Child health

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Section 27 of the Constitution of South Africa[1] provides that everyone has the right to have access to health care services. In addition, section 28(1)(c) gives children "the right to basic nutrition and basic health care services".

Article 14(1) of the African Charter on the Rights and Welfare of the Child[2] states that "every child shall have the right to enjoy the best attainable state of physical, mental and spiritual health".

Article 24 of the UN Convention on the Rights of a Child[3] says that state parties should recognise "the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health". It obliges the state to take measures "to diminish infant and child mortality" and "to combat disease and malnutrition".

HIV prevalence in children

This indicator refers to the proportion of children, in a given period, who are HIV positive.

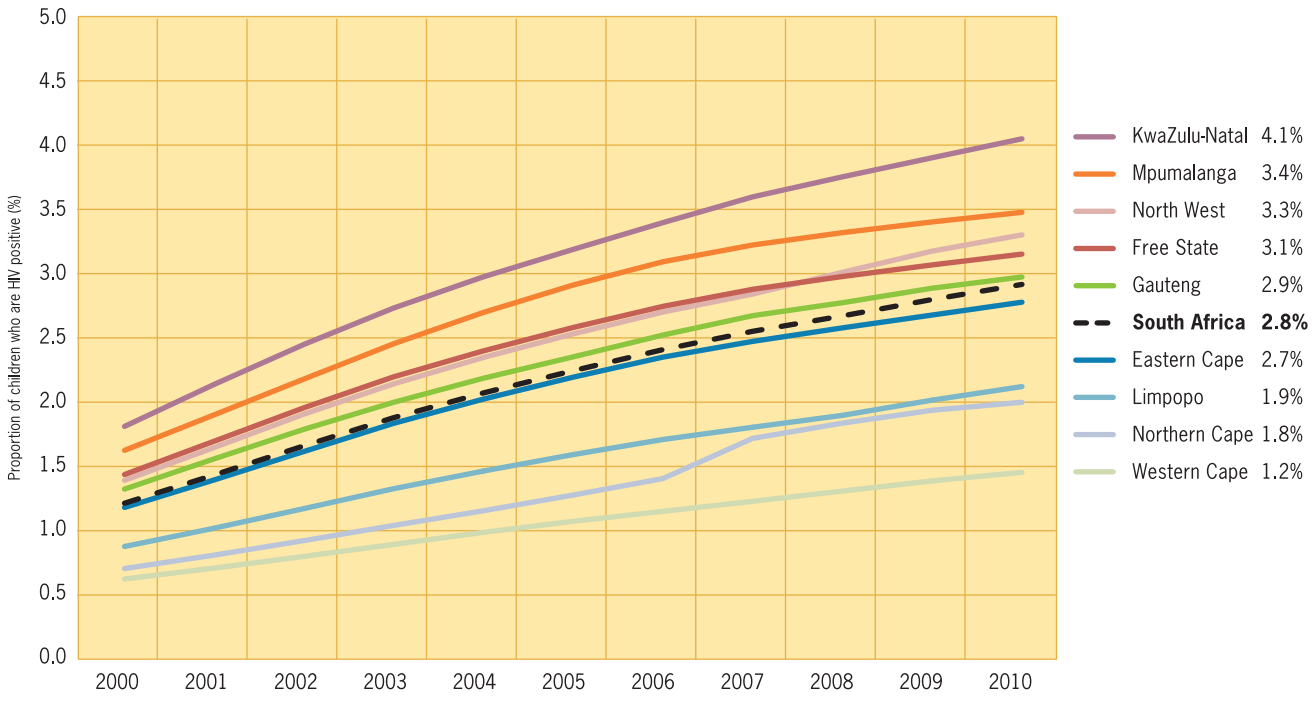
South Africa is currently the country in the world with the largest number of people living with HIV. Many children are HIV positive or have become ill and died due to AIDS. The majority of children are infected before and during the birth process and some later through breastfeeding – in other words, paediatric HIV is driven by the adult epidemic. Children may also become infected through sexual intercourse, including sexual abuse.

