

BEING ALHIV AND STAYING ALIVE:

What do we know about adolescents living with HIV in South Africa?

As we approach the fourth decade of the HIV epidemic, gaps remain in understanding the health, behaviour and lived experiences of adolescents living with HIV in South Africa. *Inbarani Naidoo, Alicia North, Musawenkosi Mabaso and Nompumelelo Zungu* report key findings from a [recently completed research study](#) that explored the context and lived experiences of adolescents aged 10–19 years living with HIV in South Africa.

Many adolescents are infected with HIV before their fifteenth birthday.

Photo: Ron Lach, Pexels

Approximately 1.7 million adolescents aged 10–19 years are living with HIV in the world, the majority of them in sub-Saharan Africa. In addition, South Africa ranks as the highest HIV-burdened country in the world. New infections continue to occur, particularly among older adolescents. The pool of adolescents living with HIV (ALHIV) is not diminishing over time. South Africa needs to intensify prevention programmes from early adolescence to mitigate the later risk for HIV acquisition.

Adolescents acquire HIV through two main routes; mother-to-child transmission (perinatal) or through sexual transmission. When [compared with adults living with HIV](#), ALHIV are less likely to know their HIV status or to access antiretroviral therapy (ART). Even after being initiated to ART, many are lost to follow-up and struggle with adherence.

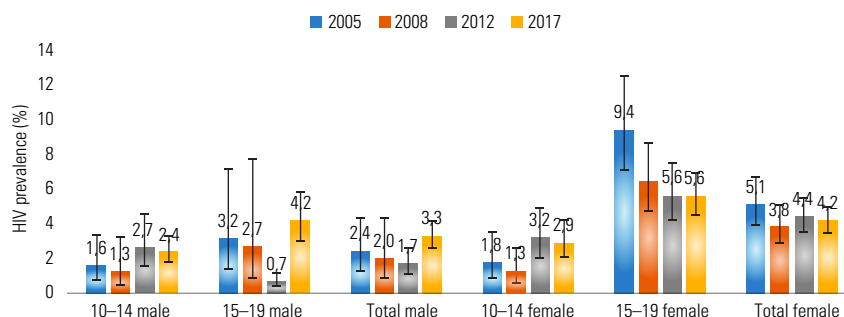
The key [findings](#) presented below are based on data collected from the South African National HIV Prevalence, Incidence, Behaviour and Communication Surveys, which were conducted from 2005 to 2017. The methods used in these surveys rendered the findings generalisable to the whole population. We focused on describing who the ALHIV were (demographics); the number of HIV infections among adolescents (HIV prevalence); the number of new infections among adolescents (HIV incidence); their HIV-related risk behaviours; and knowledge and misconceptions about HIV.

HIV prevalence highest among older teenage girls

In South Africa, HIV testing of children is not routine and many asymptomatic children with HIV remain undiagnosed. Moreover, their parents or caregivers have to provide consent for them to be [tested if they are 12 years or younger](#). Even during adolescence, the rationale for testing would mainly be determined by exposure to potential sexual transmission or, for females, during pregnancy.

Our research found that HIV prevalence among adolescents in the 10–19-year age group declined from 3.6% in 2005 to 3.0% in 2012, but increased to 3.7% in 2017. That means 360 582 adolescents aged 10–19 years were living with HIV in South Africa in 2017. This substantial number, coupled with the proportion of ALHIV who did not know their HIV status, points to a need for a provider-initiated HIV testing campaign targeted at children and adolescents, especially those born to HIV-positive mothers or who were exposed to HIV sexually. This can promote early diagnosis and referral for treatment.

Figure 1. HIV prevalence among adolescents aged 10–19 years, South Africa 2005–2017



Our calculation of HIV prevalence among adolescents revealed differences by age and gender (Figure 1). A total of 136 913 were 10–14 years old while 223 669 were 15–19 years old. Among all ALHIV aged 10–19 years, 202 923 were female and 157 659 were male. Females aged 15–19 years had the highest HIV prevalence compared to other age groups and also had the most HIV infections throughout all survey years.

