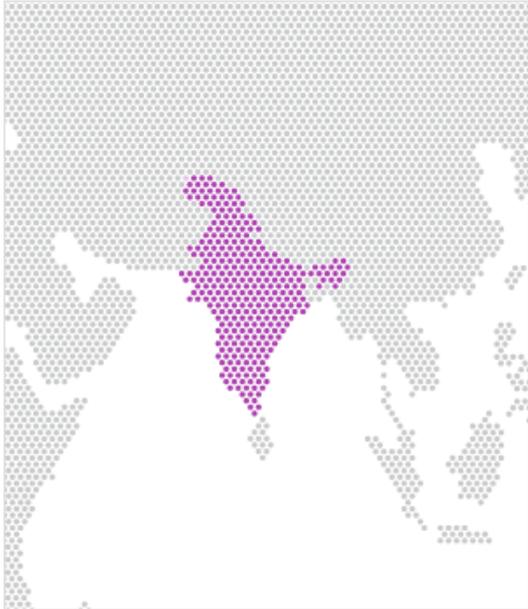


# HIV and AIDS in India



## India (2017)

**2.1m** people living with HIV

**0.2%** adult HIV prevalence (ages 15-49)

**88,000** new HIV infections

**69,000** AIDS-related deaths

**56%** adults on antiretroviral treatment\*

**n/a** children on antiretroviral treatment\*

\*All adults/children living with HIV

Source: UNAIDS Data 2018

## KEY POINTS

- India has the third largest HIV epidemic in the world, with 2.1 million people living with HIV.
- India's epidemic is concentrated among key affected populations, including sex workers and men who have sex with men. The National AIDS Control Programme has made particular efforts to reach these two high-risk groups with HIV interventions.
- Compared to neighbouring countries, India has made good progress in reducing new HIV infections by half since 2001.
- Despite free antiretroviral treatment being available, uptake remains low as many people face difficulty in accessing clinics.

Explore this page to read more about [populations most affected by HIV in India](#), [testing and counselling](#), [prevention programmes](#), [antiretroviral treatment availability](#), [civil society's role](#), [HIV and TB](#), [barriers to the HIV response](#), [funding](#) and [the future of HIV in India](#).

India has the third largest HIV epidemic in the world. In 2017, HIV prevalence among adults (aged 15-49) was an estimated 0.2%. This figure is small compared to most other middle-income countries but because of India's huge population (1.3 billion people) this equates to 2.1 million people living with HIV.<sup>1 2</sup>

Overall, India's HIV epidemic is slowing down. Between 2010 and 2017 new infections declined by 27% and AIDS-related deaths more than halved, falling by 56%.<sup>3</sup>

In 2017, 79% of people living with HIV were aware of their status, of whom 71% were on antiretroviral treatment (ART). The proportion of people on ART who are virally suppressed is not reported.<sup>4</sup> India's HIV epidemic is driven by sexual transmission, which accounted for 86% of new infections in

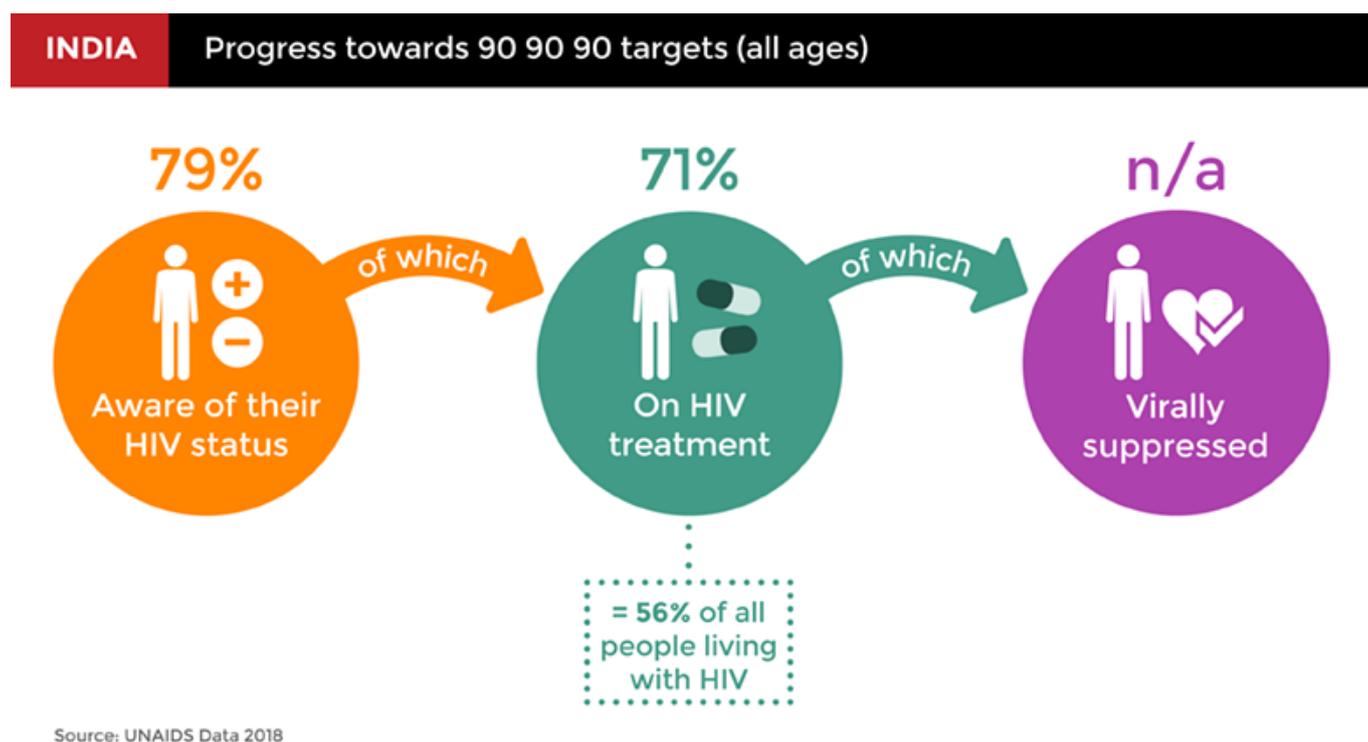
2017/2018.<sup>5</sup> The three states with the highest HIV prevalence, Manipur, Mizoram and Nagaland, are in the east of the country.<sup>6</sup>

