

# THE NEXT REVOLUTION

GIVING EVERY CHILD  
THE CHANCE TO SURVIVE



Save the Children

**EVERY**  
  
**ONE**

# THE NEXT REVOLUTION

**GIVING EVERY CHILD  
THE CHANCE TO SURVIVE**

**The International Save the Children Alliance is the world's leading independent children's rights organisation, with members in 28 countries and operational programmes in more than 100. We fight for children's rights and deliver lasting improvements to children's lives worldwide.**



**Save the Children**

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Cover photo: Babygirl, 3, lives with her family in a village in Liberia. They don't have access to clean drinking water or to safe sanitation and, though malaria is common, they don't have mosquito nets.  
(Photo: Jane Hahn/Panos)

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“...WE ARE CALLED TO ACT BY OUR CONSCIENCE BUT ALSO BY OUR COMMON INTEREST, BECAUSE WHEN A CHILD DIES OF A PREVENTABLE DISEASE IN ACCRA, THAT DIMINISHES US EVERYWHERE.”

**Barack Obama, President of the United States of America, 11 July 2009<sup>1</sup>**

“...OUR LONG-TERM CONCERN IS FOR THE FUTURE OF OUR CHILDREN. THEY NEED TO BE HEALTHY, WELL EDUCATED, WITH HOPE FOR THE FUTURE... WE WILL WAGE A WAR AGAINST MALNUTRITION OF CHILDREN, AGAINST MALARIA, TUBERCULOSIS, HIV/AIDS AND OTHER DISEASES.”

**Manmohan Singh, Prime Minister of India, August 2006<sup>2</sup>**

“THE SURVIVAL OF CHILDREN IN LIBERIA IS A FUNDAMENTAL UNDERPINNING OF OUR DEVELOPMENT AGENDA BECAUSE IT SHAPES HOW WE PROGRESS AS A NATION... THERE NEEDS TO BE RENEWED MOMENTUM AROUND THE ISSUE OF CHILD SURVIVAL, AND LIBERIA IS LEADING THAT CLARION CALL.”

**Ellen Johnson Sirleaf, President of Liberia, 2008<sup>3</sup>**

# THE STORY IN NUMBERS

6

The number of countries where more than half all child deaths occur – India, Nigeria, Democratic Republic of Congo, Ethiopia, Pakistan and China<sup>a</sup>

15

The number of times less likely an infant is to die from pneumonia if she or he is exclusively breastfed for the first six months, compared to an infant who is not<sup>d</sup>

57

The World Health Organization's assessment of the number of countries with 'critical shortages' of health workers – 36 of them in Africa<sup>b</sup>

28%

The proportion of children's deaths that are linked to poor sanitation and unsafe water<sup>e</sup>

6

The number of African Union countries allocating 15% of their budgets to health in 2006 – despite all 53 members promising to do so in 2001<sup>c</sup>

22nd

The century in which the Millennium Development Goal promising clean water will be achieved in sub-Saharan Africa, on current trends<sup>f</sup>

<sup>a</sup> UNICEF (2008) *The State of the World's Children*

<sup>b</sup> World Health Organization (2006) *World Health Report 2006: Working together for health*, p xvii, <http://www.who.int/whr/2006/en/> accessed 3 August 2009

<sup>c</sup> World Health Organization (2009) *World Health Statistics*

<sup>d</sup> R Black et al, Maternal and Child Undernutrition: Global and regional exposures and health consequences, Paper 1, *The Lancet*, 2008, p 5

<sup>e</sup> Water Aid (2009) *Fatal Neglect: How health systems are failing to comprehensively address child mortality*

<sup>f</sup> Water Aid (2009) see note above

# 200,000– 400,000

The additional number of children who may die each year until 2015 because of the global financial crisis, according to the World Bank<sup>g</sup>

# 8.8 million

The number of children who died before the age of five in 2008<sup>i</sup>

# \$36–45 billion

The total additional funds needed by 2015 to meet the Millennium Development Goals on child and maternal mortality<sup>h</sup> – less than half what consumers spend globally on bottled water each year<sup>i</sup>

<sup>g</sup> World Bank (2009) *Swimming Against the Tide: How developing countries are coping with the global crisis*

<sup>h</sup> High Level Taskforce on International Innovative Financing for Health (2009) Working Group 2: Constraints to Scaling Up and Costs, Working Group 1 Technical Report: Unedited version, page 10

<sup>i</sup> E Arnold and J Larsen (2006) *Bottled Water: Pouring resources down the drain*, Eco-Economy Updates, Earth Policy Institute. According to this report, US\$100m per year is spent on bottled water. <http://www.earth-policy.org/Updates/2006/Update51.htm> accessed 21 August 2009

<sup>j</sup> D You, T Wardlow, P Salama and G Jones, (2009) 'Levels and trends in under-5 mortality, 1990–2008', *The Lancet*, published online 10 September 2009



# EXECUTIVE SUMMARY

Nearly 9 million children die every year before the age of five\* – that is nearly one child every three seconds. Just under 4 million of these children die within their first month, during the so-called newborn period. Nearly 3 million babies die within one week of birth, including up to 2 million who die on the first day of their lives. Nearly all – 97% – of these children die in low- or middle-income countries, and disproportionately from the poorest and most marginalised communities within those countries.<sup>4</sup> In Afghanistan, one child in five will die before their fifth birthday.<sup>5</sup> Across the whole of sub-Saharan Africa, the figure is one in seven.<sup>6</sup>

Thirty years ago, Jim Grant, then head of UNICEF, spearheaded a surge of global action to save millions of children's lives. Faced with the fact that many children were dying from conditions that could easily be prevented, he mounted a campaign to raise widespread awareness, money and political support for change. His efforts, and those of many others, became known as the 'child survival and development revolution'.

Now, as we enter the second decade of a new century, we can count the successes of that revolution. Millions of children have survived who would otherwise not be here today, thanks to that extraordinary effort. Many of them have gone to school and grown up healthy and ready to make their own contribution to their communities. There are doctors, teachers, nurses, and small businessmen

and women who are changing the world around them – because a generation knew enough to care, and cared enough to act.

Every child – no matter where or to whom they are born – has an equal right and deserves an equal chance to survive. And every one of us has a responsibility to act. It is time for the second revolution in newborn and child survival.

There is wide agreement about the actions needed to massively reduce levels of newborn and child mortality. The scandal is that governments and others with influence have failed so far to provide the leadership, resources and sense of urgency to make it happen. In the year 2000, world leaders committed themselves to Millennium Development Goal (MDG) 4, calling for a reduction by two-thirds, between 1990 and 2015, in the under-five mortality rate.

This report is published to coincide with the launch of our global campaign on newborn and child survival. Our objective for this campaign is clear: to help get the world on track to achieve MDG 4 by bringing about a substantial reduction in the preventable deaths of young children. While children are our primary focus, the health, nutritional status and broader wellbeing of a young child is linked inextricably with that of his or her mother. Therefore, the campaign will include efforts to address the health and wellbeing of mothers

\* See D You, T Wardlow, P Salama and G Jones, 'Levels and trends in under-5 mortality, 1990–2008', *The Lancet*, published online 10 September 2009. DOI:10.1016/S0140-6736(09)61601-9

and to accelerate progress towards MDG 5 – a three-quarters reduction in maternal mortality by 2015.

High levels of child mortality can be explained at three levels.

1. There are a small number of diseases and conditions that directly cause more than 90% of deaths in under-fives. These are pneumonia, measles, diarrhoea, malaria, HIV and AIDS, and neonatal conditions that occur during pregnancy and during or immediately after birth. The latter conditions are particularly significant in respect of newborn deaths. Severe infections, asphyxia and premature births cause 86% of newborn deaths.<sup>7</sup> In nearly all cases, the diseases and conditions that are the direct causes of child death are preventable and treatable with proven interventions. But these interventions remain unavailable or inaccessible to many of the world's poorest children.
2. There are a series of intermediate factors that make some children more likely to fall prey to these diseases or medical conditions, and limit their chances of recovering from them. These factors include: the absence of essential healthcare or the inability of many mothers and their children to access it; high levels of maternal and child undernutrition and poor feeding practices; lack of access to clean water and safe sanitation; lack of maternal education; and limited access to contraception.
3. The deaths of children are not random events beyond our control. To a considerable extent, they are the outcome of policy and political choices taken by governments. They are also influenced by cultural, economic, environmental, political and social factors that governments, international institutions, the private sector and civil society could help to shape or mitigate. These are the underlying causes of newborn and child mortality.

Of these factors, poverty, inequality and discrimination are particularly important. Women and girls face pervasive discrimination in many

countries – their rights and opportunities denied. This is why a commitment to equity and justice – reducing disparities, realising rights and empowering the poorest and most marginalised women – is absolutely critical for reducing child mortality rates.

Poor governance, violent conflict and worsening environmental trends like climate change are additional underlying factors that impact on the survival prospects of children. Eight of the ten countries with the worst rates of child mortality have recently experienced conflict, violence or political instability,<sup>8</sup> and climate change is already increasing the frequency of disasters that kill poor children.<sup>9</sup>

Children's chances of survival are also influenced by global economic conditions. The World Bank estimates that child deaths could be 200,000 to 400,000 per year higher between 2009 and 2015 as a result of the financial and economic crisis.<sup>10</sup> And new global health pandemics, like the H1N1 virus (swine flu), could spread further and faster, or mutate into a more virulent form, overwhelming already fragile health systems and increasing levels of newborn and child mortality.

## SO WHAT SHOULD BE DONE?

Save the Children believes there should be a real drive to expand the coverage of proven interventions that reduce maternal, newborn and child mortality. These include: skilled personnel available to support mothers during birth; early postnatal care; preventive and curative treatment for pneumonia, diarrhoea and malaria; and support for nutrition, including breastfeeding, complementary feeding, cash transfers and wider social protection programmes. These interventions should be delivered through stronger systems, so that the poorest and most marginalised families can get the healthcare, nutrition and other services they need. Action should be matched by policies that address the underlying causes of child mortality. Policies to reduce newborn and child mortality must be flexible, as they will need to be applied in fragile and conflict-affected states, as well as in chronic emergencies and rapid fast-onset disaster situations.

Given the difficult economic and environmental conditions the world faces, it would be easy to be pessimistic about the prospects of achieving MDG 4. Yet we know that a really dramatic reduction in the number of child deaths is achievable. Why? Because all developed countries have already achieved huge reductions in child mortality in the course of the 20th century. In 1900, the infant mortality rate in the UK was 140 per 1,000 live births,<sup>11</sup> and in the USA, 100.<sup>12</sup> These rates are worse than in Liberia today (93 per 1,000).<sup>13</sup> More importantly, we know it because many low- and middle-income countries have cut mortality significantly over the last few decades, and many have done so more rapidly than today's developed economies managed in the last century.<sup>14</sup> Although further progress is needed, since 1990 more than 60 countries have reduced their child mortality rate by 50%.<sup>15</sup> We do not need a major technological breakthrough to crack this problem. But we do need to:

- push the health and nutrition of mothers and young children higher up national and international agendas, building greater awareness and understanding of how widespread death and illness remains in many poor countries, and channelling anger and outrage into decisive action
- expose the false assumptions that still cloud the debate about child mortality in poor countries, creating a pretext in some quarters for inaction and cynicism
- champion what some communities and countries have achieved, and the policy responses and interventions that have been shown to work, and to demonstrate how this success can be replicated elsewhere
- highlight what the world loses from high levels of child mortality, and what we would all gain from saving children's lives.