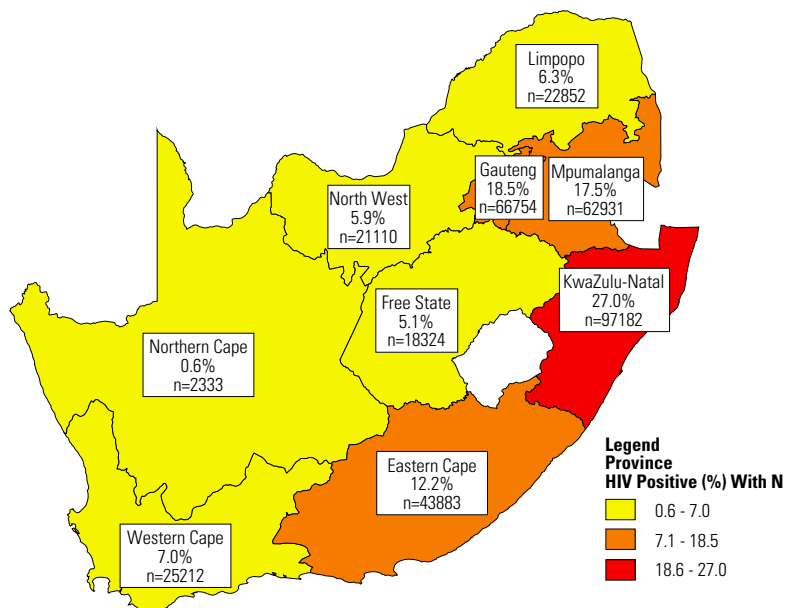
Half of ALHIV not yet on treatment

Less than two-thirds of HIV-positive adolescents (62.3%) aged 10–19 years knew their status, which means that nearly 4 in 10 adolescents with HIV indicated that they did not know their status. Similarly, only about two-thirds (65.4%) of ALHIV who knew their HIV status were on ART. Among ALHIV on ART, 78.1% had viral suppression. This suggests that nearly half of ALHIV (49%) were not receiving treatment and were at risk of transmitting HIV to others.

Who are the ALHIV in South Africa?

In the 2017 survey, 8 741 adolescents provided a sample for HIV testing. Nearly all ALHIV (95.4%) were black African. The majority of adolescents aged 15–19 years were in school (86.7%) or unemployed (94.2%). A total of 3.6% of female ALHIV said they were married. Figure 2 shows the distribution of ALHIV by province.

Figure 2. Map showing proportion (%) of ALHIV aged 10–19 years by province, South Africa, 2017

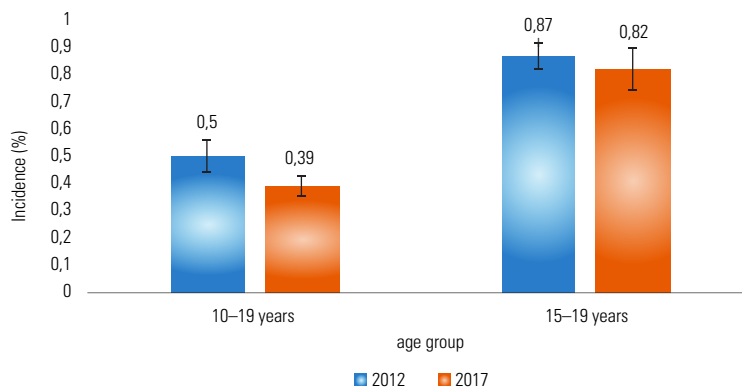


Most ALHIV aged 10–19 years (53.2%) lived in urban or rural informal areas (42.5%) and 4.3% on farms. The majority of ALHIV lived in KwaZulu-Natal, an estimated 27.0% (n=97 182). This was followed by Gauteng with 18.5% (n=66 754) and the Eastern Cape with 17.5% (n=43 883). The Northern Cape had the lowest proportion of ALHIV (0.6%).

New infections continue among adolescents

Figure 3 shows the incidence rate among adolescents. Overall, the incidence rate (the number of new infections estimated using mathematical models) declined from 0.50% in 2012 to 0.39% in 2017. However, among older adolescents (aged 15–19 years), the incidence remained comparable at 0.87% in 2012 and 0.82% in 2017. The rate of new infections will continue to contribute to HIV prevalence in this age group. To better understand the underlying reasons for this, we analysed high-risk sexual behaviours.

