



# The Urban Disadvantage

STATE OF THE WORLD'S MOTHERS 2015

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*Note:* The focus of this report is on the hidden and often neglected plight of the urban poor. For the purpose of this analysis, the “urban poor” are defined as the bottom quintile (i.e., the poorest 20 percent of urban households). The “urban rich,” in contrast, are the top quintile (i.e., the richest 20 percent). The “urban survival gap” is a key metric used throughout. For this report, it refers to relative (not absolute) inequity in child survival chances and is given by the ratio between these two groups (i.e., the under-5 mortality rate (U5MR) for the urban poorest is divided by the U5MR for the urban richest). A relative difference of 2.0, for example, means the poorest urban children are twice as likely as the richest urban children to die before reaching age 5.

When interpreting these data it is important to note that sub-national estimates are subject to uncertainty. Observed gaps, especially where small, may be an artifact of the data rather than an indicator of genuine difference between groups. For this reason, the city and country data included in the report are imperfect but valuable measures of health equity. The data suggest where gaps may be great and call attention to the need for further investigation of health care challenges faced by the urban poor. For details, see Methodology and Research Notes.

Some names of mothers and children have been changed to protect identities.

#### **On the cover**

*Fatmara lost a baby a few years ago after giving birth on the floor of her shack in Freetown, Sierra Leone. She recently delivered a healthy baby at a clinic opened by Save the Children in the Susan's Bay slum.*  
Photo by Alfonso Daniels.

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# The Urban Disadvantage

Save the Children's 16th annual *State of the World's Mothers* report focuses on our rapidly urbanizing world and the poorest mothers and children who must struggle to survive despite overall urban progress.

Every day, 17,000 children die before reaching their fifth birthday. Increasingly, these preventable deaths are occurring in city slums, where overcrowding and poor sanitation exist alongside skyscrapers and shopping malls. Lifesaving health care may be only a stone's throw away, but the poorest mothers and children often cannot get the care they need.

This report presents the latest and most extensive analysis to date of health disparities between rich and poor in cities. It finds that in most developing countries, the poorest urban children are at least twice as likely to die as the richest urban children. In some countries, they are 3 to 5 – or even more – times as likely to die.

The annual *Mothers' Index* uses the latest data on women's health, children's health, educational attainment, economic well-being and female political participation to rank 179 countries and show where mothers and children fare best and where they face the greatest hardships.

## Foreword



When I was growing up in Hong Kong in the 1950s, 30 percent of the world's population lived in cities. Today, for the first time in history, more than half of humanity lives in an urban setting. Most people flourish under the amenities of modern life: economic and cultural opportunities, a secure food supply, reliable utilities and transportation, and access to social services, including health care. But many others flounder. WHO estimates that nearly a billion people live in urban slums, shantytowns, on sidewalks, under bridges, or along the railroad tracks. Life under these circumstances is chaotic and dangerous, and communities often lack even the most basic legal recognition needed to seek essential services.

As this year's report on the *State of the World's Mothers* shows, one of the worst places in the world to be a mother is in an urban slum. Poverty, and the social exclusion that goes with it, leave the urban poor trapped in overcrowded, makeshift or decrepit housing, with few opportunities to stay clean or safe on a daily basis. Diets are poor. Diseases are rife. Pregnancies occur too early in life and too often. Good health care, especially preventive care, is rare. In most cases, the publicly funded health services that reach the urban poor are under-staffed and ill-equipped. Forced reliance on pricey and unregulated care by private, and sometimes public, practitioners deepens poverty even further.

These are the women and children left behind by this century's spectacular socioeconomic advances. Far too often, even the simplest and most affordable health-promoting and lifesaving interventions – like immunizations, vitamin supplements, safe drinking water, and prenatal check-ups – fail to reach them. Their plight is largely invisible. Average statistics for health indicators in cities conceal the vast suffering in slums and other pockets of poverty in rich and poor countries alike.

*State of the World's Mothers 2015* puts these unmet health needs under the spotlight. The data set out in the report are sometimes shocking and often counter-intuitive. Vast health inequalities are pervasive. In the developing

world, young children from the poorest urban households are roughly twice as likely to die as children from the wealthiest households. The fact that death rates of mothers and children in urban slums may exceed those in rural areas will come as a surprise to many.

The report is issued at an opportune time as the international community transitions to a new development agenda. The Millennium Development Goals have unquestionably been good for public health. The annual number of young child deaths, stuck at more than 10 million for decades, has fallen by half since 1990. And at least 17,000 fewer children are dying every day. Deaths associated with pregnancy and childbirth have also been cut by 45 percent. As thinking about the post-2015 development agenda has matured, strong emphasis is being given to the importance of making equity and social inclusion explicit policy objectives. I hear this from my Member States every time the post-2015 agenda is discussed.

As so often happens in public health, when one stubborn problem begins to recede, it reveals another problem hidden beneath it. For example, as deaths in young children began to fall, newborn deaths emerged as a huge and neglected problem accounting for 44 percent of all deaths of children under age 5. This report likewise profiles a problem that stands out more prominently in the midst of so many areas of success. As underscored by the report, giving greater attention to the health needs of the urban poor – the mothers and children left behind – is essential to move towards universal health coverage, reducing one of the most glaring gaps in health outcomes, and one of the most tragic.

Dr. Margaret Chan  
*Director-General, World Health Organization*

## Introduction



Save the Children works in some of the world's toughest places to ensure that mothers and children survive and thrive. And through our global campaign, EVERY ONE, we are working hard to influence changes in policies, norms, laws and budgets so that we end preventable child deaths. The world has made remarkable progress towards this goal – 100 million children are alive today because of reductions in child mortality since 1990. Millions of mothers are alive today because of improvements in essential health care during pregnancy and childbirth. But there is a major unfinished agenda. Increasingly, further reductions in child and maternal mortality will depend on strengthened efforts in urban areas.

Every year, millions of families move from the countryside to towns and cities, in search of a better life. Yet in many cases, children and mothers in cities continue to face a high risk of death from preventable causes. In most countries, the poorest urban children are at least twice as likely to die as the richest children before their fifth birthday, and often face mortality rates well above the national average. We call this *the urban disadvantage*.

Our 16th annual *State of the World's Mothers* report explores the urban disadvantage in rich and poor cities around the world. Among our most important findings:

- The world is urbanising rapidly, with virtually all future population growth in developing countries expected to happen in cities. As a result, a greater share of child deaths will take place in urban areas.
- In developing countries, the urban poor are often as bad as, or worse off than, the average rural family, and for many rural families, moving to the city may result in more – rather than less – hardship.
- Few countries have invested sufficiently in the infrastructure and systems, including health care and water and sanitation, which are critical to addressing the basic health needs of the urban poor. More countries need to adopt

universal health care as a national policy to help address the needs of the urban poor.

There is no simple solution to tackling child and maternal mortality in the world's cities, but a number of the major cities cited in the report – such as Addis Ababa and Manila – have made real progress in addressing the health needs of the poorest families. These examples hold important lessons for other cities, and demonstrate the scope for progress even where resources are scarce and the burden of need is heavy.

Save the Children is proud to have contributed to these successes. We are working in urban settings around the world to improve care for pregnant mothers and newborn babies and provide improved nutrition, education and sanitation. We partner with local and national governments to create policies and strategies that make it easier for the poorest urban families to get essential services. We leverage the unique advantages cities have to offer – technology, highly skilled partners and existing services – that need to be made more accessible. Many more lives could be saved with fully resourced plans that ensure universal access to services for every mother and every child.

We must seize the opportunity that 2015 presents us, with the launch of the Sustainable Development Goals, to set the world on the trajectory to ending preventable deaths within a generation. I encourage you to take a look at the Take Action section of the report. It's time for all of us to work to set things right – to reverse the urban disadvantage, once and for all.

Jasmine Whitbread  
*CEO, Save the Children International*



Dhaka, Bangladesh

# Executive Summary: Key Findings and Recommendations

Increasing numbers of mothers are raising their children in urban areas. Over half the world's population now lives in cities and a growing proportion of child deaths occur in these areas.<sup>1</sup> While cities are home to the wealthiest and healthiest people in a country, they are also home to some of the poorest and most marginalized families on earth.

In much of the world, the odds of children surviving to celebrate their fifth birthday have improved considerably in recent years. Today, 17,000 fewer children die every day than in 1990 and the global under-5 mortality rate has been cut nearly in half, from 90 to 46 deaths per 1,000 live births, between 1990 and 2013. But beneath remarkable improvements in national averages, inequality is worsening in far too many places. Some groups of children are falling behind their more fortunate peers, and these disparities tend to be more pronounced in cities.

Earlier this year, Save the Children's *Lottery of Birth* report called attention to those children who have been left behind and demonstrated how a more equitable path is needed in order to accelerate progress in reducing global and national under-5 deaths. *State of the World's Mothers 2015* focuses on one vulnerable group of children that urgently needs more attention – those living in urban poverty. It also focuses on the people who feel the loss of a child most keenly and who have tremendous potential to make a positive difference in children's lives – their mothers.

This report presents a first-ever global assessment of health disparities between rich and poor in cities. It analyzes data for dozens of cities in developing countries and 25 cities in industrialized countries to see where child health and survival gaps are largest and where they are smallest. It also looks at progress over time to see where gaps have narrowed and where they have grown wider. While preventable deaths of young children are tragic, unacceptable and reason enough to focus more attention on health care for the most vulnerable, it is important to note that child mortality rates are also an important indicator of the overall health of a city. The young children dying in city slums today – even

where lifesaving care may be a stone's throw away – represent perhaps the saddest expression of urban health system failure, and they also represent the everyday misery faced by millions of others.

While there are multiple determinants of health in urban settings, this report focuses primarily on health-related interventions and approaches that we know can have a significant impact on the health and survival of mothers and children.

## Key Findings

### 1. While great progress has been made in reducing urban under-5 mortality around the world, inequality is worsening in too many cities.

Many countries have made important progress in reducing child death rates overall, including among the poorest urban children. But progress often does not eliminate disparities, and sometimes it exacerbates them. In almost half of the countries with available trend data (19 out of 40), urban survival gaps have grown. In relative terms, survival gaps have roughly doubled in urban areas of Kenya, Rwanda and Malawi despite these countries' overall success in saving more children's lives in cities. (To read more, turn to pages 26-27.)

### 2. The poorest children in almost every city face alarmingly high risks of death.

In all but one of the 36 developing countries surveyed, there are significant gaps between rich and poor urban children. Save the Children's *Urban Child Survival Gap Scorecard* examines child death rates for the richest and poorest urban children and finds that in most countries the poorest urban children are at least twice as likely to die as the richest urban children before they reach their fifth birthday. The *Scorecard* finds urban child survival gaps are largest in Bangladesh, Cambodia, Ghana, India, Kenya, Madagascar, Nigeria, Peru, Rwanda, Vietnam and Zimbabwe. In these countries, poor urban children are 3 to 5 times as likely to die as their most affluent peers. In contrast, cities in Egypt and the Philippines have been able to achieve



relatively low child mortality rates with comparatively smaller urban child survival gaps. *(To read more, turn to pages 23-24.)*

**3. The poorest urban mothers and children are often deprived of lifesaving health care.** Save the Children's *City Health Care Equity Ranking* looks at how access to, and use of, health care differs among the poorest and wealthiest mothers and children within 22 cities. It also includes a comparison of child malnutrition (stunting) rates between rich and poor in these same cities. The ranking finds huge disparities in access to prenatal care and skilled birth attendance. The largest coverage gaps between rich and poor were found in Delhi (India), Dhaka (Bangladesh), Port au Prince (Haiti) and Dili (Timor-Leste). Child malnutrition gaps are greatest in Dhaka, Delhi, Distrito Central (Honduras), Addis Ababa (Ethiopia) and Kigali (Rwanda). In these cities, stunting rates are 29 to 39 percentage points higher among the poorest compared to the richest. *(To read more, turn to pages 23-25.)*

**4. High child death rates in slums are rooted in disadvantage, deprivation and discrimination.** High rates of child mortality in urban slums are fueled by a range of factors, including social and economic inequalities. While high-quality private sector health facilities are more plentiful in urban areas, the urban poor often lack the ability to pay for this care – and may face discrimination or even abuse when seeking care. Public sector health systems are typically under-funded, and often fail to reach those most in need with basic health services. In many instances, the

poor resort to seeking care from unqualified health practitioners, often paying for care that is poor quality, or in some cases, harmful. Overcrowding, poor sanitation and food insecurity make poor mothers and children even more vulnerable to disease and ill health. And fear of attack, sexual assault or robbery limit their options when a health crisis strikes. *(To read more, turn to pages 17-21.)*

**5. We know what works to save poor urban children.** Save the Children profiles six cities that have made good progress in saving poor children's lives despite significant population growth. The cities are: Addis Ababa (Ethiopia), Cairo (Egypt), Manila (Philippines), Kampala (Uganda), Guatemala City (Guatemala) and Phnom Penh (Cambodia). These cities have achieved success through a variety of strategies to extend access to high impact services, strengthen health systems, lower costs, increase health awareness and make care more accessible to the poorest urban residents. The city profiles provide a diverse set of examples, but the most consistently employed success strategies included: 1) Better care for mothers and babies before, during and after childbirth; 2) Increased use of modern contraception to prevent or postpone pregnancy; and 3) Effective strategies to provide free or subsidized quality health services for the poor. *(To read more, turn to pages 29-39.)*

**6. Among capital cities in high-income countries, Washington, DC has the highest infant death risk and great inequality.** Save the Children examined infant mortality rates in 25 capital cities of wealthy countries and found that Washington, DC had the highest infant mortality rate at 6.6 deaths per 1,000 live births in 2013. While this rate is an all-time low for the District of Columbia, it is still 3 times the rates found in Tokyo and Stockholm. There are also huge gaps between rich and poor in Washington. Babies in Ward 8, where over half of all children live in poverty, are about 10 times as likely as babies in Ward 3, the richest part of the city, to die before their first birthday. *(To read more, turn to pages 41-45.)*

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# Urban and Unequal

# 54%

of the world's population lives in urban areas. This is projected to increase to 66 percent by 2050. Most of this increase will be in Africa and Asia.<sup>2</sup>

In the developing world, one-third of urban residents live in slums – over

# 860 million people.<sup>3</sup>

In cities around the world, the **poorest urban children** are at least

# twice as likely to die

as the richest urban children.<sup>4</sup>

In Bangladesh and India, **over half of poor urban children are stunted**, compared to 20 percent or less of the wealthiest children.<sup>5</sup>

In the slums of Nairobi, Kenya, maternal and child mortality rates are about

# 50% higher

than the national average.<sup>6,7</sup>

In Cambodia and Rwanda, children born into the poorest 20% of urban households are almost

# 5 times as likely to die

by age 5 as children born into the richest 20 percent. Survival gaps have grown in Rwanda, but are closing in Cambodia.<sup>8</sup>

In Haiti, Jordan and Tanzania, under-5 mortality rates are

# higher in urban areas

than they are in rural areas.<sup>9</sup>

In Latin America and the Caribbean,

# more than half

of all child deaths likely occur in urban areas.<sup>10</sup>

## Recommendations

Cities on fast and more equitable pathways to reducing child mortality have made concerted efforts to ensure that hard-to-reach groups have access to essential, cost-effective and high-impact health services that address the leading causes of child mortality. Malnutrition is now an underlying cause of nearly half of all under-5 deaths worldwide, and an increasing proportion of all child deaths occur in the first month of life (the newborn period). These facts point to an urgent need to strengthen efforts to improve maternal and child nutrition, provide prenatal care, safe childbirth and essential newborn care. A range of policies make equitable progress more likely for the urban poor, including steps toward the progressive realization of universal health coverage to ensure that poor and marginalized groups have access to quality services that meet their needs.

**1. The final post-2015 framework should include an explicit commitment to equitably ending preventable child and maternal deaths with measurable targets.** 2015 is a pivotal year for maternal, newborn and child survival. September 2015 will mark the launch of the post-2015 framework (Sustainable Development Goals) and the end of the Millennium Development Goals (in December 2015). This framework will determine the future of mothers' and children's lives around the world. Given the rapid growth of urban populations, and the increasing portion of under-5 deaths occurring among the urban poor, the post-2015 framework needs to highlight investments needed for basic health services, water and sanitation, and improved nutrition for this under-served, and often neglected, population.

**2. Commit to leaving no one behind by embedding equity in the final post-2015 framework.** The post-2015 framework must make a commitment that no target will be considered to have been met unless it has been met for all social and economic groups. While we have made tremendous progress in reducing maternal and child deaths over the last two



decades, not all mothers and children have benefited from this progress. This is especially true for the urban poor. Within the context of the post-2015 framework for addressing inequities, explicit attention should be given to advancing strategies to addressing the inequities that exist within urban populations.

**3. Improve the health of the urban poor by ensuring universal health coverage.** Ending preventable maternal, newborn and child deaths will require that everyone, starting with the most vulnerable, has access to high quality basic health and nutrition services, and is protected from the impoverishing effects of out-of-pocket costs of care. To achieve this, quality basic preventive and curative health services must be made more accessible and affordable. This will require investing in strengthened and expanded urban health systems designed to reach the poor, ensuring access to health workers able to provide quality care in slums and informal settlements, and removing financial barriers to accessing quality health services.

**4. All governments must follow through on Nutrition for Growth commitments and ensure that the World Health Assembly nutrition targets are met.** Malnutrition is the underlying cause of 45 percent of deaths of children under 5, leading to over 3 million deaths each year, 800,000 of which occur among newborn babies. The locus of poverty and malnutrition among children appears to be gradually shifting from rural to urban areas, as the number of the poor and undernourished

increases more quickly in urban than in rural areas. Child stunting is equally prevalent in poor urban settings as in rural settings. Stunting, which is caused by chronic malnutrition, can start during pregnancy as a result of poor maternal nutrition, poor feeding practices, low food quality and frequent infections. Attention must also be given to supporting and promoting exclusive breastfeeding for the first 6 months of life. Breastfeeding in some poor urban settings is lower than in rural areas due to lack of knowledge and education. Country-costed plans must include ways to address malnutrition in urban areas, including an emphasis on wasting, exclusive breastfeeding and stunting.

**5. Develop comprehensive and cross-sectoral urban plans.** National governments should develop and invest in integrated, cross-sectoral urban policies, strategies and plans that include maternal, newborn and child health (MNCH) and nutrition, as well as investments in improved access to clean water, sanitation and primary education. Donors should support these plans with funding critical to the achievement of the post-2015 goal of ending preventable maternal and child deaths.

**6. Invest in data collection.** National governments and donors should invest in strengthening data collection to better identify disadvantaged groups, track quality and use of services and monitor progress against agreed-upon plans and targets. Disaggregated data to identify residents of slums, informal settlements and street dwellers is needed to ensure that the urban poor are recognized and brought into the health system.

**7. Mobilize resources to end preventable child deaths in poor urban areas.** All governments must meet their funding commitments for maternal, newborn and child health and nutrition. Country governments must increase their own health budgets.

*(To read this report's full set of recommendations, turn to pages 47-53.)*

## 2015 Mothers' Index Rankings

### Top 10

RANK	COUNTRY
1	Norway
2	Finland
3	Iceland
4	Denmark
5	Sweden
6	Netherlands
7	Spain
8	Germany
9	Australia
10	Belgium

### Bottom 10

RANK	COUNTRY
169	Haiti*, Sierra Leone*
171	Guinea-Bissau
172	Chad
173	Côte d'Ivoire
174	Gambia
175	Niger
176	Mali
177	Central African Republic
178	DR Congo
179	Somalia

\*Countries are tied

Save the Children's 16th annual *Mothers' Index* assesses the well-being of mothers and children in 179 countries – more than in any previous year. Norway, Finland and Iceland top the rankings this year. The top 10 countries, in general, attain very high scores for mothers' and children's health, educational, economic and political status. The United States ranks 33rd. Somalia scores last among the countries surveyed. The 11 bottom-ranked countries – all but two of them from West and Central Africa – are a reverse image of the top 10, performing poorly on all indicators. Conditions for mothers and their children in the bottom countries are grim. On average, 1 woman in 30 dies from pregnancy-related causes and 1 child in 8 dies before his or her fifth birthday.

The data collected for the *Mothers' Index* document the tremendous gaps between rich and poor countries and the urgent need to accelerate progress in the health and well-being of mothers and their children. The data also highlight the role that armed conflict and poor governance play in these tragedies. Nine of the bottom 11 countries are conflict-affected or otherwise considered to be fragile states, which means they are failing in fundamental ways to perform functions necessary to meet their citizens' basic needs.

See the *Complete Mothers' Index, Country Rankings and an explanation of the methodology*, beginning on page 55.



Freetown, Sierra Leone

# Global Trends in Child Survival and Urbanization

Substantial progress has been made in reducing child deaths since 1990. The global under-5 mortality rate has been cut by 49 percent – from 90 deaths per 1,000 live births in 1990 to 46 in 2013.<sup>11</sup> Global child mortality rates are falling faster now than at any time in history, made possible in part by action on immunization, family planning, nutrition and treatment of common childhood illnesses, as well as improvements in the wider social determinants of health.<sup>12</sup>

The bold child survival target set out in the fourth Millennium Development Goal – to reduce global under-5 mortality by two thirds between 1990 and 2015 – has already been met by eight developing countries with high child death rates. Inspiring progress has been made in Malawi (72 percent reduction in child mortality), Bangladesh (71 percent), Liberia (71 percent), Tanzania (69 percent), Ethiopia (69 percent), Timor-Leste (68 percent), Niger (68 percent) and Eritrea (67 percent).<sup>13</sup>

Many other countries have also made progress, and as a result about 100 million lives have been saved since 1990.<sup>14</sup>

This is a huge achievement to be celebrated. The dramatic progress made by some of the world's poorest countries has led many to speculate that an end to preventable child mortality is within our reach. Within a generation, we could live in a world where no child dies from preventable causes – conditions such as diarrhea and pneumonia for which vaccines and cost-effective treatment are available, or complications at birth that could be resolved through the presence of a skilled birth attendant.

However, there is still a long way to go. More than 6 million children died in 2013 and progress for most countries has been too slow. Only 12 of the 60 countries with the highest child deaths rates are on track to achieve MDG 4. Greater attention is urgently needed in sub-Saharan Africa and South Asia, the regions where under-5 deaths are increasingly concentrated. Increased attention to newborn babies is also critically important. While newborn death rates have been falling, the proportion of under-5 deaths that occur in the first month of

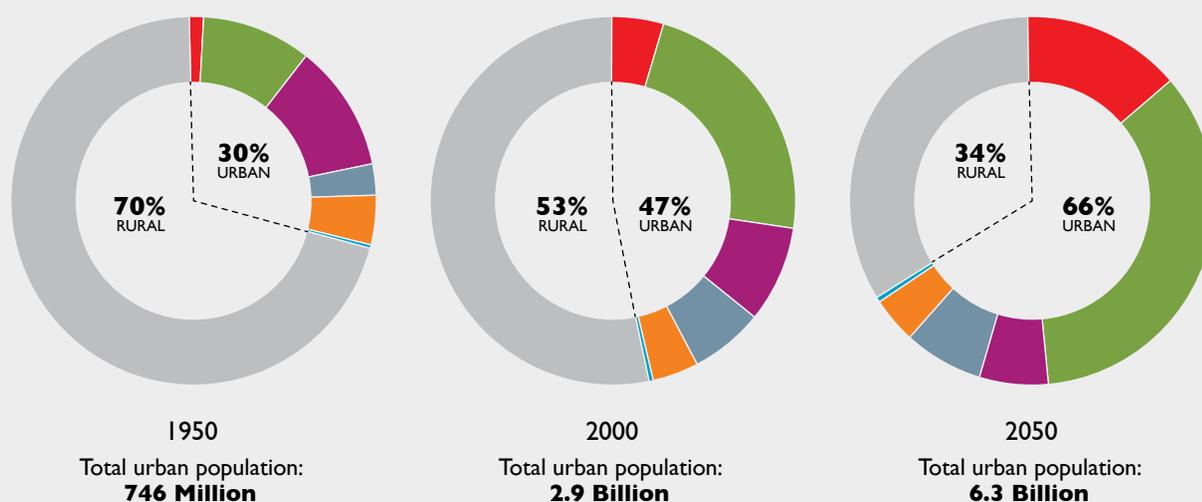
life has increased from 37 percent in 1990 to 44 percent in 2013. The share of under-5 deaths that occur during the newborn period is rising in every region and in almost all countries.<sup>15</sup>

Historically, the highest child mortality rates have been found in rural areas and in the most remote regions of developing countries. Many governments have rightly made important efforts to improve health infrastructure in those geographic areas. Decades of investments in rural areas are paying off, as death rates in small villages in most countries are declining.<sup>16</sup> But much work remains to be done to ensure the most vulnerable children everywhere have an equal chance to survive and thrive. Unmet needs in rural areas cannot be neglected, but the urgent task of completing the MDG agenda is increasingly concentrated in urban contexts.