Estimates of the number of children infected with HIV are essential for planning health services to meet their needs. In addition, knowing the prevalence of paediatric HIV helps to monitor the epidemic from year to year and gives an indication of the effectiveness of the prevention of mother-to-child transmission programme (PMTCT).

The ASSA2008 AIDS and Demographic Model provides the most current estimates of paediatric HIV prevalence in South Africa and suggests that, while prevalence is increasing, the rate at which it is doing so is decreasing. The increase in prevalence could be explained by the increased survival rates for children who now have access to antiretroviral therapy (ART). However, there are significant provincial differences in prevalence, which should be investigated. The Western Cape consistently has the lowest HIV-prevalence rate (1.2% in 2010), while prevalence is highest in KwaZulu-Natal (4.1%). Across South Africa, 438,000 children under 15 years (2.8%) are estimated to be HIV positive in 2010.

Table 3a: HIV prevalence in children under 15 years, 2000 – 2010

(Y-axis reduced to 5%)



Source: Actuarial Society of South Africa (2011) *ASSA2008 AIDS and Demographic Model.* Available: www.actuarialsociety.org.za. Analysis by Tamlyn Roman & Katharine Hall, Children's Institute, UCT.

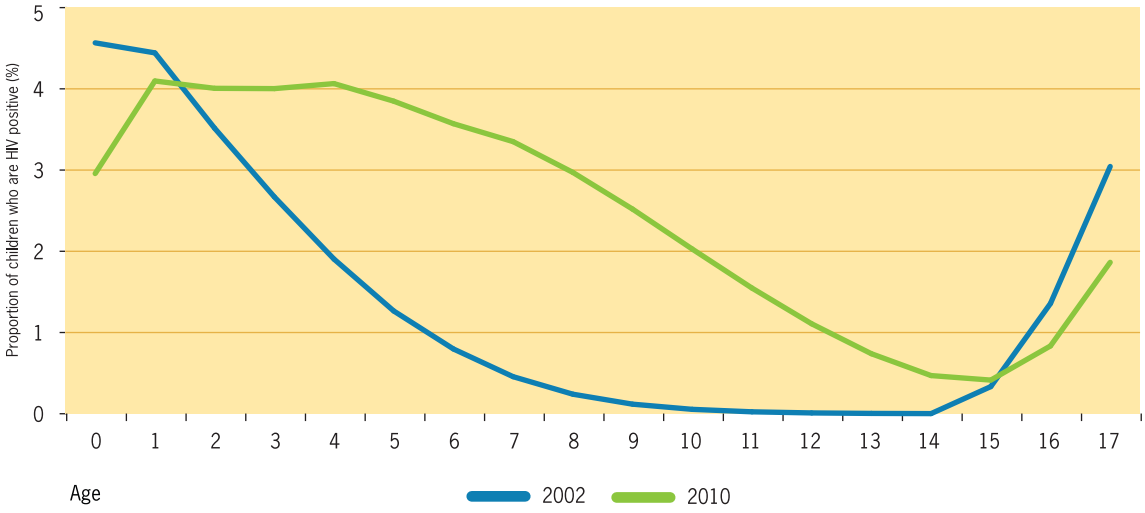
Notes: ① Strengths and limitations of the data are described on pp. 104 – 106. ② See www.childrencount.ci.org.za for more information.

A recent paediatric model projects the number of infected children to be slightly higher than the ASSA2008 estimates.[4] This is partly because it includes more detailed modelling of breastfeeding rates. The probability of infection through breastfeeding is reduced by 80% if breastfeeding mothers receive highly active ART (HAART) during this period.[5] According to this model, an estimated 3.8% of children aged 0 – 14 years old were infected with HIV in 2008,[6] compared with 2.6% in the ASSA2008 model.

Most HIV infections in children under 14 years occur at birth or shortly thereafter. Given the rapid expansion of the PMTCT programme over the past decade, it seems surprising that prevalence should continue to increase. Figure 3a, derived from ASSA2008, shows prevalence by individual age for all children under 18, and compares rates for 2002 and 2010.

