

COMMUNITIES AT THE CENTRE

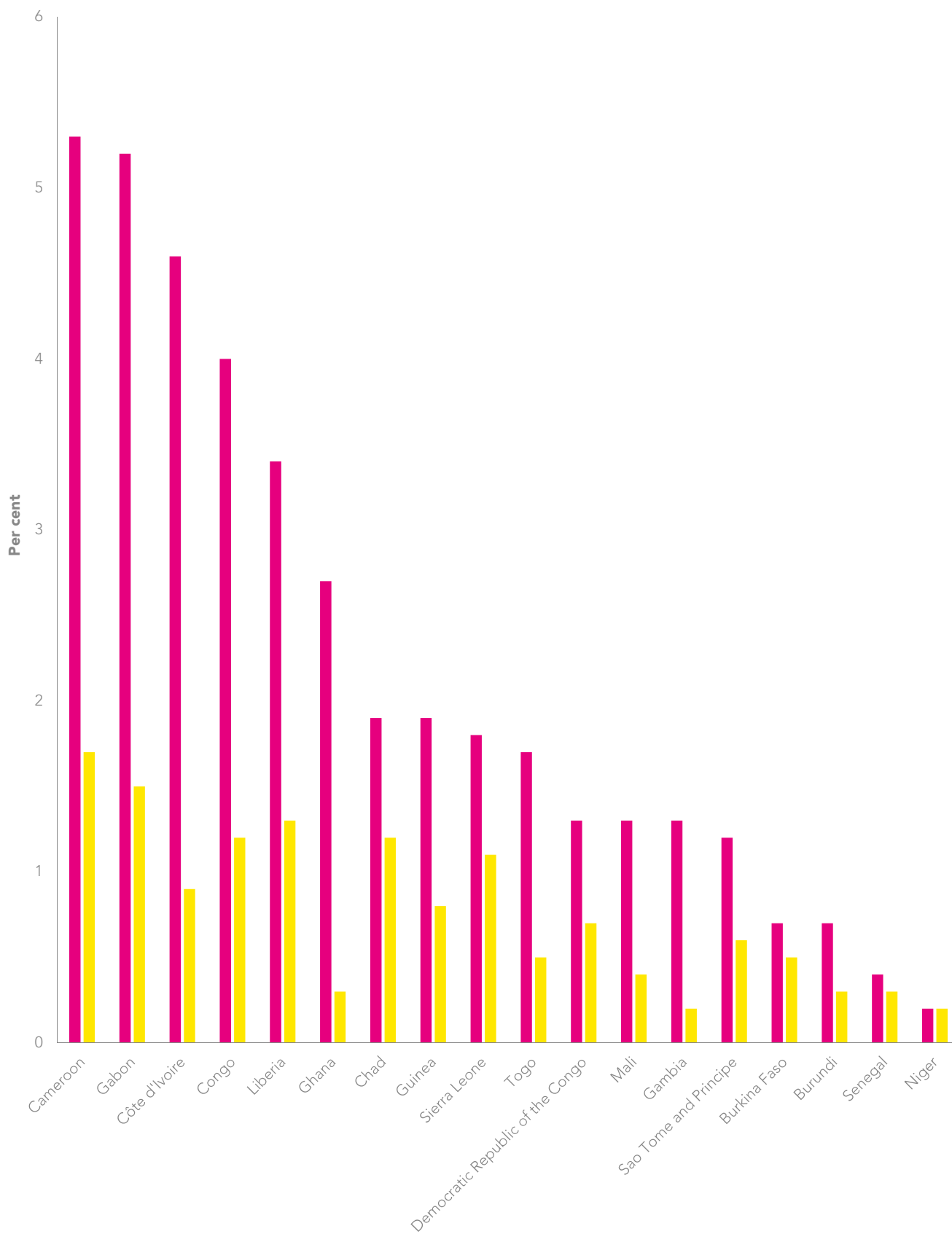
THE RESPONSE TO HIV
IN WESTERN AND
CENTRAL AFRICA



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FIGURE 11.1 HIV prevalence among young women and men aged 20–29 years, western and central Africa, 2012–2017



■ Females ■ Males

Source: Population-based surveys, 2012–2017.

WESTERN AND CENTRAL AFRICA

AT A GLANCE

Some national HIV responses show improvement, but insufficient political will, frail health systems and weak support for community organizations hold back progress.

Systemic barriers, including HIV-related criminalization and user fees, continue to deter large numbers of people from accessing HIV testing and treatment services.

Many countries and communities in the region are fragile, affected by conflict, insecurity and humanitarian crises that create additional barriers to HIV responses.

Although HIV prevalence across the region is higher than 1% and therefore considered to be a generalized epidemic, key populations and their sexual partners accounted for 64% of all new infections within the region.

A priority issue facing the region is the extremely low coverage of antiretroviral therapy among children (28%).

Despite some progress and successes, the catch-up plans developed and implemented by western and central African countries have not sufficiently accelerated the HIV response in the region. Comprehensive programmes for the prevention of HIV infections among key populations and young women are especially lacking. HIV prevalence among young women (aged 20–29 years) exceeds 3% in five countries (Cameroon, the Congo, Côte d'Ivoire, Gabon and Liberia), and it is consistently higher than it is among young men of the same age (Figure 11.0).

Every day, approximately 160 young women aged 15–24 years become infected with HIV in the region. This reflects a lack of gender-sensitive HIV services

and sexual and reproductive health services in many countries of the region, and the poor integration of what services do exist.

The adoption of differentiated models of care, including a greater role for communities, holds promise in a region where health systems are relatively weak. An encouraging development is the UNAIDS-supported establishment of the Civil Society Institute for Health in West and Central Africa, which aims to develop an effective and sustainable health response in western and central Africa through a regional mechanism for consultation, coordination and synergy of civil society organizations working in the health sector. ■

STATE OF THE EPIDEMIC

FIGURE 11.2 Number of new HIV infections, western and central Africa, 2000–2018

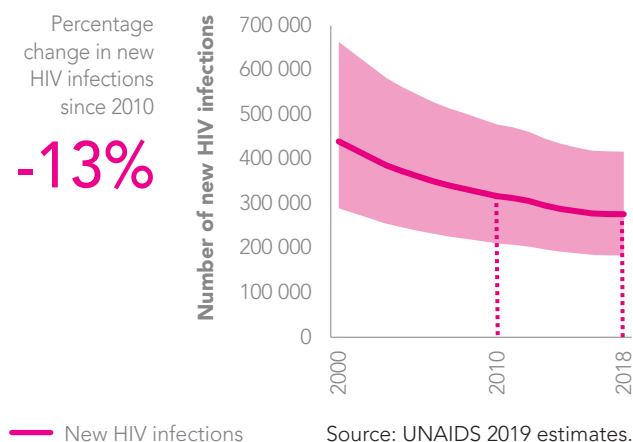


FIGURE 11.3 Number of AIDS-related deaths, western and central Africa, 2000–2018

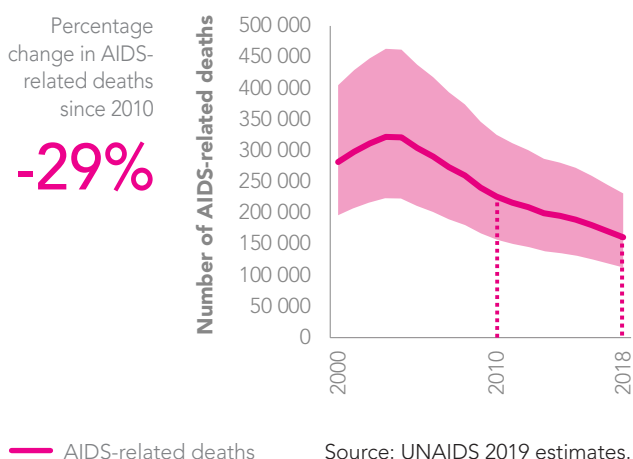
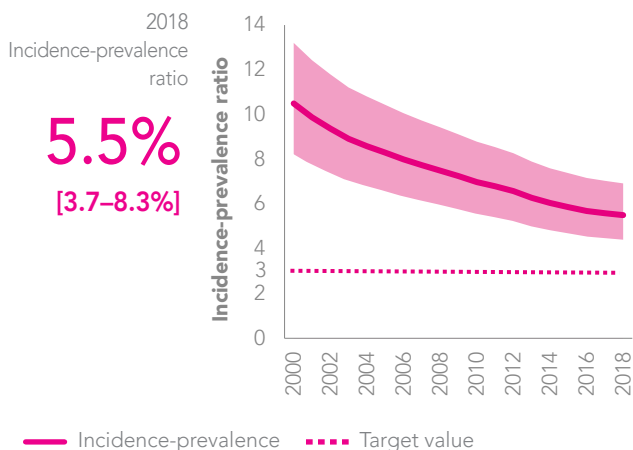


FIGURE 11.4 Incidence-prevalence ratio, western and central Africa, 2000–2018



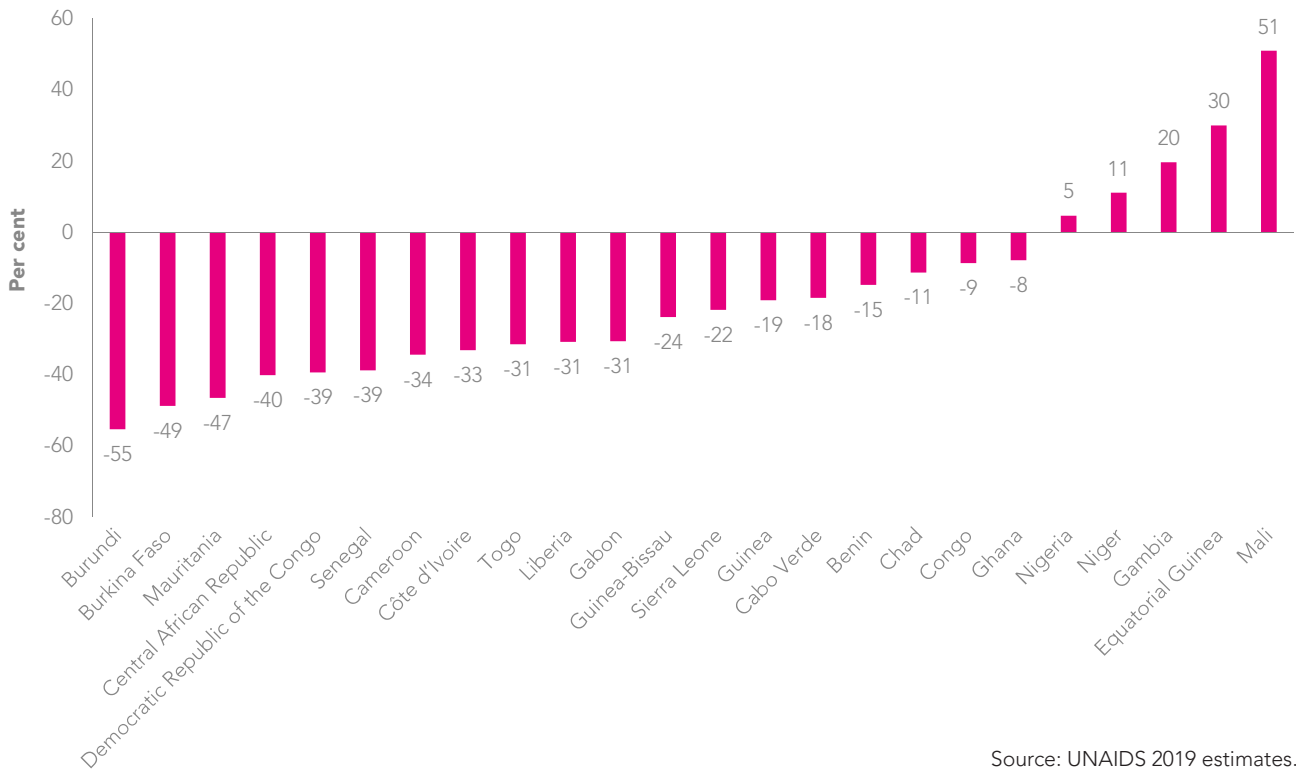
Combination HIV prevention and treatment programmes in western and central Africa are not having sufficient impact on the region’s epidemic. Annual new HIV infections have declined by only 13% since 2010, from an estimated 320 000 [210 000–480 000] to 280 000 [180 000–420 000] (Figure 11.2). The annual number of AIDS-related deaths decreased by 29% between 2010 and 2018, from 230 000 [160 000–330 000] to 160 000 [110 000–230 000] (Figure 11.3). The region’s incidence-prevalence ratio of 5.5% [3.7–8.3%] was almost double the epidemic transition benchmark of 3.0% (Figure 11.4).

