

COMMUNITIES AT THE CENTRE

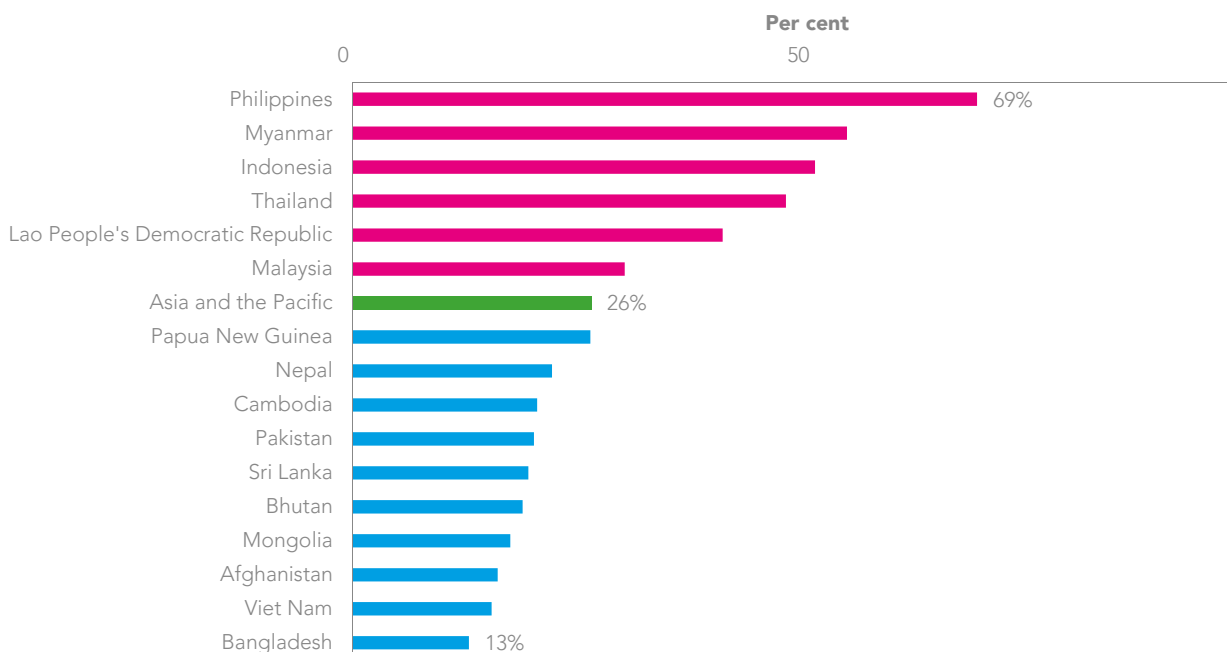
THE RESPONSE TO HIV IN
ASIA AND THE PACIFIC



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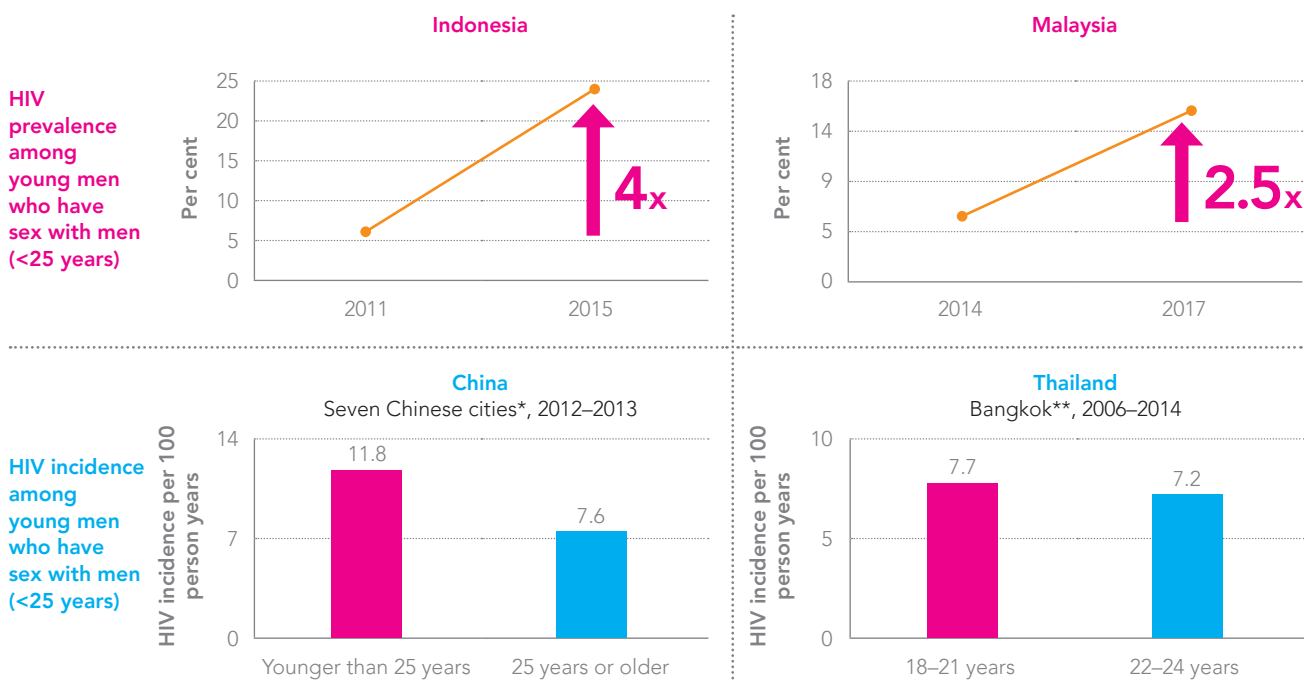
FIGURE 12.1 Proportion of young people among total estimated new HIV infections, Asia and the Pacific, 2018



Note: Pink bars are above the regional average. Blue bars are below the regional average.

Source: Prepared by www.aidsdatahub.org, based on UNAIDS 2019 HIV estimates.

FIGURE 12.2 Rising HIV prevalence and high HIV incidence among young men who have sex with men, selected countries, Asia and the Pacific, 2011–2017



*Changsha, Ji'nan, Kunming, Nanjing, Shanghai, Shenyang and Zhengzhou. **Bangkok Men Who have Sex with Men Cohort Study (BMCS).

Source: Prepared by www.aidsdatahub.org, based on integrated biological and behavioural surveys; Mao X, Wang Z, Hu Q, Huang C, Yan H, Wang Z et al. HIV incidence is rapidly increasing with age among young men who have sex with men in China: a multicentre cross-sectional survey. *HIV Med.* 2018;19(8):513-22; and Thienkrua W, van Griensven F, Mock PA, Dunne EF, Raengsakulrach B, Wimonstae W et al. Young men who have sex with men at high risk for HIV, Bangkok MSM Cohort Study, Thailand 2006–2014. *AIDS Behav.* 2018;22(7):2137-46.

ASIA AND THE PACIFIC

AT A GLANCE

While there has been strong progress in several countries, the HIV epidemic is outpacing the response in others. Annual new HIV infections are rising rapidly in Bangladesh, Pakistan and the Philippines.

Improved access to HIV treatment has reduced the annual number of AIDS-related deaths by 24% since 2010, but the epidemic is claiming a growing number of lives in Afghanistan, Bangladesh, Indonesia, Pakistan and the Philippines.

Gay men and other men who have sex with men are experiencing rapidly growing HIV epidemics in several countries, with young men especially at risk.

Amid an increase in the availability of heroin—and little improvement in the availability of harm reduction services—a resurgent epidemic is underway in some locations among people who inject drugs.

Despite legislative reforms and other progress, shrinking civic space and stigma and discrimination against people living with HIV and key populations stand in the way of more rapid progress against the epidemic.

Asia and the Pacific boasts some of the earliest successes in responding to the HIV epidemic. The region's response, however, is highly uneven, and several national HIV programmes are not keeping pace with their growing HIV epidemics. Creeping complacency in other countries risks squandering gains made thus far.

At least three quarters of new HIV infections in the region are among key populations and their sexual partners. This highlights the need for legal reforms and other initiatives to reduce the discrimination and marginalization faced by these populations, and for increased support for community-led activities.

Young people (aged 15–24 years) accounted for about one quarter of new HIV infections in the region in 2018; they represented an even larger proportion of new infections in Indonesia, Myanmar, the Philippines and Thailand (Figure 12.1). Trends in HIV acquisition among

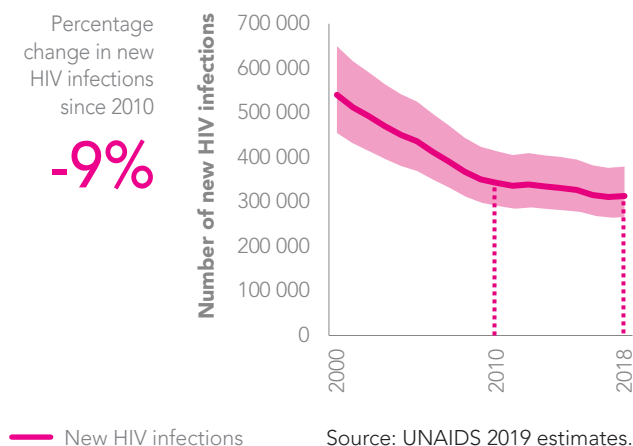
young gay men and other men who have sex with men in several countries are of particular concern: data from surveys show HIV prevalence rising among this group in Indonesia and Malaysia, and special studies conducted in China and Thailand show high incidence of HIV infection among them (Figure 12.2).¹

Social media has emerged as a source of both risk and risk mitigation. An 18-month cohort study in Shenyang, China, showed that HIV incidence among gay men and other men who have sex with men who use mobile phone-based dating applications was more than four times higher than among non-users (1). In contrast, increasingly sophisticated social media platforms offer new ways to link people at high risk of HIV infection to prevention services. Countries need to make greater use of social media and community-led innovations to reach these and other key populations with the HIV services they need, including HIV self-testing and pre-exposure prophylaxis (PrEP). ■

¹ The cities in the China study were Changsha, Ji'nan, Kunming, Nanjing, Shanghai, Shenyang and Zhengzhou.

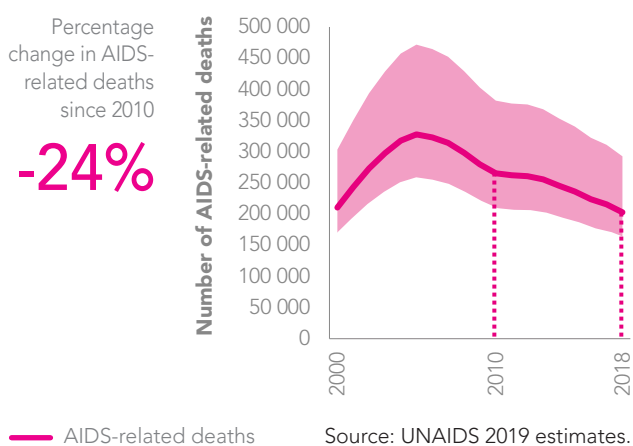
STATE OF THE EPIDEMIC

FIGURE 12.3 Number of new HIV infections, Asia and the Pacific, 2000–2018



There has been a modest 9% decline in the annual number of new HIV infections in Asia and the Pacific since 2010, from an estimated 340 000 [290 000–410 000] to 310 000 [270 000–380 000] in 2018 (Figure 12.3). Prevention programmes are faltering in some countries, notably Afghanistan, Bangladesh, Pakistan and the Philippines, where the annual number of new HIV infections has increased steeply since 2010. This regional trend is also driven to a substantial degree by the large countries in the region: without China and India, the decline in new HIV infections would be 18% between 2010 and 2018.

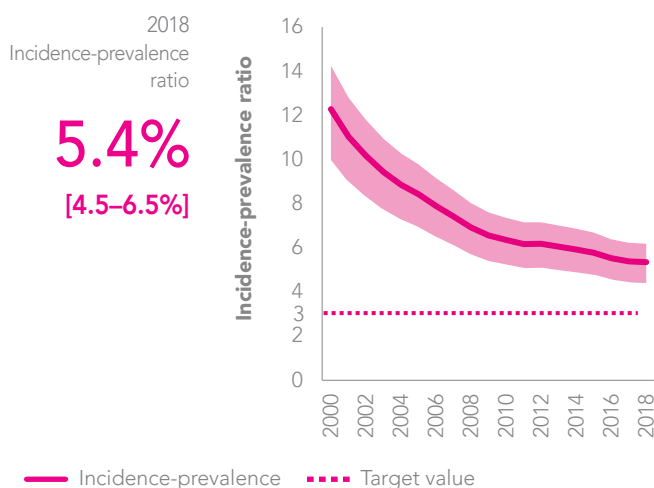
FIGURE 12.4 Number of AIDS-related deaths, Asia and the Pacific, 2000–2018



The estimated 200 000 [160 000–290 000] AIDS-related deaths that occurred in the region in 2018 were 24% fewer than the 270 000 [210 000–380 000] in 2010 (Figure 12.4). However, the HIV epidemics in Afghanistan, Bangladesh, Indonesia, Pakistan and the Philippines are claiming an increasing number of lives each year. The region’s incidence-prevalence ratio was 5.4% [4.5–6.5%] in 2018 (Figure 12.5).

More than three quarters of new HIV infections in Asia and the Pacific are among key populations and their sexual partners, with about 30% of new infections occurring among gay men and other men who have sex with men (Figure 12.8).

FIGURE 12.5 Incidence-prevalence ratio, Asia and the Pacific, 2000–2018



Surveys reveal high HIV prevalence among key populations (Figure 12.7). HIV prevalence among gay men and other men who have sex with men was between 5% and 20% in seven countries that reported data, and it exceeded 20% in two countries. Among people who inject drugs, HIV prevalence ranged between 5% and 20% in eight of the 16 countries that reported data, and it was more than 20% in four more. Among transgender people, median HIV prevalence among the 13 reporting countries was 3.1%. ■

FIGURE 12.6 Percentage change in new HIV infections, by country, Asia and the Pacific, 2010–2018

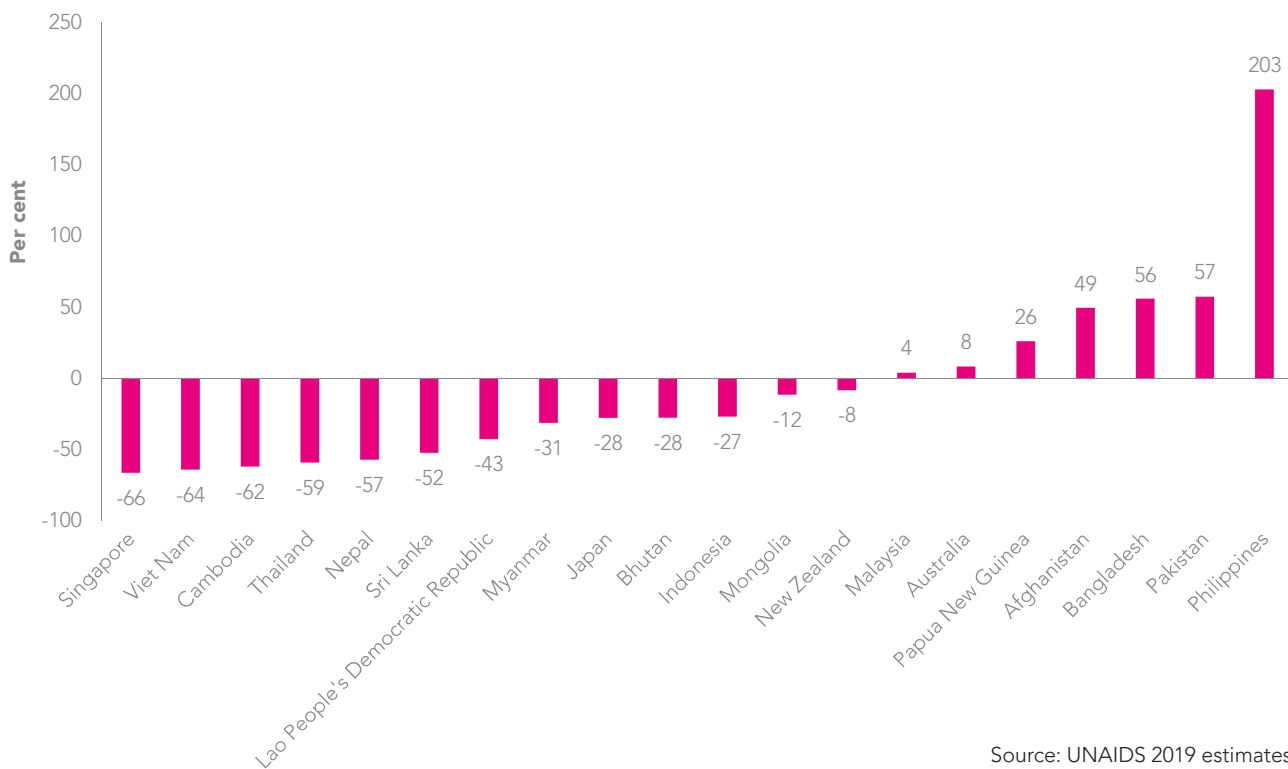
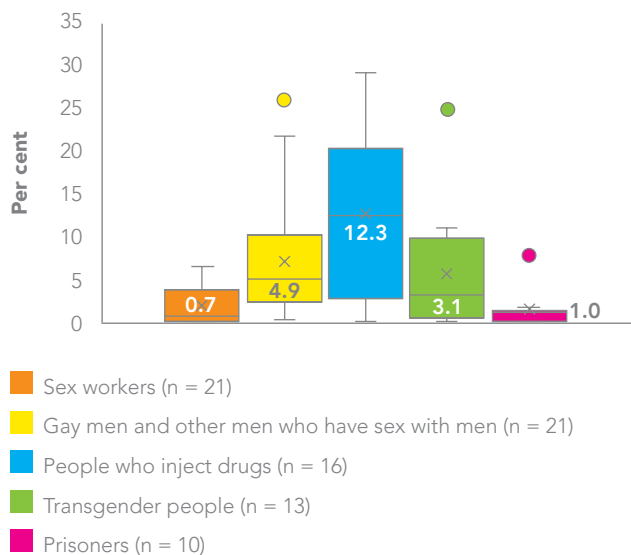
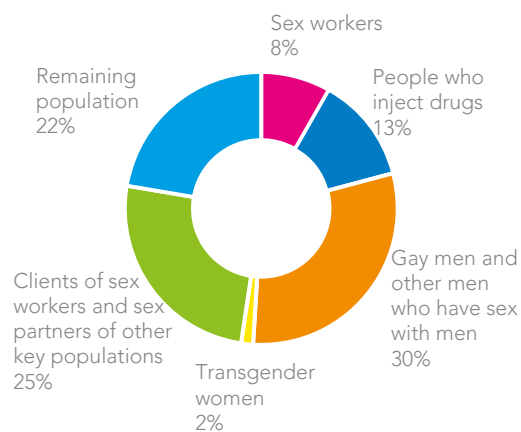


FIGURE 12.7 HIV prevalence among key populations, Asia and the Pacific, 2014–2018



Source: Global AIDS Monitoring, 2014–2018.

FIGURE 12.8 Distribution of new HIV infections (aged 15–49 years), by population group, Asia and the Pacific, 2018



Source: UNAIDS special analysis, 2019.

TABLE 12.1 Estimated size of key populations, Asia and the Pacific, 2018

Country	National adult population (15+)	Sex workers	Sex workers as per cent of adult population (15+)	Gay men and other men who have sex with men	Gay men and other men who have sex with men as per cent of adult population (15+)	People who inject drugs	People who inject drugs as per cent of adult population (15+)	Transgender people	Transgender people as per cent of adult population (15+)	Prisoners	Prisoners as per cent of adult population (15+)
Lao People's Democratic Republic	4 695 000	14 000	0.30	17 000	0.36						
Malaysia	24 340 000	37 000	0.15			75 000	0.31				
Nepal	20 684 000									22 000	0.11
New Zealand	3 808 000					15 000	0.39			10 000	0.26
Singapore	4 938 000									11 000	0.23
Sri Lanka	15 980 000	30 000	0.19	74 000	0.46	2700	0.02	2200	0.01		
Thailand	57 425 000									370 000	0.64
Viet Nam	74 266 000					190 000	0.26				

■ National population size estimate ■ Local population size estimate ■ Insufficient data ■ No data

Sources: Global AIDS Monitoring, 2018; United Nations, Department of Economic and Social Affairs, Population Division. World population prospects: the 2017 revision. 2018 (custom data acquired via website).

YOUTH-LED AND DATA-DRIVEN ADVOCACY IN THE PHILIPPINES

The Philippines has the third youngest population in Asia and the Pacific. Youth leadership, advocacy and involvement are key to the success of the HIV response in the country. With this in mind, the ACT!2030 alliance brought together youth-led and youth-serving organizations with knowledge and experience of sexual and reproductive health and rights and HIV. As one of 12 country alliances under the global ACT!2030 umbrella, the experience of the Philippines alliance is a useful case study in how to empower youth to work together to take the reins of information gathering and advocacy for their own sexual and reproductive health.

The alliance ensured that the voices of marginalized young people and key populations—including lesbian, gay, bisexual, transgender and intersex (LGBTI) young people—were included. Peer education groups and high school student government representatives served as the project's qualitative researchers. Sixty youth data reporters were tasked with collecting qualitative data on comprehensive sexuality education in the Philippines. They found that there was broad support for comprehensive sexuality education, but that delivery was not being effectively introduced (2). As well as collecting data, the ACT!2030 Philippines alliance was able to bring these data to the decision-making table as a member of the Technical Working Group of the National Adolescent Health and Development Programme. The alliance also worked with the Philippine National AIDS Council and the Committee on Children and HIV/AIDS during the development of the country's Sixth AIDS Medium Term Plan (2). (Full story on page 155.)

THE CASCADE FROM HIV TESTING TO VIRAL SUPPRESSION

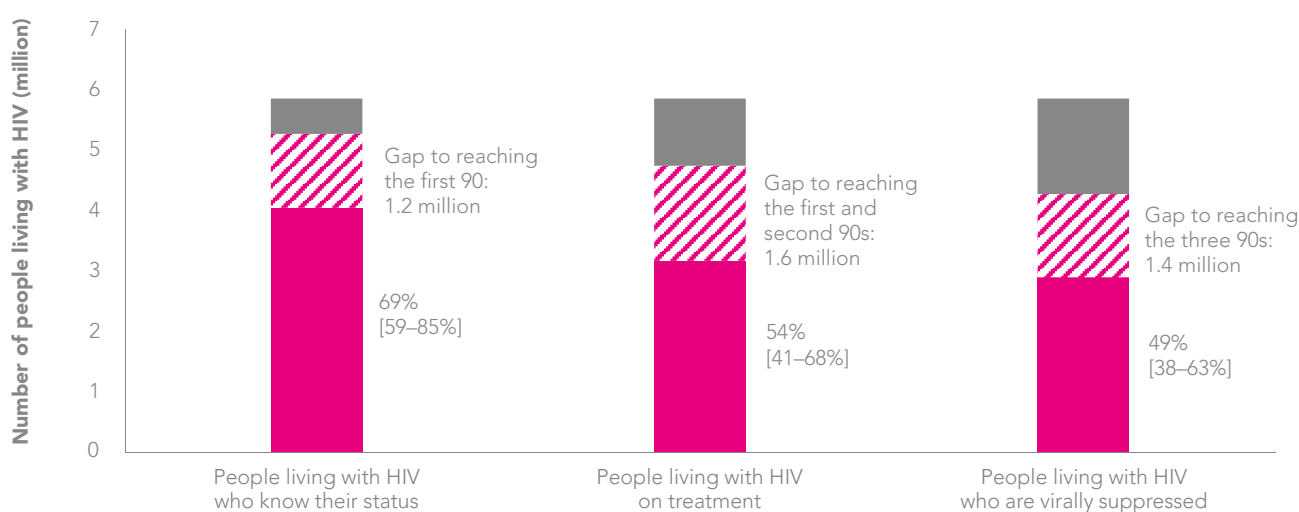
Among the estimated 5.9 million [5.1 million–7.1 million] people living with HIV in Asia and the Pacific in 2018, the proportion who knew their HIV status increased from 58% [45–76%] in 2015 to 69% [59–85%] in 2018. The estimated 3.2 million people who were receiving antiretroviral therapy in 2018 comprised about 54% [41–68%] of people living with HIV, compared with 37% [28–47%] in 2015. But gaps in diagnosing people living with HIV and linking them to treatment and care mean that the estimated 2.9 million people who were virally suppressed accounted for only about half (49% [38–63%]) of all people living with HIV in the region (Figure 12.9). This is a missed opportunity to prevent onward transmission of HIV and to reduce AIDS-related deaths.

Among people living with HIV who knew their HIV-positive status, 78% [68–83%] were accessing treatment in 2018, and viral load suppression among people accessing treatment was about 91% [72–95%]. However, routine viral load testing is limited in many countries in the region. The gap to achieving the first of the 90–90–90 targets in 2018 was 1.2 million people who did not know they were living with HIV, while the gap to achieving the first two 90s was 1.6 million people living with HIV who were not on treatment. The gap to reaching all three 90s was 1.4 million people living with HIV with unsuppressed viral loads.

Linkage to HIV treatment and care services was poor in several countries, particularly Afghanistan and Indonesia, where more than half of the people who knew they were living with HIV were not accessing antiretroviral therapy in 2018 (Table 12.2). In Bangladesh, the Lao People's Democratic Republic, Malaysia, the Philippines, Sri Lanka and Viet Nam, at least one third of people who knew they were HIV-positive were not receiving HIV treatment. By contrast, almost all people living with HIV who knew their HIV status in Cambodia were receiving treatment in 2018, as were close to 80% or more in China, Myanmar, Nepal and Thailand.

Accessible, affordable and stigma-free care and treatment services, including access to viral load testing, should be available to all people living with HIV. High levels of viral load suppression were achieved in Australia, Cambodia, Myanmar (among women) and Thailand (Figure 12.10). Despite this, efforts to reach key populations with prevention, treatment and care services are uneven across the region: in Bangladesh, Malaysia, Pakistan, the Philippines and Sri Lanka, for example, survey data from 2016–2018 show that less than half of key populations living with HIV knew their HIV status (Figures 12.11). ■

FIGURE 12.9 HIV testing and treatment cascade, Asia and the Pacific, 2018



Source: UNAIDS special analysis, 2019; see annex on methods for more details.

TABLE 12.2 90–90–90 country scorecard, Asia and the Pacific, 2018

	First 90: percentage of people living with HIV who know their HIV status			Second 90: percentage of people living with HIV who know their status and who are on treatment			Third 90: percentage of people living with HIV on treatment who have suppressed viral loads			Viral load suppression: percentage of people living with HIV who are virally suppressed		
	All ages	Women (15 years and older)	Men (15 years and older)	All ages	Women (15 years and older)	Men (15 years and older)	All ages	Women (15 years and older)	Men (15 years and older)	All ages	Women (15 years and older)	Men (15 years and older)
Asia and the Pacific	69	74	66	78	81	76	91	92	91	49	55	46
Afghanistan	38	32	40	34	38	32						
Australia							95	>95	95	79	81	78
Bangladesh	37	35	37	60	60	61						
Bhutan	47	73	35	79	78	75						
Brunei Darussalam				93	>95	91	59	57	59			
Cambodia	82	82	80	>95	>95	>95	95	>95	>95	78	79	76
China				83	86	83	94	94	94			
Cook Islands												
Democratic People's Republic of Korea												
Fiji												
India												
Indonesia	51			33								
Japan												
Kiribati				>95	>95	>95						
Lao People's Democratic Republic	85			64			87	92	82	47	52	44
Malaysia	86	75	89	55	95	48						
Maldives												
Marshall Islands												
Micronesia (Federated States of)												
Mongolia	38	39	38	86	77	89	79	91	77	26	27	26
Myanmar							92	92	92	65	75	58
Nauru												
Nepal	71	71	70	79	93	68						
New Zealand												
Niue												
Pakistan	14	8	16	69	83	66						
Palau												
Papua New Guinea	87	91	87	75	77	70						
Philippines	76	78	77	57	28	59						
Republic of Korea												
Samoa				>95	>95	>95	31	33	38			
Singapore												
Solomon Islands				>95	>95	>95	77	78	75			
Sri Lanka							84	87	83	38	39	37
Thailand	94	94	94	80	82	78	>95	>95	>95	73	75	71
Timor-Leste												
Tonga												
Tuvalu												
Vanuatu												
Viet Nam												

90–90–90: ■ 90% and above ■ 85–89% ■ 70–84% ■ 50–69% ■ Less than 50%

Viral load suppression: ■ 73% and above ■ 65–72% ■ 40–64% ■ 25–39% ■ Less than 25%

Source: UNAIDS special analysis, 2019.

