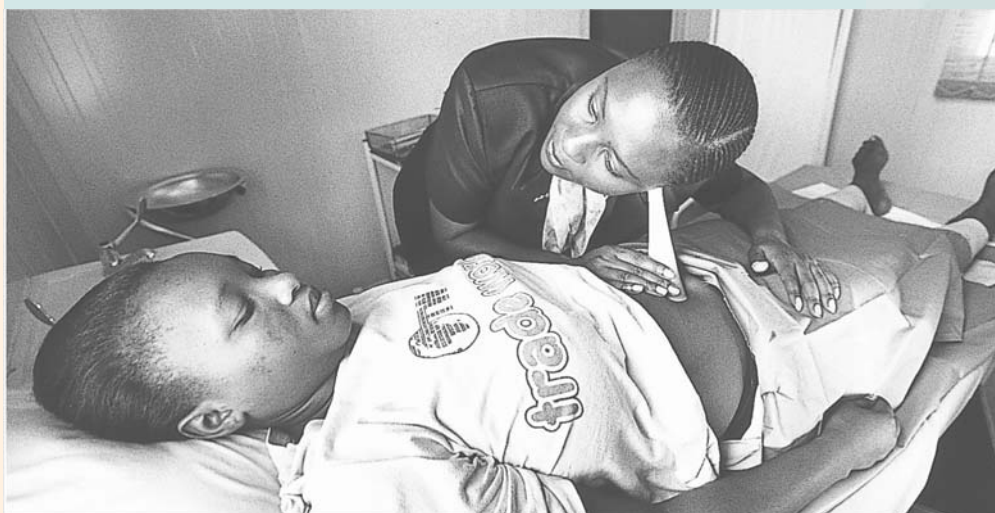


# GOAL 4



## CHILD MORTALITY

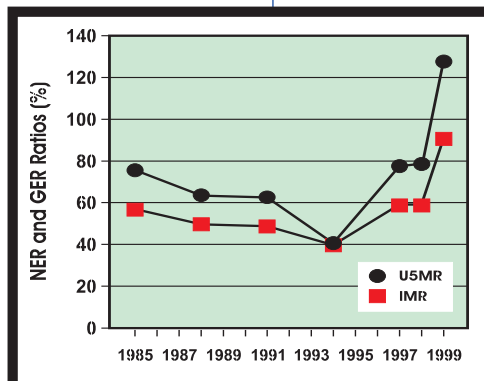
| Targets  | Will target be reached? | Conducive Environment? |
|--|-------------------------|------------------------|
| 9. To reduce the Infant Mortality Rate (IMR) from 48/1000 live births in 1991 to 27/1000 in 2011.            | Potentially             | Strong                 |
| 10. To reduce by 2/3, the under-five mortality rate (U5MR) from 63/1000 live births in 1991 by 2011.         | Potentially             | Strong                 |
| 11. To reduce the PEM rate amongst children from 18 percent in 1998 to 8 percent by 2011                     | Likely                  | Strong                 |
| 12. To increase the proportion of 1-year-old children who are fully immunised to at least 80 percent by 2009 | Likely                  | Strong                 |

Although the policy and programme environment supports the attainment of child survival goals, the incidence of HIV/AIDS and behaviour that supports its spread significantly 'pollute' the environment. HIV/AIDS compromises the mother's health and in consequence that of the child and its survival prospects. Both the infant and under five mortality rates started to rise around 1995/96 when the effects of HIV/AIDS became manifest.

## 1. WHAT IS THE SITUATION LIKE?

Botswana was on track to significantly reducing child mortality until HIV/AIDS made its impact felt in the mid 1990s. In the early 1990s, fewer babies died at birth or within five years of birth than at the end of the decade. In fact, between 1991 and 1996, the number of children who died in their first five years decreased from 63 per 1000 live births to 45 in 1996. Over the same period, the number of babies who died before their first birthday decreased from 48 per 1000 live births in 1991 to 37 in 1996. Since then, both the infant and under five mortality rates have been rising.

