

GOAL 4

REDUCE CHILD MORTALITY

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Goal 4: Reduce Child Mortality

High levels of infant and child mortality up to the age of 5 years continue to be a major development and human rights issue in many developing countries, particularly the poorest. Although more children are surviving the first five years of life, globally there are significant differences by region. Child mortality is greatest in Africa, which has 42 percent of child deaths under age 5.

Progress in reducing child mortality lags behind progress in all of the other goals,¹⁰⁴ and progress in sub-Saharan Africa is still lagging far behind other regions in the world.¹⁰⁵ Southern Asia also has relatively low rates of child survival, although there has been a marked improvement between 1990 and 2004.

Only two regions, East Asia and Pacific and Latin America and the Caribbean, are close to achieving the MDG target. But even in those two regions, more than half the countries are off track.¹⁰⁶ However some countries have significantly reduced child mortality—infant mortality fell in Timor-Leste by 7.1 percent between 2000 and 2005¹⁰⁷ and in Viet Nam from 147 per thousand live births in 1990 to 78 in 2005.¹⁰⁸

Matrix 11: Global target and indicators for reducing child mortality

Target		Indicators	
<i>All indicators should be disaggregated by sex and urban/rural as far as possible</i>			
4.A	Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	4.1	Under-five mortality rate
		4.2	Infant mortality rate
		4.3	Proportion of one-year-old children immunized against measles

A. Issues for a gender-responsive rights-based analysis

1. More boys are born in most countries, but more boys die during infancy

In most countries, gender differences in infant and child mortality are small and largely reflect biological differences. The natural birth rate by sex is between 103 and 107 boys for every 100 girls, but infant mortality rates for boys are almost universally higher than for girls due to biological factors.

2. Some Asian countries have an extreme surplus of males at birth

However, there are exceptions to the norm in Asia, especially in the world's most populous nations, China and India. This is related to a strong preference for sons in these cultures, particularly in rural areas, resulting in infanticide in times past, and more recently in abortion of female foetuses. In China this is compounded by the impact of the one-child family planning policy.

In 1990, Amartya Sen estimated that such extreme sex ratios translated into 100 million 'missing women'.¹¹³ In 2003, he noted there had been little change. The ratio of women to men in the total population was a little worse in China and a little better in India, Bangladesh, Pakistan, and West Asia but had not altered radically in

any of these countries. Although the total numbers of missing women had continued to grow this was mainly due to the absolute growth in population.

A paper published in late 2005 has an alternative explanation for some of the differences in the sex ratio at birth.¹¹⁴ There is evidence that women who are carriers of hepatitis B give birth to a higher ratio of boys to girls than non-carriers. Since many of the countries with missing women also have a relatively a high proportion of people who carry the hepatitis B infection, this could produce a higher than normal ratio of male to female births, even in the absence of excess female mortality. The paper suggests that, after adjusting for differences in the sex ratio at birth caused by hepatitis B, the number of missing women based on population estimates for 1980–1990 drops from 60 to 32 million.¹¹⁵

However, there is a significant difference across countries in the share of the gender bias that can be explained by hepatitis B. China has very high sex ratios at birth but declining sex ratios over childhood, suggesting that most of the difference in childhood and population sex ratios is due to sex ratios at birth. By contrast, India has moderately higher sex ratios at birth but also increasing sex ratios during childhood, suggesting that female infants and children are more likely to die than males. Hepatitis B can explain 75 percent of the missing women in China but less than 20 percent in India, Nepal and Pakistan.¹¹⁸

Missing girls in China and India

From a relatively normal ratio of 108 boys to 100 girls in the early 1980s, the male surplus in China increased progressively to 111 in 1990, 116 in 2000, and 120 boys per 100 girls in 2004. Only seven of China's 29 provinces were within the world's average sex ratio in 2004. In eight 'disaster provinces' there were from 26 to 38 percent more boys than girls.¹⁰⁹

In India 1984 -1998, the sex ratio at birth was 108 males for every 100 females.¹¹⁰ Between 1991 and 2001, the sex ratio of the child population aged between 0 and six years of age fell sharply from 945 females per 1,000 males to 927 per 1,000.¹¹¹ From a relatively normal ratio of 108.5 boys to 100 girls in the early 80s in China, the male surplus progressively rose to 111 in 1990, 116 in 2000, and around 120 boys for every 100 girls in 2004.¹¹²

Infant and child mortality rates for girls have fallen but are still abnormally high in China and India