### Getting on the radar screen

Unlike other diseases like HIV and AIDS – or new issues like climate change – newborn and child mortality in poor countries lacks a significant public and political constituency. Our efforts, and those of like-minded organisations, need to find innovative ways of connecting with the public, so that this issue becomes more tangible and important to them

and they begin to hold their politicians accountable for delivering on it. Save the Children's campaign is designed to do precisely this.

### Debunking the myths

Many people are cynical about the possibility of doing anything about child mortality. Some believe that it would cost too much; others, that reducing child mortality would further accelerate population growth on an already overcrowded planet. Many believe that attempts to improve children's health and nutrition will inevitably be thwarted by corruption and misgovernment in the poorest countries, and that there is little benefit in keeping children alive if the future ahead of them is one of desperate poverty.<sup>16</sup>

These claims are all false. Many poor countries have cut their child mortality rates. The costs of achieving MDG 4 are small in global terms. Reductions in child mortality rates correlate with falling rates of fertility, and serve to slow and stabilise population growth. While corruption and poor governance are important issues, they have not proved an insurmountable barrier to reducing child mortality in many countries. And while keeping children alive is not the end of the story – and should be complemented by policies to help them grow up healthy, well-educated, properly nourished and safe – improvements in child survival will lead to wealthier, more productive societies.

### Learning from success

Several countries, including Bangladesh, Brazil, Egypt, Indonesia, China, Mexico, Nepal and the Philippines, are on track to achieve MDG4,<sup>17</sup> and there are concrete lessons to be learned from their experience. Some of these countries have achieved cuts in mortality rates despite problems of weak or corrupt governance, and in the context of deep poverty.

### Sharing the benefits

We are all diminished – economically as well as morally – when children die. The influential Commission on Macroeconomics and Health

estimated the global impact of maternal and newborn deaths at US\$15 billion a year in lost productivity.<sup>18</sup> It has also been estimated that 30 to 50% of Asia's economic growth between 1965 and 1990 is attributable to demographic and health improvements, including reductions in infant and child mortality, better access to reproductive health services and reductions in fertility rates.<sup>19</sup> More recent research evidence shows that improvements in human development correlate with higher levels of economic growth, with a 5 percentage point reduction in child mortality rates associated with a one percentage point increase in economic growth over the subsequent decade.<sup>20</sup> At a time when governments are looking to revive their economies, there is a sound business case for investing in children's early years.

## A call to action

The target date for achieving the Millennium Development Goals, including MDGs 4 and 5, is 2015. On current trends, these targets will not be met. This coming year, 2010, is an absolutely critical one for getting the world on track for meeting its promises to the world's poorest children and their mothers. This report suggests how this can be done, and why it must be done.

Save the Children, working in close cooperation with others, and using fresh evidence and new arguments, is determined to end the gross injustice of high levels of maternal, newborn and child mortality, and to champion political, policy and programme responses that will help the world achieve MDGs 4 and 5. We need nothing less than a new 'child survival revolution' that completes the job started by Jim Grant and UNICEF in the 1980s, and helps deliver massive reductions in child mortality. Our aim is that national governments and donors should become much more accountable for their performance in reducing maternal, newborn and child mortality, particularly for the poorest. This will require stronger civil society organisations – internationally, nationally and locally – that are focused on this issue, pressing and persuading governments and others to take the necessary action.

## RECOMMENDATIONS

### Make maternal, newborn and child survival the key metric in measuring success in development

Rates of mortality among the poorest communities are a much more telling indicator of development progress (or the lack of it) than per capita income. Countries should be encouraged to measure and report progress against newborn and child mortality, broken down by wealth quintile and social group; national governments and donors should be held to account by civil society for delivering improved outcomes.

We are also making a series of concrete policy calls to donors, developing countries, international organisations and others – a seven-point plan – to help save the lives of children and their mothers.

### Save the Children's seven-point plan

#### 1. Implement credible national plans.

Developing countries need to implement national plans for reducing maternal, newborn and child mortality. Some of these plans exist on paper, but are not being implemented effectively. In other cases, plans will need to be developed or significantly strengthened. National plans should be fully costed, and should set out clear benchmarks against which progress can be judged. The plans should focus on achieving universal coverage of proven interventions for reducing mortality, alongside action to strengthen systems and delivery mechanisms. Donors and international institutions should help countries to develop and implement these plans, and they should pledge that no country with a credible plan in place, and a clear commitment to implement it, should fail through lack of resources. Donors should fast-track resources to these countries.

**2. Focus on newborn babies.** Interventions are needed that enhance the health, nutrition and wellbeing of women, and support mothers and children during and immediately after

birth (the most vulnerable period for the child and the mother). Support is best provided through a ‘continuum of care’ – across the lifecycle, from women of reproductive age, through birth, to early childhood; and from care in the home through to hospitals and other health facilities.

- 3. Prioritise equity.** This should include targets for reducing the gaps in coverage of maternal, newborn and child health, nutrition and related interventions, as well as mortality rates between rich and poor. This requires the removal of financial and non-financial barriers to care (like user fees or informal payments), and tackling the underlying causes of high mortality, such as inequality, discrimination and the violation of rights.
- 4. Mobilise additional resources.** It has been estimated that to reach the agreed goals on maternal and child mortality in the world’s poorest countries, donors, national governments and others must more than double current annual spending on health and related interventions, from an estimated US\$31 billion in 2008 to US\$67–76 billion in 2015. This additional amount will need to come from various sources. Given the scale of the need and the urgency of a rapid increase in resources, we recommend that at least half of the additional US\$36–45 billion comes from donors, with these resources used for interventions that reduce maternal, newborn and child mortality.

- 5. Train and deploy more health workers.** Part of the additional investment needed to reach MDGs 4 and 5 should be allocated to recruit, train, equip and deploy more health workers. Targets should be set for expanding the number of trained and properly equipped health workers in each country, particularly to meet the needs of the poorest and most marginalised communities.
- 6. Tackle undernutrition.** Nutrition should be a much higher priority, and support should be provided to proven interventions, including micronutrient supplements, exclusive breastfeeding, complementary feeding, and food fortification, as well as cash transfers and social protection programmes. Developing countries and donors should report on their performance against the internationally-agreed nutrition indicator (part of MDG 1), which many fail to do at present.
- 7. Increase focus on children in emergencies.** Where developing countries are not able to cope with emergencies themselves, donors and others should provide lifesaving assistance for children and their families in emergency, fragile and conflict situations. They should help poor countries reduce the risks and costs of conflict and disasters by developing more resilient systems, and through disaster risk-reduction programmes.

# INTRODUCTION

Governments have made many promises to the world's poorest people, in international human rights agreements and in political declarations. Clear commitments to safeguard the lives of newborn babies and young children are contained in the United Nations Convention on the Rights of the Child (UNCRC), the International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social and Cultural Rights. For example, Article 6 of the UNCRC refers to children's inherent right to life, survival and development, while Article 24 calls on governments to: "take appropriate measures to diminish infant and child mortality and to ensure the provision of necessary medical assistance and healthcare to all children". But governments are falling short of their legal obligations to children.

More recently, at the United Nations Millennium Summit, world leaders committed themselves to eight targets for poverty reduction and development. One of these, Millennium Development Goal (MDG) 4, is a promise to reduce the under-five mortality rate by two-thirds between 1990 and 2015. There has been some progress here. In 2006, for the first time since records were kept, the number of children dying each year under the age of five fell below 10 million. The figure now stands at 8.8 million.<sup>21</sup> This compares with an estimated 20 million under-five deaths in 1960. But overall global progress is still shockingly slow and uneven. There is even less progress in relation to MDG 5 (to reduce maternal mortality by three-quarters by 2015). The world is also significantly off-track on

the part of MDG 1 that relates to reducing levels of hunger and underweight rates among children under five.

Progress has also been poor in relation to newborn deaths (within the first month of life). These now account for 40% of deaths in children under the age of five each year. Africa has made almost no progress in reducing newborn mortality, while South Asia's progress has been limited (with the exceptions of Bangladesh and Nepal).<sup>22</sup> We should also remember that 3.2 million babies are dying each year during birth or in the last 12 weeks of pregnancy,<sup>23</sup> and that for each newborn baby that dies, 20 more suffer illness or disability from injury during birth, infection, and the complications of premature birth.<sup>24</sup>

Yet there is wide international agreement about what needs to be done to address maternal, newborn and child mortality. Countdown to 2015\* has assessed coverage of 25 interventions in the 68 countries that account for nearly all maternal, newborn and child mortality. Implementing these preventive and curative interventions would cut child mortality by two-thirds in these countries.<sup>25</sup>

The aim of this report is to galvanise much greater political and public engagement with this issue, and much more decisive action by governments and others to help deliver these interventions – not just for some children and their mothers, but for all; and not just in the short term, but through systems and structures that are sustainable.

\* Countdown to 2015 is an initiative by key international agencies – including UNICEF, WHO, the United Nations Population Fund (UNFPA), the World Bank, the Gates Foundation, Save the Children and others – to cut maternal, newborn and child mortality.

Chapters 2 and 3 point out the countries and communities where newborn babies and children are dying in large numbers, and explain why this is still happening.

Chapter 4 provides a brief overview of the child survival story so far. What happened in the first child survival revolution in the 1980s and 1990s? Why did this run out of steam? What lessons can we learn from this? And what does the next child survival revolution need to do differently?

Chapter 5 highlights some examples of success – those countries that are on track to achieve MDG 4, or are making real progress in cutting child deaths.

Chapter 6 challenges the common misconceptions around child survival.

Chapter 7 is our call to action – the policy responses we believe are needed, and why it is so urgent to act on them now.

# WHERE CHILDREN ARE DYING

Sixty eight low- and middle-income countries account for 97% of all child deaths. Half of these deaths – 4.7 million – occur in Africa, and around 3.8 million newborn and child deaths are in Asia.<sup>26</sup> The latest data available shows the child mortality

rate (child deaths per 1,000 live births) as 148 per 1,000 in sub-Saharan Africa, and 78 per 1,000 in South Asia – up to 25 times the rates in industrialised countries (6 deaths per 1,000).<sup>27</sup>

## FIGHTING INEQUITY IN INDIA

In India nearly 2 million children under five die every year – more than in any other country. Its record on newborn and child mortality (72 per 1,000 live births) is worse than that of neighbouring countries such as Bangladesh (61 per 1,000) and Sri Lanka (21 per 1,000).<sup>28</sup> It accounts for one-fifth of newborn deaths, and is also home to one-third of the world's undernourished children. These figures persist, despite nearly a decade of high economic growth – which has not translated into improved healthcare and nutrition for the majority of children.

However, there are huge differences between different states, and between different income groups, tribal groups and castes within India. For example, whereas the under-five mortality rate in Kerala is 16/1,000, and in Goa 20/1,000, in Uttar Pradesh it is 96/1,000, in Madhya Pradesh 94/1,000, and in Rajasthan 85/1,000. Across the whole country, the under-five mortality rate for the lowest wealth quintile is 92/1,000, compared with 33/1,000 for the highest wealth quintile.<sup>29</sup>

For many poor parents and their children, seeking medical help is a luxury, and health services are often too far away. Patriarchal norms, which place severe restrictions on women's mobility, prevent mothers being able to seek medical help. To achieve MDG 4, India will have to tackle poverty, inequality, exclusion and discrimination and take decisive steps to strengthen the rights of women.

