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 bio-demographic, 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) 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, as in many middle- and lower-income countries, the under-reporting 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 Africa National Burden of Disease Study has produced national and provincial infant and under-five mortality trends from 1997 up until 2012.[i]

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 Co-ordinating Committee because corrections have been made for known biases. In other words, the indicators shown in Table 3 are nationally representative. The RMS reports vital registration data adjusted for under-reporting which allow for evaluation of annual trends. They suggest the IMR peaked in 2003 when it was 53 per 1,000 and decreased to 25 per 1,000 in 2016. During the same period, the U5MR decreased from 81 per 1,000 to 34 per 1,000.

Table 3: Child mortality indicators, 2012 – 2016

INDICATOR	2012	2013	2014	2015	2016
Under-five mortality rate per 1,000 live births	41	41	40	37	34
Infant mortality rate per 1,000 live births	27	28	28	27	25
Neonatal mortality	12	11	12	12	12

Source: Dorrington RE, Bradshaw D, Laubscher R & Nannan, N (2018) *Rapid Mortality Surveillance Report 2016*. Cape Town: South African Medical Research Council.

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 12 deaths per 1,000 live births in 2016. Estimates of the NMR are derived directly from vital registration data (i.e. registered deaths and births without adjustment for incompleteness) up to 2013, and from 2013 onwards the estimates were derived directly from neonatal deaths and live births recorded in the District Health Information System for 2011– 2016.

The South African Demographic and Health Survey (SADHS) also reports child mortality rates. After a long gap (since 2003) the SADHS was conducted again in 2016.[5] For the period 2012 – 2016 the RMS estimated a slightly higher overall under-5 mortality rate than the Demographic and Health Survey – 42 vs 39 per 1,000. However, the SADHS infant mortality rate (IMR) for recent years is much higher than the IMR from the RMS (35 vs 27 per 1,000 live births for the period 2012 – 2016). The SADHS estimates are likely too high because the neonatal mortality rate is too high.

i These profiles can be seen at: http://www.mrc.ac.za/bod/reports.htm

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 as the 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.[6] 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 and affordable), acceptable and of good quality.[7] 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 Road-to-Health book.[8]

A fifth (20%) of South Africa's children live far from the primary health care facility they normally use, and 94% attend the facility closest to their home. Within the poorest 40% of households, only 3% do not use their nearest facility, while 16% 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, or wanting to avoid long waiting times, inconvenient opening times, unavailable medicines and (in 4% of cases) rude staff.[9]

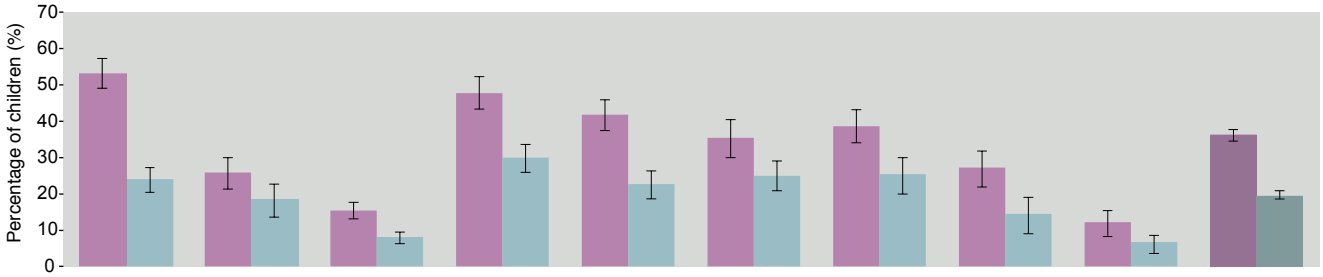
In total, 3.9 million children travel more than 30 minutes to reach their usual health facility. This is a significant improvement since 2002, when 36% of children lived far from their nearest clinic.

It is encouraging that the greatest improvements are in provinces which performed worst in 2002: the Eastern Cape (where poor access to health facilities dropped from 53% in 2002 to 24% in 2017), KwaZulu-Natal (down from 48% to 30%), Limpopo (from 42% to 23%) and North West (from 39% to 25%) over the 16-year period. Provinces with the highest rates of access are the largely metropolitan provinces of the Western Cape (where only 6% of children live far from their usual health care service) and Gauteng (8%).

There are also significant differences between population groups. A quarter (22%) of African children travel far to reach a health care facility, compared with between 6%, 8% and 9% of Indian, White and Coloured children respectively. Racial inequalities are amplified by access to transport: if in need of medical attention, 90% of White children would be transported to their health facility in a private car, compared with only 10% of African children and 23% of Coloured children.