The epidemic is concentrated among key affected populations, however the vulnerabilities that drive the epidemic vary in different parts of the country. A key driver is unprotected sex among key populations and their clients, partners and spouses. However, injecting drug use in the north and northeast of the country is also pushing up HIV prevalence.<sup>7</sup>

HIV prevalence is higher among men than women, with 0.25% of men and 0.19% of women living with HIV as of 2017. This is due to high prevalence among key populations including [men who have sex with men](#) (sometimes referred to as MSM), migrant workers and men who use drugs. <sup>8</sup>

Key population groups have been prioritised in the national AIDS response since its inception in 1992. Both the [sex worker](#) and men who have sex with men population groups have experienced a recent decline in HIV prevalence.<sup>9</sup>

However, a number of issues including HIV-related stigma, relatively low levels of status awareness among people living with HIV and weak links between diagnosis and treatment mean progress is not moving as quickly as hoped. A lack of data on key populations and on certain key indicators such as viral suppression rates also makes it difficult for HIV programmes to be designed in ways that effectively meet the needs of those most affected by the country's HIV epidemic.



## Key affected populations in India

### Sex workers

In 2017, an estimated 1.6% of female sex workers in India were living with HIV, although this figure varies between states.<sup>10</sup> For example, prevalence among female sex workers is estimated at 7.4% in

Maharashtra and 6.3% in Andhra Pradesh.[11](#)

Although sex work is not illegal in India, associated activities such as running a brothel are. This means police are often hostile towards sex workers and authorities justify routine brothel raids. The implications of this are far reaching. For example, a study in Andhra Pradesh indicated a significant association between police abuse and increased risk of HIV transmission and inconsistent condom use.[12](#)

**Stigma and discrimination** against sex workers is common and restricts their access to healthcare. For example, a study in north Karnataka found 90% of female sex workers had witnessed stigma against HIV positive sex workers, while high proportions said fear of verbal abuse, neglect and isolation would prevent them from disclosing an HIV positive status to anyone else.[13](#)

Sex workers are one of the high-risk groups targeted by India's National AIDS Control Organisation (NACO), which programmes successful peer-to-peer HIV interventions (when individuals from key affected populations provide services to their peers or link them to services within healthcare settings). In 2018, NACO reported reaching 84% of sex workers in rural areas in around 100 districts with peer-led HIV prevention, testing and treatment.[14](#)

In 2017, data reported to UNAIDS suggests around 67% of HIV positive sex workers were aware of their status and 91% of sex workers (HIV positive and negative) reported using condoms.[15](#)

#### CASE STUDY: Sex worker communities in India

Since 1992, SANGRAM has worked to unite sex workers and provide access to HIV treatment, prevention and education across six districts in Maharashtra and the border areas of north Karnataka. These are all places in which the rate of HIV infection is significantly higher than other areas of the country.