The federal government is already taking some important steps. Its ambitious National Rural Health Mission aims to bring infant mortality down to 30 per 1,000 births by 2012. It has increased the resources allocated to state governments for health. The Integrated Child Development Services – the country's nutrition supplement programme for children under five – has also been restructured to give greater priority to infants up to three years of age. The real challenge will be to ensure that high-level policy commitments are translated into improved outcomes for the poorest and most marginalised children and their mothers.



## STRENGTHENING CAPACITY AND ACCOUNTABILITY IN NIGERIA

Every year, more than 1 million Nigerian children die before their fifth birthday.<sup>30</sup> The country has the highest number of newborn deaths in Africa, and the second highest in the world. Nearly one third of all children are underweight for their age, and 43% are stunted due to chronic malnutrition.<sup>31</sup>

The situation in the northern states is much worse than in the southern part of the country. Under-five mortality rates are nearly double, twice as many children are stunted, and immunisation rates are a fraction of those in the south.<sup>32</sup> Whereas 44.6% of children in the south-east and 32.5% in the south-west are immunised, in the north-east the figure is 6%, and in the north-west just 3.7%.<sup>33</sup>

In 2006, a review of child health equity in 16 African countries highlighted Nigeria as the country with the largest disparity between rich and poor. The newborn mortality rate among the richest quintile was 23 per 1,000 live births, compared with 59 in the poorest quintile. If the newborn mortality rate was 23 per 1,000 live

births for the whole population, 133,000 fewer babies would die each year.<sup>34</sup>

Most child deaths in Nigeria could be prevented. Just 1% of children sleep under an insecticide treated net, leaving them vulnerable to malaria, which accounts for nearly a quarter of the country's under-five deaths. Only 28% of children with diarrhoea receive adequate oral rehydration therapy, and just 33% with suspected pneumonia are taken to an appropriate health provider. Less than one fifth of children are exclusively breastfed.<sup>35</sup>

The challenge is to improve the provision of accessible healthcare, nutrition and related services so that the most vulnerable and marginalised children can get the help they need. The federal government has a strategy for maternal, newborn and child health, but it is essential that it and state governments become more accountable for their performance in saving children's lives. Civil society has a crucial role to play in helping to secure this.

A small number of countries with large populations account for the highest absolute number of newborn and child deaths. Just over half – 51% – of all deaths of children under five occur in six countries – India, Nigeria, the Democratic Republic of Congo (DRC), Pakistan, China and Ethiopia (see Table 1).<sup>36</sup> The countries with the worst child mortality rates (the number of child deaths per 1,000 live births) tend to be very poor, and to have experienced war or violent conflict, such as Afghanistan, Angola, Chad, the DRC, Liberia and Sierra Leone.

Newborn deaths (those within a month of birth) are similarly concentrated, with nearly all – 98% – taking place in developing countries.<sup>37</sup> A 2005 report from the Lancet estimated that more than

two-thirds of all newborn deaths (2.7 million out of 4 million each year) occur in just ten countries. And just four countries with large populations – India, China, Pakistan and Nigeria – account for more than half.<sup>38</sup> Approximately a fifth of the world's newborn deaths occur in just one country – India.<sup>39</sup>

As the tables in Appendix 2 illustrate, there are often wide variations in levels of mortality between different income groups within the same country, even in those countries on track for meeting MDG 4. For example, while Pakistan reduced its average child mortality rate by 23% between 1990 and 2007, the figure for the poorest quintile is only 3%. In Tanzania, there was an 18% reduction in the average rate of child mortality between 1999 and 2004. However, this breaks down to 31% for the

**Table 1: Countries with the absolute highest numbers of children dying (2007)**

Country	Total population (thousands)	Annual number of births (thousands) 2007	Annual number of under-5 deaths (thousands) 2007	Under-5 child mortality rate (deaths per 1,000 live births)
India	1,169,018	27,119	1,953	72
Nigeria	148,093	5,959	1,126	189
DRC	62,636	3,118	502	161
Pakistan	163,902	4,446	400	90
China	1,328,630	17,374	382	22
Ethiopia	83,099	3,201	381	119
Afghanistan	27,145	1,314	338	257
Bangladesh	158,665	3,998	244	61
Uganda	30,884	1,445	188	130
Tanzania	40,454	1,600	186	116

Source: UNICEF (2008) *The State of the World's Children 2009*

**Table 2: Countries with the highest under-five child mortality rates (2007)**

Country	Total population (thousands) 2007	Annual number of births (thousands) 2007	Annual number of under-5 deaths 2007 (deaths per 1,000 live births)	Under-5 child mortality rate
Sierra Leone	5,866	268	70	262
Afghanistan	27,145	1,314	338	257
Chad	10,781	492	103	209
Equatorial Guinea	507	20	4	206
Guinea-Bissau	1,695	84	17	198
Mali	12,337	595	117	196
Burkina Faso	14,784	654	125	191
Nigeria	148,093	5,959	1,126	189
Rwanda	9,725	435	79	181
Burundi	8,508	399	72	180

Source: UNICEF (2008) *The State of the World's Children 2009*

wealthiest quintile, compared with only 14% for the poorest quintile. Ethiopia's average rate of reduction between 2000 and 2005 was 30%. However, while it was 37% for the richest, for the poorest it was only 18%. In Côte d'Ivoire, under-five child mortality rates for the richest quintile improved by 14% between 1994 and 1999, while rates in the poorest quintile actually deteriorated by around 21%. The

evidence presented here shows very powerfully that we must focus much more attention on the needs of the poorest and most marginalised children, and on reducing disparities between rich and poor. It also shows that MDG 4 would be achieved more quickly if we could secure greater progress in reducing mortality among children from the poorest communities. (See Appendix 2.)

# HOW AND WHY CHILDREN ARE DYING

High levels of child mortality can be explained at three separate but related levels: 1. direct causes of death, 2. intermediate causes, and 3. underlying causes.

## DIRECT CAUSES OF DEATH

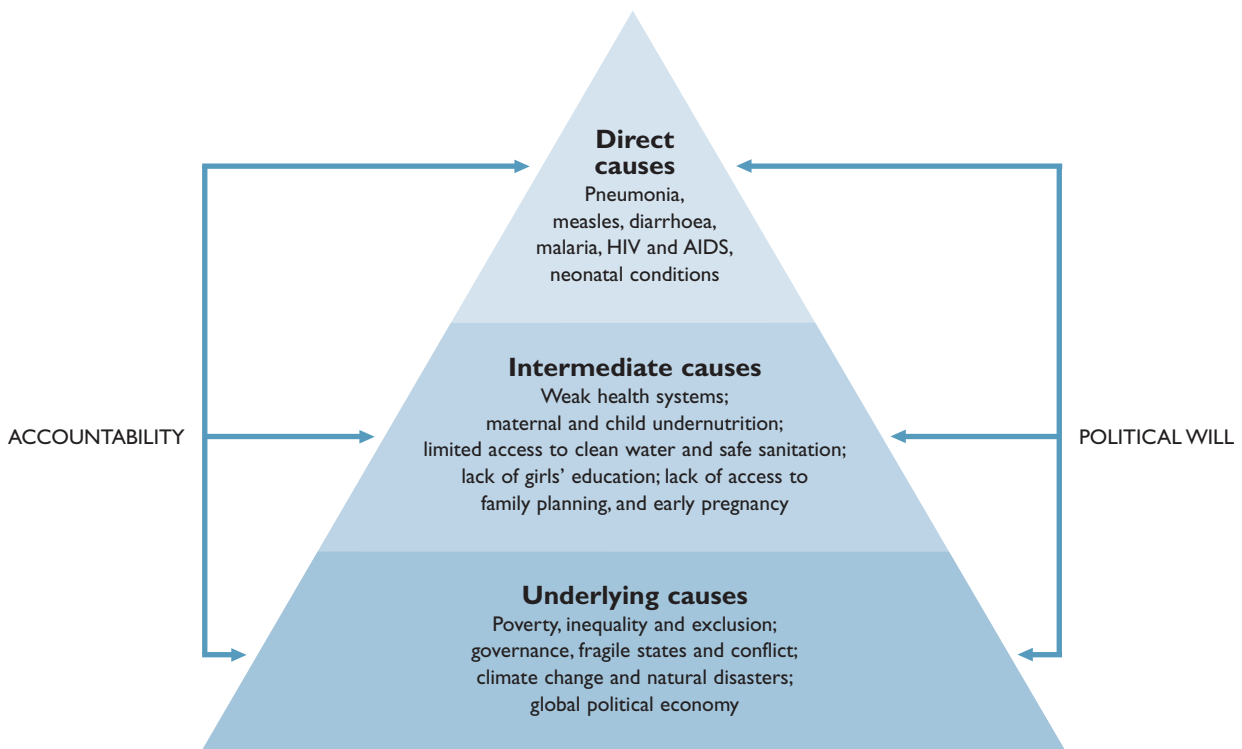
A small number of diseases and conditions cause more than 90% of child deaths in under-fives. These are pneumonia, measles, diarrhoea, malaria, HIV and AIDS, and a number of neonatal conditions that

occur during pregnancy and during and immediately after birth.<sup>40</sup>

Severe infections (like sepsis, pneumonia, tetanus and diarrhoea), asphyxia and premature births account for 86% of newborn deaths.<sup>41</sup> In nearly all cases, the diseases and medical conditions that are killing children are preventable and treatable.<sup>42</sup>

Pneumonia and diarrhoea – which together cause 3.5 million child deaths a year – are the biggest

**Figure 1: Child deaths can be explained at three levels**



killers of children under five outside of the neonatal period.<sup>43</sup> An additional 1 million infants die from severe infections, including pneumonia, during the neonatal period.<sup>44</sup> This is despite the fact that most infections can be prevented or treated with antibiotics; low-cost, easily administered oral rehydration therapy can accelerate recovery from diarrhoea. The incidence of both pneumonia and diarrhoea could be further reduced if more babies were breastfed and more children were vaccinated.<sup>45</sup>

Malaria, which causes 18% of child deaths in sub-Saharan Africa, could be cut significantly if all children in high-risk countries slept under insecticide-treated nets, and if those who get sick were promptly and properly treated.<sup>46</sup>

Immunising all children against diphtheria, pertussis (whooping cough) and tetanus, hepatitis B, polio and measles saves lives. Immunising pregnant women against tetanus saves the lives of mothers and newborn babies. Indeed, the gains in child survival over the last decade can be largely attributed to increased immunisation, alongside other preventive measures.<sup>47</sup>

Anti-retroviral therapy could reduce the risk of mothers passing the HIV virus to their infants – an essential intervention considering that more than 90% of HIV infections in infants are transmitted from the mother during pregnancy, labour, delivery or breastfeeding. Mother-to-child transmission of HIV currently accounts for nearly 350,000 child deaths annually.<sup>48</sup> Most children with HIV and AIDS die of pneumonia or diarrhoea, and many of these episodes can be easily treated.

Proven strategies to deliver many lifesaving interventions to pregnant women and newborn babies include focused antenatal care and early postnatal care. The risk of newborn and maternal deaths can be further reduced by rapid referral to an appropriately staffed and equipped health facility when complications arise during labour. Skilled attendance at childbirth is critical, as well

as immediate initiation of breastfeeding and postnatal care. Yet, despite the fact that these proven interventions could save millions of children's lives every year, they continue to be unavailable or inaccessible to millions of mothers and their children.

## INTERMEDIATE CAUSES

In addition to the direct causes of child death, there are a set of intermediate factors that shape children's survival prospects. These are:

- the accessibility and quality of basic health systems
- nutritional and feeding practices
- the availability of clean water and safe sanitation
- girls' education
- access to and use of contraception, and age at pregnancy.