Blantyre, Malawi

### Urbanization trends 1950-2050, with urban population by region



Over half of the world's population (54 percent) now lives in urban areas. This is projected to increase to 66 percent by 2050. Most of this increase (nearly 90 percent) will be in Africa and Asia.

Data source: United Nations, Department of Economic and Social Affairs, Population Division. *World Urbanization Prospects: The 2014 Revision*. (New York: 2014)

#### URBAN POPULATION, BY REGION:



### The Urban Challenge

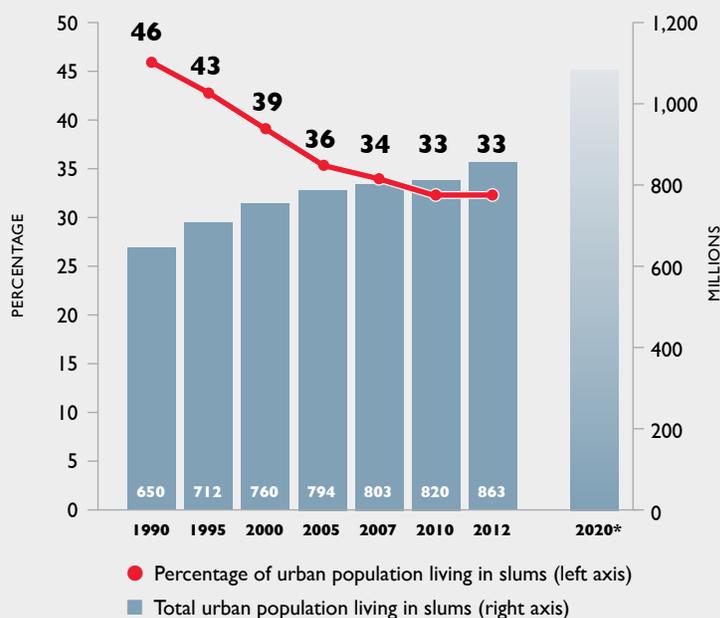
As the world becomes more urbanized, the child survival challenge is increasingly located among the urban poor. Some of the highest child mortality rates are now found in urban slums, and the numbers at risk are sure to grow if current trends continue. In Africa, Asia and the Americas, the poorest urban children are twice as likely to die as the richest urban children. And in many places, they are also more likely to die than rural children.

Save the Children estimates that over half of under-5 deaths in Latin America and the Caribbean now occur in urban areas. In Asia and Africa, roughly 30 percent of under-5 deaths occur in urban settings, but these regions are urbanizing quickly, and as they become more urbanized the share of under-5 deaths that occurs in urban areas is likely to also increase.<sup>17</sup> Maternal and child health needs will become increasingly urgent in the urban areas of these regions.

A few facts about urbanization in developing countries:

- The number and size of cities in the developing world has exploded in recent decades. In 1970, there were 273 cities in developing countries, all with populations between 300,000 and 10 million. Today, there 1,287 cities (5 times as many) and 22 have populations of 10 million or more.<sup>18</sup>
- The number of “megacities” (cities with populations over 10 million) worldwide has grown 10-fold since 1970. By 2030, over 80 percent of the world's megacities (34 of 41) will be in developing countries.<sup>19</sup>
- In 1975, only 1 percent of urban dwellers in developing countries lived in megacities. By 2030, 15 percent will live in megacities. A large but shrinking share of developing country urban dwellers live in small cities with fewer than 300,000 people (43 percent in 2015).<sup>20</sup>

Urban population living in slums in developing countries, 1990-2012



In the developing world, one-third of urban residents live in slums – about 860 million people (and counting). If this percentage remains the same, in 2020, over 1 billion of the expected 3.3 billion urban dwellers in developing countries could be living in slums, or 1 in 7 people (14 percent) globally.

Adapted from: United Nations. *The Millennium Development Goals Report 2014* (2014) p.46

\* To estimate the total number of urban residents in developing countries that could be living in slums in 2020, the expected urban population in “less developed regions” in 2020 (3.33 billion) was multiplied by the proportion of the urban population in developing countries living in slums in 2012 (32.7%). This gave an estimated number of 1.09 billion slum dwellers in less developed regions in 2020. Using the same approach, the number of slum dwellers in low- and middle-income countries in 2020 would be 1.06 billion. The total just in low-income countries would be 950 million.

Data source: United Nations, Department of Economic and Social Affairs, Population Division. *World Urbanization Prospects: The 2014 Revision*.

### Growing Numbers in Slums

In the developing world, one-third of urban residents live in slums – about 860 million people. This number could grow to over 1 billion by 2020.

Slums are heavily populated informal settlements characterized by substandard housing, poor sanitation, poverty and vulnerability. While slums differ in size and other characteristics from country to country, most lack reliable sanitation services, supply of clean water, reliable electricity, timely law enforcement, primary health care and other basic services. Slum residences vary from shanty houses to professionally built dwellings that have deteriorated because of poor quality construction or neglect.

While there is a great concentration of poverty in slums, it should be noted that not all of the urban poor live in slums – and by no means is every inhabitant of a slum poor. Nevertheless, slums are both an expression – and a practical result – of deprivation and exclusion. While it is not always appropriate to equate slums with poverty, the terms are often conflated in the literature and in this report. It should also be noted that although slum dwellers bear a disproportionate burden of mortality and ill health, not all slum dwellers are equally disadvantaged. This reinforces the need for more and better data on the urban poor, as well as context-specific approaches to meeting their needs.

Slum prevalence is by far the highest in sub-Saharan Africa, where 62 percent of city residents live in slums. In this region, basic services are lacking not only in informal, but also formal,

### What is a Slum?

The United Nations Human Settlements Programme (UN-Habitat) defines a slum household as one that lacks one or more of the following conditions:

**Access to improved water** – Easy access to safe water in sufficient amounts at an affordable price.

**Access to improved sanitation** – Access to adequate sanitation in the form of a private or public toilet shared by a reasonable number of people.

**Security of tenure** – Security of tenure that prevents forced evictions.

**Durability of housing** – Durable housing of a permanent nature that protects against extreme climate conditions.

**Sufficient living area** – Not more than three people sharing the same room.

Approximately one-fifth of the world’s slum households live in extremely poor conditions, lacking more than three of these basic shelter needs.<sup>21</sup>

settlements. By comparison, Northern Africa has the lowest prevalence of slums (13 percent in 2012). In Asia, the proportion of the urban population living in slums varies from 25 percent in Western Asia to 35 percent in Southern Asia. In Latin America and the Caribbean, slum prevalence is 24 percent.<sup>22</sup>

Most developing countries have a large share of their urban population living in slums, and the countries with larger percentages in slums tend to have higher urban child mortality rates. There are 11 countries where more than two-thirds of all urban residents are estimated to live in slums. These are: Central African Republic (96 percent), Chad (89 percent), Niger (82 percent), Mozambique (81 percent), Ethiopia (76 percent), Madagascar (76 percent), Somalia (74 percent), Benin (70 percent), Haiti (70 percent), Malawi (69 percent) and Liberia (68 percent). Seven of these 11 countries (all but Benin, Madagascar, Ethiopia and Niger) are also among the top 10 countries with the highest rates of urban under-5 mortality.<sup>23</sup>

### Urbanization and Health

Urbanization can have a positive or a negative impact on health. Infrastructure improvements such as better access to health services, education, sanitation and safe water supply that often accompany urbanization can improve health.

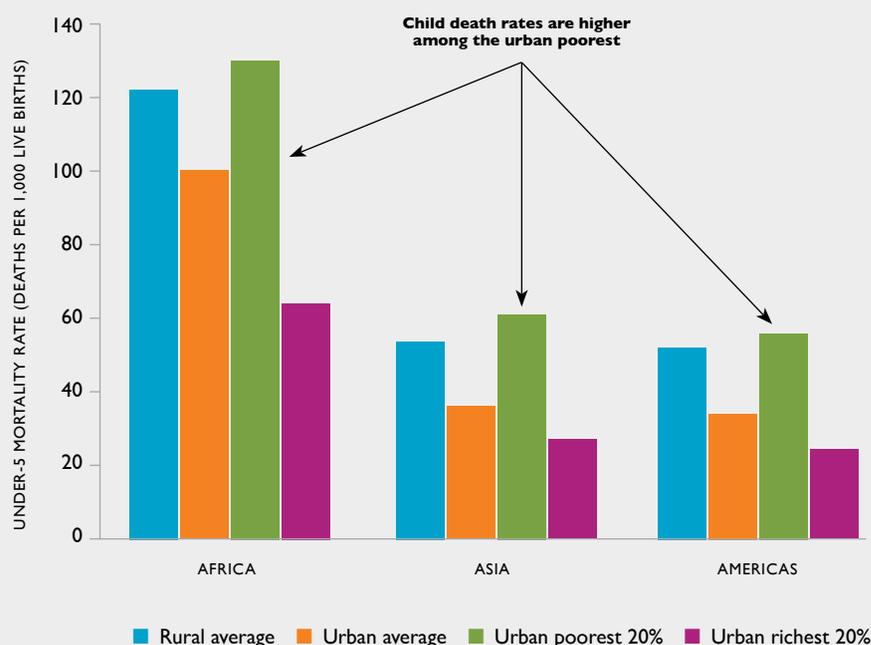
But if urbanization is unplanned and rapid, it is prone to producing informal settlements with insufficient housing, poor sanitary conditions and crowding, all of which can accelerate the spread of diseases and lead to a worsening health status. The research suggests urban population growth in developing countries has done and may continue to do both.<sup>24</sup>

In general, nations that have high life expectancies and low mortality rates are highly urbanized. These are countries where city governments invest in sound policies. The improvements over the last 50+ years in mortality and morbidity rates in highly urbanized countries like Japan, Sweden, the Netherlands and Singapore are testimony to the potentially health-promoting features of modern cities.<sup>25</sup>

But rapid and disorganized urbanization can also lead to *higher* rates of under-5 mortality. This is especially true in low- and middle-income countries when rapid urbanization is combined with poor economic performance, poor governance, failure of national and urban housing policies, and institutional and legal failure. For example, recent research from Nigeria found that the urban child mortality rate increased with urban population growth. The increase in deaths was linked to more people living in slum-like conditions.<sup>26</sup>



### Under-5 mortality in developing regions, by place of residence and urban wealth quintile



Urban averages mask huge inequities. The poorest urban children are twice as likely to die as the richest urban children in Africa, Asia and the Americas. In all three regions, poor urban children are also more likely than rural children to die before reaching age 5.

Note: These results represent the average across countries for which urban DHS data were available for under-5 mortality, from surveys 2000-2011 (Africa=31 countries, Americas=8 countries, Asia=14 countries). As such, they may not be representative of these regions as a whole.

Adapted from: [www.who.int/gho/urban\\_health/outcomes/under\\_five\\_mortality/en/](http://www.who.int/gho/urban_health/outcomes/under_five_mortality/en/). Rural averages were calculated by Save the Children from the same WHO dataset. Data available at [who.int/gho/data](http://who.int/gho/data) under "Urban health."

### Urban vs. Rural Health and Survival

In general, the risk of death before reaching age 5 is higher in rural areas than in urban areas of developing countries.<sup>27</sup> But beneath these averages, the urban poor are often as bad as, or worse off than, rural populations. In 35 of 56 countries with available data, the poorest urban children face a higher risk of death than rural children.

Despite the comparative advantage of cities, urban areas are more unequal than rural areas.<sup>28</sup> In low-income countries, these disparities are likely to increase as the combination of natural and migration growth – much of which is among the poor – and scarcity of resources results in cities being even less capable of providing services to those who come to live there.<sup>29</sup>

There are a few countries where even the *average* city dweller does not benefit from an urban advantage. Published Demographic and Health Surveys (DHS) data show urban mortality rates are as high or higher than rural ones in: Guyana, Haiti, Jordan, Paraguay, São Tomé and Príncipe, Swaziland and Tanzania.<sup>30</sup> A WHO

analysis of household survey data suggests urban children in Malawi and Zambia may also face a higher risk of death than their rural peers.<sup>31</sup>

In some cities, the poorest urban children also do worse on health indicators than rural populations in the same country. For example, in 40 percent of the cities studied (9 of 22), measles immunization rates among poor urban children are lower than rates among rural children. Coverage gaps between the city's urban poor and the national rural average are especially large in Delhi, India (for skilled birth attendance), Kigali, Rwanda (for prenatal care), Port au Prince, Haiti (for prenatal care) and Santa Cruz, Bolivia (for measles immunization). These countries may be doing a better job of reaching rural populations with these essential services than they are of reaching the urban poorest in their largest city. Stunting rates are similarly high – or higher – among the urban poor compared to rural populations in Antananarivo (Madagascar), Bogotá (Colombia), Dhaka (Bangladesh) and Delhi (India).<sup>32</sup>



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## Unequal Life Chances for the Urban Poor

In the developing world, one-third of urban residents live in slums – over 860 million people (and counting). If this percentage remains the same, the number of slum dwellers in the developing world could reach the 1 billion mark by 2020. While urbanization in and of itself is not inherently problematic, the pace and sheer scale of urbanization has, in many places, far exceeded local government's ability to provide essential services, including water, sanitation and health care.

For mothers and children, the phenomena of urbanization and the growth of city slums present unique challenges. Recent trends show an increasing number of female migrants to cities are doing so on their own – less often with husbands or other family members – and an increasing number of women are now the principal wage earners for themselves and their families.<sup>33</sup> Young women may move to cities seeking economic opportunities or fleeing discrimination and early marriage. They often have limited employment skills, and struggle to earn sufficient income to support themselves and their children.

Slum life for women is characterized by insecurity on many levels. In slums across the world there is a striking lack of basic infrastructure. Most people live close together in shacks they do not own, often sleeping several to a room, on blankets or on a mud floor. In informal or squatter settlements, many live in constant fear of eviction or housing demolition, and even those in recognized slums have little power over landlords who fail to maintain housing structures. Slum homes in the developing world often do not have toilets or running water, so women and children are forced to go outside to attend to their basic needs. This exposes them to the risk of attack, rape and robbery, especially at night.

Health is a major concern for mothers and children in slums. There is a higher risk of contagion for any infectious disease in crowded settings without proper sanitation. Water-borne disease and inadequate diets lead to malnutrition among mothers and higher than average deaths rates for children.<sup>34</sup> And while health



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### Too Many People, Too Few Toilets

Poor sanitation and related diseases are a major burden on the health of slum residents in Liberia's capital, Monrovia. Hygiene is especially bad in the city's overcrowded West Point shantytown, which is home to more than 40,000 people and has only five public toilets. "Open defecation is very common," says Josephine Wachekwa, a Save the Children health specialist.<sup>35</sup>

Monrovia is the wettest capital city in the world.<sup>36</sup> Rainfall during the wet season can exceed 20 inches (500 mm) per month.<sup>37</sup> When it rains, the water flows through the streets, mixing with feces and contaminating the wells most people rely on for drinking water.<sup>38</sup> When it floods, which it often does between May and November, things get even worse.

"Some of the biggest issues for children, and adults too, are malaria and diarrhea," says Mattie Gartor, a registered nurse and midwife who has worked at the Star of the Sea Clinic in West Point for 10 years.

Sandra, 28, has come to the clinic with her 3-year-old daughter Mary. Sandra is also taking care of three nephews who lost their mother to Ebola. "I worry about the children getting sick," she says. "I don't allow the boys to just go out. They need to stay around our neighborhood so they don't go anywhere that is too dirty or unclean."

Mattie worries that the rainy season is coming. "This always causes more women and children to get sick," she says. "There's just too much water in people's homes and in the street. People will develop coughs and colds, or malaria and cholera. Cholera is one of my biggest concerns."<sup>39</sup>

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## Struggling to Survive in a Bangladesh Slum

needs tend to be greater in slums than in other parts of a city, there are often little to no public health care services available to slum residents, especially those who cannot provide proof of residence.

“This place is like an island,” said Christina Tardy, 28, a resident of the West Point slum in Monrovia, Liberia. “The state does nothing here. It provides no water, no schools, no sanitation, no roads and no hospital.”<sup>40</sup>

Even where health facilities do exist, a variety of factors often prevent slum dwellers from accessing services. Many cannot afford to take time off work or to pay for transportation, medicines or health services available only through private providers. Mothers with young children may be reluctant to leave them at home alone while they go to a clinic. Recent migrants may not speak the local language or know where to go for care. Slum dwellers of all types report rude

Joynab and her husband Jashim dreamt they would be happy leaving behind their troubles in the the village and moving to the capital city of Dhaka in search of a better life. Neither was aware of the hardships life in the Rayer Bazar slum would bring. They both work to earn money, but they have struggled to keep a roof over their head and to meet their everyday expenses. Healthy food and quality health care are beyond their reach. Joynab has lost two of her six children, and her youngest child is severely malnourished.

“I lost my first child on the day of his birth,” said Joynab. “The boy died because he was having trouble breathing ... and there wasn’t a hospital nearby.” Her fifth child, a baby girl named Brishti, survived only a few days before succumbing to high fever and breathlessness.

Joynab does not know about prenatal care, as this is not practiced in her community. She has never had any immunizations or nutritional supplements during her pregnancies. None of her children have been fully vaccinated or received vitamin A supplementation. Information about basic child health care is unavailable in this slum.

Joynab’s 8-month-old son Ashim suffers from frequent fever, diarrhea and severe acute malnutrition. He weighs less than 9 pounds and his upper arm circumference is about 110 millimeters, which indicates severe wasting. “He is getting lean and thin day by day and does not eat enough,” said Joynab. “I can’t give him enough breast milk. I was feeding him infant formula milk, but it’s very expensive and I can’t afford it anymore. I have no idea what to do with his suffering.”<sup>41</sup>



Dhaka, Bangladesh



Manila, Philippines

treatment and discrimination by health personnel, which deters them from seeking care.<sup>42</sup> And some are unwilling to go to facilities they find to be poorly equipped and poorly staffed.<sup>43</sup>

Home births not accompanied by a trained medical professional are commonplace in many urban slums.<sup>44</sup> This contributes to late recognition of newborn illness, inadequate postnatal care, and delays in seeking appropriate medical services. Newborn deaths (deaths within the first 28 days of life) are also common in many slums and are often caused by premature birth, birth complications and infections.<sup>45</sup> Recent studies in Brazil and India found newborn mortality rates up to 50 percent higher in slum compared to non-slum areas.<sup>46</sup>

Beyond the newborn period, infants and young children frequently die of diarrheal disease and respiratory infections.<sup>47</sup> Many slum children are malnourished, which increases their susceptibility to illness. In Bangladesh, for example, 50 percent of children under age 5 living in slums are stunted and 43 percent are underweight. In non-slum areas of cities, these percentages are 33 percent and 26 percent, respectively.<sup>48</sup> The national average rate of stunting for children under 5 is 42 percent.<sup>49</sup>

### **Inadequate Health Systems in Slums**

In order to meet the goal of universal health care, tremendous investments are needed to address deficiencies in the health systems serving the urban poor. Public sector health systems are typically under-funded, and often fail to reach those most in need with basic health services. Private sector facilities are more plentiful in urban areas, but the urban poor often lack the ability to pay for care – and may face discrimination or even abuse when seeking care. In many instances, the poor resort to seeking care from unqualified health practitioners, often paying for care that is poor quality, or in some cases, harmful.

In Nairobi, Kenya, for example, a study of women giving birth in slums found the majority were served by privately owned, substandard, often unlicensed clinics and maternity homes. An audit of 25 facilities concluded “the quality of emergency obstetric care services in Nairobi’s slums is unacceptably poor, with inadequate essential equipment, supplies, trained personnel, skills, and other support services.” There was little supervision or adherence to standards. Health personnel were found to be often unfriendly, unresponsive to questions

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## Afraid to Leave Home

Life in Nairobi's Kibera slum is especially hard for women. The threat of attack and robbery are constant, so women rarely leave their homes after 10 p.m. and are cautious about using communal areas like toilets and showers. In the past few months, Kibera's dangers have affected Veronica and her family more than once.

Veronica lives in a one-room mud house with her husband, their 4-year-old son, her new baby daughter, and a 15-year-old girl who she has taken in and treats as her own daughter. Earlier this year, a relative of Veronica's was assaulted while she was taking a shower near Veronica's home. She was afraid to report the incident and did not tell Veronica until several days later, so they did not take her to a health facility.

Veronica recently gave birth to a baby girl named Esther. She planned to go to the hospital to deliver her baby, but her water broke unexpectedly late in the evening and she was afraid to leave home to go to the clinic. "Even if a woman is pregnant and walking with her husband ... they might have attacked me or my husband," said Veronica. "I wasn't going to risk that. At night it is not a safe place at all."

Veronica is fortunate that a community health volunteer named Moira was brave enough to come to her home that night and help her deliver the baby. "I was so relieved she came. I did not like giving birth at home at all. I was scared I would bleed too much. I knew I was anemic and I was worried the baby would die."

The next day, Moira took Veronica to the hospital so that she and the baby could be checked over. Veronica was discharged after 12 hours and required to pay a fee for the services. She did not have the money, so the hospital retained her husband's ID card as assurance of payment. In the end, Moira paid the fee for them. They are still paying her back.<sup>53</sup>

and unable or unwilling to provide prenatal counseling. Well-equipped private hospital and clinics in Nairobi required women to pay before receiving service, and often refused admission to women who lacked financial means.<sup>50</sup>

A recent Save the Children assessment of informal settlements in Karachi, Pakistan found no government hospitals in the vicinity of the Bhattiabad slum and the nearest private hospital so far away that travel costs are prohibitive for low-income families. Primary health care is "nonexistent" in this slum and most people depend on informal, unregulated practitioners who require high out-of-pocket payments. In Bilawal Jokhiyo, mothers struggle to pay for food and medicines, and children resort to scavenging in the streets for fruits and vegetables that have fallen on the ground. Births are not registered, so poor children lack documentation to enroll in school. Migrants from Afghanistan face the greatest deprivations, due to their illegal status and language barriers.<sup>51</sup>

Similar challenges are found in the slums of India's capital city. "The hospital is far, the population is so large, and there are not enough government health workers," said Rima, a community health volunteer in VP Singh Camp, a slum of New Delhi. It takes two or three hours for residents of this slum to reach the nearest hospital in Safdarjung, and when they get there they do not always receive good care. "The behavior of the staff at the hospital is not correct – that is a major problem," said Rima. She recalled a recent case where a woman having labor pains was sent home from the hospital by a doctor who told her she didn't look pregnant and wasn't ready to deliver. The woman gave birth at home that evening and the baby died a few days later. "Did the doctor not know when her delivery would happen? That shows how badly the doctor behaved. With such incidents, people come back and they tell other people 'see sister this is what happened to me at the hospital, so don't go to the hospital'."<sup>52</sup>





Nairobi, Kenya

A nurse in the capital of the Democratic Republic of the Congo says poor facilities and lack of equipment are major challenges. “Our resources aren’t anywhere near the standard that they should be,” says Marie-Jeanne, a nurse-midwife in Kinshasa. “If you look at the birthing room, it’s poorly set-up. If we have a child born in distress, we can’t resuscitate. We also have problems with electricity. When we can’t rely on the lights, how are we meant to deliver babies at night? Transport is another challenge. It’s difficult even to get access to a car. So how do you transfer a baby that’s already in distress? The child could die on the journey. We don’t have a blood bank. Sometimes women lose blood and we have no way to give them a transfusion. Imagine a woman in all that pain having to be transferred, sometimes at night. How do you do this without an ambulance? We are working in very, very difficult conditions.”<sup>54</sup>

“As one woman dealing with another I find it really upsetting,” said Marie-Jeanne. “We’re not here to kill children. We are here to give life, to save people. When we can’t do it, it’s not because we don’t have the skills, but because we don’t have the equipment.”<sup>55</sup>

### **Lack of Data on Health Needs of Urban Poor**

Urban growth often occurs so quickly that city leaders do not know even basic information about their slum populations. Sometimes slum populations are intentionally excluded from household surveys because informal settlements do not have legal recognition. In addition, health information is usually aggregated to provide an average of all urban residents – rich and poor, male and female. These urban averages mask great disparities, and the health challenges of the most disadvantaged groups are hidden. Depending on the context, data should be disaggregated into male vs. female, age groups, geographic area within the city or socio-economic status. In cities with large groups of ethnic minorities, disaggregating by cultural background might also be helpful.