Figure 3a: HIV prevalence in children by age (0 – 17 years), 2002 & 2010

(Y-axis reduced to 5%)



Source: Actuarial Society of South Africa (2011) *ASSA2008 AIDS and Demographic Model*. Available: www.actuarialsociety.org.za. Analysis by Tamlyn Roman & Katharine Hall, Children's Institute, UCT.

The 2002 trend shows higher infection rates at birth, followed by a rapid decline in HIV prevalence from the age of one year. In part, this reflects the progression of the pandemic (in 2002, 10-year-olds would have been unlikely to be infected at birth), but the sudden decline in HIV prevalence (amongst living children) is also due to HIV-related deaths. Children born HIV positive need to receive ART early because, without treatment, more than 30% of children who were infected at birth would die before their first birthday.[7] The rapid roll-out of the ART programme since 2002 has meant that increasing numbers of infected babies have received treatment and survived – as illustrated in the 2010 trend. National ART take-up amongst newly-eligible children under 15 started at a low of 2% in 2002, rising to 37% of eligible children in 2007/08.[8]

The sudden rise in prevalence rates from the age of 15 represents new infections through sexual activity amongst teenagers. In 2010, 18,522 (just under 2%) of 15-year-olds were estimated to be infected – down from 30,329 (3%) in 2002.

The infant mortality rate and under-five mortality rate

South Africa relies on survey data and modelled estimates to measure infant and child mortality because the vital registration and health information systems are not comprehensive and are inadequate for this purpose. The last reliable data on child mortality were collected from the 1998 South African Demographic and Health Survey (SADHS). In the absence of empirical child mortality estimates, the Actuarial Society of South Africa (ASSA) has developed an AIDS and Demographic model and recently released the latest version, ASSA2008.

Infant and under-five mortality rates are widely used indicators of health status and socio-economic development because they reflect not only child mortality levels but also the health status of the broader population. The infant mortality rate (IMR) is defined as the probability of dying within the first year of life and refers to the number of babies under 12 months old who die in a year, per 1,000 live births during the same year. According to ASSA2008 estimates, the IMR has gradually decreased from 52 in 2000 to 34 in 2010.

The under-five mortality rate (U5MR) is defined as the probability of dying between birth and the fifth birthday. The U5MR refers to the number of children under five years old who die in a year, per 1,000 live births in the same year. According to ASSA2008 estimates, the U5MR increased gradually in the decade leading up to 2003, when it reached a high of 74, after which it steadily decreased to 50 in 2010.

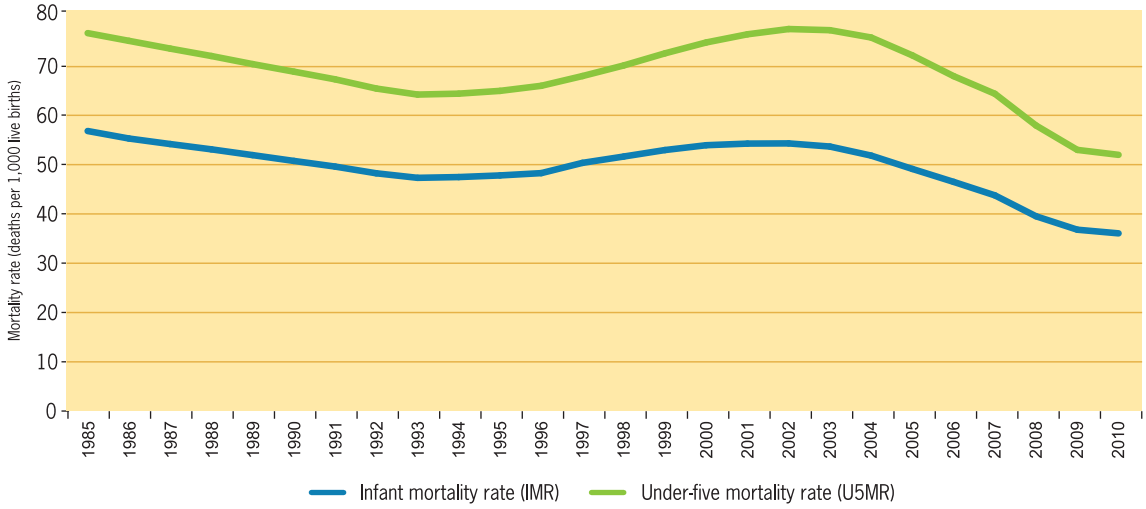
A child's growth and development are dependent on the family's living conditions and access to services and resources in the surrounding community. These conditions generate the biological risk factors that impact directly on the child's health through the occurrence of disease and its prognosis, of which death is the most extreme outcome. The IMR and U5MR in developing countries are therefore associated with a broad range of bio-demographic, health and social factors. These include access to maternal and child health care services such the number of antenatal care visits, maternal nutrition status, breastfeeding and infant feeding; environmental health factors such as safe drinking water, hygiene and sanitation; and socio-economic factors such as income and household conditions, women's education and household energy sources for cooking and heating. The IMR and U5MR, as indicators of health and overall societal development, are therefore intrinsically linked to the right to a healthy and safe childhood and the array of socio-economic rights in general.

