# **Child health**

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Section 27 of the Constitution of South Africa 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".1

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

Article 24 of the UN Convention on the Rights of a Child 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".3

### The infant and under-five mortality rate

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The infant and under-five mortality rates are key indicators of heath and development. They are associated with a broad range of biodemographic, health and environmental factors which are not only important determinants of child health but are also informative about 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 who die in a year, per 1,000 live births during the same year. Similarly, the under-five mortality rate (U5MR) is defined as the probability of a child 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.

This information is ideally obtained from vital registration systems. However, like many middle- and lower-income countries the underreporting of births and deaths renders the South African system inadequate for monitoring purposes. South Africa is therefore reliant on alternative methods, such as survey and census data, to measure child mortality. Despite several surveys which should have provided information to monitor progress, the lack of reliable data since 2000 led to considerable uncertainty around the level of childhood mortality for a prolonged period. However, the second South African National Burden of Disease Study has produced national and provincial infant and under-five mortality trends from 1997 up until 2010. These profiles can be viewed at: www.mrc.ac.za/bod/reports.htm.

An alternative approach to monitor age-specific mortality nationally since 2009 is the rapid mortality surveillance system (RMS) based on the deaths recorded on the population register by the Department of Home Affairs. 4 The RMS data have been recommended by the Health Data Advisory and Coordinating Committee because corrections have been made for known biases. In other words, the

indicators shown in table 3a are nationally representative. The RMS reports vital registration data adjusted for under-reporting which allow evaluation of annual trends. They suggest the IMR peaked in 2003 when it was 53 per 1,000 and decreased to 29 per 1,000 in 2013. During the same period the U5MR decreased from 81 per 1,000 to 41 per 1,000, which equates to a 10% annual rate of reduction up until 2011, with no further noteworthy decline since 2012.

The neonatal mortality rate (NMR) is the probability of dying within the first 28 days of life, per 1,000 live births. The NMR was 11 per 1,000 live births in 2013. Estimates on the NMR are based on registered deaths for the period 2006 – 2013 and the District Health Information System for 2011 - 2013.

Table 3a: Child mortality indicators, rapid mortality surveillance, 2009 - 2013

INDICATOR	2009	2010	2011	2012	2013
Under-five mortality rate per 1,000 live births	56	52	40	41	41
Infant mortality rate per 1,000 live births	39	35	28	27	29
Neonatal mortality rate per 1,000 live births	14	13	13	11	11

Source: Dorrington RF, Bradshaw D, Laubscher R & Nannan N (2014) Rapid Mortality Surveillance Report 2013. Cape Town: Medical Research Council.

#### **Teenage pregnancy**

This indicator counts young women aged 15 – 24 who are reported to have given birth to a live child in the past year.

Pregnancy rates are difficult to calculate directly because it is hard to determine how many pregnancies end in miscarriage, stillbirth or abortion: these are not necessarily known to the respondent, or accurately reported. In the absence of reliable data on pregnancy, researchers tend to rely on childbearing data (i.e. the proportion of women in an age group who have given birth to a live child).

Despite widespread assumptions that teen pregnancy in South Africa is an escalating problem, the available data suggest that the percentage of teenage mothers is not increasing. A number of studies have suggested a levelling off and even a decrease in fertility rates among teenagers in South Africa.<sup>5</sup> Teenage fertility rates declined after the 1996 Census, and Department of Health data between 2004 and 2012 showed no increase in the share of teenagers aged 15 – 19 who attended antenatal clinics.<sup>6</sup>

Fertility rates are an indicator of possible exposure to HIV. HIV prevalence rates are higher among women in their late twenties and thirties, and lower among teenagers, and the prevalence rate in the 15 – 24-age group has decreased over the past 10 years. However prevalence rates are still worryingly high: of the young pregnant women surveyed in antenatal clinics in 2012, 12% in the 15 – 19-age group and 24% of those aged 20 – 24 were HIV positive. There is a strong association between early childbearing and maternal mortality, and the majority of deaths in young mothers are caused by AIDS. It is important that safe sexual behaviour is encouraged and practised.

Studies have found that early childbearing – particularly by teenagers and young women who have not completed school – has a significant impact on the educational outcomes of the mother and child, and is associated with poorer child health and nutritional outcomes. For this reason is it important to delay childbearing, and to ensure that teenagers who do fall pregnant are appropriately supported. This includes ensuring that young mothers can complete their education, and that they have access to parenting support programmes and health services. Although pregnancy is a major cause of school drop-out, some research has also suggested that teenage girls who are already falling behind at school are more likely to become pregnant than those who are progressing through school at the expected rate. So efforts to provide educational support for girls who are not coping at school may also help to reduce teenage pregnancies.

Poverty alleviation is important for both the mother and child, but take-up of the Child Support Grant among teenage mothers is low compared with older mothers.<sup>11</sup> This suggests that greater effort

should be made to assist young mothers to obtain birth certificates to apply for CSGs. Ideally, home affairs and social security services should form part of a comprehensive maternal support service at clinics and maternity hospitals.

