# WILL SOUTH AFRICA MEET THE GOALS?

### Our goals

As a relatively new fully democratic nation, South Africa is recognised internationally for our human rights-based constitution and the status accorded to mothers, babies and children – constitutionally, legally and culturally.

We have committed ourselves to a number of targets to save the lives of our mothers, babies and children. In the year 2000, we signed on to the Millennium Development Goals (MDGs) with targets to reduce child deaths by two thirds (MDG 4, Figure 1a), maternal deaths by three quarters (MDG 5, Figure 1b) and to halt and begin to reverse the spread of HIV & AIDS (MDG 6, Figure 1c) between 1990 and 2015.

South Africa, together with other Southern African Development Community (SADC) countries, developed the SADC Protocol on Health in 1999 to develop strategies to reduce maternal mortality and to cooperate to improve the health status of children. In 2003, members of the African Union, including South Africa, also committed their countries to health goals detailed in the New Partnership for Africa's Development (NEPAD) Health Strategy, and recently signed on to the African Health Strategy 2007-2015, which include targets to reduce maternal and child deaths.

The HIV & AIDS and STI National Strategic Plan 2007-2011 has recently laid out targets in four priority areas of prevention, specifically highlighting actions to scale up coverage and improve the quality of prevention of mother-to-child transmission services. Although it is possible that new infections are stabilising, nearly one in three pregnant women are currently infected.

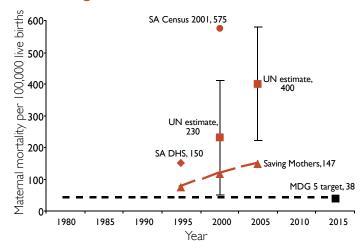
We are committed – but are we progressing and will we meet these goals?

We have committed ourselves to a number of targets to save the lives of our mothers, babies and children....but will we meet these goals?

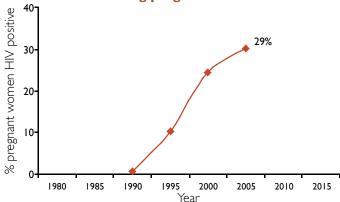


Figure Ia: MDG 4 - Child and newborn deaths 100-Mortality per 1000 live births ASSA child UN child estimate, 69 50-MDG 4 UN neonatal target, 20 estimate, 21 1980 1985 1990 1995 2000 2005 2010 2015 Year

Figure 1b: MDG 5 - Maternal deaths







Sources: (Ia) Under 5 mortality rate: UN Interagency group as presented in UNICEF, State of the World's Children 2008, ASSA estimate modeled by RE Dorrington. Neonatal mortality rate: WHO. Neonatal and perinatal mortality: regional, country and global estimates. Geneva, Switzerland: World Health Organization, 2006.

(Ib) UN Interagency group for mortality estimation. National Department of Health, Saving Mothers: third report on confidential inquiries into maternal deaths in South Africa, 2002-2004. Dorrington RE, Moultrie TA, Timaeus IM. Estimation of mortality using the South African Census 2001 data. Cape Town: Centre for Actuarial Research; 2004.

(Ic) National Department of Health. National HIV and Syphilis Antenatal Sero-Prevalence Survey in South Africa, 2006.

# THE SITUATION IN SOUTH AFRICA

### Our progress

One important source of data are the three South African mortality audit reports, Saving Mothers, Saving Babies, and Saving Children. While the primary purpose of these audits is to identify avoidable factors and implement local solutions to the problems identified, the reports also provide cause of death and mortality data, with some limitations.

While there is some uncertainty around each of the mortality figures, it is clear that maternal and child mortality rates have increased since 1990. Worldwide, only a dozen countries have increasing child mortality, all with wars or major HIV crises. Some countries that had similar mortality rates and similar gross national incomes to South Africa in 1990, such as Brazil, Mexico, and Egypt, are on track to meet MDG4 and have halved their under-five mortality rate since then. South Africa must achieve an average reduction in child mortality of 14% per year to meet Millennium Development Goal 4.