The organisation has achieved notable successes within these diverse communities. Peer educators deliver hundreds of thousands of condoms to women each month, and they report that in some areas 100% of sex workers have attended voluntary HIV testing.[16](#)

Male sex workers are particularly vulnerable to HIV. A study of men who have sex with men who attended STI clinics at Mumbai and Hyderabad found that 70% of them engaged in sex work. Of those who engaged in sex work, 43% were living with HIV, compared to 18% among those that did not.[17](#)

#### Men who have sex with men (MSM)

Around 2.7% of men who have sex with men in India are living with HIV, of whom around 65% are aware of their status.[18](#)

HIV prevalence varies greatly between areas. For example, around 10% of men who have sex with men in Andhra Pradesh and 5% in Maharashtra are estimated to be living with HIV.[19](#)

A 2015 study of men who have sex with men, conducted across 12 Indian cities, found 7% tested HIV positive. Just under a third (30%) of those who reported having anal or oral sex with a man in the past

12 months were married to a woman and engaging in heterosexual sex.<sup>20</sup> The study also found evidence of emerging epidemics among men who have sex with men in urban areas not previously recognised as having high HIV burdens.

In September 2018, India's Supreme Court decriminalised homosexuality between consenting adults. The decision overturned a ruling made by the Supreme Court in 2013 that reinstated Section 377, a British pre-colonial era law that carried a maximum jail sentence of 10 years, resulting in HIV services being out of reach for many men who have sex with men.<sup>21</sup>

Despite changes to the legal environment, men who have sex with men in India remain extremely marginalised and face widespread stigma, homophobia and discrimination, all of which prevent them from accessing HIV services and can make them more vulnerable to acquiring HIV.<sup>22</sup>

## People who inject drugs (PWID)

HIV prevalence among [people who inject drugs](#) (sometimes referred to as PWID) in India is high, with injecting drug use the major route of HIV transmission in India's north-eastern states. In 2017, 6.3% of people who inject drugs were thought to be living with HIV, of whom 50% were aware of their status.<sup>23</sup> Prevalence varies between areas, standing at 12.1% in Manipur, 10% in Mizoram, and 3.2% in Nagaland.<sup>24</sup>

A 2018 study analysed unsafe injecting and sexual risk behaviours among 20,000 Indian men who inject drugs. Results suggest that beginning drug use at age 25 or above, longer engagement in drug use, injecting three or more times a day, sharing needles and syringes, and having a sexually transmitted infection (STI) were all linked to an increased likelihood of HIV infection.<sup>25</sup>

Age is also a factor in HIV-risk for people who inject drugs. A 2019 study conducted in India's north-eastern states of around 14,300 people who inject drugs found young people (under 30 years) who use drugs were more likely to share needles, have multiple sexual partners and engage in unprotected sex but were far less likely to get tested for HIV.<sup>26</sup>

HIV prevention efforts in the northeast of the country have been effective in reducing the number of new infections. However, there is evidence that the number of people who inject drugs is growing. In addition, evidence of higher HIV prevalence among sub-populations of people who inject drugs is also emerging. For instance, a 2015 study found prevalence to be more than three times higher among women who inject drugs than men.<sup>27</sup> The reasons for this are numerous, including high levels of sexual violence experienced by women who use drugs.<sup>28</sup>

## Hijras/transgender people

HIV prevalence among [transgender people](#) in India was estimated to be 3.1% in 2017, the second highest prevalence among all key populations in the country. Around 68% of transgender people living with HIV are aware of their status.<sup>29</sup>

In India, being a hijra (known as 'aravani', 'aruvani' or 'jagappa' in some areas) is an identity associated with being a transgender woman, intersex or a eunuch. However, not all transgender women in India belong to a hijra community. The traditional background of hijras is linked to high-risk behaviours, such as alcohol and substance abuse, and low literacy rates.<sup>30</sup>

In April 2014, the Indian Supreme Court recognised transgender people as a distinct gender.<sup>31</sup> Since

then, health and welfare programmes to meet this group's specific needs have been set up. In 2017, NACO reported that around 45% of transgender people and hijras were receiving targeted HIV interventions.<sup>32</sup> In the same year, around 80% of transgender people surveyed reported using a condom.<sup>33</sup>

Despite the change in law, transgender people face pervasive stigma and violence, linked not only to being transgender, but intersected with a range of social inequities. A 2017 study featuring in-depth interviews with around 70 transgender sex workers in Maharashtra found many had experienced stigmatisation, discrimination and violence.<sup>34</sup>

## Migrant workers

Research worldwide has linked migration to increases in HIV transmission. NACO categorises migrants as 'a bridge population', as they form links between urban and rural areas, and between groups that are at high- and low-risk of HIV infection.<sup>35</sup>

There are an estimated 7.2 million migrant workers in India, of whom 0.2% are thought to be living with HIV.<sup>36</sup> As with other key populations, data is limited, and other estimates put HIV prevalence among migrants even higher. For example, in 2014 UNAIDS reported HIV prevalence among people who had migrated from rural to urban areas in India to be 0.9%, more than four times the national prevalence.<sup>37</sup>

Despite being an important driver of the HIV epidemic in India, data on migrant sexual behaviour is limited. A 2017 study found HIV prevalence among the wives of migrant workers in rural northern India was higher than among women in the general population at 0.59%. Only 15% of those questioned had heard of HIV.<sup>38</sup>

## Truck drivers

A number of studies have reported high vulnerability of truckers to HIV transmission in India. NACO estimated that 0.2% of truck drivers were living with HIV in 2017/18.<sup>39</sup> NACO also categorises truck drivers as a bridge population because they often have unprotected sex with high-risk groups such as female sex workers as well as their regular sexual partners.