FIGURE 12.10 Viral load suppression among adults (aged 15 years and older) living with HIV, by sex, Asia and the Pacific, 2018

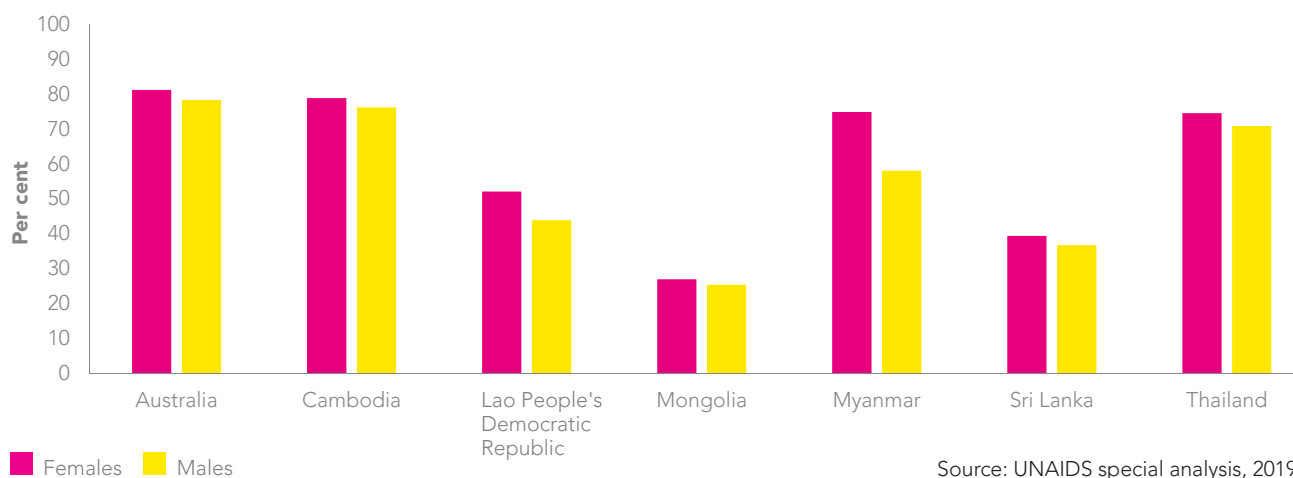
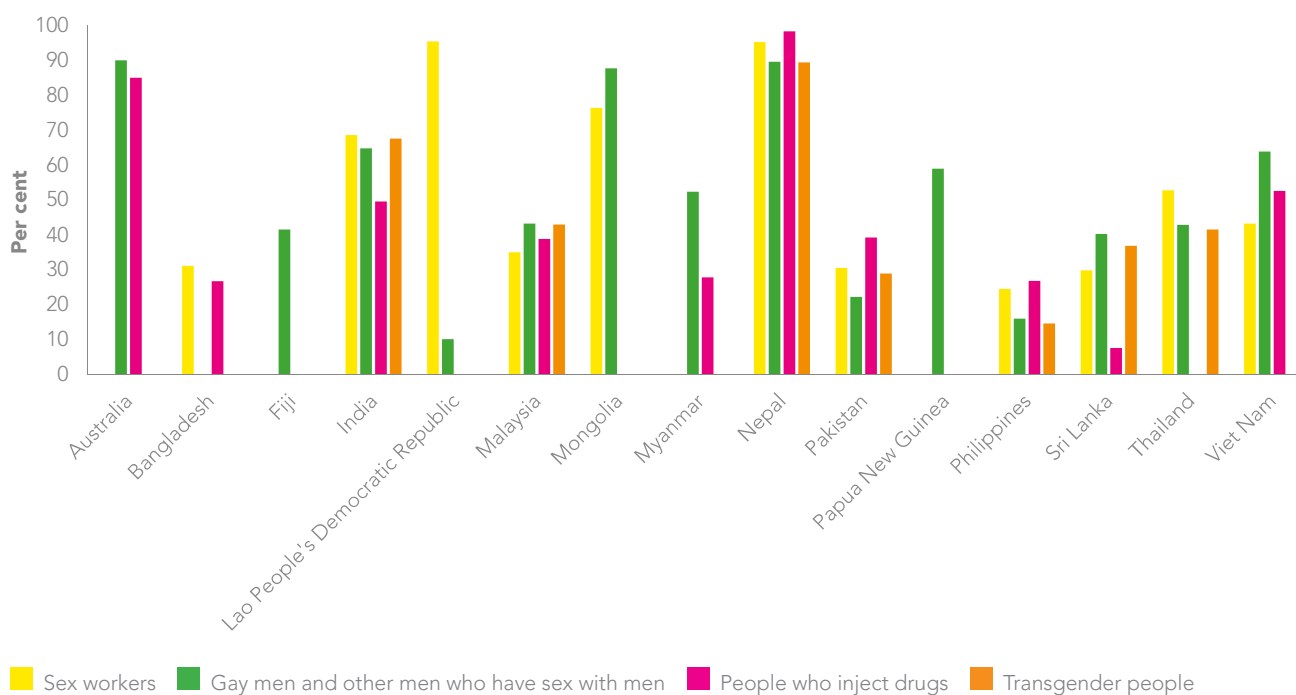


FIGURE 12.11 Knowledge of status among key populations, Asia and the Pacific, 2016–2018



Note: Data shown come from surveys, which are typically conducted in areas with high prevalence and needs and may not be nationally representative.

Source: Global AIDS Monitoring, 2016–2018.

A COMBINATION APPROACH TO PREVENTION

Given the strong evidence that people with an undetectable HIV viral load cannot transmit the virus to others, it is crucial that all people living with HIV have access to treatment as soon as they are diagnosed, and that they are able to achieve viral load suppression. In 2018, only about half of people living with HIV in Asia and the Pacific were virally suppressed.

Similarly, access to multiple HIV prevention services ranged from poor (less than 50%) to almost non-existent in eight of the 12 countries reporting these data for 2018 (Figure 12.12). Coverage of HIV prevention services for sex workers and transgender people were especially varied among countries in the region.

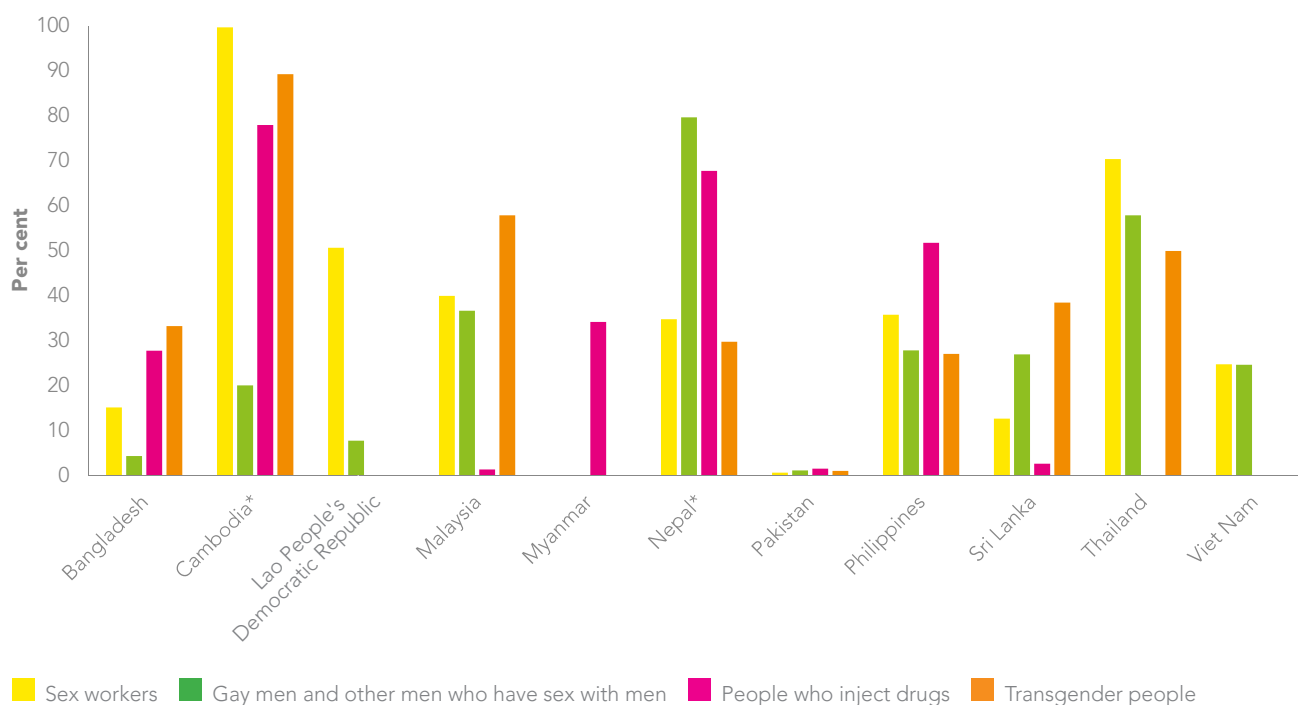
Although improving, HIV-related data for transgender people remain limited and provide only a sketchy picture of access to prevention coverage for this highly stigmatized and marginalized key population. Available

data from 2015 to 2018 contrast high coverage of HIV prevention services in Cambodia with almost non-existent coverage in Pakistan. Coverage of testing for sexually transmitted infections (STIs) was low in all countries that reported data (Figure 12.13).

PrEP is a highly effective additional prevention choice for people who are at substantial risk of HIV infection. It is becoming increasingly available to gay men and other men who have sex with men in Asia and the Pacific, albeit still on a very limited scale. This includes countries such as Malaysia and the Philippines, where a majority of new infections are within this key population (Figure 12.14).

Access to harm reduction services remains very uneven in a region marked by hostile and highly punitive approaches to drug use. In the Philippines, for example, extrajudicial killings of people who use drugs and

FIGURE 12.12 Percentage of key populations who reported receiving at least two prevention services in the past three months, Asia and the Pacific, 2016–2018



Note 1: The use of an asterisk (*) indicates that data for marked countries come from programme data (which tend to show higher values due to the use as a denominator of the number of key population members that are linked to the programme) and not from a survey.

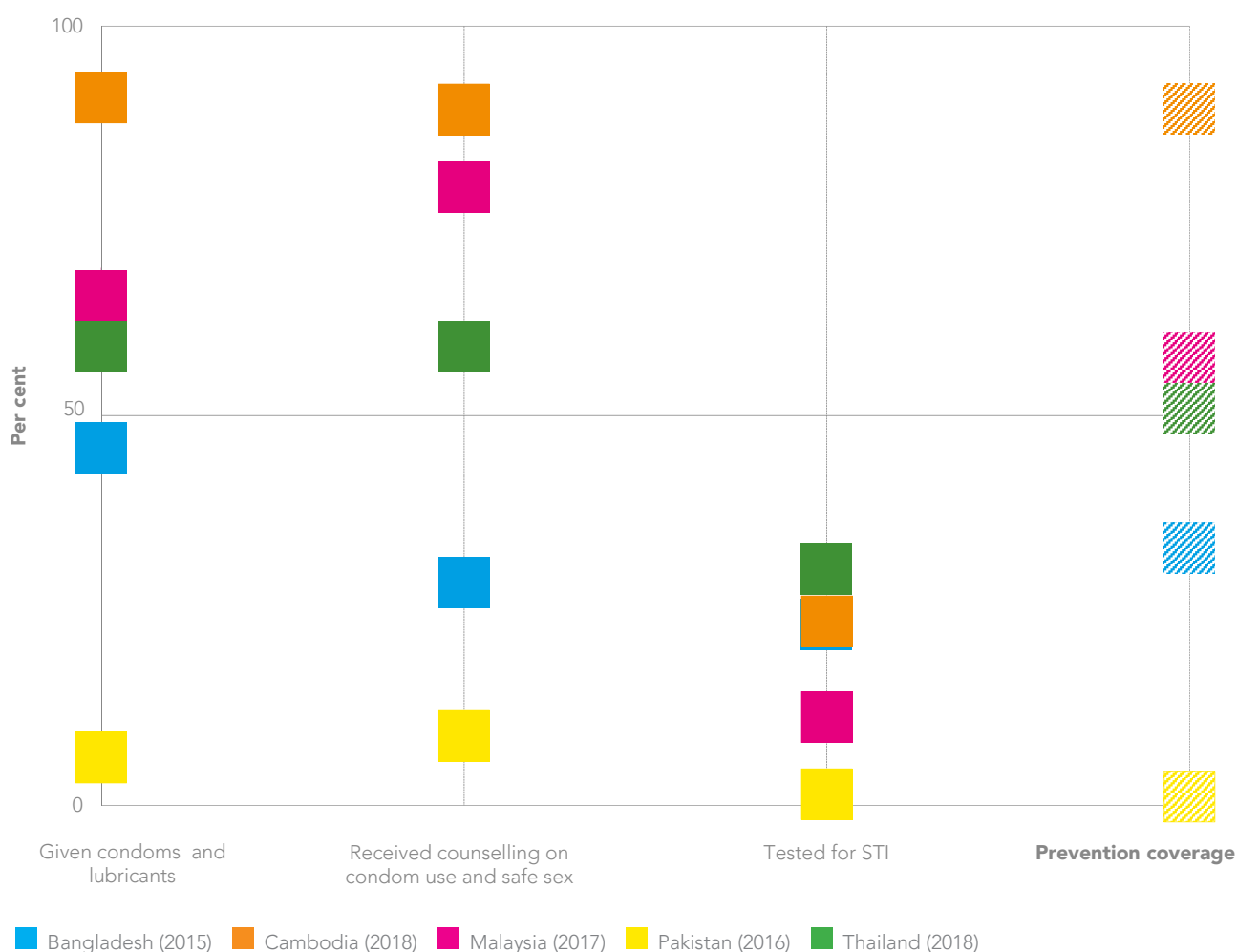
Note 2: Possible prevention services received among sex workers, gay men and other men who have sex with men and transgender people: condoms and lubricant, counselling on condom use and safe sex, and testing of STIs. Possible prevention services received among people who inject drugs: condoms and lubricant, counselling on condom use and safe sex, and clean needles or syringes.

Source: Global AIDS Monitoring, 2016–2018.

the closure of harm reduction programmes prevent people from accessing essential health services and impede progress toward reducing new HIV infections. In contrast, Cambodia and India have achieved high coverage of needle–syringe services (>200 needles and syringes per person who injects drugs per year) and moderate coverage of opioid substitution therapy services (coverage of 20–40%) (Figure 12.15). Despite this, needle–syringe programme coverage is extremely limited in Indonesia and Thailand, and opioid substitution therapy was either unavailable or rare in a number of countries, including Bangladesh, Pakistan, the Philippines and Thailand. ■

ACCESS TO HARM REDUCTION SERVICES REMAINS VERY UNEVEN IN A REGION MARKED BY HOSTILE AND HIGHLY PUNITIVE APPROACHES TO DRUG USE.

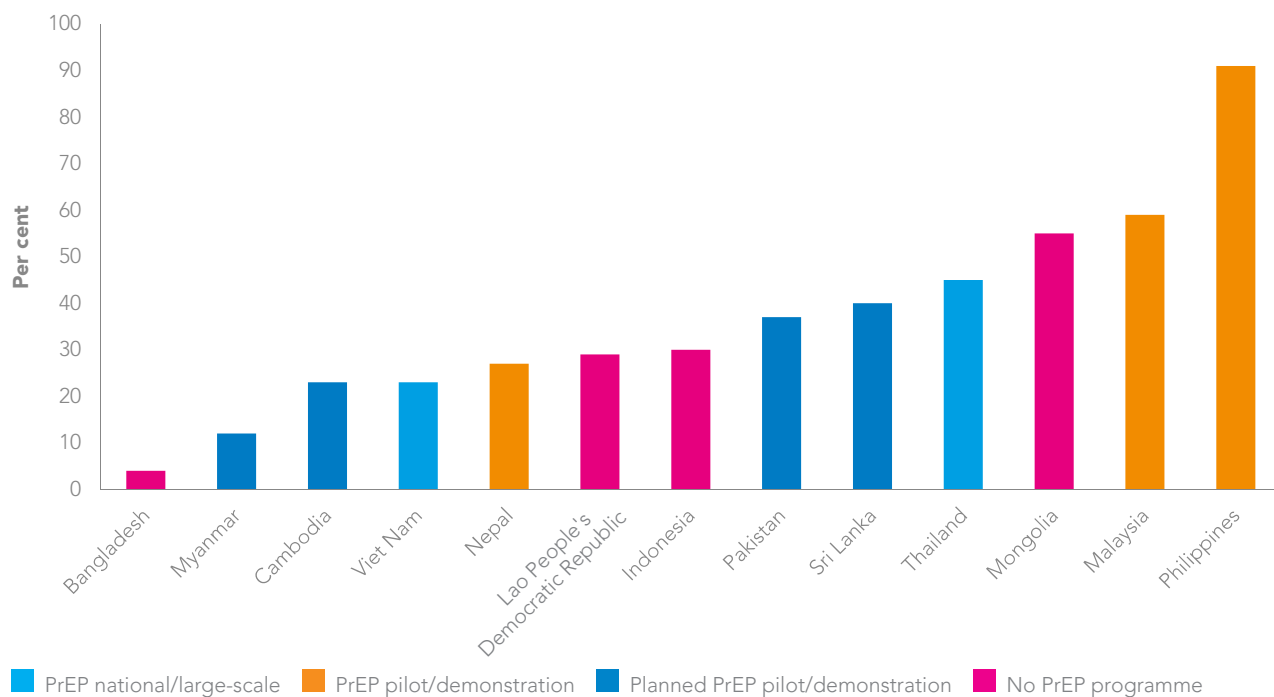
FIGURE 12.13 Prevention coverage among transgender people, selected countries with available data, Asia and the Pacific, 2015–2018



Note: Prevention coverage is measured as a percentage of people in a key population reporting having received a combined set of HIV prevention interventions (at least two out of three services: given condoms and lubricants; received counselling on condom use and safe sex; and tested for STI) in the past three months.

Source: Prepared by www.aidsdatahub.org, based on 2018 and 2019 Global AIDS Monitoring.

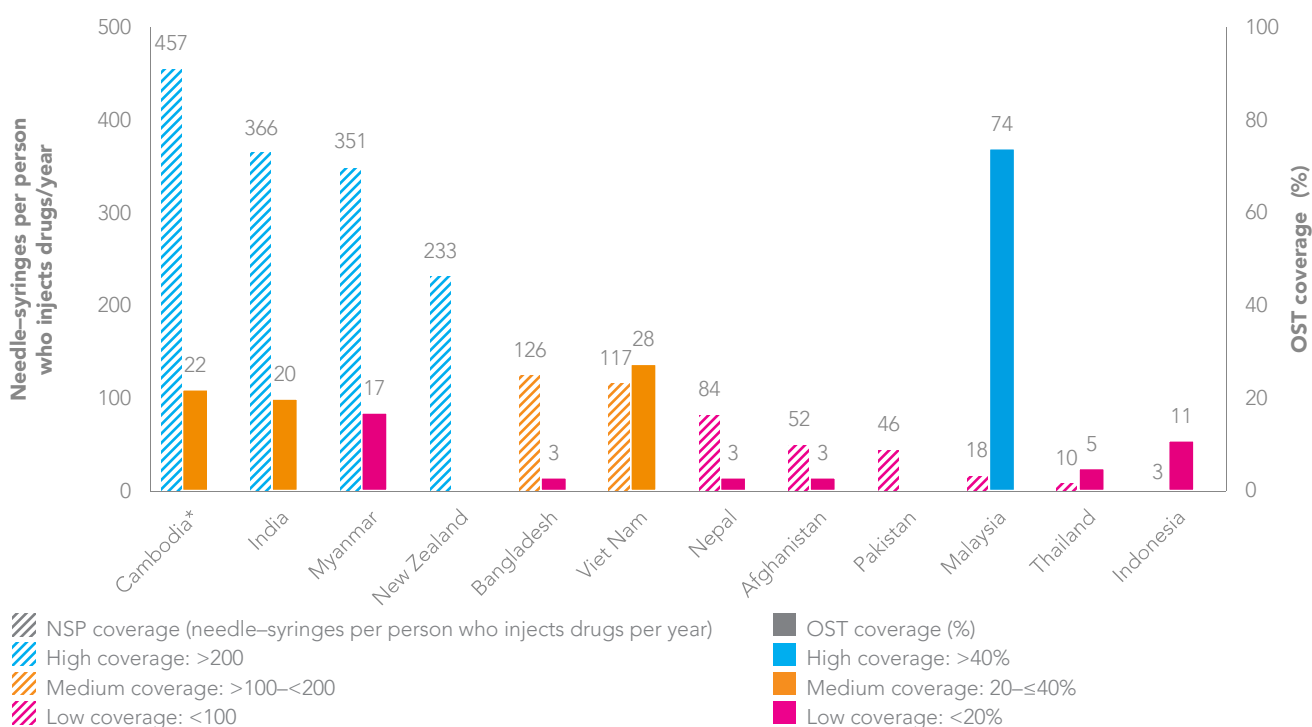
FIGURE 12.14 Percentage of total adult HIV infections that are among gay men and other men who have sex with men, availability of PrEP, selected countries, Asia and the Pacific, 2018



Note: Data do not include drug registration and private sector availability. Antiretroviral medicines registered for use as PrEP are available in the private sector in several countries, including Malaysia, the Philippines, Thailand and Viet Nam. China and India are not included in the above graph since disaggregated new HIV infection data for gay men and other men who have sex with men are not available. India has completed a PrEP demonstration project, and China has a current demonstration project.

Source: Prepared by www.aidsdatahub.org based on country-submitted AEM-Spectrum HIV estimates files and information from national programmes.

FIGURE 12.15 Needle and syringe programme (NSP) and opioid substitution therapy (OST) coverage among people who inject drugs, selected countries with available data, Asia and the Pacific, 2018



*2016 data for OST coverage

Source: Prepared by www.aidsdatahub.org, based on 2019 Global AIDS Monitoring.

CONFRONTING STIGMA AND DISCRIMINATION

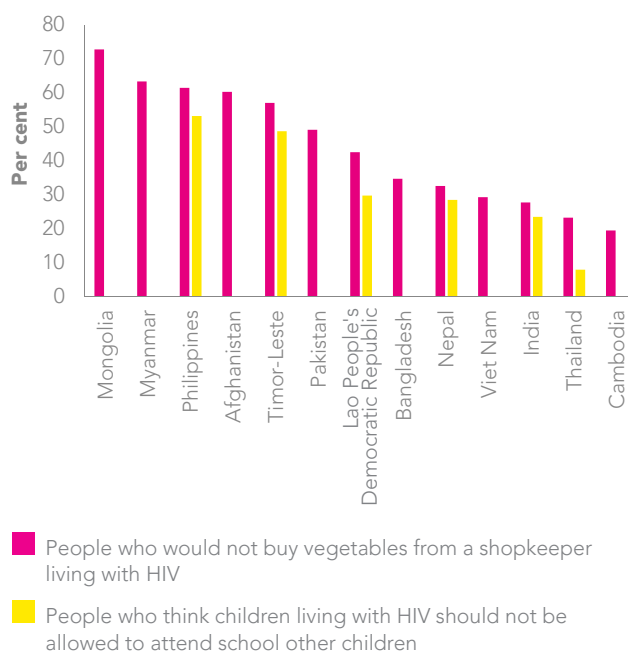
Stigma and discrimination continues to be a major impediment to HIV prevention, treatment and other health-related services in Asia and the Pacific. According to population-based surveys from 13 countries, at least 40% of people in seven of those countries said they would not buy vegetables from a vendor who was living with HIV. In five of six countries that reported data, more than 20% of people felt that children living with HIV should not be allowed to go to school with other children (Figure 12.16).

Thailand is one of the few countries in the region where concerted efforts, guided by strong national policies, are underway to reduce stigma and discrimination in the HIV response. Results from two rounds of surveys in Thailand (in 2014–2015 and 2017) indicate there has been progress made in reducing the HIV-related stigma and discrimination that is experienced by people living with HIV in health-care settings (Figure 12.18). Nonetheless, one out of 10 people living with HIV surveyed in 2017 reported experiencing stigma and discrimination in health-care settings, and one in three said they avoided attending a health facility due to internalized stigma (4).

Intimate partner violence, which can increase the risk of acquiring HIV among women and discourage their use of HIV and other health services, remains a challenge in Asia and the Pacific. In five of the 11 countries with relatively recent survey data, more than 20% of women said their husbands or male partners had physically and/or sexually assaulted them in the previous 12 months (Figure 12.17) (5). ■

THAILAND IS ONE OF THE FEW COUNTRIES IN THE REGION WHERE CONCERTED EFFORTS, GUIDED BY STRONG NATIONAL POLICIES, ARE UNDERWAY TO REDUCE STIGMA AND DISCRIMINATION IN THE HIV RESPONSE.

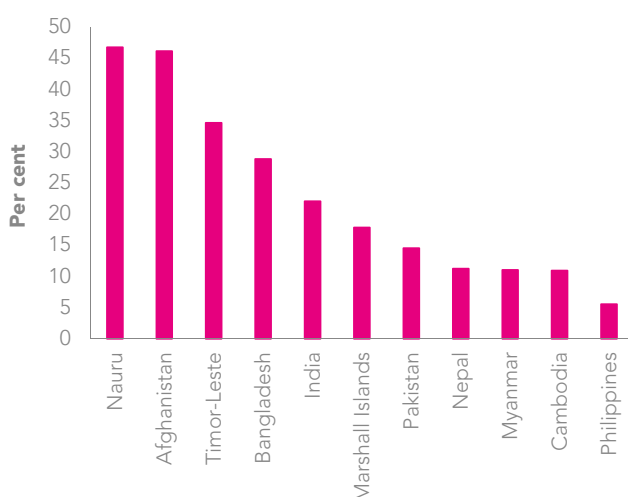
FIGURE 12.16 Percentage of men and women aged 15–49 years with discriminatory attitudes towards people living with HIV, Asia and the Pacific, 2013–2017



Note: Data for Bangladesh, the Philippines and Viet Nam are for female respondents only.

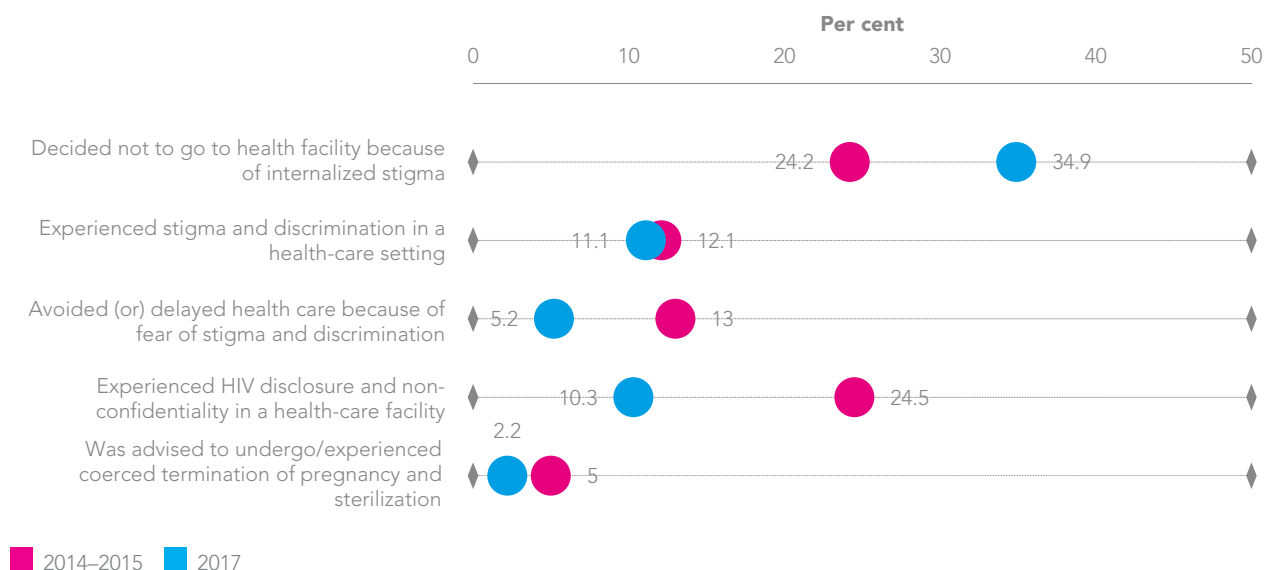
Source: Population-based surveys, 2013–2017, countries with available data.

FIGURE 12.17 Percentage of ever-married or partnered women aged 15–49 years who experienced physical and/or sexual violence by an intimate partner in the past 12 months, Asia and the Pacific, most recent data, 2014–2018



Source: Population-based surveys, 2014–2018.

FIGURE 12.18 Stigma and discrimination in health-care settings experienced by people living with HIV in the past 12 months, Thailand, 2014–2015 and 2017



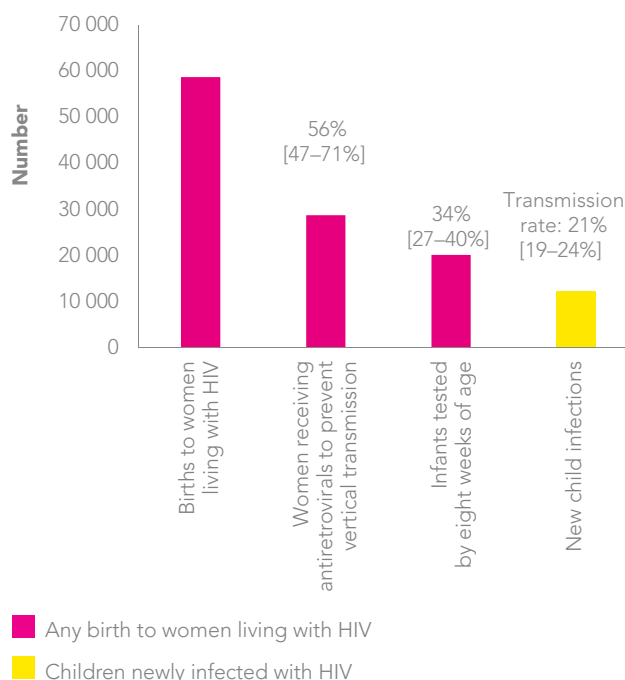
Source: Stigma and discrimination among health care providers and people living with HIV in health care settings in Thailand: comparison of findings from 2014–2015 and 2017. Bangkok: Ministry of Public Health [Thailand]; Oct 2018.

ELIMINATING MOTHER-TO-CHILD TRANSMISSION

In October 2018, Malaysia became the second country in the region to be certified as having eliminated mother-to-child transmission of both HIV and syphilis (following Thailand’s certification in 2016) (3). In the region as a whole, coverage of programmes to prevent mother-to-child transmission has more than doubled since 2010, but there is wide variation between countries. An estimated 56% [47–71%] of HIV-positive pregnant women were receiving effective antiretroviral regimens in 2018 (Figure 12.19). Consequently, the regional rate of mother-to-child transmission of HIV was 21% [19–24%], which means that approximately 12 000 [9800–18 000] children (aged 0–14 years) acquired HIV in 2018.

