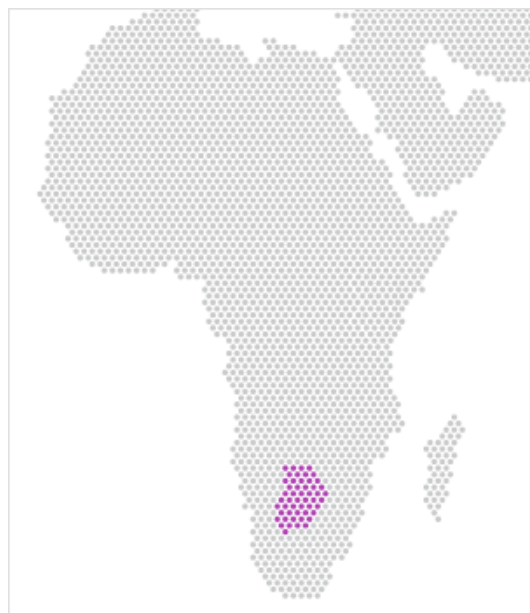


# HIV and AIDS in Botswana



## Botswana (2016)

**360,000** people living with HIV

**21.9%** adult HIV prevalence

**10,000** new HIV infections

**3,900** AIDS-related deaths

**84%** adults on antiretroviral treatment

**60%** children on antiretroviral treatment

Source: UNAIDS Data 2017

### KEY POINTS:

- Botswana is still one of the countries most affected by HIV in the world, despite its provision of universal free antiretroviral treatment (ART) to all people living with HIV.
- Botswana's HIV epidemic is firmly established in the general population, with women and young women disproportionately affected.
- Botswana's successful ART coverage is compromised by a low testing rate and low levels of HIV knowledge - this has kept HIV prevalence rates high.
- Botswana has a one-size-fits all approach to HIV prevention, but its lack of targeted services has meant that prevention programmes are reaching less than half of those most at risk.
- There are many barriers to HIV prevention in Botswana including the withdrawal of programme funding in recent years by international donors, punitive laws against marginalised groups and gender inequality.

Explore this page to find out more about [groups most affected by HIV in Botswana](#), [HIV testing and counselling programmes](#), [HIV prevention programmes](#), [antiretroviral treatment availability](#), [civil society's role](#), [HIV and TB in Botswana](#), [barriers to the HIV response](#), [funding for HIV](#), and [the way forward for Botswana](#)..

At 21.9%, Botswana has the third highest HIV prevalence in the world, after Lesotho and Swaziland.<sup>1</sup> In 2005, prevalence stood at 25.4%, suggesting some signs of improvement over the last decade.<sup>2</sup>

Botswana has demonstrated strong commitment in responding to its HIV epidemic and has become an exemplar within sub-Saharan Africa. It was the first country in the region to provide universal free antiretroviral treatment (ART) to people living with HIV, paving the way for many other countries in the region to follow. The impact of its treatment programme has been widespread. New infections have decreased significantly, from 15,000 in 2005 to 9,100 in 2013, although in recent years they have begun to rise again, with 10,000 reported in 2016. AIDS-related deaths have

dramatically decreased from the 14,000 recorded in 2005 to 3,900 in 2016.<sup>3</sup>