A 2015 study found 49% of truckers in central India reported paying for sex, of whom 21.5% had an STI.<sup>40</sup>

## HIV testing and counselling (HTC) in India

In 2017, 79% of people living with HIV in India were aware of their status. HIV positive women are significantly more likely to be diagnosed, compared to HIV positive men (87% vs. 68%).<sup>41</sup> This is due to high proportions of women testing for HIV through preventing mother to child transmission (PMTCT) services.

In 1997, there were just 67 HIV testing and counselling (HTC) sites in India. By 2017, around 23,400 facilities were offering HTC. Between April 2018 and April 2019, 30 million general users accessed these services, almost double the number of those testing in 2016/17, showing the impact accelerated efforts are having in this area.<sup>42</sup>

Testing is offered in a variety of settings, including standalone clinics, health facilities and through

public/private partnerships. Mobile testing units also offer community-based testing, aimed at improving early diagnosis, reaching first-time testers and people who seldom use clinical services.<sup>43</sup> Community-based testing is particularly important, as the stigma of HIV and the criminalisation of populations at high risk of HIV discourages many people from attending clinics and health facilities.

After the World Health Organization (WHO) recommended HIV self-testing in 2016, India's Ministry of Health indicated it would investigate the feasibility of self-testing kits, initially among high-risk populations.<sup>44</sup> As of 2019 a number of self-testing pilot programmes are running, focusing on pregnant women and people from key populations, but self-testing kits are not yet widely available.<sup>45</sup>

#### CASE STUDY: Improving testing rates among Indian men who have sex with men

A trial conducted in Mumbai in 2016 used gay dating websites to encourage men who have sex with men to test for HIV.

Initially, messages encouraging HIV testing at specific clinics were posted on a popular website. Those who took up this offer were then recruited as peer mobilisers when they came for testing. Each peer mobiliser was given coupons with unique identifying codes to distribute to other men in their social networks to get tested for HIV.

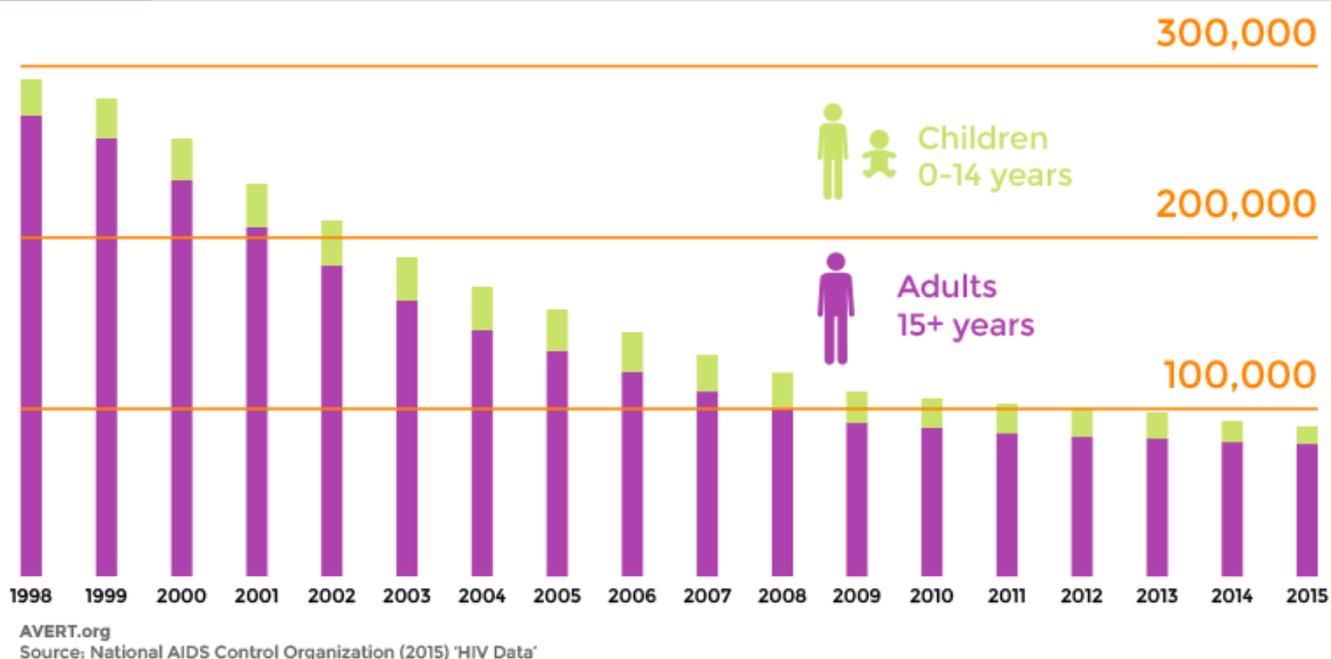
During the 6-month study, 247 men who have sex with men tested for HIV, of whom 99% were first-time testers. Two-thirds were young men (under 25 years) and about half reported inconsistent or no condom use during the last 10 anal sex acts. Eight individuals (3%) tested positive for HIV and were linked to treatment.<sup>46</sup>

