HIV and AIDS in South Africa

KEY POINTS

- South Africa has the biggest HIV epidemic in the world, with 7.1 million people living with HIV. HIV prevalence is high among the general population at 18.9%.
- Men who have sex with men, transgender women, sex workers and people who inject drugs experience even higher HIV prevalence rates.
- South Africa has made huge improvements in getting people to test for HIV in recent years and is now almost meeting the first of the 90-90-90 targets, with 86% of people aware of their status.
- The country has the largest ART programme in the world, which has undergone even more expansion in recent years with the implementation of ‘test and treat’ guidelines.
- South Africa was the first country in sub-Saharan Africa to fully approve PrEP, which is now being made available to people at high risk of infection.

South Africa has the biggest and most high-profile HIV epidemic in the world, with an estimated 7.2 million people living with HIV in 2017.1 South Africa accounts for a third of all new HIV infections in southern Africa.2

In 2017, there were 270,000 new HIV infections and 110,000 South Africans died from AIDS-related illnesses.3

South Africa has the largest antiretroviral treatment (ART) programme in the world and these efforts have been largely financed from its own domestic resources. In 2015, the country was investing more than $1.34 billion annually to run its HIV programmes.4
The success of this ART programme is evident in the increases in national life expectancy, rising from 61.2 years in 2010 to 67.7 years in 2015.5

HIV prevalence remains high (18.9%) among the general population, although it varies markedly between regions.6 For example, HIV prevalence is almost 12.2% in Kwazulu Natal 7 compared with 6.8 and 5.6% in Northern Cape and Western Cape, respectively.8 9

Groups most affected by HIV in South Africa

South Africa's National Strategic Plan 2017-2022 identifies a number of groups who are particularly at risk of HIV transmission.10

Sex workers and HIV in South Africa

Nationally, HIV prevalence among sex workers is estimated at 57.7%, although this varies between areas, with prevalence estimated at 71.8% in Johannesburg, 53.5% in Durban and 39.7% in Cape Town.11 12

Certain factors increase HIV risk for South African sex workers, including poverty, the number of dependents they have and lack of alternative career opportunities.13 Injecting drug use is also common among sex workers, exacerbating their vulnerability to HIV infection.14

Studies have also found that understanding of HIV risk is often low among female sex workers. In Durban it was reported that only 4.6% of female sex workers could correctly identify HIV transmission risks and reject myths.15

In 2015, it was found that only 19% of female sex workers living with HIV in Johannesburg were accessing treatment, rising to 25.6% in Durban and 27.7% in Cape Town.16 These rates are well below the national average. This could be because sex workers in South Africa face high levels of stigma and discrimination and are restricted by the laws under which they work. Although South Africa is moving towards decriminalising sex work, carrying condoms can still be considered an
offence. Nevertheless, in 2016, 86% of female sex workers reported using a condom with their last partner.17

Until recently South Africa has not had a comprehensive and nationally co-ordinated HIV plan for sex workers. In 2016, the South African government launched a progressive new National Sex Worker HIV Plan, outlining a new peer-led approach to providing HIV services that had been tailored to meet the specific needs of sex workers.18

However, educational organisations have reported difficulties in delivering HIV prevention services to sex workers due to ongoing police harassment. One study found that up to 70% of female sex workers had experienced abuse by the authorities.19

The police officer raped me, then the second one, after that the third one did it again. I was crying after the three left without saying anything. Then the first one... let me out by the back gate without my property. I was so scared that my family would find out.

- Female sex worker, Cape Town[fn]Women's Legal Centre (2012) 'A Report On Human Rights Violations By Police Against Sex Workers In South Africa'

Men who have sex with men (MSM) and HIV in South Africa

HIV prevalence among men who have sex with men (sometimes referred to as MSM) in South Africa is now estimated at 26.8%. 20 This varies geographically but it is reported to have risen by more than 10% in Johannesburg, Cape Town and Durban since 2008.21

Despite a constitution that protects the rights of LGBT communities, many men who have sex with men face high levels of social stigma and homophobic violence as a result of traditional and conservative attitudes within the general population. There is also a lack of knowledge around the issues that face men who have sex with men, this makes it difficult for these men to disclose their sexuality to healthcare workers and get the healthcare they need.22

There’s also discrimination whereby you find these old kinds of nurses who don’t have this knowledge about gays and lesbians ... when you go to clinics and then maybe let’s say you have an STI or something. They then start calling you names, and saying, 'Guys don’t sleep with guys, why do you do that?... Boys don’t sleep together'.