Three countries—Cameroon, Côte d’Ivoire and Nigeria— account for close to 60% of new HIV infections and 54% of AIDS-related deaths each year. Decisive improvements in their national HIV programmes would have a major impact on the region’s overall HIV response. The recent Nigeria AIDS Indicator and Impact Survey (NAIIS) found lower HIV prevalence than earlier surveys, which led to a revision of the country’s HIV estimates. The latest regional estimates reflect this additional information, with lower estimates of people living with HIV, AIDS-related deaths and HIV infections than previous estimates.

Burkina Faso and Burundi have achieved impressive declines in new HIV infections between 2010 and 2018 (Figure 11.5). However, Equatorial Guinea, the Gambia, Mali and Niger are lagging behind in their prevention efforts, with increases in new HIV infections of greater than 10% between 2010 and 2018.

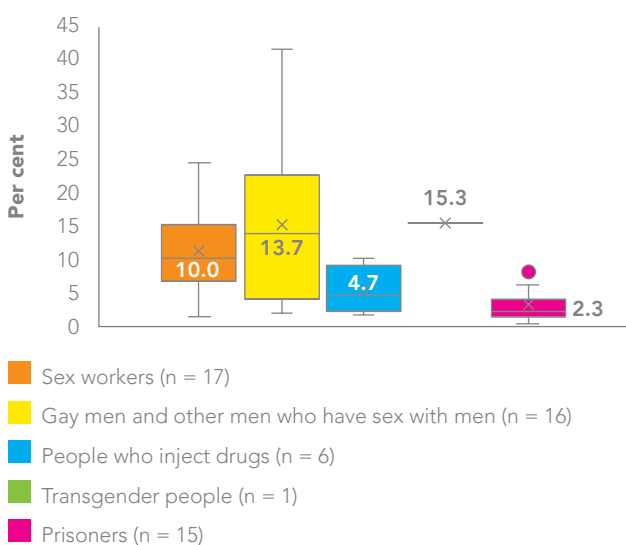
Key populations and their sexual partners accounted for 64% of all new HIV infections within the region in 2018 (Figure 11.7). HIV prevalence among sex workers in individual countries ranged from 4% to more than 30%, and it exceeded 10% in nine of the 17 countries reporting data (Figure 11.6). Among gay men and other men who have sex with men, median HIV prevalence was 13.7% in the 16 reporting countries, and it was more than 20% in six countries. The one study conducted among transgender persons found HIV prevalence of 15%, while HIV prevalence among people who inject drugs and prisoners is also far higher than HIV prevalence in the overall adult populations of most countries. ■

FIGURE 11.5 Percentage change in new HIV infections, by country, western and central Africa, 2010–2018



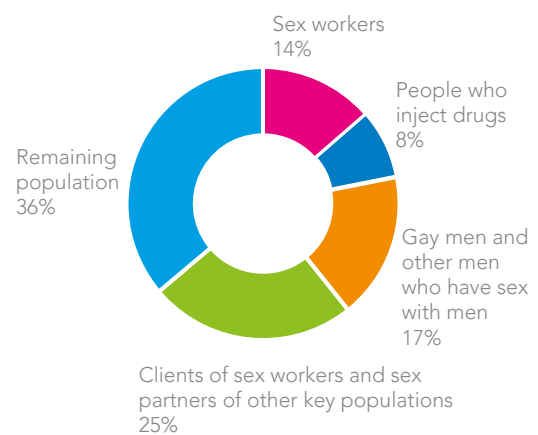
Source: UNAIDS 2019 estimates.

FIGURE 11.6 HIV prevalence among key populations, western and central Africa, 2014–2018



Source: Global AIDS Monitoring, 2014–2018.

FIGURE 11.7 Distribution of new HIV infections (aged 15–49 years), by population group, western and central Africa, 2018



Source: UNAIDS special analysis, 2019.

TABLE 11.1 Estimated size of key populations, western and central Africa, 2018

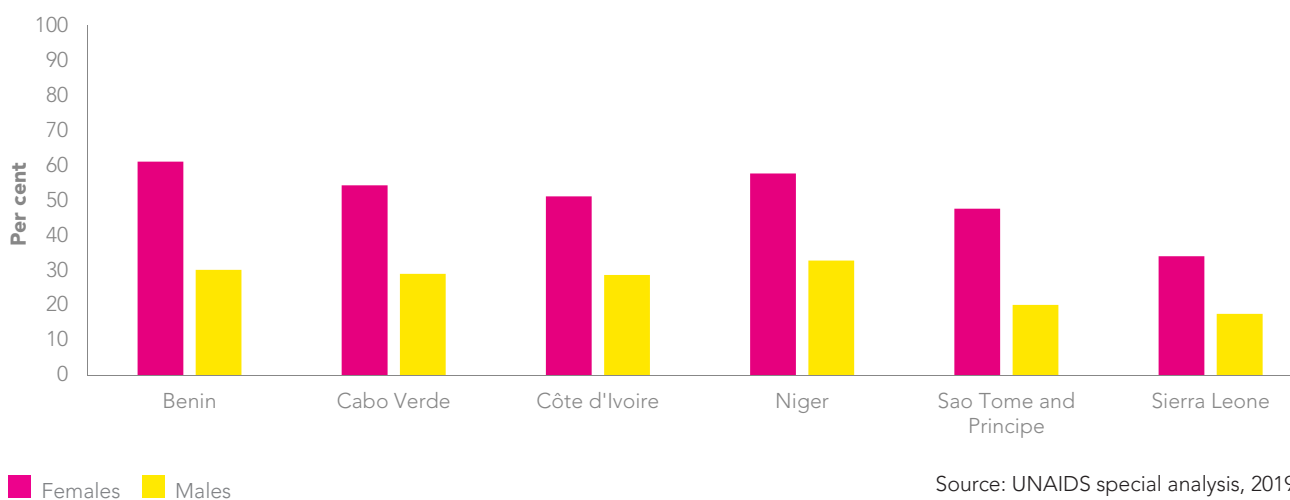
Country	National adult population (15+)	Sex workers	Sex workers as per cent of adult population (15+)	Gay men and other men who have sex with men	Gay men and other men who have sex with men as per cent of adult population (15+)	People who inject drugs	People who inject drugs as per cent of adult population (15+)	Transgender people	Transgender people as per cent of adult population (15+)	Prisoners	Prisoners as per cent of adult population (15+)
Cameroon	14 188 000										
Côte d'Ivoire	14 375 000									41 000	0.29
Democratic Republic of the Congo	45 227 000	350 000	0.77	190 000	0.43	160 000	0.34				
Gambia	1 188 000										
Mali	10 026 000										
Niger	11 130 000										
Senegal	9 332 000					3100	0.03			9500	0.10
Togo	4 691 000									5200	0.11

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

The regions to which the local population size estimate refers:
Gambia (Banjul)

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).

FIGURE 11.8 Viral load suppression among adults (aged 15 years and older) living with HIV, by sex, western and central Africa, 2018



THE CASCADE FROM HIV TESTING TO VIRAL SUPPRESSION

Among the estimated 5 million [4.0 million–6.3 million] people living with HIV in western and central Africa in 2018, the proportion who knew their HIV status increased from 51% [41–64%] in 2015 to 64% [51–80%] in 2018 (Figure 11.9). Access to HIV testing and treatment reached 51% [34–66%] of people living with HIV in 2018, up from 37% [26–48%] in 2015. The estimated percentage of people living with HIV in the region who had suppressed viral loads was 39% [25–53%] in 2018. Achieving all three 90s requires viral load suppression among an additional 1.7 million people living with HIV.

Progress toward the 90–90–90 targets in the region is slow, with 79% [70–83%] of people who know their HIV status receiving treatment. Viral suppression among those on treatment is 76% [56–87%]. This means that the gap in 2018 to achieving the first of the 90–90–90 targets was 1.3 million people who did not know they were living with HIV.

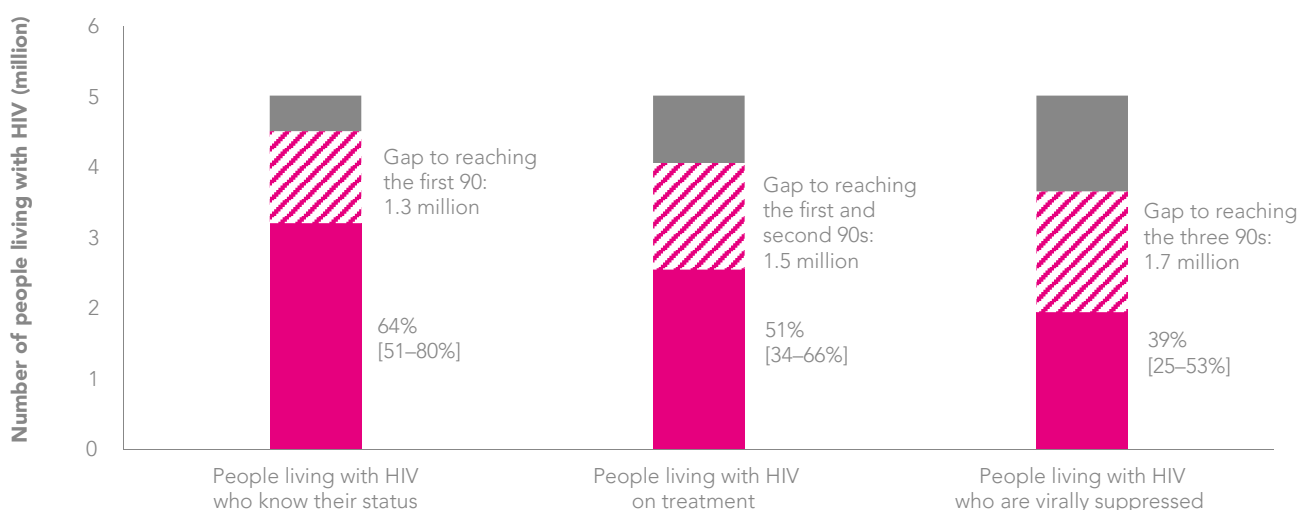
Although weaknesses exist along the entire continuum of testing and treatment services, the single biggest

challenge is the diagnosis of people living with HIV. Besides Cabo Verde, no country in the region has achieved the first 90. Cabo Verde, the Democratic Republic of the Congo, Mali and Senegal have reached the second 90, and several other countries are very close to doing the same (Table 11.2).