Medical Centre & Welfare

Under the Umbrella of

Muhammad Qutub-Uz-Zaman

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آفتاب میڈیکل سنٹر اینڈ

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# Urban Health Fairness Assessment

Save the Children presents a first-ever global analysis of health inequities in cities in developing countries showing the often huge differences in death rates and access to health care for poor and rich urban children. The analyses find alarming inequities in almost every country with available data.

The *Urban Child Survival Gap Scorecard* examines child death rates for rich and poor urban children in 36 developing countries and finds that in most countries (69 percent) the poorest urban children are at least twice as likely to die as the richest urban children before they reach their fifth birthday. In nearly 60 percent of the countries studied (21 of 36), the poorest urban children face worse survival odds than children in rural areas (on average).

The *Scorecard* finds urban child survival gaps are largest in Bangladesh, Cambodia, Ghana, India, Kenya, Madagascar, Nigeria, Peru, Rwanda, Vietnam and Zimbabwe. In these countries, poor urban children are 3 to 5 times as likely to die as their most affluent peers. In contrast, cities in Egypt and the Philippines have been able to achieve relatively low child mortality rates with comparatively smaller urban child survival gaps.

A second analysis, the *City Health Care Equity Ranking*, shows how access to health care differs among the poorest and wealthiest mothers and children within 22 cities, and also includes a comparison of child malnutrition rates between rich and poor in these same cities.

The ranking finds that, on average, about 60 percent of the poorest women in these cities receive the recommended minimum number of prenatal care visits (compared to 90 percent of the wealthiest women), and about 70 percent give birth with a skilled health professional (compared to 95 percent of the wealthiest women).

Eighty percent of the poorest children, on average, are vaccinated for measles (compared to 90 percent of the wealthiest children).

The largest coverage gaps between rich and poor were found in Delhi (India), Dhaka (Bangladesh), Port au Prince (Haiti) and Dili (Timor-Leste).

Malnutrition gaps are greatest in Dhaka, Delhi, Distrito Central (Honduras), Addis Ababa (Ethiopia) and Kigali (Rwanda). In these cities, stunting rates are 29 to 39 percentage points higher among the poorest compared to the richest. Malnutrition gaps are also notably large in Santa Cruz (Bolivia) and Port au Prince, where the poorest are more than 6 times as likely to be stunted as the richest.

## More and Better Data Needed

These analyses use the best and most recent dataset available on urban child survival and health coverage in developing countries. Overall, research for this report found that health data for specific cities are not being collected in a systematic, publicly accessible way by any established international organization. Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) are the only sources available for internationally comparable estimates across cities and, in most cases, only data for capitals are available from published reports. For some countries (for example, Brazil, China and South Africa), recent survey data are not available from these sources. Major cities in these countries are likely to have some of the lowest child death rates seen anywhere in the developing world.

City information, when available, is usually aggregated to provide an average of all residents – rich and poor, young and old, men and women, alike – rather than disaggregated by income, neighborhood, etc. As a result, the health challenges of the disadvantaged remain hidden. This is especially true of slums and informal settlements. Because these areas are not likely to be surveyed comprehensively, results for the poorest in cities may be an underestimate of the true magnitude of health inequities.<sup>56</sup>

## Urban Child Survival Gap Scorecard

COUNTRY	NATIONAL URBAN SURVIVAL GAP <sup>§</sup>			CITY DEATH RATE <sup>‡</sup>			
	Urban poor are "x" times as likely as the urban rich to die by age 5*	Are poor urban children more or less likely to die than the rural average?	Percent of urban population living in a slum area <sup>1</sup>	CAPITAL AND/OR LARGEST CITY <sup>Δ</sup>	Under-5 mortality rate (per 1,000 live births)		
Cambodia	4.7	more	79% <sup>2</sup>	Phnom Penh	18	LOW UNDER-5 MORTALITY	
Egypt	2.4	more	13%	Urban Governorates (≈ Cairo)	20 <sup>4</sup>		
Guatemala	—	—	39%	Metropolitana (≈ Guatemala City)	19 <sup>3</sup>		
India	3.2	more	29%	Delhi (NCT)	24		
Mexico	—	—	14% <sup>2</sup>	Distrito Federal (Mexico City)	14		
Peru	3.6	more	36% <sup>2</sup>	Lima Metropolitana	14		
Philippines	2.0	less	41%	Metro Manila (NCR)	22		
Vietnam	3.6	more	35%	National urban average	15		
Angola	—	—	66%	Luanda (Province)	76		MEDIUM UNDER-5 MORTALITY
Bangladesh	3.0	more	62%	National urban average	47		
Benin	2.1	more	70%	Cotonou	58		
Burkina Faso	1.9	less	60% <sup>2</sup>	Ouagadougou	95		
Burundi	—	—	64% <sup>2</sup>	Bujumbura	69		
Cameroon	2.3	less	46%	Yaoundé	76		
Congo	1.5	less	50%	Brazzaville	79		
Côte d'Ivoire	—	—	57%	Abidjan	97		
DR Congo	1.5	less	62%	Kinshasa	83		
Ethiopia	2.1	more	76%	Addis Ababa	53		
Gabon	1.6	less	39% <sup>2</sup>	Libreville/Port-Gentil	56		
Gambia	—	—	35% <sup>2</sup>	Banjul	62		
Ghana	3.0	more	40%	National urban average	72		
Guinea	2.5	more	46% <sup>2</sup>	Conakry	70		
Indonesia	1.7	less	23%	DKI Jakarta	31	HIGH UNDER-5 MORTALITY	
Iraq	—	—	53%	Baghdad (Governorate)	31		
Kenya	4.0	more	55%	Nairobi	64 <sup>3</sup>		
Kyrgyzstan	—	—	—	Bishkek City	33		
Lao PDR	—	—	79% <sup>2</sup>	Vientiane Capital	32		
Lesotho	1.8	less	54%	National urban average	89 <sup>3</sup>		
Madagascar	3.1	more	76%	Antananarivo	51 <sup>3</sup>		
Mali	2.0	less	66%	Bamako	59		
Mozambique	2.3	more	81%	Maputo Cidade	80		
Nepal	1.5	less	58%	National urban average	45		
Niger	2.4	less	82%	Niamey	80		
Nigeria	3.0	more	63%	Lagos (State)	65		
Pakistan	2.5	more	47%	Islamabad (ICT)	43		
Pakistan	2.5	more	47%	Urban Sindh (≈ Karachi)	68		
Rwanda	4.9	more	65%	Kigali City	79		
Senegal	2.1	less	39%	Dakar	59		
Sudan	—	—	—	Khartoum (State)	67		
Tajikistan	—	—	—	Dushanbe	29		
Uganda	1.9	more	60%	Kampala	65		
Yemen	—	—	77% <sup>2</sup>	Sana'a City	37		
Zimbabwe	3.4 <sup>5</sup>	less	24%	Harare (Province)	77 <sup>4</sup>		
Central African Republic	—	—	96%	Bangui	109		
Chad	1.5	less	89%	National urban average	165		
Guinea-Bissau	—	—	83% <sup>2</sup>	Bissau (SAB)	100		
Haiti	2.4	more	70%	Metropolitan area (Port au Prince)	109		
Liberia	1.9	more	68%	Greater Monrovia	109		
Malawi	2.0	more	69%	National urban average	113		
Mauritania	—	—	—	Nouakchott	113		
Nigeria	3.0	more	63%	Abuja (FCT)	148		
Sierra Leone	1.1	more	97% <sup>2</sup>	Western Area Urban (≈ Freetown)	152		
Tanzania	2.2	more	64%	Dar es Salaam (Region)	103		
Togo	—	—	62% <sup>2</sup>	Lomé Commune	109		

### LEVEL OF UNDER-5 MORTALITY IN CITIES

- Low = U5MR is less than 25
- Medium = U5MR is between 25 and 100
- High = U5MR is 100 or higher

\* The national urban survival gap is given by the poorest-to-richest quintile ratio (i.e., the under-5 mortality rate (U5MR) for the poorest 20% of urban households is divided by the U5MR for the richest 20% of urban households).

■ The data suggest highlighted countries have well-above-average child survival gaps (defined as a relative difference between rich and poor of 3.0 or more).

§ Data are from the most recent survey available, 2000-2011.

‡ Data are from the most recent survey available, 2009-2013.

— Data are not available for the specified time period.

<sup>1</sup> Population living in households that lack improved water, improved sanitation, sufficient living area, durable housing or combinations thereof. Data are for 2009, unless otherwise footnoted. Computed by UN-Habitat from country household data.

<sup>2</sup> Data are for 2005 or 2007.

<sup>3</sup> Data are from 2008-09 or 2009. All other city estimates are from 2010 or later.

<sup>4</sup> Preliminary data from 2014.

<sup>5</sup> Ratio compares U5MR in the first (poorest) to the fourth (2nd richest) wealth quintile. Data for the richest quintile were not available.

Δ Estimates are for the city itself or the administrative region the city resides in (e.g., the state or province), as noted and only when the city population constituted at least 60 percent of the regional population.

Note: Analysis included 52 Countdown countries with available data. See *Methodology and Research Notes* for details and data sources.

## City Health Care Equity Ranking

RANK	COUNTRY	CITY	Average size of coverage gap	COVERAGE GAPS ACROSS THREE KEY MATERNAL AND CHILD HEALTH INTERVENTIONS						NUTRITION GAP	
				Prenatal care (at least 4 visits)		Skilled attendant at birth		Measles vaccination		Child stunting (moderate + severe)	
				Poorest 20%	Richest 20%	Poorest 20%	Richest 20%	Poorest 20%	Richest 20%	Poorest 20%	Richest 20%
1	Colombia	Bogotá	small	83%	99%	98%	100%+	96%	89%+	23%	12%+
1	Peru	Lima	small	88%	97%+	97%	100%+	80%	81%+	18%	4%+
3	Indonesia	Jakarta	small	97%	100%+	94%	100%	74%	93%	—	—
4	Dominican Republic	Distrito Nacional	small	88%	95%+	91%	97%+	73%	90%+	2%	6%+
5	Bolivia	La Paz	medium	73%	86%+	80%	98%	79%	76%+	32%	10%
6	Benin	Cotonou	medium	84%	96%	95%	97%+	77%	95%	32%	16%
7	Egypt	Cairo	medium	76%	95%	83%	99%	98%	99%+	29%	17%+
8	Honduras	Distrito Central	medium	75%	94%	83%	100%	94%	90%+	36%	4%
9	Cambodia	Phnom Penh	medium	73%	97%	97%	99%+	82%	94%+	(38%)	(16%)+
10	Bolivia	Santa Cruz	medium	74%	98%	92%	99%	74%	89%+	25%	4%
11	Ethiopia	Addis Ababa	medium	75%	92%+	63%	94%	90%	93%+	42%	10%
12	India	Mumbai	medium	73%	92%	78%	100%	86%	99%	52%	30%
13	Nigeria	Lagos	medium	81%	98%	76%	94%	69%	90%	26%	9%
14	Mali	Bamako	medium	46%	76%	78%	87%	76%	90%	24%	17%+
15	Philippines	Metro Manila	large	72%	93%	68%	95%	80%	95%	—	—
16	Senegal	Dakar region	large	28%	71%	89%	96%+	79%	92%+	*	(7%)+
17	Madagascar	Antananarivo	large	51%	93%	69%	97%	83%	92%+	60%	36%+
18	Rwanda	Kigali City	large	24%	63%	70%	100%	97%	98%+	36%	7%
19	Timor-Leste	Dili	very large	59%	79%	39%	91%	65%	89%	59%	36%
20	Haiti	Port au Prince <sup>§</sup>	very large	36%	87%	18%	72%	59%	72%+	(26%)	4%
21	Bangladesh	Dhaka	very large	11%	77%	6%	77%	88%	94%+	52%	13%
21	India	Delhi	very large	27%	93%	19%	99%	56%	98%	58%	20%

### EQUITY GAP ASSESSMENT<sup>‡</sup>

- Very large = Difference is 30 or more percentage points OR the ratio is 5.0 or above
- Large = Difference is at least 20 percentage points, but less than 30 AND the ratio is under 5.0
- Medium = Difference is at least 10 percentage points, but less than 20 AND the ratio is under 2.5
- Small = Difference is less than 10 percentage points AND the ratio is under 1.25

<sup>‡</sup> If the ratio rule is not met, the gap is classified as belonging to the next largest size class. For example, if the rate difference is 9 percentage points (small by these standards), but the ratio is 1.5, the gap is classified as "medium" in size. Assessment is based on values rounded to the nearest tenth. Percentages reported in the table were rounded to the nearest whole number.

(x) Figures in parentheses are based on 25 – 49 observations.

\* Data are based on fewer than 25 observations and have been suppressed.

+ Confidence intervals overlap. The difference between the richest 20% and poorest 20% of households may be negligible.

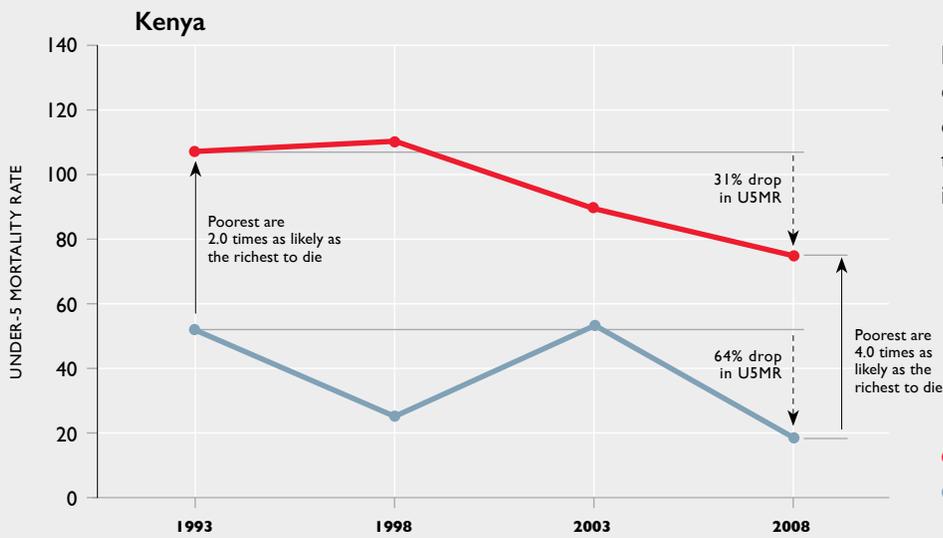
§ Data are for the Metropolitan area.

– Data are not available.

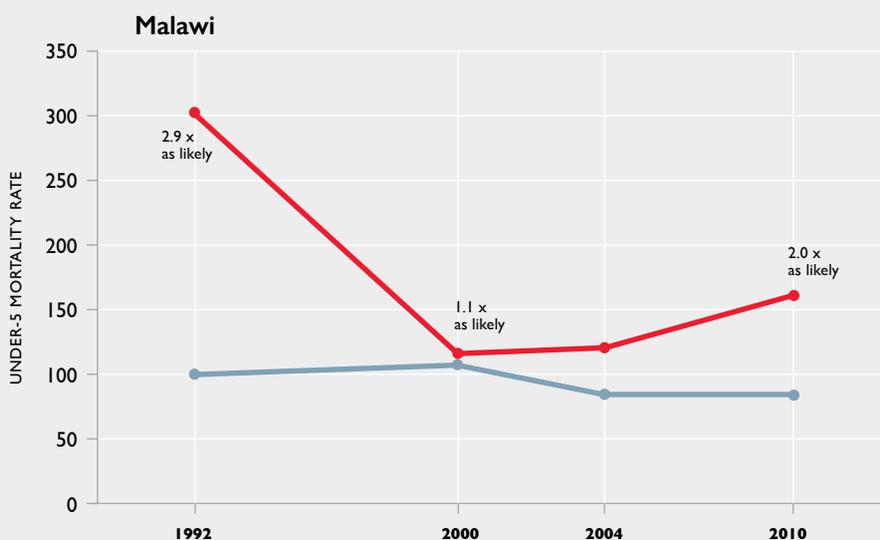
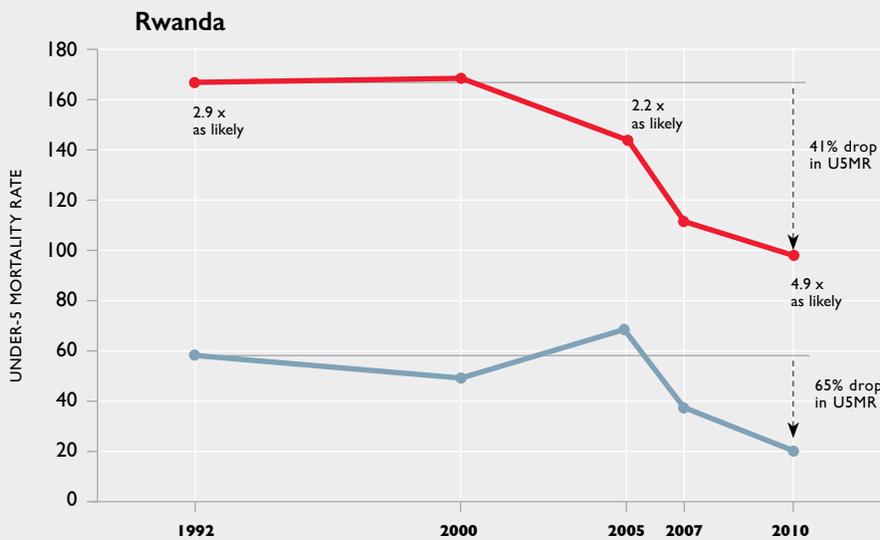
Note: Analysis included all cities with available data from 2005-2011. Cities are ranked according to the average size of their coverage gap. See Methodology and Research Notes for details.

Data source: WHO Centre for Health Development calculations based on data from Demographic and Health Surveys (DHS), 2003-2011. Data were used from the latest available survey for each country.

## Examples of Widening Equity Gaps



Progress for the poorest doesn't always bring gains in equity. Survival gaps, in relative terms, have roughly doubled in Kenya, Rwanda, and Malawi.



Note: For each country, all available urban trend data are shown. Under-5 mortality rates refer to the year they were estimated (i.e., the DHS survey year).

Data source: WHO. Available at [who.int/gho/](http://who.int/gho/) data under "Urban health."



### Progress, But Not Equity

Many countries have made important progress in reducing child death rates overall, including among the poorest urban children. But progress often does not eliminate disparities, and sometimes it exacerbates them. In almost half of all countries with available trend data (19 of 40 countries), urban survival gaps between the richest and poorest children have grown.<sup>57</sup>

In Kenya, for example, child death rates for the poorest urban children have declined 31 percent since the 1993 DHS, but they fell twice as far for the richest urban children (64 percent), so the survival gap has doubled. The poorest are now 4 times as likely to die as the richest, whereas they had been twice as likely to die.

Rwanda is well known for the spectacular progress of its health system in recent years. Nationwide, the child mortality rate has been reduced 66 percent since 1990.<sup>58</sup> Progress among the urban richest has been similarly impressive (65 percent decline in the child death rate since urban health data were first reported in 1992), but the poorest only experienced a 41 percent decline. This leaves the richest urban children with 5 times the survival advantage of the

poorest urban children (compared with 3 times the advantage in 1992).

The data suggest inequality has also noticeably worsened (while overall survival rates improved) in urban areas of Armenia, Lesotho, Namibia, Nigeria, Vietnam and Zimbabwe. Survival gaps (in relative terms) between the urban rich and the urban poor in these countries have grown by at least 50 percent over the period of available data.<sup>59</sup>

And even where equity gains are made, they are not guaranteed to last. In Malawi, important progress for the poorest in the 1990s enabled that country to reach near parity in survival rates between rich and poor urban children, as reported in 2000. That was a rare achievement. But in recent years, the gap between rich and poor urban children appears to have widened to the point that the poorest children may be twice as likely to die as the richest urban children. This suggests equity gains need to be monitored and safeguarded, lest they be lost.

# मेटर्निटी सेक्सन (MATERNITY SECT.)

क्याबिन नं.

- ३ (१०७) : सुडिया काँ
- ४ (१०८)
- ५ (१०९) सभिता पापा
- ६ (११०) मेधा अश्रवाल
- ७ (१११) उमा कुमारी बास्मा
- ८ (११२) सुजला पौडेल
- ९ (११३) अनुशा पौडेल
- ९ (११४) सुपा कुवाका
- १० (११५) विक शनिवार
- १० (११६)

क्याबिन नं.

- ११ (११७)
- ११ (११८)
- १२ (११९)
- १२ (१२०)
- १३ (१२१)
- १३ (१२२)
- १४ (१२३)
- १४ (१२४)
- १५ (१२५)

क्याबिन नं.

- १६ (१२७)
- १६ (१२८)
- १७ (१२९)
- १८ (१३०)
- १८ (१३१)
- २० (१३२)
- २१ (१३३)
- २२ (१३४)



# Saving Lives in Slums

What is working to make cities healthier for mothers and children? Save the Children analyzed household survey data for the past 20 years and identified several cities in the developing world that have made real progress in saving children's lives despite significant urban growth.<sup>60</sup> These "positive deviant" cities have achieved success through a variety of strategies to strengthen health systems, lower costs, increase health awareness and make care more accessible to the poorest urban residents. Different cities have faced different challenges. Some had unique advantages, and some found unique solutions. Their stories offer insights that may help guide others seeking to improve the health and survival of the poorest urban mothers and children.

Our profiles of successful cities provide a diverse set of examples, but some important consistent themes did emerge. First, and not surprisingly, where mothers received better care before, during and after childbirth, fewer children died before reaching age 5. Second, progress in reducing child deaths was often linked to increased use of modern contraception. Effective use of family planning methods is known to help save lives by enabling women to avoid pregnancy when they are too young or too old, and to space their births at intervals that are healthy for them and their babies. Third, most successful cities found ways to provide free or subsidized health services for the poor. Reducing or eliminating payments for health care is key to increasing use of services among the poorest, unhealthiest city residents.



## SUCCESSFUL CITIES

### Addis Ababa, Ethiopia

**The facts:** Addis Ababa has made some of the greatest child survival gains of any city since 2000. Data from 2000 and 2011 suggest under-5 mortality in Addis dropped by half (53 percent) over this time period, from 114 to 53 deaths per 1,000 live births.<sup>61,62</sup> The data also suggest this progress has almost exclusively favored the poorest children. From 2000 to 2011, the child death rate among the poorest 20 percent of Ethiopian urban children (not only those in Addis) fell by over 40 percent. There was little to no change among the top 20 percent. As a result, the urban survival gap in cities across Ethiopia has narrowed dramatically. In 2000, the poorest children were 3.6 times as likely to die as the wealthiest. In 2011, they were twice as likely to die (105 vs. 49 deaths per 1,000 live births in the bottom and top wealth quintile, respectively).