There are a number of factors contributing to the lack of progress in reducing deaths. HIV & AIDS is a major contributing factor; HIV prevalence



Photo: Chris Taylor/Save the Children, 2008

among pregnant women remains extremely high though progress has been made to improve testing, prevention of mother-to-child transmission (PMTCT), and provision of antiretroviral treatment. Each year 300,000 pregnant women with HIV will need PMTCT services for themselves and their babies. One often invisible factor is the lack of measureable progress in reducing stillbirths and newborn deaths. Deaths during the first month of life remain high and account for 30% of all child deaths. Poverty and extreme inequity are barriers to accessing high quality essential services and limit the ability of families to make healthy choices.

## Table I: How many South African mothers, babies and children die?

Population	48,282,000
Annual number of births	1,102,000
Mothers	
Maternal mortality ratio per 100,000 live births	147
Annual number of maternal deaths	1,600
Babies	
Stillbirth rate per 1,000 total births	18
Annual number of stillbirths	20,000
Neonatal mortality rate per 1,000 live births	21
Annual number of newborn deaths	22,000
Children	
Under 5 mortality rate per 1,000 live births	69
Annual number of under 5 deaths	75,000



Photo: Dianne Lang/Photoshare, 2003

#### At least 260 mothers, babies and children die each day in South Africa.

Sources

Note: numbers rounded to avoid spurious accuracy.

Population and births: UN Population Division, 2006, as presented in UNICEF, State of the World's Children 2008.

Mothers: National Department of Health, Saving Mothers: third report on confidential inquiries into maternal deaths in South Africa, 2002-2004. It is important to note that this is an underestimate due to under-reporting and missing deaths that do not occur at health facilities. There is wide uncertainty around maternal mortality. The UN point estimate of 230 for the year 2000 ranges from 58 to 430 maternal deaths per 100,000 live births, and the most recent UN estimate for South Africa for 2005 is 400.

Babies: Saving Babies 2003-2005: Fifth perinatal care survey of South Africa. University of Pretoria, Medical Research Council of South Africa, Centers for Disease Control; 2007. WHO. Neonatal and perinatal mortality: regional, country and global estimates, 2006.

Children: UN Interagency group for mortality estimation (UNICEF, WHO, World Bank, UN Population Division), as presented in UNICEF, State of the World's Children 2008.

# WHY DO THEY DIE? THE CAUSES ARE LINKED

### Why do mothers die?

(Figure 2a)

"Non-pregnancy related infections," primarily HIV & AIDS, TB and pneumonia accounts for 38% of all deaths. According to recent mortality audit data, this proportion is increasing. Currently the largest proportion of maternal deaths is related to direct obstetric causes. Hypertension and haemorrhage (antepartum and postpartum) are important direct causes of maternal deaths that are easily preventable with better antenatal and childbirth care.

The HIV status for the majority of deaths is unknown.

# Why are babies stillborn? (Figure 2b)

While around one third of all stillbirths remain unexplained, intrapartum asphyxia is one of the largest and most preventable causes, with an estimated 2,800 deaths each year underlining the need for better care during childbirth. HIV is an important risk factor for stillbirths. Other major preventable causes are infections and maternal hypertension. Quality antenatal care could substantially reduce these deaths.

# Why do children and newborns die? (Figure 2c)

Child PIP is a new audit process that cannot yet be used to estimate the population-based cause of death profile for children. Estimates from the 2000 National Burden of Disease Study reveal that there are three major killers of children under five years of age in South Africa: HIV & AIDS, neonatal causes and childhood infections such as pneumonia and diarrhoea. Each account for approximately one third of all deaths. Deaths during the first month of life – the neonatal period – are due to three main causes: complications of preterm birth, infections, and asphyxia. Most of the estimated 4,500 deaths resulting from birth asphyxia could be prevented through improved care during childbirth. Malnutrition also is an important factor as it increases the risk of children dying from infections.

Figure 2a: Why do mothers die?

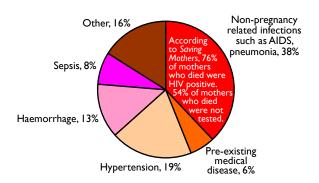


Figure 2b: Why are babies stillborn?