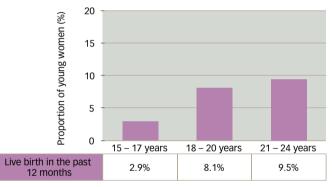
Since 2009 the nationally representative General Household Survey (GHS) conducted by Statistics South Africa has included a question on pregnancy. The question asks the household respondent: "Has any female household member [between 12 – 50 years] been pregnant during the past 12 months?" For those reported to have been pregnant, a follow-up question asks about the current status of the pregnancy. This indicator calculates the number and proportion of young women who have given birth in the past year.

According to the GHS the national childbearing rate for young women aged 15-24 was 7% in 2013. There has been no significant change in this rate since 2009 and the estimated number of young women giving birth in a year has remained stable at between 350,000 and 360.000.

As would be expected, childbearing rates increase with age. Less than three percent of girls aged 15-17 were reported to have given birth in the past 12 months (representing just under 50,000 teenagers in this age group). Childbearing rates increased to 8% among 18-20-year-olds (123,000 when weighted), and 9.5% in the 21-24 age group (188,000). These rates have also been stable over the five-year period that the GHS has included this question.

Figure 3a: Childbearing rate among young women aged 15 – 24 years, by age, 2013

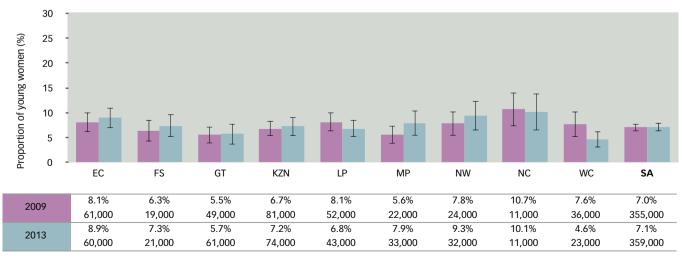
(Y-axis reduced to 20%)



**Source:** Statistics South Africa (2014) *General Household Survey 2013*. Pretoria: Stats SA. Analysis by Katharine Hall. Children's Institute. UCT.

Figure 3b: Annual childbearing rates among young women aged 15 – 24 years, by province, 2009 & 2013

(Y-axis reduced to 30%)



Source: Statistics South Africa (2010; 2014) General Household Survey 2009; General Household Survey 2013. Pretoria: Stats SA Analysis by Katharine Hall, Children's Institute, UCT.

### The number and proportion of children living far from their 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.

A review of international evidence suggests that universal access to key preventive and treatment interventions could avert up to two-thirds of under-five deaths in developing countries. Preventative measures include promotion of breast- and complementary feeding, micronutrient supplements (vitamin A and zinc), immunisation, and the prevention of mother-to-child transmission of HIV, amongst others. Curative interventions provided through the government's Integrated Management of Childhood Illness strategy include oral rehydration, infant resuscitation and the dispensing of medication.

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. In 1996, primary level care was made free to everyone in South Africa, but the availability and physical accessibility of health care services remain a problem, particularly for people living in remote areas.

Physical inaccessibility poses particular challenges when it comes to health services because the people who need these services are often unwell or injured, or need to be carried because they are too young, too old or too weak to walk. Physical inaccessibility can be related to distance, transport options and costs, or road infrastructure. Physical distance and poor roads also make it difficult for mobile clinics and emergency services to reach outlying areas. Within South Africa, patterns of health care utilisation are influenced by the distance to the health service provider: those who live further from their nearest health facility are less likely to use the facility. This "distance decay" is found even in the uptake of services that are required for all children, including immunisation and maintaining the clinic card (Road-to-Health booklet). 14

Close to a quarter (23%) of South Africa's children live far from the primary health care facility they normally use, and over 90% attend the facility closest to their home. Amongst households with children,

only 9% do not usually attend their nearest health facility, and within the poorest 40% of households, only 4% do not use their nearest facility, while 15% of children in upper quintile households (the richest 20%) travel beyond their nearest health facility to seek care. The main reasons for attending a more distant health service relate to choices based on perceptions of quality: preference for a private doctor, long waiting times at clinics, non-availability of medicines.<sup>15</sup>

In total, 4.3 million children travel more than 30 minutes to reach their usual health care service provider. This is a significant improvement since 2002, when 37% (or 6.9 million children) lived far from their nearest clinic.

It is encouraging that the greatest improvements in access have been made in provinces which performed worst in 2002: the Eastern Cape (where the proportion of children with poor access to health facilities dropped from 55% in 2002 to 37% in 2013), KwaZulu-Natal (down from 49% to 33%), Limpopo (from 43% to 24%) and North West (from 39% to 29%) over the 12-year period. Provinces with the highest rates of access are the largely metropolitan provinces of Gauteng and the Western Cape, at 9% and 8% respectively

There are also significant differences between population groups. Over a quarter (26%) of African children travel far to reach a health care facility, compared with only 3-8% of Indian, White and Coloured children. Racial inequalities are amplified by access to transport: if in need of medical attention, 95% of White children would be transported to their health facility in a private car, compared with only 10% of African children and 27% of Coloured children.