- Gay man living in Free State, South Africa.23

However, there is evidence that attitudes are changing. In 2013, a study found that only 32% of
South Africans said homosexuality should be accepted by society. A more recent study in 2016 found 55% of South Africans would accept a gay family member; 51% said gay people should have the same human rights as others; and two-thirds supported keeping the constitutional protections against discrimination on the basis of sexual orientation.

Nevertheless, the same study found that 72% of people said same-sex sexual activity was morally wrong; 18% either had, or would consider, verbally abusing someone who is not gender conforming.

In 2017, the South African government released a national LGBT HIV strategy for the first time, recognising that these groups have specific needs that have been overlooked in the past. The new strategy aims to provide the basis for more inclusive services so that LGBT communities have ‘the necessary tools to realise their health and human rights goals’.

Among the recommendations made in this strategy is increasing the availability of lubricants for men who have sex with men and providing them with Pre-exposure Prophylaxis (PrEP) to protect them from infection.

Transgender women and HIV in South Africa

Transgender women in Sub-Saharan Africa are twice as likely to have HIV as men who have sex with men.

However, these populations have often been neglected by both policy and research in South Africa, where trans women have either been excluded from participating in studies or been categorised as men who have sex with men. In January 2018, the first study to investigate HIV prevalence in transgender women in South Africa was launched. With this study will come an insight into the drivers of HIV amongst transgender women, and so the means for better targeted interventions in this community.

The South African National AIDS Council’s LGBTI HIV Framework recognises transgender women as a key affected population. To address the high HIV prevalence in this group they have developed peer-led interventions, in which members of the transgender community will identify other at risk individuals and help to provide them with psycho-social support as well as better targeted information and services.

Stigma is another major barrier to transgender individuals receiving care. GenderDynamix, a South African NGO that promotes transgender rights, have released a report showing the role healthcare provider stigma can play in putting trans women off accessing HIV prevention services.

Yes. I tested for HIV and was not of the best as the person who pricked me urged me to change my life - as I being like I am is immoral, she said.

- Anonymous

People who inject drugs (PWID) and HIV in South Africa

Data on HIV prevalence among people who inject drugs (sometimes referred to as PWID) in South Africa is very limited and, where it does exist, is based on small sample sizes. In 2016, an estimated
17% of people who inject drugs in South Africa were living with HIV. However, people who inject drugs only account for 1.3% of new HIV infections in South Africa.

A 2016 study of people who inject drugs in five South African cities found 32% of men and 26% of women regularly shared syringes and other injecting equipment and nearly half reused needles.

People who inject drugs are also associated with other high-risk behaviours such as sex work and unsafe sexual practices. For example, the same study reported fewer than half of those surveyed used a condom during their last sexual encounter.

Children and orphans and HIV in South Africa

In 2017, an estimated 280,000 children (aged 0 to 14) were living with HIV in South Africa, only 58% of whom were on treatment.

New infections have declined among South African children, from 25,000 in 2010 to 13,000 in 2017. This is mainly due to the success of prevention of mother-to-child transmission (PMTCT) programmes. The rate of mother-to-child transmission stood at 1.3% in 2017, down from 3.6% in 2011. This puts South Africa on track for eliminating mother to child transmission.

As it stands, for every child initiated on to treatment, 1.4 are newly infected with HIV.

Children are also affected by HIV through the loss of family members. In South Africa more than 2 million children have been orphaned by HIV and AIDS. Orphans are particularly vulnerable to HIV because of economic and social insecurities; they are often at risk of being forced into sex, have sex in exchange for support, and typically become sexually active earlier than other children.

The National Strategic Plan 2017-2022 aims to renew the focus on children, putting emphasis on eliminating new infections and building resilience in families.

