KEY POINTS

- Although sustained and focused efforts to reach key populations have led to major reductions in HIV infections in between 2010 and 2017, Myanmar continues to display a high incidence of new HIV infections.

- People who inject drugs are the group most affected by HIV in Myanmar. This is largely due to drugs which are farmed, manufactured and distributed in the northern regions of the country.

- The country’s low financial investment in public health appears to be a major barrier to the success of HIV testing, prevention and treatment programmes.

Myanmar (also known as Burma) has a population of 53 million people,\(^1\) of which UNAIDS estimates there were 220,000 people living with HIV in 2017.\(^2\)

A further 6,700 people died from AIDS-related illnesses in the same year. Between 2010 and 2017, the number of AIDS-related deaths has fallen by an estimated 49% as a result of antiretroviral treatment coverage in Myanmar.\(^3\)
After Thailand, Myanmar has the second highest prevalence in Southeast Asia at 0.7% and shares similar key populations of people most affected by HIV. These include men who have sex with men, male and female sex workers and people who inject drugs and their intimate partners.

Despite a general decline in new infections across Asia, gains in some countries have been offset by rising epidemics in places such as Myanmar where funding of effective primary HIV prevention has been insufficient.

As such, Myanmar is now one of 35 countries which together account for 90% of new infections globally. Myanmar had 11,000 new infections reported (approximately 30 infections per day) in 2017. Although this number of new infections remains steady compared to the two years before, observations show that the annual rate of infections is no longer declining at the same rate it did between 2000 and 2010.

New infections are mostly found in urban areas or areas where drug use is endemic. For example in the country’s largest city, Yangon (formerly known as Rangoon), there appears to be a higher rate of partner change, a higher rate of buying sex and injecting drugs, lower knowledge on HIV transmission and prevention, lower contact by outreach workers and a lower rate of condom use, all resulting in higher HIV prevalence.

**MYANMAR**

HIV prevalence among key population groups (2017)

- People who inject drugs: 27.9%
- Men who have sex with men: 6.4%
- Prisoners: 5.6%
- Female sex workers: 5.4%

Source: UNAIDS Data 2018

Key affected populations in Myanmar
People who inject drugs (PWID)

In 2017, HIV prevalence among people who inject drugs (sometimes referred to as PWID) was by far the highest out of all of the key affected populations at 34.9%.9

In the previous year, people who inject drugs also presented the highest HIV incidence, accounting for 20–65% of adults, aged 15 to 49, testing positive for new infections.10

Analysis suggests that infection occurs at an early age among those who inject drugs, with 16.8% of those under the age of 25 already testing positive. These findings have bolstered the argument that the risk associated with injecting drug use and HIV vulnerability should make the case for developing more youth-targeted programmes.11

Although the burden of HIV prevalence has been limited to urban towns and cities, injectable opium use is endemic with rates of high HIV prevalence evident in the more rural northern and north-eastern areas of the country where the drug is produced. For example, in Waingmaw in Kachin State, HIV prevalence among people who inject drugs was particularly high at 47% during 2014.12

Distribution of drugs from this region also has contributed to new HIV infections developing in more remote areas of the country, providing additional challenges to expanding the coverage of harm reduction and HIV services.13

Less than 50% of people who inject drugs report regular testing for HIV and less than a quarter of those asked in 2016 reported consistent condom use.14 However, 90.8% of people who inject drugs report using sterile injection equipment for their last injection.15

Men who have sex with men (MSM)

HIV prevalence (6.4%%16) among gay men and other men who have sex with men (sometimes referred to as MSM) has continued to remain a concern in Myanmar, with rates particularly high in many cities and urban areas such as Yangon (26.6%).17

This the highest recorded rate of prevalence for this group in the Southeast Asia region, even higher than Bangkok, Thailand (24.4%). Myanmar’s National Strategy Plan recognises that these rates are alarming and present an immediate call to scale up targeted services in high burden geographical locations.18