Children in Addis also appear to face better odds of survival than their peers in most other largest cities/capitals in sub-Saharan Africa. This may not be surprising since, nationally, Ethiopia outperforms many other countries in the region on this indicator. But although the country as a whole performs *worse* on under-5 mortality than Tanzania, Rwanda, Senegal and Gabon, for example, Addis performs *better* than Dar es Salaam, Kigali, Dakar and Libreville. In other words, Addis does better than one would expect based on national rankings.<sup>63</sup>

**How did Addis achieve success?** Addis Ababa has experienced substantial growth over the past two decades with expansive construction of roads, residential buildings and facilities providing services. Private sector investment has been booming, communications technology has expanded and many people have moved to Addis from other parts of the country. These changes, along with the socioeconomic progress they nurture, have influenced positive trends in most public health indicators.<sup>64</sup>

Women and children in Addis are getting more health care than they did two decades ago.

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## Same Hospital, New Story

Asegedech, a 59-year-old Ethiopian grandmother of three, has seen tremendous progress in her lifetime. She is with her daughter Hirut, who just gave birth to a healthy baby boy in a public hospital in Addis Ababa. When Asegedech was having her children in this same hospital in the 1980s, her experience was far from positive.

“When I gave birth 30 years ago, there were a lot of challenges,” said Asegedech. “We did not know about prenatal care during my time. It was very difficult to see a doctor. You might not get medical attention even if you were a bleeding mother. You would receive abusive words from the nurses when you were in labor. They would rebuke us when we asked for help.”

Today, Hirut says she is very happy with the services she has received. “I started prenatal care when I was eight weeks pregnant. The medical team gave me a lot of support and advice. They would regularly assess my condition and encourage me. They told me to come anytime if there is any problem. When I came here to deliver my baby, I received a warm welcome. I was worried about giving birth, but they made me feel comfortable.”

“I was telling my daughter to go to a private hospital to give birth,” said Asegedech. “But they are taking care of her very well here. It is really nice.”

Asegedech says people used to worry whenever a woman was pregnant because so many mothers and babies died. “Now things have changed and the services have been improved. Now we do not hear about maternal and newborn deaths very often.”<sup>69</sup>

For example, contraceptive use increased from 45 percent to 63 percent between 2000 and 2011, while unmet need for contraception declined from 19 percent to 11 percent. Partly as a result, the total fertility rate in the city (estimated at 1.5 children per woman in 2011) is among the lowest seen anywhere in the developing world.<sup>65</sup> Over the same period, use of prenatal care rose from 83 to 94 percent, institutional delivery increased from 67 to 82 percent and percentage of children vaccinated for measles increased from 88 to 94 percent.<sup>66</sup>

The health system in Addis has grown over the past 10 years to meet increased demand. The number of hospitals, both public and private, increased from 25 to 34. Facilities providing primary health care increased from 23 to 75. The number of private health facilities providing different levels of care grew from 319 to 573. Public and private health facilities now provide family planning and immunization services. And all public health facilities provide integrated management of childhood illnesses and prevention of mother-to-child transmission of HIV. Many more nurses have been trained and employed – the nurse-to-population ratio improved from one nurse per 3,459 people to one nurse per 963 people.<sup>67</sup>

**What challenges remain?** Addis Ababa still faces challenges in addressing maternal and child health needs. While gaps have narrowed, the rates of under-5, child and newborn mortality remain higher for the poorest segment of the population. The newborn mortality rate did not show significant improvement between 2005 and 2011 and these deaths disproportionately occur among the poor. The Addis Ababa Health Bureau plans to address these problems by working to improve the quality of institutional delivery and postnatal care in public health facilities specifically targeting the poor. They also plan to better promote these services among those who aren't using them.<sup>68</sup>



Addis Ababa, Ethiopia

## Cairo, Egypt

**The facts:** Cairo has achieved an above-average reduction in its under-5 mortality rate and is one of the only megacities to have done this. The data suggest Cairo (and Egypt's three other urban governorates) have almost doubled the pace of progress in recent years. Overall, mortality rates dropped by more than half (55 percent) from 2000 to 2014.<sup>70</sup> The data suggest this progress was equitably shared across income groups and that urban survival gaps have narrowed. Egypt has made good child survival gains among its most affluent urban residents (47 percent reduction in under-5 mortality between 1995 and 2008) but even better gains for the poorest (66 percent reduction over the same time period). As a result, the poorest urban children in Egypt have gone from being 3.7 times as likely to die before their fifth birthday (in 1995) as the urban best-off to 2.4 times as likely to die (in 2008). Cairo is also notable for its nearly universal (99 percent) measles vaccination coverage. The poorest and best-off children in the city are equally likely to be immunized (98 percent vs. 99 percent, respectively). And all families – poor and rich alike – have access to safe (and piped) water.<sup>71</sup>

**How did Cairo achieve success?** The city's remarkable progress is the result of national health system reforms, specialized programs and the persistent efforts of civil society organizations. The Ministry of Health and Population, the primary source of health services in Egypt, provides various levels of free or subsidized services for the poor.<sup>72</sup> Services range from outpatient clinics to large-scale hospitals providing secondary and tertiary levels of care.<sup>73</sup> The health ministry operates nationally, but administration and funding are decentralized in compliance with the general health ministry policies. A “multi-phase health sector reform Program on Immunization” was introduced in Egypt to improve health care availability, sustainability, quality and satisfaction, with the goal of universal coverage in basic primary care.<sup>74</sup> These reforms have brought about significant progress in newborn survival, hepatitis control and reductions in the national death rate.



About 10 years ago, Egypt reached a milestone achievement with more than 60 percent of health clinics in hospitals offering free health services.<sup>75</sup>

Effective urban planning along with political commitment in Egypt have contributed to huge reductions in the country's slum population. Between 1990 and 2009, the number of slum dwellers in the country's cities fell by half (from 12.6 to 6.1 million) and the share of its urban population living in slums declined by two-thirds (from 50 to 13 percent). In 2009, Egypt had the second *lowest* slum incidence rate in the developing world.<sup>76</sup>

Egypt's population program is one of the most successful efforts in the world of family planning.<sup>77</sup> The percentage of currently married women aged 15 to 49 using family planning increased from 38 percent in 1988 to 59 percent in 2014.<sup>78</sup> Moreover, the percentage of women using a modern family planning method they obtained from a public health facility increased from 36 percent in 1995 to 57 percent in 2014. The program achieved significant changes in the attitudes and practices of Egyptian couples.<sup>79</sup> Through the program, over 5,000 family planning clinics are providing services nationally.

Egypt also has one of the strongest immunization programs in the world. Vaccinations are readily available and easily accessed by all segments of the society. The success of Egypt's Expanded Program on Immunizations has made childhood vaccinations routine for even the poorest families. The program has helped decrease and prevent many diseases, such as diphtheria and polio.<sup>80</sup> Egypt has been polio free since 2004.<sup>81</sup>

Egypt's health ministry has partnered with a range of local and international civil society organizations that deliver development, social and health care services, including reproductive

## “I Am Trying Not To Be Ignorant”

Mothers-in-law are very powerful members of Egyptian households. They have great influence on their sons and they control most daily routines in the home. They decide what to eat, who can go out, and they can influence their sons' decisions on who to marry and how many children to have. For this reason, many Egyptian health projects are keen to reach out to mothers-in-law and get them involved in improving mother and child health.

Hamida is a 55-year-old mother-in-law who has three married sons. She was married at age 14 in Upper Egypt and lived there for most of her life. Recently, the bad economy forced her to move to a slum area in Cairo with her sons and their families. Save the Children community health workers in the neighborhood noticed Hamida would show up for many of their sessions, not just the ones meant for mothers-in-law. They asked what was the reason for her avid interest.

“I am completely illiterate and I have never been to school,” Hamida said. “However, I am trying to know as much as I can. I know I am old to learn now, but I am trying not to be ignorant. When I saw the health workers visiting my neighbors, I insisted on attending all the classes.”

Hamida says she has learned valuable information on health, nutrition, hygiene, raising children, early marriage and the importance of pregnancy follow ups. She has made certain changes at home to keep the children clean, improve the nutritional quality of meals and prevent disease.

Last month, one of her sons' wives wanted to circumcise their 7-year-old daughter. “I said NO. I talked to my son about how this can endanger the life of my granddaughter,” she said. “To tell you the truth, before attending those classes, I would not have minded. Now, I swear to God, I will not allow it to happen to any girl in my family. I won't be the mother-in-law who forgot the pain she went through and I won't do it again to my granddaughters.”<sup>89</sup>

health and family planning, nutrition, maternal care, disease prevention and awareness-raising efforts. A key feature of this work is a focus on the most vulnerable, with many NGOs offering free or very low-cost health services in the poorest areas of Cairo, especially the informal settlements.<sup>82</sup>

Save the Children has supported improvements in Cairo's health system through partnerships with various government bodies to improve communities' knowledge, attitudes and practices regarding maternal and child health and nutrition. Save the Children also supported the Ministry of Health and Population in establishing a surveillance system of nutritional deficiencies and health management information systems.<sup>83</sup>

**What challenges remain?** Vulnerable mothers and children in Cairo experience many health disadvantages, including alarmingly high rates of child malnutrition and significant risks associated with maternal health.<sup>84</sup> One of the most pressing issues is the poor quality of health services provided to vulnerable communities, which stems from a lack of trained health care staff and a shortage of medical equipment. Health facility infrastructure is deteriorating because of overuse, poor maintenance and budget limitations. In 2012, Egypt spent only 4.7 percent of total GDP on health care services, which is considered very low compared with government's spending on other services.<sup>85</sup> As the population grows, the availability of hospital beds, doctors and pharmacies shrinks, leaving a gap between supply and demand. Only half the population is eligible for public health insurance.<sup>86</sup> Non-working mothers and women of reproductive age working privately or informally are excluded from health insurance services. Children who do not attend school or who drop out of school are also not eligible, meaning the most vulnerable are excluded.<sup>87</sup> Illiteracy and low educational attainment characterize many informal areas in Cairo, which contributes to the low level of health seeking behaviors, especially for mothers during pregnancy and childbirth.<sup>88</sup>



## Manila, Philippines

**The facts:** Metro Manila, which is the National Capital Region of the Philippines, is composed of 16 cities and one town. It achieved about a 4 percent reduction in under-5 mortality per year from 1998 to 2013 (over 40 percent total reduction).<sup>90</sup> In addition, Metro Manila has done a better job than most megacities at dramatically reducing child survival inequities. The data suggest progress across urban areas of the Philippines has favored the poorest. Under-5 mortality among the poorest 20 percent of urban residents has been steadily declining over the years. Between 1993 and 2008, child mortality rates among the urban poor were cut in half (from 81 to 38 deaths per 1,000 live births). Meanwhile, the most affluent urban 20 percent made relatively minor gains (under-5 mortality was 20 per 1,000 births in 1993 and 19 in 2008). As a result, over this time period, the poorest urban children went from being 4 times as likely to die to being twice as likely to die compared to their wealthy peers. In other words, the child survival gap has been cut in half.

**How did Manila achieve success?** According to local experts, Manila's progress is the combined result of many factors, including improved quality of services, special programs for mothers and children, public-private partnerships, investments in frontline health workers, structural reforms and health care innovations introduced to the local government units. Strong and sustained involvement of community-based organizations in maternal and child health care programs have also helped contribute to the National Capital Region's progress.<sup>91</sup> Reforms introduced in 1991 decentralized responsibility for many services related to the health and welfare of the people. Local government units at the city and municipal levels were given authority over basic health care, maternal and child care, nutrition, disease treatment and prevention and other functions.<sup>92</sup>

Several innovations are unique to the capital region. To make health care more convenient, "one-stop shopping" is available for certain

services and diseases. Under this concept, all services related to prenatal care or non-communicable diseases, for example, are located under one roof. Special prenatal care centers for adolescents have been developed in some areas of the capital region. Another innovation aimed at poor people is called the *Family Kit* – this provides an easy way to ensure an individual's health records are available in different clinics; it is especially helpful for those who live in informal settlements and other poor areas where they might be forcibly relocated or evicted at any time.<sup>93</sup>

A nationwide program known as the *Pantawid Pamilyang Pilipino Program* (4Ps) – the country's social protection program – provides conditional cash grants to poor households with pregnant women or children under 14 to help improve their health, nutrition and education. Enrolled families need to comply with conditions, including prenatal visits, health check-ups for children under 5, and ensuring children attend school.<sup>94</sup> The program currently covers 4 million households across 79 provinces and 143 cities in 17 regions nationwide.<sup>95</sup> "We don't have problems with patients enrolled in the 4Ps because they really comply with their routine health check-ups," says Sophie Angeles, a midwife in Caloocan City, one of the most populous cities in the capital region. "Also, there is follow up with them to ensure that pregnant women deliver in a health facility."

Irene, a 42-year-old mother of eight, talked about how the 4Ps benefits her family: "As a 4Ps member, you are required to attend family development sessions regularly and you need to ensure that your children attend school," she said. "It is a really a big help to us financially, as it helps us take care of our children's school needs. My children are now healthy, because now we have things like 4Ps and family planning."

In Caloocan City, a public-private partnership between the local health department and private birthing clinics led to the development of a city-wide service delivery network in 2013. Because many pregnant women prefer giving birth within their community, the city health

## Learning About Motherhood in an Indian Slum

department formed partnerships with “lying-in clinics” (modest, single-purpose facilities for pregnancy and childbirth care). Through this partnership, staff of private birthing clinics are trained in essential newborn care, emergency obstetric care, health and nutrition data collection and other health protocols. For 4Ps recipients who are also enrolled in PhilHealth, the national insurance program, maternal and newborn packages in accredited private birthing clinics are free.<sup>96</sup>

In Manila, a city within the National Capital Region with a large population and high urban poverty, a local nongovernmental organization *Likhaan Center for Women’s Health, Inc.*, helps complement reproductive health and family planning services offered by the city. At present, *Likhaan* is in partnership with Save the Children on a European Union-funded project. Through this project, *Likhaan* is helping to reach more than 90,000 poor urban mothers, fathers, adolescents and children through consultations, counseling, face-to-face meetings, home visits and via mobile phones. The project also advises local health providers and local government officials on the best ways reach the urban poor with other health and family planning services. Saturday is designated as “Youth Day” when teenagers can access adolescent sexual and reproductive health services, including modern family planning methods.

“I really like it here at *Likhaan* because the services are free, unlike in some other hospitals,” said Irene. “For poor people like me, it is important that we are not paying for family planning services. In hospitals, you have to pay a lot for family planning.”<sup>97</sup>

**What challenges remain?** In Metro Manila, while health facilities and obstetric care are physically more accessible, the poor and young people still have to compete for limited resources. Many poor people do not access health services because they lack financial capacity to do so. Also, the cost of health care continues to rise despite policy reforms in the health financing system.<sup>98</sup> Some mothers still prefer delivering at home because fees for traditional

Chotti lost three babies shortly after they were born. During her pregnancies, she did not receive any prenatal care and the deliveries took place at home without a skilled attendant. “I didn’t know ... I didn’t get check-ups, nothing,” she said. “All three children were born and then they died.”

In the slums of Delhi, India, her story is sadly commonplace. Among the poorest 20 percent of women in this city, only 27 percent receive recommended prenatal care and only 19 percent have a skilled attendant at birth. In a city where the affluent enjoy a very high standard of living, statistics like these make Delhi one of the most unequal cities in the developing world.<sup>99</sup>

When Chotti became pregnant a fourth time, her neighbors told her to go see Rima, a Save the Children community health volunteer in the VP Singh Camp where both women live. Rima became like a wise older sister to Chotti, coaching her on when and where to go for prenatal check-ups, how to have better nutrition, and danger signs to watch for. Rima accompanied Chotti to the hospital and helped her register so she could have her birth there.

“In the hospital, the baby was born properly,” Chotti said. “I liked it there. The people helped me. They made me lie down and after that the baby was born and everything was fine. If I had gone to the hospital before, my other children would have survived.”

Rima visits Chotti at home now and helps her care for her new baby boy, whom she named Naveen. Rima advises Chotti about breastfeeding, cleanliness and vaccinations. Chotti has been following Rima’s advice and Naveen is doing well.

“I used to feel sad earlier,” Chotti said. “But now my baby is fine. My heart is happy.”<sup>100</sup>



Delhi, India

birth attendants are more affordable and can be made in installments.<sup>101</sup>

A recent study found the National Capital Region failed to meet national targets for maternal mortality and contraceptive use. In addition, data from the National Statistics Office suggest 1 in 5 infants who died in 2010 were in the capital region (which represents 13 percent of the country's total population), even though the capital has one of the lowest infant mortality rates in the country.<sup>102</sup> Breastfeeding in Metro Manila remains low. A recent study found that only 24 percent of young children had been exclusively breastfed for the first 6 months of their lives.<sup>103</sup>

### Kampala, Uganda

**The facts:** Kampala has made good child survival progress while also experiencing a relatively rapid rate of population growth. Data suggest under-5 mortality in Kampala declined at an average rate of 7 percent per year over six years of available data (from 94 deaths per 1,000 live births reported in 2006 to 65 in 2011).<sup>104</sup> This is one of the fastest declines seen among the 50 cities with available data and the fastest seen in any capital/largest city in Africa. At the same time, Kampala experienced an above-average annual population growth rate of almost 4 percent.<sup>105</sup>

Uganda hosts a large number of refugees (mostly from DR Congo and South Sudan), suggesting Kampala's population growth may in part be attributable to in-migration from conflict. Progress in this complex environment is another reason Kampala's success deserves praise, and may serve as a model for other cities.

Kampala has also made good equity gains. Progress reducing child deaths has favored the poorest urban residents and the urban survival gap has decreased. In 1995 and 2000, the poorest urban children in Uganda were almost 3 times as likely as the wealthiest urban children to die before their fifth birthday. In 2006, they were twice as likely to die.<sup>106</sup>

**How did Kampala achieve success?** Kampala has achieved good results from a variety of outreach efforts that take health care information



and services to the communities where poor people live. For example, family health days in places of worship have helped promote awareness of preventable diseases and reduced their occurrence, according to Dr. Oundo Christopher, division medical officer for part of Kampala city. "Information sharing through community radio and village health teams have also helped," said Dr. Oundo. "Through these vehicles we get to people individually in the different communities." Currently there are more than 300 village health teams in just one division of Kampala, Dr. Oundo noted.<sup>107</sup>

"Though we live in a congested place, sanitation-related diseases are no longer problem," said Brenda, 24, mother of a 2-year-old boy who is pregnant with her second child. "People now take the initiative to collect their rubbish and clean up their surroundings."

Joseline, 35, a businesswoman and mother of five, agrees: "Diseases like measles and malaria are the only ones we still struggle with in our area," she said. "The sanitation-related diseases like diarrhea, typhoid and cholera are no longer heard of. We get health information from the different door-to-door health personnel." Joseline added that clean water is not a problem in her area as it was before.

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## Nepal's New Focus on the Urban Poor

The government of Nepal's new strategy to reduce health and nutrition inequities and achieve universal health coverage includes a specific plan to reach the urban poor. Nepal has made good progress on many health indicators over the past two decades, but the strategy acknowledges disparities continue to increase. Overall progress at the aggregate level has hidden unequal progress among different communities.

"The urban poor are the fastest growing sector of society, yet it has been long overlooked," say the strategy's authors. "The urban poor have remained out of reach of the public health services."

Nepal's health and nutrition strategy for 2015 to 2030 seeks to address these inequities by strengthening the urban health infrastructure, increasing staff serving poor urban areas, along with addressing other barriers. To remove cost as a barrier, the strategy calls for the urban poor to receive a renewable ID card for free health care. Private providers will be encouraged to provide a percentage of their services free of charge to the poor. Awareness-raising efforts will promote public alternatives to costly private pharmacies. Specific strategies aimed at the poorest mothers and children include: assigning at least one nurse-midwife or female care provider to each urban health clinic, as well as activities to support breastfeeding by working mothers.<sup>108</sup>

Save the Children has partnered with the government of Nepal in developing this strategy, and will continue to support these efforts over the coming 15 years.

**What challenges remain?** Accessibility and cost of health services are still problems for Kampala's poorest families. "It's not easy getting medical care because the clinics and private hospitals are too expensive given that we earn very little," said Eunice, a 38-year-old mother of one. "And the government hospitals are far away."

Joseline agrees, the government hospitals are affordable, "but there are long waiting queues, and they don't treat us well, given that it's a free service."

Dr. Oundo says the referral system doesn't cater to the needs of city residents. The bigger health facilities – such as the national referral hospital – are set up to take care of large numbers of people, but most urban residents would prefer to go to smaller local clinics. In terms of diseases, malaria and upper respiratory infections are the biggest problems in slum areas, said the doctor. "HIV and AIDS are also still a burden due to prostitution in most of the slums."<sup>109</sup>

## Guatemala City, Guatemala

**The facts:** Data from 1998/99 and 2008/09 suggest under-5 mortality in Guatemala's metropolitan declined by nearly 10 percent per year between these surveys.<sup>110</sup> This is the fastest average annual rate of reduction seen among capitals in Latin America and the Caribbean with available data. All in all, under-5 mortality in the metropolitan area dropped by nearly two-thirds in just 10 years (from 52 to 19 deaths per 1,000 live births – a rate that is well below the national MDG4 target of 27). At the same time, Guatemala City's population grew at an average rate of 3 percent per year.<sup>111</sup>

Stepping back, we see Guatemala City has sustained two decades of good progress in saving lives. From 1987 to 1998/99, under-5 mortality in the metropolitan area fell by almost half (45 percent). In total, since 1987, under-5 mortality across the region has fallen by 80 percent (from 95 deaths per 1,000 live births to 19).<sup>112</sup>

### How did Guatemala City achieve success?

Guatemala City performs very well on two indicators that are key to maternal and child survival and health: prenatal care and birth attendance by a medical doctor or nurse. Prenatal care coverage in 2008 was 97 percent and more importantly, 72 percent of all mothers received prenatal check-ups during the first trimester of pregnancy. This increases possibility of early detection and prevention of potential causes of child death – especially newborn death. The number of births attended by qualified staff rose from 67 percent in 1987 to 88 percent in 2008/2009. In addition, 92 percent of the births in the Guatemala City metropolitan area took place at hospitals compared to the national average of 59 percent. This has helped the metropolitan area achieve the lowest maternal mortality rate in the country; close to 66 per 100,000 births, compared to other parts of the country where the numbers are triple that.<sup>113</sup>

The positive influence of education on child survival is well known, especially the number of years that women stay in school. In the Guatemala metropolitan area almost half of



women of childbearing age reach high school (45 percent) and more than 13 percent reach the tertiary level. According to UNDP, the literacy rate in the city was as high as 80 percent in 2010.<sup>114</sup>

Family planning is another important contributor to higher child survival rates in the metro area. The expected number of children born per woman dropped from 4 in 1987 to 2.7 in 2008 and is expected to continue to fall. In 1987 only 45 percent of women in union between the ages 15 to 49 used any form of contraception. This number had increased to 57 percent in 1999 and to 72 percent in 2008.<sup>115</sup> One of the main factors behind this increase is the growth of the public sector as a source of family planning methods.<sup>116</sup>