### Weak health systems

At a minimum, health systems should be equipped, staffed and organised to deliver proven interventions, effectively and equitably, to those mothers, newborn babies and children who need them, particularly those from the poorest and most marginalised communities. These systems need to operate across what is called the 'continuum of care'. There are two dimensions to this – time and place. Services must be provided to women of reproductive age, through pregnancy, birth, and the early days and years of a child's life. There must also be links between care provided in the home, locally in the community, and in hospitals and other health facilities.<sup>49</sup>

Yet in many poor countries and communities, strong health systems – operating across the continuum of care – are simply non-existent. Health facilities are often too far away or too expensive to access. In many cases, those that do exist are inadequately staffed and lack essential medicines and equipment. Poor people are therefore reluctant to invest precious time, effort and money in seeking care that may be unavailable or of very poor quality. Others

may not recognise the symptoms of potentially serious illness, or they may turn to traditional healers or spiritualists. Health policies and systems should, so far as possible, take healthcare to the communities and households where most maternal and child deaths occur.

The cost of accessing healthcare is also a very important issue. A number of studies have shown that when user fees are introduced, poor people's demand for primary health services falls, and when they are abolished, it increases dramatically.<sup>50</sup> But the issue of costs is broader than user fees. In most cases, other costs – like transport, drugs, informal payments to healthcare workers, accommodation, food and foregone income – are greater than the direct costs. While there are different views about the most appropriate means to finance healthcare, a global consensus was explicitly supported by the G8 in 2009, saying that maternal and child healthcare should be “free at the point of use where countries chose to provide it”.<sup>51</sup>

The lack of trained and equipped health workers in many poor countries is a major barrier to the delivery of effective healthcare for mothers and children. This is further aggravated by an inequitable distribution of existing workers within poor countries. Few relish hardship postings, so the shortage of health workers in insecure urban and remote rural areas is often acute. The World Health Organization (WHO) has estimated that more than 4 million more health workers are needed – 1.5 million for Africa alone.<sup>52</sup> Across the world, 57 countries have been identified as having ‘critical shortages’ – 36 of these are in Africa.<sup>53</sup> This problem has been compounded in some cases by the outward migration of healthcare staff to work in Europe, North America and

Australia, sometimes encouraged by these rich country governments.

Donors have also contributed to the weakening of national health systems in many cases. At the global level, the health sector is bedevilled by a confusing proliferation of funds and initiatives, many of them focused around interventions to address specific diseases. While some of these ‘vertical’ initiatives have successfully boosted coverage rates for preventive and curative treatments for specific diseases, they have often been detrimental to the development of effective and equitable national and community health systems. There are more than 40 bilateral donors and 90 global initiatives around health. These compete for attention and scarce country resources, especially human resources. They skew country priorities, increase transaction costs, and encourage piecemeal solutions to service delivery problems.<sup>54</sup>

The quality of national health systems and their ability to deliver key interventions is also severely constrained by an overall lack of resources. African Heads of State committed themselves in 2001 to allocating at least 15% of their government budgets to the health sector.<sup>55</sup> But very few of them do so. Kenya spends 9.7% of the government budget on health, Ethiopia 9%, Sierra Leone 7.8%, Angola 5%, Ghana 4.4%, Eritrea 4.2%, Nigeria 3.5%, and Burundi a mere 2.4%.<sup>56</sup> Donors are also failing to deliver on their promises. The G8 countries are way off-track in delivering on the promised increases in aid that they made in 2005 and that they have reiterated at subsequent G8 summits. Poor children in poor countries are dying because developing and donor country governments are failing to honour their promises.

\* There are three measures of child malnutrition: 1. chronically malnourished or stunted children are too short for their age; 2. acutely malnourished or wasted children are too thin (their weight is too low for their height); and 3. an underweight child who has a low weight for his or her age could be chronically and/or acutely malnourished. All three types vary in their degree of severity and are classified as mild, moderate or severe. There is also a hidden side to malnutrition: micronutrient deficiencies affect billions of people worldwide, with an estimated one-third of children in developing countries deficient in vitamin A alone.

## Maternal and child undernutrition

The deaths of 3.2 million children each year – around a third of all those who die under the age of five – are associated with malnutrition.\* The damage can start when a child is in the womb, an indirect consequence of the poor nutritional intake of the mother. Globally, each year 18 million babies are born with low birth weight because they are premature or were malnourished in the womb. South Asia has the highest incidence of low birth weight – a quarter of newborn babies weigh less than 2,500 grams – as well as the highest prevalence of underweight children.<sup>57</sup> A child is almost ten times more likely to die if they are severely underweight than if they are of average weight for their age, and more than two-and-a-half times more likely to die if they are even moderately underweight.<sup>58</sup>

A lack of certain key micronutrients can also damage the health of the mother and her child, and increase the risk of maternal and child mortality. For example, anaemia affects 42% of pregnant women globally – ranging from 24% in the Americas to 57% in Africa, raising the risk of premature birth, low birth weight, haemorrhage and sepsis.<sup>59</sup>

Undernutrition weakens a child's immune system, making them more susceptible to disease and less able to fight off infection. A particularly critical period for cognitive and physical development is from the first few weeks in the womb until the second year of life. If a child is chronically malnourished or stunted during this time, the effects are irreversible.

One of the best means for ensuring a child's survival, strengthening their immune system and furthering healthy development is breastfeeding. Infants who are exclusively breastfed for the first six months of their life are ten times less likely to die from diarrhoea, and 15 times less likely to die of pneumonia, compared with infants who are not breastfed.<sup>60</sup> But many women do not know the benefits of exclusive breastfeeding, and may introduce other liquids and foods that are not necessary

in the first six months of life. Other mothers face competing demands of work and household tasks – such as collecting water and making food – which reduce the frequency and length of breastfeeding. Infants are often left in the care of siblings, or a grandmother, and are only partially breastfed. When a child is fed anything other than breastmilk in their first six months, their risk of dying is increased three-fold.<sup>61</sup> The evidence also indicates that breastfeeding practices that do not meet international recommended standards (relating to the duration and frequency of breastfeeding and the introduction of other foods) are responsible for 1.4 million child deaths each year.<sup>62</sup>

Pressure from the manufacturers of baby milk substitutes can discourage breastfeeding and heighten the risk of child mortality. In many parts of the developing world, the general conditions for preparing the milk are unhygienic, or mothers are forced to use unsafe and contaminated water to make up the formula. Moreover, the infant foregoes the immunity passed through the mother's milk. There is an international code of conduct for companies, setting out guidelines on the promotion of infant formula, but these are not always adhered to.

Despite its importance in tackling newborn and child mortality, maternal and child nutrition has been neglected by many developing country governments and by international donors. This is beginning to change, not least as a result of the food price crisis. There is now much more international attention on food security and agriculture. Necessary action to boost agricultural yields in the poorest countries needs to be linked with measures to ensure that the poorest people can buy or produce the food they need. Cash transfers and social protection programmes have a critical role to play in this.<sup>63</sup>

Like health, the international system for dealing with nutrition issues is highly fragmented. Action is also needed to ensure that the various international initiatives around nutrition and food security are better coordinated.

## THE FOOD PRICE CRISIS

High food prices are having a serious impact on the world's poorest people, including poor children. Food prices rose to peak levels between 2005 and 2008. While they have fallen globally, they are expected to remain on average 35–60% higher than in the past decade.<sup>64</sup>

In April 2009, the UN Food and Agriculture Organization surveyed domestic food prices in 58 developing countries. They found that high food prices were persisting, and in some cases had reached record levels. In 80% of the countries looked at, food prices were higher than a year earlier, and in about 40% of countries prices had actually increased from January 2009.<sup>65</sup>

A number of longer-term factors will also push food prices higher over the coming years, including climate change and its impact on

agricultural yields, water scarcity, the rising cost of energy, competition for land, and growing demand for food as a result of world population growth. For example, the World Bank has estimated that by 2030, the worldwide demand for food will have increased by 50%.<sup>66</sup>

What does this mean for children? Poor rural families in countries with high levels of malnutrition need to spend at least half and sometimes as much as 80% of their income on food, depending on the season.\* Very small fluctuations in food prices can therefore have a serious impact. Using World Bank figures, Save the Children estimates that in 2008 alone a minimum of 4.3 million (and potentially as many as 10.4 million) additional children could have become malnourished in developing countries as a result of global food price rises.<sup>67</sup>

## Limited access to clean water and safe sanitation

The WHO estimates that 28% of under-five deaths are linked to poor sanitation and unsafe water.<sup>68</sup> Many of these deaths relate to diarrhoea, which spreads rapidly in unhygienic environments, or where hygiene practices are poor. A lack of clean water and safe sanitation also increases the incidence of acute respiratory infections, another major cause of child mortality.

Poorer children tend to have limited access to clean water and safe sanitation facilities. In affluent areas of cities in Asia, Latin America and sub-Saharan

Africa, many families have toilets, and piped drinking water will be delivered into their homes at low prices by public utilities. By contrast, slum dwellers and poor rural families in the same countries are likely to lack hygienic toilet facilities, and have access to much less water than the 20 litres each person needs every day. In fact, most of the 1.1 billion people categorised as lacking access to clean water use only about five litres a day.<sup>69</sup> Women and girls face a double burden – missing out on education and opportunities because they have to spend hours each day collecting water.

While there has been considerable progress in respect of clean water provision, investment in

\* J Bernard (2008) Impact of prices on households' livelihoods in Burkina Faso, unpublished research, Save the Children UK

safe sanitation and progress towards international targets on sanitation remain seriously off-track. In 2006, 2.5 billion people still lacked access to safe sanitation. On current trends, MDG 7, relating to the provision of safe sanitation, will not be met in sub-Saharan Africa until the 22nd century.<sup>70</sup>

### **Lack of girls' education**

While girls' inability to access good quality schooling clearly has disastrous educational consequences, it also has a serious negative impact on maternal, newborn and child survival.

Research findings from 35 demographic and health survey country reports suggest that children of mothers with no education are more than twice as likely to die, or be malnourished, than children of mothers who have secondary education or higher qualifications.<sup>71</sup>

Mothers with limited literacy and educational skills are also much less likely to receive skilled support during pregnancy and childbirth. In Nigeria, for example, only 15% of births among uneducated women are assisted by trained medical personnel, compared with 56% of births among women who have completed primary school, and 88% among women who have completed higher education.<sup>72</sup>

More widely, there are various ways in which girls' limited educational opportunities have a negative impact on their own and their future children's health. These include not being able to read information about good health practices, lack of self-confidence and authority to make decisions, and an inability to negotiate government bureaucracy for services.

### **Limited access to family planning and early pregnancy**

There is a very strong link between high levels of newborn and child mortality, and the inability of mothers and their partners to obtain and use modern contraception. Children born less than two years after the next oldest sibling are more than twice as likely to die than a child born after three

years.<sup>73</sup> The effective use of contraception can help mothers control their fertility and space their pregnancies in a way that enhances their health and that of their babies. While access to contraception has increased over recent decades, millions of women who say they would like to delay pregnancy are not using modern contraception. While globally the use of modern contraception is 55%, in sub-Saharan Africa it is on average 16%, with 17 sub-Saharan African countries reporting a usage rate of less than 10%.<sup>74</sup>

Child and maternal mortality rates are also affected by the age of the mother. Latest figures produced by the UN suggest that pregnancy early in life contributes to an estimated 70,000 maternal deaths among girls aged 15 to 19 each year, and that an infant's risk of dying in the first year of life is 60% higher when the mother is under the age of 18.<sup>75</sup> Early marriage – usually of a girl to an older man – contributes to a large number of teenage pregnancies, and puts the lives of these young mothers and their children at serious risk.