There appears to be an increased risk of HIV infection within the most sexually active age group (25-49 year olds) where prevalence of HIV is significantly higher than average. Prevalence peaks at 25% for the 35-39 age group.19

Stigma and discrimination continues to contribute to the low levels of access to HIV services, with just 50%-75% of men who have sex with men reporting having an HIV test in 2015. Consequently, in 2017, just over half (52.4%) of those living with HIV knew their status.20 21

Most recent statistics record 77% of gay men and other men who have sex with men reporting condom use with their last male partner. However, male-to-male sexual dynamics are complex in Myanmar, and risk behaviours can vary between self-categorised groups of men who have sex with men.22

Although Myanmar has a relatively visible LGBT community, existing laws which criminalise same sex
behaviour in Myanmar keep many people hidden from the reach of healthcare service providers. Moreover, a lack of legal gender identity recognition in the country often means that transgender people are wrongly categorised as men who have sex with men and are commonly not offered the appropriate link to targeted HIV services.23

These observations have informed the country's National Strategic Plan to develop a more appropriate future framework for effective responses to intertwined gender identities, sexual orientations and behaviours. By 2020 the new strategy aims to reach more ‘non-disclosed’ men who have sex with men by expanding services through innovative social media, test-and-treat campaigns and proactive community-led outreach linked to services which are friendly towards men who have sex with men and transgender persons.24

Attitudes towards self-testing for out-of-reach key affected populations in Myanmar

Transwomen and gay men in Myanmar experience stigma and discrimination which means they are unlikely to access HIV services – HIV self-testing can help fill the testing gap. It has the potential to increase testing and early diagnosis among transwomen and men who have sex with men – of which less than 50% have a history of HIV testing.

A 2017 study, by the Johns Hopkins University School of Public Health and the International HIV/AIDS Alliance in Myanmar, conducted focus groups and in-depth interviews with these two key populations to find out their attitudes to HIV self-testing.

Confidentiality and privacy were seen as significant benefits by both key populations. People taking part in the study saw self-testing as a way to avoid uncertainty and worry about who will be there when seeking facility-based HIV testing as it can be done at home. The fact that self-testing is conducted through a saliva-based test and is therefore pain-free was also seen as an advantage.

Although participants were generally optimistic about self-testing, concerns were raised, particularly around the lack of counselling associated with self-testing. They feared this might lead to poor mental health outcomes among those who test positive, which could prevent them from disclosing their status and linking to care.

The fact that self-testing is conducted orally also raised concerns. Participants highlighted how this may lead people to incorrectly believe that saliva can transmit HIV, which could further stigmatise people living with HIV. The use of community education, peer networks, social media and mass media to inform people about self-testing was suggested by participants as a way to combat this.

Concerns around the introduction of compulsory self-testing by employers or others in positions of power, which could result in further stigma, were also raised.25

Sex workers

Sex workers who knew their status stood at 44.6% and HIV prevalence among female sex workers was over 5.4% in Myanmar in 2017.26 In Myanmar’s major cities, HIV prevalence was much higher - 24.6% and 13.7% in Yangon and Mandalay respectively - representing some of the highest HIV prevalence locations in the Southeast Asia and Pacific region.27
Migrants

Myanmar is home to over 100 different ethnic groups and shares its borders with two of the most populated countries in the world, India and China, in addition to Bangladesh, Laos and Thailand.

The last census (2014) estimated that over 11 million residents have migrated internally or externally. Some critics are concerned that increasingly open borders make Myanmar more vulnerable to HIV incidence with the increase of migrants coming from bordering high-prevalence countries.

As HIV testing is not a condition for entry, work or residence in Myanmar, there is not much comprehensive information available on HIV prevalence or risk behaviours associated with the migrant population. Nevertheless, in 2014, the IOM data project did find that 18% of people identifying as migrants in Mon and Kayin states were HIV positive - although it is difficult to assess if the point of infection happened within country.