Women, adolescent girls and HIV in South Africa

HIV prevalence among young women in South Africa is nearly four times greater than that of men their age. Young women between the ages of 15 and 24 made up 37% of new infections in South Africa in 2016. To try and reduce this high rate of infection, young women and adolescent girls who are considered at high risk of HIV infection are now being offered pre-exposure prophylaxis (PrEP).

Poverty, the low status of women and gender-based violence (GBV) have all been cited as reasons for the disparity in HIV prevalence between genders. Indeed GBV attributable to an estimated 20–25% of new HIV infections in young women.

Intergenerational relationships - between older men and younger women - are understood to be driving a cycle of infections. Sexual partnering between young women and older men, who might have acquired HIV from women of a similar age, is a key factor driving transmission. The National Strategic HIV Plan has centred its approach to HIV prevention around interrupting this cycle.

In 2016, the government launched a national campaign to try and improve these health outcomes for women. The ‘She Conquers’ campaign focused on decreasing teenage pregnancies, preventing gender-based violence, keeping girls in school, and increasing economic opportunities for young women. All of these would protect women from falling into this cycle of transmission.
Lebogang Motsumi was 27 when she acquired HIV from a ‘sugar daddy’ – a man significantly older than her who was capable of showering her with the gifts she believed she needed to fit in with her friends and feel more accepting of herself. She was reluctant to use a condom because she feared being perceived as promiscuous by men and felt she was “not in control” of the situation when she was with her sexual partners.

Now a mother, Motsumi says she wishes she had received more information at home and at school about risky sexual behaviour, and is using her experience to advocate non-judgemental, face-to-face conversations with young people about relationships with older men.

HIV testing and counselling (HTC) in South Africa

South Africa has made impressive progress in recent years in getting more people to test for HIV. In 2017, South Africa reached the first of the 90-90-90 targets, with 90% of people living with HIV aware of their status, up from 66.2% in 2014.

This progress follows the launch of two nationwide testing initiatives: the national HIV testing and counselling (HTC) campaign of April 2010 and the HTC revitalisation strategy in 2013 which focused on getting people from the private sector, farms and higher education to test. Thanks to campaigns such as these, more than 10 million people in South Africa test for HIV every year.

Yet the progress made in getting people to test has been uneven. In South Africa women are much more likely to test than men. This is partly because PMTCT programmes enable women to access HIV testing services during routine antenatal appointments.

However, there are other barriers to men testing. Recent research has shown that men often are reluctant to test, as they see health facilities as being ‘women’s places’ and so feel that testing for HIV is non-masculine and might be seen as weak. Men report worrying that queueing outside a testing facility will be taken as evidence that they are living with HIV, and also talk of avoiding testing because they are ‘terrified’ of a positive result.

In South Africa, links have also been made between an individual’s socio-economic background and the likelihood they will test for HIV. Those who have taken an HIV test and know their status are more likely to have a higher level of education, be employed, have accurate HIV knowledge and a higher perception of risk.

Although rates of HIV testing gave similar across provinces, ranging from 82% in Gauteng to 88.3% in KwaZulu-Natal, the likelihood of an individual having tested for HIV increases if they are living in an urban setting. Those living in rural areas are as much as two times less likely to have tested for HIV.

The new National Strategic Plan has identified closing these testing gaps as being a key priority in the coming years. They plan on decentralising testing, so that more work places and community settings are able to provide HIV tests.

As well as this the country will be rolling out self-testing on a wider scale. Initial trials have shown that 88% of those who refuse traditional testing, accept the offer of HIV self-testing.
There are many people who want to test and who do not want to interface with the healthcare system. We believe the more people testing, the better. Let's get as many people to test as possible.\textsuperscript{68}

**HIV prevention programmes in South Africa**

South Africa aims to reduce the annual number of new infections to under 100,000 by 2022.\textsuperscript{69} It has also committed to achieving zero new infections due to mother-to-child transmission.\textsuperscript{70}

**Prevention of mother-to-child transmission (PMTCT)**

Over the past decade, South Africa has made great progress in reducing mother-to-child transmission (MTCT) of HIV, due largely to improvements in the choice of antiretroviral medicines and the widespread accessibility of the PMTCT programme.\textsuperscript{71} In 2016, more than 95\% of HIV-positive pregnant women received antiretroviral medicine to reduce the risk of MTCT.\textsuperscript{72}