Figure 3: Incidence rates among 10–19-year-old adolescents and 15–19-year-old adolescents

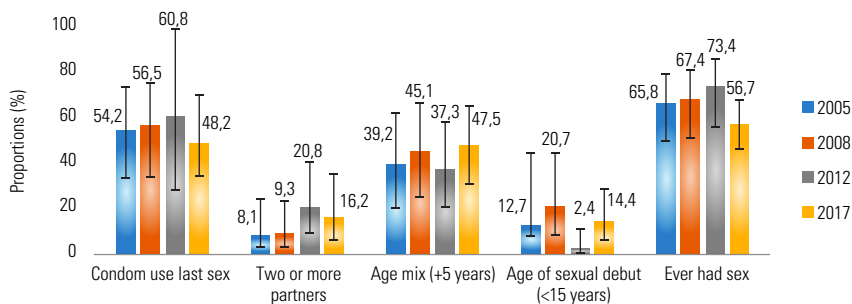


NB: Incidence data were insufficient for reliable estimates by sex and for younger adolescents aged 10–14 years.

Increase in high-risk sexual behaviours

We analysed risk behaviours and relationship practices that are associated with increased risk of contracting HIV among females. These risk behaviours included: ever having had sex; having had sex in the past year; early sexual debut (before age 15 years); multiple (two or more) sexual partners; age-disparate sex (having a most recent partner who was five years or more older than themselves); and condom use at last sexual encounter.

Figure 4. HIV risk behaviours among female adolescents aged 15–19, South Africa, 2005–2017



The analysis showed an increase in high-risk sexual behaviours from 2005 to 2017. Early sexual debut rose from 12.7% to 14.4%; having an age-disparate relationship rose from 39.2% to 47.5%; and having multiple sexual partners doubled from 8.1% to 16.2%. Furthermore, using a condom at last sexual encounter declined from 54.2% to 48.2%. Most concerning was that young female ALHIV aged 15–19 years had higher levels of engaging in risky sexual behaviours, compared to their HIV-negative peers.

Knowledge levels and rejection of myths were also measured using standardised HIV-knowledge questions. We found that knowledge about HIV was generally low. However, knowledge was higher among ALHIV aged 15–19 years compared to those aged 12–14 years.



Key messages

Prevention of new infections

Our analyses of ALHIV aged 10–14 and ALHIV of 15–19 years as separate groups highlighted that new infections, particularly among older adolescents, did not decline much between 2012 and 2017. The vulnerability of young females remains a concern. The key social drivers for adolescent infection were high-risk sexual behaviours including unprotected sex, being sexually active before 15 years of age, and age-disparate relationships.

We recommend specific interventions for adolescents of 10–14 years of age to reduce their risk of being infected in late adolescence and to manage living with HIV if they were infected from birth. To reduce new infections among all adolescents, both transmission routes must remain on the agenda in the public-health response to containing the epidemic in the general population. For ALHIV, ‘positive prevention’ means increasing the number of adolescents who access ART and have the correct knowledge about how they could reduce onward transmission through the use of condoms, by accessing ART, and adhering to ART regimes to achieve viral suppression.

Need for adolescent- and family-friendly support services

There is still a need for focused work to understand how young men and women are socialised in different contexts in South Africa with a special focus on gender-specific risk and behaviour. Programmes focused on HIV prevention need to be intensified to substantially reduce the number of new infections among adolescents.

Gaps exist with regards to entry to care and support for adolescents. Interventions are required that recognise the contextual factors that challenge the health and well-being of ALHIV, and therefore need to include their immediate family, working together with health-care workers. Schools should furthermore be better used as spaces for intervention. Both adolescents and guardians must be included in routine provider-initiated testing and counselling and guardians need to be assisted in the disclosure process to improve early diagnosis and ART adherence. For adolescents to achieve positive sexual-health outcomes, adolescent-friendly sexual and reproductive health services and support need to be scaled up urgently.

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