Reducing child mortality is one of the eight Millennium Development Goals (MDGs) for reducing poverty and inequality in the world. The target for MDG 4 is to reduce under-five mortality by two-thirds between 1990 and 2015. South Africa's target is to attain an U5MR of 20 deaths per 1,000 live births by 2015.

Based on the 1998 SADHS and ASSA2003, it was assumed that mortality rates continued to increase during the 2000s, continuing the trend of the late 1990s. This trend correlates with an increase in HIV prevalence in pregnant women. Given the limited treatment available to HIV-positive pregnant women during the 1990s, most of the rise in infant mortality can be attributed to AIDS and AIDS-related illnesses. However the ASSA2008 estimates show that this trend was reversed around 2003. The decreasing child mortality rates correlate with the timing of the national roll-out of the prevention of mother-to-child transmission programme, and the downward trend illustrates the success of this programme in reducing child deaths.

Figure 3b: Child mortality trends in South Africa, 1985 – 2010

(Y-axis reduced to 80%)



Sources: Actuarial Society of South Africa (2011) *ASSA2008 AIDS and Demographic Model*. Available: www.actuarialsociety.org.za
Analysis by Tamlyn Roman & Katharine Hall, Children's Institute, UCT.

Notes: ① Strengths and limitations of the data are described on pp. 104 – 106. ② See www.childrencount.ci.org.za for more information.

The number and proportion of children living far from the nearest health facility

This indicator reflects the distance from a child's household to the health facility they normally attend. Distance is measured through a proxy indicator: length of time travelled to reach the health facility, by whatever form of transport is usually used. The health facility is regarded as "far" if a child would have to travel more than 30 minutes to reach it, irrespective of mode of transport.

The health of children is influenced by many factors, including nutrition, access to clean water, adequate housing, sanitation and a safe environment. Primary health care facilities provide important preventative and curative services, and increased access to such facilities could substantially reduce child illness and mortality. Children therefore need access to good and reliable health services to ensure that they receive life-saving interventions such as immunisation and ARVs.

According to the UN Committee on Economic, Social and Cultural Rights, primary health care should be available (in sufficient supply); accessible (easily reached); affordable; and of good quality.[9] In 1996, primary health care was made free to everyone in South Africa, but the availability and physical accessibility of public health care services remain a problem, particularly for people living in remote areas.