---

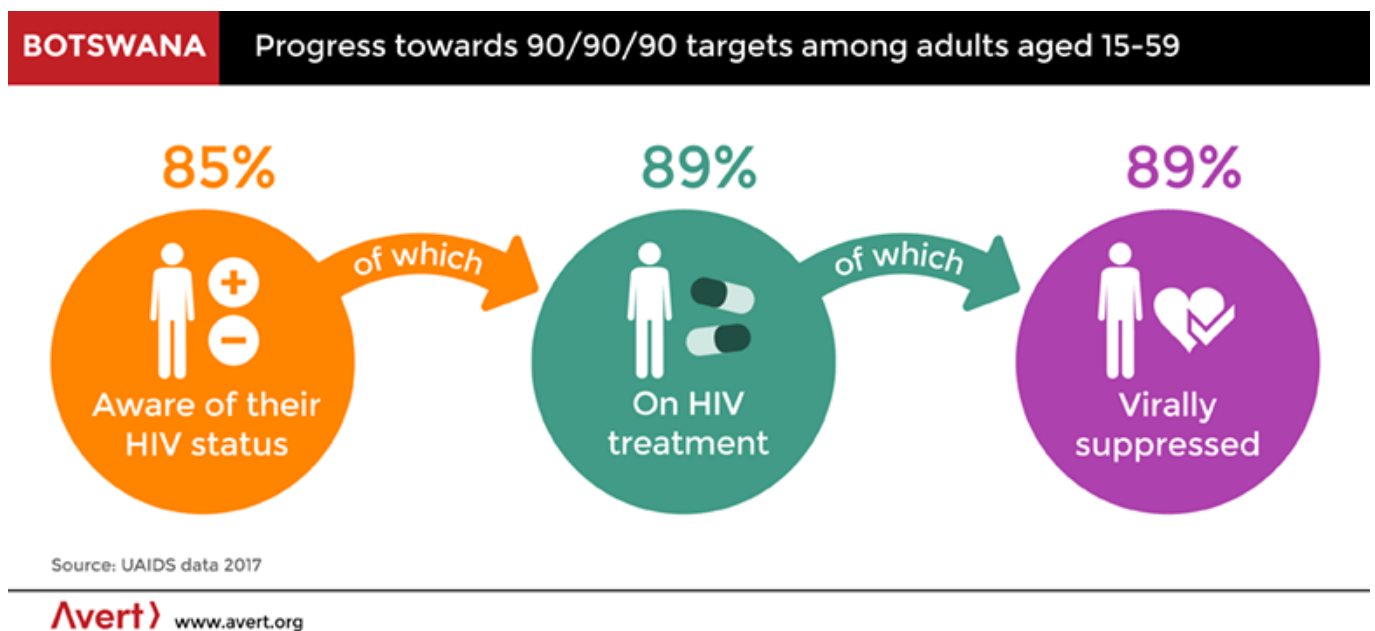
Botswana is the first country in the region to provide universal free antiretroviral treatment to people living with HIV.

---

In 2012, for the first time, key populations including female sex workers and men who have sex with men were included in HIV epidemic surveys. While this should allow for a better understanding of HIV among these populations, there is still very little data available.<sup>4</sup>

However, as of 2016, Botswana does not have a specific strategy that addresses the needs of key affected populations, although its National Strategic Framework for HIV and AIDS refers to 'all inclusive programming'.<sup>5</sup> In 2013, HIV prevention programmes were reaching only 44.9% of these key affected populations.<sup>6</sup>

Botswana is an upper middle-income country which faces a huge challenge in sustaining its impressive HIV response as donors increasingly focus on low-income countries.<sup>7</sup> Many donors have reduced or withdrawn their funding in recent years. PEPFAR alone has more than halved its funding, from \$84 million in 2011 to \$28 million in 2016.<sup>8 9</sup>



## Groups most affected by HIV in Botswana

### Women and HIV in Botswana

Women are disproportionately affected by the HIV epidemic. In 2016, there was an HIV prevalence rate of 26.3% among adult women (aged 15-49), compared to 17.6% for men of the same age.<sup>10</sup>

Around 200,000 women were estimated to be living with HIV in 2016, compared to 150,000 in 2005.<sup>11 12</sup> This means more than half (56%) of those living with HIV are women.<sup>13</sup> Gender inequality in Botswana is fuelling the epidemic among females. Factors such as early sexual debut, forced marriage and gender-based violence have increased their vulnerability to HIV.