More girls than boys die in infancy and in childhood in China and some areas of India. In China, death rates for first born children are not significantly different, but the risk of death rises dramatically for second and higher order births of girls.¹¹⁶ Death rates are higher for girls born to families with daughters and no living sons.¹¹⁷

3. Sex-selective abortions are a new dimension of female disadvantage

While female disadvantage in mortality in South Asia has been substantially reduced, a new female disadvantage has emerged in South and East Asia through sex-specific abortions of female fetuses. Modern technology makes sex-selective abortion possible and easy, and it is being widely used in societies with a strong preference for sons. In India and China, where infanticide of girl children seems to have been largely eradicated, sex-selective abortion is a major cause of unbalanced sex ratios at birth and among children. Unbalanced sex ratios among children lead to unbalanced sex ratios in the adult population.

4. Policy makers should be aware of the gender implications of unbalanced population sex ratios

The gender implications of these statistics are alarming. They are not limited to poor societies or those where women are particularly disempowered—some of the most unbalanced sex ratios at birth in India are found in states with rapid rates of growth and relatively high incomes, such as the Punjab, Haryana and Maharashtra, which are among the richest states in India.¹¹⁹ The decline in the child sex ratio is likely to result in more girls being married at younger ages, more girls dropping out of school, higher maternal mortality due to early child bearing, the immigration of poor women from other countries for marriage, especially to rural areas, and an increase in violence against girls and women, including rape, abduction, trafficking, and forced polyandry—the practice of sharing a wife among more than one man, particularly brothers.

On the more positive side, in the Republic of Korea sex ratios at birth have declined with economic development and modernization.¹²⁰

Policy makers need to be aware of these implications, and develop strategies to prevent these negative outcomes on women.

5. Most children who do not survive to their fifth birthday die from preventable causes

A 2005 study found that 73 percent of the 10.6 million child deaths worldwide each year are the result of six causes: pneumonia, diarrhoea, malaria, neonatal sepsis, preterm delivery and asphyxia at birth. The first four causes account for 54 percent of all child deaths globally. 94 percent of all child deaths due to malaria are in Africa.¹²¹

While measles is not among the six leading causes of child deaths, it is responsible for almost half a million deaths of children each year and results in blindness or loss of hearing in many others. The proportion of one-year-old children immunised against measles—global indicator 4.3—may be regarded as an indicator of the effectiveness and efficiency of the preventive health system. However at country level, alternative indicators which reflect more directly the main causes of child mortality in that country may be more relevant.

6. Boys aged 2-5 are at higher risk of death due to greater exposure to risk

In most countries, boys who have reached the age of physical mobility tend to have higher death rates than girls. This may be a result of social attitudes, particularly in rural societies—girls are more likely to be kept within the home and are more closely supervised, while small boys are allowed to wander away from home to play or to care for livestock, and may be more exposed to disease and accidents. Boys aged 2-5 also often have poorer nutrition than girls, possibly because their meals are not so well supervised.

7. Mothers, the main caregivers, may lack the power to improve the health of their children

The role of mothers is recognized as critical in improving child survival—it is mothers or grandmothers who are primarily responsible for the care of under-five children. However, they may lack the economic resources, time, and/or access to transport which is necessary to access health care for their children. They also often lack the power and authority to make critical decisions that may make the difference between a child living or dying.

The role of fathers and male household heads in child survival, particularly as key decision makers, is often overlooked. Improving the understanding of child health and nutrition among fathers and other significant decision makers in the family and community, as well as among mothers, can empower mothers to make decisions on child health and increase the likelihood that childhood illnesses can be prevented or detected and treatment sought.

Higher levels of mothers' education result in a significant reduction in child mortality. Although mother's education is not included as an indicator for Goal 4, the *Millennium Development Goals Report 2006* notes that secondary or higher education for mothers doubles child survival.¹²² Women's economic, social and decision-making empowerment is also important to reducing child mortality. While this is not highlighted in Goal 4, it is mentioned as a gender issue in the technical manual *Indicators for Monitoring the Millennium Development Goals*.¹²³

8. Efforts to reduce child mortality need to target high risk groups of mothers

If significant progress is to be achieved in reducing child mortality, efforts must be targeted at the mothers of children at highest risk of mortality. Specific programmes are needed to empower them to make decisions on the health and welfare of their children and ensure they have the resources needed to implement appropriate measures.

Detailed analysis of infant and child mortality is therefore needed to identify mothers, as well as children, at highest risk of child mortality. Among these mothers are those in poor households and minority groups, adolescent and young mothers, and women refugees and internally displaced persons in crisis and conflict situations. These mothers should be specifically targeted in the delivery of child health and nutrition programmes.