## **UNDERLYING CAUSES**

Beneath the direct causes of newborn and child mortality, and the intermediate factors that increase a child's risk of early death, are a set of underlying causes.

### **Poverty, inequality and exclusion**

It is the poorest children in the poorest communities in the poorest countries who are at greatest risk of dying before their fifth birthday. Their poverty reflects their parents' lack of livelihood opportunities or assets, or their greater vulnerability to economic and environmental shocks.

Poverty can be caused or compounded by inequality and exclusion. In many countries – including Brazil, Nigeria and India – the mortality rates of children in the poorest 20% of households can be two or three times higher than among the richest 20% (see Appendix 1). In Peru, the rate is five times higher.<sup>76</sup> In some countries – for example, Côte d'Ivoire and



Senegal – rates of child mortality are deteriorating for the poorest households, at the same time as they are improving for better-off households (see Appendix 2).

Inequality is not just about income disparities. Discrimination on the grounds of gender, caste, ethnicity and religion may also lead to higher rates of newborn and child mortality. In many countries, the relative powerlessness of women and girls prevents them from accessing services without the consent of their husbands or male relatives. Attaining women's and girls' rights, and enhancing their status, power and opportunities, is absolutely key to progress on newborn, child and maternal survival.

### **Governance, fragile states and conflict**

The nature and quality of governance can have a significant impact on the survival prospects of newborn babies, children, and their mothers. Poorly governed or corrupt states, or countries with very weak public administration systems, tend to be less capable of delivering (or unwilling to deliver) health and other services to their people.<sup>77</sup> These trends are even more pronounced when it comes to conflict-affected states. Eight of the countries with the highest under-five mortality rates have been through recent conflict or violence and political insecurity.<sup>78</sup> For example, the under-five mortality rate in Sierra Leone, still recovering from a decade of civil war, is 262 per 1,000 live births. In Afghanistan it is 257 per 1,000, and in Chad it is 209 per 1,000.

### **Climate change and natural disasters**

Climate-related disasters already affect 250 million people – around half of them children – in a typical year.<sup>79</sup> In the next 20 years, it is estimated that climate change and other factors will increase the number of people affected by disasters by more than 300%.<sup>80</sup> Already, climate change is seriously affecting children's health and access to food and water. It is also increasing the distribution, frequency and severity of disasters, which have a disproportionate impact on children.<sup>81</sup>

Some of the major child killer diseases – including malaria and diarrhoea – are highly sensitive to climatic conditions such as flooding and higher temperatures. Malaria already kills 800,000 children under five each year.<sup>82</sup> Rising temperatures will increase the geographical range and seasonality of the disease.<sup>83</sup> In some areas where temperatures were previously low enough to keep malaria at bay – such as the Kenyan highlands – the average temperature has now risen to a level that increases the risk of transmission.<sup>84</sup> Overall, an additional 260 to 320 million more people will be affected by malaria by 2080 because of its spread into new areas.<sup>85</sup>

The majority of cases of diarrhoea in children are caused by inadequate sanitation, poor hygiene, and unsafe drinking water.<sup>86</sup> Accessing clean water is already a daily challenge for more than 1 billion people around the world.<sup>87</sup> If global temperatures increase by 2°C, an additional 1 to 3 billion people will experience increased water stress. This, in turn, will contribute to the growing incidence of diarrhoea and water-borne disease.<sup>88</sup>

Climate change also has very serious implications for food availability and nutrition.<sup>89</sup> By 2020, crop yields in some parts of Africa could fall by as much as 50%,<sup>90</sup> and in tropical and subtropical regions the harvest of rice and maize could fall by up to 40%.<sup>91</sup> This will result in many developing countries becoming even more dependent on food imports, and being further exposed to the vagaries of international markets, creating greater food insecurity for the poorest families and their children.<sup>92</sup>

### **Global political economy**

The survival prospects of children are affected by global economic developments, including international terms of trade, global financial instability and economic slowdown, and the costs of food and fuel. The World Bank has estimated that child deaths could be 200,000 to 400,000 per year higher between 2009 and 2015 as a result of the global financial and economic crisis.<sup>93</sup>

This report provides ample evidence that the deaths of children are not random events beyond our control. To a considerable extent, they are the outcome of policy and political choices made by governments. They are also influenced by cultural, economic, environmental, political and social factors that governments and other actors could help to shape or mitigate.

While developing countries with high rates or levels of newborn and child mortality should develop and lead their own strategies for tackling this problem, the underlying causes of mortality highlight the particular responsibilities of the world's wealthier countries. These countries should use their considerable resources, knowledge and other policy instruments more effectively to ensure the delivery of basic healthcare, nutrition and related services that prevent children dying.

Wealthy countries must also alter policies that damage the development prospects of poorer countries. For example, they should put an end to massive subsidies for agricultural trade that distort global food markets. They should stop poaching health workers from developing countries through active recruitment policies, and they should abandon

harmful approaches to economic reform that squeeze investment in the social sectors such as health, sanitation and education. They should also cut large-scale emissions of carbon that accelerate climate change.

## POLITICAL WILL AND ACCOUNTABILITY

There are two other important factors that affect child mortality rates. These are political will and accountability. If proven interventions are not being provided, if clean water and safe sanitation are not available, if girls are denied access to education, and if there is discrimination and prejudice against certain communities, this is largely because those with influence and power lack the will to address these inequities, and feel no sense of accountability for delivering better health and nutrition outcomes for poor mothers and their children. Civil society has a crucial role to play in mobilising the necessary political will, and in holding governments and others accountable for their actions. Save the Children's campaign is designed to help bring this about.

# CHILD SURVIVAL – A BRIEF HISTORY

Child mortality is not a new issue. For more than a century, governments, private foundations, health professionals and others have sought to cut the number of child and infant deaths. Indeed, the large decline in child deaths in many parts of the world – especially in today’s developed countries – over this period is one of the great success stories in international public health. At the start of the 20th century, many of these countries had levels of child mortality that were worse than those in even the poorest countries today. For example, in 1900 the infant mortality rate in the UK was 140 per 1,000 live births, and in the USA, 100. The comparable figures today are five and seven.<sup>94</sup>

How did these countries reduce their child mortality rates? They invested in healthcare, sanitation and clean water supplies. Rising incomes led to improved diets, and the provision of universal education and greater access to family planning led to smaller but healthier families.

In more recent decades, international attention on this issue has focused on developing countries, precisely because child death rates remain high in many of these countries. In 1978, a landmark international conference on health was held in Alma Ata bringing together representatives from 134 nations and 67 non-governmental organisations (NGOs), as well as the key UN agencies. The first of its kind, this event sought to build a stronger international consensus around the importance of primary healthcare, drawing on the experience of Nigeria, India, Guatemala, Cuba, Indonesia and China. The Alma Ata Declaration<sup>95</sup> stressed the importance of equity, community involvement and

participation, a fully integrated approach to health, the use of appropriate technology, affordability, and health education.

Although there was much in the Alma Ata approach that was forward-thinking and innovative, the take-up and full application of these principles was hamstrung in many poor countries by the wider economic context. In large parts of the developing world – particularly in Latin America and sub-Saharan Africa – the 1980s was a lost decade for development. It was a period of financial crisis and debt, of structural adjustment and rising poverty levels.

But despite this inauspicious context, some elements of the Alma Ata approach were taken forward by UNICEF, in the context of the ‘child survival and development revolution’. This initiative was the brainchild of UNICEF’s Executive Director, Jim Grant. Under his charismatic leadership, UNICEF pioneered and promoted four low-cost interventions, collectively referred to as GOBI: growth monitoring and the promotion of better nutrition; oral rehydration therapy to treat childhood diarrhoea; breastfeeding to ensure that young children were appropriately nourished; and immunisation against six deadly childhood diseases. At a later stage, three additional interventions were added: food supplementation, family spacing through support for family planning, and female education. The overall package was renamed GOBI-FFF.<sup>96</sup>

This package of interventions was highly successful, catalysing national governments and international

donors into action, and producing a sharp fall in levels of child death. At the start of the decade, an estimated 15 million children were still dying before their fifth birthday. By the early 1990s, that figure had fallen to around 12 million.<sup>97</sup>

However, the success of this approach wasn't just about the technical interventions themselves. What was most impressive about the initiative, and Jim Grant's leadership of it, was that it managed to mobilise and energise so many governments and communities. The vision was articulated in a way that was clear and compelling. This was matched by practical actions – concrete steps against which progress could be measured and judged – for example, increases in the coverage of immunisation, or in the use of oral rehydration therapy to treat diarrhoea.

All the time, the appeal was to the better instincts of the public and politicians. In the case of the latter, reducing child mortality was presented as something they could do easily and at low cost, that would deliver concrete measurable results over a short period of time, and for which they would get the credit. As Jim Grant often put it: "Good health is good politics."

There are wider lessons to be learned from this first child survival and development revolution. Why was the momentum not sustained? What did it fail to achieve? Why is a second revolution needed now? And how should it differ from the first?

## LESSONS FOR A SECOND REVOLUTION

Many elements of the first child survival revolution are still highly relevant to the situation today. We need to rekindle that sense of idealism, generate and sustain political leadership at all levels, and link these with a concrete and doable policy agenda. Our collective task is to put child survival centre-stage once again.

However, the challenge today is a harder one because, in many places, the 'easy' job has been done – immunisation levels are higher, the use of oral rehydration salts is now widespread in some countries, and many families are having fewer and better-spaced children. In addition, many of the newborn babies and children who are dying today live in much more difficult environments, and are much harder to reach. As UNICEF put it in this year's *State of the World's Children*: "The bulk of efforts [to reduce newborn and child mortality] must be focused on the most difficult situations and circumstances: in the poorest countries, among the most impoverished, isolated, uneducated and marginalised districts and communities, within nations ravaged by AIDS, conflict, weak governance and chronic under-investment in public health systems and physical infrastructure."<sup>98</sup> Making progress will require innovative new policy responses, of the kind set out in Chapter 7 of this report.

While the first child survival revolution made good progress in reducing mortality among slightly older children, it was less successful in reducing newborn and maternal mortality. An estimated 500,000 women still die every year from complications related to pregnancy and childbirth. Newborn mortality has fallen over the last few decades, but at a slower pace than the overall under-five mortality rate. The result is that a higher proportion (40%) of child deaths now occur within one month of birth.<sup>99</sup> Action to promote maternal, newborn and child survival needs to be thoroughly integrated, with interventions across a continuum of care.

The next concerted surge on maternal, newborn and child survival must also focus not just on reaching more mothers and children, but on helping to build systems and structures that are capable of delivering sustainable improvements in their lives. A criticism of the first child survival revolution is that it paid insufficient attention to effecting lasting change. Sustainability must be a critical focus of future efforts. In policy terms, this means ensuring

that: there are adequate numbers of health workers where they are needed most; equipment and supplies are routinely available; and the recurrent costs of programmes are adequately financed. This also requires addressing the wider structural determinants of high maternal, newborn and child mortality, like adverse economic and environmental conditions.

While global progress in reducing newborn and child mortality since the early 1990s has been less impressive than in the 1980s, there have been some

important developments over the last decade, particularly the establishment of a clearer scientific and technical consensus about the measures necessary to reduce mortality.\*

Overall, the child survival story should be a motivating and inspiring one. The experience of the last century – and of the first ‘child survival and development revolution’ in particular – shows what can be achieved. There is much that can and must be learned from this experience.