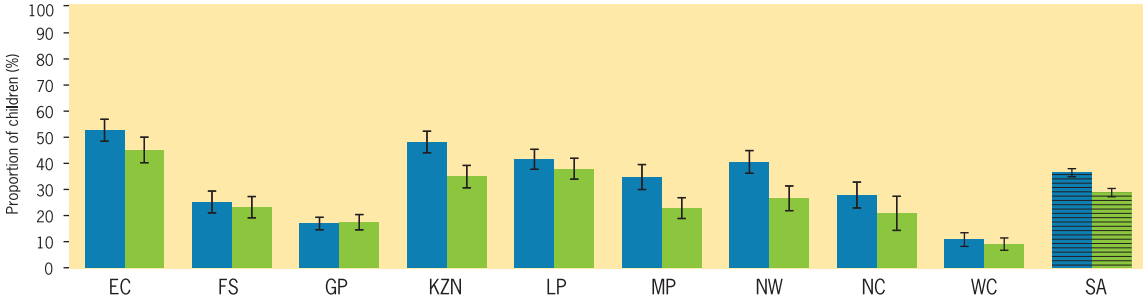
In South Africa, nearly 30% of children live far from the health care facility they normally use, and over 90% normally use the health care facility nearest their homes. That means 5.4 million children need to travel more than 30 minutes to reach their usual health care service provider. Nationally, access to health services remained relatively constant between 2002 and 2008 with about 40% of children living far from their health care facility. Access appears to have increased dramatically in 2009 when 29% of children were reported to live far from their health care facility. This rapid improvement is contrary to the trend over the previous seven years, and may be due partly to a change of question in the General Household Survey in 2009. For this reason, data from 2009 may not be directly comparable with that of previous years.

The situation seems to have improved across the country as a whole, with an average nationwide improvement of seven percentage points. In KwaZulu-Natal there has been an improvement of 13 percentage points in the proportion of children travelling far to their health facility (from 48% in 2002 to 35% in 2009). This may be the result of a changed question in the 2009 survey, but it may also reflect improved provisioning to a certain extent. There was a three percent increase in the number of public clinics between 2007 and 2009, from 3,077 to 3,174 clinics nationally, with the greatest number of new clinics being established in the Eastern Cape (28 clinics) and KwaZulu-Natal (20).[10] On the other hand, there appears to be great improvement in access to health care facilities in the North West province in 2009, although only one additional clinic was established in the two-year period prior to 2009.

There is considerable variation between provinces. While a large proportion of children in the Eastern Cape (45%), Limpopo (38%) and KwaZulu-Natal (35%) have to travel more than 30 minutes to reach their health facility, this proportion is much lower for other provinces, and lowest in the largely metropolitan provinces of Gauteng (18%) and the Western Cape (9%).

There are also significant differences between population groups. A third (32%) of African children would have to travel far to their health facility compared with only 7% – 12% of Coloured, Indian and White children.

Table 3b: Number and proportion of children living far from the nearest health facility, 2002 & 2009



	EC	FS	GP	KZN	LP	MP	NW	NC	WC	SA
2002	52.7% 1,494,000	25.2% 249,000	16.9% 464,000	48.2% 1,847,000	41.5% 1,039,000	34.8% 454,000	40.5% 580,000	27.9% 84,000	10.8% 172,000	36.4% 6,382,000
2009	45.1% 1,247,000	23.2% 248,000	17.5% 565,000	34.9% 1,493,000	37.9% 878,000	22.9% 337,000	26.6% 340,000	20.8% 91,000	9.0% 160,000	28.8% 5,356,000

Source: Statistics South Africa (2003; 2010) *General Household Survey 2002; General Household Survey 2009*. Pretoria: Stats SA. Analysis by Tamlyn Roman & Katharine Hall, Children's Institute, UCT.

Notes: ① Children are defined as people aged 0 – 17 years. ② Population numbers are rounded off to the nearest thousand. ③ Strengths and limitations of the data are described on pp. 104 – 106. ④ The confidence intervals, shown on the graph as a vertical line at the top of each bar, represent the range into which the true value may fall. See p. 77 for more details on confidence intervals. ⑤ See www.childrencount.ci.org.za for more information.