Low income and civil disturbance are risk factors for child mortality

An analysis of selected countries for the 2007 World Bank MDG monitoring report found that child mortality was 40 percent higher for children in the lowest income (quintile) households compared with the highest income (quintile) households.¹²⁴ While 82 percent of children in the top quintile and 69 percent of all children were immunized for measles in these countries, only 59 percent of children in the bottom income quintile were immunized.¹²⁵

The report also observed that civil disturbance was a significant factor in the failure of many African countries to improve child mortality outcomes.¹²⁶

B. National long-term targets and indicators

Matrix 12 below suggests a range of long-term targets and indicators for child mortality, based on the preceding gender-responsive rights-based analysis of Goal 4. They should be adapted and added to so that they are relevant and useful for the individual country.

Women's groups should ensure that data and references to child mortality in CEDAW country reports are used in the process of developing national and subnational targets and indicators. The responses of the CEDAW Committee on these matters to the most recent country report may also be useful in providing a global and rights-based perspective.

The relevant sections of the Beijing Platform and National Action Plans based on the Platform also provide information on government commitments to women and gender equality related to child mortality under Critical Area of Concern C Women and Health.

Matrix 12: National long-term targets and indicators for reducing child mortality	
Targets	Indicators (see note # below)
L4.A Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate for both girls and boys (<i>based on global target 4.A</i>)	L4.A.1 Under-five mortality rate, by sex and age
L4.B Eliminate, between 1990 and 2015, excess female under-five mortality (<i>in countries where this exists</i>)	L4.B.1 Infant and child mortality rate, disaggregated by sex L4.B.2 Proportion of 1-year-old children immunized against measles, disaggregated by sex L4.B.3 Proportion of under-five children in malaria-affected areas sleeping under treated anti-malarial nets, disaggregated by sex and age L4.B.4 Proportion of 1-year-old children immunized against measles, mumps and rubella, disaggregated by sex L4.B.5 Proportion of 5-year-old children completing a full course of immunization against Diphtheria, Tetanus, Pertussis (whooping cough) and Hib (DTP-Hib), disaggregated by sex and age L4.B.6 Proportion of 5-year-old children completing a full course of immunization against polio
L4.C Eliminate sex-selective abortions by 2015 (<i>in countries where this is widely practiced</i>)	L4.C.1 Sex ratio at birth
L4.D Reduce by two-thirds* excess mortality among under-five boys	L4.D.1 Number of accidental deaths of under-five children, by sex

Matrix 12: National long-term targets and indicators for reducing child mortality	
due to accidents and poor nutrition	<p>L4.D.2 Prevalence of underweight among girls and boys under five years of age</p> <p>L4.D.3 Prevalence of stunting among girls and boys under five years of age</p>
L4.E Increase coverage of child health and nutrition programmes among adolescent and young mothers, mothers from poor households and minority groups, and women refugees and IDPs by 5 percent* per year to reach at least the same level as the general population by 2015	<p>L4.E.1 Proportion of 1-year-old children of the relevant target groups of mothers immunized against measles, disaggregated by sex</p> <p>L4.E.2 Proportion of under-five children of the relevant target groups of mothers in malaria-affected areas sleeping under treated anti-malarial nets, disaggregated by sex and age</p> <p>L4.E.3 Proportion of 1-year-old children of the relevant target groups of mothers immunized against measles, mumps and rubella, disaggregated by sex</p> <p>L4.E.4 Proportion of 5-year-old children of the relevant target groups of mothers completing a full course of immunization against Diphtheria, Tetanus, Pertussis (whooping cough) and Hib (DTP-Hib), disaggregated by sex and age</p> <p>L4.E.5 Proportion of 5-year-old children of the relevant target groups of mothers completing a full course of immunization against polio</p>
<p>* <i>Numeric targets are important for monitoring and accountability. Suggested percentage targets should be adapted to suit what is both feasible and necessary to achieve national targets. Suggested timeframes should be adjusted in accordance with how often data are available to measure progress.</i></p> <p># <i>All individual level indicators should be disaggregated by sex, rural/urban location and other relevant socio-economic variables, particularly those relating to minority groups and, where relevant, internally displaced persons.</i></p>	

C. Gender-responsive rights-based strategies

Implementation strategies for achieving Goal 4 tend to focus primarily on women as mothers and on a health and health education perspective. However, fathers and male decision makers in families and communities are often equally important in ensuring that children receive appropriate preventive and curative health care. Eliminating extreme poverty, particularly its greater impact on women, and promoting women's empowerment and gender equality are essential components of an integrated approach to Goal 4.