Coverage of early infant diagnosis is similarly uneven, ranging from more than 90% in Malaysia, Singapore and Thailand to extremely low levels in Afghanistan, Indonesia, Pakistan and the Philippines. In the region as a whole, an estimated 34% [27–40%] of children exposed to HIV received early infant diagnosis. ■

FIGURE 12.19 Cascade of services for preventing vertical transmission, numbers of new HIV infections and transmission rate, Asia and the Pacific, 2018



Source: UNAIDS 2019 estimates; 2019 Global AIDS Monitoring.

INVESTING TO END AN EPIDEMIC

There has been a modest but steady increase in resources available for the HIV response in Asia and the Pacific since 2010.² A doubling of domestic resources for HIV programmes between 2010 and 2018, from US\$ 1.4 billion to US\$ 2.8 billion, was largely responsible for a 32% total increase in resources (to US\$ 3.5 billion) available for HIV responses (Figure 12.20).

The domestic share of HIV funding grew from 53% in 2010 to 81% in 2018. China, India, Malaysia and Thailand now fund their national HIV responses almost entirely from domestic resources. Indonesia more than doubled its domestic resources for HIV compared to 2010 levels, but the current investment in the country remains significantly below the funding needed.

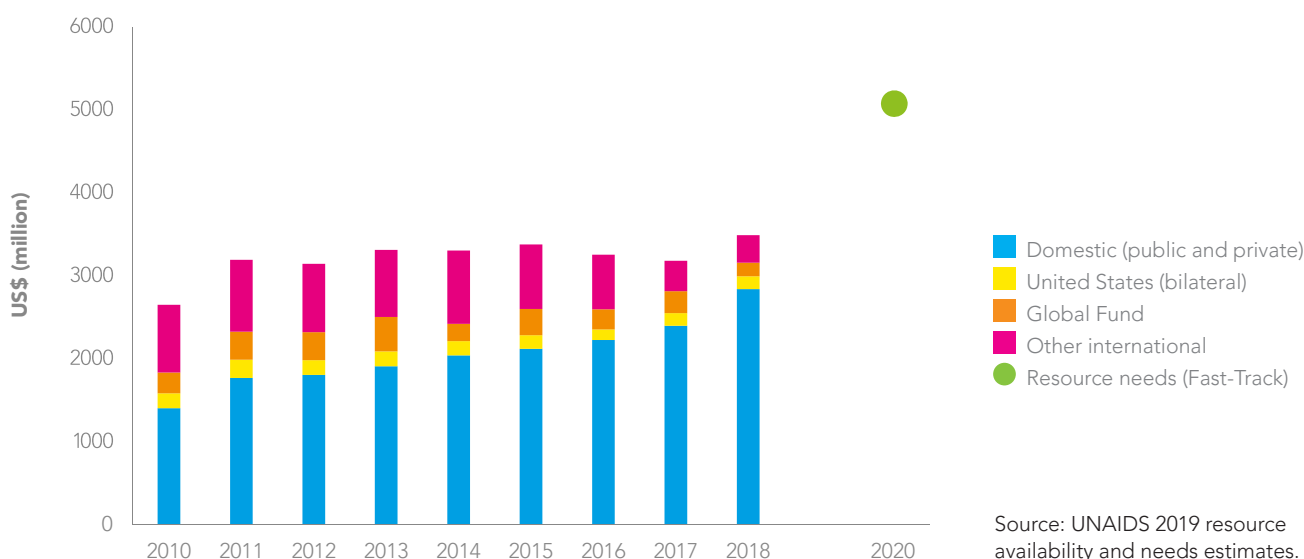
International contributions diminished by 48% between 2010 and 2018. Bilateral disbursements from the Government of the United States of America

decreased by 14%, resources from the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund) declined by 35% and all other international resources were reduced by 59%.³

The change in resource availability between 2017 and 2018 showed an increase of 10% (in constant 2016 US dollars). Domestic resources increased by 18% and United States bilateral resources increased by 2%, while the Global Fund's resources in the region decreased by 38%. All other international channels decreased by 10%.

Total resource availability fell short of the estimated US\$ 5 billion needed to reach the 2020 Fast-Track Targets. Bridging that gap requires an increase of about 40% in HIV resources by 2020, and programme effectiveness and improved efficiencies are needed in several countries in the region. ■

FIGURE 12.20 HIV resource availability, by source, Asia and the Pacific, 2010–2018, and projected resource needs by 2020



2 Details on the revised UNAIDS estimates for resource availability in low- and middle-income countries can be found in the Investing to End an Epidemic chapter.

3 The Global Fund disbursements to countries decreased by 20% in 2018 because most funding grants ended in 2017, hence the changes in the level of disbursements.

REFERENCES

1. Xu J, Yu H, Tang W, Leuba SI, Zhang J, Zhang J et al. The effect of using geosocial networking apps on the HIV incidence rate among men who have sex with men: eighteen-month prospective cohort study in Shenyang, China. *J Med Internet Res*. 2018;20(12):e11303.
2. Case Study Philippines The Pact, Uproot and ACT!2030 Philippines.
3. Malaysia eliminates mother-to-child transmission of HIV and syphilis. In: who.int [Internet]. 8 October 2018. Geneva: World Health Organization; c2019 (<https://www.who.int/reproductivehealth/congenital-syphilis/emtct-validation-malaysia/en/>, accessed 17 July 2019).
4. Stigma and discrimination among health-care providers and people living with HIV in health-care settings in Thailand: comparison of findings from 2014–2015 and 2017. Bangkok: Ministry of Public Health [Thailand]; October 2018.
5. Various population-based surveys, 2014–2018.

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	560 [<500–850]	740 [<500–1200]	840 [<500–1600]
New HIV infections (0–14)	<100 [<100– <100]	<100 [<100– <200]	<100 [<100– <200]
New HIV infections (women, 15+)	<200 [<100– <500]	<200 [<100– <500]	<500 [<100– <500]
New HIV infections (men, 15+)	<500 [<500–560]	<500 [<500–810]	560 [<500–1000]
HIV incidence per 1000 population	0.02 [0.01–0.03]	0.02 [0.01–0.04]	0.02 [0.01–0.04]
AIDS-related deaths			
AIDS-related deaths (all ages)	<500 [<200– <500]	<500 [<200–500]	<500 [<200–610]
AIDS-related deaths (0–14)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (women, 15+)	<100 [<100– <100]	<100 [<100– <200]	<100 [<100– <200]
AIDS-related deaths (men, 15+)	<200 [<100– <500]	<200 [<100– <500]	<500 [<200– <500]
People living with HIV			
People living with HIV (all ages)	4200 [2500–6200]	6000 [3600–8900]	7200 [4100–11 000]
People living with HIV (0–14)	<500 [<200– <500]	<500 [<200– <500]	<500 [<500–530]
People living with HIV (women, 15+)	1200 [690–1700]	1600 [950–2400]	2000 [1100–3100]
People living with HIV (men, 15+)	2800 [1700–4100]	4000 [2400–6100]	4900 [2700–7900]
HIV prevalence (15–49)	<0.1 [<0.1– <0.1]	<0.1 [<0.1– <0.1]	<0.1 [<0.1– <0.1]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	No
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	Yes, death penalty
Drug use or possession for personal use is an offence	The law allows possession of a certain amount of drugs
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	No
Spousal consent for married women to access sexual and reproductive health services	...
Mandatory HIV testing for marriage, work or residence permits or for certain groups	No

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	2015 60.2
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months	
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent	

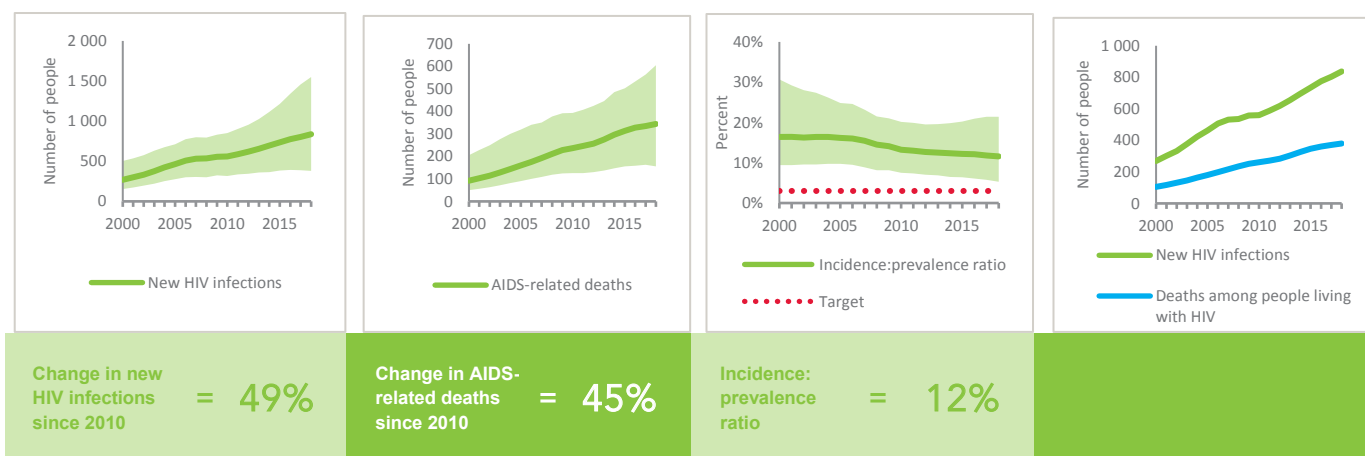
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months	2015 46.1
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EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2018	...	\$140 861	...	\$9 936 908	\$124	\$10 077 893

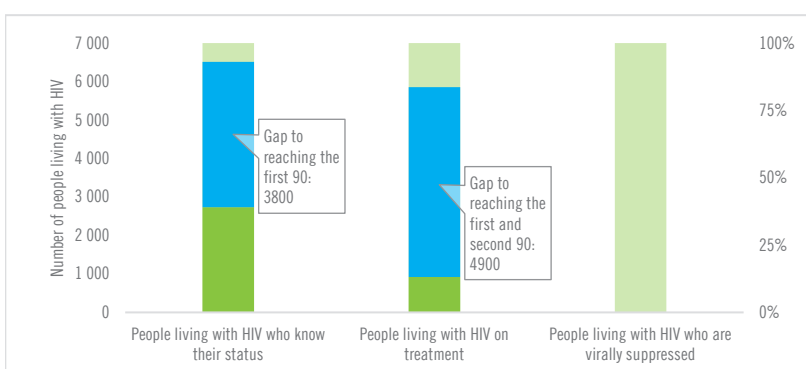
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population
HIV prevalence
Know their HIV status
Antiretroviral therapy coverage
Condom use
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (2017)	\$2205	\$1985	\$8306		

HIV TESTING AND TREATMENT CASCADE



	2010	2018
All ages	38% [21–60%]	13% [7–20%] 920
Children (0–14)	45% [26–67%]	17% [10–26%] 60
Women (15+)	32% [18–49%]	12% [7–19%] 250
Men (15+)	40% [22–65%]	13% [7–21%] 620

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	2% [1–3%]	11% [7–18%]
Early infant diagnosis	...% [...–...%]	1.2% [<1–2.1%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	210 [140–300]
People living with HIV who started TB preventive therapy (2017)	4.2%
Cervical cancer screening of women living with HIV	...
People coinfectd with HIV and hepatitis B virus receiving combined treatment (2018)	2.17%
People coinfectd with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years (2015)	
— Women	1%
— Men	6.3%
Condom use at last sex with a non-marital, non-cohabiting partner	
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2015)	42.2%
Men aged 15–49 years who are circumcised (2015)	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects (2018)	52
— Coverage of opioid substitution therapy (2018)	3.2%
— Naloxone available (2019)	Yes
— Safe injection rooms available (2019)	No

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	960 [770–1100]	1000 [810–1200]	1000 [840–1200]
New HIV infections (0–14)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
New HIV infections (women, 15+)	<200 [<100– <200]	<200 [<200– <200]	<200 [<200– <200]
New HIV infections (men, 15+)	860 [670–1000]	880 [680–1000]	890 [680–1000]
HIV incidence per 1000 population	0.04 [0.04–0.05]	0.04 [0.03–0.05]	0.04 [0.03–0.05]
AIDS-related deaths			
AIDS-related deaths (all ages)	<500 [<200– <500]	<200 [<200– <500]	<200 [<200– <500]
AIDS-related deaths (0–14)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (women, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (men, 15+)	<200 [<200– <500]	<200 [<100– <200]	<200 [<100– <200]
People living with HIV			
People living with HIV (all ages)	21 000 [17 000–23 000]	25 000 [21 000–28 000]	28 000 [23 000–31 000]
People living with HIV (0–14)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
People living with HIV (women, 15+)	2300 [2000–2500]	2900 [2500–3200]	3300 [2900–3700]
People living with HIV (men, 15+)	18 000 [15 000–21 000]	22 000 [18 000–25 000]	24 000 [20 000–28 000]
HIV prevalence (15–49)	0.1 [<0.1–0.1]	0.1 [0.1–0.1]	0.1 [0.1–0.1]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	...
Criminalization of sex work among consenting adults	...
Criminalization of same-sex sexual acts	Laws penalizing same-sex sexual acts have been decriminalized or never existed
Drug use or possession for personal use is an offence	...
Criminalization of transgender people	...
Laws or policies restricting the entry, stay and residence of people living with HIV	Yes
Parental consent for adolescents to access HIV testing	...
Spousal consent for married women to access sexual and reproductive health services	...
Mandatory HIV testing for marriage, work or residence permits or for certain groups	...

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

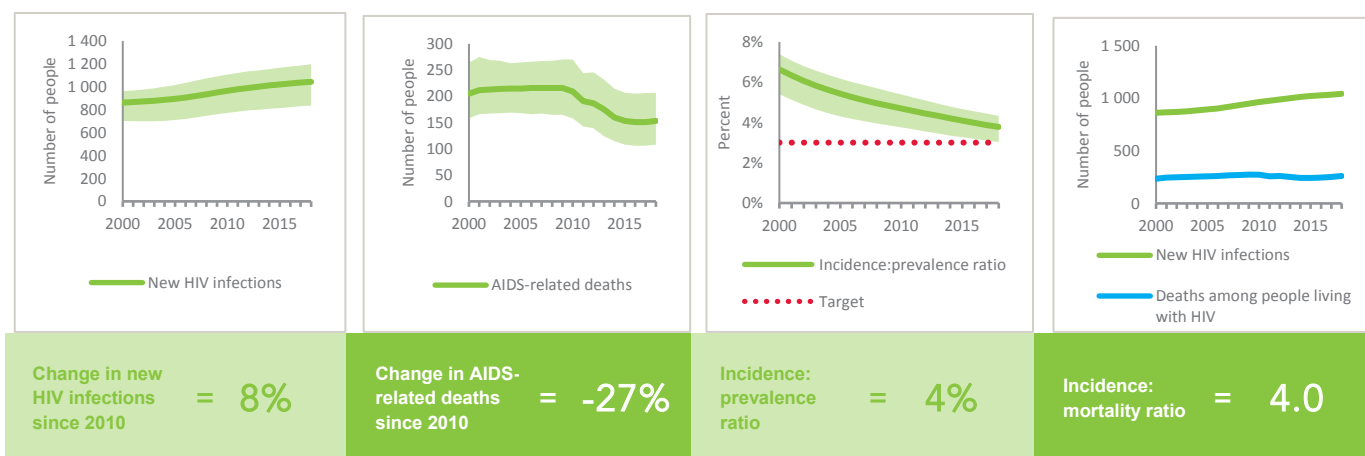
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2006	...	\$101 415 112	...	...	...	\$101 415 112

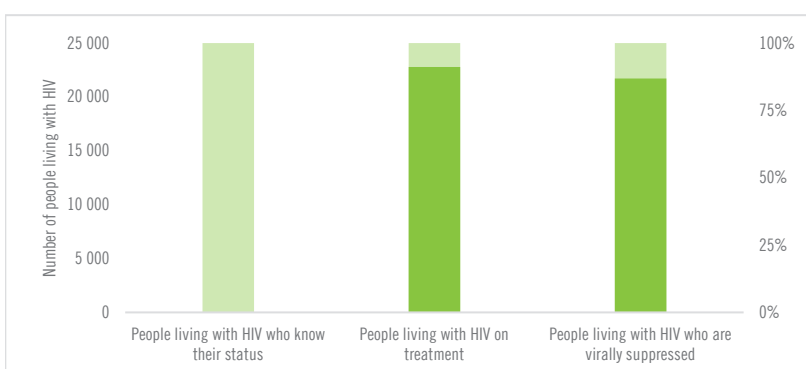
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population
HIV prevalence	0.0%	18.3%	1.7%	...	1.0%
Know their HIV status	...	90.0%	85.0%	...	...
Antiretroviral therapy coverage	...	78.0%	...	...	...
Condom use
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (0)

HIV TESTING AND TREATMENT CASCADE



	...	83% [70–93%] 22 800	79% [67–88%]
All ages	...% [...-...%]		
Children (0–14)	...% [...-...%]	...% [...-...%]	...% [...-...%]
Women (15+)	...% [...-...%]	83% [72–91%] 2800	81% [70–89%]
Men (15+)	...% [...-...%]	82% [69–94%] 20 000	78% [65–90%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	...% [...-...%]	...% [...-...%]
Early infant diagnosis	...% [...-...%]	...% [...-...%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	35 [30–41]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfectd with HIV and hepatitis B virus receiving combined treatment	...
People coinfectd with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	<0.1%
Knowledge of HIV prevention among young people aged 15–24 years	
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection (2016)	74%
— Needles and syringes distributed per person who injects (2016)	62%
— Coverage of opioid substitution therapy (2016)	36%
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	1000 [900–1200]	1400 [1200–1500]	1600 [1400–1800]
New HIV infections (0–14)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
New HIV infections (women, 15+)	<500 [<500– <500]	<500 [<500– <500]	<500 [<500–560]
New HIV infections (men, 15+)	580 [510–660]	870 [770–970]	1000 [930–1200]
HIV incidence per 1000 population	0.01 [<0.01– <0.01]	0.01 [<0.01– <0.01]	0.01 [<0.01–0.01]
AIDS-related deaths			
AIDS-related deaths (all ages)	<500 [<500– <500]	<500 [<500–540]	580 [<500–680]
AIDS-related deaths (0–14)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (women, 15+)	<100 [<100– <100]	<200 [<200– <200]	<500 [<200– <500]
AIDS-related deaths (men, 15+)	<200 [<200– <500]	<500 [<500– <500]	<500 [<500– <500]
People living with HIV			
People living with HIV (all ages)	7700 [6600–8800]	11 000 [9800–13 000]	14 000 [12 000–16 000]
People living with HIV (0–14)	<500 [<200– <500]	<500 [<500– <500]	<500 [<500– <500]
People living with HIV (women, 15+)	2600 [2300–3000]	4000 [3500–4500]	4800 [4200–5400]
People living with HIV (men, 15+)	4800 [4200–5600]	7000 [6000–8000]	8700 [7600–9900]
HIV prevalence (15–49)	<0.1 [<0.1– <0.1]	<0.1 [<0.1– <0.1]	<0.1 [<0.1– <0.1]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	No
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	Yes, imprisonment (14 years - life)
Drug use or possession for personal use is an offence	Possession of drugs for personal use or drug use and/or consumption are specified as criminal offences
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	Yes, for adolescents younger than 18 years
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	No

STIGMA AND DISCRIMINATION

Percentage of women aged 15–49 years who report discriminatory attitudes towards people living with HIV	2013
	34.6
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months	2017
	5
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent	2017
	5

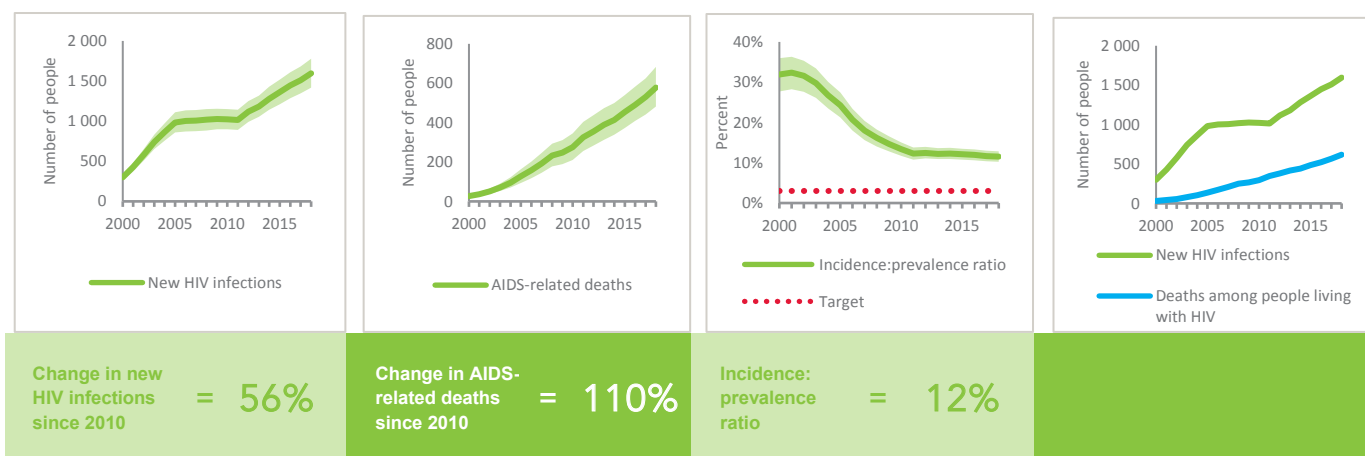
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months	2007	2015
	22.4	28.8

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2018	\$754	\$6 142 305	...	\$7 717 522	\$1 210 985	\$15 071 566

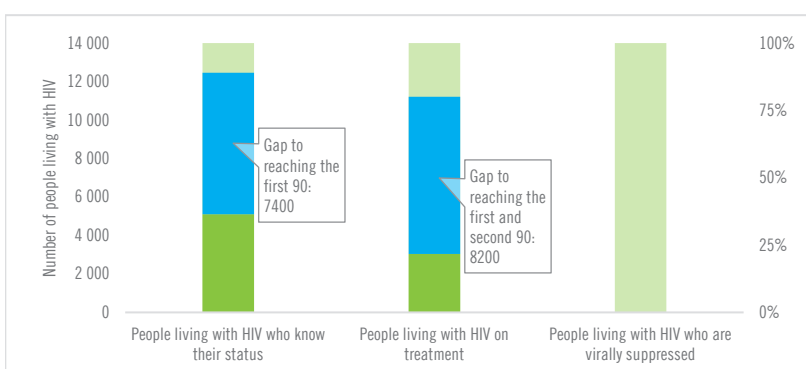
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	...
HIV prevalence	0.2%	0.2%	18.1%	1.4%	...
Know their HIV status	31.2%	...	26.8%	...	...
Antiretroviral therapy coverage	...	...	30.9%	...	...
Condom use	66.7%	45.8%	34.9%	41.1%	...
Coverage of HIV prevention programmes	15.2%	4.4%	27.8%	33.3%	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2017)	\$1 422 071	\$2 401 213	\$1 815 204		

HIV TESTING AND TREATMENT CASCADE



	37% [32–42%]	22% [19–25%] 3000	...% [...–...%]
All ages			
Children (0–14)	71% [61–81%]	33% [28–38%] 130	...% [...–...%]
Women (15+)	35% [30–39%]	21% [18–23%] 990	...% [...–...%]
Men (15+)	37% [32–42%]	22% [20–26%] 1900	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	18% [15–22%]	28% [24–33%]
Early infant diagnosis	2.9% [2.4–3.6%]	25.2% [21.3–29.9%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	540 [270–910]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years (2014)	
— Women	12.7%
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2014)	72.6%
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection (2015)	83.9%
— Needles and syringes distributed per person who injects (2018)	126
— Coverage of opioid substitution therapy (2018)	3.1%
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	No

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	<200 [<100– <500]	<100 [<100– <200]	<100 [<100– <500]
New HIV infections (0–14)	... [...–...]	... [...–...]	... [...–...]
New HIV infections (women, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
New HIV infections (men, 15+)	<100 [<100– <200]	<100 [<100– <200]	<100 [<100– <200]
HIV incidence per 1000 population	0.17 [0.08–0.38]	0.13 [0.05–0.28]	0.11 [0.04–0.3]
AIDS-related deaths			
AIDS-related deaths (all ages)	<100 [<100– <500]	<100 [<100– <500]	<100 [<100– <200]
AIDS-related deaths (0–14)	... [...–...]	... [...–...]	... [...–...]
AIDS-related deaths (women, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (men, 15+)	<100 [<100– <200]	<100 [<100– <200]	<100 [<100– <200]
People living with HIV			
People living with HIV (all ages)	1300 [590–2700]	1300 [670–2700]	1300 [700–2700]
People living with HIV (0–14)	... [...–...]	... [...–...]	... [...–...]
People living with HIV (women, 15+)	<500 [<200–670]	<500 [<200–700]	<500 [<500–750]
People living with HIV (men, 15+)	950 [<500–2000]	920 [<500–1900]	900 [<500–1900]
HIV prevalence (15–49)	0.3 [0.1–0.6]	0.3 [0.1–0.6]	0.3 [0.1–0.5]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	...
Criminalization of sex work among consenting adults	...
Criminalization of same-sex sexual acts	Yes, imprisonment (up to 14 years)
Drug use or possession for personal use is an offence	...
Criminalization of transgender people	...
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	...
Spousal consent for married women to access sexual and reproductive health services	...
Mandatory HIV testing for marriage, work or residence permits or for certain groups	...

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

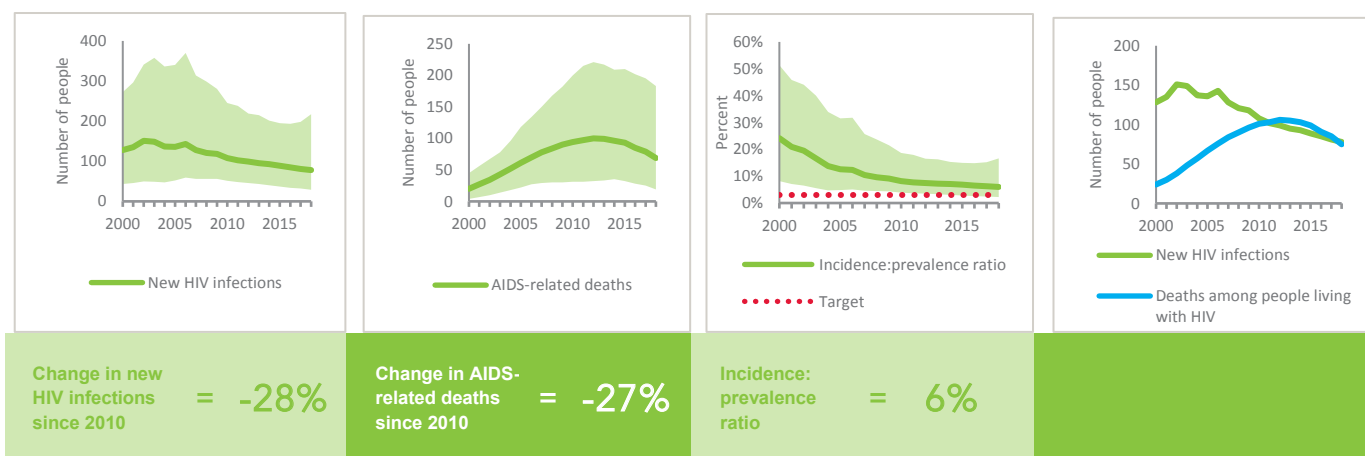
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report:

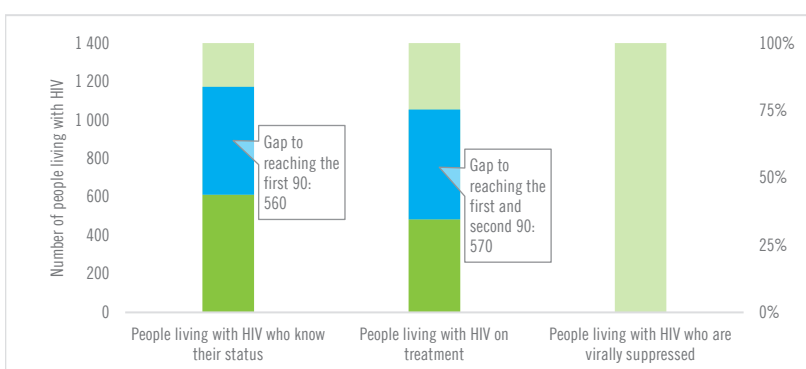
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population
HIV prevalence
Know their HIV status
Antiretroviral therapy coverage
Condom use
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (0)

HIV TESTING AND TREATMENT CASCADE



	47% [25– >95%]	37% [20–78%] 480	...% [...–...%]
All ages			
Children (0–14)	...% [...–...%]	...% [...–...%]% [...–...%]
Women (15+)	73% [41– >95%]	57% [32– >95%] 220	...% [...–...%]
Men (15+)	35% [18–75%]	26% [13–57%] 230	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	...% [...–...%]	...% [...–...%]
Early infant diagnosis	...% [...–...%]	...% [...–...%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	6 [4–9]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

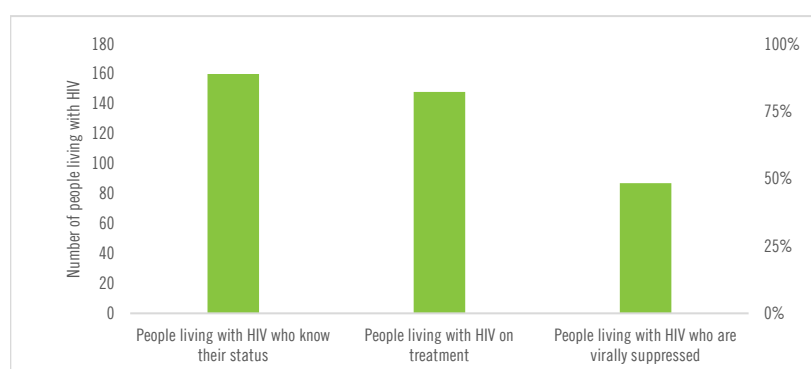
HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	...
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population
HIV prevalence	0.1%
Know their HIV status
Antiretroviral therapy coverage
Condom use
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (0)

HIV TESTING AND TREATMENT CASCADE



	...% [...-...%]	...% [...-...%]	...% [...-...%]
All ages	...% [...-...%]	...% [...-...%] 150	...% [...-...%]
Children (0–14)	...% [...-...%]	...% [...-...%] 0	...% [...-...%]
Women (15+)	...% [...-...%]	...% [...-...%] 20	...% [...-...%]
Men (15+)	...% [...-...%]	...% [...-...%] 130	...% [...-...%]

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report:

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	2 [1–3]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment (2018)	100%
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment (2018)	0%

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	...
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	No

Note: HIV epidemiological estimates were not available at the time of publication.