As a result MTCT rates have fallen from 3.6\% to 1.5\% between 2011 and 2016 - achieving the national target for 2015 of a transmission rate below 2\%.\textsuperscript{73} The number of children born with HIV has now fallen to below 6,000 in 2015 meaning that the country is on-track to eliminate MTCT.\textsuperscript{74} However, to achieve this the goal of zero transmissions the focus must be on getting mothers to adhere to treatment throughout breastfeeding as well as during pregnancy and birth.\textsuperscript{75} Maternal mortality is also declining but at a much slower rate. The previous national HIV strategy aimed to reduce maternal mortality by three quarters between 1990 and 2015, from 150 deaths per 100,000 live births to 38 per 100,000. However these targets weren’t met, the maternal mortality rate was reported at 119 per 100,000 in 2015 and 116.9 in 2017.\textsuperscript{76,77} ‘Let our actions count: South Africa’s National Strategic Plan for HIV, TB and STIs 2017-2022’

**Condom use and distribution**

Between 2007 and 2010, South Africa’s distribution of male condoms increased by 60\%, from 308.5 million to 495 million a year. In the most recent National Strategic Plan, the South African National AIDS Council aimed to increase the number of male condoms distributed annually to 850 million by 2018.\textsuperscript{78} South Africa’s female condom programme is also one of the biggest and most established in the world, with over 26 million female condoms (also known as internal condoms) distributed in 2016.\textsuperscript{79} By 2022, the South African National AIDS Council hopes to increase this to 40 million.\textsuperscript{80}

While condom distribution may have increased in recent years, there is evidence that the use of condoms may be declining. In 2008, 85\% of 15-24 year old males reported using a condom during their last sexual encounter, by 2012 this had fallen to 68\%. Condom use among men aged 25-49 also decreased from 44\% to 36\%. The same survey reported that 53\% of participants had never used condoms.\textsuperscript{81}

Challenges remain in ensuring that condom programmes are able to serve all groups, particularly those with higher HIV risk. The new strategy will expand condom distribution, making them available at non-traditional outlets such as hair salons, petrol stations, spaza shops, hotels, toll plazas, truck stops and brothels, as well as secondary schools and non-traditional community settings.\textsuperscript{82}
Voluntary medical male circumcision (VMMC)

In 2010, research emerged from sub-Saharan Africa suggesting that voluntary medical male circumcision (VMMC) can reduce the risk of female-to-male HIV transmission by up to 60%. This led the South African government to rapidly roll out a national VMMC programme, which aimed to reach 80% of HIV-negative men (4.3 million) by 2016. In 2016, it was reported that 50-79% of eligible men had been reached by VMMC programming. In 2016 over 491,859 circumcisions were performed in South Africa.

Across the country the VMMC programme has mostly been well received with 78% of women preferring their partner to be circumcised according to the 2011 youth sex survey.

PrEP

In December 2015 South Africa became the first country in sub-Saharan Africa to fully approve pre-exposure prophylaxis (PrEP), the use of antiretroviral drugs to protect HIV-negative people from infection.

In 2017, it was estimated that between 30,000 and 35,000 individuals were being targeted with PrEP in ongoing and planned projects across South Africa. The 2017-2022 National Strategic Plan aims to expand this, so that PrEP becomes available to all those who are most likely to benefit, including adolescents, sex workers, men who have sex with men and people who inject drugs. They predict that 85,858 more people from the most affected groups will be initiated onto PrEP by 2022.

An initial trial of PrEP was conducted amongst South African women, in 2015. Results showed an adherence rate of 76% among the trial population, demonstrating that women in South Africa were both able and willing to use PrEP. These results pave the way for the wider implementation of PrEP.

People ask me, 'How can you afford to implement new interventions?' and I always reply, 'How can we afford not to?' Once you answer this question, you will find the way to work it out.

- Aaron Motsoaledi, South Africa’s Minister of Health

HIV education

Recent studies have found that only 59% of young people in South Africa have comprehensive knowledge of ways to prevent HIV (compared to 85% in eSwatini). Only 5% of schools were providing comprehensive sexuality education in South Africa in 2016, but over the next five years the government has committed to increasing this to 50% in high burden areas.