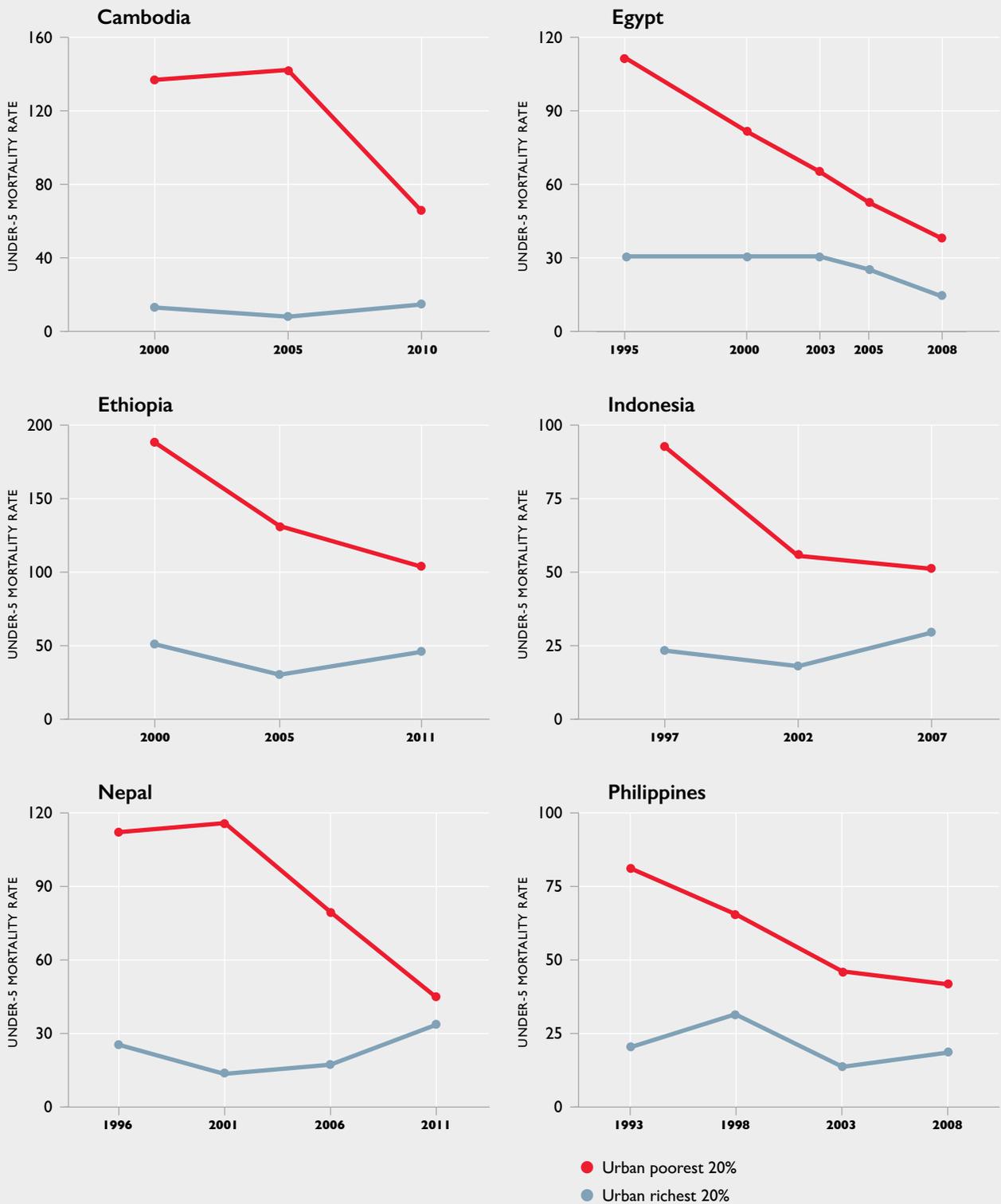
The capital metropolitan area has the highest concentration of health care facilities in the country. The two largest providers, the Ministry of Public Health and Social Assistance and the Guatemalan Institute of Social Security, both channel most of their human and financial resources to the Guatemala City metro area. This increase was dramatic in the period 1999 to 2003 when the budget for hospitals in the metropolitan area tripled from about \$32 million to \$121 million U.S. dollars, exceeding the sum received by all other areas of the country together since 2001.<sup>117</sup>

**What challenges remain?** While Guatemala City has a greater number of health care services, with better infrastructure and access conditions than the rest of the country, quality of service is still not guaranteed. According to local newspapers, during 2014, hospitals ran out of budget several times during the year because of prolonged delays in the allocation and release of funds by the Ministry of Finance. As a consequence, many hospitals periodically suffered severe shortages of medicines, medical supplies and even food and drinks needed to meet patients' dietary needs. In addition, the human rights attorney's office receives frequent complaints of mistreatment by nurses and physicians working in the hospital system.<sup>118</sup>

### **Phnom Penh, Cambodia**

**The facts:** Phnom Penh has cut its under-5 mortality rate by nearly two-thirds (from 50 to 18 deaths per 1,000 live births) since the first Demographic and Health Survey was done in 2000.<sup>119</sup> In 2010, the city's under-5 mortality rate was reported at just 18 deaths per 1,000 live births. This is the lowest child death rate reported for any capital city in a low-income country with available data and is roughly on par with rates seen in Lima and Mexico City, both cities in upper-middle-income countries.

## Six Countries Making Major Equity Gains for Urban Poor Children



In these countries, progress has favored the poorest urban children. As a result, survival gaps have likely narrowed. The data suggest Cambodia, Indonesia, Nepal and the Philippines have cut urban survival gaps in half – in both relative and absolute terms.

Note: All available trend data are shown for each country. Under-5 mortality rates refer to the year they were estimated (i.e., the DHS survey year). Country examples are used for purpose of illustration only. These data do not necessarily reflect the overall level of health equity in country.

Data source: WHO. Available at [who.int/gho/data](http://who.int/gho/data) under "Urban health."

In Cambodia overall, there is a very clear advantage to living in urban areas in general and Phnom Penh in particular. There are also very large regional inequities. Mortality rates are 2.5 to 6.6 times as high in other provinces as they are in the capital region. The urban poor in Cambodia are clearly disadvantaged. In fact, the urban survival gap in Cambodia is one of the largest seen in the world. Poor urban children are nearly 5 times as likely to die before their fifth birthday as the wealthiest urban children are (under-5 mortality is 66 per 1,000 births vs. 14, respectively). Fortunately, the data also suggest this gap is narrowing. Over the past 10 years, mortality rates among the poorest urban children have been cut in half (from 132 in 2000 to 66 in 2010), while there has been little change for the wealthiest. As a result, the survival gap has halved since 2000.

Phnom Penh is also notable for its nearly universal coverage of skilled care at birth (99 percent). The poorest and best-off mothers in the city are equally likely to deliver with a skilled health professional (97 vs. 99 percent, respectively). The facility birth rate is 93 percent (only 6 percent of births take place at home). And 84 percent of children are fully immunized.<sup>120</sup>

### **How did Phnom Penh achieve success?**

Phnom Penh was the focal point of what was considered a golden age of urbanity until the late 1970s, when an outbreak of civil war consumed the city and became the precursor to one of the most violent expressions of ideology in any urban theater. The anti-urbanism of the Khmer Rouge was described as the “killing of cities.”<sup>121</sup> Pervasive destruction and eradication of both rural and urban ways of life lasted until the mid to late 1990s.<sup>122</sup>

After the demise of Khmer Rouge’s power (post 1979), government relief efforts focused on better training for nurses, midwives and doctors in order to regain stability of health-related infrastructure and programs. These government-led efforts were supported by multiple national and international organizations, including two large Cambodian NGOs: the Reproductive Health Association of Cambodia and Reproductive and Child Health Alliance, as well as major international NGOs and international agencies.<sup>123</sup>

Phnom Penh has quickly become an economic node linking agricultural production to regional and global markets. Perhaps most important: Cambodia’s rate of urban population

growth has been much slower than that of neighboring countries, and it encompasses a much smaller overall population (estimated 1.2 million compared to approximately 7.4 million in Ho Chi Minh and 6.3 million in Bangkok). This, arguably, places less pressure on urban planning and management systems. Between the years of 2008 and 2013, Cambodia’s urban population grew by just over 350,000 whereas Thailand’s grew by over 4.3 million and Vietnam’s grew by 3.8 million in the same period. Slower rates of urbanization (and smaller urban populations) could be correlated to the slower growth of urban slums, all factors that make Phnom Penh a special case for improved health relative to the growing megacities and city regions in Asia.<sup>124</sup>

Phnom Penh’s rapid improvements in facility-based births and skilled birth attendance were achieved in part through investments in midwifery training and the numbers of midwives providing prenatal care and deliveries within an expanded primary health care network. A monetary incentive was given to facility-based midwives for every live birth conducted. In addition, an expanded system of health equity funds made health care free of cost for poor people.<sup>125</sup>

Another factor in Phnom Penh’s urban health improvement has been the spread of telecommunication through television, radio and cell phones. This has contributed to recent health communication improvements such as health messaging and health care response. Cities with a larger, more diverse and more dense populations may receive less information.<sup>126</sup>

**What challenges remain?** As Phnom Penh gradually rebuilds pre-war urban ideals, the city still faces major challenges in delivering comprehensive health maternal and child health care. Issues include: poor post-partum care, lack of family planning and inadequate prevention and treatment of breast and cervical cancer, which is attributed to ineffectiveness of the public health sector.<sup>127</sup>

Health care in Cambodia operates primarily under unregulated conditions with formal and informal services available alongside a number of government-funded public facilities. Surveys show that 57 percent of household members who are ill or injured and seeking treatment use private sector facilities whereas 29 percent use public facilities. Between 85 and 100 percent of the money used to pay for health care is from either out-of-pocket or personal savings.<sup>128</sup>



## Urban Inequity in Wealthy Countries

In more developed countries, as in less developed countries, it is the poorest, most marginalized children who suffer the most in cities and continue to die in the greatest numbers. While child deaths are much less common in wealthy countries than in developing countries, there remain striking differences in death rates between the richest and the poorest children in cities throughout the industrialized world. In some United States cities, urban child survival gaps between rich and poor are greater than those found in developing countries.

In measuring child mortality in the industrialized world, most countries focus on infant mortality – deaths of children in the first year of life. This is because relatively few children in wealthy countries die after their first birthday from diseases such as pneumonia, malaria and diarrhea, which continue to kill young children in large numbers in developing countries. Complications from prematurity account for a large percentage of infant deaths in wealthy countries – these are babies being born too soon or too small.

While infant deaths in most major industrialized cities surveyed outside the United States were below 5 deaths per 1,000 live births, our research also found significant gaps between babies born to wealthy, well-educated urban mothers and those born to poor, less-educated mothers. Save the Children found examples of significant urban inequities in cities in the United States, Canada, Japan, Australia and Europe. Here are some of the most compelling findings:

**United States:** Cities in the United States have some of the highest urban infant mortality rates in high-income countries. Save the Children examined infant mortality in capital cities of wealthy (OECD) countries and found that Washington, DC had by far the highest infant mortality rate among the 25 capital cities (see chart on page 45). In 2012, the District of Columbia had an infant mortality rate of 7.9 deaths per 1,000 live births as compared to Stockholm (Sweden) or Oslo (Norway) with infant mortality rates at or below 2.0. Late last

year, DC officials released preliminary figures for 2013 indicating a sharp decline in the city's infant mortality rate to 6.6 deaths per 1,000 live births.<sup>129</sup> This rate, which represents an all-time low for Washington, DC is still higher than any of the capital cities outside the U.S. surveyed and remains above the U.S. national average of 6.1.

Many major U.S. cities have even higher infant mortality rates than Washington, DC in recent years. In 2011, Cleveland and Detroit reported infant mortality rates of 14.1 and 12.4, respectively. Eight other cities had death rates at or above 8.9 in 2011 (see table on page 42). A *Detroit News* investigation last year found that a majority of deaths among Detroit children under 5 occurred during the first year of life. Infant deaths accounted for 130 of the 208 Detroit children who died before the age of 5 in 2011. Prematurity was cited as the leading killer of Detroit babies. Other factors contributing to infant deaths included pervasive poverty, young and uninformed mothers and poor prenatal care.<sup>130</sup> Race is also a factor. In many U.S. cities, poor, unmarried and young African-American mothers are losing their babies at much higher rates than the U.S. average of 6.1 deaths per 1,000 live births. In San Francisco, an African-American mother is 6 times as likely as a white



mother to lose her baby before her child's first birthday.<sup>131</sup>

Urban neighborhoods with high poverty rates often have much higher infant mortality rates than the city average, and Save the Children found that city averages often mask the huge disparities in infant death rates between rich and poor children. In 2012, for example, infants in Washington, DC's Ward 8, where half of all children live in poverty, died at a rate more than 10 times higher than the death rate of infants born in Ward 3, the richest part of the city.<sup>132</sup>

Urban mothers in the U.S. also have different life expectancies based on race. In most US cities, the largest gap in female life expectancy is between Asian American and African American women. Gaps are greatest in Chicago, where Asian American women outlive African American women by more than 14 years.<sup>133</sup>

**Australia:** Although Australia is home to four of the world's top 10 "most liveable" cities,<sup>134</sup> child health outcomes vary significantly within them. In Australia's largest city, Sydney, infants



born in the southwest are twice as likely to die before their first birthday as babies born in the inner-city North Shore.<sup>135</sup> South Western Sydney is characterized by a higher portion of Aboriginal and Torres Strait Islander people, new immigrants and lower socioeconomic indicators compared to the North Shore – one of Australia's wealthiest addresses. Similarly, in Melbourne, an infant born in the southeast of the city is 1.7 times as likely to die before age 1 as a baby born in the more affluent Bayside area.

**Canada:** In Canada, remoteness is the primary driver of poor health outcomes. Women in rural and far north regions often have to travel, sometimes for hours, to access maternal health services and this is particularly true for high risk pregnancies. Some Canadian cities have higher infant mortality rates than the national average – often these higher rates seem to affect communities with large indigenous populations.

In Winnipeg, the infant mortality rate in 2012 was reported in Point Douglas and downtown Winnipeg at 7.3 to 7.4 deaths per 1,000 live births.<sup>136</sup> Winnipeg has the largest indigenous population of any Canadian city and there are significant indigenous populations in the neighborhoods with the highest infant death rates such as Point Douglas and downtown.<sup>137</sup> The correlation between racial and income inequality and poor health outcomes is clear.

Saskatchewan has the second highest population of indigenous peoples after Manitoba, with 15.6 percent of the population self-identifying as indigenous. Mothers living in impoverished neighborhoods with significant indigenous populations experience the loss of a child at 1.5

### Out of the 50 Largest U.S. Cities, These 10 Have the Highest Infant Death Rates

RANK	CITY	INFANT MORTALITY RATE (2011)*
50	Cleveland	14.1
49	Detroit	12.4
48	Baltimore	10.8
47	Memphis	10.7
46	Raleigh	10.0
44	Indianapolis	9.5
44	Philadelphia	9.5
42	Milwaukee	9.3
42	Atlanta	9.3
41	Columbus	8.9

\* The infant mortality rate is the number of deaths occurring among infants under 1 year of age, expressed per 1,000 live births. The data are reported by the place of residence, not the place of death.

Note: Analysis was limited to the 50 most populous U.S. cities according to the most recent Census counts.

Data source: KIDS COUNT Data Center, a project of the Annie E. Casey Foundation. Available: <http://datacenter.kidscount.org/data/tables/6051-infant-mortality> (accessed April 6, 2015)

## How Stockholm Battled Inequity and Saved Lives

times the rate of mothers living in more affluent neighborhoods.<sup>138</sup> The children who survive are at higher risk of low birth weight, prematurity, sudden infant death syndrome, infections and perinatal conditions.<sup>139</sup> A 15-year analysis of infant mortality rates (1985-2000) in highest- and lowest-income neighborhoods in urban British Columbia found infant mortality rates were two-thirds higher in the poorer neighborhoods and that the gaps did not narrow over this time period.<sup>140</sup>

**France:** A recent analysis of infant mortality in the metropolitan areas of Lille and Lyon found that families living in more deprived neighborhoods had a significantly higher risk of infant mortality than those in better-off neighborhoods. In Lille, researchers identified two “urban hotspots” of high inequality – the Lille city center and Roubaix, in the northeast section of the metro area next to the Belgium border. In Lyon, researchers found that infant mortality increased from west to east with significantly elevated mortality situated in the east. French researchers believe this type of micro-analysis provides a deeper understanding of the geographic patterns of health inequalities and often reveals inequalities that are hidden when health estimates are produced at the city, state or national level.<sup>141</sup>

**Germany:** Recent research shows progress in closing maternal and infant mortality gaps in Berlin. Berlin residents of Turkish origin (the largest group of immigrant women in Germany) used to have higher rates of infant and maternal mortality than women of German origin. But new studies suggest these outcomes have improved over time. One recent study even showed no difference for stillbirth, preterm birth or congenital malformations between women of Turkish and German origin. It did, however, find lower utilization rates of prenatal health care among immigrant women, which, the authors concluded, “could be the expression of barriers to access in health care for pregnant women with migration background as offered in Germany.”<sup>142</sup>

The city of Stockholm in Sweden is one of the best places to be a mother and raise a child, but it was not always so. Around 1900, Stockholm was similar to many cities in poor countries today. Poverty, crowding and adverse living conditions were a fact of life for the majority of the rapidly growing urban population.<sup>143</sup> Infant mortality rates exceeded 200 per 1,000 births. Rates were especially high among orphans, babies born out of wedlock and the urban poor.

In response to public concern, the city government introduced policies to reduce deaths among these vulnerable groups. Stockholm employed inspectors to visit foster homes and advise parents on child care and feeding. The city also invested in universal policies to improve living conditions and provide clean water and sanitation for all residents. By 1925, Stockholm’s infant mortality rate had dropped 75 percent and survival gaps had narrowed. Importantly, deaths due to diarrhea (which had been a major cause of infant and childhood death, especially among the poor) had been virtually eliminated.<sup>144, 145</sup>

In subsequent decades, the Swedish government introduced free maternal and child health services, financial support to low-income families and general welfare and housing reforms. By 1950, maternal health services covered about 60 percent of all women and child health services covered more than 80 percent of infants. Continued expansion of health care services during the 1970s and 1980s further improved access to health care among rich and poor families across the country. This, in turn, led to more reductions in social inequity and infant mortality. By about the turn of the century, inequity in infant mortality in Stockholm and throughout Sweden had been largely eliminated.<sup>146, 147, 148</sup>



Stockholm, Sweden

**Japan:** While Tokyo has one of the lowest infant mortality rates in the world, there are still large disparities in child death rates among mothers with different types of jobs and levels of income. In the city's center, babies born to mothers working clerical jobs face 3 times the risk of being stillborn or dying in their first week compared to babies born to mothers with management, specialized or technical jobs. Risks are even higher among those working in transportation, cleaning and packing.<sup>149</sup> Infant death rates in Japan, where over 90 percent of people live in cities, are highest among non-working households. Children born to unemployed parents are, on average, 7.5 times as likely to die in their first year as children born to parents in higher-paying occupation groups like government employees or directors of companies (infant mortality rate is 10.5 vs. 1.4).<sup>150</sup>

**New Zealand:** Indigenous (Māori) infants face higher rates of infant mortality than any other ethnic group. In 2011, the infant mortality rate for Māori and Pacific babies in the Auckland region was more than 2.5 times the rate for babies of other ethnic groups, including European. Survival gaps in the region are greater when comparing levels of deprivation. Infant mortality among babies residing in the most deprived areas was 10 times the rate among babies residing in the least deprived areas. Overall, those residing in the most deprived areas accounted for 31 percent of all live births, but 62 percent of all infant deaths.<sup>151</sup>

**Spain:** A 2012 study in Barcelona (the second largest city in the country) found poor pregnancy outcomes were associated with poor neighborhoods. Mothers living in disadvantaged neighborhoods (those with a lower income and a higher unemployment rate) had higher rates of prematurity and low birth weight than mothers in more privileged neighborhoods.<sup>152</sup> The authors concluded: "Some of these socioeconomic aspects are probably related to cultural and traditional characteristics but also with political factors which determine different types of policies and interventions in reproductive

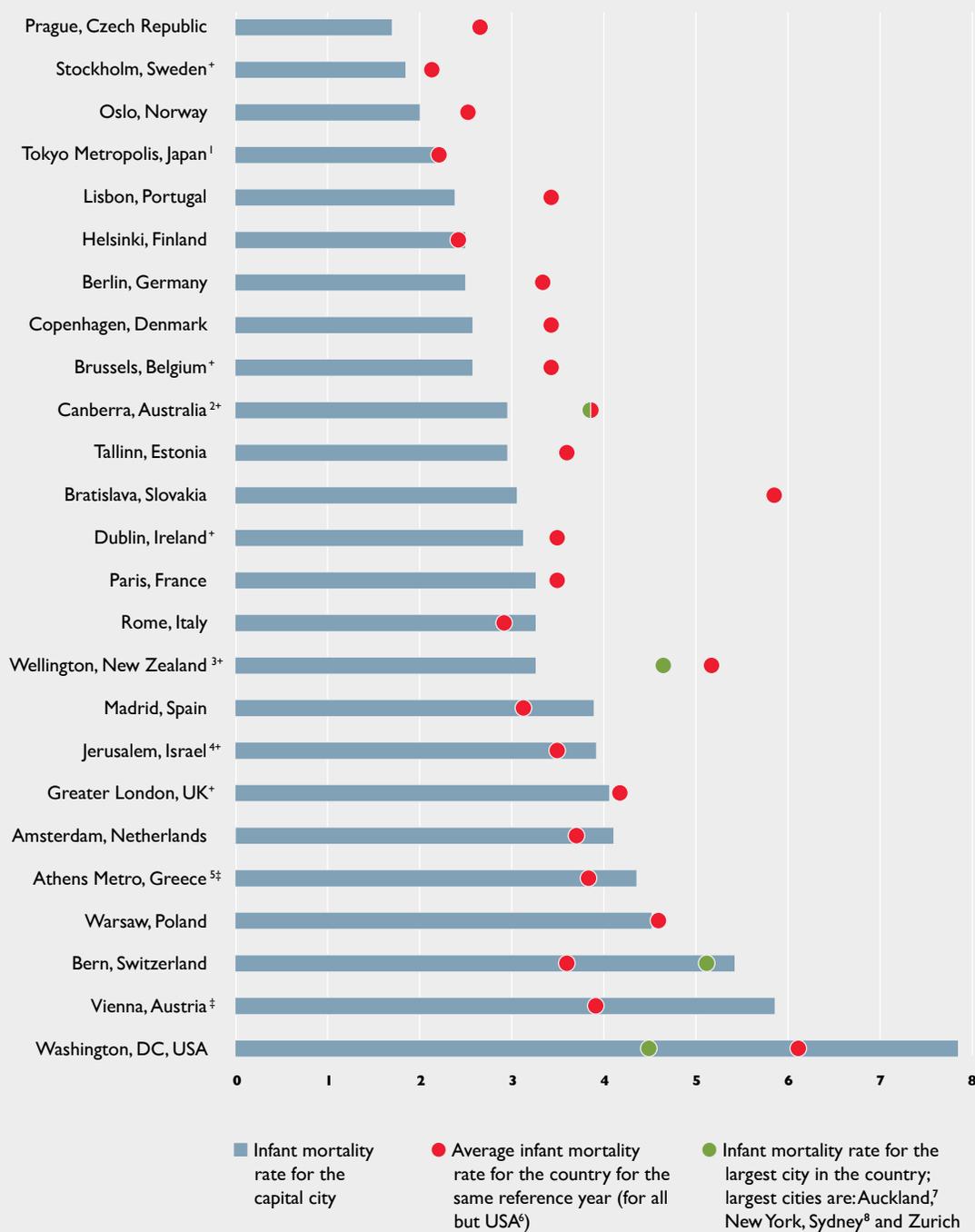
health. In Spain, the National Health Service provides universal coverage for pregnancy care; however, women of the working class were less likely to attend obstetrics controls and to follow recommendations about folic acid intake or smoking in pregnancy."

The Barcelona study also found that births to mothers from some developing regions, specifically those from North Africa and from Central and South America, are less likely to suffer an adverse pregnancy outcome than mothers from developed countries (including Spain) or from other developing regions. Prematurity rates in the city, for example, were lowest among women born in North Africa and highest among East European-born women; Spanish women were in the middle. One of the main arguments to explain better pregnancy outcomes among women who migrate from a developing country to a developed one involves the healthy migrant effect – women who have gone through the migratory process tend to be younger, stronger, and have a healthier lifestyle. On the other hand, after a period of years living in the host country, the health status of migrant people tends to converge towards the status of their corresponding social class.