An important gap in the HIV response in the region is the provision of antiretroviral therapy to children living with HIV. Only 28% [18–39%] of children living with HIV accessed treatment in 2018, which is considerably lower than the 59% [47–71%] of pregnant women who received treatment in the region.

Due to hostile legal and social environments, people belonging to key populations are often apprehensive about (and distrustful of) standard testing and treatment services. A recent study from Burundi, Côte d'Ivoire and the Democratic Republic of the Congo found that enhanced peer outreach approaches led to higher proportions of new HIV diagnoses among both female sex workers and gay men and other men who have sex with men (1). ■

FIGURE 11.9 HIV testing and treatment cascade, western and central Africa, 2018



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

TABLE 11.2 90–90–90 country scorecard, western and central Africa, 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)
Western and central Africa	64	71	61	79	86	66	76	78	75	39	48	30
Benin							79	79	79	48	61	30
Burkina Faso	70	82	63	88	>95	73						
Burundi												
Cabo Verde	>95			92			47	58	36	42	54	29
Cameroon	74	80	75	71	74	63						
Central African Republic	55	62	53	65	71	53						
Chad												
Congo	39	43	36	89	84	>95						
Côte d'Ivoire	63	72	53	87	92	74	75	77	74	41	51	29
Democratic Republic of the Congo	62	64	79	92	91	93						
Equatorial Guinea	49	64	40	69	83	44						
Gabon												
Gambia	36	46	22	81	81	75						
Ghana	57	69	43	59	58	58						
Guinea												
Guinea-Bissau												
Liberia	68	85	54	52	53	46						
Mali	33	37	33	93	95	87						
Mauritania	62	77	53	88	>95	77						
Niger	72	85	62	75	81	63	83	84	84	45	58	33
Nigeria	67	74	63	80	92	60	80			42		
Sao Tome and Principe							41	45	38	31	48	20
Senegal	65	74	60	>95	>95	>95						
Sierra Leone	49	61	38	83	86	74	63	64	61	26	34	17
Togo	73	84	69	82	87	71						

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.

A COMBINATION APPROACH TO PREVENTION

Condom promotion remains a mainstay of prevention programmes in the region. However, in 12 countries with recent data from a population-based survey, only six indicated that more than half of young men (aged 15–24 years) reported condom use at last high-risk sex. They also reported condom use among young women was consistently lower (Figure 11.11).

Few data are available on the coverage of combination prevention services for key populations in the region (Figure 11.10), with high HIV prevalence among these population suggesting that coverage is low in many countries. Senegal is a rare example of a country in the region providing both needle–syringe programmes and opioid substitution therapy to people who inject drugs (2).

Key populations rely chiefly on civil society organizations for prevention services, which often operate in unwelcoming environments. The reform of obstructive laws and legal policies—along with greater funding and other support for community-based organizations—would greatly enhance HIV prevention focused on key populations.

The latest World Health Organization (WHO) guidelines have highlighted pre-exposure prophylaxis (PrEP) as an important tool to prevent new infections among people at substantial risk of HIV infection, but the region has been slow in adopting these guidelines. Two regional projects are underway:

- A demonstration project in Burkina Faso, Côte d'Ivoire, Mali and Togo is evaluating the feasibility of rolling out PrEP nationally and regionally. The project is financed by the French National Agency for Research on AIDS and Expertise France, in partnership with Coalition PLUS and three European health institutes.
- An implementation project in Côte d'Ivoire, the Democratic Republic of the Congo and Nigeria is supported by the United States President's Emergency Plan for AIDS Relief (PEPFAR). ■

FIGURE 11.10 Percentage of key populations who reported receiving at least two prevention services in the past three months, western and central Africa, 2016–2018

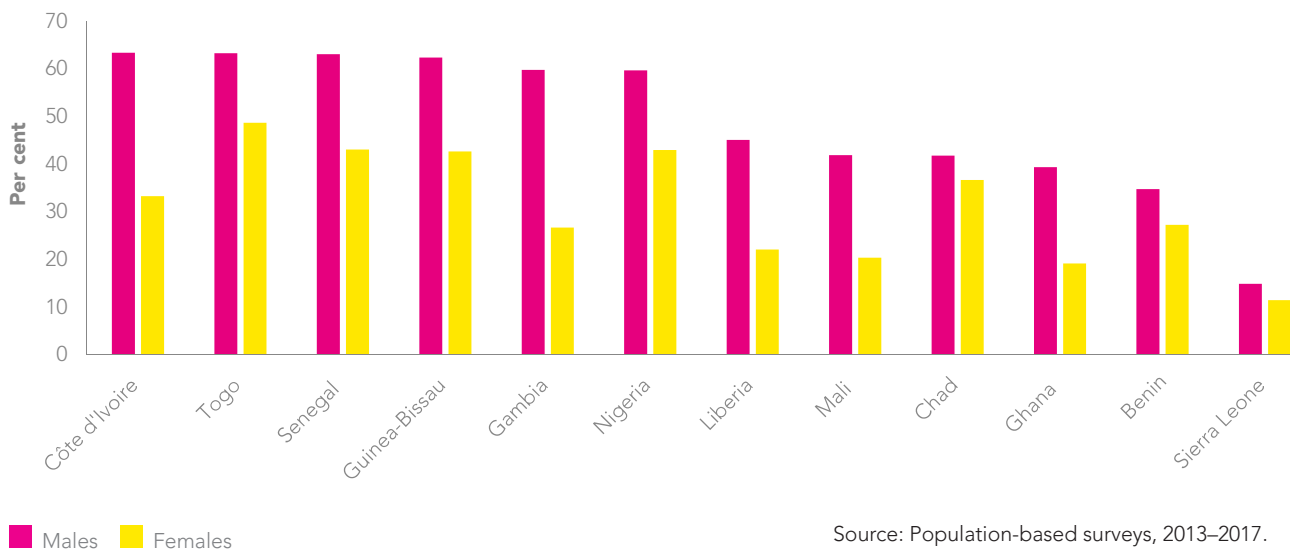


Note: The use of an asterisk (*) indicates that data for marked countries come from programme data (which tend to show higher values due to the use as a denominator of the number of key population members that are linked to the programme) and not from a survey.

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 for sexually transmitted infections. 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.

FIGURE 11.11 Percentage of men and women (aged 15–24 years) reporting use of a condom at last high-risk sex (with a nonmarital, noncohabiting partner) in the past 12 months, western and central Africa, 2013–2017



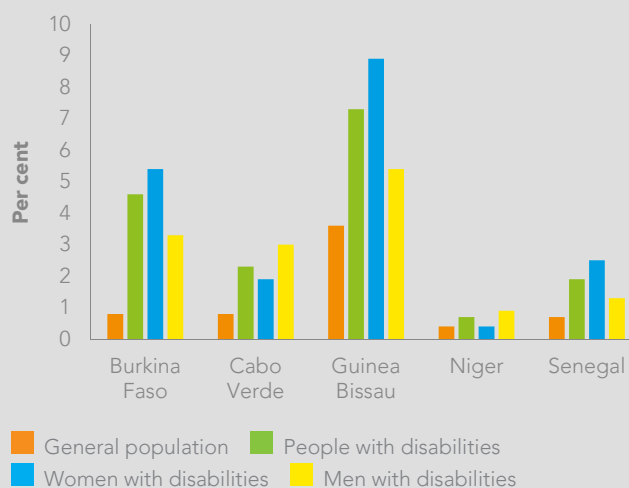
Source: Population-based surveys, 2013–2017.

SUPPORTING PEOPLE WITH DISABILITIES

People with disabilities are often left behind by HIV responses. In western and central Africa, biobehavioural surveys of people with disabilities were undertaken between 2016 and 2018 in Burkina Faso, Cabo Verde, Guinea-Bissau and Niger, while a broader biobehavioural survey was conducted in Senegal. They found that HIV prevalence is on average three times higher among people with disabilities than it is among the general population (Figure 11.12) (5). In Burkina Faso, Guinea-Bissau and Senegal, women with disabilities were considerably more likely to be HIV-positive than men with disabilities (4–7).

The Regional HIV and Disability Project is working to make regional and national HIV laws, strategies and policies more inclusive of people with disabilities. The project—established by Humanity & Inclusion and the West Africa Federation of Associations of People with Disabilities, with support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund)—is collating information and good practices around HIV-related and health facility care for people with disabilities (3). It also seeks to increase capacity and knowledge among civil society organizations, policy-makers, and other HIV and human rights stakeholders (4).

FIGURE 11.12 HIV prevalence among people with disabilities compared to the general population, selected countries, western and central Africa, 2016–2018



Source: Global Fund to Fight AIDS, Tuberculosis and Malaria, Humanity & Inclusion, West Africa Federation of Persons with Disabilities. Une population oubliée: résultats des études bio comportementales [A forgotten population: results from the biobehavioural studies]. Power Point presentation. 2019.

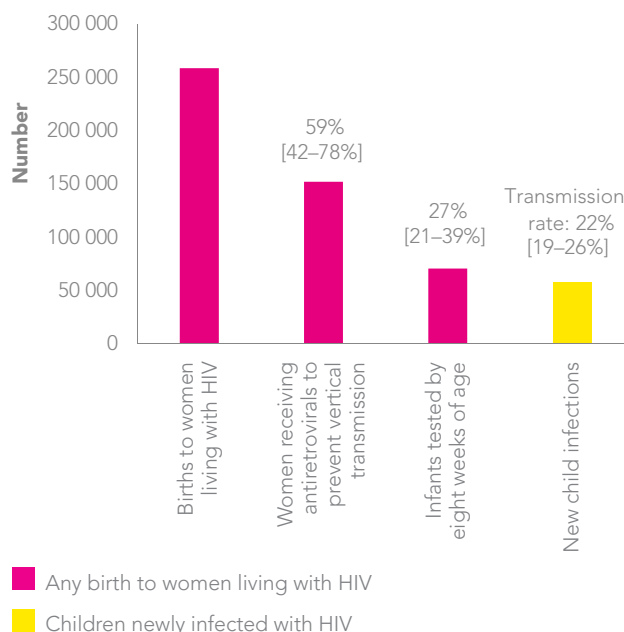
ELIMINATING MOTHER-TO-CHILD TRANSMISSION

Western and central Africa’s faltering HIV response is also reflected in the continuing high rate of mother-to-child transmission, which was an estimated 22% [19–26%] in 2018. Approximately 58 000 children (aged 0–14 years) acquired HIV in 2018; of those, 41% lived in Nigeria, the country with the highest HIV burden in the region.