However, it is broadly assumed that migrants might face residency and social restrictions that limit their access to HIV programming services, as well as other general forms of healthcare.

Since 2014, HIV awareness campaigns that target large migrant populations have been created to address these issues. The National Strategic Plan proposes developing specific packages for people near transit points in addition to cross-border referral mechanisms and agreements to strengthen access to health services in destination countries.

Since August 2017, almost a million Rohingya people have migrated to neighbouring Bangladesh. They were fleeing from mass atrocities in Myanmar, their homeland. Most are now living in the Cox’s Bazar district of Bangladesh where they are particularly vulnerable to HIV and other STIs due to multiple and overlapping forms of discrimination.

There is little information available about the health status and behaviour of the displaced Rohingya people, although 83 cases of HIV-infected people have been recorded, and more undiagnosed cases are likely.

HIV testing and counselling (HTC) in Myanmar

Unfortunately, there has been no new behavioural data on HIV testing among the general population in Myanmar since 2007 when it was recorded at 11.3%. As such, there is an urgent need for strengthening the involvement of community networks in the planning and monitoring of testing services.

In 2014, among key affected populations, the estimated testing coverage was also still far from optimal with only 34% of female sex workers, 27% of people who inject drugs, and 20% of men who have sex with men accessing testing services.

Myanmar’s most recent National Strategic Plan, launched in 2016, aims to promote early HIV testing and counselling in line with WHO recommendations, and to close the testing gap by prioritising townships with a high epidemic burden and centralising the provision of HIV counselling and testing to become a local public health sector concern.
HIV prevention programmes in Myanmar

Harm reduction

Research consistently shows that harm reduction programmes - such as needle and syringe exchange programmes and opioid substitution therapy – are the most effective ways of reducing the spread of HIV among people who inject drugs.39

However, because the scale of drug use in Myanmar is particularly extensive, existing harm reduction services fail to meet the escalating demand by people who inject drugs.40

For example, in response to a 2014 study which estimated that the reported re-use of needles varied from 16% in Mandalay to 63% in other areas, there were 18 million sterile needles and syringes distributed free of charge during the next year.41

Despite these efforts, the coverage of additional needles was not enough. Based on typical injecting practices involving 2-3 daily injections, around 60-90 million additional needles would be needed. So there continues to be a major gap for the 93,000 people who inject drugs in Myanmar.42

The government has recognised this need to scale up their commitment to strengthening harm reduction services, and has since allocated an additional US$1 million (as part of the US$11 million domestic funding commitment towards HIV services) for methadone as a form of opioid substitution.44 However, critics suggest that this sum will not be enough to curtail the growing dependency on drug use within the country.45

Preventing mother-to-child transmission (PMTCT)

HIV counselling and testing services for all pregnant women have been integrated into antenatal services across the country, which presents a much more successful model of implementation compared to other countries within the Southeast Asia region.46

As a result, more than 900,000 pregnant women received pre-test counselling and more than 700,000 took an HIV test and received post-test counselling during 2015. In 2015, 3,923 HIV-positive pregnant women received ART to reduce the risk of mother-to-child transmission, but only 39% of these were put on lifelong treatment (Option B+) as recommended by the WHO, with the rest only put on treatment while pregnant and breastfeeding.47

In 2017, overall ART coverage among pregnant women living with HIV to prevent mother-to-child transmission was estimated to be 78%, with 4,383 women receiving antiretroviral therapy and a further 5,600 women in need.48

Routine monitoring continues to be an area of weakness - as it is across most testing, prevention and treatment services in Myanmar. Early infant diagnosis stands at just 28% with less than 1,000 new HIV infections averted due to PMTCT care.49

Myanmar’s National Strategic Plan suggests that there is a critical need for better collaboration between health services to integrate early infant diagnosis into post-birth care in order to establish a fully comprehensive PMTCT cascade.50
Antiretroviral treatment availability (ART) in Myanmar