Estimated infant and under 5 Mortality (1985-99)



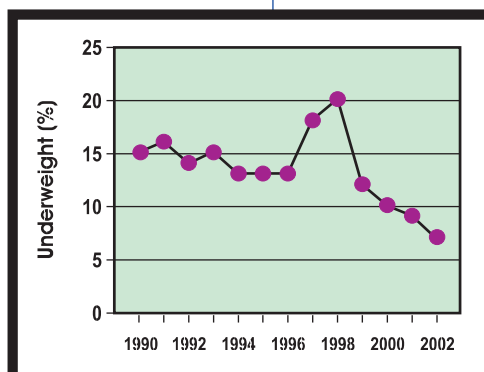
### INFANT MORTALITY AND UNDER FIVE-MORTALITY RATE

From the mid 1990s, child mortality rates increased to levels experienced in the seventies, primarily because of rising HIV prevalence. HIV prevalence among pregnant women attending antenatal clinics increased from 13.8% in 1992 to 35.4% in 2002. It is estimated that 40% of the infants born to HIV positive mothers who do not enrol for Prevention of Mother to Child Transmission (PMTCT) therapy are infected with HIV.

Infant deaths closely follow HIV/AIDS prevalence. For every 1000 infants born in Botswana, about 56 die before their first birthday, many possibly from HIV/AIDS related illnesses. The under-five mortality rate (U5MR) has also increased since 1996.

The introduction of anti-retroviral therapy and countrywide implementation of the Prevention of the Mother to Child Transmission (PMTCT) programme may have helped reverse the trend in both infant and child mortality.

Underweight Children (%) 1990-02



### PROTEIN ENERGY MALNUTRITION AMONGST CHILDREN

In 2000/01, 7-9% of children aged 0 to 5 had a low weight for their age or suffered Protein Energy Malnutrition (PEM). This represents an improvement of at least 40% over this group's PEM rate of 15% observed in 1995. This improvement is attributable to the comprehensive feeding programme that was reintroduced in July 1998 after a brief suspension between 1997 and June 1998, when the Government experienced difficulties with a selective feeding programme and PEM rates rose.

The prevalence of malnutrition varies across districts. The highest rates of malnutrition are observed in remote areas but these are also registering steady decline. Infant malnutrition is however exacerbated by HIV/AIDS. Breastfeeding, the long recommended source of nutrition and protection from diseases for infants, is not an option for HIV positive mothers because of the risk of HIV transmission from mother to child. The public health system provides infant formula as a substitute for breastfeeding to HIV positive mothers who enrol for PMTCT.

## CHILD IMMUNISATION

Vaccine coverage rates for Botswana have been relatively high since the inception of the national Expanded Programme on Immunisation (EPI) in 1980, leading to a reduction in the incidence of common but vaccine preventable diseases. These include Tuberculosis, Measles, Polio, Tetanus, Whooping Cough and Hepatitis. Botswana's primary child immunisation objective is full immunisation coverage for all vaccine preventable diseases. There has been some progress towards this goal, from 67% in 1990 to 74% in 2000.



Two factors seem to weigh heavily on Botswana's slow progress towards its child immunisation target. One is the difficulty of reaching some rural communities and the supply chain logistics involved in the procurement, storage and distribution of vaccines throughout Botswana. In 2001, vaccine coverage rates fell on account of unreliable supplies of vaccines. The second problem is the user uptake of vaccines. Some, especially users who have to travel from afar to access vaccines, may have other priorities.

Corrective measures have already been taken to strengthen the reliability of vaccine supplies. There is need to strengthen service delivery in general and to sustain public education towards disease prevention and public health in general.

## 2. MAJOR CHALLENGES

Without a significant turnaround in the war on HIV/AIDS, Botswana will have difficulty returning to the pre 1996 trends towards lower child mortality rates. HIV/AIDS is the main challenge in reducing child mortality. A few specific measures can be considered for augmenting the already expansive national effort to contain and reverse the HIV/AIDS epidemic. These include:

### **ADOPTING A FAMILY TEAM APPROACH TO SECURING THE HEALTH AND LIVES OF INFANTS AND CHILDREN.**

More of the burden of childcare should move from the state to the family. The public health system has expanded the provision of accessible prevention and treatment services for children. Raising family consciousness about and responsibility for preventative child healthcare is the next logical step. In this regard, the foremost priorities are HIV/AIDS and child nutrition.