In countries facing extremely unbalanced sex ratios at birth and/or in the child population, the strategies required to address this very serious and complex gender issue are also broader

and more complex. Again, they centre on promoting gender equality and women's empowerment. Thus, many of the gender-responsive rights-based implementation strategies required to achieve Goal 4 have already been covered under Goals 1, 2 and 3, and are not repeated here. This section will focus on strategies that directly address the major gender and rights issues identified above for Goal 4.

1. Disaggregate data sources on child mortality by age and sex

As shown in the analysis section, there are many gender patterns in child mortality which can only be revealed by sex-disaggregated data. While the official list of the MDG targets and indicators does have an overarching statement that "all indicators should be disaggregated by sex and urban/rural as far as possible", this is easily overlooked. Specifically including sex-disaggregation in national targets and indicators will ensure that this does not occur. UNICEF and UNFPA both have an important role in addressing this through the Multiple Cluster Indicators Surveys and Demographic and Health Surveys.

Gender-responsive rights-based strategies to address this issue include:

- routinely collect, present and analyse data on infant mortality by sex and data on child mortality by age and sex in Multiple Cluster Indicators Surveys and Demographic and Health Surveys.

2. Identify and address the factors that lead to higher mortality among girls where this occurs

The factors which lead to higher mortality among girls, where this occurs, are different in different countries and even in different regions within countries. Implementing a strategy which has been successful in another location, without checking if the factors it addresses are relevant in the new location, is likely to lead to wasted resources. It is important to begin with research, and to monitor impact.

Gender-responsive rights-based strategies to address this issue include:

- conduct research on infant mortality data by sex and child mortality data by age and sex to identify the factors that lead to higher mortality among girls in countries or regions where this occurs;
- conduct research on why girl babies and children are less likely than boys to receive preventive treatment or medical care;
- monitor clinic attendance and immunization rates by the sex of the child, and develop follow-up mechanisms where girls are known to not have received immunization.

Gendered spaces: an obstacle to girls' health care

In one Indian area, girls were less likely to receive medical care because of the lack of an appropriate waiting place in the local town for fathers and daughters. Because women did not use public transport, men had to take children to the clinic. However, the bus service ran only in the morning and evening, so the father had to wait in town the whole day. If the child was a boy, they could wait at a local tea shop, but this was not regarded as an acceptable place for girls, even infants. Consequently, men were reluctant to take their daughters to the clinic.¹²⁷

3. Identify and address the factors that lead to higher mortality among older boys where this occurs

Where boys aged 2-5 are at more risk of accidents and poor nutrition because they are allowed to roam free outside the home, parents and communities need to be educated on the need to ensure that small boys are fed regularly and supervised, and on the risks of accidental death or exposure to disease pathogens through, for example, drinking unsafe water in the environment.

Gender-responsive rights-based strategies to address this issue include:

- conduct awareness-raising and health education campaigns on appropriate diets and feeding patterns for under-five children who are no longer breastfed;
- conduct awareness-raising and health education campaigns on environmental risks and safety precautions for under-five children outside the home.

4. Address the factors that lead to sex-selective abortions of females

Initiatives to reduce the sex-selective abortion of females need to reduce son preference, increase the value placed on girls and reduce the number of sex-selective abortions performed by medical professionals.

Gender-responsive rights-based strategies to address this issue include:

- conduct more research on sex-selective abortions and the factors that lead to them;
- develop public information campaigns addressing parents, medical staff and communities on the value of daughters and girls;
- provide cash incentives to families raising daughters;
- reduce the pressure on mothers to produce male babies by addressing factors such as dowry payments and traditional customs that favour sons over daughters;
- enforce laws which ban the medical profession from performing sex-selective abortions and impose fines of sufficient magnitude to act as a real deterrent to the practice;
- lobby policy makers about the serious long-term consequences for gender equality and women's rights of extremely unbalanced sex ratios in the population;
- ensure that the issues of sex-selective abortions and unbalanced child sex ratios are raised in CEDAW country reports and with other human rights bodies; if necessary, assist women's groups to prepare an alternative report to the Committee on these matters.

5. Target health education and information to men

In the long term, gender equality and empowerment of women will increase women's capabilities and their ability to make strategic decisions about their children's health. However, in the short term many women lack the power to make critical decisions about their children's health, such as when to take them for treatment or whether to have them immunized. Even when they are able to make the decisions, women may lack the financial, time or transportation resources to put their decision into effect. While the empirical evidence is clear that high-order births are much more at risk of death both in infancy and childhood, women often have little say in the number of children they bear. Thus, apart from empowering women, working with fathers and other men is an important and complementary intermediate strategy.