According to a national study into gender-based violence in 2012 - the most recent of its kind - 29%

of women in Botswana reported experiencing some form of intimate partner violence during the past 12 months. 67% reported experiencing intimate partner violence in their lifetime.<sup>14</sup>

Botswana's national strategic HIV response aims to reduce these inequalities, focusing on the provision of psychosocial services for young women, female economic empowerment and greater focus on effective HIV prevention programmes for secondary school girls.<sup>15</sup>

## Young people and HIV in Botswana

Considering that in 2000, a 15-year-old had more than a 50% chance of dying from an AIDS-related illness, Botswana has made substantial progress in tackling HIV and AIDS in young people as treatment has become more readily available.<sup>16</sup>

But more remains to be done in targeting HIV prevention programmes towards young people. According to the last population census in 2011, just over a fifth (426,400) of Botswana's population are aged 15-24 years old. Over the last decade, HIV prevalence among this age group has made little improvement, with reports of 6% prevalence in 2005 among young people, compared to 5.4% among young men and 10.2% among young women in 2016.<sup>17</sup>

This lack of progress reflects dangerously low levels of HIV knowledge among young people, with less than half (47%) of those between 15 and 24 able to answer basic questions on HIV.<sup>18</sup> There is little difference in knowledge between young men (47.1%) and young women (47.4%).<sup>19</sup>

## Female sex workers and HIV in Botswana

Most of Botswana's current data on female sex workers is based on a 2012 study of Francistown, Gaborone and Kasane.<sup>20</sup> It found HIV prevalence to be 61.9% among an estimated 4,000 female sex workers in the three districts.<sup>21</sup>

About half (54.8%) had tested for HIV and 67% reported consistent condom use. Those female sex workers who reported not using condoms indicated that they were paid not to do so, and 18.6% reported they were forced not to use condoms.<sup>22</sup> It is therefore critical that HIV prevention efforts focus on the clients of female sex workers as well as the sex workers themselves. There is an urgent need to encourage HIV testing among this group, allowing more female sex workers to know their status and seek appropriate treatment if necessary.

A 2016 study on sex work and violence in Botswana found that 66% of sex workers surveyed had experienced violence, a contributing factor to the spread of HIV, as is the criminalisation of sex workers.<sup>23</sup>

## Men who have sex with men and HIV in Botswana

Homosexuality is illegal in Botswana and, due to this punitive law, providing HIV services for men who have sex with men (sometimes referred to as MSM) is inherently difficult.

As with female sex workers, current data is based on a 2012 study of three districts. This estimates HIV prevalence among men who have sex with men at 13.1%. Around 66% reported consistent condom use during anal sex in the last six months, although 60% were not aware that anal sex is associated with higher risks of HIV. Around half (49.4%) reported receiving HIV-related information in the past year. Just under half (46.7%) reported having female sexual partners in the past six months.<sup>24</sup>

A study on human rights violations against men who have sex with men in Southern Africa found stigma and discrimination in Botswana are leading to a range of rights abuses including blackmail (26%), fear of seeking healthcare services (20.5%), being denied housing (5.2%) and fear of walking

in the community (29.1 %). When asked if they had ever experienced a human rights abuse, 58.6% of the sample in Botswana responded yes.<sup>25</sup>

Since 2010 it has been illegal to terminate an employment contract on the grounds of sexual orientation or health status, including HIV.<sup>26</sup>

## Prisoners and HIV in Botswana

In August 2014, Botswana's Supreme Court ruled that all HIV-positive prisoners, regardless of nationality, must be provided with public access to ART, indicating that this group may also be disproportionately affected by HIV. Despite this, there is currently little public information about the HIV status of prisoners in Botswana and no free distribution of condoms in prisons.<sup>27</sup>

## HIV testing and counselling (HTC) in Botswana

The percentage of people living with HIV who knew their status in 2016 was 85%.<sup>28</sup> However, HIV testing rates remain low across Botswana. In 2014, 315,185 people aged 15 years and older had received HIV testing and counselling (HTC) during the past 12 months and knew their results, with more women testing than men.<sup>29</sup>

Botswana provides HTC services through a network of public and private health facilities and sites run by non-governmental organisations. In 2014, 636 public health facilities and 32 civil society facilities were providing HTC. There is no data from the country's private sector.<sup>30</sup>

### Voluntary, routine and mandatory testing

Botswana's approach to HIV testing has changed in recent years. Until 2004, the government and external funders supported voluntary testing services, with centres providing immediate, confidential HCT services for sexually active people in Botswana aged 18-49.<sup>31</sup>