Antiretroviral therapy coverage for pregnant women in the region has been declining since 2016, reaching 59% [42–78%] in 2018 (Figure 11.13). This means that only 153 000 of the estimated 260 000 pregnant women living with HIV were receiving antiretroviral medicine for preventing mother-to-child transmission. In Nigeria, the number of women receiving antiretroviral therapy during pregnancy decreased from 60 000 in 2014 to 44 000 between 2010 and 2018, with treatment coverage diminishing from 63% [41–89%] to 44% [28–62%] over the same period.¹

Early infant diagnosis is another programming area awaiting substantial improvement. Only 27% [21–39%] of infants exposed to HIV were tested for HIV infection within eight weeks of birth. The expansion and closer integration of HIV, maternal and child health, and sexual and reproductive health services are urgently needed to curb new HIV infections in children and protect the health of mothers living with HIV. ■

FIGURE 11.13 Cascade of services for preventing vertical transmission, numbers of new HIV infections and transmission rate, western and central Africa, 2018



Source: UNAIDS 2019 estimates; 2019 Global AIDS Monitoring.



“STIGMATIZING ATTITUDES AND DISCRIMINATORY BEHAVIOUR— INCLUDING FROM HEALTH-CARE WORKERS—AND THE POLITICAL AND HUMANITARIAN CRISIS IN MY COUNTRY EXPLAIN THE LOW COVERAGE OF ANTIRETROVIRAL THERAPY.”

Bienvenu Gazalima, Chief Administrator for the Network of People Living with HIV in the Central African Republic.

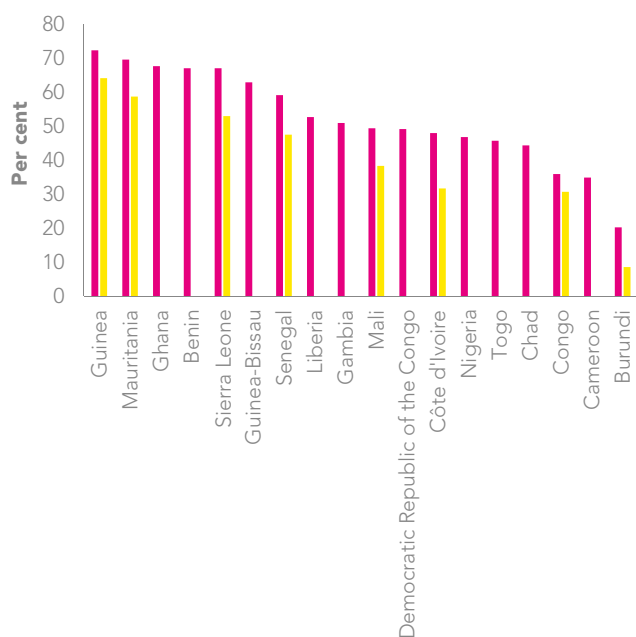
¹ The 2014 and 2018 coverage estimates reflect the results of the 2018 NAHS.

CONFRONTING STIGMA AND DISCRIMINATION

Stigma and misconceptions about HIV continue to be widespread in the region. In 10 of the 18 countries with recent population-based survey data, 50% or more of adults said they would not buy vegetables from a shopkeeper living with HIV (Figure 11.14). Two thirds of respondents held that discriminatory attitude in Benin, Ghana, Guinea, Mauritania and Sierra Leone. In seven of the eight countries with recent data, more than 30% of people felt that children living with HIV should not be allowed to attend school with other children.

Some countries are training health-care workers and law enforcement agents on health and human rights, but these programmes are not at scale at the national level, with only 25% of the countries in the region implementing such nationwide programmes (compared to 44% in eastern and southern Africa). Violence against women also remains common in the region: in five of the 11 countries with recent data, at least 25% of adult women (aged 15–49 years) reported being physically and/or sexually assaulted by an intimate partner within the previous 12 months (Figure 11.15). ■

FIGURE 11.14 Percentage of men and women aged 15–49 years with discriminatory attitudes towards people living with HIV, western and central Africa, 2013–2017

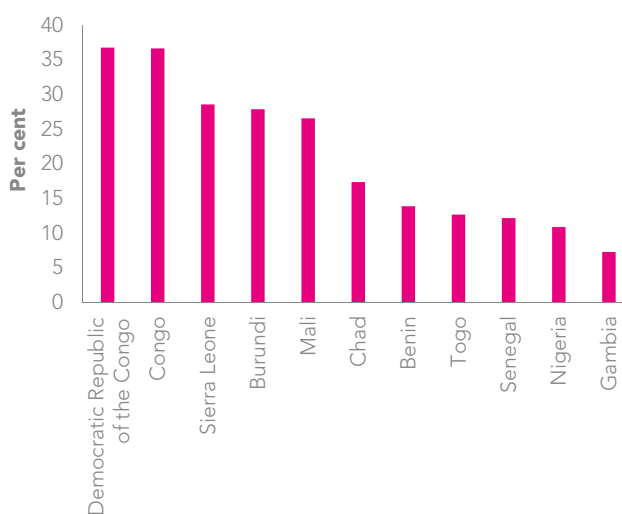


- People who would not buy vegetables from a shopkeeper living with HIV
- People who think children living with HIV should not be allowed to attend school with children not living with HIV

Note: Data for Guinea are for female respondents only.

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

FIGURE 11.15 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, western and central Africa, most recent data, 2013–2018



Source: Population-based surveys, 2013–2018.

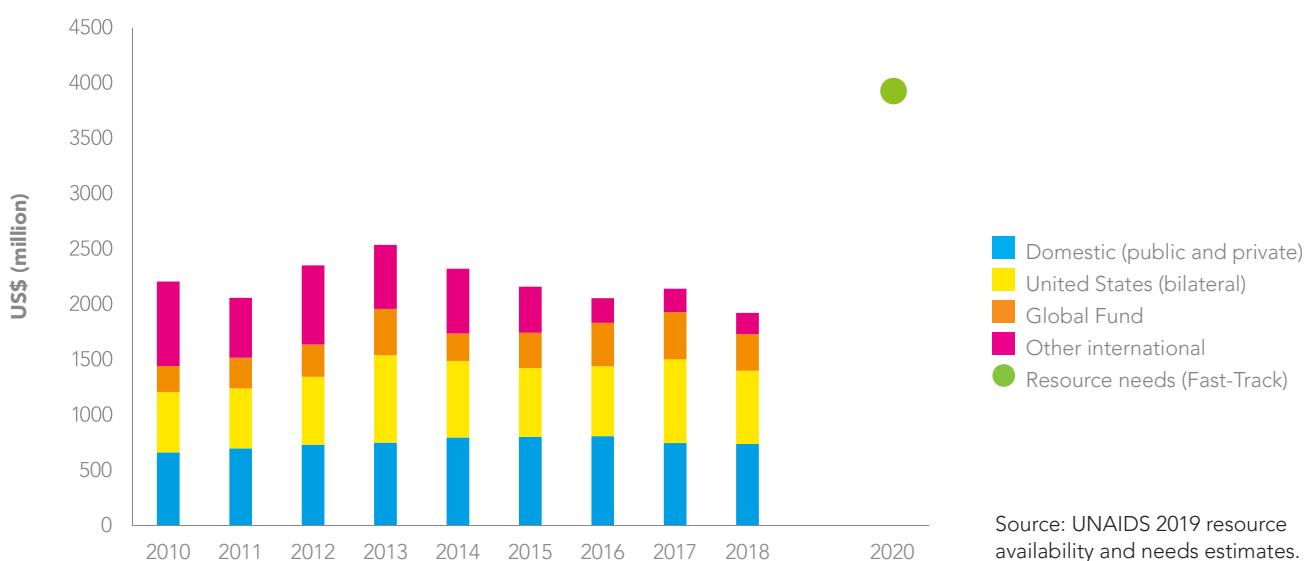
INVESTING TO END AN EPIDEMIC

The US\$ 1.9 billion available for HIV responses in the region in 2018 was less than half the resources needed to reach the 2020 Fast-Track Targets (Figure 11.16).² Total resource availability for HIV responses in western and central Africa decreased by 13% (in constant 2016 US dollars) between 2010 and 2018. Internationally sourced funding accounted for approximately 62% of total HIV resources in the region in 2018, but it had declined from US\$ 1.5 billion in 2010 to US\$ 1.2 billion in 2018. The bulk of international support came from the Global Fund (a 40% increase since 2010) and the Government of the United States of America (a 22% increase since 2010), while other international resources decreased by 75% over the same period. Domestic

resources comprised 38% of total HIV resources in 2018, an increase from 30% in 2010. Nigeria has increased its domestic public investment in HIV by more than 30% since 2010.

The availability of financial resources in 2018 was 10% lower than 2017, including declines in all international sources of funding: bilateral resources from the Government of the United States decreased by 12%, Global Fund resources decreased by 23% and all other international resources decreased by 10%.³ Domestic resources remained almost the same, with a marginal decrease of 1%. ■

FIGURE 11.16 HIV resource availability, by source, western and central Africa, 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 chapter Investing to End an Epidemic.

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

REFERENCES

1. Lillie TA, Persaud NE, DiCarlo MC, Gashobotse D, Kamali DR, Cheron M et al. Reaching the unreached: performance of an enhanced peer outreach approach to identify new HIV cases among female sex workers and men who have sex with men in HIV programs in West and Central Africa. *PLoS One*. 2019;14(4):e0213743.
2. Global state of harm reduction 2018. London: Harm Reduction International; 2018.
3. Global Fund to Fight AIDS, Tuberculosis and Malaria, Handicap International, West Africa Federation of Persons with Disabilities. *Projet VIH et Handicap [HIV and Disability Project]*. 2018.
4. Charles Diop, Assistant Coordinator, Regional HIV and Disability Project, Humanity & Inclusion. Personal communication, 17 June 2019.
5. Global Fund to Fight AIDS, Tuberculosis and Malaria, Humanity & Inclusion, West Africa Federation of Persons with Disabilities. *Une population oubliée: résultats des études bio comportementales [A forgotten population: results from the bio-behavioural studies]*. Power Point presentation. 2019.
6. Handicap International. *Enquête bio-comportementale sur la vulnérabilité des personnes handicapées face au VIH au Burkina Faso [Biobehavioural study on the vulnerability to HIV of disabled people in Burkina Faso]*. Ouagadougou: Institut de Recherche en Sciences de la Santé (IRSS/CNRST); 2017.
7. Senegal National Council for the Fight against AIDS, Handicap International. *Enquête bio-comportementale sur la vulnérabilité des personnes handicapées face au VIH au Sénégal [Biobehavioural study on the vulnerability to HIV of disabled people in Senegal]*. Dakar: Agence pour la Promotion des Activités de Population-Sénégal (APAPS) & Le Laboratoire de Bactériologie-Virologie; 2015.