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission ...

Criminalization of sex work among consenting adults ...

Criminalization of same-sex sexual acts Yes, imprisonment (up to 14 years)

Drug use or possession for personal use is an offence ...

Criminalization of transgender people ...

Laws or policies restricting the entry, stay and residence of people living with HIV Yes

Parental consent for adolescents to access HIV testing No

Spousal consent for married women to access sexual and reproductive health services No

Mandatory HIV testing for marriage, work or residence permits or for certain groups Yes

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	2300 [2100–2600]	1300 [1200–1500]	880 [780–990]
New HIV infections (0–14)	<500 [<500– <500]	<200 [<200– <500]	<200 [<100– <200]
New HIV infections (women, 15+)	1100 [930–1200]	550 [<500–610]	<500 [<500– <500]
New HIV infections (men, 15+)	890 [780–990]	620 [550–680]	<500 [<500– <500]
HIV incidence per 1000 population	0.16 [0.14–0.18]	0.09 [0.08–0.09]	0.05 [0.05–0.06]
AIDS-related deaths			
AIDS-related deaths (all ages)	2500 [1900–3400]	1500 [1100–2400]	1300 [920–1900]
AIDS-related deaths (0–14)	<500 [<200– <500]	<100 [<100– <200]	<100 [<100– <100]
AIDS-related deaths (women, 15+)	1100 [820–1500]	670 [<500–1100]	620 [<500–970]
AIDS-related deaths (men, 15+)	1200 [870–1700]	770 [550–1200]	640 [<500–880]
People living with HIV			
People living with HIV (all ages)	79 000 [68 000–93 000]	76 000 [66 000–88 000]	73 000 [64 000–84 000]
People living with HIV (0–14)	4700 [4000–5500]	4000 [3400–4800]	3300 [2800–3900]
People living with HIV (women, 15+)	39 000 [34 000–45 000]	38 000 [33 000–43 000]	37 000 [32 000–42 000]
People living with HIV (men, 15+)	36 000 [30 000–43 000]	34 000 [29 000–39 000]	33 000 [28 000–38 000]
HIV prevalence (15–49)	0.8 [0.7–1]	0.6 [0.5–0.7]	0.5 [0.5–0.6]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	No specific legislation
Drug use or possession for personal use is an offence	...
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	Yes, for adolescents younger than 14 years
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	No

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	2010	2014
	19.1	19.4

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

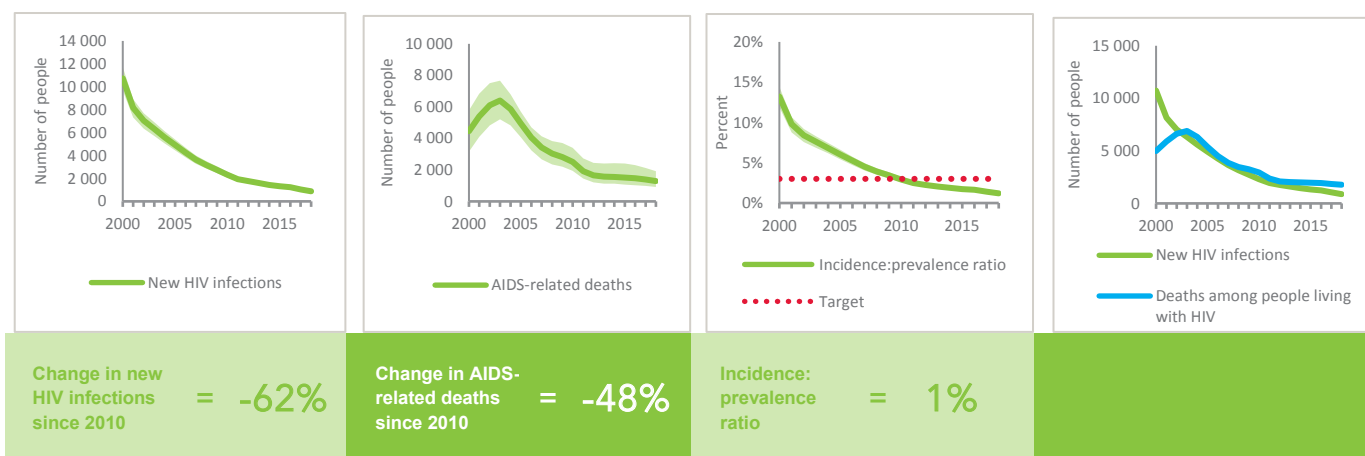
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months	2005	2014
	9	10.9

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2015	\$16 620	\$1 010 975	\$10 803 717	\$8 205 638	\$1 783 592	\$21 820 542

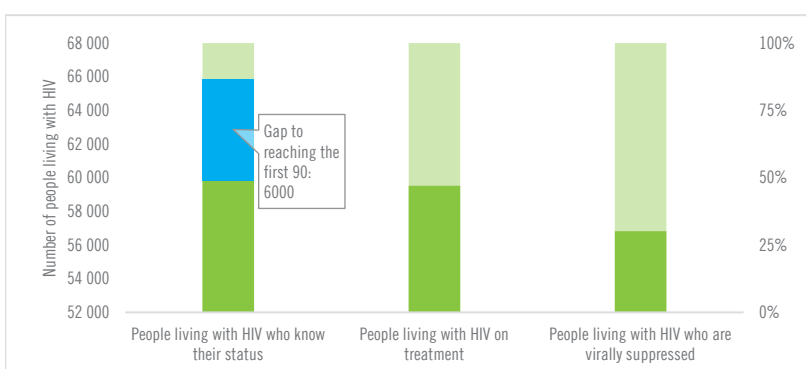
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	...
HIV prevalence	2.3%	2.3%	15.2%	5.9%	1.6%
Know their HIV status	100%	70.4%	...	70.9%	...
Antiretroviral therapy coverage	82.8%	98.4%	30.8%	95.1%	...
Condom use	88.8%	69.4%	8.7%	62.6%	...
Coverage of HIV prevention programmes	99.7%	20.1%	78.0%	89.3%	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2015)	\$1 156 666	\$1 182 591	\$737		

HIV TESTING AND TREATMENT CASCADE



	82% [71–93%]	81% [71–93%] 59 500	78% [67–89%]
All ages			
Children (0–14)	>95% [81–>95%]	92% [78–>95%] 3000	78% [66–93%]
Women (15+)	82% [72–93%]	82% [72–93%] 30 300	79% [69–90%]
Men (15+)	80% [68–92%]	80% [68–92%] 26 200	76% [65–88%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	33% [27–38%]	85% [71–>95%]
Early infant diagnosis	43.0% [37.1–52.5%]	45.7% [39.1–55.1%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	1300 [890–1800]
People living with HIV who started TB preventive therapy (2017)	21%
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

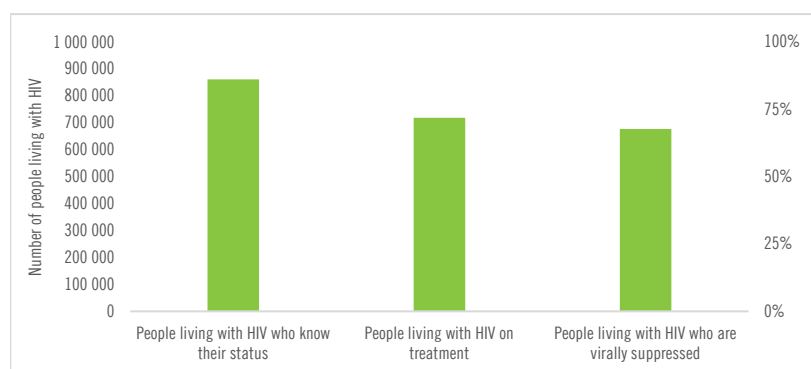
HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	0.1%
Knowledge of HIV prevention among young people aged 15–24 years (2014)	
— Women	37.6%
— Men	45.9%
Condom use at last sex with a non-marital, non-cohabiting partner (2014)	
— Women	41.5%
— Men	72.8%
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2014)	56.5%
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection (2017)	93.5%
— Needles and syringes distributed per person who injects (2018)	457
— Coverage of opioid substitution therapy (2016)	22.1%
— Naloxone available (2019)	Yes
— Safe injection rooms available (2019)	No

KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	...
HIV prevalence	0.2%	6.9%	5.9%	...	...
Know their HIV status	53.7%	58.8%	55.7%	...	...
Antiretroviral therapy coverage	...	86.5%	69.4%	...	...
Condom use	93.5%	85.1%	53.1%	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2016)	\$0	\$0	\$0	...	...

HIV TESTING AND TREATMENT CASCADE



	...% [...-...%]	...% [...-...%]	...% [...-...%]
All ages	...% [...-...%]	...% [...-...%] 718 000	...% [...-...%]
Children (0–14)	...% [...-...%]	...% [...-...%] 6200	...% [...-...%]
Women (15+)	...% [...-...%]	...% [...-...%] 193 000	...% [...-...%]
Men (15+)	...% [...-...%]	...% [...-...%] 520 000	...% [...-...%]

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2018	\$10 619 335	\$1 198 273 414	\$1 338 369	\$0	\$2 255 287	\$1 212 486 405

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	11 000 [6200 –18 000]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	...
— Use of sterile injecting equipment at last injection (2015)	86.5%
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	Yes
— Safe injection rooms available (2019)	No

Note: HIV epidemiological estimates were not available at the time of publication.

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	No specific legislation
Drug use or possession for personal use is an offence	Possession of drugs for personal use or drug use and/or consumption are specified as criminal offences
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	No
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	Yes

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population
HIV prevalence
Know their HIV status
Antiretroviral therapy coverage
Condom use
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (0)

HIV TESTING AND TREATMENT CASCADE



Category	People living with HIV who know their status	People living with HIV on treatment	People living with HIV who are virally suppressed
All ages	...% [...-...%]	...% [...-...%]	...% [...-...%]
Children (0-14)	...% [...-...%]	...% [...-...%]	...% [...-...%]
Women (15+)	...% [...-...%]	...% [...-...%]	...% [...-...%]
Men (15+)	...% [...-...%]	...% [...-...%]	...% [...-...%]

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2011	...	\$1 070 420	...	...	...	\$1 145 420

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	170 [93-280]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15-24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15-49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15-49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	...
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

Note: HIV epidemiological estimates were not available at the time of publication.

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission ...

Criminalization of sex work among consenting adults ...

Criminalization of same-sex sexual acts Laws penalizing same-sex sexual acts have been decriminalized or never existed

Drug use or possession for personal use is an offence ...

Criminalization of transgender people ...

Laws or policies restricting the entry, stay and residence of people living with HIV No

Parental consent for adolescents to access HIV testing ...

Spousal consent for married women to access sexual and reproductive health services ...

Mandatory HIV testing for marriage, work or residence permits or for certain groups ...

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

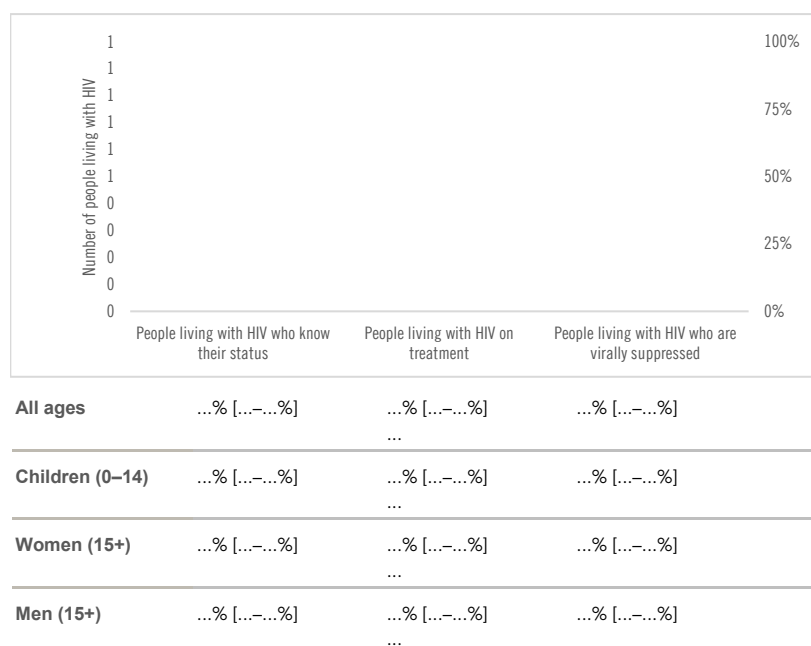
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	...
HIV prevalence	0.7%	0.5%	...	0.4%	...
Know their HIV status	...	41.6%	...	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	...	23.8%	...	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2016)	\$0	\$0	\$0		

HIV TESTING AND TREATMENT CASCADE



EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2016	...	\$509 384	...	...	\$158 885	\$668 269

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	12 [7-16]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfectd with HIV and hepatitis B virus receiving combined treatment	...
People coinfectd with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15-24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15-49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15-49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	...
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

Note: HIV epidemiological estimates were not available at the time of publication.

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission Yes

Criminalization of sex work among consenting adults ...

Criminalization of same-sex sexual acts Laws penalizing same-sex sexual acts have been decriminalized or never existed

Drug use or possession for personal use is an offence ...

Criminalization of transgender people ...

Laws or policies restricting the entry, stay and residence of people living with HIV No

Parental consent for adolescents to access HIV testing ...

Spousal consent for married women to access sexual and reproductive health services ...

Mandatory HIV testing for marriage, work or residence permits or for certain groups ...

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	...
HIV prevalence	1.6%	2.7%	6.3%	3.1%	...
Know their HIV status	68.6%	64.8%	49.6%	67.6%	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	90.8%	83.9%	77.4%	79.7%	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2017)	\$0	\$0	\$0	...	...

HIV TESTING AND TREATMENT CASCADE



	People living with HIV who know their status	People living with HIV on treatment	People living with HIV who are virally suppressed
All ages	...% [...-...%]	...% [...-...%]	...% [...-...%]
Children (0–14)	...% [...-...%]	...% [...-...%]	...% [...-...%]
Women (15+)	...% [...-...%]	...% [...-...%]	...% [...-...%]
Men (15+)	...% [...-...%]	...% [...-...%]	...% [...-...%]

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2018	...	\$275 000 000	...	...	...	\$275 000 000

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	86 000 [57 000 –120 000]
People living with HIV who started TB preventive therapy (2017)	10.5%
Cervical cancer screening of women living with HIV (survey data) (2016)	35%
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years (2016)	
— Women	21.7%
— Men	31.5%
Condom use at last sex with a non-marital, non-cohabiting partner (2016)	
— Women	...
— Men	40.8%
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2016)	72.8%
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection (2015)	86.4%
— Needles and syringes distributed per person who injects (2018)	366
— Coverage of opioid substitution therapy (2018)	19.5%
— Naloxone available (2019)	Yes
— Safe injection rooms available (2019)	No

Note: HIV epidemiological estimates were not available at the time of publication.

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	No
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	Laws penalizing same-sex sexual acts have been decriminalized or never existed
Drug use or possession for personal use is an offence	Possession of drugs for personal use or drug use and/or consumption are specified as criminal offences
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	Yes, for adolescents younger than 18 years
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	No

STIGMA AND DISCRIMINATION

	2006	2016
Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	35.1	32.8

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

VIOLENCE

	2006	2016
Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months	23	22

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	63 000 [57 000–68 000]	52 000 [47 000–56 000]	46 000 [42 000–50 000]
New HIV infections (0–14)	3300 [2800–3900]	3700 [3200–4500]	3500 [2900–4200]
New HIV infections (women, 15+)	22 000 [19 000–25 000]	19 000 [16 000–21 000]	16 000 [14 000–17 000]
New HIV infections (men, 15+)	38 000 [33 000–41 000]	29 000 [26 000–32 000]	27 000 [24 000–30 000]
HIV incidence per 1000 population	0.26 [0.24–0.29]	0.2 [0.18–0.22]	0.17 [0.16–0.19]
AIDS-related deaths			
AIDS-related deaths (all ages)	24 000 [19 000–28 000]	37 000 [32 000–42 000]	38 000 [33 000–43 000]
AIDS-related deaths (0–14)	2000 [1700–2300]	2600 [2200–3000]	2500 [2100–3000]
AIDS-related deaths (women, 15+)	5900 [4500–7300]	11 000 [8900–13 000]	12 000 [11 000–14 000]
AIDS-related deaths (men, 15+)	16 000 [13 000–19 000]	24 000 [21 000–27 000]	23 000 [20 000–27 000]
People living with HIV			
People living with HIV (all ages)	510 000 [450 000–590 000]	620 000 [540 000–730 000]	640 000 [550 000–750 000]
People living with HIV (0–14)	9300 [8100–11 000]	15 000 [13 000–18 000]	18 000 [15 000–20 000]
People living with HIV (women, 15+)	160 000 [140 000–180 000]	210 000 [180 000–240 000]	220 000 [190 000–260 000]
People living with HIV (men, 15+)	350 000 [300 000–400 000]	390 000 [340 000–470 000]	400 000 [350 000–480 000]
HIV prevalence (15–49)	0.4 [0.3–0.4]	0.4 [0.4–0.5]	0.4 [0.4–0.5]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	...
Criminalization of sex work among consenting adults	...
Criminalization of same-sex sexual acts	Laws penalizing same-sex sexual acts have been decriminalized or never existed
Drug use or possession for personal use is an offence	...
Criminalization of transgender people	...
Laws or policies restricting the entry, stay and residence of people living with HIV	Yes
Parental consent for adolescents to access HIV testing	...
Spousal consent for married women to access sexual and reproductive health services	...
Mandatory HIV testing for marriage, work or residence permits or for certain groups	...

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

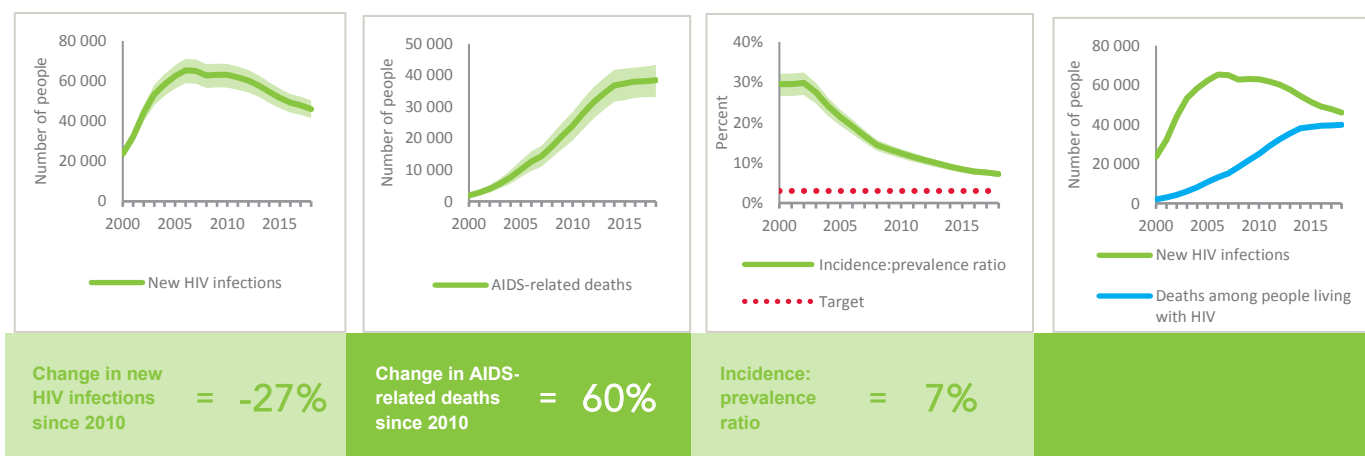
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2016	...	\$103 052 033	...	\$26 912 887	\$43 512 146	\$173 477 066

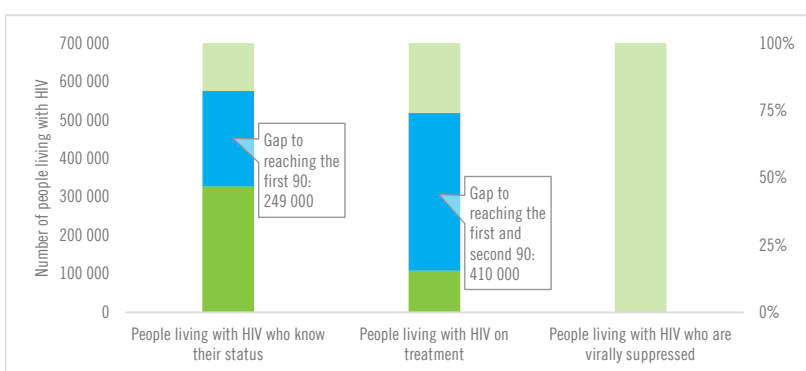
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	...
HIV prevalence	5.3%	25.8%	28.8%	24.8%	1.0%
Know their HIV status	...	...	...	...	...
Antiretroviral therapy coverage	...	...	...	...	0.3%
Condom use	67.8%	81.0%	46.3%	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	2010	2018
All ages	51% [44–60%]	17% [15–20%] 108 000
Children (0–14)	53% [46–62%]	22% [19–26%] 3900
Women (15+)	...% [...–...%]	17% [15–19%] 37 500
Men (15+)	...% [...–...%]	17% [15–20%] 67 100

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	3% [2–3%]	15% [13–18%]
Early infant diagnosis	...% [...–...%]	1.2% [1.1–1.4%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	36 000 [20 000–56 000]
People living with HIV who started TB preventive therapy (2017)	15.6%
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	...
— Use of sterile injecting equipment at last injection (2015)	88.9%
— Needles and syringes distributed per person who injects (2018)	3
— Coverage of opioid substitution therapy (2018)	10.5%
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	1700 [1300–2100]	1500 [1200–1900]	1200 [910–1500]
New HIV infections (0–14)	... [...–...]	... [...–...]	... [...–...]
New HIV infections (women, 15+)	<200 [<200– <200]	<100 [<100– <100]	<100 [<100– <100]
New HIV infections (men, 15+)	1600 [1200–2000]	1500 [1100–1800]	1200 [860–1400]
HIV incidence per 1000 population	0.01 [0.01–0.02]	0.01 [<0.01–0.01]	0.01 [<0.01–0.01]
AIDS-related deaths			
AIDS-related deaths (all ages)	... [...–...]	... [...–...]	... [...–...]
AIDS-related deaths (0–14)	... [...–...]	... [...–...]	... [...–...]
AIDS-related deaths (women, 15+)	... [...–...]	... [...–...]	... [...–...]
AIDS-related deaths (men, 15+)	... [...–...]	... [...–...]	... [...–...]
People living with HIV			
People living with HIV (all ages)	19 000 [16 000–22 000]	27 000 [22 000–31 000]	30 000 [25 000–34 000]
People living with HIV (0–14)	... [...–...]	... [...–...]	... [...–...]
People living with HIV (women, 15+)	2400 [2100–2700]	2700 [2400–3100]	2800 [2500–3100]
People living with HIV (men, 15+)	17 000 [14 000–20 000]	24 000 [20 000–28 000]	27 000 [23 000–31 000]
HIV prevalence (15–49)	<0.1 [<0.1– <0.1]	<0.1 [<0.1– <0.1]	<0.1 [<0.1– <0.1]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	...
Criminalization of sex work among consenting adults	...
Criminalization of same-sex sexual acts	Laws penalizing same-sex sexual acts have been decriminalized or never existed
Drug use or possession for personal use is an offence	...
Criminalization of transgender people	...
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	...
Spousal consent for married women to access sexual and reproductive health services	...
Mandatory HIV testing for marriage, work or residence permits or for certain groups	...

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

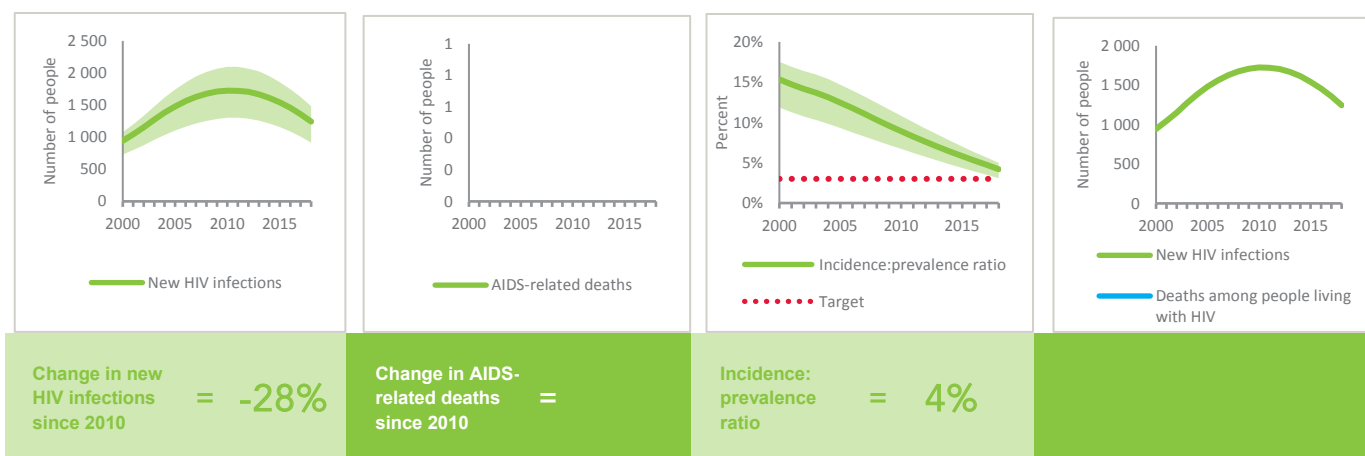
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2011	...	\$67 907 854	...	...	...	\$67 907 854

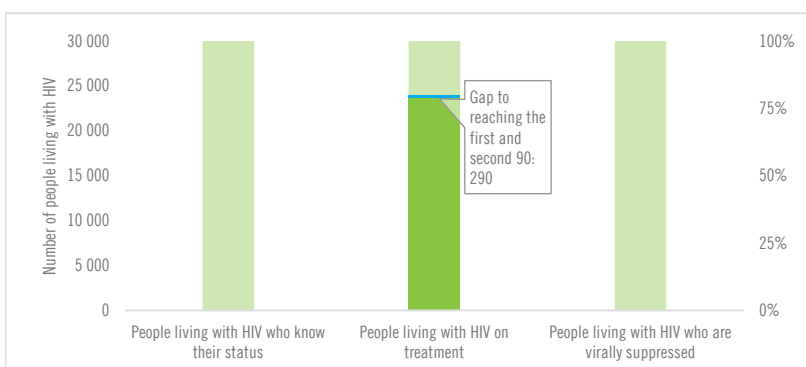
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population
HIV prevalence	0.0%	4.8%	0.0%	...	...
Know their HIV status
Antiretroviral therapy coverage
Condom use	...	71.0%	...	...	...
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (0)

HIV TESTING AND TREATMENT CASCADE



	...	80% [68–92%] 23 700	...
All ages	...% [...–...%]	80% [68–92%] 23 700	...% [...–...%]
Children (0–14)	...% [...–...%]	...	...% [...–...%]
Women (15+)	...% [...–...%]	80% [71–89%] 2200	...% [...–...%]
Men (15+)	...% [...–...%]	80% [67–92%] 21 500	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	...% [...–...%]	...% [...–...%]
Early infant diagnosis	...% [...–...%]	...% [...–...%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	85 [70–100]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	...
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	1000 [900–1100]	720 [650–790]	570 [510–630]
New HIV infections (0–14)	<200 [<200– <200]	<100 [<100– <200]	<100 [<100– <100]
New HIV infections (women, 15+)	<500 [<500– <500]	<500 [<500– <500]	<200 [<200– <500]
New HIV infections (men, 15+)	<500 [<500–520]	<500 [<500– <500]	<500 [<500– <500]
HIV incidence per 1000 population	0.16 [0.15–0.18]	0.11 [0.1–0.12]	0.08 [0.07–0.09]
AIDS-related deaths			
AIDS-related deaths (all ages)	<500 [<500– <500]	<500 [<500– <500]	<500 [<500– <500]
AIDS-related deaths (0–14)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (women, 15+)	<200 [<100– <200]	<200 [<100– <200]	<200 [<100– <200]
AIDS-related deaths (men, 15+)	<200 [<200– <500]	<200 [<200– <500]	<200 [<200– <200]
People living with HIV			
People living with HIV (all ages)	9900 [8800–11 000]	11 000 [10 000–13 000]	12 000 [11 000–14 000]
People living with HIV (0–14)	550 [<500–640]	700 [620–810]	700 [620–820]
People living with HIV (women, 15+)	4200 [3700–4700]	4800 [4300–5500]	5000 [4500–5700]
People living with HIV (men, 15+)	5200 [4600–6000]	5900 [5200–6900]	6300 [5500–7300]
HIV prevalence (15–49)	0.3 [0.2–0.3]	0.3 [0.2–0.3]	0.3 [0.2–0.3]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	...
Criminalization of sex work among consenting adults	...
Criminalization of same-sex sexual acts	Laws penalizing same-sex sexual acts have been decriminalized or never existed
Drug use or possession for personal use is an offence	...
Criminalization of transgender people	...
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	...
Spousal consent for married women to access sexual and reproductive health services	...
Mandatory HIV testing for marriage, work or residence permits or for certain groups	...