In 2004 the government introduced routine HIV testing, with tests being offered as a part of routine health check-ups in public and private clinics in Botswana. If people did not want to be tested they could 'opt out'. Botswana was the first country in Africa to have this as national policy.<sup>32</sup>

In April 2013, mandatory HIV testing became legal in Botswana. This enables directors or authorised personnel to force someone to take an HIV test and disclose their status if requested. This has been contested by many civil society and human rights organisations, arguing that it is a step backwards for Botswana and could contribute towards increased HIV stigma and discrimination within the country.<sup>33</sup>

### Self-testing

HIV self-testing has not yet been introduced in Botswana. HIV testing is restricted to government-approved testing centres and can only be done under the supervision of a trained professional.<sup>34</sup> A recent survey of 45 tertiary students at the Institute of Health Sciences in Lobatse found that self-testing was an acceptable option, which would address an unmet need for testing, offering confidentiality, flexibility and convenience.<sup>35</sup>

## HIV prevention programmes in Botswana

The number of annual new HIV infections in Botswana has gone down from 15,000 in 2005 to 10,000 in 2016, but a lot more remains to be done.<sup>36</sup> While Botswana has shown significant

progress in HIV treatment and care, some areas of HIV prevention have not been as effective.

Botswana's current HIV prevention strategy includes a commitment to invest more in behavioural interventions that increase knowledge about HIV among young people and key populations.<sup>37</sup>

## Condom use

The vast majority (85%) of condoms that are available in Botswana are available for free.<sup>38</sup> On average, 50 condoms a year are available for every man in Botswana, exceeding the UNFPA regional benchmark of 30 male condoms distributed per man per year (2011–2014).<sup>39</sup>

However, condom use has decreased over time, from 90.2% of people claiming to use condoms during sex in 2008, to 81.9% in 2012. Botswana is struggling to challenge the misconceptions surrounding HIV prevention and transmission, which sometimes challenge cultural beliefs pervasive in many areas of the country.<sup>40</sup>

## HIV education and sex education

Botswana's first national HIV programme was in 1988. Different strategies have evolved since then. One of the most successful programmes is the teacher-capacity building programme launched in 2004 by the Ministry of Health and UNDP. The programme improves teachers' knowledge on HIV and AIDS to demystify and reduce stigma. Part of the project is an interactive TV programme called Talk Back, aired by Botswana TV and shown in schools. Since its inception, Talk Back has reached more than 20,000 teachers and 460,000 students.<sup>41</sup>

Makgabaneng, a popular, long-running radio drama, is another example of how Botswana has used mass media for HIV prevention. The series addresses themes related to HIV, such as faithfulness, cultural traditions, treatment and services. Makgabaneng also provides HIV services and information at roadshows and health fairs, reaching more than 20,000 people in 2013.<sup>42</sup>

However, according to UNAIDS, adolescents and young adults have been "largely neglected and left behind by the national HIV response". HIV and AIDS services targeting adolescents and young adults are inadequate and often perceived by the beneficiaries as "unfriendly". The take up of HIV testing and counselling among adolescents has remained slow.

There is low coverage of the life skills programme, which includes sex education. There is also a shortage of trained personnel at both regional and school levels for proper implementation of Life Skills comprehensive sexuality-based education.<sup>43</sup>

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

Botswana's prevention of mother-to-child transmission (PMTCT) programme is one of its most successful HIV programmes.