## HIV prevention programmes in India

In 2017, 88,000 people in India were newly infected with HIV. The majority were men, who accounted for 50,000 new infections. There were 34,000 new infections among women and around 3,700 among children (aged 0-14 years).<sup>47</sup>

NACO is the body responsible for formulating policy and implementing programmes for the prevention and control of the HIV epidemic in India. Its most recent programme, NACP-IV (2012-2017, extended to 2020), aims to halve annual new HIV infections by 2020 by providing comprehensive HIV treatment, education, care and support for the general population, along with targeted interventions for key affected groups at high risk of HIV transmission.<sup>48</sup>

A key goal of the NACP-IV is to reach 80% of key affected populations with targeted interventions.<sup>49</sup> Targeted interventions are implemented on the premise that prevention of HIV transmission among key affected populations will also lower HIV transmission among the general population. For example, targeting interventions towards female sex workers and their male clients will help reduce the risk of clients transmitting HIV to their regular sexual partners.



## Condom availability and use

Significant efforts have been made by NACO to increase the awareness and use of condoms to prevent the transmission of HIV. India's Condom Social Marketing Programme promotes safer sex. A key focus of the programme is making condoms available for free in rural and remote areas and in high-risk places such as truck stops. In 2014, NACO launched a new condom promotion campaign on Doordarshan (India's public broadcasting service), leading cable and satellite channels, All India Radio and private radio, in Hindi and other regional languages. In the years that followed, digital cinema, social media and outdoor media were added as campaign platforms.<sup>50</sup>

The key targets of India's condom programme are men who engage in sex with non-regular partners including sex workers, and married couples who do not want to get pregnant.<sup>51</sup>

Although condom use among high-risk populations is relatively high, it is lower among the general population. In 2016, only 41% of adult men reported using a condom at last higher-risk sex (with a non-marital, non-cohabiting partner).<sup>52</sup>

## HIV education and approach to sex education

Increasing awareness among the general population and key affected populations about HIV prevention is a central focus of NACP IV. However, as of 2017, only 22% of young women (aged 15-24) and 32% of young men knew how to prevent HIV.<sup>53</sup> This is reflected in the wider population, as only one-fifth of women and one-third of men (aged 15-49) had comprehensive knowledge of HIV and AIDS.<sup>54</sup>

A number of innovative awareness programmes are being implemented. In 2018, NACO ran a multimedia HIV campaign to increase HIV testing among young people. This ran on Doordarshan, cable and satellite channels, radio, online and at cinemas. NACO also broadcasts phone-in and panel discussions on issues relating to HIV on regional radio networks. Shows relating to HIV are also performed by folk troupes in remote villages to reach people in places with no television or radio.<sup>55</sup>

Through India's Adolescent Education Programme, comprehensive sexuality education (CSE) is available in schools for students aged between 13 and 18.<sup>56</sup> The AEP was operating in 55,000 schools as of 2018/19.<sup>57</sup>

India's CSE curriculum covers a wide range of issues relating to sexual and reproductive health (SRH). However, it excludes sexual rights and diverse sexual orientations, gender identities, and negotiation and decision-making skills within sexual relationships.<sup>58</sup>

Around 12,600 Red Ribbon Clubs also operate in India. These are linked to schools and universities and are driven by young ambassadors and peer educators who help other young people access HIV information and also serve to reduce HIV-related stigma.<sup>59</sup> However, the focus of the clubs are limited to basic components of SRH.