Previous analyses have found that providing comprehensive sexuality education in South African schools led to a 33% reduction in genital herpes (HSV2) incidence in young people, a significant decrease in physical violence or sexual assault perpetrated by young men, and a lower proportion of young men engaging in transactional sex with a casual partner.

Barriers to providing comprehensive sex education in schools include high drop-out rates, a
shortage of teacher training, and resistance in schools because of the perceived sensitive nature of the subject matter.95

We need to be able to assist our learners to prevent and report incidents of violence and I think this more in-depth training will help. These topics are so important to the emotional, social and moral development of learners who need to feel equipped to make the right decisions in their lives.

- Sexuality teacher, Life Orientation Programme, South Africa

HIV awareness

The 2012 National Communication Survey on HIV/AIDS found the country’s HIV communication programmes were having a positive effect, particularly on youth (aged 15-24), with an increase in condom usage, uptake of testing services and male circumcision. By contrast, knowledge around safe breastfeeding practices among pregnant mothers living with HIV remains low.96

The main HIV awareness campaigns include:

- loveLife

Founded in 1999, loveLife is best known for its ‘ABC’ billboard campaign, that promoted ‘abstinence, be faithful and condomise’ in the early years of the epidemic. However, the organisation has since turned its attention to breaking down the social and structural drivers of HIV among young people, including poverty and lack of opportunities. They promote the economic empowerment of young people, using a range of different communication techniques, including TV and Radio.97 Lovelife’s radio programmes reached over 12 million listeners in South Africa with health content in 2015.98

- Soul City Institute

The Soul City Institute is another NGO that focuses on health promotion in South Africa, most notably using TV and Radio to provide edutainment programmes. Biggest successes in the past have included the Soul City and Soul Buddyz series, targeting adults and children respectively. Soul City, was able to reach 70% of over 16s, including 65% of rural people and 50% without any formal education, while Soul Buddyz became one of the most successful family television shows produced in South Africa. 67% of 8-12 year olds watched, read or listened to Soul Buddyz (about four million children).99

A more recent endeavour, called ‘Untold Stories: In a time of HIV’, has again sought to address drivers of HIV, through edutaining programmes. The series was made in collaboration with nine other countries in southern Africa. Each episode focused on a different context relevant topic. A recent report showed that those who watched the programme often reported having discussed the issues raised with others and there is evidence that it produced behaviour change such as increasing HIV testing.100

- MTV Shuga
MTV Shuga is a mass-media behaviour-change campaign that aims to improve the sexual and reproductive health of young people. It began in 2009 and centres around an awarding-winning TV series, supported by radio, digital, social media and mobile elements. Previous series have been set in Kenya and Nigeria.

The most recent series of MTV Shuga was set in Johannesburg. It aired in 2016 and featured the show’s first LGBT character. 101

Evaluations of previous series have found that viewers of MTV Shuga were more likely to get tested for HIV and the airing of the show was associated with reduced chlamydia infections in young women.102

Antiretroviral treatment (ART) availability in South Africa

South Africa has the largest ART programme in the world. In 2018, UNAIDS reported that 4.4 million people were receiving treatment in South Africa. This equates to 61% of the people living with HIV in the country.103

South Africa’s ART services have undergone dramatic expansion in recent years, in keeping with the World Health Organization’s (WHO) changing guidelines. In 2016, South Africa implemented ‘test and treat’, whereby everyone with a positive diagnosis was eligible to start treatment. This has meant that the number of people eligible for treatment has increased from 3.39 million in the middle of 2015 to 7.1 million in 2016 – more than doubling in just one year.104 105

Initially many were concerned that the dramatic scale-up of ART would result in clinics and services becoming over-stretched and that the quality of care would suffer as a result. However, one year on, studies have shown that the increase in ART provision has had no significant effect on patient outcomes, either in terms of either AIDS-related deaths or illnesses.106
Studies have, however, highlighted other issues around treatment provision. They found that men were more likely to start ART at an older age and later stage of infection and had almost double the mortality rate than that of women. This again highlights the need to engage men in testing services and ensure that they are linked to treatment.\textsuperscript{107}

Commenting on the current challenges around treatment in an interview with Avert, Sibongile Tshabalala, Chairperson of the Treatment Action Campaign said:

Now we have moved to 'test and treat', the disparity of health between rich and poor is smaller. Although there is still a lot of stigma, the normalisation of treatment is helping people talk differently about HIV. The main challenge around treatment is stopping people from defaulting, either because pastors and churches suggest that they are not needed or because people cannot cope with poor side effects including depressive symptoms.