In 2014, the PMTCT programme was available in all 634 health facilities that provide maternal child health services.<sup>44</sup>

More than 95% of pregnant women living with HIV in Botswana received ART treatment in 2016 – a slight improvement from 92% of pregnant women who had access to services the previous year.<sup>45</sup>  
<sup>46</sup> This equates to around 11,295 women.<sup>47</sup>

The estimated percentage of HIV infections among newborns from HIV-positive women delivering in the past 12 months was 1.8% in 2014, compared to a high of 2.49% in 2013. This equates to fewer than 500 infants.<sup>48</sup>

Male involvement in PMTCT remains low – 18% in 2014, which is a slight increase from 11% in 2011.[49](#)

## Voluntary medical male circumcision (VMMC)

There is growing uptake of voluntary medical male circumcision (VMMC) in Botswana, with increasing numbers of males aged 15-49 being circumcised. The proportion of circumcised men has risen from 11% in 2008 to around 30% in 2016.[50](#) [51](#)

However, this rate of development has failed to reach government targets of 80% coverage among HIV negative men, despite efforts to boost demand for VMMC through house-to-house mobilisation and social media.[52](#) [53](#) Most men who have volunteered for circumcision have been adolescents and young adults.[54](#)

## Pre-exposure prophylaxis (PrEP)

Pre-exposure prophylaxis (PrEP) is a course of drugs taken by someone who is HIV negative before potential exposure to HIV, in order to prevent infection. Botswana has registered the branded drug Truvada and is pursuing generic registration. It has created an implementation plan focusing on sero-different couples, adolescent girls, men who have sex with men, and female sex workers – and was included in the country's HIV clinical care guidelines in 2016.[55](#) [56](#) [57](#) [58](#)

Funding from the USA's PEPFAR programme is also supporting PrEP access among priority populations, but the numbers are currently small.[59](#) A study in Botswana among heterosexuals in 2015 found very high adherence rates to PrEP.[60](#)

## Antiretroviral treatment (ART) in Botswana

Botswana's antiretroviral treatment (ART) programme launched in 2002. It has become one of the most successful ART programmes in sub-Saharan Africa.

The key characteristics of the programme are that it is universal and free, making ART available to all eligible citizens. Botswana was the first African country to establish a national HIV treatment programme and it developed substantially over its first decade.[61](#)

By 2016 it was estimated that 298,000 adults living with HIV were receiving ART – a coverage of 85% up from 77% in 2015. Coverage among children has reached 60%.[62](#) [63](#) The proportion of people living with HIV who have suppressed viral loads was 78%.[64](#)

In 2016, in line with World Health Organization treatment guidelines, Botswana launched a 'treat all' strategy. This aims to start anyone who tests positive for HIV on treatment immediately, regardless of their CD4 count (which indicates the level of the virus in the body).

As a result of the 'treat all' approach started in June 2016, almost 25,000 people living with HIV were newly initiated on treatment in the following six months.[65](#)

Although Botswana's ART programme has done well, there are concerns around the number of adults who test positive but do not continue onto treatment. This is known as the 'loss to follow-up rate', which has steadily increased among adults in recent years. An increase in the first line treatment failure rate – the first type of ART someone is given – has also been recorded, from less than 6% in 2012 to over 10% in 2013.[66](#)

ART coverage is also compromised by low rates of HIV testing.

## HIV drug resistance

As 'treat all' ART programmes are rolled-out, effective monitoring of those on treatment is essential to stop drug-resistant HIV becoming a major public health threat. Although data is limited, transmitted drug resistance (TDR) in Gaborone, Botswana, is estimated to have increased from 2.9% in 2012/14 to 9.7% in 2014/15 - underlining the importance of continued testing for TDR, particularly as access to HIV treatment increases.<sup>67</sup>

## Civil society role in Botswana

Civil society in Botswana has become more robust since the 1990s but is still perceived as weak in terms of influencing policy. The sector remains largely dependent on government funding.<sup>68 69</sup>

From 1966 to 2014 Botswana was one of the fastest growing economies in the world, and one of the most stable democracies in Africa.<sup>70</sup> This context, and the government's leadership in tackling health and poverty may be factors in the relatively slow development of civil society.