## Preventing mother-to-child transmission (PMTCT)

The Indian government is committed to eliminating new HIV infections among [children](#). The country's [Prevention of Parent to Child Transmission](#) of HIV/AIDS (PPTCT) programme started in 2002. As of 2017 almost 30,000 sites were offering PPTCT services.<sup>60</sup>

Based on 2013 WHO Guidelines, the programme initiates lifelong antiretroviral treatment for all pregnant and breastfeeding women living with HIV regardless of CD4 count or stage of HIV infection.<sup>61</sup> In 2017, 60% of pregnant women living with HIV received PPTCT services, a 20% increase from 2016.<sup>62 63</sup>

During 2018/19, out of 13,760 babies exposed to HIV, 86% were initiated on antiretroviral (ARV) prophylaxis to prevent transmission.<sup>64</sup> However, only 23% of babies born to mothers enrolled in PPTCT programmes were tested for HIV before eight weeks of age to confirm whether transmission had been prevented.<sup>65</sup> In addition, only 20% of HIV positive mothers are thought to breastfeed exclusively in the first six months of their baby's life, despite this being likely to decrease the risk of HIV transmission by between three- and four-fold.<sup>66</sup>

## Harm reduction

HIV prevention activities for people who inject drugs in India include [needle and syringe exchanges \(NSPs\)](#) and, less commonly, [opioid substitution therapy \(OST\)](#). Harm Reduction International has praised the country for developing community-based alternatives to Compulsory Centres for Drug Users, which are common in the region. These alternatives offer harm reduction interventions along with psychosocial support, and are critical to delivering effective services that meet the needs of people who inject drugs.<sup>67</sup>

India is also succeeding in providing integrated harm reduction and antiretroviral treatment services for people who use drugs who are also living with HIV. An estimated 58% of people eligible for the 'one stop' scheme began HIV treatment as a result of this service in 2018.<sup>68</sup>

As of 2018, 247 NSPs were operating in India.<sup>69</sup> India distributed 250 needles and syringes per person who injects drugs per year in 2018, the second highest distribution level of any country in the region.<sup>70</sup> As a result, more than three-quarters (86%) of people who inject drugs are estimated to use sterile injecting equipment.<sup>71</sup>

OST was incorporated into India's harm reduction programme in 2008. However, plans to increase the

number of OST centres has been slow and coverage remains low at 19%.<sup>72</sup>As of 2018, there were 212 OST centres supporting around 24,000 people who inject drugs.<sup>73</sup>

## Pre-exposure prophylaxis (PrEP)

**Pre-exposure prophylaxis (PrEP)**, a daily course of ARVs taken by HIV-negative people to protect themselves from infection, is not widely available in India. As of 2018, up to 800 people are accessing PrEP through a demonstration project and feasibility study being conducted with female and transgender sex workers.<sup>74</sup>

## Antiretroviral treatment (ART) availability in India

In 2017, 56% of people living with HIV were on treatment, a significant rise from 2013 when coverage stood at just 36%.<sup>75</sup> <sup>76</sup> More women than men are on treatment (63% vs. 50%). The proportion of children (aged 0-14) receiving ART in 2017 has not been reported.<sup>77</sup>

In 2017, India adopted 'test and treat', following WHO guidance, which means anyone testing positive for HIV is now eligible for treatment, regardless of their CD4 count.<sup>78</sup>

Despite the rise in ART coverage, many people living with HIV still have difficulty accessing treatment clinics, emphasising the importance of initiatives such as NACO's Link Workers Scheme (LWS). LWS works across 16 states, training people from at-risk populations to link communities with HIV information, commodities and services. In 2018, the scheme reached around 500,000 migrants, 50,000 sex workers and 740,000 people from other vulnerable groups, including people who inject drugs and men who have sex with men.<sup>79</sup> In 2017/18, more than 80% of people testing HIV positive from at-risk groups through the scheme were linked to ART centres.<sup>80</sup>

The proportion of people on treatment who are **virally suppressed**, meaning they will be in relatively good health and unable to transmit HIV to others, is not currently reported. Although viral load testing is included in NACO's treatment strategy, in reality this type of testing is scarce and tends to be only offered to people whose treatment is failing. To begin to address this situation, in 2018 India made a commitment to provide free annual viral load testing for 1.2 million people living with HIV in the country who are on treatment by 2020.<sup>81</sup> Around 75% of people were still on ART after 12 months in 2018/19.<sup>82</sup> This means one in four people stop treatment after starting it, which increases their risk of developing drug resistant HIV.

A 2018 evidence review assessing levels of drug resistant HIV in a number of Indian cities found levels of drug resistance against first-line ART have remained steady in the past decade. However, as treatment expands in India, there are concerns that drug resistant HIV could increase.<sup>83</sup>

Around 544 Care and Support Centres (CSCs) exist in India to improve the number of people adhering to treatment. These centres provide essential services such as CD4 counts, along with psychosocial support, referrals to social benefit schemes and stigma reduction workshops. More than 60% of CSCs are implemented by people living with HIV networks, making it the biggest community-led care and support intervention programme in the country.<sup>84</sup>

As in many other countries, lack of adherence to treatment among young people is an issue. Various reasons exist for this including the fear of disclosure and social stigma, low social support, inadequate communication and education, and depression related to living with HIV.<sup>85</sup>

## Civil society's role and HIV in India

India is often described as the world's largest democracy. It boasts an active and vibrant civil society, with over three million civil society organisations (CSOs) and social movements.<sup>86</sup> This is typified by the involvement of CSOs in India's HIV response, including a strong presence of networks and organisations led by at-risk communities. The decriminalisation of homosexuality in 2018, following a prolonged campaign from LGBTI, HIV and human rights activists and CSOs, shows the collective strength of these groups.