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	4400 [2200–9100]	4000 [1900–8200]	3800 [1800–7700]
New HIV infections (0–14)	850 [<500–1800]	530 [<500–1100]	<500 [<500–960]
New HIV infections (women, 15+)	2100 [1000–4300]	2000 [980–4200]	1900 [930–4000]
New HIV infections (men, 15+)	1500 [710–3100]	1400 [680–3000]	1400 [650–2800]
HIV incidence per 1000 population	0.49 [0.24–1.03]	0.39 [0.19–0.81]	0.34 [0.17–0.71]
AIDS-related deaths			
AIDS-related deaths (all ages)	2000 [980–4100]	2400 [1200–4800]	2200 [1100–4400]
AIDS-related deaths (0–14)	590 [<500–1200]	<500 [<500–980]	<500 [<200–730]
AIDS-related deaths (women, 15+)	650 [<500–1400]	930 [<500–2000]	870 [<500–1800]
AIDS-related deaths (men, 15+)	760 [<500–1500]	970 [<500–1900]	940 [<500–1900]
People living with HIV			
People living with HIV (all ages)	61 000 [41 000–98 000]	70 000 [46 000–110 000]	73 000 [48 000–120 000]
People living with HIV (0–14)	5700 [3500–10 000]	5200 [3200–9200]	4600 [2800–8000]
People living with HIV (women, 15+)	33 000 [22 000–52 000]	39 000 [26 000–61 000]	42 000 [28 000–66 000]
People living with HIV (men, 15+)	23 000 [15 000–37 000]	26 000 [17 000–41 000]	27 000 [18 000–43 000]
HIV prevalence (15–49)	1.1 [0.7–1.8]	1.1 [0.7–1.8]	1 [0.7–1.7]

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 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	2012	2014
	55.4	67.1

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

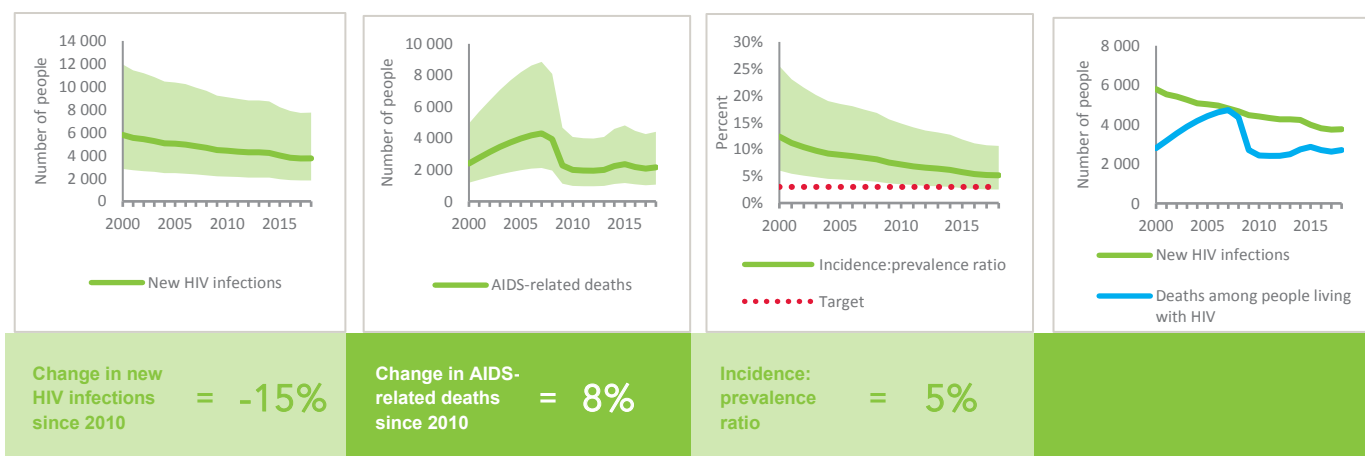
VIOLENCE

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	2018
	13.9

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2018	...	\$1 822 497	\$652 213	\$9 505 648	\$1 249 502	\$13 229 862

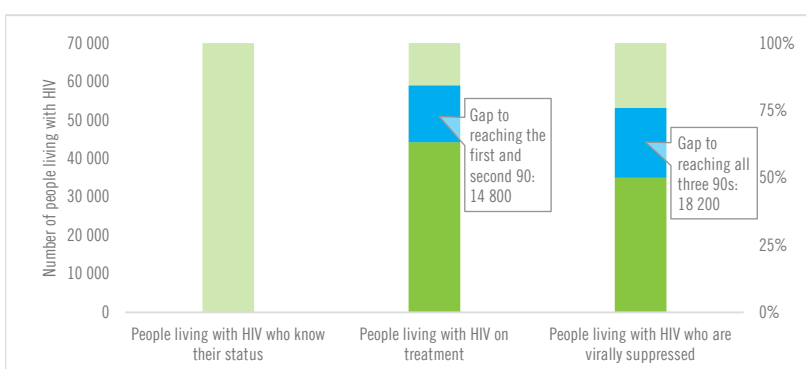
EPIDEMIC TRANSITION METRICS



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	8.5%	7.0%	2.2%	...	0.6%
Know their HIV status	59.2%	84.1%	71.2%	88.5%	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	83.5%	66.0%	51.8%	86.8%	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	...	61% [40– >95%] 44 200	48% [32–77%]
All ages	...% [...–...%]		
Children (0–14)	...% [...–...%]	44% [27–77%] 2000	...% [...–...%]
Women (15+)	...% [...–...%]	77% [51– >95%] 32 100	61% [41– >95%]
Men (15+)	...% [...–...%]	38% [25–61%] 10 100	30% [20–48%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	30% [18–49%]	>95% [>95– >95%]
Early infant diagnosis	...% [...–...%]	64.9% [39.1– >95%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	980 [630–1400]
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	0.5%
Knowledge of HIV prevention among young people aged 15–24 years (2017)	
— Women	15%
— Men	18.6%
Condom use at last sex with a non-marital, non-cohabiting partner (2017)	
— Women	22.9%
— Men	36%
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2018)	28.8%
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 (2017)	94.6%
— 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)	4600 [3400–6000]	2800 [1900–4100]	2400 [1600–3700]
New HIV infections (0–14)	1700 [1000–2300]	680 [<500–1300]	700 [<500–1200]
New HIV infections (women, 15+)	1600 [1200–2100]	1200 [810–1700]	920 [580–1500]
New HIV infections (men, 15+)	1300 [940–1800]	950 [660–1400]	750 [<500–1200]
HIV incidence per 1000 population	0.3 [0.22–0.4]	0.16 [0.11–0.23]	0.12 [0.08–0.19]
AIDS-related deaths			
AIDS-related deaths (all ages)	4800 [3600–6300]	4000 [2900–5300]	3300 [2400–4400]
AIDS-related deaths (0–14)	1300 [810–1800]	780 [<500–1200]	<500 [<500–790]
AIDS-related deaths (women, 15+)	1700 [1300–2300]	1100 [800–1500]	1100 [750–1500]
AIDS-related deaths (men, 15+)	1800 [1300–2300]	2100 [1500–2700]	1700 [1300–2200]
People living with HIV			
People living with HIV (all ages)	110 000 [88 000–130 000]	100 000 [83 000–120 000]	96 000 [78 000–120 000]
People living with HIV (0–14)	16 000 [12 000–20 000]	12 000 [7900–15 000]	9100 [6300–12 000]
People living with HIV (women, 15+)	52 000 [42 000–63 000]	53 000 [43 000–63 000]	53 000 [43 000–63 000]
People living with HIV (men, 15+)	41 000 [33 000–48 000]	37 000 [30 000–44 000]	34 000 [27 000–40 000]
HIV prevalence (15–49)	1.2 [0.9–1.4]	0.9 [0.7–1.1]	0.7 [0.6–0.9]

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	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	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 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

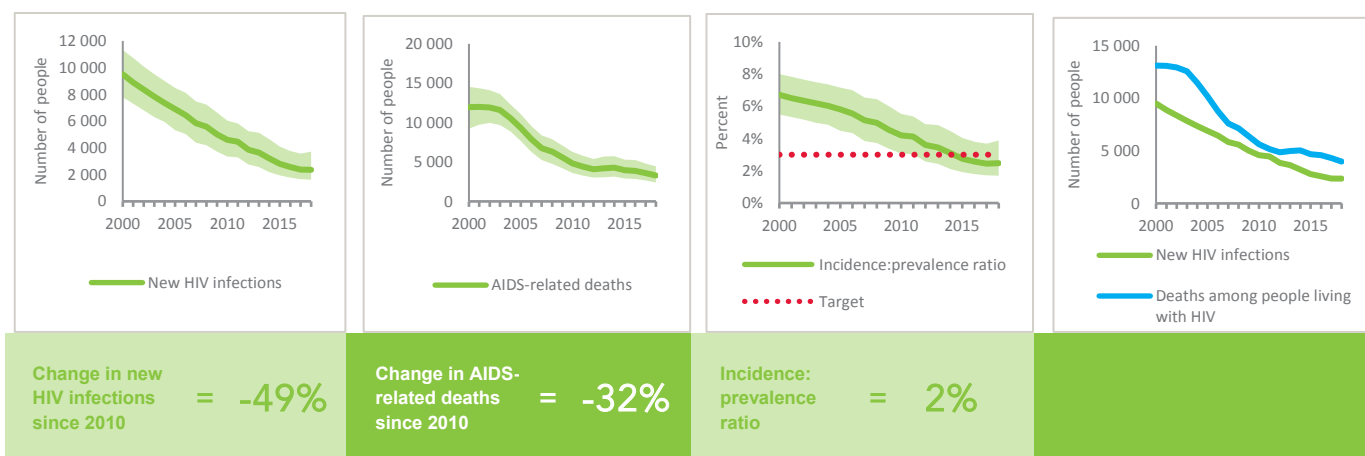
VIOLENCE

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	\$2 875 787	\$18 027 894	...	\$14 293 173	\$3 858 466	\$39 055 319