According to UNAIDS, 146,826 (or 66%) of all people living with HIV in Myanmar have access to antiretroviral treatment (ART).\textsuperscript{51}

It is worth noting that this figure has more than doubled (from 24%) in 2012 (NSP), and has brought the country up to speed with the treatment rate of people living with HIV in the rest of the Southeast Asia region (41%). As a result, the country has witnessed the number of AIDS-related deaths fall by an estimated 49% to 6,700 in 2017 as ART coverage has expanded in the last six years.\textsuperscript{52}

Nevertheless, despite improvements in treatment access, Myanmar is still a high burden country with limited availability of viral load testing and HIV drug resistance testing for monitoring patients who are on first-line as well as second-line ART.\textsuperscript{53}

Long-term outcomes of second-line ART in Myanmar

Second-line ART has been available in Myanmar since 2008, however there has been no published data about the outcomes of patients on second-line treatment until recently. A 2017 study followed a cohort of 824 adults and adolescents over seven years in which time 11% of patients died and the overall incidence rate of unfavourable outcomes of those who moved on to second-line treatment was 7.9%.

Those who fared worse on second-line treatment included patients with a history of injecting drug use, those lost to follow-up and those with a higher baseline viral load. Comparatively, patients with higher baseline CD4 counts, those who had taken first-line ART at a private clinic or received ART at decentralised cites all seemed to have a lower risk of unfavourable outcomes.

Though these results indicate relatively good long-term outcomes of patients on second-line ART treatment there was a strong emphasis made on making viral load monitoring routine, and third-line ART drugs available for cases of virological failure.\textsuperscript{54}

Historically, the majority of healthcare facilities in Myanmar have been privately funded or supported by NGOs. It is also estimated that at least 25% of people in Myanmar live below the poverty line and that those living with HIV may struggle to source the funds for necessary ARV treatment. As such, there have been strong arguments for a transition from private and NGO-run services to public sector delivery with the hope of making treatment more readily available to vulnerable groups across the country.\textsuperscript{55}

Civil society’s role and HIV in Myanmar

The legacy of military rule and restrictions on the financing and operations of civil society in Myanmar hinder efforts to provide support to people living with HIV and populations at risk of HIV but progress is being made. The Myanmar Positive Group-MPG, a national network of people living with HIV, promotes networking between individuals and self-help groups, works to reduce stigma and discrimination, and advocates for peoples’ rights to access treatment and quality services. In 2015, there were 177 networked self-help groups of people living with HIV; there was no update as of
HIV and tuberculosis (TB) coinfection in Myanmar

Myanmar is one of 14 countries that carry a high burden of TB/HIV coinfection (of 30 countries globally) as well as multi-drug resistant TB and TB infection. The number of TB-related deaths among people with HIV was 4,900 in 2016 up 2,000 from 2015. In 2016 the World Health Organization (WHO) and UNAIDS carried out an in-depth review of the status of tuberculosis and HIV coinfection in Myanmar. Co-infection of TB and HIV remains a serious public health issue and was responsible for around 4,100 deaths in Myanmar in 2014 (of the estimated 32,000 deaths for all TB forms).

The key recommendations of the 2016 review shared with the Ministry of Health focused on the importance of strengthening collaboration between HIV and TB National Programmes, through improved information sharing, joint procurement and adequate deployment of human resources. Furthermore, increasing and decentralising the number of health facilities which provide joint screenings and treatment of patients for HIV and TB at all levels of the health system (through scaling up of services and employing mobile teams particularly in high burden areas) are central to ensuring that these diseases and coinfections are detected early, properly treated and further reduced.

Barriers to the HIV response in Myanmar

Financial barriers

Total health expenditure in Myanmar (2-2.4% of its GDP) is among the lowest in the Southeast Asia and Western Pacific regions, which goes some way to explaining the country’s HIV incidence. An analysis of countries from different regions, and with varying epidemic patterns, found that Myanmar was among the countries where funding of effective and focused primary HIV prevention was insufficient.