The rates of HIV infection amongst expectant women and the slow uptake of PMTCT services suggest that too many couples are not yet making responsible reproductive health choices. This is partially explained by the disproportionate responsibility for family health choices and childcare that women carry. Extending more of the responsibility to the entire family could help reduce HIV prevalence amongst newborn babies by getting more couples to test for HIV prior to conception. It could also get more men to participate in prenatal discussions of reproductive health issues and support their partners should they need to enrol for PMTCT. More generally,

**HAART**  
Highly Active Anti Retroviral  
Therapy

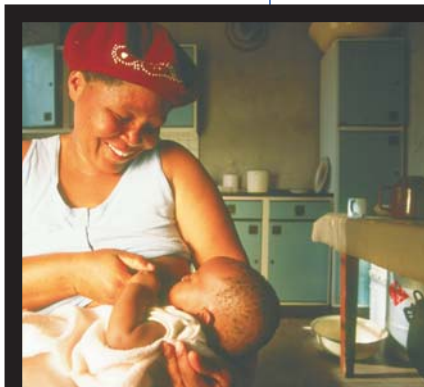
**PMTCT**  
Prevention of Mother to Child  
Transmission

**U5MR**  
Under 5 Mortality Rate

public health education should perhaps seek to inculcate child health and nutrition competencies in families rather than in mothers only.

### **BROADENING ACCOUNTABILITY FOR THE HEALTH OF CHILDREN**

Botswana's public health system caters well for children. It provides prenatal care services that cover nutrition and health education to pregnant women. It also provides a fully funded nationwide PMTCT programme that includes infant formula as a substitute for breast milk for HIV positive mothers. But the limits of state protection for children can still be stretched further in the case of HIV/AIDS.



Why, for instance, should the state allow a woman who tests positive for HIV to remain ignorant of her HIV status if she so desires when ignorance may result in her not enrolling for PMTCT and stretches the child's period of heightened vulnerability to "Mother to Child Transmission of HIV" beyond pregnancy to ill-advised breast-feeding? Every child has a right to expect state protection from HIV infection. Is it not in the interest of the unborn child for the state to demand that pregnant women be informed about their HIV status and the options available to them to protect their children?

Second, men influence their spouses' reproductive health choices. To facilitate informed choices on such critical issues as HIV testing, enrolment for PMTCT and breastfeeding, they should also participate in prenatal education with their spouses. Men's involvement is critical because many women do not have full control over decisions concerning their health and that of their babies. About 60% of Botswana mothers have their first child at 15-19 years of age, when they are still dependent on others and are unable to make responsible reproductive health choices.

## **3. SUPPORT POLICIES AND PROGRAMMES**

The policies and programmes that impact most directly on infant and child health in Botswana are summarised in the table on the next page. They include the National Population Policy, EPI, PMTCT, IMCI, the CWC and feeding programmes for vulnerable groups

## Policy Instruments and Objectives

| The Instrument                                       | Year | Objectives   |
|--|------|--|
| <b>Policies</b>                                      |      |  |
| National Population policy                           | 1999 | To reduce child and adult mortality, ensure household food security, and enhance the nutritional status of the population  |
| Expanded Policy on Immunisation                      | 1993 | To reduce infant and child morbidity and mortality from vaccine-preventable diseases   |
| PMTCT  | 1998 | To improve child survival through the reduction of HIV related morbidity and mortality; reduce incidence of HIV infections in children through mother to child transmission by 50% |
| Baby and Mother Friendly Hospital Initiative (BMBFI) | ...  | To support infant and young children's nutrition   |
| Vulnerable Group Feeding Programme                   | ...  | To develop nutritional food products for the vulnerable children   |
| Revised National Policy for Rural Development        | 2002 | To sustain rural livelihoods   |
| HAART  | 2002 | To improve child survival and development by reducing HIV related morbidity and mortality.   |

## 4. TO TRACK PROGRESS TOWARDS THE TARGETS

The table below suggests that Botswana's health system has developed a strong capability to monitor trends in child health. The civil registration system could, however, be improved to allow for more timely compilation of mortality data.

### Capacity to monitor Child Mortality

| Elements of Monitoring Environment                       | Assessment    |             |      |
|--|---------------|-------------|------|
| Data gathering capacities                                | <b>Strong</b> | Fair        | Weak |
| Quality of recent survey information                     | <b>Strong</b> | Fair        | Weak |
| Statistical tracking capacities                          | <b>Strong</b> | Fair        | Weak |
| Statistical analysis capacities                          | Strong        | <b>Fair</b> | Weak |
| Capacity to incorporate statistical analysis into policy | <b>Strong</b> | Fair        | Weak |
| Monitoring and evaluation mechanisms                     | <b>Strong</b> | Fair        | Weak |