Poor children bear the greatest burden of disease, due to under-nutrition and poorer living conditions and access to services (water and sanitation). Yet health facilities are least accessible to the poor. More than a quarter of children (28%) 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 between different sex and age groups.

Figure 3a: Children living far from their health facility, by province, 2002 & 2017



	EC	FS	GT	KZN	LP	MP	NW	NC	WC	**SA**
2002	53.2%	25.9%	15.4%	47.9%	41.7%	35.4%	38.8%	27.2%	12.4%	36.2%
	1,559,000	259,000	453,000	1,988,000	1,010,000	538,000	451,000	108,000	199,000	6,568,000
2017	24.1%	18.5%	7.9%	30.0%	22.6%	25.2%	25.3%	14.6%	6.5%	19.7%
	610,000	186,000	325,000	1,246,000	537,000	418,000	342,000	63,000	127,000	3,856,000

Source: Statistics South Africa (2003; 2018) *General Household Survey 2002; General Household Survey 2017*. Pretoria: Stats SA.
Analysis by Katharine Hall & Winnie Sambu, Children's Institute, UCT.

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 2.3 million children (12%) lived in households where child hunger was reported in 2017. There was a significant drop in reported child hunger, from 30% of children in 2002 to 16% in 2006. Since then the rate has remained fairly consistent, suggesting that despite the expansion of social grants, school feeding schemes and other efforts to combat hunger amongst children, many households remain vulnerable to food insecurity. South Africa therefore has some way to go if it is to achieve the Sustainable Development Goal target of ending hunger by 2030.[10]

There are large disparities between provinces and population groups. Provinces with relatively large numbers of children and high rates of child hunger are the KwaZulu-Natal (18%), North West (16%), Free State (15%), Mpumalanga (14%), and the Western Cape (11%). Together these provinces have over 1.6 million children living in households that report having insufficient food for children. The Northern Cape has the highest percentage of children living in households where there was child hunger, though the province has the lowest child population in the country. The Eastern Cape has had the largest decrease between 2002 and 2017, with reported child hunger being reduced by 41 percentage points over the 16-year-period from 48% to 7%. 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 3% in 2017.

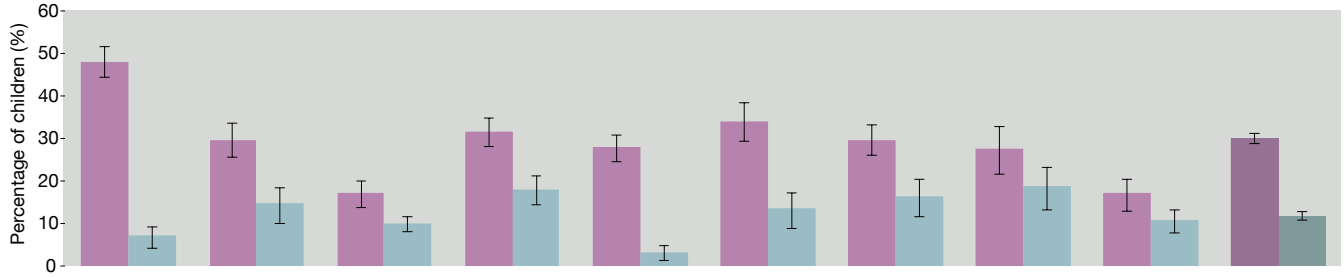
Hunger, like income poverty and household unemployment, is most likely to be found among African children. In 2017, some 2.2 million African children lived in households that reported child hunger. This equates to 13% of the total African child population. Eight percent of Coloured children were reported to live in households where there was child hunger, while the hunger rates for Indian children was 4% and White children below 1%.

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: 19% of children in the poorest quintile go hungry sometimes, compared with less than 1% in the wealthiest quintile. The differences in child hunger rates across income quintiles are statistically significant.

There are no significant differences in reported child hunger across age groups. However, more than 820,000 children younger than five years old are reported to have experienced child hunger, signalling a risk of under-nutrition. Young children are particularly vulnerable to prolonged lack of food, which increases their risk of stunting. Inadequate food intake compromises children's growth, health and development; increases their risk of infection; and contributes to malnutrition.

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. The indicator also doesn't reflect the quality of food, including dietary diversity, which has been found to affect the nutritional status of children under five years.