The number and proportion of children living in households where there is reported child hunger

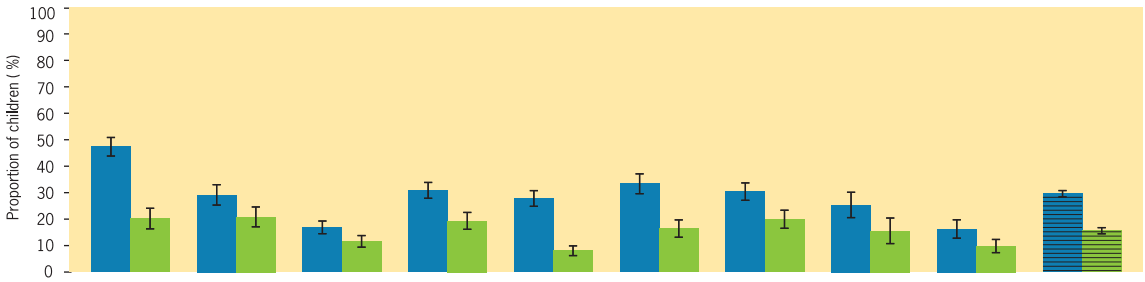
This indicator draws on data from the GHS and shows the number and proportion of children living in households where children are reported to have ever gone to bed hungry because there was not enough food, or there was not enough money to buy food. Child hunger is emotive and subjective, and this undermines the reliability of estimates on the extent and frequency of hunger, but it is assumed that variation and reporting error will be reasonably consistent so that it is possible to report trends from year to year.

The government has introduced a number of programmes to reduce hunger, malnutrition and food insecurity, yet child hunger continues to be a problem. Nearly three million children (16%) were living in households where child hunger was reported in 2009. Overall, there has been a significant drop in reported child hunger from 30% of children in 2002, and a slight drop from 18% of children in 2007.

There are large disparities in reported hunger between provinces and population groups. The provinces with the highest reported child hunger rates were the Eastern Cape and Free State. Reported child hunger in the Free State increased from 13% in 2008 to 21% in 2009, but decreased overall from 2002. The Eastern Cape has particularly high rates of child poverty and unemployment, and child hunger rates have remained consistently high from 2007 to 2009 (21% – 20%), despite an overall drop in reported child hunger from 47% in 2002. Limpopo also experiences high rates of unemployment and income poverty; yet it has the lowest proportion of reported child hunger (8%). This may be related to greater food security in rural households as a result of access to land for subsistence agriculture.

Hunger, like poverty and unemployment, is most likely to be found among African children. In 2009, some 2.7 million African children lived in households that reported child hunger. While this is an improvement from the 3.3 million in 2008, it still equates to 17% of the total African child population, while relatively few Coloured (13%), Indian (2%) and White (1%) children live in households where child hunger was reported.

Table 3c: Number and proportion of children living in households where there is reported child hunger, 2002 & 2009



	EC	FS	GP	KZN	LP	MP	NW	NC	WC	SA
2002	47.4% 1,346,000	29.2% 290,000	17.0% 465,000	30.9% 1,186,000	27.9% 698,000	33.4% 437,000	30.5% 436,000	25.4% 77,000	16.3% 260,000	29.7% 5,203,000
2009	20.3% 561,000	20.9% 223,000	11.7% 378,000	19.4% 830,000	8.1% 188,000	16.5% 243,000	20.0% 256,000	15.7% 68,000	9.9% 175,000	15.7% 2,921,000

Source: Statistics South Africa (2003; 2010) *General Household Survey 2002; General Household Survey 2009*. Pretoria: Stats SA. Analysis by Tamlyn Roman & Katharine Hall, Children's Institute, UCT.

Notes: ① Children are defined as people aged 0 – 17 years. ② Population numbers are rounded off to the nearest thousand. ③ Strengths and limitations of the data are described on pp. 104 – 106. ④ The confidence intervals, shown on the graph as a vertical line at the top of each bar, represent the range into which the true value may fall. See p. 77 for more details on confidence intervals. ⑤ See www.childrencount.ci.org.za for more information.

References

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5 See no. 4 above.
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