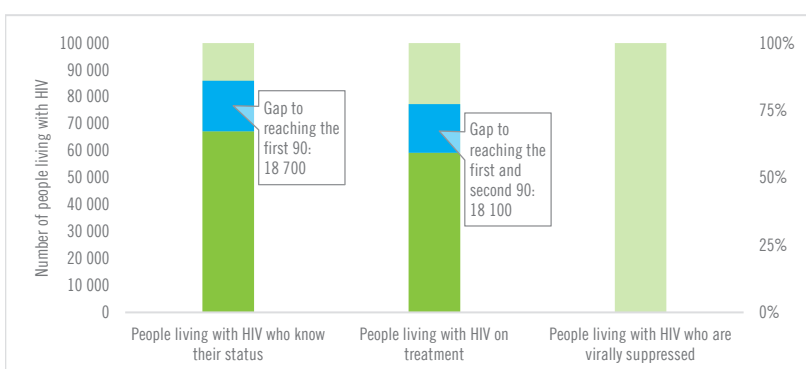
EPIDEMIC TRANSITION METRICS



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	5.4%	1.9%	...	...	2.2%
Know their HIV status	74.7%	67.9%	...	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	92.9%	87.2%	...	...	...
Coverage of HIV prevention programmes	46.8%	76.4%	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	70% [57–85%]	62% [50–75%] 59 300	...% [...–...%]
All ages			
Children (0–14)	33% [23–45%]	21% [15–29%] 1900	...% [...–...%]
Women (15+)	82% [67–>95%]	80% [65–>95%] 42 000	...% [...–...%]
Men (15+)	63% [51–74%]	46% [37–54%] 15 500	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	44% [32–56%]	>95% [71–>95%]
Early infant diagnosis	8.4% [6.6–11.4%]	16.7% [13.2–22.9%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	860 [550–1200]
People living with HIV who started TB preventive therapy (2017)	5.8%
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)	3700 [2700–4900]	2400 [1700–3400]	1700 [1000–2800]
New HIV infections (0–14)	1800 [1300–2300]	1100 [640–1500]	820 [<500–1300]
New HIV infections (women, 15+)	1200 [720–1600]	810 [<500–1300]	520 [<500–920]
New HIV infections (men, 15+)	750 [<500–1100]	520 [<500–860]	<500 [<200–650]
HIV incidence per 1000 population	0.45 [0.33–0.6]	0.24 [0.17–0.35]	0.16 [0.1–0.26]
AIDS-related deaths			
AIDS-related deaths (all ages)	5200 [4100–6400]	3000 [2300–3900]	1900 [1400–2500]
AIDS-related deaths (0–14)	1500 [1100–1800]	880 [560–1200]	640 [<500–930]
AIDS-related deaths (women, 15+)	2000 [1600–2600]	860 [610–1200]	590 [<500–770]
AIDS-related deaths (men, 15+)	1700 [1300–2200]	1200 [940–1600]	650 [<500–830]
People living with HIV			
People living with HIV (all ages)	93 000 [79 000–110 000]	85 000 [74 000–100 000]	82 000 [71 000–97 000]
People living with HIV (0–14)	19 000 [15 000–22 000]	14 000 [10 000–16 000]	11 000 [8000–14 000]
People living with HIV (women, 15+)	44 000 [37 000–51 000]	44 000 [38 000–51 000]	44 000 [39 000–52 000]
People living with HIV (men, 15+)	30 000 [25 000–35 000]	28 000 [24 000–32 000]	27 000 [23 000–32 000]
HIV prevalence (15–49)	1.6 [1.3–1.8]	1.2 [1–1.4]	1 [0.9–1.2]

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	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	2010	2017
	25.5	22.8
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months	2014	
		2
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent	2014	
		2.6

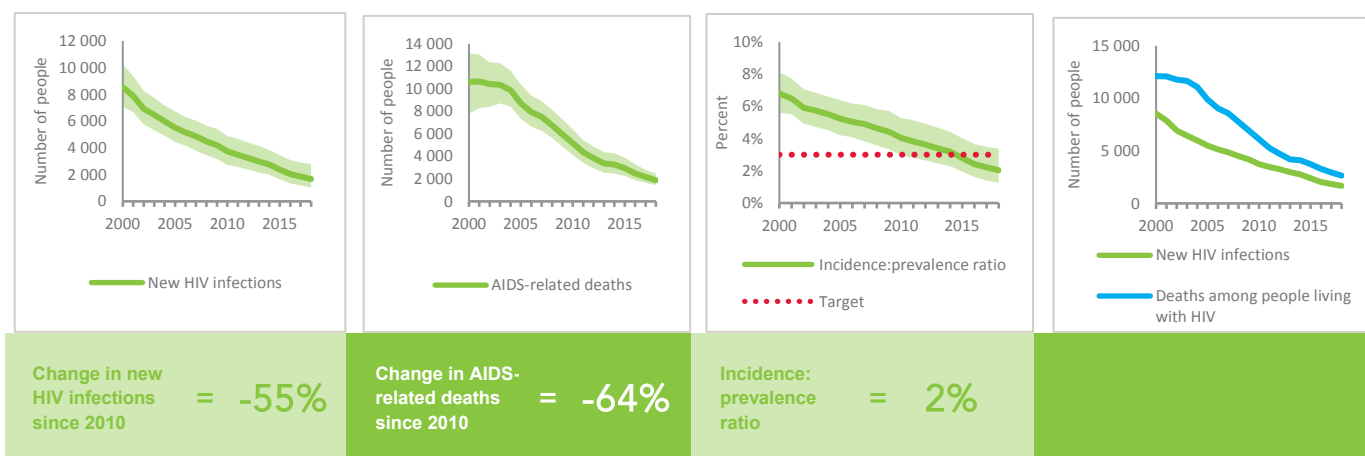
VIOLENCE

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	2017
	27.9

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2014	\$2 098 404	\$289 800	...	\$15 903 384	\$122 941	\$18 414 529

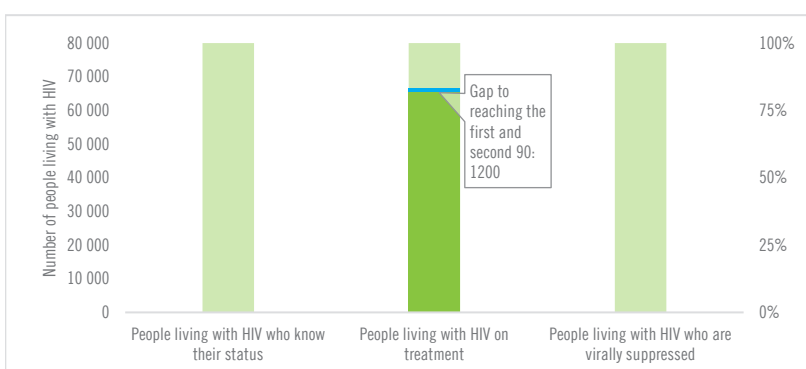
EPIDEMIC TRANSITION METRICS



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	21.3%	4.8%	10.2%	...	...
Know their HIV status	...	...	...	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	52.5%	44.9%	...	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	...	80% [69–94%] 65 500	...
All ages	...% [...-...%]	80% [69–94%] 65 500	...% [...-...%]
Children (0–14)	...% [...-...%]	30% [22–38%] 3400	...% [...-...%]
Women (15+)	...% [...-...%]	93% [81–>95%] 41 200	...% [...-...%]
Men (15+)	...% [...-...%]	78% [67–92%] 20 900	...% [...-...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	43% [32–53%]	80% [61–>95%]
Early infant diagnosis	8.5% [6.9–11.3%]	...% [...-...%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	1400 [930–2000]
People living with HIV who started TB preventive therapy (2017)	31.8%
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 (2016)	
— Women	52.4%
— Men	54.9%
Condom use at last sex with a non-marital, non-cohabiting partner (2016)	
— Women	29.4%
— Men	53.4%
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2017)	40.3%
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	...
— 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)	<200 [<100– <200]	<200 [<100– <200]	<200 [<100– <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+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
HIV incidence per 1000 population	0.26 [0.2–0.33]	0.21 [0.15–0.3]	0.19 [0.13–0.29]
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)	2100 [1700–2600]	2300 [1900–2700]	2400 [2100–2900]
People living with HIV (0–14)	... [...–...]	... [...–...]	... [...–...]
People living with HIV (women, 15+)	1100 [880–1300]	1200 [1000–1400]	1300 [1100–1500]
People living with HIV (men, 15+)	910 [770–1100]	1000 [870–1200]	1100 [920–1300]
HIV prevalence (15–49)	0.6 [0.5–0.8]	0.6 [0.5–0.7]	0.6 [0.5–0.7]

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

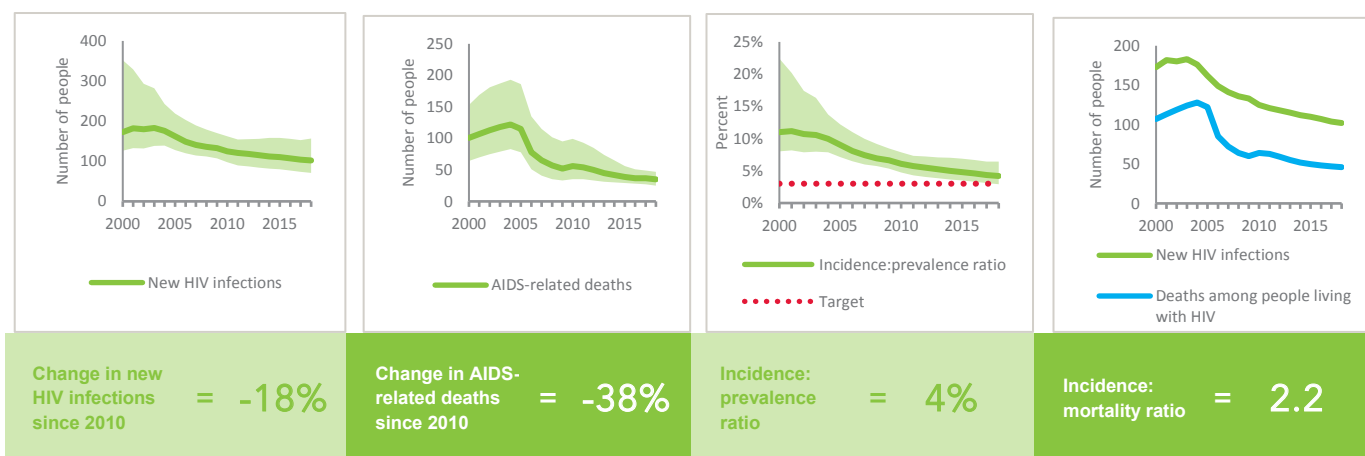
VIOLENCE

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

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2014	\$93 000	\$2 343 480	\$28 723	\$1 076 920	\$269 531	\$3 811 654

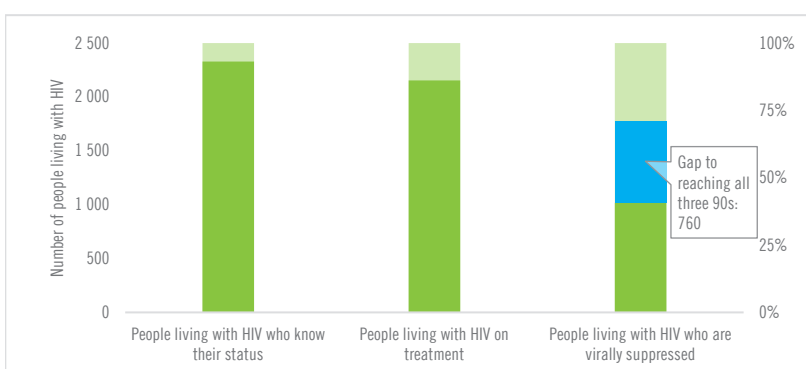
EPIDEMIC TRANSITION METRICS



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	45.1%	...	...	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	73.8%	57.5%	...	...	...
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	>95% [81–>95%]	89% [75–>95%] 2200	42% [35–50%]
Children (0–14)	...% [...–...%]	...% [...–...%]% [...–...%]
Women (15+)	...% [...–...%]	94% [79–>95%] 1200	54% [46–64%]
Men (15+)	...% [...–...%]	81% [68–>95%] 890	29% [24–35%]