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Today we no longer have Section 377, instead we have the freedom of the queer movement and a new pathway for LGBTI people to seek their rights, protect their dignity and access healthcare. We are thankful to India's Supreme Court but we must not forget the sacrifices of millions of LGBTI leaders who fought shoulder-to-shoulder over the years and made this dream come true. We are queer and we are free.

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*- Abhina Aher, India HIV/AIDS Alliance.<sup>87</sup>*

That said, civic space has shrunk since Prime Minister Narendra Damodardas Modi came to power in 2014. The government is now using tactics such as restrictive legislation to deny CSOs their right to register, and in some cases suspending or withdrawing CSO permits to operate. Resourcing of CSOs is also under threat: some CSOs have been prevented from receiving funding from external sources, and others have had their bank accounts suspended. It is also common for human rights defenders to be threatened and attacked, with the aim of silencing them and intimidating others.<sup>88</sup>

In 2018 UN Secretary-General Antonio Guterres expressed concern over civic freedoms in India, in particular over India's Foreign Contribution Regulation Act, which places CSOs who receive foreign funding under scrutiny and has been used to silence groups that criticise the government.<sup>89</sup>

## HELP US HELP OTHERS

Avert.org is helping to prevent the spread of HIV and improve sexual health by giving people trusted, up-to date information.

We provide all this for FREE, but it takes time and money to keep Avert.org going.

Can you support us and protect our future?

Every contribution helps, no matter how small.

PLEASE DONATE NOW

## HIV and tuberculosis (TB) in India

India is one of the WHO's 30 high TB burden countries. Globally, 10 million people are estimated to have developed tuberculosis (TB) in 2017, 27% of whom lived in India.<sup>90</sup>

Multi drug-resistant TB (MDR-TB) continues to be a public health issue. Of the three countries accounting for almost half of the world's MDR/RR-TB cases in 2017, India has the highest proportion at 24%, followed by China at 13% and Russia at 10%.<sup>91</sup>

In 2017, 11% of people newly enrolled in HIV care in India had active TB. Of the 410,000 people who died of TB in 2017, 11,000 were HIV positive.<sup>92</sup> In 2017, 58% of people with HIV-associated TB were not reported to have reached TB care. Reasons for missing people with TB include poor integration of and lack of access to services, weaknesses in service delivery, gaps in recording and reporting, and limited private sector engagement.<sup>93</sup>

To strengthen integration, the government has been rolling out TB service delivery from all HIV clinics since December 2016.<sup>94</sup> Although reporting of HIV case-based data for the TB case-finding cascade has not yet been possible, NACO has been able to report data based on clinic visits. People living with HIV made almost 11 million visits to ART centres in 2017. In 83% of these visits, clinic attendees received an evaluation for TB. Of those who were evaluated, 6% had TB symptoms.<sup>95</sup> Coverage of treatment to prevent TB among people living with HIV is low, with only 42% of those eligible for Isoniazid Preventive Therapy receiving it as of 2019.<sup>96</sup>

In March 2017, the government announced a new plan to end TB in the country by 2025. It increased domestic funding dramatically, from US \$47 million for 2011–2012 to US \$149 million for 2017–2018.<sup>97</sup>

## Barriers to the HIV response in India

### Stigma and discrimination

India's NACP-IV has made the elimination of stigma and discrimination a major focus.<sup>98</sup> In 2018, implementation on the HIV AIDS (Prevention and Control) Act 2014 began. The law criminalises discrimination against people with HIV and AIDS, including within employment, healthcare, education, public facilities and public office, as well as protecting property and insurance rights.<sup>99 100</sup>

Despite this, people living with HIV continue to experience high levels of discrimination. In 2016, a third of adults demonstrated a discriminatory attitude towards people living with HIV. This is a similar level recorded a decade earlier in 2006, suggesting current stigma-reduction activities are not working.<sup>101</sup>

Stigma and discrimination are very common within the healthcare sector. A 2013 study of doctors, nurses and ward staff in government and non-government clinics in Mumbai and Bengaluru found

discriminatory attitudes were common. This included a willingness to prohibit women living with HIV from having children (55 to 80%), endorsement of mandatory testing for female sex workers (94 to 97%) and surgery patients (90 to 99%), and stating that people who acquired HIV through sex or drugs 'got what they deserved' (50 to 83%).[102](#)

Several studies in India have shown that experiences or fear of being stigmatised are significantly associated with a delay in seeking care, with people particularly worried about having their positive status disclosed to others without their consent. HIV stigma fears have also been reported to lead to suboptimal adherence, missed appointments, and delays in getting prescriptions refilled, thereby interfering with viral suppression.[103](#)

## Gender inequality

Gender inequality is also an issue. Women, particularly in rural areas, have little control over important aspects of their lives. Intimate-partner violence, including sexual violence, is relatively widespread, with around one in five women in relationships likely to experience violence from their male partner, a level that has remained unchanged for the past decade.[104](#) The power imbalance between men and women means women are often unable to negotiate condom use or protect themselves from risk of HIV infection in other ways.