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	2017 48.1
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months	
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent	

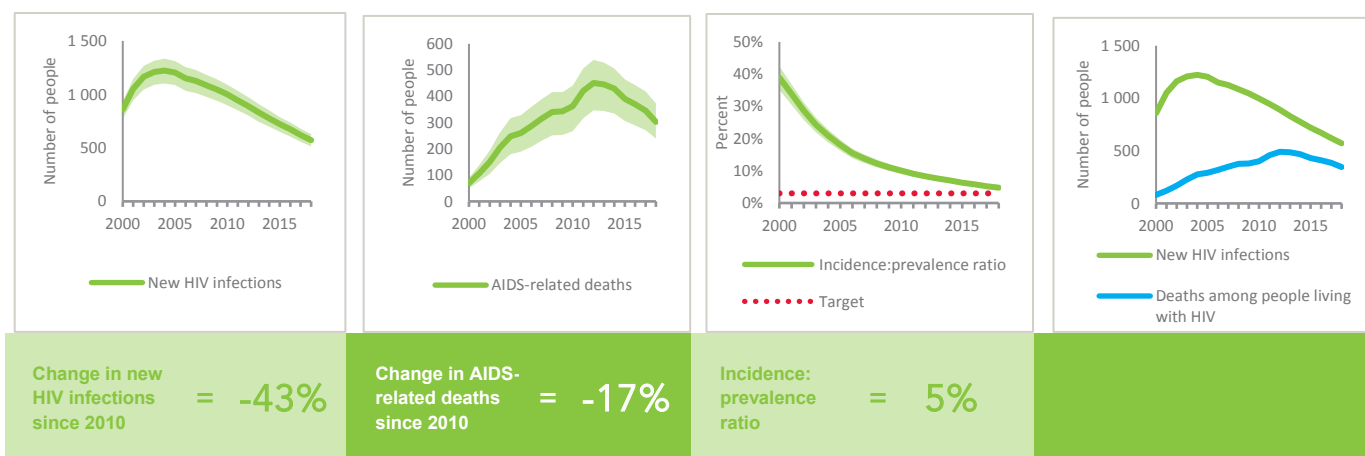
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2017	...	\$569 221	\$459 782	\$3 246 284	\$358 204	\$4 633 491

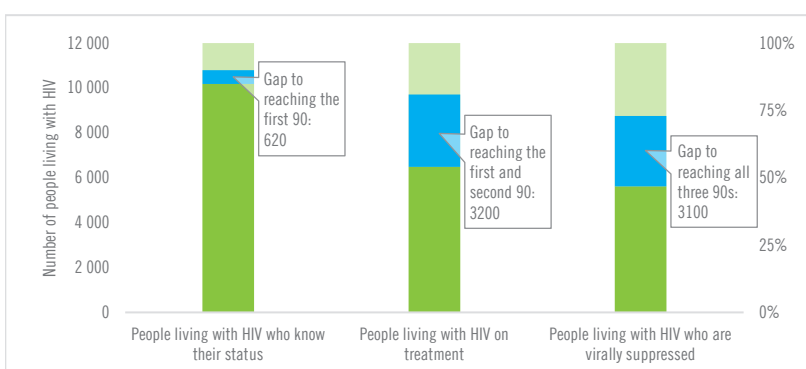
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	14 000	17 000	...	...	...
HIV prevalence	1.0%	2.8%	...	...	...
Know their HIV status	95.4%	10.2%	...	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	91.8%	25.7%	...	...	...
Coverage of HIV prevention programmes	50.7%	7.8%	...	...	...
Avoidance of health care because of stigma and discrimination	2.3%	75.0%	...	...	...
Expenditures (2017)	\$329 955	\$675 288	\$20 413		

HIV TESTING AND TREATMENT CASCADE



	85% [75– >95%]	54% [48–62%] 6500	47% [41–54%]
All ages			
Children (0–14)	... [...–...%]	40% [35–46%] 280	35% [30–40%]
Women (15+)	... [...–...%]	57% [51–64%] 2800	52% [47–59%]
Men (15+)	... [...–...%]	54% [47–62%] 3400	44% [39–51%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	8% [6–9%]	35% [31–41%]
Early infant diagnosis	<1% [<1–1.1%]	12.7% [10.9–14.7%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	680 [430–980]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	0.1%
Knowledge of HIV prevention among young people aged 15–24 years	
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects (2017)	3
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	5400 [4900–5900]	5200 [4700–5700]	5600 [5100–6100]
New HIV infections (0–14)	<100 [<100– <200]	<100 [<100– <100]	<100 [<100– <100]
New HIV infections (women, 15+)	820 [700–940]	<500 [<500– <500]	<500 [<200– <500]
New HIV infections (men, 15+)	4500 [4100–4900]	4900 [4400–5300]	5400 [4900–5900]
HIV incidence per 1000 population	0.19 [0.17–0.21]	0.17 [0.15–0.19]	0.18 [0.16–0.19]
AIDS-related deaths			
AIDS-related deaths (all ages)	2900 [2400–3300]	3600 [3100–4100]	2600 [2100–3300]
AIDS-related deaths (0–14)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (women, 15+)	680 [550–800]	800 [640–980]	550 [<500–800]
AIDS-related deaths (men, 15+)	2200 [1800–2500]	2800 [2400–3200]	2100 [1700–2600]
People living with HIV			
People living with HIV (all ages)	74 000 [65 000–86 000]	81 000 [71 000–92 000]	87 000 [77 000–98 000]
People living with HIV (0–14)	730 [590–900]	570 [<500–710]	<500 [<500–520]
People living with HIV (women, 15+)	17 000 [15 000–19 000]	16 000 [14 000–18 000]	15 000 [13 000–17 000]
People living with HIV (men, 15+)	57 000 [50 000–66 000]	64 000 [57 000–73 000]	72 000 [64 000–81 000]
HIV prevalence (15–49)	0.4 [0.4–0.5]	0.4 [0.3–0.5]	0.4 [0.4–0.5]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	Yes, imprisonment (14 years - life)
Drug use or possession for personal use is an offence	Possession of drugs for personal use or drug use and/or consumption are specified as criminal offences
Criminalization of transgender people	...
Laws or policies restricting the entry, stay and residence of people living with HIV	Yes
Parental consent for adolescents to access HIV testing	Yes, for adolescents younger than 18 years
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	Yes

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

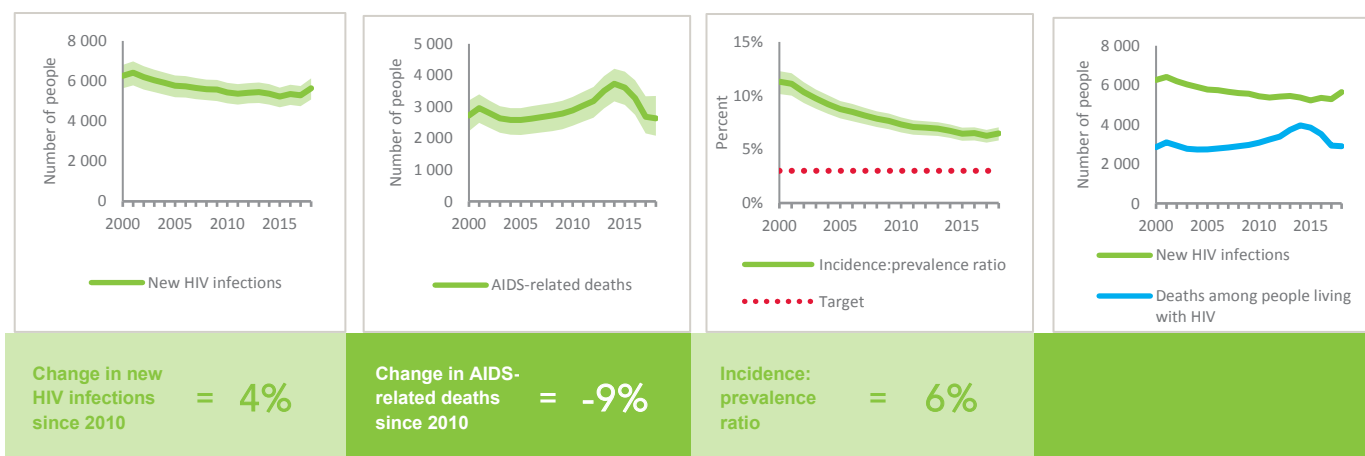
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2017	\$721 955	\$35 065 813	...	\$906 297	\$241 688	\$36 935 753

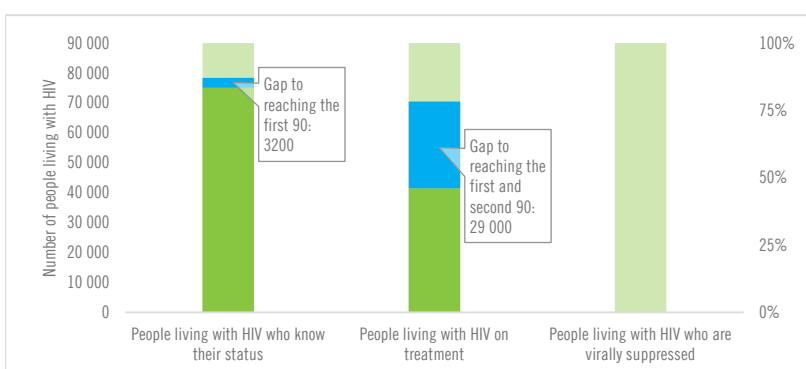
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	37 000	...	75 000	...	...
HIV prevalence	6.3%	21.6%	13.5%	10.9%	0.2%
Know their HIV status	35.1%	43.3%	38.9%	43.0%	...
Antiretroviral therapy coverage	...	62.6%	34.6%	...	...
Condom use	83.5%	65.4%	25.7%	78.2%	...
Coverage of HIV prevention programmes	40.0%	36.7%	1.4%	57.9%	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2017)	\$272 583	\$248 103	\$5 000 328	...	...

HIV TESTING AND TREATMENT CASCADE



	86% [77- >95%]	48% [42-53%] 41 500	...% [...-...%]
All ages			
Children (0-14)	94% [77- >95%]	94% [77- >95%] 400	...% [...-...%]
Women (15+)	75% [65-85%]	71% [62-80%] 10 400	...% [...-...%]
Men (15+)	89% [79- >95%]	43% [38-48%] 30 700	...% [...-...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	50% [41-61%]	>95% [86- >95%]
Early infant diagnosis	48.0% [39.1-57.7%]	>95% [79.3- >95%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	1800 [1500-2100]
People living with HIV who started TB preventive therapy (2017)	78.8%
Cervical cancer screening of women living with HIV	...
People coinfectd with HIV and hepatitis B virus receiving combined treatment (2018)	31.9%
People coinfectd with HIV and hepatitis C virus starting hepatitis C treatment (2018)	27.9%

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15-24 years (2015)	
— Women	41.1%
— Men	41.8%
Condom use at last sex with a non-marital, non-cohabiting partner	
— Women	...
— Men	...
Women aged 15-49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15-49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection (2017)	79.5%
— Needles and syringes distributed per person who injects (2018)	18
— Coverage of opioid substitution therapy (2018)	74.3%
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	No

KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population
HIV prevalence
Know their HIV status
Antiretroviral therapy coverage
Condom use
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (0)

HIV TESTING AND TREATMENT CASCADE



	People living with HIV who know their status	People living with HIV on treatment	People living with HIV who are virally suppressed
All ages	...% [...-...%]	...% [...-...%]	...% [...-...%]
Children (0–14)	...% [...-...%]	...% [...-...%]	...% [...-...%]
Women (15+)	...% [...-...%]	...% [...-...%]	...% [...-...%]
Men (15+)	...% [...-...%]	...% [...-...%]	...% [...-...%]

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report:

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	0 [0–0]
People living with HIV who started TB preventive therapy (2017)	0%
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment (2018)	0%
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment (2018)	0%

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years (2016)	
— Women	29.3%
— Men	26.4%
Condom use at last sex with a non-marital, non-cohabiting partner	
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2017)	29.4%
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

Note: HIV epidemiological estimates were not available at the time of publication.

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission ...

Criminalization of sex work among consenting adults ...

Criminalization of same-sex sexual acts Yes, imprisonment (up to 14 years)

Drug use or possession for personal use is an offence ...

Criminalization of transgender people ...

Laws or policies restricting the entry, stay and residence of people living with HIV Yes

Parental consent for adolescents to access HIV testing ...

Spousal consent for married women to access sexual and reproductive health services ...

Mandatory HIV testing for marriage, work or residence permits or for certain groups ...

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	<100 [<100- <100]	<100 [<100- <100]	<100 [<100- <100]
New HIV infections (0–14)	... [...-...]	... [...-...]	... [...-...]
New HIV infections (women, 15+)	<100 [<100- <100]	<100 [<100- <100]	<100 [<100- <100]
New HIV infections (men, 15+)	<100 [<100- <100]	<100 [<100- <100]	<100 [<100- <100]
HIV incidence per 1000 population	0.02 [0.02–0.02]	0.02 [0.01–0.02]	0.01 [0.01–0.02]
AIDS-related deaths			
AIDS-related deaths (all ages)	<100 [<100- <100]	<100 [<100- <100]	<100 [<100- <100]
AIDS-related deaths (0–14)	... [...-...]	... [...-...]	... [...-...]
AIDS-related deaths (women, 15+)	<100 [<100- <100]	<100 [<100- <100]	<100 [<100- <100]
AIDS-related deaths (men, 15+)	<100 [<100- <100]	<100 [<100- <100]	<100 [<100- <100]
People living with HIV			
People living with HIV (all ages)	<500 [<500- <500]	540 [<500–600]	600 [530–670]
People living with HIV (0–14)	... [...-...]	... [...-...]	... [...-...]
People living with HIV (women, 15+)	<100 [<100- <100]	<100 [<100- <200]	<200 [<100- <200]
People living with HIV (men, 15+)	<500 [<500- <500]	<500 [<500- <500]	<500 [<500–550]
HIV prevalence (15–49)	<0.1 [<0.1- <0.1]	<0.1 [<0.1- <0.1]	<0.1 [<0.1- <0.1]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	Laws penalizing same-sex sexual acts have been decriminalized or never existed
Drug use or possession for personal use is an offence	Possession of drugs for personal use or drug use and/or consumption are specified as criminal offences
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	Yes, for adolescents younger than 18 years
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	Yes

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	2010	2014
	75.6	72.7

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

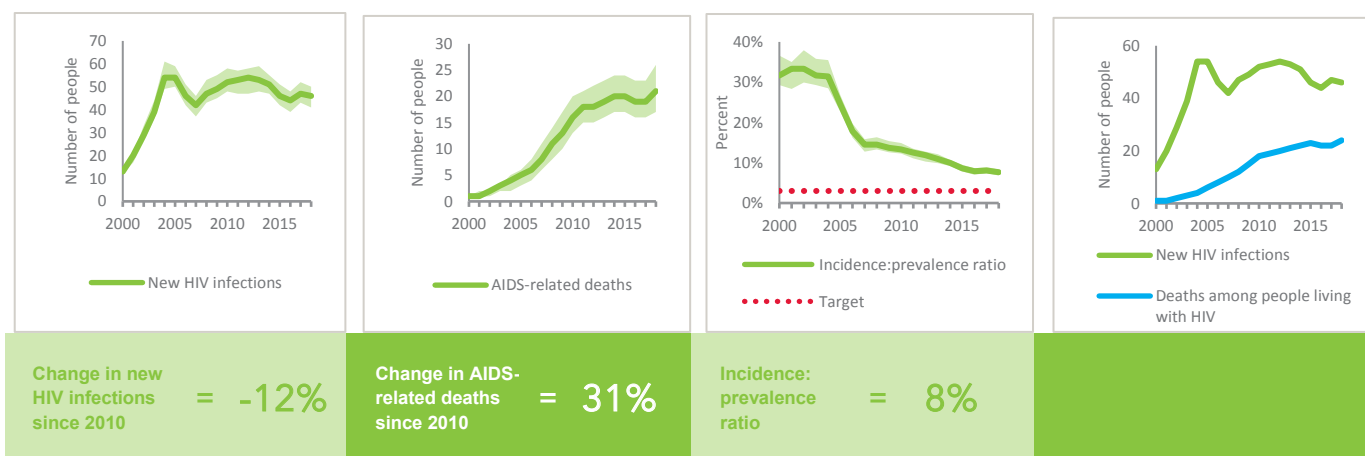
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2016	...	\$3 032 500	...	...	...	\$5 255 800

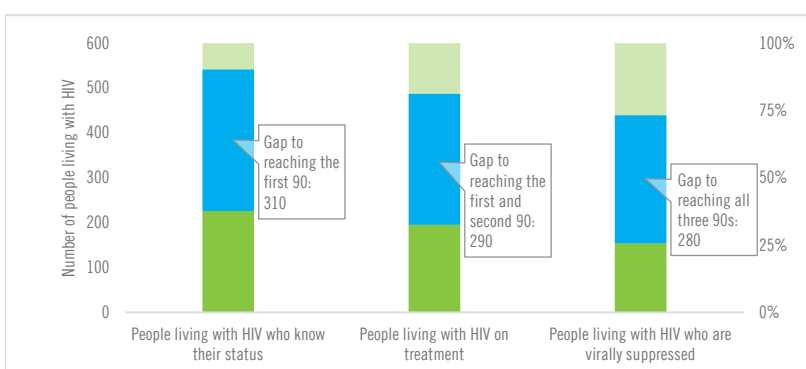
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	...
HIV prevalence	0.0%	9.2%	...	...	0.0%
Know their HIV status	76.4%	87.7%	...	...	...
Antiretroviral therapy coverage	...	90.3%	...	...	...
Condom use	84.3%	76.5%	...	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	2010	2018
All ages	38% [33–42%]	32% [29–36%] 200
Children (0–14)	...% [...–...%]	...% [...–...%] ...
Women (15+)	39% [35–44%]	30% [27–33%] 30
Men (15+)	38% [33–42%]	33% [29–37%] 160

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	...% [...–...%]	...% [...–...%]
Early infant diagnosis	...% [...–...%]	...% [...–...%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	25 [13–42]
People living with HIV who started TB preventive therapy (2017)	4%
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment (2018)	100%
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment (2018)	0%

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	<0.1%
Knowledge of HIV prevention among young people aged 15–24 years (2014)	
— Women	22.8%
— Men	20.7%

Condom use at last sex with a non-marital, non-cohabiting partner	
— Women	...
— Men	...

Women aged 15–49 years who have their demand for family planning satisfied by modern methods	...
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Men aged 15–49 years who are circumcised	Not applicable
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Voluntary medical male circumcisions performed according to national standards	Not applicable
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People who received PrEP at least once during the reporting period (2018)	1
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Harm reduction	
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	No

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	16 000 [14 000–17 000]	13 000 [12 000–15 000]	11 000 [9500–12 000]
New HIV infections (0–14)	1300 [940–1800]	1100 [920–1300]	840 [680–990]
New HIV infections (women, 15+)	5200 [4600–5900]	3700 [3300–4200]	2800 [2500–3200]
New HIV infections (men, 15+)	9000 [8000–9900]	8400 [7500–9200]	7000 [6200–7700]
HIV incidence per 1000 population	0.31 [0.28–0.35]	0.26 [0.23–0.28]	0.2 [0.18–0.22]
AIDS-related deaths			
AIDS-related deaths (all ages)	11 000 [9600–13 000]	9500 [7400–12 000]	7800 [5900–11 000]
AIDS-related deaths (0–14)	900 [690–1100]	520 [<500–620]	<500 [<500– <500]
AIDS-related deaths (women, 15+)	2000 [1700–2500]	2200 [1700–3100]	2100 [1600–3000]
AIDS-related deaths (men, 15+)	8200 [7100–9400]	6700 [5300–8500]	5300 [3900–7500]
People living with HIV			
People living with HIV (all ages)	220 000 [190 000–260 000]	230 000 [210 000–270 000]	240 000 [210 000–270 000]
People living with HIV (0–14)	8200 [6900–9600]	9600 [8300–11 000]	9800 [8400–11 000]
People living with HIV (women, 15+)	76 000 [66 000–87 000]	84 000 [75 000–96 000]	87 000 [78 000–98 000]
People living with HIV (men, 15+)	140 000 [120 000–160 000]	140 000 [120 000–160 000]	140 000 [120 000–160 000]
HIV prevalence (15–49)	0.8 [0.6–0.9]	0.8 [0.6–0.9]	0.8 [0.6–0.9]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	No
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	Yes, imprisonment (14 years - life)
Drug use or possession for personal use is an offence	Possession of drugs for personal use or drug use and/or consumption are specified as criminal offences
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	No
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	Yes

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	2016 63.3
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months	
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent	

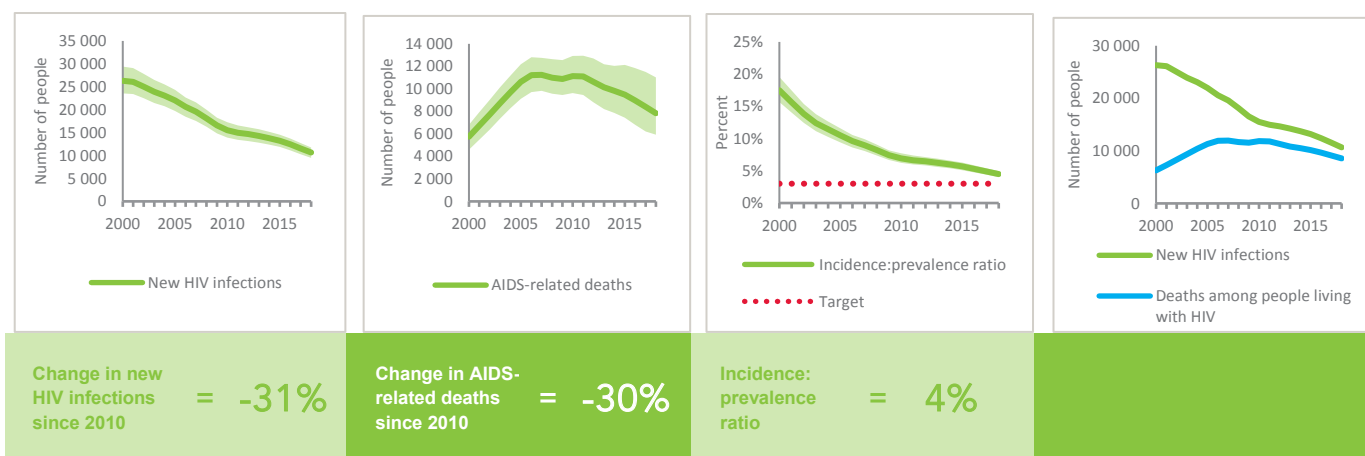
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months	2016 11
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EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2017	\$2 382 058	\$20 212 929	\$12 248 661	\$51 148 388	\$20 477 207	\$106 469 242

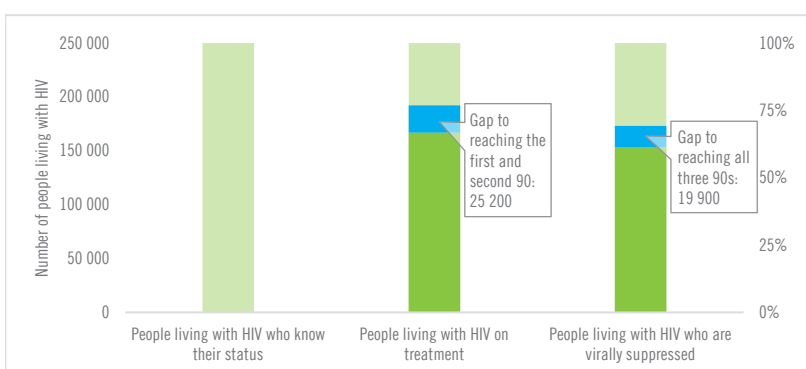
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	...
HIV prevalence	5.6%	6.4%	19.0%	...	7.7%
Know their HIV status	44.6%	52.4%	27.9%	...	...
Antiretroviral therapy coverage	...	...	14.1%	...	...
Condom use	81.1%	77.1%	21.9%	...	...
Coverage of HIV prevention programmes	...	...	34.2%	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	...	70% [63–79%] 167 000	65% [58–73%]
All ages	...% [...–...%]		
Children (0–14)	...% [...–...%]	80% [69–93%] 7900	67% [57–77%]
Women (15+)	...% [...–...%]	81% [73–91%] 70 500	75% [67–84%]
Men (15+)	...% [...–...%]	63% [56–72%] 88 600	58% [52–66%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	34% [28–41%]	80% [69–89%]
Early infant diagnosis	1.1% [<1–1.3%]	25.0% [22.2–28.8%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	17 000 [12 000–22 000]
People living with HIV who started TB preventive therapy (2017)	17.5%
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment (2018)	82%
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	0.2%
Knowledge of HIV prevention among young people aged 15–24 years (2016)	
— Women	16.2%
— Men	17.8%
Condom use at last sex with a non-marital, non-cohabiting partner (2016)	
— Women	...
— Men	77.4%
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2016)	74.9%
Men aged 15–49 years who are circumcised (2016)	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection (2017)	90.8%
— Needles and syringes distributed per person who injects (2018)	351
— Coverage of opioid substitution therapy (2018)	17.2%
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	No

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	2100 [1900–2300]	1200 [1100–1300]	900 [800–980]
New HIV infections (0–14)	<500 [<200– <500]	<200 [<200– <200]	<100 [<100– <200]
New HIV infections (women, 15+)	850 [740–940]	<500 [<500– <500]	<500 [<500– <500]
New HIV infections (men, 15+)	1000 [910–1100]	680 [600–740]	530 [<500–580]
HIV incidence per 1000 population	0.08 [0.07–0.09]	0.04 [0.04–0.05]	0.03 [0.03–0.03]
AIDS-related deaths			
AIDS-related deaths (all ages)	1400 [1200–1700]	1100 [920–1400]	910 [700–1200]
AIDS-related deaths (0–14)	<200 [<200– <200]	<100 [<100– <200]	<100 [<100– <100]
AIDS-related deaths (women, 15+)	<500 [<500– <500]	<500 [<200– <500]	<200 [<200– <500]
AIDS-related deaths (men, 15+)	1000 [840–1200]	850 [680–1100]	680 [540–910]
People living with HIV			
People living with HIV (all ages)	31 000 [27 000–36 000]	31 000 [27 000–36 000]	30 000 [26 000–34 000]
People living with HIV (0–14)	1400 [1300–1700]	1500 [1400–1800]	1400 [1200–1600]
People living with HIV (women, 15+)	9800 [8700–11 000]	11 000 [9900–13 000]	12 000 [10 000–13 000]
People living with HIV (men, 15+)	20 000 [17 000–24 000]	18 000 [16 000–21 000]	17 000 [15 000–20 000]
HIV prevalence (15–49)	0.2 [0.2–0.2]	0.2 [0.1–0.2]	0.1 [0.1–0.2]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	Laws penalizing same-sex sexual acts have been decriminalized or never existed
Drug use or possession for personal use is an offence	Possession of drugs for personal use or drug use and/or consumption are specified as criminal offences
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	Yes, for adolescents younger than 16 years
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	No

STIGMA AND DISCRIMINATION

	2011	2016
Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	28.3	38

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

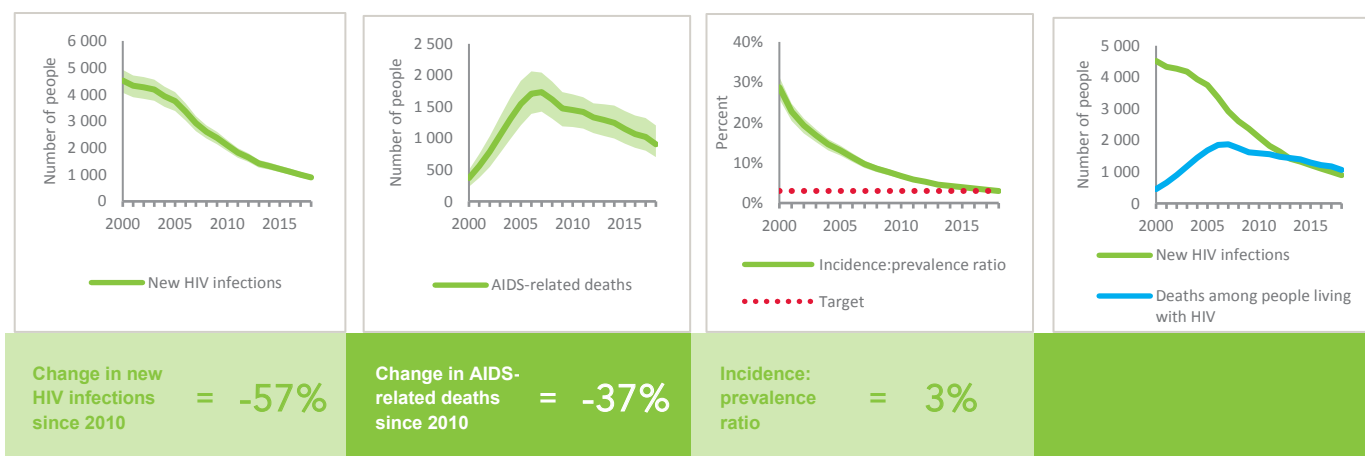
VIOLENCE

	2011	2016
Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months	14.3	11.2

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2018	...	\$2 335 783	...	\$10 571 595	\$2 852 016	\$15 759 395