**Switzerland:** Migrants represent 31 percent of the population of Zurich (the largest city in the country).<sup>153</sup> Large health disparities exist between the Swiss migrant and Swiss national populations. Immigrant women in Switzerland, for example, have a higher risk of maternal mortality than Swiss-born women. From 2000–2006 the maternal mortality ratio of Swiss women was 2.9 per 100,000 live births, among the lowest rates in the world. In contrast, for Italian, Spanish and Turkish-born women in Switzerland the rate was more than 4 times as high at 12.7 per 100,000 live births. Researchers attributed this partly to the fact that language barriers and lack of knowledge of the Swiss health system bar women from accessing prenatal care in a timely manner.<sup>154</sup>

## Infant Death Rates in 25 High-Income Capital Cities

### Infant deaths per 1,000 live births\*



\* Data are for 2012, unless otherwise footnoted

+ Data are for 2011

‡ Data are for 2010

<sup>1</sup> Data are for Tokyo Prefecture

<sup>2</sup> Data are for Australian Capital Territory

<sup>3</sup> Data are for Capital and Coast District Health Board (DHB)

<sup>4</sup> Data are for Jerusalem District

<sup>5</sup> Data are for Attiki region

<sup>6</sup> Data for USA and New York are for 2011; D.C. data are for 2012

<sup>7</sup> Data are for Auckland DHB, Waitemata DHB and Counties Manukau DBH taken together

<sup>8</sup> Data are for New South Wales

Note: Chart includes all capitals in high-income OECD countries with latest available data 2010-2012 and populations over 300,000 in 2014. Where capitals are not the largest city, data for largest cities are also shown, if available. For details and data sources, see Methodology and Research Notes.



## Take Action Now for the Urban Poor

In 2000, the world adopted a series of bold and ambitious goals – the United Nations Millennium Development Goals (MDGs) – including commitments to cut poverty by half, get every child into school and dramatically reduce child and maternal deaths by 2015. The world has made great progress in helping children to survive and thrive. Today, millions fewer people live in poverty than a generation ago, most children complete a primary education, and hunger has been cut by over a third.<sup>155</sup> But the single most powerful testament of progress is the progress on child health.

Globally, child mortality rates have declined by almost half (49 percent) over the last two decades. Almost 100 million children have been saved over these two decades including 24 million newborns. Twenty-five countries have already met the goal to dramatically reduce child deaths by 2015, including a number of countries in which Save the Children works – Bangladesh, Ethiopia, Malawi and Tanzania.<sup>156</sup>

Many urban areas are also making important progress in improving children's lives despite significant population growth. These include Addis Ababa, Cairo, Manila, Kampala, Guatemala City and Phnom Penh. Yet while these gains demonstrate that progress is possible, even in the poorest countries, there is no room for complacency. 6.3 million children died in 2013. 44 percent of these deaths occurred among newborns. 17,000 children die each day. Furthermore, as this *State of the World's Mothers* report highlights, progress will be stalled if the world does not turn its attention to the high rates of child mortality in urban slums and if action is not taken to reach the poorest and most marginalized families on earth.

While it is generally understood that urban populations enjoy better health than their rural counterparts, in urban areas of developing countries, under-5 mortality rates are still disproportionately higher among the urban poorest populations compared to the urban richest. In most countries with available data, children in the poorest 20 percent of urban households are at least twice as likely to die before their fifth birthday as children in the richest quintile.<sup>157</sup> This situation is not improving in many cities

even if the country as a whole is making progress towards child survival.

### All governments must accelerate action on addressing maternal, newborn and child health by

1. Ensuring that the following are included in the final post-2015 framework released at the U.N. General Assembly in September 2015:

a. Commitment to end preventable newborn, child and maternal deaths and focus on equity. 2015 is a pivotal year for maternal, newborn and child survival. September 2015 will see the launch of the post-2015 framework, with a series of global Sustainable Development Goals to replace the MDGs, which draw to an end in December. This framework will have significant impact on the future of mothers' and children's lives around the world, helping to raise levels of ambition and channel resources to those who need them. We must do all we can to ensure that this is the strongest possible framework that



ensures the poorest and marginalized access to basic health services, clean water, sanitation and other basic resources.

**b. Include smart, measurable targets to reduce child and newborn deaths.** In 2012, over 174 nations pledged to end preventable child and maternal deaths within a generation at the Child Survival Call to Action Meeting hosted by the United States, Ethiopia and India and to end newborn deaths in 2014. The world has already committed to this ambitious yet achievable goal. The final post-2015 framework should include a specific target to reduce child mortality rates to 25 per 1,000 births and reduce newborn deaths to 9 per 1,000 births.

**c. Commitment to leaving no one behind by embedding equity in the final post-2015 framework.** While we have made tremendous progress in reducing maternal and child deaths over the last two decades, not all mothers and children benefited from this progress. This is especially true for the urban poor. Within the context of the post-2015 framework to address the inequities, explicit attention should be given to advancing strategies to addressing the inequities that exist within urban populations, as well as among and within other disadvantaged social and economic groups.

- The framework should ensure that all mothers, newborns and children have access to quality essential health services and other basic resources no matter where they live, how wealthy they are, or on the basis of their ethnic identity. This should include targets on the coverage of key health interventions and financial risk protection for health, tracked through disaggregated data.
- Include an explicit commitment that no target will be considered to have been met unless it has been met for all social and economic groups. This means that the proposed targets for child and newborn mortality should be achieved by all sectors of society within a country, not just at the national level.

- Improving the quality and disaggregation of data will be critical for monitoring this commitment, and for identifying intersecting inequalities including those within urban areas (see below).
- The final post-2015 framework should include mechanisms to ensure that progress is being made among all social and economic groups. One such mechanism is stepping stone targets. Stepping stone targets are interim benchmarks for disadvantaged groups, and should accompany the final post-2015 targets across all goal areas. These targets will specify progress that disadvantaged groups must be making in the run-up to 2030 and ensure they are on track for achieving the final targets. For reducing child mortality among all groups by 2022, this should include closing the gap between slum dwellers and urban poor and more advantaged groups.





Northern Nigeria

**d. The final post -2015 framework must also include a goal to end extreme poverty.**

As part of a commitment to promote equity through the post-2015 framework a target must be included to reduce income inequality and relative poverty, ensuring opportunities for all. Robust economic growth will be critical for providing the resources and opportunities that are needed for eradicating extreme poverty in all its forms, and ensuring that all children can survive and thrive. Within this goal, the framework should include implementing social protection systems, especially for children. It should guarantee decent work for all and ensure that no child is involved in hazardous work.

**e. The final framework must address multi-dimensional aspects of poverty.**

Addressing child, newborn and maternal health alone will not improve the lives of mothers and children. Poor urban children, in particular, face a complex set of challenges that go beyond access to health care services. Poverty, inadequate access to safe drinking water and sanitation, violence, lack of access to good quality education, and insufficient living space contribute to increased risk of illness and malnutrition.

The economic, social and environmental impact of disasters is high and has a major influence on development outcomes, including for children. Many urban populations live in areas prone to environmental risks. The post-2015 framework must address ways to reduce the

number of deaths and those affected by disasters, including seasonal flash flooding, and should provide ways to reduce human and economic losses from disasters. This should include a focus on the urban poor living in environmental risk-prone areas.

**2. Ensuring universal health coverage to improve the health of the urban poor.**

Ending preventable maternal, newborn and child deaths will require that everyone, starting with the most vulnerable, have access to high quality essential health care and nutrition services and are protected from the impoverishing effects of out-of-pocket costs of care. Universal health coverage will require investing in strengthened and expanded urban health care systems designed to reach the poor, ensuring access to health workers able to provide quality care in slums and informal settlements and removing financial barriers to accessing health services.

**a. Make health care services more accessible and strengthen urban health care systems.**

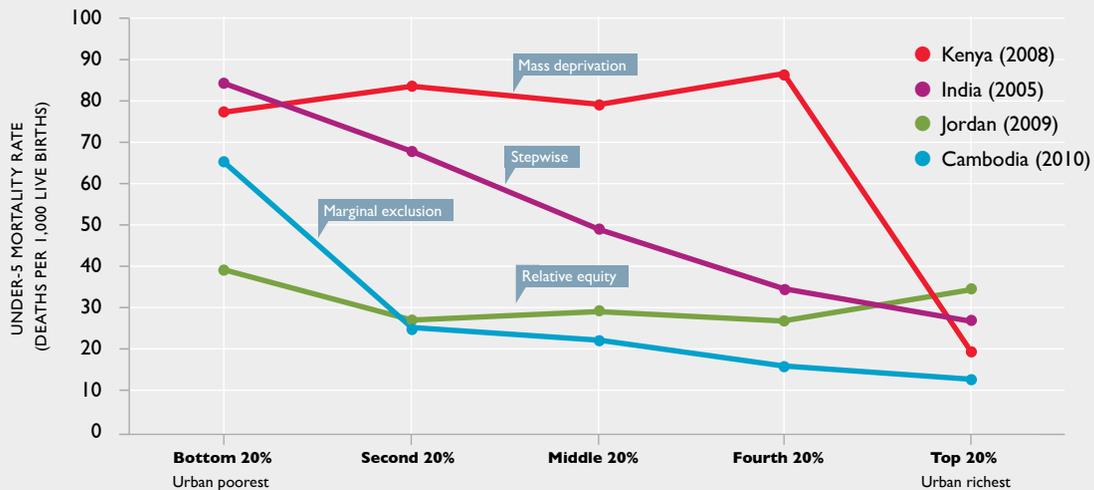
Strengthening health systems and increasing the capacity of health workers are key to improving the lives of mothers and children around the world. To date, a lot of focus has been given to strengthening health systems and increasing the number of health workers – especially front-line health workers – in rural areas. It has been noted that there is a tremendous discrepancy in the number of health professional serving urban areas versus rural areas. This is truer for



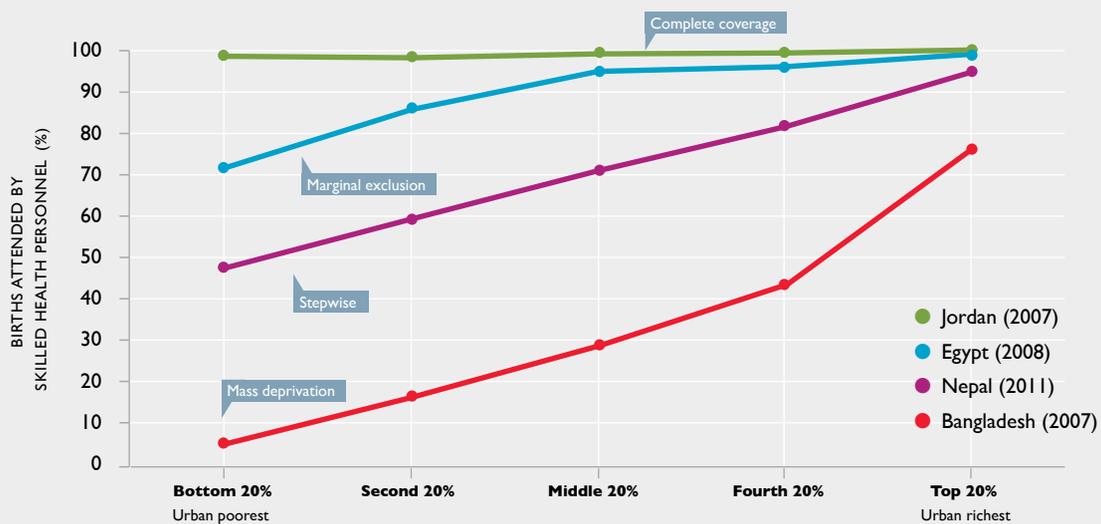
wealthier urban populations. As this report illustrates, the urban poor and other hard-to-reach communities often lack access to basic quality health services.

- **National human resource plans** should include provisions to strengthen the health care delivery system in urban areas and include an assessment of health workforce capacity among slum dwellers and informal settlements that are often neglected by urban health professionals. National plans should include deploying, training and retaining frontline health workers in urban poor settings. These plans must also include ways to address urban health inequalities.
- **Every child must be in reach of a properly trained, supported and equipped health workers.** The human resource plans should include a plan for training new frontline health care workers and other health professionals to deliver health services in urban areas as well as rural areas, particularly among slum dwellers and informal settlements. For example, Ethiopia is training over 4,000 health extension workers in urban areas.
- **Donors should provide technical and financial assistance to countries** to support health systems strengthening and human resources plans and work with countries to ensure that these plans includes a focus on poor urban areas.
- **Remove financial barriers and ensure quality health care services.** Often a barrier to accessing health care services among the urban poor is not due to a lack of health systems but because of poor quality and high cost. For the poorest populations, out-of-pocket expenditures, including user fees, often represent a critical barrier to timely and appropriate care-seeking or cause financial hardship. Mechanisms such as fair and large-scale pooling arrangements should be put in place to allow for cross-subsidization between the rich and healthy and the poor and sick. Direct payments should be eliminated, at a minimum for essential reproductive, maternal, newborn and child health services, or, where this is not yet agreed or seen as practical by decision-makers, sharply reduced to minimize barriers to access and use of these services.
- **Health systems strengthening plans must ensure good quality health care services.** All health facilities should have water, sanitation, electricity and equipment. A zero discrimination policy must be enforced – quality of health services should not vary on the basis of identity, ethnicity, gender, or other factors.
- **Develop innovative models to address the specific challenges of the urban poor.** Reaching the urban poor presents a unique set of challenges – and opportunities. Urban public sector health systems are often weak and under-funded, and strategies that work in rural settings may not be successful in urban settings. Socio-cultural factors require different approaches to community engagement, but greater access to technology, especially media and communications, offers new opportunities for reaching and engaging communities. Private providers are more plentiful, but those offering quality care are typically not

Patterns of inequality in child death rates



Patterns of inequality in skilled care at birth



Strategies to address mass deprivation, where all but the richest are doing poorly (shown by the red lines for urban Kenya and Bangladesh) must take a “whole population” approach, where resources are invested in all (or most) subgroups. To address situations of marginal exclusion (as seen in urban Cambodia and Egypt, in blue), health interventions should prioritize the most disadvantaged subgroup(s) of the population. A stepwise or queuing pattern that shows consistently better outcomes and/or coverage across the socioeconomic spectrum (shown in purple for urban India and

Nepal) requires an approach that combines population-wide and targeted interventions. Where complete coverage has been achieved and there is relative equity in outcomes (shown in green for urban Jordan), further interventions may not be required to address inequalities, but ongoing monitoring and actions may be warranted to ensure that the situation improves and/or remains favorable for all.

Data source: WHO. Available at [who.int/gho/data](http://who.int/gho/data) under “Urban health.” Data are from years shown in parentheses. Figure modeled after WHO, *Handbook on Health Inequality Monitoring*. (Geneva: 2013) p.68

affordable for the urban poor. Investments are needed, therefore, to develop innovative and scalable models or approaches that address the specific challenges to reaching the urban poor with basic preventive and curative services.

**3. Following through on the 2012 globally agreed World Health Assembly nutrition targets and ensure that commitments made through initiatives such as Nutrition for Growth are met.** Malnutrition is the underlying cause of 45 percent of deaths of children under 5, leading to over 3 million deaths each year, 800,000 of which occur among newborn babies. The locus of poverty and undernutrition among children appears to be gradually shifting from rural to urban areas, as the number of the poor and undernourished increases more quickly in urban than in rural areas. Child stunting and wasting are equally prevalent in poor urban settings as in rural settings. Breastfeeding in some poor urban settings is lower than in rural areas due to lack of knowledge and education. Attention in particular must be given to addressing stunting, wasting and low percentage of breastfeeding.

**a. Meet the World Health Assembly nutrition targets.** In 2012, all member nations of the World Health Organization endorsed six nutrition targets, including reducing stunting by 40 percent by 2025, increasing the rate of exclusive breastfeeding in the first 6 months to at least 50 percent and to reducing and maintaining childhood wasting to less than 5 percent. All governments must be working towards meeting these six nutrition targets.

**b. Meet the Nutrition for Growth commitments.** In 2013, at the Nutrition for Growth conference hosted in London, governments agreed to reduce malnutrition by 2020 in the following ways:

- Ensure that at least 500 million pregnant women and children under 2 are reached with effective nutrition interventions.

- Prevent at least 20 million children under 5 from being stunted.
- Save at least 1.7 million lives by reducing stunting, increasing breastfeeding and treating severe acute malnutrition.

**c. Scaling up nutrition plans should include addressing malnutrition in urban settings.**

Over 50 countries are now part of the *Scaling Up Nutrition Movement*. A number of these countries have costed nutrition plans, including countries with high urban child survival gaps such as Bangladesh, India, Kenya and Nigeria. These costed plans should be reviewed to ensure that the plans include interventions to address malnutrition among the urban poor, including an emphasis on wasting, exclusive breastfeeding and stunting.

**4. Developing comprehensive and cross-sectoral urban plans.** National governments must develop and invest in integrated, cross-sectoral urban policies, strategies, and plans that include maternal, newborn and child health (MNCH) and nutrition as well as investments in other dimensions such as improved access to clean water and sanitation and improving the nutritional status of women and children. This includes solid waste management. Health plans should include and/or link to early childhood development efforts, linking early cognitive development and primary education.

National and local urban plans must include gender- and child-sensitive social protection programs that are accessible to the urban poor. Increasing the income of mothers and children will ensure they will be able to afford more and better quality foods as well as health services and medicine, including modern forms of contraception.

Cities should have policies and programs that support the economic empowerment of women and adolescent girls. Ensuring that women and girls can earn a living wage is a cornerstone to improved health and to self-determination.

Urban plans should include provisions for improving housing situations, including

addressing sufficient living space, housing in non-hazardous locations and protecting the urban poor from extremes of climate conditions such as rain, heat, cold or humidity.

National governments should aim to provide safer cities. This includes a focus on providing safe, affordable, accessible and sustainable public transport planning for all with special attention to the needs of those in vulnerable situations: women, children, persons with disabilities and older persons. Governments should promote universal access to safe, inclusive and accessible, green and public spaces, particularly for vulnerable groups.

**5. Investing in data collection.** Poor quality data and lack of disaggregated data make it difficult to identify groups lagging behind, particularly those suffering from intersecting inequalities and from social exclusion.

Governments, donors, and international institutions should increase investment in strengthening data collection to identify disadvantaged groups and to track quality of care. Investments in national statistical system is urgently needed to track and monitor progress.

While it is generally understood that city dwellers, on average, enjoy better health than their rural counterparts, very little is known about health differences that exist within cities. Health information should be disaggregated by income, neighborhood and other subgroups. Currently, health information is aggregated to provide an average of all urban residents (rich and poor, young and old, men and women). As a result, the inequalities within the urban population are hidden and overlooked. Those living in slums and informal settlements are rarely counted and therefore neglected by urban health professionals.

**6. Mobilizing resources to end preventable child deaths in poor urban areas.** Donor governments should meet their funding pledges for maternal and child health and nutrition and continue to provide technical and financial assistance to developing countries.



National governments should increase their domestic resource allocation to health, allocating at least 15 percent of the total budget towards health. Country governments must increase their own health budgets substantially, raised in fair ways, allowing them to move away from relying on out-of-pocket and private financing to mandatory, large-scale pooling mechanisms. Increasing domestic revenues through increased and improved taxation, and allocating a fair share to health, could help meet a large part of the gap in funding universal health coverage. Aid should play a complementary role, especially in the poorest countries that are unlikely to be able to fund health sufficiently without support for a number of years.

Civil society organizations and city and municipal governments should monitor domestic budgets to track resource flows and advocate for increased funding.



# Appendix: The 2015 Mothers' Index and Country Rankings

## From Sub-Saharan Africa to Scandinavia, Mothers Make a Difference Every Day

Save the Children's 16th annual *Mothers' Index* assesses the well-being of mothers and children in 179 countries – 46 developed nations<sup>158</sup> and 133 in the developing world – showing where they fare best and where they face the greatest hardships. All countries with populations over 100,000 and sufficient data are included in the *Index*.

Why should Save the Children be so concerned about mothers? Because decades of program experience have taught us that the quality of children's lives depends in large part on the health, security and well-being of their mothers. In short, providing mothers with access to education, economic and political opportunities, and maternal and child health care gives mothers and their children the best chance to survive and thrive.

The *Complete Mothers' Index*, based on a composite score of five indicators related to maternal well-being (see column to the right), begins on page 60 of this report. All data are sourced from authoritative international agencies. For a detailed explanation of how the *Index* is calculated see the *Methodology and Research Notes*.

### Mothers' Index Rankings

Nordic countries dominate the top positions on the 2015 *Mothers' Index* while countries in sub-Saharan Africa fill the lowest ranks. The United States places 33rd this year.

The 10 top-ranked countries, in general, are among the best countries in the world for mothers' and children's health, educational, economic and political status.

The 11 bottom-ranked countries (there is a tie for 10th to last) – all but two of them from West and Central Africa – are a reverse image of the top 10, performing poorly on all indicators. Eight of these 11 toughest places to be a mother are currently experiencing a humanitarian crisis and one is considered a "situation of concern."<sup>159</sup>

## The 5 Indicators of the 2015 Mothers' Index

### Maternal health —

**Lifetime risk of maternal death:** No mother should die giving life. A woman's risk of maternal death is a function of the number of pregnancies/births she has, the spacing of births, the conditions under which she gives birth as well as her own health and nutritional status. Maternal mortality is also a sensitive measure of health system strength, access to quality care and coverage of effective interventions to prevent maternal deaths.

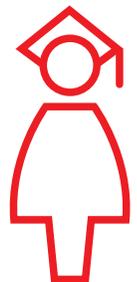


### Children's well-being —

**Under-5 mortality rate:** A mother's well-being is intimately connected to the health and well-being of her children. U5MR is a leading indicator of child well-being, reflecting children's health and nutritional status. It is also a key indicator of coverage of child survival interventions as well as the quality of care mothers receive before, during and after pregnancy.

### Educational status —

**Expected years of formal schooling:** Education is a basic human right and a powerful determinant of life quality. Numerous studies show a robust relationship between years of schooling and a number of important life outcomes, including income, health and civic participation. And when a girl is educated, her children are more likely to be healthy and well schooled.



### Economic status —

**Gross national income per capita:** Mothers are likely to use the resources they control to promote the needs of their children. GNI per capita is the best measure available to gauge a mother's access to economic resources and, therefore, her ability to provide for her children.

### Political status —

**Participation of women in national government:** When women have a voice in politics, issues that are important to mothers and their children are more likely to surface on the national agenda and emerge as national priorities.

*Note: For indicator definitions and data sources, see Methodology and Research Notes.*



Conditions for mothers and their children in these 11 bottom-ranked countries are devastating:

1 child in 8 dies before his or her fifth birthday.



On average, 1 woman in 30 is likely to die from a pregnancy-related cause.

Roughly 7 out of 10 women are likely to suffer the loss of a child in their lifetime.<sup>160</sup>

Children can expect to receive about 8 years of formal education (range is 2.2 to 11.2).



Women hold at most 15% of parliamentary seats.

GNI per capita, a measure of a country's economic welfare and a mother's access to resources, ranges from as little as \$130 to less than \$1,500.

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## What the Numbers Don't Tell You

The national-level data presented in the *Mothers' Index* provide an overview of many countries. However, it is important to remember that the condition of geographic or ethnic sub-groups and the poorest families in a country may vary greatly from the national average. Remote rural areas and urban slums often have fewer services and more dire statistics. War, violence, corruption and lawlessness also do great harm to the well-being of mothers and children, and often affect certain segments of the population disproportionately. These details are hidden when only broad national-level data are available.

The contrast between the top-ranked country, Norway, and the lowest-ranked country, Somalia, is striking. Although maternal death is a rare event in Norway (the lifetime chance of dying in pregnancy or childbirth is about 1 in 15,000), one Somali woman in 18 is likely to eventually die of a maternal cause. Nearly every Norwegian child – girl and boy alike – enjoys good health and education. But children in Somalia face incredible odds. Almost 15 percent of Somali children do not live to see their fifth birthday. In Norway, it's only 0.3 percent. At these rates, nine out of 10 Somali mothers are likely to lose a child under age 5, whereas only 1 in 188 Norwegian women are likely to suffer the loss of a young child. Children in Somalia can expect to receive less than 2.5 years of formal education, while the typical Norwegian child stays in school for 17.5 years. Somalia is also one of the poorest countries in the world, while Norway is the wealthiest. And Norwegian women hold roughly three times as many parliamentary seats: 40 percent in Norway compared to 14 percent in Somalia.

It should be noted that not all Somali children are equally bad off. National averages mask large sub-national disparities. Recent survey data suggest some northern areas have under-5 mortality rates that are less than half the national average.<sup>161</sup>

### Gaps Between Rich and Poor

The data collected for the *Mothers' Index* document the tremendous gaps between rich and poor countries and the urgent need to accelerate progress in the health and well-being of mothers and their children. The data also highlight the role that armed conflict and poor governance play in these tragedies. Nine of the bottom 11 countries are conflict-affected or otherwise considered to be fragile states,<sup>162</sup> which means they are failing in fundamental ways to perform functions necessary to meet their citizens' basic needs and expectations.