Women living with HIV are reluctant to access healthcare for fear of discrimination and marginalisation, leading to a disproportionate death rate in HIV among women.[105](#)

India is also home to arguably the largest number children orphaned by AIDS. These children endure stigma and face an impenetrable barrier in many Indian societies. This situation encourages children and their guardians to hide HIV and discourages access to essential treatment services (if available).[106](#)

## Data issues

There is a need for greater access, analysis and applied use of data within the national HIV response. This is due to a lack of integrated quality data systems, which limit availability and use, plus a lack of structure for case-based reporting, a lack of district HIV and key population size estimates, and inadequately trained staff to monitor the epidemic.

There are also challenges associated with tracking people through the continuum of HIV diagnosis to care and treatment due to a lack of unique patient identifier records and different monitoring and reporting systems used within facilities.[107](#)

## Structural and resource barriers

In recent years, there have been shortfalls in the procurement, management and distribution of ARVs, HIV testing kits and other HIV commodities, mainly due to supply chain bottlenecks.[108](#)

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India is large and the status of infrastructure varies widely across the country... The operation of the [drug procurement] system, particularly in remote locations, needs to be strengthened. For

example, slow internet speeds can really disrupt the system. Late payments to drug companies has also led to delays in the delivery of medicines.

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- Ashok Kumar Agarwal at Public Health Foundation of India<sup>109</sup>

## Funding for HIV in India

Before 2012, efforts to tackle the HIV epidemic in India relied heavily on international [funding](#).<sup>110</sup> However, in 2012 India committed to financing 90% of its HIV and AIDS programmes.

In 2017/18 the main source of financing for NACP IV came from domestic resources (63%). The allocation of annual resources in the NACP IV budget was 63% of funding for prevention, 30% for care, support and treatment services, 4% for institutional strengthening and 3% for strategic information management systems.<sup>111</sup>

The 2017/18 annual NACO budget was increased by approximately 26% from the 2015/16 budget, mainly reflecting the need to fund the expansion of treatment due to the adoption of 'test and treat'.<sup>112</sup>

Domestic funding for HIV has gone up from US \$670 million a year for 2015/16 to 2017/18, to US \$1.32 billion a year for 2018/19 to 2020/21, an increase of 97.6%. This means domestic funding will account for more than 90% of available funding in the next implementation period of India's TB and HIV grants. This move is particularly important for India's HIV response, given the increasing withdrawal of international funding. For example, Global Fund support is due to 'transition out' over a nine-year period from 2018 to 2026.<sup>113</sup>

India also provides funds to support the global response to HIV. For example, in 2006 the country joined the Global Fund as a donor and had contributed a total US\$46.5 million by 2019. The Indian government has pledged US\$22 million to the Global Fund's Sixth Replenishment for 2020-2022.<sup>114</sup>

## The future of HIV in India

Over the past decade, India has made significant progress in tackling its HIV epidemic, especially in comparison with other countries in the region. A major reason for this success is the sustained commitment of the Indian Government through its National AIDS Control Programme, which has been particularly effective at targeting high-risk groups.

While ART is free and uptake, helped by the adoption of 'test and treat', is rising many people living with HIV still have difficulty accessing services, meaning the rapid pace at which coverage is being scaled up must continue. However, stigma and discrimination remain significant barriers preventing key affected populations and those at high risk of HIV transmission from accessing treatment and vital healthcare services. There is also a need to strengthen the link between testing and treatment to ensure those with a diagnosis are able to access care.

Lowering infections among high-risk groups is one of NACO's biggest success stories, although continued effective prevention programmes must remain in place, particularly for people who inject drugs and transgender people, the two at-risk groups with the highest HIV prevalence of all key populations.

The move to decriminalise homosexuality is promising, yet more needs to be done to reduce homophobia within Indian society to ensure men who have sex with men are able to protect themselves from HIV and access treatment if diagnosed as positive.

Equally important is to better understand the transmission dynamics between states caused by migration, which is increasingly being recognised as a key driver of new HIV infections in India.

In addition, new pockets of infection have emerged in areas including Gujarat, Bihar, Delhi, Chhattisgarh, Rajasthan, Odisha, and Jharkhand.<sup>115</sup>

Improving data collection and analysis is crucial to identifying these pockets of new infections and understanding patterns of vulnerability, making this field crucial to the success of India's HIV response.<sup>116</sup>

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