Poor children bear the greatest burden of disease, partly due to poorer living conditions and access to services (water and sanitation). Yet health facilities are least accessible to the poor. Over a third of children (34%) in the poorest 20% of households have to travel far to access health care, compared with 7% of children in the richest 20% of households.

There are no significant differences in patterns of access to health facilities when comparing children of different sex. Similarly, there are no significant differences across the lower age groups, but those in the upper age group (20-24) are slightly less likely to have to travel far to reach health facilities.

(Y-axis reduced to 70%) 70 60 Proportion of children (%) 50 40 30 20 10 0 EC FS GT KZN LP MP NW NC WC SA 54.8% 26.3% 15.8% 48.7% 42.7% 36.4% 38.9% 27.0% 12.6% 37.1% 2002 1,653,000 285,000 454,000 2,089,000 1,061,000 559,000 490,000 118,000 205,000 6,914,000 36.6% 21.8% 9.4% 32.9% 23.5% 23.1% 29.4% 18.5% 8.0% 23.4% 2013 978,000 201,000 338,000 1,347,000 357,000 77,000 4,347,000 523,000 378,000 150,000

Figure 3c: Children living far from their health facility, by province, 2002 & 2013

Source: Statistics South Africa (2003; 2014) General Household Survey 2002; General Household Survey 2013. Pretoria: Stats SA. Analysis by Katharine Hall & Winnie Sambu, Children's Institute, UCT.

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

Section 28(1)(c) of the Bill of Rights in the Constitution gives every child the right to basic nutrition. The fulfilment of this right depends on children's access to sufficient food. This indicator shows the number and proportion of children living in households where children are reported to go hungry "sometimes", "often" or "always" because there isn't enough food. Child hunger is emotive and subjective, and this is likely to undermine the reliability of estimates on the extent and frequency of reported hunger, but it is assumed that variation and reporting error will be reasonably consistent so that it is possible to monitor trends from year to year.

The government has introduced a number of programmes to alleviate income poverty and to reduce hunger, malnutrition and food insecurity, yet 2.5 million children (14%) lived in households where child hunger was reported in 2013. There was a significant drop in reported child hunger, from 31% of children in 2002 to 16% in 2006. Since then the rate has remained fairly consistent, suggesting that despite expansion of social grants, school feeding schemes and other efforts to combat hunger amongst children, there may be targeting issues which continue to leave households vulnerable to food insecurity.

There are large disparities between provinces and population groups. Provinces with relatively large numbers of children and high rates of child hunger are the North West (21%), the Northern Cape (20%) and KwaZulu-Natal (18%), which together have over a million children living in households that report having insufficient food for children. These provinces consistently reported high rates of child hunger throughout the past decade, although the proportion of children experiencing hunger has declined substantially in all provinces over the period. The Eastern Cape has had the largest decrease between 2002 and 2013, with reported child hunger having

reduced by 34 percentage points over the 12-year-period. Limpopo has a large rural child population with high rates of unemployment and income poverty, yet child hunger has remained well below the national average, reported at 4% in 2013.

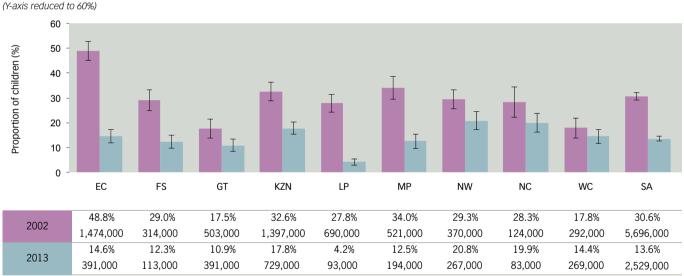
Hunger, like income poverty and household unemployment, is most likely to be found among African children. In 2013, some 2.4 million African children lived in households that reported child hunger. This equates to 15% of the total African child population, while relatively few Coloured (9%) children lived in households where child hunger was reported, and the proportions for Indian and White children were below 4%

Although social grants are targeted to the poorest households and are associated with improved nutritional outcomes, child hunger is still most prevalent in the poorest households: 23% of children in the poorest quintile go hungry sometimes, compared with 1% in the wealthiest quintile of households.

There are no significant differences in reported child hunger across age groups. However, over 800,000 children aged less than five years are reported to have experienced child hunger. Young children are particularly vulnerable to prolonged lack of food. Inadequate food intake compromises children's growth, health and development, increases their risk of infection, and contributes to malnutrition. Stunting (or low height-for-age) indicates an ongoing failure to thrive. It is the most common form of malnutrition in South Africa and affects 25% of children under five. <sup>16</sup>

It should be remembered that this is a household-level variable, and so reflects children living in households where children are reported to go hungry often or sometimes; it does not reflect the allocation of food within households.

Figure 3d: Children living in households where there is reported child hunger, by province, 2002 & 2013



Source: Statistics South Africa (2003; 2014) General Household Survey 2002; General Household Survey 2013. Pretoria: Stats SA. Analysis by Katharine Hall & Winnie Sambu, Children's Institute, UCT.

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