In 2015, the country committed US$ 11 million in domestic funding towards HIV programmes while relying on an additional US$ 71.8 million from international donors.

Further findings from the National AIDS Spending Assessment (NASA) indicate that while more than 20 donors provide additional financial support for healthcare in Myanmar, only a few are committed to funding HIV-specific programmes. Of these, the Global Fund provides around half of the existing funding towards such programmes (investing a total of US$ 266 million between 2009 and 2017).

Structural barriers

There are plans to move HIV treatment services to government have not yet addressed critical supply chain and human resource needs in order to make such transitions viable. This means that key affected populations, such as people who inject drugs, are being left behind in terms of service reach.

As well as these limitations, service delivery and supply chains are set up to operate separately within the healthcare system which means that human resources such as community health workers and
service delivery at health facilities remain distinct from one another.

The above are compounded by lack of assurance and oversight by the Principal Recipients, Country Coordinating Mechanism and Local Fund Agent.62

Legal barriers for sex workers

Sex work in Myanmar is illegal. Fear of prosecution, harassment and blackmail all reduce access to services such as HIV testing which, in 2016, was only accessed by 50% of sex workers in the country.63

Until 2011, even carrying a condom could be used as circumstantial evidence if a sex worker was detained by the police.64 More recent records from 2017 still indicate that just 81% of sex workers reported condom use with last client.65

One day, the police detained me and I had to pay a MMK 50,000 fine for my release next day. If I did not pay, I could be detained, sued and jailed.

- Sex worker, Myanmar66

Legal penalties for commercial sex work are just one of many social and structural barriers – alongside cultural stigma, discrimination and violence – preventing sex workers accessing necessary HIV prevention and treatment services.67

Stigma and discrimination

There is currently no welfare or job support for people living with HIV in Myanmar, and many face family or community rejection as a result of their status. Stigma within communities largely appears to stem from a lack of public health education and misconceptions on how the infection is spread.

We've seen cases where if someone looking after a patient with HIV dies while the patient is unwell, other people don't want to take care of the person with HIV anymore.

- Soe Yadanar, Medecins Sans Frontieres (MSF)68

This stigma also persists within healthcare systems themselves, with reports of institutional neglect by nurses and doctors also being cited by patients living with HIV.

For example, in one 2015 report assessing hospital conditions of people living with HIV in Myanmar and Cambodia, it was found that some patients were relegated to segregated waiting areas and bed spaces after their status was discovered.69

The same report also discovered much more serious allegations by women living with HIV who were forced by healthcare providers into making sterilisation a condition for accessing pregnancy-related services. In one instance in the city of Yangon, they also found that one woman was sterilised without
her knowledge or consent.70

**Funding for HIV in Myanmar**

Myanmar is a UNAIDS fast-track country with a severe epidemic. Historically, the private sector - through international and local NGOs - has played a major role in service delivery. The current national strategic plan (NSP III 2016-2020) is focused on the development of sustainable partnerships which calls for the public and private sector, and communities to jointly design, deliver, monitor and evaluate services.

Resource need is estimated at US$460 million, a 16% decrease from the total funding need of the previous plan. The decrease is due to, ‘streamlined costs that will enable efficient strategic scale-up of priority needs and strengthening of cross-cutting components’.

The single largest external financing source of the HIV response in Myanmar has been the Global Fund, amounting to 50% of total funding (external and domestic sources) in 2015. Other more limited external sources include the 3MDG Fund (a multi-donor trust fund that pools the contributions of seven bilateral donors), PEPFAR, Asian Development Bank (ADB), and international and local NGOs.

The decreasing trend in external funding for HIV in Myanmar continues. In 2015, the Government of Australia withdrew support to the health sector and in 2017, the 3MDG Fund wound up, leaving a large gap in resources for HIV prevention, particularly for one of the most key affected populations: people who inject drugs.