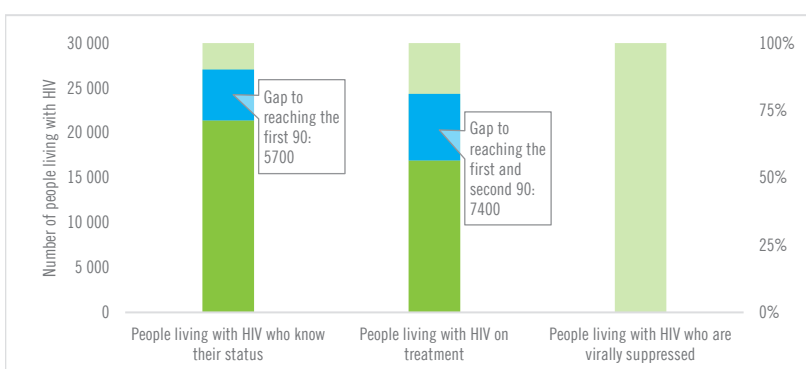
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	22 000
HIV prevalence	4.2%	5.0%	8.8%	8.5%	...
Know their HIV status	95.2%	89.6%	98.3%	89.4%	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	88.2%	94.6%	48.9%	91.5%	...
Coverage of HIV prevention programmes	34.8%	79.7%	67.8%	29.8%	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2014)	\$200 879	\$875 761	\$1 825 145		

HIV TESTING AND TREATMENT CASCADE



	71% [63–82%]	56% [50–65%] 16 900	...% [...–...%]
All ages			
Children (0–14)	92% [81–>95%]	91% [80–>95%] 1300	...% [...–...%]
Women (15+)	71% [63–80%]	66% [58–74%] 7600	...% [...–...%]
Men (15+)	70% [61–81%]	47% [41–55%] 8000	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	14% [11–16%]	51% [43–60%]
Early infant diagnosis	3.3% [2.7–4.1%]	70.8% [59.6–83.3%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	870 [480–1400]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years (2016)	
— Women	20.7%
— Men	27.1%
Condom use at last sex with a non-marital, non-cohabiting partner (2016)	
— Women	...
— Men	67.6%
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2016)	56.3%
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection (2017)	97.6%
— Needles and syringes distributed per person who injects (2018)	85
— Coverage of opioid substitution therapy (2018)	2.8%
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	No

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	<200 [<200– <200]	<200 [<200– <200]	<200 [<200– <200]
New HIV infections (0–14)	... [...–...]	... [...–...]	... [...–...]
New HIV infections (women, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
New HIV infections (men, 15+)	<200 [<200– <200]	<200 [<200– <200]	<200 [<200– <200]
HIV incidence per 1000 population	0.04 [0.03–0.04]	0.04 [0.03–0.04]	0.03 [0.03–0.04]
AIDS-related deaths			
AIDS-related deaths (all ages)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (0–14)	... [...–...]	... [...–...]	... [...–...]
AIDS-related deaths (women, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (men, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
People living with HIV			
People living with HIV (all ages)	2500 [2100–2800]	3200 [2700–3700]	3600 [3100–4200]
People living with HIV (0–14)	... [...–...]	... [...–...]	... [...–...]
People living with HIV (women, 15+)	<500 [<500–540]	570 [<500–620]	590 [520–650]
People living with HIV (men, 15+)	2000 [1700–2300]	2700 [2200–3100]	3000 [2500–3600]
HIV prevalence (15–49)	<0.1 [<0.1– <0.1]	<0.1 [<0.1–0.1]	0.1 [<0.1–0.1]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Sex work is not subject to punitive regulations or is not criminalized
Criminalization of same-sex sexual acts	Laws penalizing same-sex sexual acts have been decriminalized or never existed
Drug use or possession for personal use is an offence	Possession of drugs for personal use or drug use and/or consumption are specified as criminal offences
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	Yes
Parental consent for adolescents to access HIV testing	No
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	Yes

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

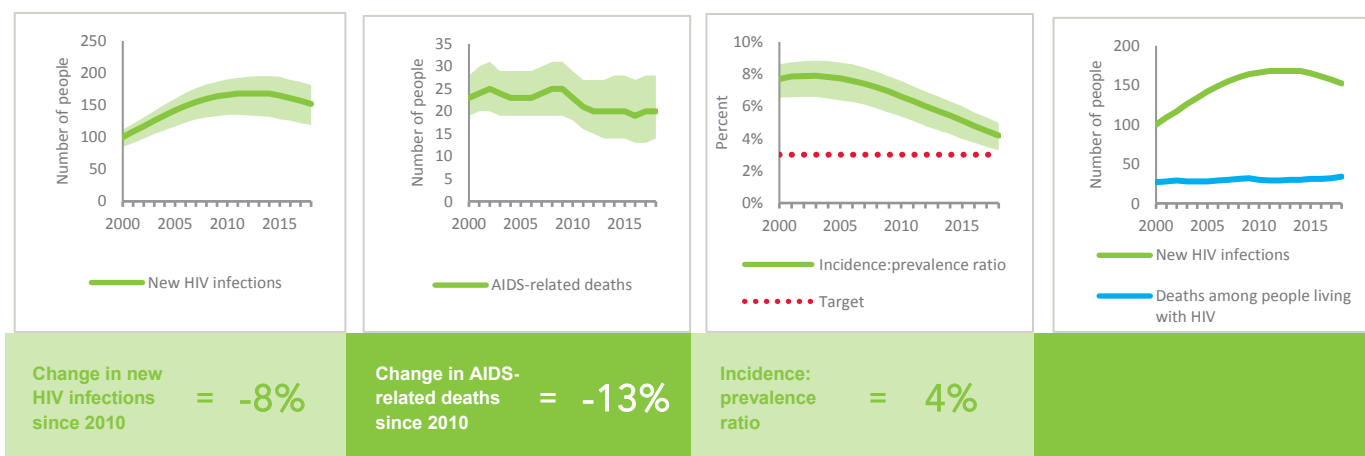
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2017	\$30 068 244

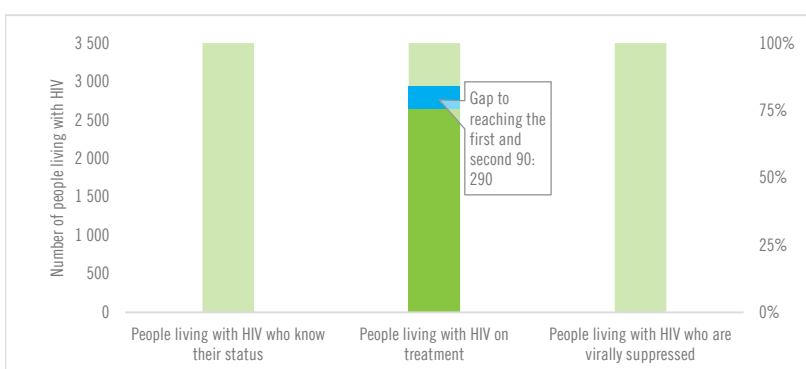
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	15 000	...	10 000
HIV prevalence	...	6.5%	0.2%	...	...
Know their HIV status
Antiretroviral therapy coverage
Condom use	...	81.0%	...	...	...
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (2017)	\$0	\$0	\$0	...	...

HIV TESTING AND TREATMENT CASCADE



	...	73% [62–84%] 2700	...
All ages	...% [...–...%]		...% [...–...%]
Children (0–14)	...% [...–...%]	...	...% [...–...%]
Women (15+)	...% [...–...%]	71% [62–78%] 420	...% [...–...%]
Men (15+)	...% [...–...%]	73% [60–86%] 2200	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	...% [...–...%]	...% [...–...%]
Early infant diagnosis	...% [...–...%]	...% [...–...%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	1 [1–2]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfectd with HIV and hepatitis B virus receiving combined treatment	...
People coinfectd with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	...
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects (2018)	233
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	No

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	14 000 [12 000–15 000]	18 000 [17 000–20 000]	22 000 [20 000–24 000]
New HIV infections (0–14)	760 [640–900]	1200 [990–1300]	1400 [1200–1600]
New HIV infections (women, 15+)	3800 [3200–4300]	4900 [4400–5400]	5900 [5200–6500]
New HIV infections (men, 15+)	9400 [8300–10 000]	12 000 [11 000–14 000]	15 000 [13 000–16 000]
HIV incidence per 1000 population	0.08 [0.07–0.09]	0.1 [0.09–0.11]	0.11 [0.1–0.12]
AIDS-related deaths			
AIDS-related deaths (all ages)	1400 [870–1900]	4700 [3700–5800]	6400 [5200–7600]
AIDS-related deaths (0–14)	<500 [<500– <500]	660 [560–760]	800 [690–920]
AIDS-related deaths (women, 15+)	<500 [<200– <500]	1200 [930–1500]	1800 [1500–2200]
AIDS-related deaths (men, 15+)	700 [<500–1000]	2800 [2200–3500]	3800 [3100–4600]
People living with HIV			
People living with HIV (all ages)	67 000 [57 000–76 000]	120 000 [110 000–140 000]	160 000 [140 000–190 000]
People living with HIV (0–14)	1800 [1500–2000]	4000 [3400–4500]	5500 [4700–6300]
People living with HIV (women, 15+)	19 000 [17 000–22 000]	37 000 [32 000–42 000]	48 000 [42 000–54 000]
People living with HIV (men, 15+)	46 000 [39 000–52 000]	84 000 [73 000–96 000]	110 000 [97 000–120 000]
HIV prevalence (15–49)	<0.1 [<0.1– <0.1]	0.1 [<0.1–0.1]	0.1 [0.1–0.2]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	No
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	Yes, death penalty
Drug use or possession for personal use is an offence	No
Criminalization of transgender people	...
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	Yes, for adolescents younger than 18 years
Spousal consent for married women to access sexual and reproductive health services	...
Mandatory HIV testing for marriage, work or residence permits or for certain groups	No

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV **2013**

49

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months **2013** **2018**

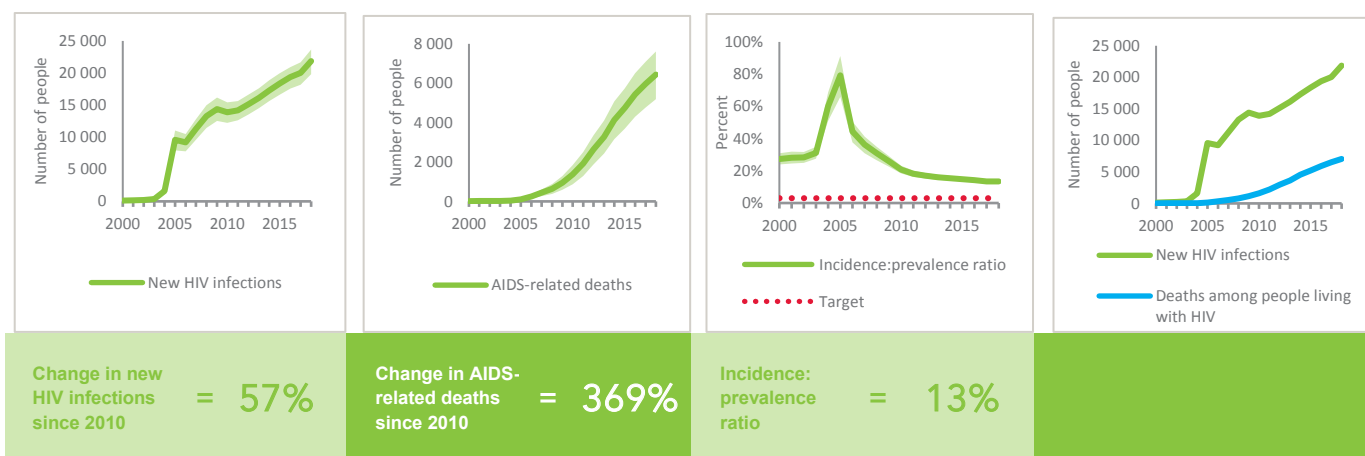
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14.5

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2013	...	\$3 631 968	...	\$5 311 225	\$313 844	\$9 993 630

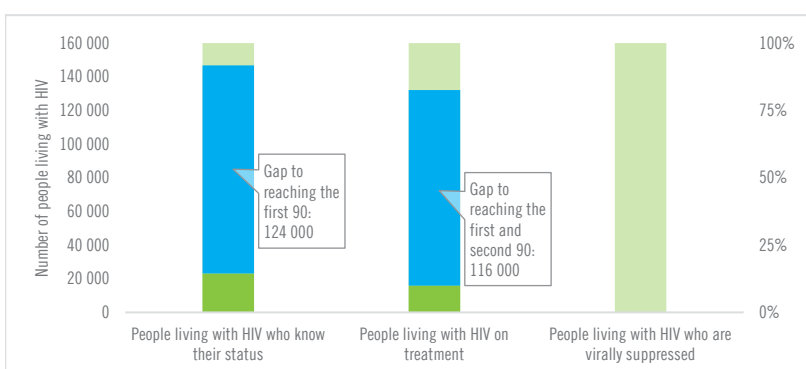
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	...
HIV prevalence	3.8%	3.7%	21.0%	5.5%	...
Know their HIV status	45.0%	44.7%	39.3%	69.1%	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	35.1%	22.4%	15.3%	24.4%	...
Coverage of HIV prevention programmes	0.7%	1.2%	1.6%	1.1%	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	14% [13–16%]	10% [9–11%] 15 800	...% [...–...%]
All ages			
Children (0–14)	18% [15–21%]	11% [10–13%] 610	...% [...–...%]
Women (15+)	8% [7–9%]	7% [6–8%] 3300	...% [...–...%]
Men (15+)	16% [15–19%]	11% [10–12%] 11 900	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	1% [1–2%]	10% [8–12%]
Early infant diagnosis	1.3% [1.0–1.6%]	1.9% [1.6–2.2%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	7200 [3600 –12 000]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfectd with HIV and hepatitis B virus receiving combined treatment	...
People coinfectd with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years (2017)	
— Women	1.8%
— Men	5.9%
Condom use at last sex with a non-marital, non-cohabiting partner	
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection (2016)	72.5%
— Needles and syringes distributed per person who injects (2018)	46
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	No

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	1700 [1500–1900]	2200 [1900–2500]	2100 [1800–2500]
New HIV infections (0–14)	<500 [<500–590]	<500 [<500– <500]	<500 [<200– <500]
New HIV infections (women, 15+)	680 [600–790]	1100 [890–1200]	1100 [860–1300]
New HIV infections (men, 15+)	520 [<500–630]	810 [680–1000]	820 [660–1000]
HIV incidence per 1000 population	0.25 [0.22–0.28]	0.29 [0.25–0.33]	0.26 [0.22–0.31]
AIDS-related deaths			
AIDS-related deaths (all ages)	... [...–...]	... [...–...]	... [...–...]
AIDS-related deaths (0–14)	... [...–...]	... [...–...]	... [...–...]
AIDS-related deaths (women, 15+)	... [...–...]	... [...–...]	... [...–...]
AIDS-related deaths (men, 15+)	... [...–...]	... [...–...]	... [...–...]
People living with HIV			
People living with HIV (all ages)	38 000 [34 000–42 000]	41 000 [37 000–46 000]	45 000 [41 000–50 000]
People living with HIV (0–14)	3400 [2900–4000]	3400 [2700–3900]	2900 [2300–3500]
People living with HIV (women, 15+)	19 000 [17 000–22 000]	22 000 [20 000–24 000]	25 000 [22 000–27 000]
People living with HIV (men, 15+)	15 000 [13 000–17 000]	16 000 [14 000–18 000]	18 000 [16 000–20 000]
HIV prevalence (15–49)	0.8 [0.7–1]	0.8 [0.7–0.9]	0.8 [0.7–0.9]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	Yes, penalty not specified
Drug use or possession for personal use is an offence	Possession of drugs for personal use or drug use and/or consumption are specified as criminal offences
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	Yes
Parental consent for adolescents to access HIV testing	Yes, for adolescents younger than 18 years
Spousal consent for married women to access sexual and reproductive health services	...
Mandatory HIV testing for marriage, work or residence permits or for certain groups	Yes

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

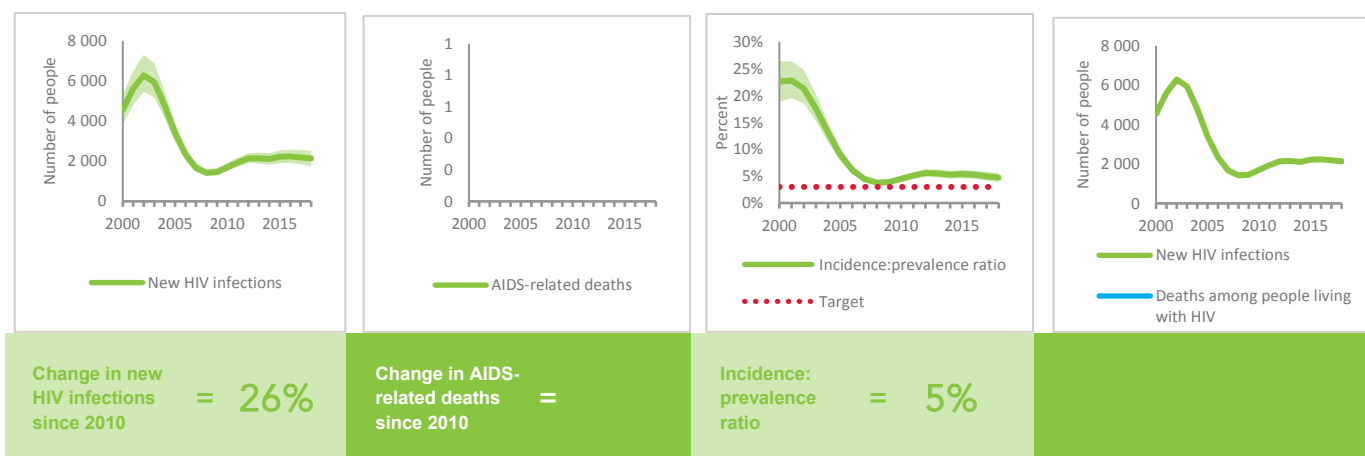
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2012	\$740 081	\$6 385 677	...	\$1 577 356	\$27 388 589	\$36 659 267

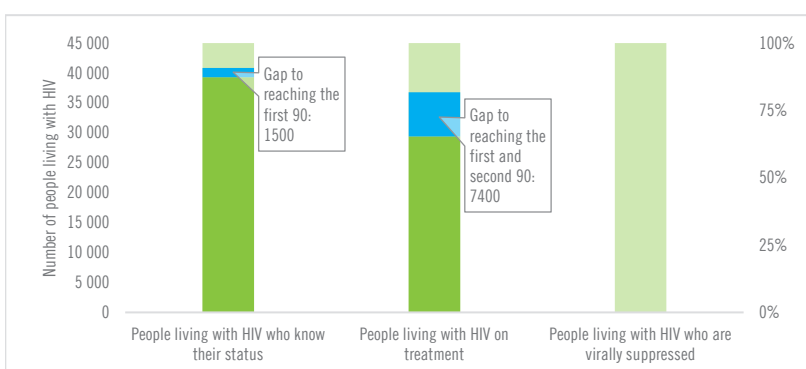
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population
HIV prevalence
Know their HIV status	...	59.0%	...	...	...
Antiretroviral therapy coverage
Condom use
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (0)

HIV TESTING AND TREATMENT CASCADE



	87% [77- >95%]	65% [58-71%] 29 400	...% [...-...%]
All ages			
Children (0-14)	49% [39-58%]	49% [39-58%] 1400	...% [...-...%]
Women (15+)	91% [83- >95%]	70% [63-77%] 17 100	...% [...-...%]
Men (15+)	87% [77- >95%]	61% [54-67%] 10 900	...% [...-...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	5% [4-6%]	79% [59-95%]
Early infant diagnosis	...% [...-...%]	74.6% [61.7- >95%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	3500 [2000-5400]
People living with HIV who started TB preventive therapy (2017)	15.6%
Cervical cancer screening of women living with HIV	...
People coinfectd with HIV and hepatitis B virus receiving combined treatment	...
People coinfectd with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15-24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15-49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15-49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	...
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	No

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	4400 [3700–5000]	9500 [7800–11 000]	13 000 [11 000–16 000]
New HIV infections (0–14)	<100 [<100– <100]	<100 [<100– <100]	<200 [<100– <200]
New HIV infections (women, 15+)	<500 [<500– <500]	560 [<500–660]	810 [640–960]
New HIV infections (men, 15+)	4100 [3400–4600]	8800 [7300–10 000]	12 000 [10 000–14 000]
HIV incidence per 1000 population	0.05 [0.04–0.05]	0.09 [0.08–0.11]	0.13 [0.11–0.15]
AIDS-related deaths			
AIDS-related deaths (all ages)	<500 [<200– <500]	770 [<500–1100]	1200 [800–1700]
AIDS-related deaths (0–14)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (women, 15+)	<100 [<100– <100]	<100 [<100– <100]	<200 [<100– <200]
AIDS-related deaths (men, 15+)	<500 [<200– <500]	680 [<500–1000]	1000 [680–1500]
People living with HIV			
People living with HIV (all ages)	15 000 [13 000–18 000]	46 000 [38 000–53 000]	77 000 [65 000–90 000]
People living with HIV (0–14)	<100 [<100– <200]	<500 [<200– <500]	<500 [<500–510]
People living with HIV (women, 15+)	1100 [900–1200]	2800 [2400–3300]	4600 [3900–5400]
People living with HIV (men, 15+)	14 000 [12 000–16 000]	43 000 [36 000–50 000]	72 000 [60 000–84 000]
HIV prevalence (15–49)	<0.1 [<0.1– <0.1]	<0.1 [<0.1–0.1]	0.1 [0.1–0.2]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	...
Criminalization of same-sex sexual acts	Laws penalizing same-sex sexual acts have been decriminalized or never existed
Drug use or possession for personal use is an offence	...
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	Yes, for adolescents younger than 18 years
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	No

STIGMA AND DISCRIMINATION

Percentage of women aged 15–49 years who report discriminatory attitudes towards people living with HIV	2017
	71.2

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

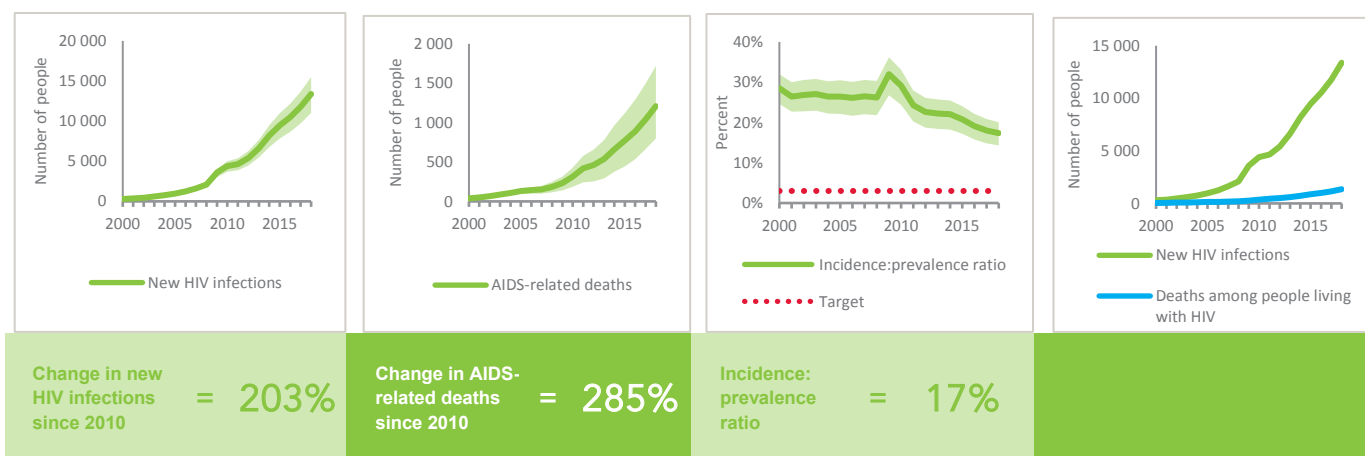
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months	2013	2017
	7.1	5.5

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2013	\$17 814	\$4 522 803	...	\$3 180 753	\$2 018 819	\$10 319 421

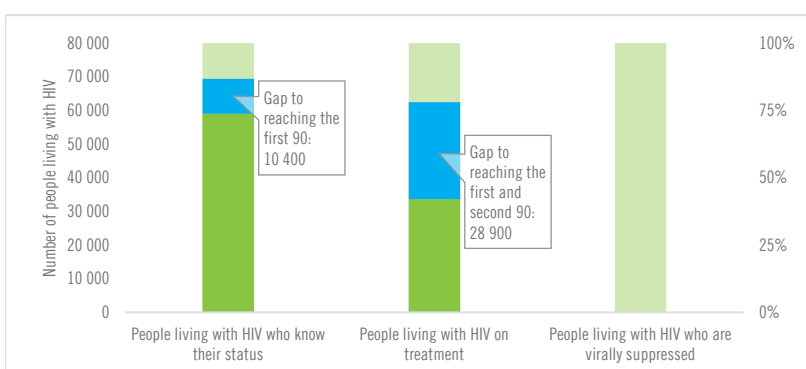
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	...
HIV prevalence	0.6%	4.9%	29.0%	1.7%	...
Know their HIV status	24.6%	16.1%	26.9%	14.7%	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	70.6%	49.8%	14.5%	37.2%	...
Coverage of HIV prevention programmes	35.8%	27.9%	51.8%	27.1%	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	76% [64–89%]	44% [37–51%] 33 600	...% [...–...%]
All ages			
Children (0–14)	28% [22–34%]	20% [16–25%] 90	...% [...–...%]
Women (15+)	78% [66–92%]	22% [19–26%] 1000	...% [...–...%]
Men (15+)	77% [64–90%]	45% [38–53%] 32 500	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	13% [11–17%]	18% [15–22%]
Early infant diagnosis	7.8% [6.2–9.5%]	3.6% [3.0–4.4%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	7000 [2900 –13 000]
People living with HIV who started TB preventive therapy (2017)	56.5%
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years (2017)	
— Women	20.2%
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner (2017)	
— Women	10.3%
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2017)	56.1%
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection (2015)	63.6%
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	No

KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population
HIV prevalence
Know their HIV status
Antiretroviral therapy coverage
Condom use	...	65.4%	...	...	...
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (0)

HIV TESTING AND TREATMENT CASCADE



	People living with HIV who know their status	People living with HIV on treatment	People living with HIV who are virally suppressed
All ages	...% [...-...%]	...% [...-...%]	...% [...-...%]
Children (0-14)	...% [...-...%]	...% [...-...%]	...% [...-...%]
Women (15+)	...% [...-...%]	...% [...-...%]	...% [...-...%]
Men (15+)	...% [...-...%]	...% [...-...%]	...% [...-...%]

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2011	...	\$11 171 000	...	...	...	\$11 171 000

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	630 [360-970]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfectd with HIV and hepatitis B virus receiving combined treatment	...
People coinfectd with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15-24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15-49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15-49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	...
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

Note: HIV epidemiological estimates were not available at the time of publication.

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	No specific legislation
Drug use or possession for personal use is an offence	No
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	No
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	Yes

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	<500 [<500–530]	<200 [<200– <200]	<200 [<200– <200]
New HIV infections (0–14)	... [...–...]	... [...–...]	... [...–...]
New HIV infections (women, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
New HIV infections (men, 15+)	<500 [<500– <500]	<200 [<200– <200]	<200 [<200– <200]
HIV incidence per 1000 population	0.14 [0.13–0.15]	0.04 [0.04–0.04]	0.04 [0.04–0.05]
AIDS-related deaths			
AIDS-related deaths (all ages)	<100 [<100– <200]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (0–14)	... [...–...]	... [...–...]	... [...–...]
AIDS-related deaths (women, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (men, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
People living with HIV			
People living with HIV (all ages)	6500 [5700–7300]	7600 [6800–8400]	7900 [7200–8700]
People living with HIV (0–14)	... [...–...]	... [...–...]	... [...–...]
People living with HIV (women, 15+)	670 [590–760]	710 [640–790]	750 [680–830]
People living with HIV (men, 15+)	5800 [5100–6500]	6900 [6200–7600]	7200 [6500–7900]
HIV prevalence (15–49)	0.3 [0.2–0.3]	0.3 [0.2–0.3]	0.2 [0.2–0.3]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	Yes, imprisonment (up to 14 years)
Drug use or possession for personal use is an offence	Possession of drugs for personal use or drug use and/or consumption are specified as criminal offences
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	Yes
Parental consent for adolescents to access HIV testing	No
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	Yes

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

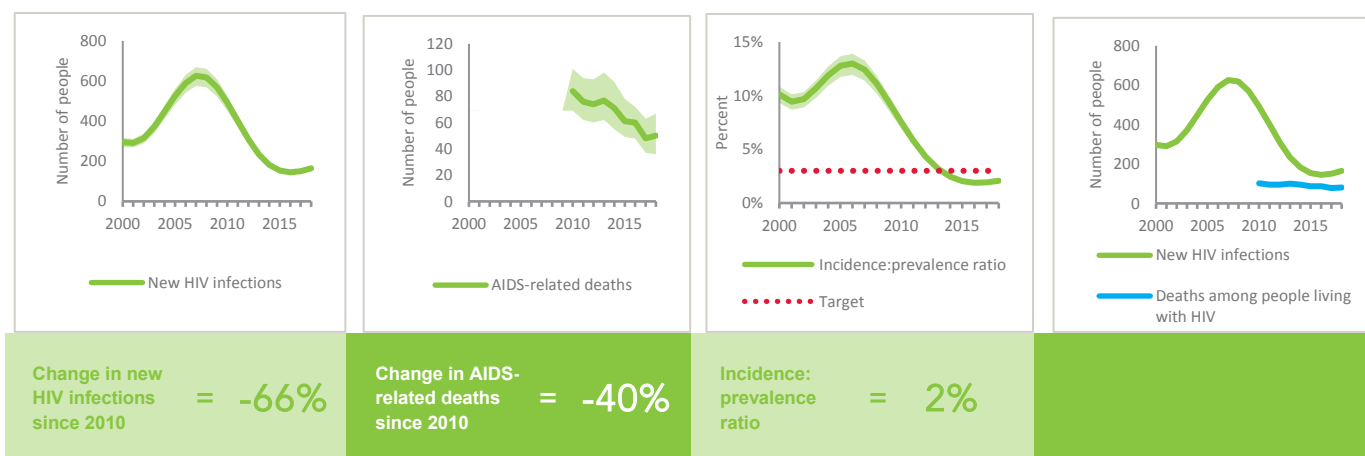
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2017	...	\$52 093 243	...	...	...	\$52 093 243

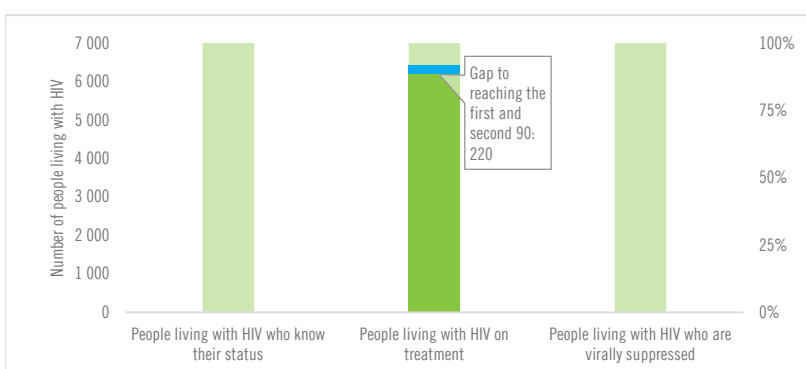
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	11 000
HIV prevalence	0.0%	2.2%	1.5%	...	1.1%
Know their HIV status	...	...	...	...	...
Antiretroviral therapy coverage	...	...	...	...	100%
Condom use	100%	64.5%	...	...	...
Coverage of HIV prevention programmes	98.0%	25.0%	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2017)	\$0	\$0	\$0	...	...