\* These include the following Lancet specialist papers and series: Bellagio Child Survival Series (2003), Newborn Mortality (2005), Maternal Survival and Sexual Reproductive Health (2006), Broader Issues of Child Development in Developing Countries (2007), Health Systems and ‘Women Deliver’ (2009), and Maternal and Child Health and Nutrition (2008).

# LEARNING FROM SUCCESS

Table 3 on page 18 indicates the level of progress the countries with the worst child mortality rates are making. The bad news is that of the 68 countries that account for nearly all newborn and child mortality, 31 (46%) are making insufficient progress on child mortality and 20 (29%) are making no progress at all, or have child mortality rates that are actually worsening. Yet 17 countries (25%) are on track to meet MDG 4. It is important to highlight how and why certain countries have made progress. Their experience shows what it is possible for others to achieve.

## SUCCESS STORIES

**Bangladesh** – on track to achieve MDG 4 – has made progress by: increasing the coverage of immunisations, especially neonatal tetanus protection; the provision of vitamin A supplements and oral rehydration therapy; and through support for family planning. It is a unique example of government and NGO collaboration – especially through the Bangladesh Rural Advancement Committee (BRAC), which has helped to bring lifesaving health and nutrition interventions to some of the poorest communities in the country. BRAC's efforts, and those of others, have helped to ensure that more girls are educated, there is greater use of modern family planning, and better access to emergency obstetric care.

Bangladesh has also introduced poverty reduction programmes in many districts, with an emphasis on generating income and promoting self-reliance for women, particularly from the poorest parts of the population.<sup>100</sup> As shown in Appendix 2, in recent years Bangladesh has achieved faster progress on

child mortality among its poorest wealth quintile than the national average of progress. Despite this, there are still unacceptable inequities in mortality rates and the coverage of key interventions between wealthier and poorer income groups. Reducing these inequalities will help Bangladesh to achieve MDG 4 more quickly.

**Nepal** – also on track to achieve MDG 4 – is a remarkable story. Despite widespread political unrest and extreme poverty, under-five mortality has dropped by 50% since 1990. Between 1996 and 2006: immunisation coverage and treatments for diarrhoea and pneumonia more than doubled; modern contraceptive use increased from 26% to more than 40%; and vitamin A coverage exceeded 90%. A supportive policy environment (especially allowing health workers other than doctors to deliver interventions) and the strengthening of systems (especially training and logistics, and sustained donor support) were critical to this success. Perhaps most importantly, a national cadre of Female Community Health Volunteers has played a vital role in delivering interventions such as pneumonia treatment. These have increased demand and created a link between the formal health system and local communities.<sup>101</sup>

**Sri Lanka** has made so much progress in reducing child mortality over the last four decades, that it is not part of the Countdown list. But its experience is still relevant. Sri Lanka has achieved low levels of child mortality by tackling the social determinants of ill health. An emphasis on women's empowerment and literacy has ensured a population that is equipped to assert its right to basic services. Quality healthcare, free at the point of use, has meant that most births take place in local health facilities,

attended by trained staff, with good follow up to monitor the progress of infants and prevent diseases. Investment in the training and development of the health workforce has also played an important role in Sri Lanka’s impressive child survival rates.<sup>102</sup>

In terms of current challenges, action is clearly needed to reduce disparities in health provision and outcomes between the majority Sinhalese population and the minority Tamil community, including

assistance and protection for those children and their families displaced by violence and conflict.

**Tanzania** is not currently on track to meet MDG 4, but is making progress, and is beginning to see its policy and programmatic interventions translate into lower child mortality rates. It has a progressive policy framework, including free services offered to all women during pregnancy, delivery and the postnatal period, and to children

**Table 3: Progress towards MDG 4**

MDG 4 (reduce by two-thirds, between 1990 and 2015, the mortality rate in children under age five)						
Country or territory	Under-five mortality rate		Millennium Development Goal target 2015	Average annual rate of reduction (AARR) (%)		Progress towards MDG target
	1990	2007		Observed 1990–2007	Required 2007–2015	
Afghanistan	260	257	87	0.1	12.1	No progress
Angola	258	158	87	2.9	12.2	Insufficient
Azerbaijan	98	39	35	5.4	10.2	On track
Bangladesh	151	61	50	5.3	3.6	On track
Benin	184	123	62	2.4	9.7	Insufficient
Bolivia	125	57	42	4.6	4.2	On track
Botswana	57	40	19	2.1	20.7	Insufficient
Brazil	58	22	19	5.7	0.6	On track
Burkina Faso	206	191	69	0.4	12.1	No progress
Burundi	189	180	63	0.3	11.7	No progress
Cambodia	119	91	39	1.6	8.3	Insufficient
Cameroon	139	148	46	-0.4	13	No progress
Central African Republic	171	172	58	0.0	12.3	No progress
Chad	201	209	67	-0.2	12.6	No progress
China	45	22	15	4.2	5.2	On track
Congo	104	125	34	-1.1	14.5	No progress
Congo, Democratic Republic of the	200	161	68	1.3	12.2	Insufficient
Côte d'Ivoire	151	127	51	1.0	10.1	Insufficient
Djibouti	175	127	58	1.9	8.9	Insufficient
Egypt	93	36	30	5.6	1.6	On track
Equatorial Guinea	170	206	57	-1.1	14.3	No progress
Eritrea	147	70	49	4.4	4.6	On track
Ethiopia	204	119	68	3.2	6.6	Insufficient
Gabon	92	91	31	0.1	12.1	No progress
Gambia	153	109	51	2.0	8.8	Insufficient
Ghana	120	115	40	0.3	12.2	No progress
Guatemala	82	39	27	4.4	4.5	On track
Guinea	231	150	78	2.5	8	Insufficient
Guinea-Bissau	240	198	80	1.1	10.2	Insufficient
Haiti	152	76	51	4.1	5.1	On track
India	117	72	38	2.9	7.6	Insufficient
Indonesia	91	31	30	6.3	1.3	On track
Iraq	53	44	18	1.1	10.6	Insufficient
Kenya	97	121	32	-1.3	14.7	No progress
Korea, Democratic People's Republic	55	55	18	0.0	12.2	No progress
Lao People's Democratic Republic	163	70	54	5.0	3.6	On track
Lesotho	102	84	34	1.1	15.2	Insufficient
Liberia	205	133	78	2.5	12.2	Insufficient

under five. The government has also put more emphasis on tackling childhood malnutrition.

While there are specific contextual factors relevant to each of these cases, there are also some common themes that emerge from them. Political prioritisation appears to be important, as does the provision of services through community-based strategies, and a focus on expanding access to preventive interventions. Women's

empowerment and access to family planning make a real difference.<sup>103</sup> In some countries, progress is faster where governments focus on strengthening systems at both the national and the community level. Civil society also appears to play an important role, particularly in Bangladesh. These case studies are consistent with some of the best literature on the causes of social development – for example, the work of Amartya Sen on opportunities, empowerment and participation.<sup>104</sup>

**Table 3** continued

Country or territory	Under-five mortality rate		Millennium Development Goal target 2015	Average annual rate of reduction (AARR) (%)		Progress towards MDG target
	1990	2007		Observed 1990–2007	Required 2007–2015	
Madagascar	168	112	56	2.4	8	Insufficient
Malawi	209	111	74	3.7	5.4	Insufficient
Mali	250	196	83	1.4	10.6	Insufficient
Mauritania	130	119	44	0.5	11.5	No progress
Mexico	52	35	18	2.3	7.6	On track
Morocco	89	34	30	5.7	204	On track
Mozambique	201	168	78	1.1	6.3	Insufficient
Myanmar	130	103	43	1.4	9.7	Insufficient
Nepal	142	55	47	5.6	2.5	On track
Niger	304	176	107	3.2	9.6	Insufficient
Nigeria	230	189	77	1.2	10.1	Insufficient
Pakistan	132	90	43	2.3	9	Insufficient
Papua New Guinea	94	65	31	2.2	9.4	Insufficient
Peru	78	20	26	8.0	-0.4	On track
Philippines	62	28	21	4.7	4.8	On track
Rwanda	195	181	59	0.4	11.1	No progress
Senegal	149	114	50	1.6	9.4	Insufficient
Sierra Leone	290	262	97	0.6	11.4	No progress
Somalia	203	142	68	2.1	8.5	Insufficient
South Africa	64	59	20	0.5	13.8	No progress
Sudan	125	109	40	0.8	8.9	No progress
Swaziland	96	91	37	0.3	16.6	No progress
Tajikistan	117	67	38	3.3	6.4	Insufficient
Tanzania, United Republic of	157	116	54	1.8	8.7	Insufficient
Togo	150	100	50	2.4	8.6	Insufficient
Turkmenistan	99	50	33	4.0	4.8	On track
Uganda	175	130	53	1.7	10.2	Insufficient
Yemen	127	73	46	3.3	8.6	Insufficient
Zambia	163	170	60	-0.2	12.3	No progress
Zimbabwe	95	90	25	0.3	15.8	No progress

Note: This table shows progress towards MDG 4, with countries classified according to the following thresholds (based on classification method employed by UNICEF ([www.childinfo.org/mortality\\_progress.html](http://www.childinfo.org/mortality_progress.html))):

On track: U5MR is less than 40, or U5MR is 40 or more and the average annual rate of reduction (AARR) in under-five mortality rate observed from 1990–2007 is 4.0 per cent or more

Insufficient Progress: U5MR is 40 or more and AARR observed for the 1990–2007 period is between 1.0 per cent and 3.9 per cent

No progress: U5MR is 40 or more and AARR observed for 1990–2007 is less than 1.0 per cent

Sources: 1990 and 2007 Under-5 Mortality Rates are taken from *The State of the World's Children 2009*, UNICEF; Observed rate of reduction 1990–2007 was calculated by UN Data using data from *State of the World's Children 2009* (<http://data.un.org/Data.aspx?d=SOWC&f=inID%3A81>)



# DEBUNKING THE MYTHS

There are a number of misconceptions about child survival. Debunking these myths is vital if we are to trigger more concerted and urgent action by governments and others in a position of influence and power.

## **Myth 1 – Lots of poor children die, they always have. There’s not much we can do about it.**

This is false. A huge amount can and is being done to reduce child mortality. Even very poor countries like Eritrea, Bangladesh, Bolivia, Guatemala, Haiti, Lao PDR and Peru are on track to achieve MDG 4. In recent years, large reductions in newborn and child mortality have been achieved through low-cost interventions such as immunisation, oral rehydration, insecticide treated bed nets and vitamin A supplements, alongside measures to strengthen women’s rights and opportunities, and improve access to education. What these countries have achieved can be replicated elsewhere.

## **Myth 2 – The costs of reducing maternal, newborn and child mortality are high.**

The cost of cutting child deaths is small in global terms. By 2015, the world needs to be spending an additional US\$36–45 billion to secure MDGs 4 and 5 in the poorest countries, on top of the \$31 billion that is currently being spent. This sounds like a lot, but it is less than half what consumers spend globally on bottled water each year.<sup>105</sup>

## **Myth 3 – Progress in reducing child mortality will further accelerate population growth on an already overcrowded planet.**

The exact opposite is the case. Cuts in child mortality help to reduce rates of fertility, and to slow and stabilise population growth. While on current trends, the world’s population is set to grow to around 9 billion by 2050, there has been a slowdown in the rate of growth because women in many parts of the world are choosing to have fewer children than their parents.<sup>106</sup> A major reason for this is lower child mortality.<sup>107</sup> Where mothers and their partners are confident that their children will live, and where they have the capacity to control their fertility, they choose to have smaller families.

