURE THAT WAS PAID OUT-OF-POCKET
22% IN 2000 ▸ 12% IN 2009

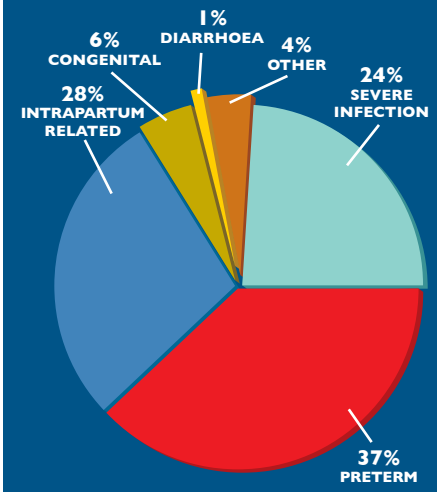
OFFICIAL DEVELOPMENT ASSISTANCE

CHILD HEALTH ODA - PER CHILD
$13.79 IN 2003 ▸ $29.16 IN 2008
53% INCREASE

MATERNAL & NEWBORN HEALTH ODA - PER LIVE BIRTH
$29.46 IN 2003 ▸ $41.19 IN 2008
28% INCREASE

% OF ODA FOR MNCH MENTIONING "NEWBORN"
0% IN 2003 ▸ 2% IN 2008

CAUSES OF NEONATAL DEATH



DECADE OF CHANGE

NEWBORN SURVIVAL IN MALAWI

What happened and what was learned?

Though it is one of the poorest countries in the world, Malawi has reduced neonatal mortality greater than most sub-Saharan African countries despite only recent attention to newborn survival, limited political priority or specific funds for newborns. Consistent health sector and increasing human resource investments have been a good foundation. Also newborn survival has benefited from the high level attention to maternal health, which enabled an effective small group of technical partners working with the Ministry of Health to ensure inclusion of specific newborn care inventions into wider health policies and programmes, such as Kangaroo Mother Care in facilities and a package of community-based interventions. The significant increase in facility births and other health system changes, including increased human resources, likely contributed to the decline in newborn deaths.

Going forward

Globally, Malawi is recognized as an example of progress for maternal, newborn and child health. Improving quality of care will be critical for maintaining progress especially given the rapid increase in facility deliveries. With implementation of programmes at increasingly wide scale for newborn survival, strengthening data collection and monitoring and evaluation will enable local experience to guide the way forward. Moderate increases in coverage and systematic attention to high impact interventions for newborns could optimize Malawi's chances of staying on track for MDG 4, a remarkable achievement for one of the world's poorest countries.

Kangaroo Mother Care in Malawi

Malawi has the highest preterm birth rate globally (18%) and roughly a third of all newborn deaths are due to complications of preterm birth. Kangaroo Mother Care (KMC) involves tying the baby skin-to-skin with the mother to provide warmth, promote breastfeeding and reduce infections. The intervention is associated with over 50% reduced risk of neonatal mortality for stable babies <2500g if started in the first week. Introduced in the late 1990s, Malawi currently has over 121 active KMC units, including in the 28 government-run district hospitals, and is recognized globally as a learning site for scaling up the interventions. Despite great success, challenges remain such as linkages between households and health workers and tracking data.

CONTEXT

One of the poorest countries in the world with **very low GNI per capita (US$330)**

High HIV prevalence (11%)

One of the **lowest physician density** in the world

High population growth rate (3.1)

High total fertility rate (6 births per woman)