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)	82 [51–120]
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	0.4%
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)	36 000 [32 000–39 000]	28 000 [24 000–32 000]	23 000 [19 000–28 000]
New HIV infections (0–14)	8100 [5900–10 000]	4800 [3900–6600]	4500 [2800–5900]
New HIV infections (women, 15+)	18 000 [16 000–20 000]	15 000 [13 000–17 000]	12 000 [10 000–15 000]
New HIV infections (men, 15+)	9700 [8600–12 000]	8100 [7000–10 000]	6700 [5400–8300]
HIV incidence per 1000 population	1.93 [1.76–2.14]	1.31 [1.14–1.5]	1.02 [0.84–1.23]
AIDS-related deaths			
AIDS-related deaths (all ages)	22 000 [19 000–25 000]	26 000 [23 000–29 000]	18 000 [15 000–21 000]
AIDS-related deaths (0–14)	6600 [5100–7600]	4300 [3200–5400]	3600 [2400–4600]
AIDS-related deaths (women, 15+)	11 000 [9100–12 000]	12 000 [10 000–13 000]	8000 [6500–9800]
AIDS-related deaths (men, 15+)	4700 [3800–5800]	9500 [8400–11 000]	6300 [5400–7300]
People living with HIV			
People living with HIV (all ages)	520 000 [460 000–560 000]	540 000 [470 000–580 000]	540 000 [470 000–590 000]
People living with HIV (0–14)	55 000 [45 000–61 000]	49 000 [39 000–57 000]	43 000 [33 000–51 000]
People living with HIV (women, 15+)	300 000 [270 000–330 000]	320 000 [280 000–350 000]	330 000 [290 000–360 000]
People living with HIV (men, 15+)	170 000 [140 000–180 000]	170 000 [150 000–190 000]	170 000 [150 000–190 000]
HIV prevalence (15–49)	4.5 [3.9–4.9]	3.9 [3.4–4.4]	3.6 [3.1–4]

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 (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	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	No

STIGMA AND DISCRIMINATION

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	2006	2014
(2006 refers to women only)	43.9	34.9

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

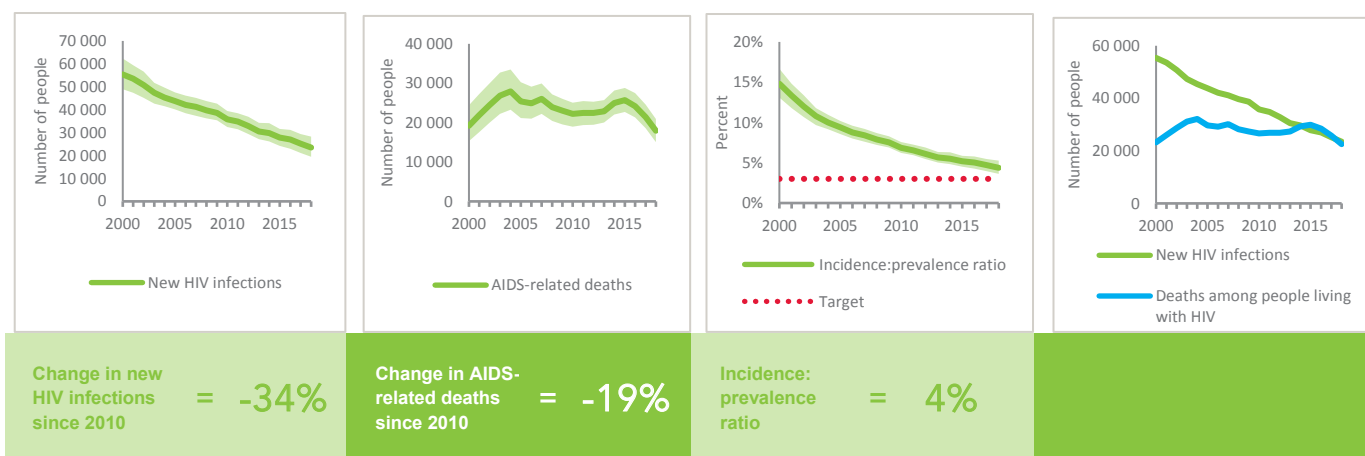
VIOLENCE

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	\$13 745 789	\$14 805 716	\$12 252 577	\$14 302 281	\$17 442 940	\$72 549 303

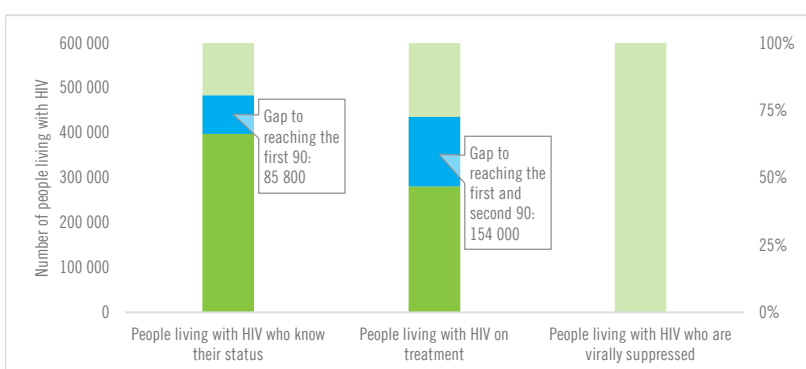
EPIDEMIC TRANSITION METRICS



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	24.3%	20.6%	...	...	4.0%
Know their HIV status	97.0%	67.3%	...	...	...
Antiretroviral therapy coverage	99.1%	97.2%	...	...	...
Condom use	96.0%	77.9%	...	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	4.7%	13.5%	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	74% [65–81%]	52% [46–57%] 281 000	...% [...–...%]
All ages			
Children (0–14)	28% [22–33%]	24% [18–28%] 10 300	...% [...–...%]
Women (15+)	80% [70–87%]	59% [52–64%] 193 000	...% [...–...%]
Men (15+)	75% [66–83%]	47% [41–52%] 78 100	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	42% [32–49%]	80% [61–94%]
Early infant diagnosis	19.2% [16.2–24.9%]	61.3% [52.0–80.9%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	14 000 [9200 –21 000]
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 (2014)	
— Women	32%
— Men	41.2%
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)	21%
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)	No

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	9100 [7500–12 000]	6700 [4900–9400]	5500 [3500–8100]
New HIV infections (0–14)	2200 [1700–2700]	1400 [970–2000]	1000 [600–1500]
New HIV infections (women, 15+)	4000 [3200–5200]	3100 [2200–4200]	2600 [1600–3800]
New HIV infections (men, 15+)	2900 [2300–3900]	2200 [1600–3400]	1900 [1200–3000]
HIV incidence per 1000 population	2.14 [1.77–2.73]	1.52 [1.1–2.14]	1.2 [0.77–1.77]
AIDS-related deaths			
AIDS-related deaths (all ages)	7800 [6400–9400]	6300 [5100–7700]	4800 [3700–6400]
AIDS-related deaths (0–14)	1600 [1300–2000]	1200 [890–1600]	890 [570–1200]
AIDS-related deaths (women, 15+)	3500 [2700–4100]	3000 [2300–3600]	1600 [1100–2200]
AIDS-related deaths (men, 15+)	2700 [2100–3300]	2200 [1700–2800]	2300 [1900–3100]
People living with HIV			
People living with HIV (all ages)	140 000 [110 000–160 000]	120 000 [97 000–140 000]	110 000 [90 000–140 000]
People living with HIV (0–14)	16 000 [13 000–19 000]	13 000 [10 000–16 000]	11 000 [8200–14 000]
People living with HIV (women, 15+)	70 000 [58 000–82 000]	60 000 [50 000–72 000]	59 000 [49 000–73 000]
People living with HIV (men, 15+)	50 000 [42 000–59 000]	43 000 [36 000–53 000]	40 000 [33 000–51 000]
HIV prevalence (15–49)	5 [4.2–5.9]	4 [3.3–4.9]	3.6 [2.9–4.5]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Sex work is not subject to punitive regulations or is not criminalized
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	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	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

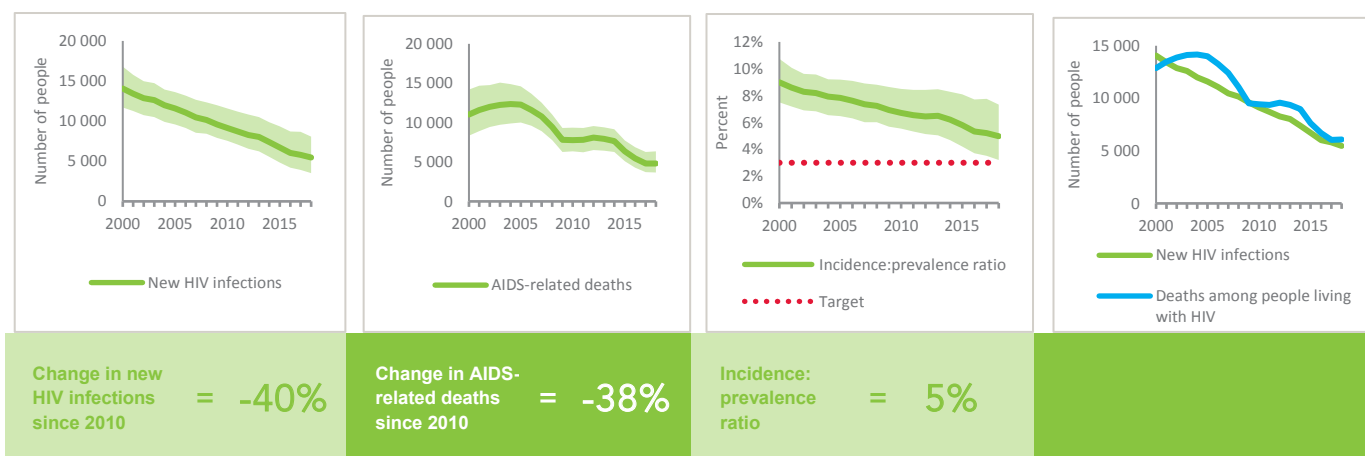
VIOLENCE

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: 2011	...	\$1 892 102	...	\$6 189 238	\$764 633	\$15 784 564

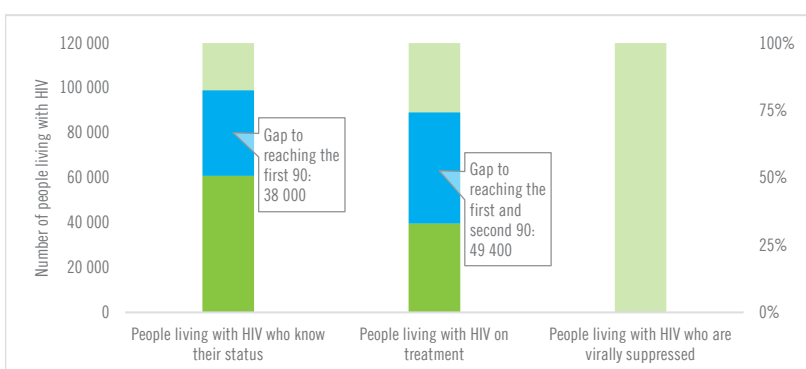
EPIDEMIC TRANSITION METRICS



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	9.2%	6.1%	...	...	3.6%
Know their HIV status	...	...	...	...	...
Antiretroviral therapy coverage	...	25.4%	...	...	...
Condom use	76.4%	...	...	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2017)	\$0	\$0	\$0	...	...