Alongside the national response to HIV, many civil society organisations are playing a vital role in providing HIV testing and support services. They have also played a critical role in advocating for improved HIV services, especially for marginalised populations such as sex workers. Representing these groups, however, has been difficult: with many organisations reliant on government funding, their role in policy reform can be compromised.<sup>71</sup>

## HIV and tuberculosis (TB) in Botswana

Botswana has a high burden of tuberculosis (TB), with an incidence rate of 326 per 100,000 in 2016.<sup>72</sup> In 2016, there were 7,300 new TB cases, with 4,400 (60%) of these co-infected with HIV.<sup>73</sup>

Treatment coverage in 2016 was relatively low at 65%. 60% of people living with HIV were being treated for TB/HIV co-infection and 81% of these patients were on ART.<sup>74</sup>

## Barriers to the HIV response in Botswana

A strong and committed national response has ensured that many HIV programmes have been effectively implemented. However, like many countries in sub-Saharan Africa, barriers exist that are impeding progress in the HIV response. One of the greatest threats to HIV prevention in Botswana is the withdrawal of funding from international donors - others are gender inequality and legal barriers.

### Gender inequality

Gender inequality in Botswana is a major barrier to HIV prevention efforts. New HIV infections among women aged 15-49 have risen from 4,500 in 2013 to 5,200 in 2016. A number of factors increase women's vulnerability to HIV - early sexual debut, forced marriage and gender-based violence.<sup>75 76</sup>

### Legal barriers

In 2013 several policies were introduced to reduce discrimination in access to healthcare services. However, as of 2016 no policies have been brought in to protect sex workers and men who have sex with men and homosexuality is still illegal for both men and women. Botswana criminalises "carnal knowledge against the order of nature" and the penalty is imprisonment with a maximum of seven

years.<sup>77</sup> This makes it harder to reach men who have sex with men with HIV services.

## Stigma

Widespread stigma and discrimination around HIV are significant issues in Botswana, causing many people to avoid getting tested for HIV or seek healthcare services. In 2014 the Botswana Network of People Living with HIV and partners conducted a study of 1,231 people with HIV. Key findings included that mainly due to their HIV status: 39% were aware of being gossiped about in the previous 12 months; 21% experienced verbal insults and 10% had experienced physical harassment.<sup>78</sup>

## Funding for HIV in Botswana

One of Botswana's greatest challenges in responding to HIV is funding. The National AIDS Coordinating Agency (NACA) estimates that costs for Botswana's HIV response will rise from \$274 million in 2014 to \$339 million in 2030.<sup>79</sup>

Due to Botswana's upper-middle income country status, many international donors are withdrawing funding and instead directing their donor support to low-income countries. For example, PEPFAR has more than halved its funding from US\$84 million in 2011 to US\$39 million in 2015.<sup>80</sup> In 2013, the Gates Foundation withdrew funding altogether and the Center for Disease Control and the African Comprehensive HIV/AIDS Partnership withdrew funding for safe male circumcision.<sup>81</sup> This has grave implications for Botswana's national prevention and treatment programmes, especially since a shortage of human resources has become a major challenge.<sup>82</sup>

Financial security and sustainability are critical if Botswana is to continue providing the highly successful universal access to ART treatment programme.

To address this funding shortfall, in 2015 Botswana produced a national HIV investment framework that promotes effective, efficient and sustainable investments in their HIV responses by targeting specific locations and populations.<sup>83</sup> Although a shift to greater domestic funding is challenging, it can also bring more sustainable resourcing for health and HIV.

## The future of HIV and AIDS in Botswana

A strong and committed national HIV response in Botswana has enabled significant progress in tackling the HIV epidemic. Continuing this approach will be critical in the years ahead, though challenging in the face of significant financial cuts to HIV funding and support.

In 2015, NACA identified the following interventions as future priorities: immediate treatment enrolment for people who test positive for HIV (known as 'test and treat'); the introduction of PrEP and community HIV testing, including self-testing and new treatment regimens.<sup>84</sup> While 'test and treat' is now firmly in place, as of early 2018 there had been little progress on self-testing and work was only just beginning on rolling out PrEP.

Despite significant progress in HIV treatment coverage for pregnant women and children, urgent attention is needed to reach other sectors of the population – particularly key affected populations and young people. A concerted effort to increase awareness of the importance of testing is also key for prevention efforts.