HIV TESTING AND TREATMENT CASCADE



	...	78% [71–86%] 6200	...
All ages	...% [...-...%]		...% [...-...%]
Children (0–14)	...% [...-...%]% [...-...%]
Women (15+)	...% [...-...%]% [...-...%]
Men (15+)	...% [...-...%]% [...-...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	...% [...-...%]	...% [...-...%]
Early infant diagnosis	...% [...-...%]	...% [...-...%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	39 [33–46]
People living with HIV who started TB preventive therapy (2017)	0.4%
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment (2018)	91.67%
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15–24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period (2017)	24
Harm reduction	...
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	No

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	<500 [<500– <500]	<200 [<200– <500]	<200 [<200– <200]
New HIV infections (0–14)	... [...–...]	... [...–...]	... [...–...]
New HIV infections (women, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
New HIV infections (men, 15+)	<200 [<200– <200]	<200 [<200– <200]	<200 [<100– <200]
HIV incidence per 1000 population	0.01 [0.01–0.01]	0.01 [<0.01–0.01]	0.01 [<0.01– <0.01]
AIDS-related deaths			
AIDS-related deaths (all ages)	<500 [<200– <500]	<500 [<200– <500]	<200 [<200– <500]
AIDS-related deaths (0–14)	... [...–...]	... [...–...]	... [...–...]
AIDS-related deaths (women, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
AIDS-related deaths (men, 15+)	<200 [<200– <200]	<200 [<200– <200]	<200 [<100– <200]
People living with HIV			
People living with HIV (all ages)	4000 [3400–4700]	3700 [3200–4400]	3500 [3100–4000]
People living with HIV (0–14)	... [...–...]	... [...–...]	... [...–...]
People living with HIV (women, 15+)	1200 [1000–1400]	1100 [980–1300]	1000 [890–1200]
People living with HIV (men, 15+)	2700 [2300–3300]	2500 [2200–3000]	2400 [2100–2800]
HIV prevalence (15–49)	<0.1 [<0.1– <0.1]	<0.1 [<0.1– <0.1]	<0.1 [<0.1– <0.1]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	...
Criminalization of sex work among consenting adults	...
Criminalization of same-sex sexual acts	Yes, imprisonment (up to 14 years)
Drug use or possession for personal use is an offence	...
Criminalization of transgender people	...
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	...
Spousal consent for married women to access sexual and reproductive health services	...
Mandatory HIV testing for marriage, work or residence permits or for certain groups	...

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

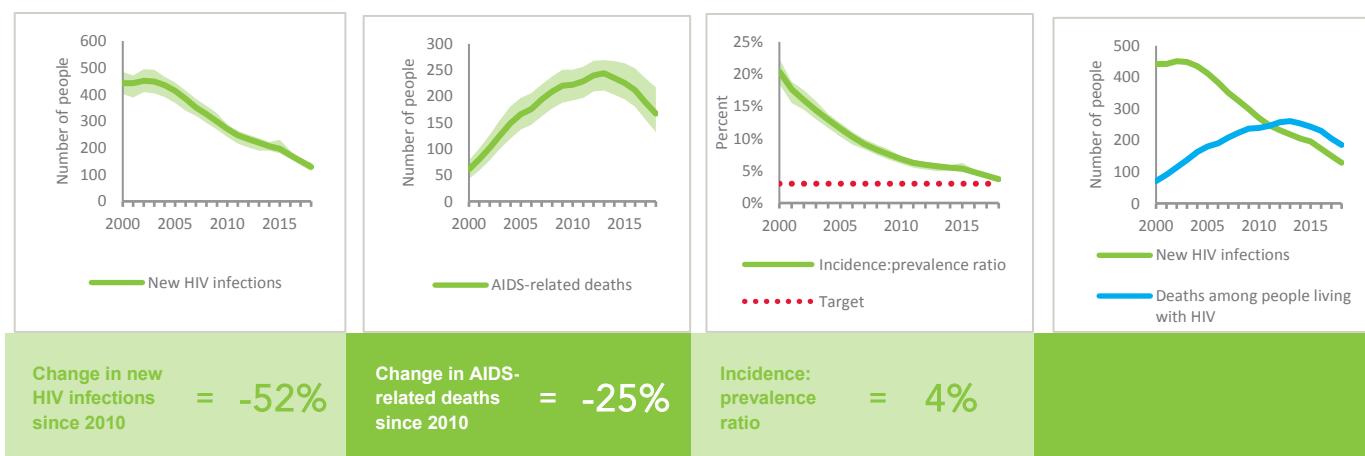
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2013	...	\$671 143	...	...	...	\$1 226 938

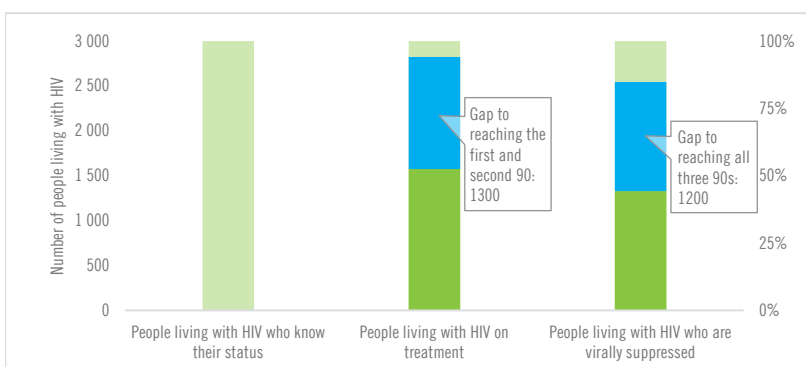
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	30 000	74 000	2700	2200	...
HIV prevalence	0.3%	0.2%	...	0.5%	0.0%
Know their HIV status	29.9%	40.3%	7.7%	36.9%	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	83.6%	82.8%	25.5%	76.3%	...
Coverage of HIV prevention programmes	12.7%	27.0%	2.7%	38.5%	...
Avoidance of health care because of stigma and discrimination	6.8%	5.2%	7.7%	5.5%	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	...	45% [40–52%] 1600	38% [34–44%]
All ages	...% [...-...%]		
Children (0–14)	...% [...-...%]	...	...
Women (15+)	...% [...-...%]	45% [40–53%] 470	39% [34–46%]
Men (15+)	...% [...-...%]	44% [39–52%] 1100	37% [32–43%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	...% [...-...%]	...% [...-...%]
Early infant diagnosis	...% [...-...%]	...% [...-...%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	49 [35–64]
People living with HIV who started TB preventive therapy (2017)	20.4%
Cervical cancer screening of women living with HIV	...
People coinfectd with HIV and hepatitis B virus receiving combined treatment (2017)	100%
People coinfectd with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	<0.1%
Knowledge of HIV prevention among young people aged 15–24 years	...
— Women	...
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	...
— Women	...
— Men	...
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2016)	74.2%
Men aged 15–49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection (2018)	80.5%
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	16 000 [14 000–17 000]	9700 [8700–11 000]	6400 [5700–7000]
New HIV infections (0–14)	<500 [<500–500]	<100 [<100– <200]	<100 [<100– <100]
New HIV infections (women, 15+)	5300 [4700–6000]	2800 [2500–3100]	1900 [1700–2100]
New HIV infections (men, 15+)	9900 [8800–11 000]	6800 [6100–7500]	4400 [3900–4800]
HIV incidence per 1000 population	0.24 [0.21–0.26]	0.14 [0.13–0.16]	0.09 [0.08–0.1]
AIDS-related deaths			
AIDS-related deaths (all ages)	27 000 [19 000–36 000]	21 000 [14 000–31 000]	18 000 [13 000–26 000]
AIDS-related deaths (0–14)	<500 [<500– <500]	<200 [<200– <500]	<100 [<100– <200]
AIDS-related deaths (women, 15+)	9100 [6500–12 000]	7900 [5000–12 000]	7600 [5400–12 000]
AIDS-related deaths (men, 15+)	17 000 [12 000–25 000]	13 000 [8700–19 000]	11 000 [7600–14 000]
People living with HIV			
People living with HIV (all ages)	580 000 [490 000–690 000]	520 000 [460 000–610 000]	480 000 [420 000–550 000]
People living with HIV (0–14)	11 000 [8700–13 000]	5900 [4700–7100]	3200 [2600–3800]
People living with HIV (women, 15+)	250 000 [210 000–290 000]	230 000 [200 000–260 000]	210 000 [180 000–240 000]
People living with HIV (men, 15+)	320 000 [270 000–390 000]	290 000 [250 000–340 000]	270 000 [240 000–310 000]
HIV prevalence (15–49)	1.5 [1.2–1.8]	1.3 [1.1–1.5]	1.1 [0.9–1.3]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	...
Criminalization of sex work among consenting adults	...
Criminalization of same-sex sexual acts	Laws penalizing same-sex sexual acts have been decriminalized or never existed
Drug use or possession for personal use is an offence	...
Criminalization of transgender people	...
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	...
Spousal consent for married women to access sexual and reproductive health services	...
Mandatory HIV testing for marriage, work or residence permits or for certain groups	...

STIGMA AND DISCRIMINATION

	2013	2015
Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV (2013 refers to women only)	29.2	26.1

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

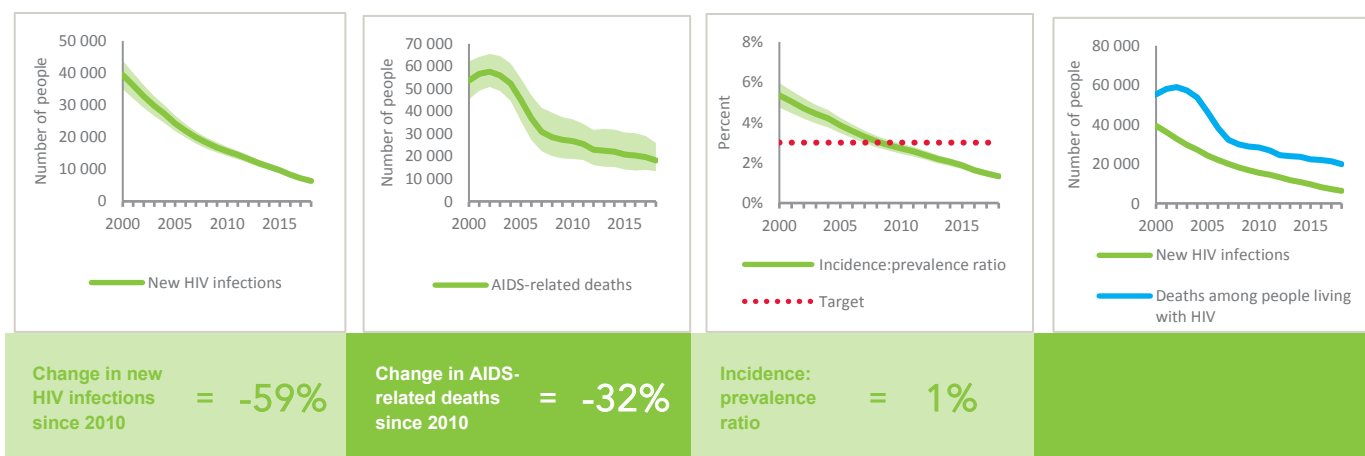
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2013	\$76 396	\$256 685 666	\$1 863 515	\$27 326 826	\$415 073	\$287 278 782

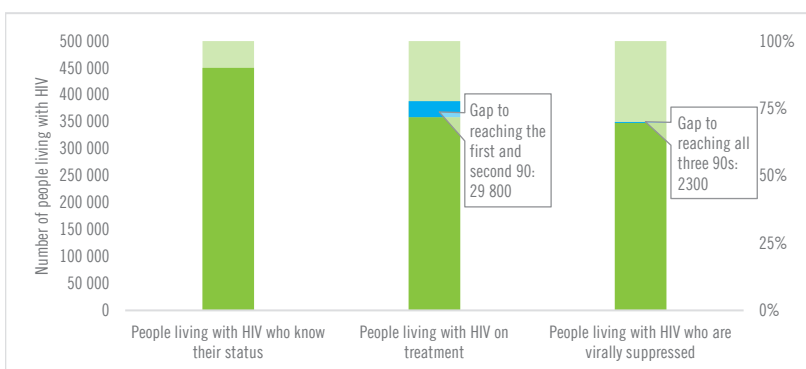
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	...	...	370 000
HIV prevalence	1.7%	11.9%	20.5%	11.0%	1.2%
Know their HIV status	52.8%	42.9%	...	41.6%	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	83.1%	82.7%	51.2%	76.9%	...
Coverage of HIV prevention programmes	70.4%	57.9%	...	50.0%	...
Avoidance of health care because of stigma and discrimination	7.7%	5.6%	...	6.2%	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	94% [82- >95%]	75% [66-86%] 359 000	73% [64-84%]
All ages			
Children (0-14)	84% [69- >95%]	83% [68- >95%] 2600	74% [60-88%]
Women (15+)	94% [81- >95%]	77% [67-88%] 161 000	75% [65-86%]
Men (15+)	94% [83- >95%]	73% [65-85%] 195 000	71% [63-82%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	94% [78- >95%]	>95% [81- >95%]
Early infant diagnosis	43.7% [37.2-52.9%]	>95% [82.7- >95%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	11 000 [8500 -15 000]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfectd with HIV and hepatitis B virus receiving combined treatment	...
People coinfectd with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	0.2%
Knowledge of HIV prevention among young people aged 15-24 years (2016)	
— Women	46%
— Men	45.1%
Condom use at last sex with a non-marital, non-cohabiting partner (2017)	
— Women	76.8%
— Men	75%
Women aged 15-49 years who have their demand for family planning satisfied by modern methods (2016)	96.5%
Men aged 15-49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period (2018)	2888
Harm reduction	
— Use of sterile injecting equipment at last injection (2014)	95.3%
— Needles and syringes distributed per person who injects (2018)	10
— Coverage of opioid substitution therapy (2018)	5.3%
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population
HIV prevalence
Know their HIV status
Antiretroviral therapy coverage
Condom use
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (0)

HIV TESTING AND TREATMENT CASCADE



Category	People living with HIV who know their status	People living with HIV on treatment	People living with HIV who are virally suppressed
All ages	...% [...-...%]	...% [...-...%]	...% [...-...%]
Children (0-14)	...% [...-...%]	...% [...-...%]	...% [...-...%]
Women (15+)	...% [...-...%]	...% [...-...%]	...% [...-...%]
Men (15+)	...% [...-...%]	...% [...-...%]	...% [...-...%]

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2009	...	\$21 000	...	\$1 743 620	\$38 394	\$1 803 014

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	59 [37-85]
People living with HIV who started TB preventive therapy (2017)	...
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15-24 years (2016)	
— Women	7.7%
— Men	14.6%
Condom use at last sex with a non-marital, non-cohabiting partner (2016)	
— Women	20.6%
— Men	33.5%
Women aged 15-49 years who have their demand for family planning satisfied by modern methods (2016)	46.6%
Men aged 15-49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period	...
Harm reduction	
— Use of sterile injecting equipment at last injection	...
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	...
— Safe injection rooms available (2019)	...

Note: HIV epidemiological estimates were not available at the time of publication.

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	...
Criminalization of sex work among consenting adults	...
Criminalization of same-sex sexual acts	Laws penalizing same-sex sexual acts have been decriminalized or never existed
Drug use or possession for personal use is an offence	...
Criminalization of transgender people	...
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	...
Spousal consent for married women to access sexual and reproductive health services	...
Mandatory HIV testing for marriage, work or residence permits or for certain groups	...

STIGMA AND DISCRIMINATION

	2010	2016
Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	63.2	64.1

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

VIOLENCE

	2010	2016
Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months	30.4	34.6

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	16 000 [14 000–17 000]	9600 [8500–10 000]	5700 [5200–6300]
New HIV infections (0–14)	570 [<500–730]	<500 [<500–570]	<500 [<200– <500]
New HIV infections (women, 15+)	5100 [4400–5700]	3200 [2800–3500]	2100 [1800–2300]
New HIV infections (men, 15+)	10 000 [8900–11 000]	5900 [5200–6400]	3300 [3000–3700]
HIV incidence per 1000 population	0.18 [0.16–0.2]	0.1 [0.09–0.11]	0.06 [0.05–0.07]
AIDS-related deaths			
AIDS-related deaths (all ages)	8500 [6400–9800]	6100 [4400–7700]	4700 [3200–6200]
AIDS-related deaths (0–14)	<500 [<200– <500]	<200 [<200– <500]	<200 [<100– <200]
AIDS-related deaths (women, 15+)	2400 [1700–2900]	1500 [1100–1900]	1000 [690–1400]
AIDS-related deaths (men, 15+)	5800 [4500–6600]	4400 [3200–5500]	3500 [2500–4700]
People living with HIV			
People living with HIV (all ages)	220 000 [180 000–250 000]	230 000 [200 000–260 000]	230 000 [200 000–260 000]
People living with HIV (0–14)	3800 [3200–4400]	5000 [4000–5700]	5000 [4000–5900]
People living with HIV (women, 15+)	61 000 [52 000–69 000]	71 000 [62 000–79 000]	74 000 [65 000–83 000]
People living with HIV (men, 15+)	150 000 [130 000–170 000]	150 000 [130 000–170 000]	150 000 [130 000–170 000]
HIV prevalence (15–49)	0.4 [0.3–0.4]	0.3 [0.3–0.4]	0.3 [0.3–0.4]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Any criminalization or punitive regulation of sex work
Criminalization of same-sex sexual acts	No specific legislation
Drug use or possession for personal use is an offence	Possession of drugs for personal use or drug use and/or consumption are specified as non-criminal offences
Criminalization of transgender people	Neither criminalized nor prosecuted
Laws or policies restricting the entry, stay and residence of people living with HIV	No
Parental consent for adolescents to access HIV testing	Yes, for adolescents younger than 16 years
Spousal consent for married women to access sexual and reproductive health services	No
Mandatory HIV testing for marriage, work or residence permits or for certain groups	Yes

STIGMA AND DISCRIMINATION

	2011	2014
Percentage of women aged 15–49 years who report discriminatory attitudes towards people living with HIV	36.6	29.2

Percentage of people living with HIV denied health services because of their HIV status in the last 12 months

Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent

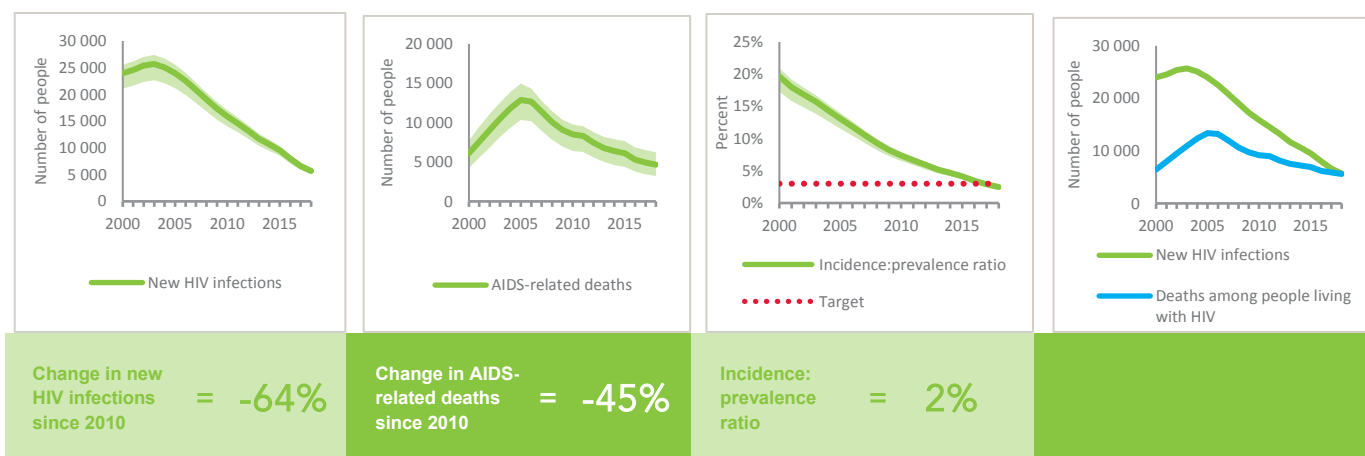
VIOLENCE

Proportion of ever-married or partnered women aged 15–49 years who experienced physical or sexual violence from a male intimate partner in the past 12 months

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2012	...	\$30 327 094	\$28 917 091	\$19 495 015	\$14 805 388	\$95 446 487

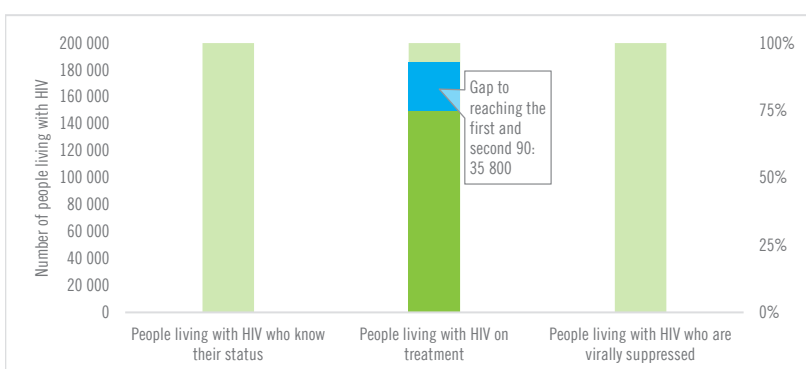
EPIDEMIC TRANSITION METRICS



KEY POPULATIONS

	Sex workers	Gay men and other men who have sex with men	People who inject drugs	Transgender people	Prisoners
Estimated size of population	...	...	190 000	...	...
HIV prevalence	3.6%	10.8%	11.0%	...	...
Know their HIV status	50.8%	64.7%	52.6%	...	...
Antiretroviral therapy coverage	21.3%	23.3%	53.4%	...	...
Condom use	85.4%	63.0%	36.5%	...	...
Coverage of HIV prevention programmes	24.8%	24.7%	28.2%	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	...	2010	2018
All ages	...% [...-...%]	65% [57-73%] 150 000	...
Children (0-14)	...% [...-...%]	92% [74- >95%] 4600	...% [...-...%]
Women (15+)	...% [...-...%]	68% [60-76%] 50 800	...% [...-...%]
Men (15+)	...% [...-...%]	63% [54-71%] 94 600	...% [...-...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	46% [37-54%]	81% [69- >95%]
Early infant diagnosis	...% [...-...%]	50.8% [43.2-59.8%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	4500 [3700-5400]
People living with HIV who started TB preventive therapy (2017)	31.4%
Cervical cancer screening of women living with HIV	...
People coinfecting with HIV and hepatitis B virus receiving combined treatment	...
People coinfecting with HIV and hepatitis C virus starting hepatitis C treatment	...

HIV PREVENTION

Adults aged 15+ years with unsuppressed viral load	...
Knowledge of HIV prevention among young people aged 15-24 years (2014)	
— Women	49.3%
— Men	...
Condom use at last sex with a non-marital, non-cohabiting partner	
— Women	...
— Men	...
Women aged 15-49 years who have their demand for family planning satisfied by modern methods	...
Men aged 15-49 years who are circumcised	Not applicable
Voluntary medical male circumcisions performed according to national standards	Not applicable
People who received PrEP at least once during the reporting period (2018)	2429
Harm reduction	
— Use of sterile injecting equipment at last injection (2017)	98%
— Needles and syringes distributed per person who injects (2018)	117
— Coverage of opioid substitution therapy (2018)	27.5%
— Naloxone available (2019)	Yes
— Safe injection rooms available (2019)	No



ANNEX ON METHODS



METHODS FOR DERIVING UNAIDS HIV ESTIMATES

INTRODUCTION

UNAIDS annually provides revised global, regional and country-specific modelled estimates using the best available epidemiological and programmatic data to track the HIV epidemic. Modelled estimates are required because it is impossible to count the exact number of people living with HIV, people who are newly infected with HIV or people who have died from

AIDS-related causes in any country: doing so would require regularly testing every person for HIV and investigating all deaths, which is logistically impossible and ethically problematic. Modelled estimates—and the lower and upper bounds around these estimates—provide a scientifically appropriate way of describing HIV epidemic levels and trends.

PARTNERSHIPS IN DEVELOPING METHODS FOR UNAIDS ESTIMATES

Country teams use UNAIDS-supported software to develop estimates annually. The country teams are primarily comprised of demographers, epidemiologists, monitoring and evaluation specialists, and technical partners.

The software used to produce the estimates is Spectrum, which is developed by Avenir Health, and the Estimates and Projections Package, which is developed by the East–West Center.¹ The UNAIDS Reference Group on Estimates, Modelling and Projections provides technical guidance on the development of the HIV component of the software.²

1 More information on Avenir Health can be found at www.avenirhealth.org. The East–West Center website can be found at www.eastwestcenter.org.

2 For more on the UNAIDS Reference Group on Estimates, Modelling and Projections, please visit www.epidem.org.

A BRIEF DESCRIPTION OF METHODS USED BY UNAIDS TO CREATE ESTIMATES³

For countries where HIV transmission is high enough to sustain an epidemic in the general population, available epidemiological data typically consist of HIV prevalence results from pregnant women attending antenatal clinics and from nationally representative population-based surveys. Many countries have historically conducted HIV sentinel surveillance among women attending antenatal clinics, which requires collecting data from a selection of clinics for a few months every few years. More recently, a number of countries have stopped conducting sentinel surveillance among pregnant women and are now using the data from the routine HIV tests conducted when pregnant women attend antenatal clinics and are tested for HIV. These data avoid the need to conduct a separate surveillance effort, and they provide a complete set of data from all clinics across the country instead of samples from specific sites.

The trends from pregnant women at antenatal clinics, whether done through surveillance or routine data, can be used to inform estimates of national prevalence trends, whereas data from population-based surveys—which are conducted less frequently but have broader geographical coverage and also include men—are more useful for informing estimates of national HIV prevalence levels. Data from these surveys also contribute to estimating age- and sex-specific HIV prevalence and incidence levels and trends. For a few countries in sub-Saharan Africa that have not conducted population-based surveys, HIV prevalence levels are adjusted based on comparisons of antenatal clinic surveillance and population-based survey data from other countries in the region. HIV prevalence trends and numbers of people on antiretroviral therapy are then used to derive an estimate of HIV incidence trends.

Historically, countries with high HIV transmission have produced separate HIV prevalence and incidence trends for rural and urban areas when there are well-established geographical differences in prevalence. To better describe and account for further geographical heterogeneity, an increasing number of countries have produced subnational estimates (e.g., at the level of the province or state) that, in some cases, also account for rural and urban differences. These subnational or

rural–urban estimates and trends are then aggregated to obtain national estimates.

In the remaining countries, where HIV transmission occurs largely among key populations at higher risk of HIV and the epidemic can be described as low-level, the estimates are derived from either surveillance among key populations and the general, low-risk population, or from HIV case reporting data, depending on which data are most reliable in a particular country. In countries with high-quality HIV surveillance data among the key populations, the data from repeated HIV prevalence studies that are focused on key populations are used to derive national estimates and trends. Estimates of the size of key populations are increasingly derived empirically in each country; when studies are not available, they are derived based on regional values and consensus among experts. Other data sources—including HIV case reporting data, population-based surveys and surveillance among pregnant women—are used to estimate the HIV prevalence in the general, low-risk population. The HIV prevalence curves and numbers of people on antiretroviral therapy are then used to derive national HIV incidence trends.

For most countries in western and central Europe and North America—and many countries in Latin America, the Caribbean, and the Middle East and North Africa that have insufficient HIV surveillance or survey data, but that have robust disease reporting systems—HIV case reporting and AIDS-related mortality data from vital registration systems are directly used to inform trends and levels in national HIV prevalence and incidence. These methods also allow countries to take into account evidence of underreporting or reporting delays in HIV case report data, as well as the misclassification of deaths from AIDS-related causes.