Reducing child mortality and increasing women’s control over their fertility is crucial for very poor families in order to overcome poverty. This also applies to communities and countries that cannot afford to accommodate a population that doubles each generation.<sup>108</sup> High fertility rates also increase environmental pressures, particularly in parts of Africa where the size of agricultural plots per family is already very low. But – linked with support for family planning and women’s empowerment – a reduction in child mortality leads to lower rates of fertility and population growth, making it easier to reduce poverty.

**Myth 4 – Attempts to improve children’s health and nutrition will inevitably be thwarted by corruption and misgovernment in the poorest countries.**

Corruption and poor governance pose significant challenges for development and for child survival. Nevertheless, these challenges do not appear to be insurmountable. Each year, Transparency International constructs a Corruption Perception Index, which measures the perceived levels of public-sector corruption in a given country, drawing on different expert and business surveys. All 16 of the Countdown priority countries that are on track to meet MDG 4 fall into the bottom half of this index – ie, are perceived as countries with significant levels of corruption (see Table 4). Again, this is not to say that corruption is not an issue. But it does appear that there are ways to make progress in reducing child mortality despite it.

**Myth 5 – There is no benefit in keeping children alive if the future ahead of them is one of desperate poverty.**

Beyond the obvious moral imperative, there are strong grounds of self-interest for wealthier people in developing countries, and for developed countries, to do much more to cut child mortality rates in the poorest communities.

We all lose out when children are undernourished and vulnerable to sickness and early death, and we all benefit when they are healthier, better nourished and educated. Globally, it is estimated that the direct cost of child malnutrition is between US\$20 billion and \$30 billion per annum.<sup>109</sup> The economic impact of undernutrition is also significant at the country level, leading to losses in GDP as high as 6% in some cases, as a result of lost productivity and income.<sup>110</sup>

**Table 4: Corruption in countries ‘on track’ to meet MDG 4**

Country rank (out of 180 countries)	Country	2008 corruption perception score (1 = completely corrupt 10 = completely clean)
72	China	3.6
72	Mexico	3.6
72	Peru	3.6
80	Brazil	3.5
80	Morocco	3.5
96	Guatemala	3.1
102	Bolivia	3.0
115	Egypt	2.8
121	Nepal	2.7
126	Indonesia	2.6
126	Eritrea	2.6
141	Philippines	2.3
147	Bangladesh	2.1
151	Lao PDR	2.0
166	Turkmenistan	1.8
177	Haiti	1.4

Source: Countdown to 2015 2008 Report and Transparency International Corruption Perception Index 2008

In addition, there are significant economic advantages in cutting child mortality. The influential Commission on Macroeconomics and Health estimated the global impact of maternal and newborn deaths at US\$15 billion a year in lost productivity.<sup>111</sup> They also looked at the longer-term economic benefits of better health. They argued that improved health outcomes should increase the life expectancy of low-income countries by one half of the existing 19-year gap with high-income countries – for example, from 59 to 68 years – and that this would boost economic growth rates. Their estimate was that the per capita income of low-income countries would be 10% higher than otherwise after 20 years.<sup>112</sup>

Other research has estimated that 30–50% of Asia’s economic growth between 1965 and 1990 is attributable to demographic and health improvements, including reductions in infant and child mortality, better access to reproductive health services, and reductions in fertility rates.<sup>113</sup> More recent research evidence shows that improvements in human development correlate with higher levels of economic growth, with a 5 percentage point reduction in child mortality rates associated with a 1 percentage point increase in economic growth over the subsequent decade.<sup>114</sup> At a time when governments are looking to revive their economies, there is a sound business case for investing in children’s early years.

# CALL TO ACTION

The target date for achieving the Millennium Development Goals – including MDGs 4 and 5 – is 2015. On current trends, these targets will not be met. This coming year, 2010, is a critical one for getting the world on track to fulfil its promises to the world's poorest children and their mothers. This report has suggested how this can be done, and why it must be done.

Save the Children – working in close cooperation with others, and using fresh evidence and new arguments – is determined to end the gross injustice of high levels of maternal, newborn and child mortality, and to champion political, policy and programme responses that will help the world achieve MDGs 4 and 5.

Nothing less than a new 'child survival revolution' is needed – one that completes the job led by Jim Grant and UNICEF in the 1980s. Our aim is that donors and national governments become much more accountable for their performance in reducing maternal, newborn and child mortality, particularly for the poorest. This will require stronger civil society organisations – internationally, nationally and locally – that are focused on this issue, pressing and persuading governments and others to take the necessary action.

## RECOMMENDATIONS

### **Make maternal, newborn and child survival the key metric in measuring success in development**

Rates of mortality among the poorest communities are a much more telling indicator of development progress (or the lack of it) than per capita income. We know, for example, that not all countries that have achieved high levels of economic growth have managed to translate this into commensurate reductions in mortality, or improvements in human development. For developing countries as a whole, the evidence suggests that a 1% increase in income per capita is associated with a 0.3% (0.1% in sub-Saharan Africa) decline in the child mortality rate.<sup>115</sup> This research is consistent with the experience of other countries. It is striking to note that 40% of all child deaths have taken place in the world's 20 fastest growing economies over the last five years (2005–2009).<sup>\*</sup> These countries have the potential to make faster progress in reducing child mortality, but they are not yet using their resources effectively for this purpose.

Countries should be encouraged to measure and report progress against maternal, newborn and

\* Child mortality estimates are taken from the latest available data at the time of print as reported in UNICEF's *State of the World's Children 2009*. Economic growth rates are an average estimate for the period 2005–09 and are taken from a data set provided by the Development Economic Prospect Group at the World Bank. The 20 countries are: Angola, Egypt, Azerbaijan, Bangladesh, Cape Verde, China, Ethiopia, The Gambia, Guyana, India, Lao PDR, Malawi, Panama, Peru, Rwanda, Slovak Republic, Sudan, Tanzania, Uganda and Uzbekistan.

child mortality indicators (by wealth quintile and other social groups), and national governments and donors should be held to account by civil society for delivering improved outcomes.

Below, we make a series of concrete policy calls to donors, developing countries and international organisations – a seven-point plan – for achieving sweeping reductions in maternal, newborn and child mortality.

## **Save the Children's seven-point plan**

### **1. Implement credible national plans**

Every country should have a credible plan for reducing maternal, newborn and child mortality. This should focus on scaling up proven interventions like effective antenatal care, skilled attendance at birth, early postnatal care, vitamin A supplementation, community case management of diarrhoea, pneumonia and malaria, and increased access to immunisation and vaccines. These interventions should be accessible to the poorest people, and should operate across the continuum of care in emergency, fragile and developmental contexts. The plan should sit within a coherent development strategy for the country, and be properly integrated with action to tackle intermediate and underlying causes of maternal, newborn and child mortality.

Many countries have good strategies on paper, but these are often not being properly implemented. A credible plan should contain clear benchmarks (against which progress can be measured), clear structures of political accountability, an appropriate level of resources, and an implementation plan to ensure that all children and mothers, particularly the poorest, really benefit. Donor governments and international institutions should fast-track resources to those countries with a credible plan in place. Indeed, donors should pledge that no country with a credible plan for reducing maternal, newborn and child mortality, and a commitment to implement it, should fail through lack of resources.

### **2. Focus on newborn babies**

Newborn deaths (those within a month of birth) now account for 40% of deaths of children under the age of five each year; that is nearly 4 million deaths worldwide. As countries have managed to reduce the deaths of slightly older children, newborn deaths have increased as a proportion of overall child mortality. Reaching MDG 4 will therefore require really sustained attention and action to promote newborn survival.

This requires interventions that enhance the health, nutrition and wellbeing of mothers, and support for mothers and children during and immediately after birth (the most vulnerable period for the child and the mother). Support is best provided through a continuum of care – across the lifecycle, from women of reproductive age through birth to early childhood; and from care at home through to hospitals and other specialist health facilities. Examples include contraception services, antenatal visits, trained attendants at birth, early postnatal care in the community, and support for breastfeeding.

### **3. Prioritise equity**

There are vast and shameful inequalities in rates and levels of newborn and child mortality between countries, and within them. One child in seven in sub-Saharan Africa will die before their fifth birthday. In industrialised countries, the figure is one in 167.<sup>116</sup> There are also huge differences in levels of coverage for proven interventions such as antenatal visits, skilled attendance at birth and immunisation. In nearly all the priority Countdown to 2015 countries, the richest families are gaining access to key interventions more quickly than the poorest. Achieving MDGs 4 and 5 will require a massive effort to reduce global and national inequalities.

Specifically, we want donors, international institutions and developing country governments to set targets for reducing disparities in the coverage of proven interventions between rich and poor, plus targets for reducing mortality rates across income and other social groups.

Reducing mortality rates among the poorest children requires concerted action to tackle underlying causes – those factors that limit the ability of poor children and their families to get decent healthcare, adequate nutrition, clean water and safe sanitation, and opportunities for education. This means recognising that children are often discriminated against on the grounds of ethnicity, gender, caste, HIV status and other social factors. In policy and programme terms, it will require a comprehensive approach to break down barriers and multiple forms of discrimination and prejudice, and to ensure that children's rights and the rights of women are respected.

#### 4. Mobilise resources

Progress towards MDGs 4 and 5 is severely hampered by inadequate levels of funding, and by the inefficient use of funds, and by multiple – often badly coordinated – global health initiatives and funding mechanisms. This was the conclusion of a recent high level taskforce on health financing, chaired by the UK Prime Minister, Gordon Brown, and President of the World Bank, Robert Zoellick.\*

Consistent with the headline recommendations of this taskforce, Save the Children calls on

donors, national governments and others to more than double current annual spending on health and related interventions, from an estimated US\$31 billion in 2008 to US\$67–76 billion in 2015.<sup>117</sup> This additional US\$36–45 billion will need to come from various sources, possibly including innovative financing mechanisms like the International Finance Facility for Immunisation. However, such mechanisms must not be used by governments or donors as an excuse for not investing sufficiently in quality health and related services. Given the scale of the need, the urgency of a rapid increase in resources, and the current disproportionately high burden of cost borne by the poor, we recommend that at least half of this additional investment come from donors.

While increased resources are hugely important, the efficiency with which those resources are spent, and what they are spent on, is also vital. In many poor countries, even limited health budgets are heavily skewed towards hospitals for the better-off in the capital, as opposed to interventions that serve the needs of the urban and rural poor. And countries vary considerably in the extent to which they translate investment in health into better health outcomes.<sup>118</sup>

\* The Taskforce undertook a detailed assessment of the level of funding required to meet international goals on health and made other recommendations. While they addressed the resource gap facing the 49 low-income countries, as opposed to the 68 Countdown countries, their work provides the most authoritative source currently available in respect of resource needs for MDGs 4 and 5 and the interventions necessary to reach these targets in poor countries. However, because India and China are excluded from their calculations, their headline recommendations certainly understate the level of additional resources needed to achieve MDGs 4 and 5 globally.

In addition, the Taskforce's calculations make an assumption about how much of the additional resources for health and related interventions will come from individuals (out-of-pocket expenses), as opposed to donors, national or local governments, or other sources. They note that, in total, low-income countries currently spend only US\$25 per person per year on health. The breakdown of this total expenditure per capita follows this general trend: donors and national governments contribute \$12 per person and the remaining \$13 is funded privately. We also know that more than 75% of private expenditure is out-of-pocket, with the remaining 25% covered by health insurance. The Taskforce assumes that individuals will continue to make a large contribution to health and related costs, and yet notes that out-of-pocket spending is "the most inequitable way to fund health systems because it disproportionately hurts the poor, vulnerable and marginalised. It prevents many from seeking or continuing care, and results in severe financial problems and even impoverishment for those who use these services. This is why health systems need structured, predictable, sustainable financing mechanisms that pool risk and provide social protection."