HEALTH CONTEXT

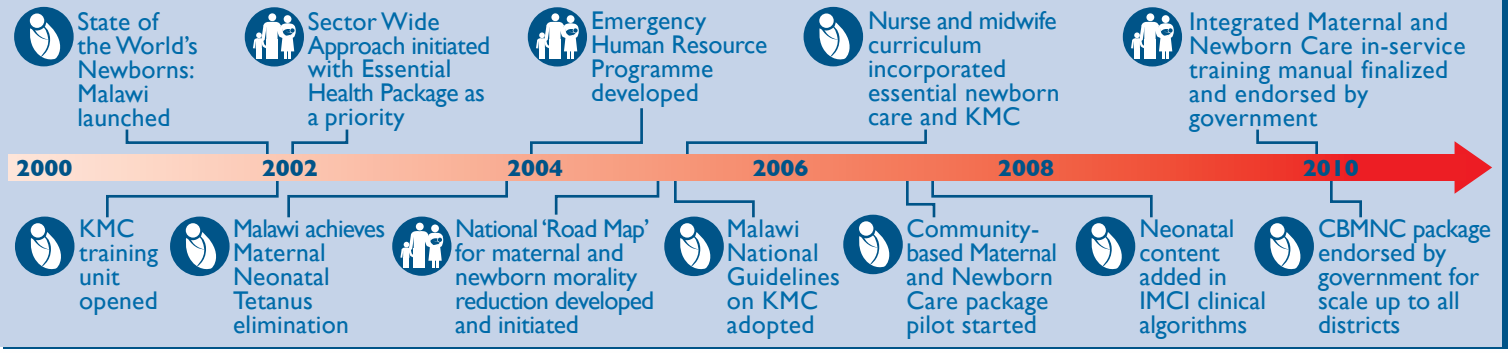
3
HEALTH WORKERS
PER 10,000 POPULATION (2008)

BIRTHS THAT TOOK PLACE IN A FACILITY

56% IN 2000 ▶ **73%** IN 2010

Photo: Andy Stenning/Save the Children

Key moments for newborn survival in policies and programmes



For more information see Newborn Survival in Malawi: a decade of change and future implications. Zimba E, Kinney MV, Kachale F, Waltensperger KZ, Blencowe H, Colbourn T, GeorgeJ, Mwansambo C, Joshua M, Chanza H, Nyasulu D, Mlava G, Gamache N, Kazembe A, Lawn JE for the Malawi Newborn Change and Future Analysis Group. 2012. *Health Policy and Planning.* 27(Suppl. 3): iii104-iii117.

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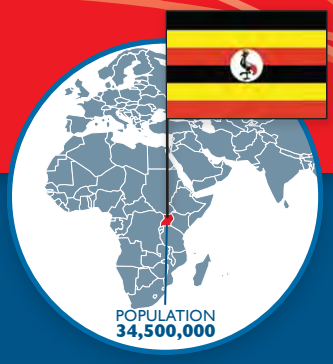
DECADE OF CHANGE

NEWBORN SURVIVAL IN UGANDA



HEADLINE MESSAGES

MDG4

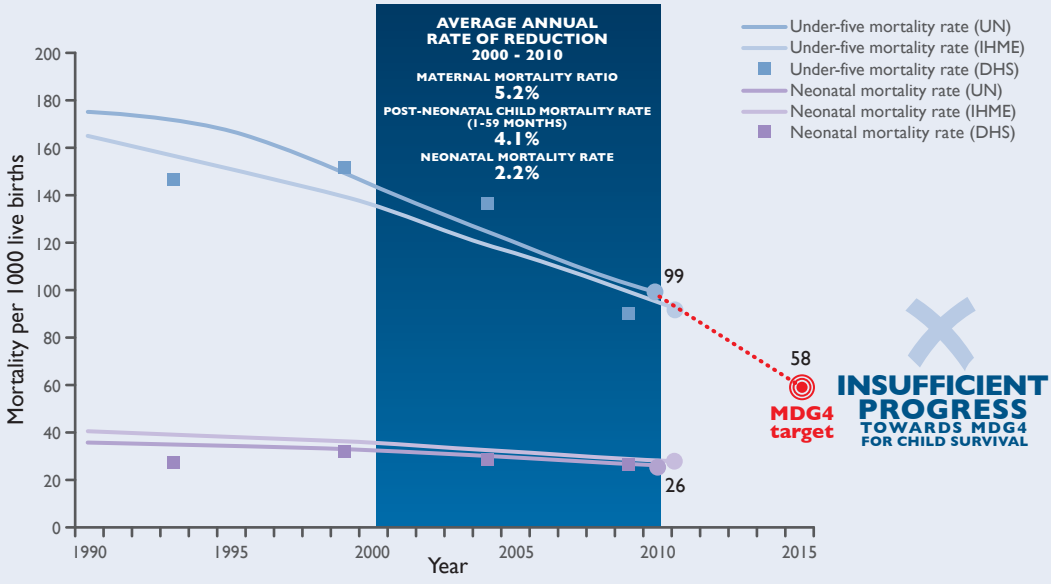
Between 2000 and 2010 **neonatal mortality reduced by 20%**. This is more than the average reduction for sub-Saharan Africa but less than the national reductions in maternal mortality and under-5 mortality after the neonatal period.