There are also strong regional dimensions to this tragedy. Sub-Saharan Africa accounts for 25 of the 30 lowest-ranking countries. While Africa as a whole has made substantial reductions in

maternal and child mortality, and gains against the other indicators, it has progressed more slowly than other regions, and on a regional level, performs worst on every indicator but one (political status). There is great diversity within Africa, however. Some countries score relatively high on several indicators, and a number of low-income African countries – Eritrea, Ethiopia, Liberia, Malawi, Niger and Tanzania – have reduced their under-5 mortality rate by two-thirds or more since 1990.<sup>163</sup>



## A Note on Interpreting Index Rankings

Rankings reflect a composite score derived from five different indicators related to maternal well-being (i.e. maternal health, children's well-being, educational status, economic status and political status). Consistently strong performance across the five indicators yields a higher ranking than exceptional performance on a few and somewhat lower performance on the others. In other words, all-around excellence is rewarded with higher rankings than super performance on some, but not all, indicators. Similarly, consistently poor performance across the five indicators yields a lower ranking than the worst performance on some indicators and somewhat better performance on others. This is the nature of composite scores.

It is also important to note that countries in the top and bottom 10 – particularly the top and bottom three to five – cluster very tightly. Consequently, while a ranking necessitates that some country will be first and another last, the differences across top and bottom performers can be very modest. This also means that the smallest change could shuffle ranks.

The *Mothers' Index* uses the most recently published internationally comparable data available as of March 29, 2015 – but there is often lag time in the reporting of data. Since indicator data are for 2013 to 2015, the numbers may not reflect current conditions in some countries.

The greatest disparity across regions is found in the lifetime risk of maternal death. In West and Central Africa, 1 woman in 30 is likely to eventually die in pregnancy or childbirth. This is 6 times the risk facing women in South Asia (1 in 190) and 130 times the risk women in industrialized countries face (1 in 4,000).<sup>164</sup>

African children are similarly disadvantaged compared to children in other regions. Across the region as a whole, 1 child in 12 does not live to see his or her 5th birthday. This is twice the risk of death a child in Asia faces and 12 times the risk in Europe and North America. In 2013, an estimated 3.2 million African children died before reaching age 5. Nearly 1.9 million child deaths – 30 percent of the world total – were in West and Central Africa.<sup>165</sup>

The capacity of countries to address these issues is often constrained by financial resources. Burundi, Malawi and Somalia are the poorest countries in the world, with an estimated GNI per capita of less than \$300. Compare this to the national wealth of Norway or Switzerland at over \$90,000 per capita.

Individual country comparisons are especially startling when one considers the human suffering and gender inequity behind the statistics:

- 1 woman in 15 will eventually die in pregnancy or childbirth in Chad. The risk is 1 in 18 in Somalia and 1 in 20 in Niger. In Austria, Belarus and Poland, by contrast, the lifetime risk of maternal death is less than 1 in 19,000.
- 1 child in 7 does not reach his or her fifth birthday in Central African Republic, Chad and Somalia. In Angola and Sierra Leone it's 1 in 6. Compare this to Iceland, where only 1 child in 476 dies before reaching age 5.
- A typical child in Niger receives less than 5 1/2 years of formal education. It's 4 years in Eritrea. And in Somalia, children receive only 2.2 years of schooling. In Australia and New Zealand, however, the average child can expect to stay in school for over 19 years.
- In Micronesia, Qatar, Tonga and Vanuatu, not one parliamentary seat is occupied by a woman. In Kuwait and Solomon Islands, women have only 1 seat. Compare this to Bolivia and Rwanda where women hold over half of all seats in parliament.

Statistics are far more than numbers. It is the human despair and lost opportunities behind these numbers that call for changes to ensure that mothers everywhere have the basic tools they need to break the cycle of poverty and improve the quality of life for themselves, their children, and for generations to come.



## Frequently Asked Questions about the Mothers' Index

### Why doesn't the United States do better in the rankings?

The United States ranks 33rd on this year's *Index*. Although the U.S. performs well on economic and educational status (9th and 16th best in the world, respectively) it lags behind all other top-ranked countries on maternal health (61st in the world) and children's well-being (42nd in the world) and performs poorly on political status (89th in the world). To elaborate:

- In the United States, women face a 1 in 1,800 risk of maternal death. This is the worst performance of any developed country in the world. A woman in the U.S. is more than 10 times as likely as a woman in Austria, Belarus or Poland to eventually die from a pregnancy-related cause.
- In the United States, the under-5 mortality rate is 6.9 per 1,000 live births. This is roughly on par with Bosnia and Herzegovina, Macedonia, Serbia and Slovakia. At this rate, children in the U.S. are 3 times as likely as children in Iceland to die before their fifth birthday.
- Women hold less than 20 percent of seats in the United States Congress. Nearly half of all countries in the world perform better on this indicator. Ten countries have more than double this percentage of seats occupied by women. In Finland and Sweden, for example, women hold 43 and 44 percent of parliamentary seats, respectively.

### Why is Norway first?

Norway has strong performance across all five dimensions of maternal and child health and well-being. Norway performs the absolute "best" on economic status and is the only country to place in the top 12 on all five indicators. It is consistently high performance that puts Norway on top.

### Why is Somalia last?

In Somalia, economic and educational status are the lowest in the world. On maternal and child mortality it ranks second and fourth from last. Although Somalia does slightly better on political status, this is not enough to compensate for poor performance across the other four indicators. It's this placement in the bottom 5 on four of the five indicators that causes Somalia to rank last on the *Index*. As discussed elsewhere



in this report, Somalia's national level data mask sub-national variations.

### Why are some countries not included in the Mothers' Index?

The only basis for excluding a country was insufficient data or a national population below 100,000.

### What should be done to bridge the divide between countries that meet the needs of their mothers and those that don't?

- Governments and international agencies need to increase funding to improve education levels for all children, provide access to maternal and child health care and advance women's economic and political opportunities.
- The international community also needs to improve current research and conduct new studies that focus specifically on mothers' and children's well-being.
- In industrialized nations, governments and communities need to work together to improve education and health care for disadvantaged mothers and children.

## 2015 Mothers' Index Rankings

RANK	COUNTRY	RANK	COUNTRY	RANK	COUNTRY	RANK	COUNTRY
1	Norway	46	Malta	91	Namibia	136	Tanzania, United Republic of
2	Finland	47	United Arab Emirates	*92	Jamaica	137	Kiribati
3	Iceland	48	Chile	*92	Maldives	138	Kenya
4	Denmark	49	Bahrain	*92	Sri Lanka	139	Zambia
5	Sweden	50	Libya	95	Dominican Republic	140	India
6	Netherlands	51	Hungary	96	Fiji	141	Uganda
7	Spain	52	Barbados	97	Mongolia	142	Swaziland
8	Germany	53	Mexico	98	Vietnam	143	Solomon Islands
9	Australia	54	Bosnia and Herzegovina	99	Turkmenistan	144	Mozambique
10	Belgium	55	Qatar	*100	Iraq	145	Cameroon
11	Austria	*56	Russian Federation	*100	Jordan	146	Sudan
12	Italy	*56	Uruguay	102	Nicaragua	147	Burundi
13	Switzerland	58	Kazakhstan	103	Armenia	148	Congo
14	Singapore	59	Tunisia	104	Tonga	149	Pakistan
15	Slovenia	60	Kuwait	105	Philippines	150	Mauritania
16	Portugal	*61	China	106	Timor-Leste	151	Ethiopia
17	New Zealand	*61	Ecuador	107	Kyrgyzstan	*152	Afghanistan
18	Israel	63	Oman	108	Suriname	*152	Togo
19	Greece	64	Bahamas	109	Honduras	154	Ghana
20	Canada	65	Turkey	110	Paraguay	155	Madagascar
21	Luxembourg	66	Romania	111	Syrian Arab Republic	156	Eritrea
22	Ireland	67	Trinidad and Tobago	112	Indonesia	157	Papua New Guinea
23	France	68	Saint Lucia	113	Guyana	158	Myanmar
24	United Kingdom	69	Ukraine	114	Nepal	*159	Malawi
*25	Belarus	70	Mauritius	115	Gabon	*159	South Sudan
*25	Czech Republic	71	Malaysia	116	Egypt	161	Djibouti
27	Estonia	72	South Africa	117	Samoa	162	Yemen
*28	Lithuania	73	Lebanon	118	Uzbekistan	163	Benin
*28	Poland	74	Venezuela, Bolivarian Republic of	119	Botswana	164	Guinea
*30	Croatia	75	Colombia	120	Angola	165	Comoros
*30	Korea, Republic of	76	Algeria	121	Rwanda	*166	Burkina Faso
32	Japan	77	Brazil	122	Bhutan	*166	Liberia
33	United States of America	78	Panama	123	Equatorial Guinea	*166	Nigeria
34	Slovakia	79	Peru	124	Senegal	*169	Haiti
35	Serbia	80	El Salvador	*125	Morocco	*169	Sierra Leone
36	Argentina	81	Moldova, Republic of	*125	Vanuatu	171	Guinea-Bissau
37	TYR Macedonia	82	Albania	127	Tajikistan	172	Chad
38	Saudi Arabia	83	Thailand	128	Lao People's Democratic Republic	173	Côte d'Ivoire
39	Cyprus	84	Iran, Islamic Republic of	129	Guatemala	174	Gambia
*40	Cuba	85	Cape Verde	*130	Bangladesh	175	Niger
*40	Latvia	*86	Georgia	*130	Sao Tome and Principe	176	Mali
42	Montenegro	*86	Saint Vincent and the Grenadines	132	Cambodia	177	Central African Republic
43	Grenada	*88	Belize	*133	Lesotho	178	Congo, Democratic Republic of the
44	Bulgaria	*88	Bolivia, Plurinational State of	*133	Zimbabwe	179	Somalia
45	Costa Rica	90	Azerbaijan	135	Micronesia, Federated States of		

\* Countries are tied

## The Complete Mothers' Index 2015

COUNTRY OR TERRITORY	MATERNAL HEALTH	CHILDREN'S WELL-BEING	EDUCATIONAL STATUS	ECONOMIC STATUS	POLITICAL STATUS	MOTHERS' INDEX RANK (out of 179 countries)
	Lifetime risk of maternal death (1 in number stated)	Under-5 mortality rate (per 1,000 live births)	Expected number of years of formal schooling	Gross national income per capita (current US\$)	Participation of women in national government (% seats held by women)*	
	2013	2013	2013	2013	2015	
Afghanistan	49	97.3	9.7 <sup>b</sup>	690	24.8	152
Albania	2,800	14.9	10.8	4,710	20.7	82
Algeria	380	25.2	14.0	5,330	25.7	76
Angola	35	167.4	11.3	5,170	36.8	120
Argentina	630	13.3	17.9	6,290	36.8	36
Armenia	1,800	15.6	12.3	3,800	10.7	103
Australia	9,000	4.0	20.2 <sup>a</sup>	65,390	30.5	9
Austria	19,200	3.9	15.7	50,430	30.3	11
Azerbaijan	1,800	34.2	11.9	7,350	15.6	90
Bahamas	1,400	12.9	12.6 <sup>a</sup>	21,570	16.7	64
Bahrain	2,000	6.1	14.4 <sup>a</sup>	19,700	15.0	49
Bangladesh	250	41.1	10.0	1,010	20.0	130
Barbados	1,100	14.4	15.4	15,080	19.6	52
Belarus	45,200	4.9	15.7	6,730	29.2	25
Belgium	8,700	4.4	16.3	46,290	42.4	10
Belize	750	16.7	13.6	4,510	13.3	88
Benin	59	85.3	11.3 <sup>b</sup>	790	8.4	163
Bhutan	340	36.2	12.6	2,330	8.3	122
Bolivia, Plurinational State of	140	39.1	13.2	2,550	51.8	88
Bosnia and Herzegovina	9,700	6.6	13.6 <sup>a</sup>	4,780	19.3	54
Botswana	200	46.6	12.5	7,770	9.5	119
Brazil	780	13.7	14.2	11,690	9.6	77
Brunei Darussalam	1,900	9.9	14.5	31,590	—	—
Bulgaria	12,400	11.6	14.4	7,360	20.4	44
Burkina Faso	44	97.6	7.8	670	13.3	166
Burundi	22	82.9	10.7 <sup>b</sup>	260	34.9	147
Cambodia	180	37.9	10.9	950	19.0	132
Cameroon	34	94.5	10.4	1,290	27.1	145
Canada	5,200	5.2	15.8	52,200	28.2	20
Cape Verde	740	26.0	13.5	3,620	20.8	85
Central African Republic	27	139.2	7.2	320	12.5 <sup>i</sup>	177
Chad	15	147.5	7.4	1,030	14.9	172
Chile	2,400	8.2	15.2	15,230	15.8	48
China	1,800	12.7	13.1	6,560	23.6	61
Colombia	500	16.9	13.5	7,590	20.9	75
Comoros	58	77.9	11.5	840	3.0	165
Congo	48	49.1	11.1	2,590	11.5	148
Congo, Democratic Republic of the	23	118.5	9.7	430	8.2	178
Costa Rica	1,400	9.6	13.9	9,550	33.3	45
Côte d'Ivoire	29	100.0	8.9	1,450	9.2	173
Croatia	5,200	4.5	14.8	13,430	25.8	30
Cuba	970	6.2	13.8	5,890	48.9	40
Cyprus	6,600	3.6	14.0	25,210	12.5	39
Czech Republic	12,100	3.6	16.3	18,950	18.9	25
Denmark	12,000	3.5	18.7	61,680	38.0	4
Djibouti	130	69.6	6.7 <sup>b</sup>	1,030	12.7	161
Dominican Republic	360	28.1	13.1	5,770	19.1	95
Ecuador	420	22.5	14.2	5,760	41.6	61
Egypt	710	21.8	13.5	3,140	2.8 <sup>i</sup>	116
El Salvador	600	15.7	12.3	3,720	27.4	80
Equatorial Guinea	72	95.8	8.5	14,320	19.7	123
Eritrea	52	49.9	4.1 <sup>a</sup>	490	22.0	156

## The Complete Mothers' Index 2015 (Continued)

COUNTRY OR TERRITORY	MATERNAL HEALTH	CHILDREN'S WELL-BEING	EDUCATIONAL STATUS	ECONOMIC STATUS	POLITICAL STATUS	MOTHERS' INDEX RANK (out of 179 countries)
	Lifetime risk of maternal death (1 in number stated)	Under-5 mortality rate (per 1,000 live births)	Expected number of years of formal schooling	Gross national income per capita (current US\$)	Participation of women in national government (% seats held by women)*	
	2013	2013	2013	2013	2015	2015
Estonia	5,700	3.4	16.5	17,690	19.8	27
Ethiopia	52	64.4	8.5 <sup>a</sup>	470	25.5	151
Fiji	620	23.6	13.9	4,370	14.0	96
Finland	15,100	2.6	17.1	48,820	42.5	2
France	4,300	4.2	16.0	43,460	25.7	23
Gabon	94	56.1	12.4	10,650	16.2	115
Gambia	39	73.8	8.8	500	9.4	174
Georgia	1,300	13.1	13.8	3,570	11.3	86
Germany	11,000	3.9	16.5	47,270	36.9	8
Ghana	66	78.4	11.5	1,770	10.9	154
Greece	12,000	4.4	17.6	22,690	23.0	19
Grenada	1,800	11.8	15.8	7,490	25.0	43
Guatemala	170	31.0	10.6	3,340	13.3	129
Guinea	30	100.7	8.7	460	21.9	164
Guinea-Bissau	36	123.9	9.0	590	13.7	171
Guyana	150	36.6	10.3	3,750	31.3	113
Haiti	80	72.8	7.6 <sup>cd</sup>	810	3.5	169
Honduras	260	22.2	11.1	2,180	25.8	109
Hungary	5,000	6.1	15.4	13,260	10.1	51
Iceland	11,500	2.1	19.0	46,400	41.3	3
India	190	52.7	11.7	1,570	12.2	140
Indonesia	220	29.3	13.0	3,580	17.1	112
Iran, Islamic Republic of	2,000	16.8	15.1	5,780	3.1	84
Iraq	340	34.0	10.1	6,720	26.5	100
Ireland	5,500	3.8	18.6 <sup>a</sup>	43,110	19.9	22
Israel	17,400	4.0	16.0	33,930	22.5	18
Italy	17,100	3.6	16.0	35,860	30.1	12
Jamaica	540	16.6	12.4	5,220	16.7	92
Japan	12,100	2.9	15.3	46,330	11.6	32
Jordan	580	18.7	13.5	4,950	11.6	100
Kazakhstan	1,500	16.3	15.0	11,550	20.1	58
Kenya	53	70.7	11.3 <sup>b</sup>	1,160	20.8	138
Kiribati	260	58.2	12.3	2,620	8.7	137
Korea, Democratic People's Republic of	630	27.4	—	620 <sup>x</sup>	16.3	—
Korea, Republic of	2,900	3.7	16.9	25,920	16.3	30
Kuwait	2,600	9.5	14.6	45,130	1.5	60
Kyrgyzstan	390	24.2	12.5	1,210	23.3	107
Lao People's Democratic Republic	130	71.4	10.6	1,450	25.0	128
Latvia	4,600	8.4	15.2	15,280	18.0	40
Lebanon	3,900	9.1	13.8	9,870	3.1	73
Lesotho	64	98.0	11.1	1,500	26.8	133
Liberia	31	71.1	10.7	410	10.7	166
Libya	2,700	14.5	16.1	12,930	16.0	50
Lithuania	5,900	4.9	16.4	14,900	23.4	28
Luxembourg	5,300	2.0	13.8	69,900	28.3	21
Macedonia, The former Yugoslav Republic of	10,200	6.6	13.4	4,870	33.3	37
Madagascar	47	56.0	10.3	440	20.5	155
Malawi	34	67.9	11.0 <sup>b</sup>	270	16.7	159
Malaysia	1,600	8.5	12.7	10,430	14.2	71
Maldives	1,200	9.9	12.7	5,600	5.9	92
Mali	26	122.7	8.4	670	9.5	176
Malta	8,300	6.1	14.4	20,980	12.9	46

## The Complete Mothers' Index 2015 (Continued)

COUNTRY OR TERRITORY	MATERNAL HEALTH	CHILDREN'S WELL-BEING	EDUCATIONAL STATUS	ECONOMIC STATUS	POLITICAL STATUS	MOTHERS' INDEX RANK (out of 179 countries)
	Lifetime risk of maternal death (1 in number stated)	Under-5 mortality rate (per 1,000 live births)	Expected number of years of formal schooling	Gross national income per capita (current US\$)	Participation of women in national government (% seats held by women) <sup>a</sup>	
	2013	2013	2013	2013	2015	
Mauritania	66	90.1	8.5	1,060	22.2	150
Mauritius	900	14.3	15.6	9,290	11.6	70
Mexico	900	14.5	13.1	9,940	37.1	53
Micronesia, Federated States of	320	36.4	11.7 <sup>b</sup>	3,280	0.0	135
Moldova, Republic of	2,900	15.4	11.9	2,470	20.8	81
Mongolia	560	31.8	14.6	3,770	14.9	97
Montenegro	8,900	5.3	15.2	7,250	17.3	42
Morocco	300	30.4	11.6	3,020	11.0	125
Mozambique	41	87.2	9.3	610	39.6	144
Myanmar	250	50.5	8.7 <sup>b</sup>	1,180 <sup>x</sup>	4.7	158
Namibia	230	49.8	11.3	5,870	37.7	91
Nepal	200	39.7	12.4	730	29.5	114
Netherlands	10,700	4.0	17.9	51,060	36.9	6
New Zealand	6,600	6.3	19.2 <sup>a</sup>	35,550	31.4	17
Nicaragua	340	23.5	10.5	1,790	39.1	102
Niger	20	104.2	5.4	400	13.3	175
Nigeria	31	117.4	9.0	2,710	6.6	166
Norway	14,900	2.8	17.5	102,610	39.6	1
Occupied Palestinian Territory	500	21.8	13.0	3,070	—	—
Oman	2,800	11.4	13.6	25,150	9.6	63
Pakistan	170	85.5	7.8	1,360	19.7	149
Panama	450	17.9	13.3	10,700	19.3	78
Papua New Guinea	120	61.4	10.7 <sup>b</sup>	2,010	2.7	157
Paraguay	290	21.9	11.9	4,010	16.8	110
Peru	440	16.7	13.1	6,270	22.3	79
Philippines	250	29.9	11.3	3,270	27.1	105
Poland	19,800	5.2	15.5	13,240	22.1	28
Portugal	8,800	3.8	16.3	21,260	31.3	16
Qatar	7,200	8.2	13.8	86,790	0.0	55
Romania	2,100	12.0	14.2	9,060	12.0	66
Russian Federation	2,600	10.1	14.7	13,850	14.5	56
Rwanda	66	52.0	10.3	630	57.5	121
Saint Lucia	1,500	14.5	12.6	7,060	20.7	68
Saint Vincent and the Grenadines	1,000	19.0	13.3	6,460	13.0	86
Samoa	430	18.1	12.9 <sup>xc</sup>	3,970	6.1	117
Sao Tome and Principe	100	51.0	11.3	1,470	18.2	130
Saudi Arabia	2,200	15.5	16.3	26,260	19.9	38
Senegal	60	55.3	7.9	1,050	42.7	124
Serbia	4,500	6.6	14.4	6,050	34.0	35
Sierra Leone	21	160.6	11.2 <sup>b</sup>	660	12.4	169
Singapore	13,900	2.8	15.4 <sup>xc</sup>	54,040	25.3	14
Slovakia	10,200	7.2	15.1	17,810	18.7	34
Slovenia	9,300	2.9	16.8	23,210	27.7	15
Solomon Islands	180	30.1	12.2 <sup>b</sup>	1,600	2.0	143
Somalia	18	145.6	2.2 <sup>b</sup>	130 <sup>x</sup>	13.8	179
South Africa	300	43.9	13.6	7,190	40.7 <sup>z</sup>	72
South Sudan	28	99.2	6.0 <sup>b</sup>	950	24.3	159
Spain	15,100	4.2	17.3	29,920	38.0	7
Sri Lanka	1,400	9.6	13.7	3,170	5.8	92
Sudan	60	76.6	7.0	1,550	23.8	146
Suriname	330	22.8	12.3 <sup>b</sup>	9,370	11.8	108
Swaziland	94	80.0	11.3	2,990	14.7	142

## The Complete Mothers' Index 2015 (Continued)

COUNTRY OR TERRITORY	MATERNAL HEALTH	CHILDREN'S WELL-BEING	EDUCATIONAL STATUS	ECONOMIC STATUS	POLITICAL STATUS	MOTHERS' INDEX RANK (out of 179 countries)
	Lifetime risk of maternal death (1 in number stated)	Under-5 mortality rate (per 1,000 live births)	Expected number of years of formal schooling	Gross national income per capita (current US\$)	Participation of women in national government (% seats held by women)*	
	2013	2013	2013	2013	2015	2015
Sweden	13,600	3.0	15.8	61,760	43.6	5
Switzerland	12,300	4.2	15.8	90,760	28.5	13
Syrian Arab Republic	630	14.6	12.3	1,850	12.4	111
Tajikistan	530	47.7	11.2	990	15.2	127
Tanzania, United Republic of	44	51.8	9.2	630	36.0	136
Thailand	2,900	13.1	13.5	5,340	6.1	83
Timor-Leste	66	54.6	11.7	3,940	38.5	106
Togo	46	84.7	12.2	530	17.6	152
Tonga	220	12.1	14.7	4,490	0.0	104
Trinidad and Tobago	640	21.3	12.3	15,760	24.7	67
Tunisia	1,000	15.2	14.6	4,200	31.3	59
Turkey	2,300	19.2	14.5	10,970	14.4	65
Turkmenistan	640	55.2	10.8	6,880	25.8	99
Uganda	44	66.1	9.8	550	35.0	141
Ukraine	2,900	10.0	15.1	3,960	11.8	69
United Arab Emirates	5,800	8.2	13.3 <sup>a</sup>	38,360	17.5	47
United Kingdom	6,900	4.6	16.2	41,680	23.5	24
United States of America	1,800	6.9	16.4	53,470	19.5	33
Uruguay	3,500	11.1	15.5	15,180	11.5	56
Uzbekistan	1,100	42.5	11.5	1,880	16.4	118
Vanuatu	320	16.9	11.7 <sup>b</sup>	3,130	0.0	125
Venezuela, Bolivarian Republic of	360	14.9	14.2	12,550	17.0	74
Vietnam	1,100	23.8	11.9 <sup>c</sup>	1,740	24.3	98
Yemen	88	51.3	9.2	1,330	0.7	162
Zambia	59	87.4	13.5 <sup>d</sup>	1,810	12.7	139
Zimbabwe	53	88.5	10.9	860	35.1	133
<b>REGIONAL MEDIANS<sup>§</sup></b>						
Sub-Saharan Africa	48	81	10	905	17	151
South Asia	225	40	12	1,465	16	126
East Asia and the Pacific	320	27	13	3,580	15	106
Latin America and Caribbean	570	17	13	6,375	20	78
Middle East and North Africa	855	16	14	5,555	12	76
CEE/CIS	2,600	13	14	6,050	19	66
Industrialized countries	9,750	4	16	42,395	28	19
<b>WORLD</b>	<b>190</b>	<b>46</b>	<b>12</b>	<b>10,680</b>	<b>22</b>	

a Discounted to 18 years prior to calculating the *Index* rank.

b Refers to primary and secondary education only.

c Calculated by the Singapore Ministry of Education.

d Based on cross-country regression.

e Calculations based on data from Samoa Bureau of Statistics.

f Data reflect the situation prior to parliament's dissolution.

g Figures are calculated on the basis of permanent seats only.

x Data are from a secondary source.