\textbf{Civil society response in South Africa}

In March 2015 it was estimated that there were 136,453 civil society organisations working in the South African HIV response.\textsuperscript{108} A new civil society forum was created in 2017, to provide a platform for civil society and government to work together in the HIV response.\textsuperscript{109}

One of the most notorious civil societies is the Treatment Action Campaign, formed in 1998. They have been a driving force in the South African response ever since, promoting access to HIV treatment and care for all South Africans.\textsuperscript{110} Their first major success came in 2002, with the Constitutional Court ruling that the South African government must provide antiretrovirals to prevent mother-to-child-transmission.\textsuperscript{111} They are currently campaigning to improve and strengthen the health care system.\textsuperscript{112}

Funding is a major issue facing many civil society organisations. Drops in external funding are making civil society organisations more dependent on financing from the government. While domestic funding is a more sustainable model, the shift has increased competition amongst organisations, and is seen by some as undermining their ability to challenge government policy in their work.\textsuperscript{113}

\textbf{HIV and tuberculosis (TB) in South Africa}

Tuberculosis is the leading cause of death in South Africa.\textsuperscript{114} The country has the world's sixth largest tuberculosis (TB) epidemic, with a TB incidence rate of 438,000 in 2016.\textsuperscript{115}

The HIV epidemic in South Africa fuels the TB epidemic because people living with HIV are at a far higher risk of developing TB due to weakened immune systems. It is estimated that 60% of people living with HIV in South Africa are also co-infected with TB. In 2016 there were 73,000 HIV/TB deaths.\textsuperscript{116}
In light of this, the South African National AIDS council, combined the HIV and STI strategy with the national TB strategy, to improve the integration of these two services. One of the aims of this strategy is to get more people living with HIV on isoniazid preventative therapy, a preventative medicine for TB.

The TB treatment success rate has improved in recent years, and stood at 83% in 2016. South Africa plans to complete its National TB Prevalence Survey by the end of 2018.

We cannot fight AIDS unless we do much more to fight TB.


**HIV funding in South Africa**

South Africa largely funds its HIV programmes domestically, only receiving 13% of its HIV funding from external sources.

The new National Strategic Plan of the South African National AIDS Council is predicted to cost 207 billion rand over the next five years. In light of this the South African government has increased its budget allocation for HIV and AIDS in 2017, despite general budget reductions across the health sector.

Still the South African National AIDS Council predicts that there will be some funding gaps, however at these early stages it is unclear how severe these will be, especially since there is a level of uncertainty around the availability of international funding for HIV and AIDS in the coming years, particularly from US funding bodies with the new Trump administration.

Treatment and care make up the biggest proportion of the costs, outlined in the National Strategic Plan (NSP). In recent years South Africa has been working hard to negotiate better prices for ARVs, having previously been paying more than most other low and middle income countries despite having the world’s largest procurement programme. In September 2017, UNAIDS announced a breakthrough pricing agreement, which will allow the single pill regime of Dolutegravir to be sold at around $75 per person per year, in south Africa and 90 other low and middle income countries.

The NSP outlines plans to roll-out Dolutegravir. It is thought that the introduction of these medicines will help reduce some of the treatment costs, having been proved to be safer and more effective that the regimens currently being used.

**The future of HIV and AIDS in South Africa**

South Africa has made great strides in tackling its HIV epidemic in recent years and now has the biggest HIV treatment programme in the world. Moreover, these efforts are now largely funded from South Africa's own resources.

HIV prevention initiatives are having a significant impact on mother-to-child transmission rates in particular, which are falling dramatically. New HIV infections overall have fallen by half in the last decade, however, there are still too many.

While the short term financing of South Africa’s HIV epidemic is secure, in the longer term, the
government needs to explore other strategies in order to sustain and expand its progress.

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