There has been an **increase in attention to newborn survival,** as well as comprehensive policy change and the start of programme change for newborn health, with a relatively short period of time.

The multi-disciplinary, inter-agency national Newborn Steering Committee, appointed by the Maternal and Child Health Cluster of the Ministry of Health, has been **instrumental in changing the evidence and policy landscape,** and has strengthened dialogue across the continuum of care for maternal, newborn and child health.

Recognition of opportunities for improved service delivery for newborn care at both health facility and community level shows promise, but improved local data, dedicated funding and a **commitment to achieving high coverage of quality services** are needed in order to save lives.

PROGRESS TOWARDS MILLENNIUM DEVELOPMENT GOAL 4 FOR CHILD SURVIVAL



43,000 NEWBORN LIVES COULD BE SAVED IN 2015 WITH UNIVERSAL COVERAGE OF HIGH-IMPACT INTERVENTIONS

2.2%

ANNUAL REDUCTION IN MORTALITY RATE

NEONATAL MORTALITY PER 1,000 LIVE BIRTHS

32 IN 2000 ▶ 26 IN 2010

NEWBORN DEATHS

38,000 IN 2000 ▶ 39,000 IN 2010

UNDER-FIVE DEATHS THAT WERE NEONATAL

22% IN 2000 ▶ 26% IN 2010

HEALTH EXPENDITURE THAT WAS PAID OUT-OF-POCKET

41% IN 2000 ▶ 53% IN 2009

OFFICIAL DEVELOPMENT ASSISTANCE

CHILD HEALTH ODA - PER CHILD

$9.38 IN 2003 ▶ $15.13 IN 2008

61% INCREASE

MATERNAL & NEWBORN HEALTH ODA - PER LIVE BIRTH

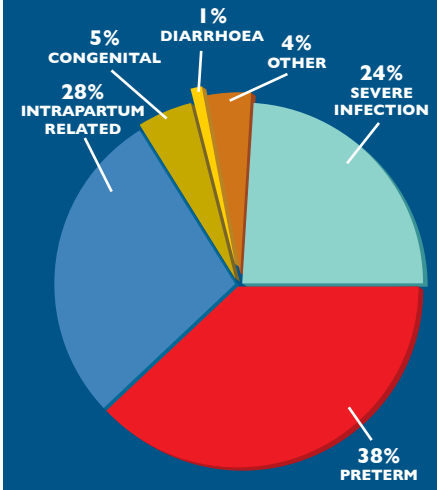
$13.78 IN 2003 ▶ $21.47 IN 2008

56% INCREASE

% OF ODA FOR MNCH MENTIONING "NEWBORN"

0% IN 2003 ▶ 1% IN 2008

CAUSES OF NEONATAL DEATH



DECADE OF CHANGE

NEWBORN SURVIVAL IN UGANDA

What happened and what was learned?

Before 2006, almost no policy or programmatic attention in Uganda was given to newborn survival. Rapid and comprehensive policy change including a specific framework for newborn health programming and national standards for establishing and monitoring newborn care services have set the stage for implementation. The multi-disciplinary Newborn Steering Committee has provided a platform within the Ministry of Health for technical leadership and broad stakeholder consensus. However, policy change and national consensus on technical needs cannot guarantee progress for newborn survival without adequate funding for implementation and commitment from district level actors.

Going forward

As more women access facility-based care during pregnancy and childbirth, strengthening district-level planning and budgeting for newborn services and connecting communities and facilities is needed within an integrated continuum of care approach. New research is expected to continue to inform implementation, especially at district level. While some progress has been made, there is still a need to accelerate progress to reduce newborn deaths and improve care for the 1.5 million babies who are born each year in Uganda. Newborn health is not promoted and protected within a vacuum; the same interventions will also improve care for mothers and older children and strengthen the overall health system.