In 2018, increased financial commitments and management responsibility from the Government to a more integrated HIV response and a rapid expansion of services have also raised concerns about how to optimise resources and bridge gaps in service quality. Successful implementation requires an increase in national resources that is beyond the capacity of the Government and donor commitments.71

**The future of HIV in Myanmar**

There are plans for Myanmar to develop a model for pre-exposure prophalaxis (PrEP) as a prevention method for populations at substantial risk of HIV infection. However, some critics suggest that treatment access for those living with HIV should be prioritised first before implementing new methods in prevention.72

[Myanmar is] a country where only 60% of people living with HIV can access treatment; WHO describe universal access to treatment as minimum 80% coverage. It’s a heavily resource-constrained setting and there isn’t the capacity to deliver PrEP appropriately.

- Associate Professor Mark Stoové from the Burnet Institute73
An initial assessment testing the acceptability of PrEP in Myanmar during 2016 found that although 39% of men would be willing to use it, the cost of the drug was a barrier.74

The report also suggested that, because sex between men is still illegal in Myanmar, it is unlikely that PrEP would be accessed through government systems and would instead have to be administered in safer social environments by NGOs or community-led services.75

Like many other low- and middle-income countries, there is a long way to go if Myanmar is come close to the UNAIDS targets for ending the epidemic by 2030. However, there is some optimism that targets for reducing transmission and increasing treatment can be achieved with increased national and international funding and support.76

1. The World Bank (accessed September 2018)
2. aidsinfo.unaids.org (accessed September 2018)
3. aidsinfo.unaids.org (accessed September 2018)
4. ibid
6. UNAIDS (2016) 'Prevention Gap Report'
7. UNAIDS (2017) 'Data Book'
8. UNAIDS (2016) 'Prevention Gap Report'
10. UNAIDS (2016) 'Prevention Gap Report'
12. UNAIDS (2016) 'Prevention Gap Report'
13. UNAIDS (2017) 'Data Book'
14. UNAIDS (2017) 'Data Book'
15. aidsinfo.unaids.org (accessed September 2018)
16. aidsinfo.unaids.org (accessed September 2018)
17. UNAIDS (2017) 'Data Book'
20. UNAIDS (2017) 'Data Book'
22. aidsinfo.unaids.org (accessed September 2018)
23. UNAIDS (2016) 'Prevention Gap Report'
48. aidsinfo.unaids.org (accessed September 2018)
49. aidsinfo.unaids.org (accessed September 2018)
51. aidsinfo.unaids.org (accessed September 2018)
52. aidsinfo.unaids.org (accessed September 2018)
53. Nang Thu Thu Kyaw et al. (2017) 'Long-term outcomes of second-line antiretroviral treatment in an adult and adolescent cohort in Myanmar'
54. Nang Thu Thu Kyaw et al. (2017) 'Long-term outcomes of second-line antiretroviral treatment in an adult and adolescent cohort in Myanmar'
58. World Health Organisation 'Newsletter: April - June 2016'
59. UNAIDS (2016) 'Prevention Gap Report'
60. UNAIDS (2017) 'Data Book'
63. UNAIDS (2016) 'Prevention Gap Report'
64. IRIN (2014, 14 January) 'Push to decriminalise sex work, but stigma still remains'
65. aidsinfo.unaids.org (accessed September 2018)
66. UNFPA (2016, 19 January) 'The story of a HIV positive sex worker'
67. IRIN (2014, 14 January) 'Push to decriminalise sex work, but stigma still remains'
68. Reuters (2015, 01 December) 'Myanmar's HIV patients shunned despite progress'
69. Thomas Reuters Foundation (2016, 15 March) 'People with HIV in Asia ejected from hospitals, women sterilised study'
70. Thomas Reuters Foundation (2016, 15 March) 'People with HIV in Asia ejected from hospitals, women sterilised study'
76. Harries, Anthony D. et al. 'Ending the HIV/AIDS Epidemic in Low- and Middle-Income