Gender-responsive rights-based strategies to address this issue include:

- develop appropriate messages and media to deliver information on child health to fathers, male household heads and male community leaders;
- promote family planning programmes to men, especially those programmes using male methods of contraception, so that men take responsibility;
- adapt child health services to the needs of fathers in terms of appropriate hours, location, and atmosphere to encourage fathers to bring their children for preventive or curative services;
- implement child health programmes that encourage fathers and mothers to take joint responsibility for their children's health;
- within the health system, record, collate and report the sex of the caregiver bringing under-five children to clinics or hospitals, by sex of child;
- specifically target these interventions to adolescent and young women, poor and minority women, and refugee and IDP women in crisis and conflict situations, as relevant to the particular national context.

D. National intermediate targets and indicators

Matrix 13 below suggests a range of national intermediate targets and indicators for reducing child mortality, based on the preceding analysis and suggested strategies. They should be adapted and added to so that they are relevant and useful for the individual country.

Intermediate targets and indicators should be used by women's groups and civil society, as well as by policy makers and programme managers, to assess whether a particular strategy is achieving the intended result and to indicate where and when a strategy may need to be adjusted or replaced.

Matrix 13: National intermediate targets and indicators for reducing child mortality			
Targets		Indicators (see note # below)	
14.a	Increase the number of men sharing responsibility with women for the care and health of under-five children	14.a.1	Men as a proportion of those bringing under-five children to health clinics, by sex of child (<i>from clinic records</i>)
		14.a.2	Number of men aware of health and immunization requirements for under-five children (<i>from MICS</i>)
14.b	Sex-disaggregated data on infant mortality and data disaggregated by sex and age for child mortality are available and used in analysis and monitoring	14.b.1	Sex-disaggregated data on infant mortality and data disaggregated by sex and age for child mortality are collected, collated, disseminated and analysed (<i>particularly from MICS and DHS surveys</i>)
		14.b.2	The number or proportion of official government reports that routinely provide sex-disaggregated data on infant mortality and data disaggregated by sex and age for child mortality

Matrix 13: National intermediate targets and indicators for reducing child mortality	
14.c Increase in evidence-based policies and programmes building on analysis of the factors leading to higher mortality rates for female infants and under-five girls	14.c.1 Number of studies of the factors leading to higher mortality for female infants and under-five girls
	14.c.2 Number of new policies and programmes addressing the issue
	14.c.3 Development of indicators for monitoring the effectiveness of these policy and programme responses
	14.c.4 Attendance of under-fives at clinics and hospitals, by age and sex of child
14.d Increase in evidence-based policies and programmes building on analysis of the factors leading to sex-selective abortions of female fetuses	14.d.1 Number of studies of factors leading to sex-selective abortions of female fetuses
	14.d.2 Number of new policies and programmes addressing the issue
	14.d.3 Development of indicators for monitoring the effectiveness of these policy and programme responses
	14.d.4 Number of abortions performed, by sex of foetus (<i>available in some countries from health system records</i>)
	14.d.5 Number and sex of other living children at the time of the abortion
14.e Reduce the number of sex-selective abortions of female fetuses by 5 percent* per year until they are eliminated	14.e.1 Number of cases brought against medical professionals for conducting or facilitating sex-selective abortions
	14.e.2 Number of convictions of medical professionals
	14.e.3 Size of fine or length of sentence for convicted medical professionals
	14.e.4 Data on sex-selective abortions of female fetuses and measures taken to eliminate them are presented in CEDAW country reports
14.f Increase in policies and programmes that specifically target adolescent and young mothers, poor or minority mothers, refugee or IDP mothers in crisis or conflict situations, as relevant to the particular country context	14.f.1 Number of new policy responses and programmes directed toward mothers from the relevant target groups
	14.f.2 Development of indicators for monitoring the effectiveness of these policy and programme responses among mothers from the relevant target groups

Matrix 13: National intermediate targets and indicators for reducing child mortality

* *Numeric targets are important for monitoring and accountability. Suggested percentage targets should be adapted to suit what is both feasible and necessary to achieve national targets. Suggested timeframes should be adjusted in accordance with how often data are available to measure progress.*

All individual level indicators should be disaggregated by sex, rural/urban location and other relevant socio-economic variables, particularly those relating to minority groups and, where relevant, internally displaced persons.