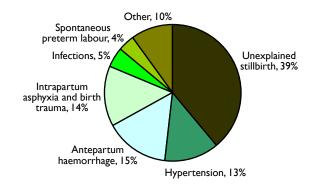
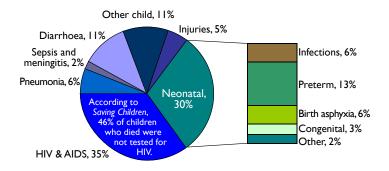


Figure 2c: Why do children and newborns die?



 $Sources: (2a)\ National\ Department\ of\ Health,\ Saving\ Mothers:\ third\ report\ on\ confidential\ inquiries\ into\ maternal\ deaths\ in\ South\ Africa,\ 2002-2004.$ 

(2b) Saving Babies 2003-2005: Fifth perinatal care survey of South Africa. Pretoria: University of Pretoria, Medical Research Council of South Africa, Centres for Disease Control: 2007.

(2c) Norman R, Bradshaw D, Schneider M, Pieterse D, Groenwald P. Revised Burden of Disease Estimates for the Comparative Risk Factor Assessment, South Africa 2000. Cape Town: Medical Research Council; 2006, revised by D Bradshaw to distinguish deaths in the neonatal period.

# THE BIG 5 HEALTH CHALLENGES

The causes of death for mothers, babies and children are linked. The main health challenges can be grouped according to time periods throughout the lifecycle, alongside the crosscutting issues of HIV & AIDS and malnutrition.

#### **Pregnancy and childbirth complications:**

Birth and the first day of life is the time of greatest risk for mother and baby. Approximately half of all maternal deaths take place within one day of childbirth. Approximately 40% of stillbirths occur during labour and between one third and one half of all newborn deaths are on the first day of life – many due to asphyxia resulting from poor quality of care during childbirth.

#### **Newborn illness:**

Small and preterm babies have a much greater risk of dying, many from lack of simple care such as warmth, feeding, hygiene, and early treatment of infection. Fifteen percent of babies in South Africa are low birth weight, weighing less than 2,500 grams. Infections, particularly sepsis, pneumonia, and meningitis, also are a major cause of newborn deaths.

#### **Childhood illness:**

While one third of childhood deaths are apparently due to HIV & AIDS (Figure 2c), the burden is likely underestimated. Child PIP data shows that 51% of child deaths had lab confirmed status or stage III/IV signs of HIV & AIDS. Infections such as diarrhoea and pneumonia are preventable and treatable. Injuries and violence is a significant cause of death in children after the age of five.

#### **HIV & AIDS:**

HIV & AIDS is associated with more than a third of all maternal and child deaths. HIV-infected children have significantly higher risk of death from pneumonia and from HIV-related complications such as failure to thrive. Currently, at least 294,000 children in South Africa are living with HIV & AIDS. However, the true magnitude of HIV & AIDS will continue to be underestimated until access and uptake of HIV testing improves.

### The BIG 5:

- Pregnancy and childbirth complications
- Newborn illness
- Childhood illness
- HIV & AIDS
- Malnutrition

#### **Malnutrition:**

Food security and dietary quality remain a challenge for many South Africans and have a profound impact on pregnant women and children. According to Child PIP, one third of children who died were severely malnourished, and over 60% were underweight for their age, particularly those who were HIV-infected. Preventing HIV in these children should prevent the malnutrition.

### Poverty is linked to all these challenges

The social determinants of health are intersectoral, encompassing living conditions — housing , water and sanitation, and nutrition as well as education and empowerment to seek care when needed. Mothers, babies and children in poor families are at increased risk of illness and face more challenges in accessing timely, high quality care, with the result that poor children are at least four times more likely to die than richer children.\(^{1}

...children from poor families are at least four times more likely to die than children from richer families.



Photo: Peter Magubane/UN

l National Department of Health, Medical Research Council, Measure DHS. 1998 South Africa Demographic & Health Survey. Calverton, MD: Measure DHS, 2002.