- 1. UNAIDS (2017), '[Ending AIDS: Progress towards 90-90-90 targets](#)' [pdf]
- 2. UNAIDS (2014) '[The Gap Report](#)' [pdf]
- 3. UNAIDS [AIDSInfo 2016 data](#), accessed 20 February 2018,



- 4. Botswana Ministry of Health (2014), '[Botswana Country Progress Report 2013](#)'[pdf]
- 5. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 6. Botswana Ministry of Health (2014), '[Botswana Country Progress Report 2013](#)'[pdf]
- 7. World Bank, '[Data: Botswana](#)' [accessed February 2018]
- 8. PEPFAR (2016), '[Partnering to Achieve Epidemic Control in Botswana](#)'[pdf]
- 9. PEPFAR.gov accessed February 2018]
- 10. UNAIDS [AIDSInfo 2016 data](#), accessed 20 February 2018
- 11. UNAIDS (2017), '[Ending AIDS: Progress towards 90-90-90 targets](#)' (pdf)
- 12. UNAIDS (2014), '[The Gap Report](#)'(pdf)
- 13. UNAIDS (2017), '[Ending AIDS: Progress towards 90-90-90 targets](#)' [pdf]
- 14. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 15. Botswana Ministry of Health (2014), '[Botswana Country Progress Report 2013](#)'[pdf]
- 16. Heald, S (2002), '[It's never as easy as ABC. Understanding of AIDS in Botswana](#)', African Journal of AIDS Research 1(1)
- 17. UNAIDS (2017), '[Ending AIDS: Progress towards 90-90-90 targets](#)' [pdf]
- 18. UNAIDS [AIDSInfo 2016 data](#), accessed 20 February 2018
- 19. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 20. Botswana Ministry of Health (2012), '[2012 Mapping, Size Estimation & Behavioral and Biological Surveillance Survey \(BBSS\) of HIV/STI among Select High-Risk Sub-Populations in Botswana](#)'[pdf]
- 21. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 22. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 23. AIDSFONDS (2017), '[Sex work & violence in Botswana](#)'
- 24. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 25. PLOS One, Human rights violations among men who have sex with men in Southern Africa: Comparisons between legal contexts, 2016
- 26. [www.icj.org](http://www.icj.org) Botswana SOGI Legislation Country Report 2013
- 27. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 28. UNAIDS [AIDSInfo 2016 data](#), accessed 20 February 2018
- 29. Botswana Ministry of Health (2014), '[Botswana Country Progress Report 2013](#)' National AIDS Coordinating Agency [pdf]
- 30. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 31. Botswana Ministry of Health (2014), '[Botswana Country Progress Report 2013](#)'[pdf]
- 32. Centers for Disease Control and Prevention (CDC) (2004), '[Introduction of Routine HIV Testing in Prenatal Care - Botswana 2004](#)' MMWR Weekly 53(46):1083-1086
- 33. HIV Justice Network (2013), '[Botswana's draconian public health bill approved by Parliament, Bonela will challenge it as unconstitutional once president signs into law \(Update 3\)](#)'
- 34. Thomson Reuters (2014), '[Could HIV self-testing be a game changer in Africa?](#)'
- 35. Pula: Botswana Journal of African Studies 2017, '[Opinions about and acceptability of HIV self-testing amongst students at the Institute of Health Sciences- Lobatse, Botswana](#)'
- 36. UNAIDS [AIDSInfo 2016 data](#), accessed 20 February 2018
- 37. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]