– Data are not available.

\* Figures correspond to the number of seats currently filled in parliament.

§ UNICEF regions. For a complete list of countries and territories in these regions see: UNICEF, *The State of the World's Children 2012*, p.124. Medians are based on the countries included in the *Index* table.

Note: Data refer to the year specified in the column heading or the most recent year available. For indicator definitions and data sources see Methodology and Research Notes.

# Methodology and Research Notes

## The Complete Mothers' Index

In the first year of the *Mothers' Index* (2000), a review of literature and consultations with international experts including Save the Children staff were undertaken to identify the factors most closely linked to the well-being of mothers. Four factors were ultimately identified as the major determinants of a mother's well-being: maternal health, educational status, political status and children's well-being. In 2007, several changes were introduced to the *Mothers' Index*. Indicators of economic status were incorporated into the *Index*. Countries were placed into one of three tiers (more, less and least developed) according to a categorization scheme established by the United Nations. The indicators used to calculate the *Index* were specific to each tier.

In 2013, the *Index* was again revised in keeping with best practice and to accommodate changes that were introduced by the international organizations that gather the data. Since that year, all countries – rich and poor alike – have been evaluated against the same five indicators (outlined below), one for each of the five dimensions of maternal well-being. The specific indicators used in these comparisons were chosen on the basis of their reliability, validity, availability for the largest possible number of countries, and year-to-year variability (in order to construct a dynamic *Index*).

Improvements in data collection and data reporting practices have led to an ever-growing number of countries included in the *Index* over the years. In 2000, 106 countries were ranked. Today, 179 countries are included in the *Index*. As a result, the number of countries any given country is compared to has grown.

### General note on the data

Save the Children does not collect original data for the *Mothers' Index*. Instead, it uses data from international data agencies with the mandate, resources and expertise to collect, certify and publish national data on specific indicators. International agencies sometimes harmonize

data to ensure comparability across countries and adjust for under-reporting, which can lead to discrepancies between international and national estimates. The data included in the *Index* are those most recently published as of March 29, 2015. Full source details and indicator definitions are included below.

### *Indicators, definitions and data sources*

**Lifetime risk of maternal death:** The probability that a 15-year-old female will die eventually from a maternal cause. This indicator takes into account both the probability of becoming pregnant and the probability of dying as a result of that pregnancy, accumulated across a woman's reproductive years. Data are for 2013. *Source: WHO, UNICEF, UNFPA and the World Bank. Trends in Maternal Mortality:1990 to 2013. (WHO: Geneva: 2014)*

**Under-5 mortality rate:** The probability of dying between birth and exactly 5 years of age, expressed per 1,000 live births. Data are for 2013. *Source: Estimates developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division) at [www.childmortality.org](http://www.childmortality.org). Accessed March 29, 2015.*

**Expected number of years of formal schooling:** School life expectancy (SLE) is defined as the number of years a child of school entrance age can expect to spend in school and university (i.e. primary, secondary and tertiary education), including years spent on repetition, if prevailing patterns of age-specific enrollment rates persist throughout the child's life. Data are for 2013 or the most recent year available. *Sources: UNESCO Institute for Statistics Data Centre; supplemented with data from: UNDP. Expected Years of Schooling. Accessed March 29, 2015.*

**Gross national income (GNI) per capita:** Aggregate income of an economy generated by its production and its ownership of factors of production, less the incomes paid for the use

of factors of production owned by the rest of the world, converted to U.S. dollars using the World Bank Atlas method, divided by mid-year population. Data are for 2013 or the most recent year available. *Sources: The World Bank Data Catalog, supplemented with data from: UN National Accounts Main Aggregates Database. Accessed March 29, 2015*

#### **Participation of women in national government:**

The share of seats occupied by women in a single house or, in the case of countries with bicameral legislatures, upper and lower houses of national parliament. Data reflect the situation as of February 1, 2015. *Source: Inter-Parliamentary Union. Women in National Parliaments. Accessed March 29, 2015*

#### *Calculation methodology*

1. All countries with a 2014 population over 100,000 (Source: UN DESA. *World Urbanization Prospects: The 2014 Revision*. (2014)) and data available (2000 or later) for all five indicators were included in the *Mothers' Index*. Countries missing one data point were included in the *Index* table, but not in the rankings.

Notes on specific indicators:

- Where primary to secondary SLE estimates were higher than primary to tertiary, primary to secondary were used. Where primary to tertiary estimates were not available, primary to secondary or SLE estimates published by UNDP (the secondary source), whichever were highest, were used.
- To avoid rewarding school systems where pupils do not start on time or fail to progress through the system at expected rates, countries with SLEs over 18 years and gross enrollment ratios (primary to tertiary) over 105 had their school life expectancy discounted to 18.0 years before calculating indicator ranks.
- In countries where parliaments are no longer functioning, the most recent information before the parliament's suspension or dissolution was used. Where recent election results were pending at the time of analysis, the latest available data were used.

2. Where relevant, data points were rounded to the nearest tenth for analysis purposes.
3. Countries were arrayed and ranked from 1 to 179 (1 being the best and 179 the worst) for each of the five indicators of maternal well-being.
4. Composite scores were then calculated as the average of these five indicator ranks with each indicator given equal weighting.
5. Scores were sorted from low to high and ranked from 1 to 179 to give the overall *Mothers' Index* rank.

#### **Urban Child Survival Gap Scorecard**

The *Scorecard* presents inequality in survival chances within and across cities in countries monitored by the *Countdown to 2015* movement.

To assess survival chances across cities, the under-5 mortality rate (U5MR) for the capital city (or its metropolitan area) was used. Where the capital is not the country's largest city (e.g., Pakistan, Nigeria, Tanzania), data for the largest city were also included. Where city estimates were unavailable, data for the administrative region the city resides in (e.g., the state or province) were used. If regional data were not available, the national urban average U5MR was used, but only so long as urban survival gap data were also available.

In total, data were sufficient to report U5MRs for 47 major cities and 7 urban areas in 52 (of 75) Countdown countries. The latest available survey data (as of March 2015) were used.

Any exclusion of a country or city from this analysis was due to one or more of the following factors:

- National urban population under 300,000 in 2014 (3 countries)
- No data (6 countries)
- Latest available data from 2008 or earlier (9 countries)
- National urban average available, but no survival gap data (5 countries)
- City represents less than 60 percent of the population of the closest administrative region with available data (8 cities)

Intra-urban mortality data by wealth quintile are not available at the city-level. So, to assess the degree of inequality within cities, *national* urban averages were used. Of these 52 countries, 36 had available data (2000-2011) to estimate the “urban survival gap.” The national urban survival gap was calculated by constructing a ratio of the poorest-to-richest quintiles. The statistical significance of differences could not be ascertained because WHO does not publish confidence intervals for these disaggregated urban health data. For this reason, only countries with the largest gaps were highlighted.

Under-5 mortality among the poorest 20 percent of urban households was also compared to the rural average. Where the U5MR among the urban poor was *higher* than the rural U5MR, the poorest urban children were said to be “more” likely to die by age 5 than the average rural child. Here too, statistical significance could not be ascertained.

The following considerations should be taken into account when interpreting these data:

- Country comparisons are limited by the fact that surveys were conducted in different years.
- In almost all cases, U5MRs refer to the 10-year reference period preceding the survey. The only exceptions are Bangui, Baghdad, Bissau, Vientiane and Harare, which refer to the 5-year period before the survey. A longer reference period results in more precise estimates.
- Sub-national mortality rates are associated with large confidence intervals (i.e., the range within which the true value can reasonably be assumed to fall). For readability, only the mid-points of the ranges (i.e., point estimates) for city and regional U5MRs are shown. Standard errors of point estimates range from 10 to 30 percent.
- For some countries (Angola, Egypt, Iraq, Nigeria, Pakistan, Sudan and Zimbabwe), major cities do not perfectly overlap with the administrative unit for which survey data were reported. In these cases, regional proxies were used (as outlined above and noted in the *Scorecard*). Although regional proxies give an indication of the level of mortality in the city, they are likely over-estimates.
- Definitions of what constitutes an urban area are not consistent across countries. MICS and DHS use whatever classification a particular country has adopted. This complicates comparative analysis. Coverage gaps may be larger in countries with more inclusive definitions of “urban” areas.

For these reasons, cities were not ranked by U5MR. Instead, established benchmarks were used to classify cities as “low” (defined as a U5MR under 25 per 1,000, the threshold at which preventable child deaths have been eliminated) and “high” (defined as a U5MR at or above 100 per 1,000). All values in between fell into the “medium” U5MR category. Using these definitions, cities were categorized.

*Data sources: DHS and MICS publications (urban, regional and city U5 mortality data); Save the Children UK’s GRID Database (mortality data for Delhi and Mexico City); WHO’s GHO Data Repository (U5MR by urban wealth quintile; rural U5MR); UNSD’s Millennium Development Goals Database (slum incidence data); UN DESA. World Urbanization Prospects: The 2014 Revision (population of cities and urban areas); www.geohive.com (population statistics for administrative regions).*

## City Health Care Equity Ranking

This analysis looked at inequalities in health system coverage across a set of three key maternal and child health interventions in 22 cities with available data from 2005-2011. The coverage indicators were: prenatal care (at least 4 visits), skilled care at delivery and measles immunization coverage. These interventions were selected because: a) they are delivered at different stages along the continuum of care, from pregnancy through childhood, b) they are delivered at different levels (e.g., health facilities, the community and mass campaigns) and with varying frequency (e.g., single occasion, multiple interactions, access 24 hours a day, 7 days a week). Stunting prevalence was also included; it was the only outcome measure available.

Data for the poorest 20 percent (Q1) and the richest 20 percent (Q5) of urban households were analyzed. For each of the three health services that were the focus of this analysis, the size of the coverage gap between the top (Q5) and bottom (Q1) quintiles was assessed in both relative and absolute terms (i.e., the Q5/Q1 ratio and the Q5-Q1 difference were calculated).

These “coverage gaps” were categorized as follows:

- “Small” gaps were defined as those with a Q<sub>5</sub>-Q<sub>1</sub> difference of less than 10 percentage points and a Q<sub>5</sub>/Q<sub>1</sub> ratio under 1.25.
- “Medium” gaps were defined as those with a Q<sub>5</sub>-Q<sub>1</sub> difference of 10-20 percentage points and a Q<sub>5</sub>/Q<sub>1</sub> ratio under 2.5
- “Large” gaps were defined as those with a Q<sub>5</sub>-Q<sub>1</sub> difference of 20-30 percentage points and a Q<sub>5</sub>/Q<sub>1</sub> ratio under 5.0.
- “Very large” gaps were defined as those with a Q<sub>5</sub>-Q<sub>1</sub> difference of 30 percentage points or more or a Q<sub>5</sub>/Q<sub>1</sub> ratio of 5.0 or more.

These same criteria were used to assess the size of the nutrition gap, only in the reverse (i.e., the Q<sub>1</sub>/Q<sub>5</sub> ratio and the Q<sub>1</sub>-Q<sub>5</sub> difference were calculated) because stunting prevalence tends to be higher among the poorest children.

Cities were ranked according to the average size of their coverage gap (i.e., nutrition gaps were not factored into the composite measure). The Q<sub>5</sub>/Q<sub>1</sub> ratios were averaged and the Q<sub>5</sub>-Q<sub>1</sub> differences were averaged to give a single value for each of these two equity measures. To avoid rewarding cities where equity gaps disadvantage the richest quintile, negative values were multiplied by (-1) before averaging across the three indicators.

Cities were ranked from 1 to 22 by their average Q<sub>5</sub>/Q<sub>1</sub> ratio and by 1 to 22 by their average Q<sub>5</sub>-Q<sub>1</sub> difference. These two scores were then averaged; cities were sorted by this average score and then ranked from 1 to 22 (with 1 being best and 22 being worst).

The following considerations should be taken into account when interpreting these data:

- Country comparisons are limited by the fact that surveys were conducted in different years.
- Estimates for middle quintiles are not shown. To understand the true nature and extent of urban inequity, coverage across the socioeconomic spectrum should be analyzed.
- For readability, only point estimates are shown. Footnotes indicate where confidence intervals overlap. These differences are not statistically

significant, meaning coverage gaps may be smaller than color-coding suggests.

- It is likely that slums and informal settlements in these cities were not surveyed comprehensively, so results for the poorest 20 percent may underestimate the true magnitude of health inequities.
- Disaggregated data were available for a very limited number of maternal and child health interventions (five). Coverage gaps and country rankings are likely to vary according to the basket of indicators used. As more indicators become available, the breadth of analysis and understanding can be expanded.

*Data source: Data were provided by the WHO Centre for Health Development. Calculations are based on data from Demographic and Health Surveys (DHS), 2003-2011. Data were used from the latest available survey for each country at the time of their analysis.*

### **Infant Death Rates in High-Income Capital Cities**

The analysis included the infant mortality rate (IMR) for all capitals in high-income OECD countries with latest available data 2010-2012 and populations over 300,000 in 2014. Where capitals are not the largest city (e.g., Australia, Switzerland, United States), data for largest cities were also included, if available. Where city-specific data were not available (five countries), data for the closest administrative region were used, provided the city accounted for at least 60 percent of the regional population. Countries were ranked according to the IMR in their capital city.

Only half of high-income cities surveyed had sufficient data for a 3-year average, so the most recent estimate available for each was used. Rates can fluctuate substantially from year to year because of relatively few deaths. This is especially true in small capital cities like Bern, Wellington and Canberra. This complicates comparative analysis and is an important limitation. Another is the use of regional proxies. These likely overestimate the level of infant mortality in cities. This is especially true for Sydney, Australia.

*Data sources: Eurostat, City Statistics Illustrated; OECD.Stat, Regions and Cities; ISTAT (Italy); Japan Statistics Bureau; Statistics*

*New Zealand; KIDS COUNT (USA). National data sources were used only if principal data sources (Eurostat and OECD.Stat) were missing data for these countries or data were prior to 2010.*

## Deaths That Are Urban Analysis

The number of under-5 deaths that occur in urban and rural areas was estimated for the 63 developing countries with disaggregated DHS data for 2000-2014. Data from the latest available survey were used for each country.

The following methodology was used for each area of residence: crude birth rate (births per 1,000 pop) x total population (1,000s) x U5MR (deaths per 1,000 live births). This calculation gave the absolute number of births that occur in urban and rural areas. Urban under-5 deaths were then divided by the total number of under-5 deaths in country (given by the urban + rural sum) to give the estimated share of under-5 deaths that occur in urban settings. The same reference year was used for all three metrics. Given the rough nature of these estimates, countries were grouped by region and results were reported as regional averages for Africa, Asia and the Americas. Weighted averages were also calculated using the total number of under-5 deaths in country in 2013.

This same analysis was done for all 73 countries with latest available data 1990-2014. Regional averages were the same or higher with this larger country set. Trend analyses were done for all 15 countries with at least 5 DHS surveys spanning roughly 15-20 years (range was 14 to 22 years). In one country (Philippines) the share of under-5 deaths that occurred in urban areas had declined across this time period. In another (Colombia) it has remained unchanged. In the 13 other countries, the share had increased. These findings suggest child deaths are becoming increasingly concentrated in urban areas (at least in these countries).

## Survival Gap Trend Analysis

This analysis included all 40 developing countries with at least two data points five years apart from DHS 1990-2011. The poorest-to-richest quintile ratio (Q1/Q5) was calculated for the earliest survey year and the most recent year available. Ratios were then compared. For 19 of 40 countries, the latest quintile ratio was larger than the earliest available quintile ratio. This suggests equity gaps have grown in these

countries. In some cases, worsening performance may be the result of better reporting of data. *Source: Data were provided by WHO, but are publicly available at [who.int/ghodata](http://who.int/ghodata) under "Urban health."*

## Positive Deviants Analysis

This analysis was done to identify candidate cities for case studies. Trend data (defined as at least two surveys five years apart) were available for 50 capital and/or largest cities (or administrative divisions they reside in) in developing countries. For each city, the average annual rate of reduction (AARR) in U5MR over the last 10 years of available data (roughly surveys 2000-onward) was calculated according to the following formula:

$$AARR=(U5MR_L/U5MR_E)^{(1/n)}-1$$

Where:

U5MR<sub>L</sub> = under-5 mortality rate from the latest available survey

U5MR<sub>E</sub> = under-5 mortality rate from the earlier (i.e., baseline) survey

n = the number of years between surveys

When calculating AARRs, baselines and end-lines were selected to get as close to a 10-year period of analysis as possible. The time period between surveys ranged from 5 to 15 years. Where there were two survey options, the more recent data were used. The average annual rate of population growth over the same time period was also calculated, using the same formula.

Candidate cities were selected based on:

a) pace of recent progress (i.e., AARR over the last 10 years of available data); b) population growth; c) national progress reducing urban inequities (see urban survival gap trend analysis below); c) city size class; d) country income group; e) fragile state status. The final set of cities was made in consultation with Save the Children technical experts and country offices.

*Data sources: DHS STAT compiler; MICS reports; final and preliminary DHS reports; UN DESA. World Urbanization Prospects: The 2014 Revision.*

# Endnotes

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- 5 Secondary analysis of data provided by WHO and available at [who.int/gho/data](http://who.int/gho/data) under “Urban health.”
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- 152 Garcia-Subirats, Irene, Glòria Pérez, Maica Rodríguez-Sanz, Dolores Ruiz Muñoz and Joaquín Salvador. "Neighborhood Inequalities in Adverse Pregnancy Outcomes in an Urban Setting in Spain: A Multi-level Approach." *Journal of Urban Health : Bulletin of the New York Academy of Medicine*. 89(3). 2012. pp.447-463
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- 159 Humanitarian crises are taking place in Chad, Central African Republic, Gambia, Mali, Niger, DR Congo, Sierra Leone and Somalia. The situation in Haiti is also of concern. See: ACAPS. *Global Emergency Overview: Snapshot 15-21 April 2015*. (April 2015) <http://geo.acaps.org/> (Accessed April 25, 2015)
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## PHOTO CREDITS

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Philippines. *Slum housing overlooked by modern skyscrapers in Pasig City, Manila.*

Page 2 – Photo courtesy of WHO  
Bangladesh. *WHO Director-General Dr. Margaret Chan meets with community women.*

Page 3 – Katie Seaborne  
DR Congo. *Save the Children CEO Jasmine Whitbread visits children admitted to the stabilization center in Mwene Ditu.*

Page 4 – Mikel Flamm / Habitat  
for Humanity  
Bangladesh. *In the Rayer Bazar community in Dhaka, families of up to six people live in small bamboo structures measuring 4 x 10 feet each.*

Page 6 – Laura Kennedy  
Peru. *Margot and her 10-month-old daughter live in the Villa Salvador community in Lima. The community is built on sandy ground on a steep cliff along the city's coast. It has no running water or electricity.*

Page 7 – Mikel Flamm / Habitat  
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Bangladesh. *In the Rayer Bazar community in Dhaka, more than 250 families reside in these small bamboo structures.*

Page 8 – Rachel Palmer  
India. *A doctor in a Save the Children clinic serving slum residents examines an 18-month-old with a respiratory infection.*

Page 10 – Anne-Sofie Helms  
Sierra Leone. *Kroo Bay, the largest slum in Freetown, is a cramped beachfront township of 15,000 where disease is rife and many children are malnourished.*

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*Queen Elizabeth Hospital in Blantyre examines a newborn baby recovering from respiratory distress.*

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Page 18 – Farzana Tabassum  
Bangladesh. *Joytab, who lives in the Rayer Bazar community in Dhaka, has already lost two children and is worried she may lose her youngest to malnutrition.*

Page 19 – Lucia Zoro  
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Pages 20-21 – Hannah Maule-ffinch  
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Page 32 – Samar Abdelrahman  
Egypt. Hamida, a 55-year-old grandmother living in a slum area of Cairo, has learned how to help children thrive from Save the Children community health workers.

Page 34 – CJ Clarke  
India. Rima (on right), a Save the Children community health worker serving a Delhi slum area, makes a check-up visit to Chotti, who recently gave birth to Naveen.

Page 35 – Jenny Matthews / Panos  
Uganda. A young mother and her baby in the Namuwongo slum district of Kampala.

Page 37 – Rodrigo Abd / AP  
Guatemala. Maidaly, 20, rests hours after giving birth to her son David Abraham at Roosevelt Hospital in Guatemala City.

Page 40 – Lloyd Wolf  
USA. Pregnant women in northeast Washington, DC.

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Norway. Young mother Mai is on an outing with her 4-month-old son Conrad in Oslo.

Page 42 – Robert McKechnie  
Australia. Emma and her 6-month-old daughter Eliora enjoy playgroups, life skills classes and other services at the It

Takes a Village program for newly arrived families in Perth.

Page 43 – Oskar Kullander  
Sweden. Rosie, 32, is on parental leave with her 8-month-old daughter Minou in Stockholm.

Page 46 – Jordi Matas  
Tanzania. In the Mtwara District Hospital, this mother successfully used “kangaroo care” to help her baby survive after it was born prematurely.

Page 47 – Erika Piñeros  
Colombia. Dr. Nathalie Charpak checks the vital signs of a premature baby in Bogotá.

Page 48 – Susan Warner  
Indonesia. Community health worker Euis Maria (in red) talks with pregnant women about childbirth and caring for a newborn.

Page 49 – Lucia Zoro  
Nigeria. Mothers wait to have their children tested for malnutrition at a government-run facility supported by Save the Children in northern Nigeria.

Page 50 – David Wardell  
Nepal. Pushpa, a midwife trained by Save the Children, has resuscitated nine babies and attended to over 25 complicated births successfully.

Page 53 – Camille Dupire  
Jordan. Ghousoun is a midwife working in a Save the Children-supported infant and young child feeding program.

Page 54 – Sylvain Cherkaoui  
Central African Republic. Giselle and her son Ronny take a stroll in Kaga-Bandoro.

Page 56 – Oli Cohen  
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Page 57 – Rob Holden  
Somalia. A mother and child living in the Darwish camp for internally displaced people in Mogadishu.

Page 58 – Riccardo Venturi  
Haiti. Shomi, age 1 month, has pneumonia. Her mother brought her to a hospital in Dessalines for urgent care.

Page 59 – Helene Negaard  
Norway. A young mother enjoys a cup of coffee while she breastfeeds her 4-month-old in Oslo.

Back cover – Susannah Ireland  
India. Children on a rooftop overlooking the Okhla slum in Delhi.



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