## 5. Train and deploy more health workers

As part of the effort to increase access to basic health services, donors, international institutions and developing countries need to recruit, train, equip and deploy many more health workers. It has been estimated that an additional 4.2 million health workers need to be recruited across developing countries as a whole, to meet the health-related MDGs,<sup>119</sup> and these extra workers should be in place by no later than 2012.

In particular, health workers are urgently needed at first-level facilities, and especially at the community level. Targets should be set for training and employing health workers in each country. To attract and retain high-quality health workers – particularly for more remote rural areas – it will be necessary to offer packages of support, including adequate pay, training, decent accommodation, adequate supervision and peer support, and opportunities for career development. So as not to undermine these efforts, industrialised countries should implement codes of conduct that prevent the recruitment of health professionals from developing countries, or provide appropriate compensation to those countries. We welcome the G8's encouragement of the WHO to develop by 2010 the Code of Practice on the International Recruitment of Health Personnel.

## 6. Tackle undernutrition

Developing countries and donors should increase funding for interventions that tackle child hunger, including support for breastfeeding, micronutrient supplementation and fortification, child and maternity benefits, nutrition education, treatment of severe acute malnutrition, early warning systems, and investments in agricultural production. Cash transfers and social protection are an important intervention to help poor families purchase adequate amounts of food and access healthcare.

Research evidence from South Africa and Mexico shows that cash transfer programmes have led to significant improvements in children's nutritional status. More broadly, these programmes can help in tackling child mortality. Cash transfer programmes in some countries – for example, Mexico, Colombia and Malawi – have led to reductions in rates of ill health among young children, while in Nicaragua, Honduras and Peru they have led to increased attendance by poor mothers and their children at health clinics, and to higher rates of immunisation.<sup>120</sup>

Action is also needed to rationalise the global architecture around nutrition, with a new international mechanism to coordinate support for hunger reduction, to ensure improved in-country coordination, and to hold governments to account. Developing country governments and donors should agree to report on their performance against the internationally-agreed indicator on nutrition (MDG 1), something that many of them fail to do at present.

## 7. Increase focus on children in emergencies

In a conflict or emergency situation children are at a greater risk of illness and death, and need immediate, lifesaving interventions. Governments, NGOs and international organisations must commit additional resources to support the needs of children during these critical times. They must also coordinate actions to ensure that there is a rapid and equitable response that reaches all communities affected by the emergency.

Whether it is a deadly outbreak of cholera or a political crisis that prevents children and families accessing critical health services, the global community must work in partnership to ensure the most vulnerable groups are not only supported through the acute initial period of the emergency, but that children and families continue to receive sustainable services and support after the emergency.

One way to help countries reduce the impact of conflict and disasters is through building the resilience of national and local systems, like health and education, and by supporting disaster risk reduction (DRR) programmes. These incorporate planning and advance preparation so that communities are stronger and more able to survive when a disaster strikes. International agencies and national governments must work together to include DRR in local plans and systems, to help protect their populations and reduce the impact of any emergency.

There are particular challenges in reducing newborn and child mortality rates in fragile and poorly governed states, which account for a large number of child deaths each year. Wherever possible, donors and international institutions should try to work through existing national or local systems, to strengthen them and to enhance their accountability to their citizens. However, in some very difficult circumstances it may be necessary for external agencies to channel resources through NGOs or other civil society organisations.

## CONCLUSION

The financial and ecological crises have demonstrated just how interconnected and mutually dependent the lives of the world's 6.6 billion people have become. They also highlight the degree of global injustice. Nowhere is this inequity more egregious than in the deaths of millions of innocent newborn babies and children each year.

This report has shown where and why children are dying, and what can be done to save children's lives. Today's developed countries have already cut their mortality rates dramatically over the course of the last century. Many developing countries have made huge strides, often in difficult circumstances. We do not need a major technological breakthrough to end this injustice. We merely need to learn from other countries' success, and apply proven remedies more systematically, and with greater urgency.

The death of millions of young children every year is a moral outrage, comparable to the worst abuses and social evils of the past. Every one of us has a role to play in tackling this problem. Further delay or inaction is inexcusable.



## CHILD SURVIVAL DIFFERENCES BY WEALTH QUINTILE

While the MDG4 target is based on a national average, these figures can conceal high levels of inequality between different wealth groups within the same country. The table below has two columns; the first shows the absolute gap in under-five mortality rates between the richest and poorest 20% of a country's population – ie, the difference in the number of children who die per 1,000 live births (the standard unit of measurement for the child mortality rate). The second column expresses that disparity as a ratio. For example,

a child from the poorest households in Nigeria is three times more likely to die under the age of five than a child from the wealthiest households.

The data on child mortality by wealth quintile is not directly comparable, as demographic and health surveys have been carried out at different periods. However, each country data set has been carried out in the same way, to allow comparison within a country.

Country	Absolute gap in under-5 mortality rates between richest 20% and poorest 20%	The ratio of the under-5 mortality rates between the richest and poorest 20% of the country's population
Zambia 2007	13.6	1.12
Swaziland 2006/07	16.9	1.17
Liberia 2007	21.3	1.18
Mauritania 2000/01	19.8	1.25
Zimbabwe 2005/06	15.2	1.27
Niger 2006	49.4	1.32
Lesotho 2004	31.4	1.38
Ethiopia 2005	38.0	1.41
Burkina Faso 2003	62.2	1.43
Ghana 2003	39.1	1.44
Tanzania 2004	44.0	1.47
Turkmenistan 2000	35.7	1.51
Eritrea 2002	34.6	1.53

<b>Country</b>	<b>Absolute gap in under-5 mortality rates between richest 20% and poorest 20%</b>	<b>The ratio of the under-5 mortality rates between the richest and poorest 20% of the country's population</b>
Azerbaijan 2006	22.3	1.55
Congo (Brazzaville) 2005	50.8	1.60
Kenya 2003	57.8	1.63
Malawi 2004	71.8	1.65
Gabon 2000	37.7	1.68
Togo 1998	70.7	1.73
Rwanda 2005	89.4	1.73
Mozambique 2003	88.1	1.81
Mali 2006	109.7	1.89
Congo, Democratic Republic of 2007	86.9	1.90
Guinea 2005	103.9	1.92
Central African Republic 1994/95	94.6	1.96
Guatemala 1998/99	38.3	1.97
Bangladesh 2007	43.0	1.99
Pakistan 2006/07	60.8	2.01
Nepal 2006	51.4	2.10
Cameroon 2004	101.1	2.15
Yemen 1997	90.1	2.23
Haiti 2005/06	70.1	2.28
Indonesia 2007	45.5	2.43
Côte d'Ivoire 1998/99	146.2	2.76
Senegal 2005	118.6	2.84
Madagascar 2003/04	92.4	2.87
Cambodia 2005	84.1	2.96
Brazil 1996	65.6	2.97
Egypt 2005	49.5	2.97
Morocco 2003–04	51.5	2.97
India 2005/06	78.2	2.98
Bolivia 2003	82.1	3.21
Philippines 2003	45.7	3.22
Nigeria 2003	177.7	3.24
South Africa 1998	65.5	3.99
Peru 2000	75.0	5.26

Source: Macro International Inc (2009). Measure DHS STAT compiler table. Accessed at <http://www.measuredhs.com> 21 July 2009

Note: Households are divided into quintiles using a composite measure of household wealth, called the 'DHS Wealth Index'.

## REDUCTIONS IN CHILD MORTALITY BY WEALTH QUINTILE

The following tables look at the change in under-five mortality rates in both the lowest 20% and highest 20% of wealth groups within a particular timeframe. **A negative sign indicates a reduction in under-five mortality.**

The first table looks at countries that are on track to achieve MDG 4 according to the Countdown to 2015. The second table looks at some of those that are not on track. Both tables also show the average progress in curbing child mortality for the entire country.

### Countries on track to meet MDG 4

Country	First year	Last year	Change in child mortality rates		
			Lowest 20%	Highest 20%	National average
Eritrea	1995	2002	-35%	-37%	-30%
Egypt	2000	2005	-24%	-26%	-28%
Morocco	1992	2003/04	-30%	-33%	-36%
Bangladesh	2000	2007	-29%	-39%	-23%
Indonesia	1997	2007	-29%	9%	-28%
Nepal	2001	2006	-24%	-31%	-27%
Bolivia	1994	2003	-32%	-30%	-30%
Peru	1996	2000	-16%	-20%	-12%

Source: Macro International Inc (2009). Measure DHS STAT compiler table. Accessed at <http://www.measuredhs.com> 21 July 2009

Note: Households are divided into quintiles using a composite measure of household wealth, called the 'DHS Wealth Index'.

**Countries not on track to meet MDG 4**

Country	First year	Last year	Change in child mortality rates		
			Lowest 20%	Highest 20%	National average
Benin	1996	2001	-5%	-15%	-12%
Côte d'Ivoire	1994	1998/99	21%	-14%	16%
Ethiopia	2000	2005	-18%	-37%	-30%
Madagascar	1997	2003/04	-27%	-51%	-32%
Malawi	2000	2004	-23%	-31%	-22%
Mali	2001	2006	-6%	-17%	-10%
Rwanda	2000	2005	-14%	-21%	-12%
Senegal	1997	2005	1%	-7%	-3%
Tanzania	1999	2004	-14%	-31%	-18%
Cambodia	2000	2005	-18%	-32%	-13%
Pakistan	1990/91	2006/07	-3%	-19%	-23%

Source: Macro International Inc (2009). Measure DHS STAT compiler table. Accessed at <http://www.measuredhs.com> 21 July 2009

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## I Introduction

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# THE NEXT REVOLUTION

## GIVING EVERY CHILD THE CHANCE TO SURVIVE

"This Save the Children report highlights the achievements and challenges in ensuring the survival of children under the age of five. Its publication coincides with the launch of the global campaign on newborn and child survival and serves to remind world leaders to honour their commitments to achieve Millennium Development Goal 4. It is a sad reality that young children, especially in developing countries, continue to die from preventable diseases, while governments spend large amounts of money on weapons of mass destruction. We must act now for the sake of our children, they are our future. Every child has a right to life."

**Archbishop Desmond Tutu**

"It is shocking and shameful that around 9 million children across the world still die every year under the age of five, when there are proven health and nutrition interventions that could help them to live and thrive. With the world a very long way from achieving Millennium Development Goals 4 and 5 on reducing child mortality and improving maternal health, this report should serve as a wake-up call to governments and others on the urgent need for action."

**Dr Gro Harlem Brundtland, former Director-General of the World Health Organization, former Prime Minister of Norway, and member of The Elders**

"Save the Children has been at the forefront of efforts to mobilise attention and action to address the horrifying and unacceptable levels of newborn and child mortality in poor countries around the world. This new policy report will be an effective tool in the fight to improve the health of women, newborn babies and children, laying out the needs and the facts, clearly identifying priorities, and presenting effective arguments for why action now is essential."

**Ann M Starrs, Co-chair of Partnership for Maternal, Newborn and Child Health**

"This is an excellent new report from Save the Children. It highlights the scale of global child mortality and the policies that could help to save children's lives, including a strong focus on realising human rights, reducing inequality and empowering women. It deserves to be widely read."

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