Figure 3b: Children living in households where there is reported child hunger, by province, 2002 & 2017



	EC	FS	GT	KZN	LP	MP	NW	NC	WC	**SA**
2002	48.0%	29.7%	17.1%	31.7%	27.9%	34.0%	29.7%	27.5%	17.1%	30.1%
	1,407,000	297,000	503,000	1,314,000	675,000	518,000	346,000	109,000	275,000	5,455,000
2017	7.1%	14.8%	10.1%	18.0%	3.4%	13.6%	16.3%	18.6%	10.9%	11.8%
	180,000	149,000	413,000	747,000	80,000	226,000	220,000	81,000	213,000	2,309,000

Source: Statistics South Africa (2003; 2018) *General Household Survey 2002; General Household Survey 2017*. Pretoria: Stats SA.
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Teenage pregnancy

This indicator shows the number and proportion of young women aged 15 – 24 who are reported to have given birth to a live child in the past year.

Teenage 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 percentage 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.[11] Teenage fertility rates declined after the 1996 Census, and Department of Health data between 2004 and 2013 showed no increase in the share of teenagers aged 15 – 19 who attended antenatal clinics.[12] The report on the 2015 national antenatal HIV prevalence survey states that the proportion of participants (i.e. pregnant women presenting at antenatal clinics for testing) "seems to be shifting towards the older age groups…. There has been a marked decline in participants under the age of 25 years and an increase in participants over 25 years".[13]

Fertility rates are, of course, 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 2015, 11.8% in the 15 –19 age group and 23.2% of those aged 20 – 24 were HIV positive.[14] There is a strong association between early childbearing and maternal mortality, and the majority of deaths in young mothers are caused by HIV.[15] It is important that safe sexual behaviour is encouraged and practised.

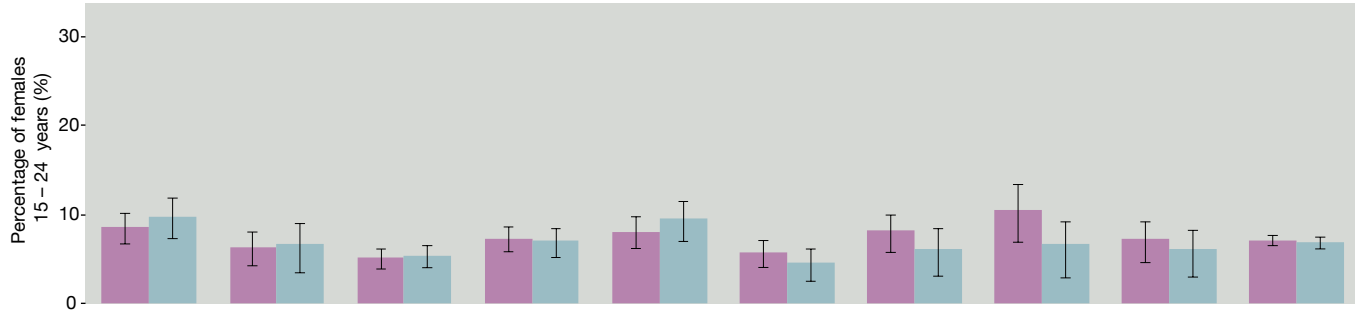
Studies have found that early childbearing – particularly by teenagers and young women who have not completed school – has a significant impact on the education outcomes of both the mother and child, and is also associated with poorer child health and nutritional outcomes.[16] For this reason is it important 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.[17] 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.[18] This suggests that greater effort should be made to assist young mothers to obtain birth certificates to apply for the 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 6.9% in 2017. There has been no significant change in this rate since 2009 when the question was first asked, and the estimated number of young women giving

Figure 3c: Annual childbearing rates among young women aged 15 – 24 years, by province, 2009 & 2017



	EC	FS	GT	KZN	LP	MP	NW	NC	WC	**SA**
2009	8.5%	6.3%	5.2%	7.3%	8.1%	5.7%	8.1%	10.5%	7.2%	7.1%
	58,000	17,000	50,000	77,000	50,000	23,000	24,000	11,000	34,000	346,000
2017	9.8%	6.7%	5.4%	7.0%	9.5%	4.6%	6.2%	6.7%	6.1%	6.9%
	56,000	16,000	61,000	69,000	52,000	19,000	18,000	7,000	32,000	332,000

Source: Statistics South Africa (2010; 2018) *General Household Survey 2009; General Household Survey 2017*. Pretoria: Stats SA.
Analysis by Katharine Hall, Children's Institute, UCT.

birth in a year has remained fairly stable. As would be expected, childbearing rates increase with age. Less than 3% of girls aged 15 – 17 were reported to have given birth in the previous 12 months (representing 36,000 teenagers in this age group).

Childbearing rates rose to 7% among 18 – 20-year-olds (94,000 when weighted), and 10% in the 21 – 24 age group (199,000). These rates have also been stable over the past decade.

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