Village Health Team (VHT) Strategy

VHTs are designed to extend basic health care services to the entire population, especially to those in rural areas but a 2009 assessment found newborn care to be lacking within VHT activities. In July 2010, new VHT materials incorporating lessons learned from the Uganda Newborn Study (UNEST) were launched with newborn health interventions and messages, including a schedule of antenatal and postnatal care visits. A 2011 assessment of newborn care within integrated Community Case Management revealed that health facility staff are knowledgeable and supportive of the role VHTs play in conducting home visits. While roll-out of VHT training has been rapid, implementation is primarily led by a few partners. Further commitment to scaling up VHTs in all districts together with evaluation of the impact of VHTs on newborn outcomes is needed.

CONTEXT

History of regional **civil unrest**

High total fertility rate

Growing **gap between rich and poor**

HEALTH CONTEXT

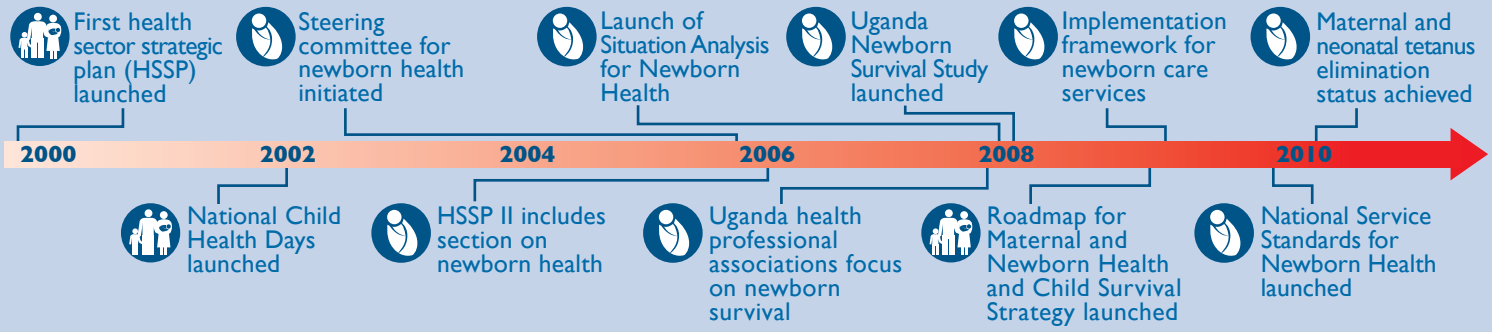
14.3
HEALTH WORKERS
PER 10,000 POPULATION (2005)

BIRTHS THAT TOOK PLACE IN A FACILITY

39% IN 2000 ▶ **57%** IN 2010

Photo: Anne-Sofie Helms/Save the Children

Key moments for newborn survival in policies and programmes



For more information see Mbonye AK, Sentongo M, Mukasa GK, Byaruhanga R, Sentumbwe-Mugisa O, Waiswa P, Sengendo H, Aliganyira P, Nakakeeto M, Lawn J.E., Kerber K. 2012. Newborn survival in Uganda: a decade of change and future implications. Health Policy and Planning 27(Suppl. 3):iii104–iii117.

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Design: The Miracle Book, Cape Town

DECADE OF CHANGE FOR NEWBORN SURVIVAL

Global MDG targets in 2000

Launch of Saving Newborn Lives

Community-Based Newborn Care trials in Asia

Healthy Newborn Partnership

State of the World's Newborns

Lancet Neonatal Survival series

Partnership for Maternal, Newborn and Child Health

PAHO Newborn Strategy

Countdown to 2015 for maternal, newborn and child health

Women Deliver

UN NMR and cause of death estimates

Opportunities For Africa's Newborns

2/3 of the world's countries eliminate neonatal tetanus

HNN

Healthy Newborn Network

IJGO supplement on intrapartum-related deaths

UN Joint Statement on home visits for newborn care

International Congress of Midwives Award for Newborn Care

Helping Babies Breathe

Neonatal chlorhexidine trials

Evidence for KMC

Lancet Stillbirth series

Save the Children

UN Every Woman Every Child global strategy

3.1 million newborns died in 2010