In all countries where UNAIDS supports the development of estimates, assumptions about the effectiveness of HIV programme scale-up and patterns of HIV transmission and disease progression are used to obtain the following age- and sex-specific estimates of people living with HIV, people newly infected with HIV, people dying from AIDS-related illness and other important indicators (including treatment programme coverage statistics). These assumptions are based on

³ A full description of the methods used for the 2019 estimates is available in the July 2019 supplement of the journal AIDS.

systematic literature reviews and analyses of raw study data by scientific experts. Demographic population data, including fertility estimates, are derived from the United Nations Population Division's World Population Prospects 2017 data files.

Selected inputs into the model—including the number of people on antiretroviral therapy and the number of women accessing services for the prevention of mother-to-child transmission of HIV by type of regimen—are reviewed and validated in partnership with the United Nations Children's Fund (UNICEF), the World Health Organization (WHO), the Government of the United States of America, the Global Fund to Fight AIDS, Tuberculosis and Malaria, and other partners.

Final country-submitted files containing the modelled outputs are reviewed at UNAIDS to ensure that the results are comparable across regions and countries and over time.

In 2019, sub-national estimates were created and used by more than 25 countries for internal planning purposes. The methods for producing robust sub-national estimates varies by country and depends primarily on the availability of sub-national data. Four methods were used (Mathematical modelling, Model-based geo-statistics, small area estimation and direct estimates from prevalence surveys) to derive the sub-national estimates. The methods to generate robust sub-national estimates are still being refined.

UNCERTAINTY BOUNDS AROUND UNAIDS ESTIMATES

The estimation software calculates uncertainty bounds around each estimate. These bounds define the range within which the true value lies (if it can be measured). Narrow bounds indicate that an estimate is precise, while wide bounds indicate greater uncertainty regarding the estimate.

In countries using HIV surveillance data, the quantity and source of the data available partly determine the precision of the estimates: countries with more HIV surveillance data have smaller ranges than countries with less surveillance data or smaller sample sizes. Countries in which a national population-based survey has been conducted generally have smaller ranges around estimates than countries where such surveys have not been conducted. Countries producing subnational estimates at the provincial level have wider ranges. In countries using HIV case reporting and AIDS-related mortality data, the number of years of data and the magnitude of the cases reported or AIDS-related

deaths observed will contribute to determining the precision of the estimate.

The assumptions required to arrive at the estimate also contribute to the extent of the ranges around the estimates: in brief, the more assumptions, the wider the uncertainty range, since each assumption introduces additional uncertainties. For example, the ranges around the estimates of adult HIV prevalence are smaller than those around the estimates of HIV incidence among children, which require additional data on prevalence among pregnant women and the probability of mother-to-child HIV transmission that have their own additional uncertainty.

UNAIDS is confident that the actual numbers of people living with HIV, people who are newly infected with HIV or people who have died from AIDS-related causes lie within the reported ranges. Over time, more and better data from countries will steadily reduce uncertainty.

IMPROVEMENTS INCLUDED IN THE 2019 UNAIDS ESTIMATES MODEL

Country teams create new Spectrum files every year. The files may differ from one year to the next for two reasons. First, new surveillance and programme data are entered into the model; this can change HIV prevalence and incidence trends over time or antiretroviral therapy coverage rates, including for past years. Second, improvements are incorporated into the model based on the latest available science and statistical methods, which leads to the creation of more accurate trends in

HIV incidence. Due to these improvements to the model and the addition of new data to create the estimates, the results from previous years cannot be compared with the results from this year. A full historical set of estimates are created each year, however, enabling a description of trends over time.

Between the 2018 estimates and the 2019 estimates, the following changes were applied to the model

under the guidance of the UNAIDS Reference Group on Estimates, Modelling and Projections and based on the latest scientific evidence.

New incidence estimation model for generalized epidemics

In 2019, a new model (R-hybrid) was introduced that uses an improved function to estimate the rate of HIV infection during different phases of the HIV epidemic. For estimating infections early in the epidemic, when data were relatively sparse, the new model has a simple structure that follows the consistent pattern across countries of exponential growth, peak and decline. For more recent years the model has more flexibility to follow the increased amount of data to shape the trends in new infections. This new model improves the fit to existing prevalence data, especially for recent routine testing data from antenatal clinics.

The previous incidence estimation model used in generalized epidemics assumed HIV prevalence stabilized at the last observed value. The impact of adopting the R-hybrid model will be minimal in countries with substantial historical surveillance data and recent surveys, but in countries with few data points early in the epidemic or in recent years, the R-hybrid model should improve the fit to available data.

Mortality among people not receiving treatment

Assumptions of the risk of mortality among people not receiving treatment were reduced based on high quality vital registration data where fewer AIDS-related deaths among the untreated HIV positive adults were recorded than predicted by Spectrum.

The impact of this change is lower mortality rates among people not receiving treatment and fewer AIDS-related deaths overall.

Mortality among people receiving antiretroviral therapy

Previously, the model assumed that mortality rates following antiretroviral therapy initiation are constant over time, conditional on age, sex, baseline CD4 count and duration on treatment. However, recent studies have shown that these rates have declined over time,

even after controlling for temporal changes in baseline CD4 count and treatment duration. A temporal reduction in mortality was included in the model as estimated from the leDEA cohort data.

leDEA data were also reanalysed for Latin America, North America, and Asia and the Pacific with improved assumptions about mortality among those lost to follow-up. This resulted in substantially lower mortality rates than previously estimated. In countries with high-quality mortality data, on- and off-treatment mortality were adjusted to match AIDS-related deaths. An option to specify allocation of treatment disproportionately to either those with low CD4 counts or according to eligibility criteria was introduced to better match the low number of AIDS-related mortality data observed in western and central Europe.

Fertility among women living with HIV

The 2019 Spectrum model included updated parameters about the fertility of women living with HIV who were not receiving antiretroviral therapy. The new parameters led to higher fertility among women living with HIV early in the epidemic, before treatment was provided to HIV-positive pregnant women. This adjustment increased historical estimates of children living with HIV.

In the 2019 model, HIV prevalence data from routine testing among pregnant women at antenatal clinics were used to calibrate the estimated births to women living with HIV. This increased the estimates in some countries and decreased the values in others. There is still some work to be done to ensure the country programme data used for this calibration are robust.

Breastfeeding among women living with HIV

New analysis of survey data done in early 2019 found that women who were living with HIV before widespread HIV testing and treatment had shorter breastfeeding duration. The model previously assumed that women who did not know their HIV status had similar breastfeeding patterns as women who were HIV-negative.

In 2019, eight high-burden countries in eastern southern Africa with household surveys from the early 2000s adjusted the breastfeeding duration among

undiagnosed women living with HIV to reflect the new analysis. The impact of this change is reduced mother-to-child transmission during breastfeeding.

Probability of mother-to-child transmission

Analysis conducted for the UNAIDS Reference Group on Estimates, Modelling and Projections found minor updated transmission probabilities based on the latest published literature about the impact of different antiretroviral regimens on mother-to-child transmission. This had minimal impact on the child HIV estimates.

Updated age at initiation of antiretroviral therapy for children

The average age of children starting antiretroviral therapy has changed over the years as children are diagnosed earlier. Data from the IeDEA and CIPHER networks provide data on the average age of children starting antiretroviral therapy in multiple regions around the world. These data are available for each calendar year from 2002 through 2016. The most recent update of these data suggested an increase in the proportion of children under two years of age starting on treatment and a small reduction to the proportion of children older than 10 years of age starting on treatment. This has a small impact on both the number of children living with HIV and on AIDS-related deaths among children.

Retention on treatment of pregnant women

Many countries do not have robust data available on the retention of women on treatment during pregnancy. An analysis conducted for the UNAIDS Reference Group on Estimates, Modelling and Projections suggested that at the time of delivery, only 80% of women were retained on treatment. This estimate was used as a default value for women already on treatment before the pregnancy and for those women who started treatment during the pregnancy. Most of the high-burden countries in eastern and southern Africa updated this assumption to reflect available data. Previously, the default assumption was that 75% of women were retained on treatment at delivery before the pregnancy.

Changes to case surveillance and vital registration model

The age range of requested model inputs of new diagnoses, CD4 count at diagnosis and AIDS-related mortality was changed from all ages to 15 years and older. It was recommended that AIDS-related death estimates (adjusted for incomplete reporting and misclassification) rather than raw AIDS-related deaths from the vital registration system be used in the fitting process. A new function was added to estimate new diagnosis based on age, sex and year. Also, a new r-logistic fitting approach was added. Complementing this new model is another function that provides the user with the ability to determine which model best fits the inputs.

Surveillance data entered into the model

In 2018, Nigeria conducted a large household survey to improve the precision of the estimate of HIV prevalence in the country. The Nigeria AIDS Indicator and Impact Survey (NAIIS) found lower HIV prevalence than previous household surveys. The new survey estimates were included in the Nigeria Spectrum models and previous survey data were removed, resulting in a shift in HIV prevalence to a lower level over the full history of the epidemic. This change also shifted the estimated prevalence in western and central Africa to slightly lower levels.

At the global level, trends in new HIV infections, AIDS-related deaths and people living with HIV are similar to previous estimates, although there are shifts within regions. The number of AIDS-related deaths has shifted downward in all regions due to changes in the models. New HIV infections are slightly flatter than estimated in 2018 in Asia and the Pacific and in eastern Europe and central Asia. Lower estimates of people living with HIV in western and central Africa were offset by higher estimates in Asia and the Pacific.

More detailed information on revisions to the 2019 model and Spectrum generally can be found at www.epidem.org.

PUBLICATION OF COUNTRY-SPECIFIC ESTIMATES

UNAIDS aims to publish estimates for all countries with populations of 250 000 or more (according to the United Nations Population Division 2017 World Population Prospects). For the countries with populations of 250 000 or more that did not submit estimates, UNAIDS developed estimates using the Spectrum software based on published or otherwise available information. These estimates contributed to regional and global totals but were not published as country-specific estimates.

In countries with low-level epidemics, the number of pregnant women living with HIV is difficult to estimate. Many women living with HIV in these countries are sex workers or people who use drugs—or they are the sexual partners of people who use drugs or gay men and other men who have sex with men—making them likely to have different fertility levels than the general population. UNAIDS does not present estimates of mother-to-child HIV transmission, including estimates related to children in some countries that have concentrated epidemics, unless adequate data are available to validate these estimates. UNAIDS also does not publish estimates related to children for countries where the estimated number of pregnant women living with HIV is less than 50.

With regard to reporting incidence trends, if there are not enough historical data to state with confidence whether a decline in incidence has occurred, UNAIDS will only publish data for the most recent year. This is done to prevent users from making inaccurate inferences about trends. Specifically, incidence trends are not published if there are fewer than four data points for the key population or if there have been no data for the past four years for countries using repeated survey or routine testing data. Trends prior to 2000 are not published for countries using case surveillance models if there are no early case surveillance or mortality data available.

Finally, UNAIDS does not publish country estimates when further data or analyses are needed to produce justifiable estimates. More information on the UNAIDS estimates and the individual Spectrum files for most countries can be found in the UNAIDS website. Data from the estimates can be found in the AIDSinfo section of the UNAIDS website (<http://aidsinfo.unaids.org>). ■

METHODS FOR DERIVING THE 90–90–90 TARGETS

INTRODUCTION

Since 2015, UNAIDS has reported estimates of global, regional and country-specific progress against the 90–90–90 targets. Progress toward these targets is monitored using three basic indicators:

- ▶ Indicator 1 (the first 90): The percentage of people living with HIV who know their HIV status.
- ▶ Indicator 2 (the second 90): The percentage of people living with HIV who know their status and are accessing treatment.

- ▶ Indicator 3 (the third 90): The percentage of people living with HIV on treatment who have suppressed viral loads.

Indicators 2 and 3 can also be expressed as a percentage of all people living with HIV. When numbers or coverage of the treatment target are expressed relative to the total number of people living with HIV, this is called “the HIV testing and treatment cascade.”—therapy Annual estimates of antiretroviral therapy coverage among people living with HIV are available from the time when treatment was first introduced in countries.

DATA SOURCES FOR CONSTRUCTING COUNTRY MEASURES

Country-level progress against the 90–90–90 targets was constructed using reported data from Spectrum, the Global AIDS Monitoring tool and (for selected countries in western and central Europe) the Dublin Declaration monitoring process. Estimates are published for all people and separately, by sex, for children (0 to 14 years) and for adults (15 years and older). Upper and lower ranges of uncertainty for country-level estimates were calculated from the range of estimated numbers of people living with HIV. This range may not fully capture uncertainty in the reported estimates.

A description of the target-related indicators that countries report against is provided in the UNAIDS 2019 Global AIDS Monitoring guidelines (1). Data sources are also briefly described. A summary of the number of countries that are publicly reporting on each measure is provided in Table 18.1, organized by region.

The final set of country measures of progress against the 90–90–90 targets for 2015 through 2018 are available at <http://aidsinfo.unaids.org>. Not all countries were able to report against all three prongs of the 90–90–90 targets: complete treatment cascades are published for 60 countries in 2018, up from 23 in 2015.

Estimates of people living with HIV

All progress measures in this report are based on UNAIDS global, regional and country-specific modelled estimates from Spectrum of the numbers of people living with HIV. Estimates of people living with HIV in 2018 were available for 170 of 193 countries and territories and published for 137. Estimates of people living with HIV are developed for all countries with populations above 250 000.

More details about how UNAIDS derives estimates and uncertainty bounds around the number of people living with HIV can be found in Part 1 of this annex. Published country estimates of people living with HIV (available <http://aidsinfo.unaids.org>) represent 79% of the total global estimated number of people living with HIV in 2018.

Knowledge of HIV status among people living with HIV

Estimates of the number of people living with HIV who know their status were derived using the most recent HIV surveillance, programme data and nationally representative population-based survey data, and from modelled 2018 estimates for 102 countries. Where data were available separately for children (aged 0–14 years) and adults (aged 15 years and older, by sex), the age- and sex-specific measures were first calculated and then aggregated to produce a national measure.

For 74 countries in 2018—primarily outside of eastern and southern Africa and western and central Africa—the number of people living with HIV who knew their HIV status is based on HIV surveillance case notification data, programme registers or modelled estimates derived from case surveillance data. If the estimate from these sources was lower than the number of people accessing antiretroviral therapy, the reported value was excluded. For countries using HIV surveillance or programme data, a country should have included this measure only if the HIV surveillance system had been functioning since at least 2013 and people who have died, emigrated or who otherwise have been lost to follow-up are removed.

Although HIV surveillance systems, including those based on programme registers, can be a reasonably robust source of data to estimate the number of people living with HIV who know their status, biases in the reported numbers may still exist. For example, a country's measure of the knowledge of status may be underestimated if not all people diagnosed are reported to the surveillance system in a timely manner;

the measure also may be overestimated if people are reported to the system or included on a register more than once and these duplicates are not detected. Similarly, if people die or emigrate but are not removed from the system, the number of people living with HIV who are reported to know their HIV status also will be overstated.

For 28 countries in eastern and southern Africa and western and central Africa, estimates of the numbers of people living with HIV who knew their status were derived using a new UNAIDS-supported mathematical model called the First 90 model. This model uses population-based survey and HIV testing service program data—together with country-specific HIV epidemic parameters from the standard UNAIDS Spectrum model—to produce outputs of knowledge of HIV status for adults, by sex. More details on the modelling approach are available in a forthcoming article (currently in press) (2).

Knowledge of HIV status from the First 90 model for eastern and southern Africa and western and central Africa has a number of strengths compared with UNAIDS' previously recommended approach to estimating knowledge of status relying on population survey data and programme treatment coverage data. Most importantly, the new model differentiates in the population survey data those who are aware of their HIV status and those who likely seroconverted after their last HIV-negative test based on national incidence trends. This approach constrains the upper bound of the proportion of people living with HIV ever tested in the survey who likely knew their HIV status at the time of the survey, thus producing a more accurate estimate of the first 90. Results of the proportion of people who know their HIV status from the model are also available by sex, assuming male-to-female testing ratios have remained relatively constant over time. Estimates of knowledge of status by sex for adults are also available since 2010.

An important model limitation, similar to the previously recommended approach, is that caution should be used in interpreting results when the last population-based survey was conducted more than five years ago or if there are concerns about the accuracy of self-reported testing history in the survey. Model results also are only for those aged 15 years and older. UNAIDS continues to recommend that countries conservatively estimate knowledge of status among children as the proportion of children living with HIV on treatment (unless other information from case surveillance data are available). Additional strengths and limitations of the model are described in the forthcoming article referenced earlier in this section.

People accessing antiretroviral therapy

Global and regional measures of antiretroviral therapy numbers are abstracted from country-reported programme data through the UNAIDS-supported Spectrum software, the Global AIDS Monitoring reporting tool, and the Dublin Declaration reporting process. In 2018, 143 countries had publicly available estimates of the number of people on treatment, representing 85% of all people on treatment. For the small number of countries where reported numbers of people on treatment are not available in selected years—primarily in western and central Europe and North America, and in China, India and the Russian Federation—estimates of the number of people on treatment are developed either in consultation with the public health agency responsible for monitoring the national treatment programme or based on published sources.

In partnership with UNICEF, WHO, the Government of the United States, the Global Fund and other partners that support treatment service delivery in countries, UNAIDS annually reviews and validates treatment numbers reported by countries through Global AIDS Monitoring and Spectrum. UNAIDS staff also provide technical assistance and training to country public health and clinical officers to ensure the quality of the treatment data reported. Nevertheless, this measure may overestimate the number of people on treatment if people who transfer from one facility to another are reported by both facilities. Similarly, coverage may be overestimated if people who have died, disengaged from care or emigrated are not identified and removed from treatment registries. Treatment numbers also may be underestimated if not all clinics report the numbers on treatment completely or in a timely manner.

In 2016, UNAIDS completed a triangulation of data to verify the UNAIDS global estimate of people accessing antiretroviral therapy at the end of 2015. Since early 2017, UNAIDS and other international partners have supported more than 15 countries, primarily in sub-Saharan Africa, to verify that the number of people reported to be currently on treatment is accurate. For more details about how confident UNAIDS is in reported treatment numbers, please see *How many people living with HIV access treatment?*⁴

People who have achieved viral suppression

Progress towards the viral suppression target among people on treatment and as a proportion of all people living with HIV was derived from data reported in Spectrum and through the online Global AIDS Monitoring reporting tool and the Dublin Declaration reporting process. For the purposes of reporting, the threshold for suppression is a viral load of less than 1000 copies per ml, although some countries may set lower thresholds or require persons to achieve an undetectable viral load. This guidance also specifies only a person's last test result from the reporting year be submitted, so the reported number suppressed among those tested should represent people and not tests performed.

UNAIDS 2019 Global AIDS Monitoring guidelines were revised from those of 2018 to clarify that countries should report viral load suppression outcomes, regardless of testing coverage. However, viral load testing results will only be published in countries where access to testing is for all or nearly all (>90%) people on treatment or nationally representative (typically 50–90% testing coverage). Table 1 shows the increase in the number of countries able to report on viral load suppression compared to previous years. In 2015, only 26 countries had reliable estimates; in 2018, there were 76 countries with reported data.

For countries with nationally representative but not universally accessible access to treatment, the estimate of viral suppression among those tested (i.e., the third 90) was multiplied by the number of people on treatment to obtain overall viral suppression levels in the country. Countries where testing coverage was 90% or higher reported only the number suppressed among all people on treatment.

A number of challenges exist in using country-reported data to monitor the viral load suppression target. First, routine viral load testing may not be offered at all treatment facilities, and those facilities that do offer it may not be representative of the care available at facilities without viral load testing. By assuming that the percentage of people suppressed among those accessing viral load testing is representative of all people on treatment countries that do not have complete access to testing, the measure may be overestimated or underestimated (depending on the characteristics of the reporting clinics).

4 The document is available at <http://www.unaids.org/en/resources/documents/2016/how-many-people-living-with-HIV-access-treatment>.

TABLE 1 Data availability for constructing UNAIDS measures of progress against the 90–90–90 treatment targets

		Asia and the Pacific	Caribbean	Eastern Europe and central Asia	Eastern and southern Africa	Latin America	Middle East and North Africa	Western and central Africa	Western and central Europe and North America	Global
Number of countries		38	16	16	21	17	20	25	40	193
Number of countries in UNAIDS global estimates		28	10	16	20	17	19	24	36	170
Number of countries with publicly available data on estimates of people living with HIV	2015	20	9	12	20	16	15	24	23	139
	2016	20	9	12	20	16	15	24	24	140
	2017	20	9	12	20	16	15	24	23	139
	2018	20	9	12	20	16	15	24	21	137
Number of countries with publicly available data on knowledge of HIV status	2015	8	6	7	20	6	6	18	9	80
	2016	9	6	8	20	8	6	18	18	93
	2017	12	7	9	20	8	6	18	18	98
	2018	15	6	12	20	9	9	18	13	102
Number of countries with publicly available data on treatment	2015	20	9	13	20	16	15	24	21	138
	2016	20	9	13	20	16	15	24	23	140
	2017	21	9	13	20	16	15	24	24	142
	2018	22	9	14	20	16	17	24	21	143
Number of countries with publicly available data on people with suppressed viral load	2015	5	0	5	3	4	4	1	4	26
	2016	5	2	5	8	7	4	1	13	45
	2017	7	4	8	7	8	6	3	12	55
	2018	9	7	11	13	11	9	6	10	76

Source: UNAIDS special analysis, 2019.

Another challenge in measuring the accuracy of viral load suppression estimates is that UNAIDS guidance requests routine (i.e., annual) viral load testing results only for people who are on treatment and eligible for testing. If people newly initiated on treatment achieve viral suppression but have not yet been offered viral load testing, they will be incorrectly counted as not suppressed, and the resulting viral suppression estimate will be understated. UNAIDS also requests countries to only report results from routine viral load testing: if countries report test results primarily

performed because of suspected treatment failure, the number of people virally suppressed in these countries will be underestimated. UNAIDS validates country submissions for quality, but it is not always possible to identify cases where both routine and other types of testing are occurring. Finally, UNAIDS guidance recommends reporting viral load test results only for people on antiretroviral therapy; persons who are not on treatment and naturally suppress the virus will not be included in this measure.

METHODS FOR CONSTRUCTION THE 90–90–90 TREATMENT TARGET AT THE REGIONAL AND GLOBAL LEVELS

All programme data submitted to UNAIDS were validated by UNAIDS and its partners prior to publication. Country-submitted data that did not meet the required validation checks for quality either at the indicator level or across the treatment cascade were not included in the composite regional or global measures.

To estimate regional and global progress against the 90–90–90 targets, UNAIDS imputed missing country data for the first and third 90 targets using a Bayesian hierarchical model with uncertainty based on regional trends, sex differences and country-specific data for those countries reporting data for some but not all years. Additional details on the modelling approach are available in a forthcoming article (4). The proportion of data on knowledge of status and viral load suppression that was imputed by region from 2015 to 2018 are shown in Table 18.2.

Due to large differences in the proportion of people virally suppressed in western and central Europe and the United States for the years in which data were available, sub-regional estimates for North America and western and central Europe were separately calculated and then combined to estimate the western and central Europe and North America regional results at large. Upper and lower ranges of uncertainty around the global and regional estimates of the HIV testing and treatment cascade are provided that reflect uncertainty in the number of people living with HIV and uncertainty (from missing country data) in the number of people who know their HIV status and the number of people who are virally suppressed. Based on reports from data quality reviews prior to 2017, uncertainty from possible overreporting or underreporting of treatment numbers of 0.88 and 1.04 for the lower and upper bounds, respectively, was added to the bounds of treatment

coverage among people living with HIV and the second and third 90s. Upper and lower ranges of uncertainty for the 90s do not capture uncertainty in the reported or missing programme data on the numbers of people who know their HIV status or the number of people on treatment who are virally suppressed.

As in previous years, results of global and regional progress towards the 90–90–90 treatment target presented in this report supersede all previously published estimates. The new approach to modelling the global and regional estimates of the first and third 90s builds on the previous UNAIDS approach, which was to calculate missing -data for countries using the ratio of knowledge of status and treatment for the first 90 and the ratio of the number of people suppressed among those on treatment in the region for countries where data were available. One of the benefits of the new approach is that it can use reported data when they are available to estimate trends in and across the region. Also, it is now possible to measure progress separately among adults by sex.

As with the previous approach, one primary drawback to the model is that it is difficult to quantify the extent to which progress in countries that reported data to UNAIDS is similar to that of countries without data in the region. This is particularly true for viral load suppression estimates, where reported data in some regions—especially in 2015 and 2016—are limited. For example, no countries in the Caribbean in 2015 were able to meet the threshold coverage of 50% testing coverage for reporting estimates of viral load suppression. In Asia and the Pacific, national-level estimates of viral load suppression are not available in any year for India and prior to 2018 for China. As access to viral load testing improves over time, the accuracy of the estimates of the third 90 will improve. ■

TABLE 2 Proportion of imputed data used to estimate the regional and global measures of the percentage of people living with HIV who know their HIV status and the percentage of people living with HIV on treatment who are virally suppressed

	Estimates of people living with HIV where knowledge of status is imputed (%)				People living with HIV on treatment where viral suppression is imputed (%)			
	2015	2016	2017	2018	2015	2016	2017	2018
Asia and the Pacific	12	8	10	51	83	84	85	56
Caribbean	7	5	5	18	100	96	63	51
Eastern Europe and central Asia	65	69	68	5	77	76	75	4
Eastern and southern Africa	0	0	0	0	58	33	46	21
Latin America	24	21	20	22	33	29	28	28
Middle East and North Africa	21	25	19	28	63	63	46	37
Western and central Africa	2	2	0	2	99	99	98	47
Western and central Europe and North America	29	4	82	95	33	6	87	98
Global	8	6	10	15	62	46	60	35

Source: UNAIDS special analysis, 2019.

DATA ON KEY POPULATIONS

DISTRIBUTION OF NEW HIV INFECTIONS BY SUBPOPULATION

The distribution of new HIV infections among subpopulations globally and by region was estimated based on data for 177 countries using five data sources.

For countries that model their HIV epidemic based on data from subpopulations, including key populations, the numbers of new infections were extracted from Spectrum 2019 files. This source provided data for sex workers from 59 countries, for people who inject drugs from 37 countries, for gay men and other men who have sex with men from 61 countries, and for transgender people from 19 countries (all of which were located in Latin America, the Caribbean and Asia and the Pacific). Additionally, 22 countries (mostly from Asia and the Pacific) had data from clients of sex workers.

The second source was mode of transmission studies conducted in countries between 2006 and 2012. The proportions of new infections estimated for each subpopulation, calculated by modes of transmission analyses, were multiplied by the number of total new gender-specific adult infections (among those aged 15–49 years) to derive an estimated number of new infections by subpopulation. This source provided data for sex workers from 18 countries, for people who inject drugs from 25 countries, and for gay men and other men who have sex with men from 22 countries.

New HIV infections for European countries with neither of the aforementioned data sources were derived from the European Centre for Disease Prevention and

Control (ECDC) and WHO Regional Office for Europe HIV/AIDS surveillance in Europe 2017–2018 data (4). The proportions of new diagnoses for each region in Europe (western, central and eastern) were applied to UNAIDS estimates of new infections in each country for people who inject drugs, gay men and other men who have sex with men, and transgender people. Data for sex workers were not available from the ECDC report. New HIV infections in China, India, the Russian Federation and the United States were taken from the most recent available national reports of new diagnoses.

New HIV infections among countries without a direct data source were calculated from regional benchmarks. The benchmarks were set by the median proportion of new infections in the specific subpopulation in all available countries in the same region. The majority of these countries were located in sub-Saharan Africa. There were 112 countries that used benchmark values for the sex work estimate, 92 countries for the people who inject drugs estimate, 69 countries for the gay men and other men who have sex with men estimate, and 82 countries for the transgender people estimate.

The calculated proportions of infections for each key population include the sex partners of members of key populations. New infections among sex partners of key populations were estimated using the number of sex partners and transmission probabilities from the literature.

QUALITY OF POPULATION SIZE ESTIMATES

The regional sections of this report include tables on the estimated size of key populations. These data are based on values reported through Global AIDS Monitoring in 2018. A comprehensive review of the data was conducted during this reporting round and therefore estimates should not be compared with data presented in previous UNAIDS' reports. As a result of this process, the estimates reported can be categorized as follows:

- ▶ “National population size estimate” refers to estimates that are empirically derived using one of the following methods: multiplier, capture-recapture, mapping/enumeration, network scale up method (NSUM) or population-based survey, or respondent driven sampling–successive sampling (RDS-SS). Estimates had to be national or a combination of multiple sites with a clear approach to extrapolating to a national estimate.
- ▶ “Local population size estimate” refers to estimates that are empirically derived using one of the before mentioned methods but only for a subnational group of sites that are insufficient for national extrapolation.
- ▶ “Insufficient data” refers either to estimates derived from: expert opinions, Delphi, wisdom of crowds, programmatic results or registry, regional benchmarks or unknown methods or estimates derived prior to 2010. Estimates may or may not be national. ■

REFERENCES

1. Global AIDS monitoring 2019: indicators for monitoring the 2016 United Nations Political Declaration on HIV and AIDS. Geneva: UNAIDS; 2017 (https://www.unaids.org/sites/default/files/media_asset/global-aids-monitoring_en.pdf, accessed 7 July 2019).
2. Maheu-Giroux M, Marsh K, Doyle C, Godin A, Delauney CL, Johnson LF et al. National HIV testing and diagnosis coverage in sub-Saharan Africa: a new modeling tool for estimating the “first 90” from program and survey data. AIDS. 2019. [in press]
3. Johnston LG, Sabin ML, Prybylski D, Sabin K, McFarland W, Baral S et al. Policy and practice: the importance of assessing self-reported HIV status in bio-behavioural surveys. Bull World Health Organ. 2016;94:605-12.
4. HIV infection and AIDS. Annual epidemiological report for 2017. Stockholm: European Centre for Disease Prevention and Control (ECDC); 2019 (https://ecdc.europa.eu/sites/portal/files/documents/AER_for_2017-hiv-infection-aids_1.pdf, accessed 7 July 2019).

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