- 38. UNFPA (2014), '[Botswana: a total market approach for male condoms](#)'[pdf]
- 39. UNAIDS (2016), '[Prevention Gap Report](#)'[pdf]
- 40. Botswana Ministry of Health (2014), '[Botswana Country Progress Report 2013](#)'[pdf]
- 41. UNDP (2013), '[Brazil-Botswana Teacher Capacity Programme for HIV/AIDS Prevention](#)'
- 42. Botswana Ministry of Health (2014), '[Botswana Country Progress Report 2013](#)'[pdf]
- 43. UNAIDS (2017), [UNAIDS Data 2017](#)
- 44. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 45. UNAIDS (2017), '[Ending AIDS: Progress towards 90-90-90 targets](#)' [pdf]
- 46. UNAIDS (2016), '[Prevention Gap Report](#)'[pdf]
- 47. UNAIDS (2017), '[Ending AIDS: Progress towards 90-90-90 targets](#)' [pdf]
- 48. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 49. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 50. UNAIDS (2016), '[Prevention Gap Report](#)'[pdf]
- 51. UNAIDS (2017), '[Ending AIDS: Progress towards 90-90-90 targets](#)' [pdf]
- 52. National AIDS Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 53. UNAIDS (2017), '[Ending AIDS: Progress towards 90-90-90 targets](#)' [pdf]
- 54. UNAIDS (2017), '[Ending AIDS: Progress towards 90-90-90 targets](#)' [pdf]
- 55. Botswana Ministry of Health (2016), [Integrated HIV clinical care guidelines](#)
- 56. AVAC, [AVAC's database of PrEP programs](#) (accessed 28 February 2018)
- 57. UNAIDS (2016), [Maximizing the potential of a new HIV prevention method: PrEP](#)
- 58. Sunday Standard (2017), '[Treat all aids patients all out](#)'
- 59. PrEPWatch.org accessed Feb 2018
- 60. Aidsmap (2015), '[Open-label PrEP in Botswana: very high adherence and no HIV infections seen](#)'
- 61. Farharni, M (2013), '[Outcomes of the Botswana national HIV/AIDS treatment programme from 2002 to 2010: a longitudinal analysis](#)' *The Lancet Global Health* 2(1):e42-50
- 62. UNAIDS (2016), '[Prevention Gap Report](#)'[pdf]
- 63. UNAIDS (2017), '[Ending AIDS: Progress towards 90-90-90 targets](#)' [pdf]
- 64. UNAIDS [AIDSInfo 2016 data](#), accessed 20 February 2018
- 65. UNAIDS [AIDSInfo 2016 data](#), accessed 20 February 2018
- 66. National Aids Coordinating Agency (2015), '[Progress Report 2014](#)'[pdf]
- 67. *Journal of Antimicrobial Chemotherapy* Volume 71, Issue 5, 1 May 2016, Pages 1361–1366, <https://doi.org/10.1093/jac/dkv500>
- 68. Puthem Jugeshor Singh, [Process of Democratisation in Botswana: The Role of Civil Society](#)
- 69. <http://www.afrinype.org/the-sustainability-of-civil-society-organisations-in-botswana/>
- 70. Fair Observer (2016), '[Is Botswana Africa's Success Story](#)'
- 71. Botswana Ministry of Health (2014), '[Botswana Country Progress Report 2013](#)'[pdf]
- 72. WHO Global TB Report 2017
- 73. WHO Global TB Report 2017
- 74. WHO Global TB Report 2017/ In 2016, there were around 1,400 TB-related deaths among people living with HIV.UNAIDS [AIDSInfo 2016 data](#), accessed 20 February 2018

- [75. UNAIDS \(2014\), 'The Gap Report'](#)[pdf]
- [76. UNAIDS \(2017\), 'Ending AIDS: Progress towards 90-90-90 targets'](#) [pdf]
- [77. PLOS One, Human rights violations among men who have sex with men in Southern Africa: Comparisons between legal contexts 2016](#)
- [78. The People Living with HIV Stigma index](#), accessed 20 February 2018
- [79. National Aids Coordinating Agency \(2015\), 'Progress Report 2014'](#)[pdf]
- [80. PEPFAR \(2016\), 'Partnering to Achieve Epidemic Control in Botswana'](#)[pdf]
- [81. Botswana Ministry of Health \(2014\), 'Botswana Country Progress Report 2013'](#)[pdf]
- [82. aho.afro.who.int](#)
- [83. UNAIDS \(2016\), 'Prevention Gap Report'](#)[pdf]
- [84. National AIDS Coordinating Agency \(2015\), 'Progress Report 2014'](#)[pdf]

Last full review: 28 February 2018

Next full review: 28 February 2021

Last updated: 26 March 2018