HIV TESTING AND TREATMENT CASCADE



	2010	2018
All ages	55% [46–69%] 39 600	36% [30–45%] 2500
Children (0–14)	28% [21–36%]	23% [18–29%]
Women (15+)	62% [51–77%] 25 800	44% [36–54%]
Men (15+)	53% [44–67%] 11 300	28% [23–36%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	31% [24–38%]	71% [52–91%]
Early infant diagnosis	<1% [<1–<1%]	24.3% [18.8–33.1%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	6200 [3300–9900]
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	...
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	...
Voluntary medical male circumcisions performed according to national standards	...
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)	7400 [5600–9400]	6600 [4400–9300]	6500 [4000–9600]
New HIV infections (0–14)	2900 [2100–3900]	2300 [1400–3300]	2200 [1200–3200]
New HIV infections (women, 15+)	2500 [1800–3200]	2400 [1500–3400]	2400 [1400–3800]
New HIV infections (men, 15+)	2000 [1400–2600]	1900 [1200–2700]	1900 [1100–3000]
HIV incidence per 1000 population	0.65 [0.5–0.83]	0.49 [0.32–0.69]	0.44 [0.27–0.65]
AIDS-related deaths			
AIDS-related deaths (all ages)	3500 [2600–4800]	3200 [2200–4500]	3100 [2000–4500]
AIDS-related deaths (0–14)	2100 [1500–2700]	1600 [1000–2300]	1500 [870–2100]
AIDS-related deaths (women, 15+)	720 [<500–1000]	690 [<500–1000]	630 [<500–1000]
AIDS-related deaths (men, 15+)	680 [<500–990]	930 [630–1300]	980 [590–1500]
People living with HIV			
People living with HIV (all ages)	99 000 [80 000–120 000]	110 000 [91 000–140 000]	120 000 [94 000–150 000]
People living with HIV (0–14)	18 000 [14 000–24 000]	17 000 [12 000–22 000]	16 000 [11 000–21 000]
People living with HIV (women, 15+)	46 000 [37 000–56 000]	55 000 [44 000–66 000]	60 000 [47 000–73 000]
People living with HIV (men, 15+)	35 000 [28 000–44 000]	42 000 [33 000–50 000]	45 000 [35 000–56 000]
HIV prevalence (15–49)	1.5 [1.2–1.8]	1.4 [1.1–1.7]	1.3 [1–1.7]

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	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	2004	2015
	62.8	44.4

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

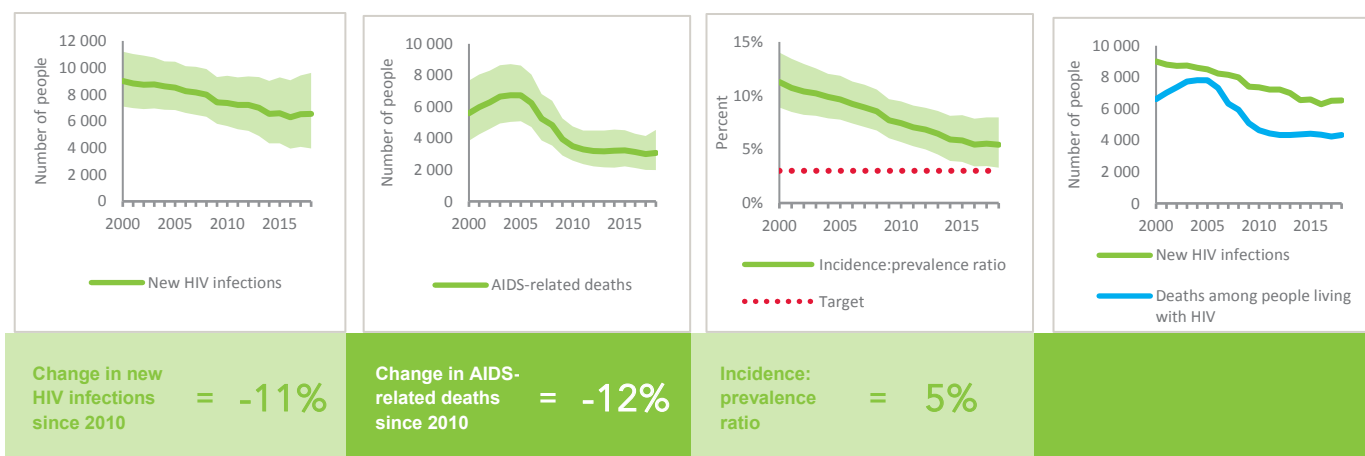
VIOLENCE

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	2014
	17.4

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2013	\$123 770	\$4 622 591	...	\$7 037 322	\$2 509 164	\$17 632 654

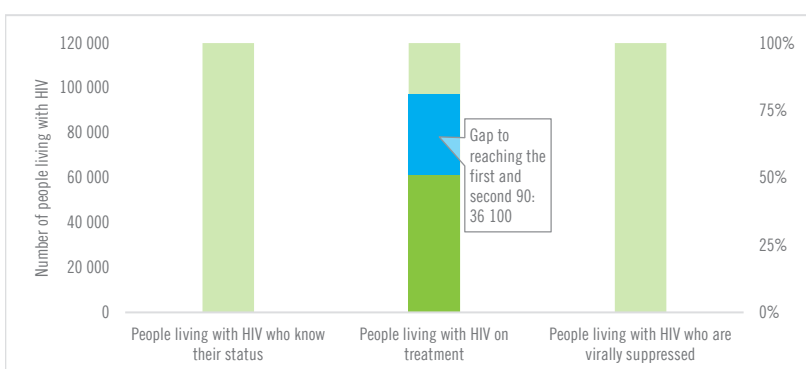
EPIDEMIC TRANSITION METRICS



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



	...% [...-...%]	51% [40-63%] 61 400	...% [...-...%]
All ages	...	51% [40-63%] 61 400	...
Children (0-14)	...	16% [11-22%] 2600	...
Women (15+)	...	67% [53-82%] 39 800	...
Men (15+)	...	42% [33-53%] 19 000	...

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	16% [11-20%]	56% [40-72%]
Early infant diagnosis	2.3% [1.8-3.1%]	...% [...-...%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	4600 [2900-6600]
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	11.2%
— Men	15.4%
Condom use at last sex with a non-marital, non-cohabiting partner (2015)	
— Women	31.6%
— Men	39.7%
Women aged 15-49 years who have their demand for family planning satisfied by modern methods (2015)	20.2%
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	...
— 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)	5800 [4200–7600]	5600 [3500–8700]	5300 [3000–9700]
New HIV infections (0–14)	1400 [1100–1800]	1300 [830–1800]	1200 [830–1700]
New HIV infections (women, 15+)	2900 [2000–3800]	2900 [1700–4700]	2700 [1500–5400]
New HIV infections (men, 15+)	1500 [1000–2000]	1500 [830–2400]	1400 [720–2600]
HIV incidence per 1000 population	1.4 [1.01–1.83]	1.18 [0.73–1.83]	1.03 [0.59–1.89]
AIDS-related deaths			
AIDS-related deaths (all ages)	3900 [3100–4800]	4500 [3400–5700]	4000 [2800–5400]
AIDS-related deaths (0–14)	1000 [800–1300]	910 [620–1200]	900 [610–1300]
AIDS-related deaths (women, 15+)	2000 [1600–2500]	2100 [1600–2800]	1900 [1300–2700]
AIDS-related deaths (men, 15+)	880 [650–1100]	1400 [1100–1900]	1200 [850–1600]
People living with HIV			
People living with HIV (all ages)	82 000 [69 000–95 000]	87 000 [70 000–110 000]	89 000 [69 000–120 000]
People living with HIV (0–14)	8200 [6700–9800]	7900 [6200–9800]	7700 [5800–10 000]
People living with HIV (women, 15+)	49 000 [41 000–57 000]	53 000 [43 000–65 000]	55 000 [42 000–72 000]
People living with HIV (men, 15+)	25 000 [21 000–29 000]	26 000 [22 000–32 000]	27 000 [21 000–36 000]
HIV prevalence (15–49)	3.1 [2.6–3.7]	2.8 [2.3–3.5]	2.6 [2–3.5]

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	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 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	2012	2014
	35.4	47.2
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months	2015	
	6.1	
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent	2015	
	17.9	

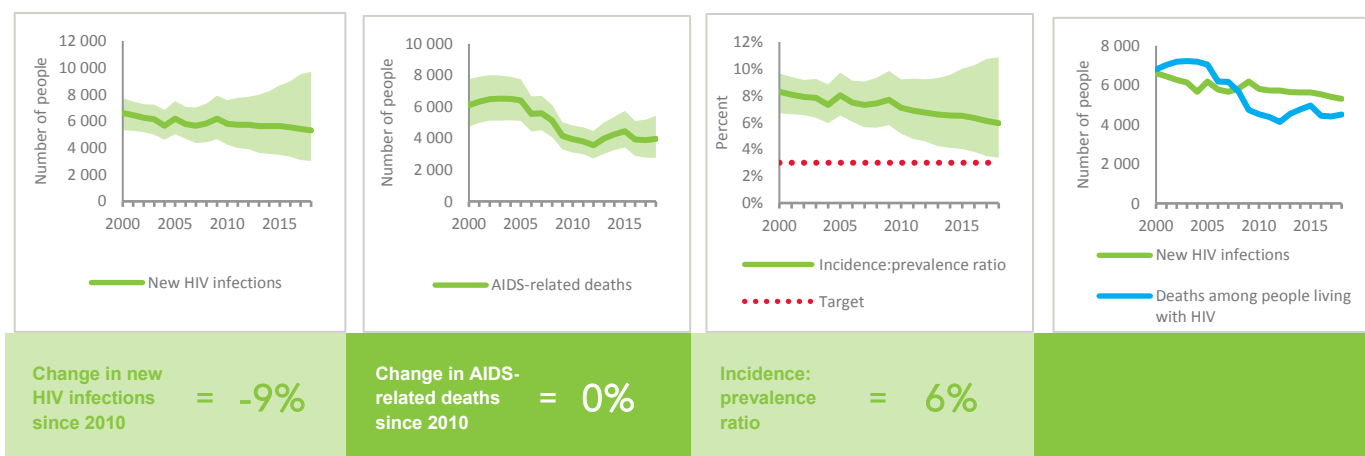
VIOLENCE

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	2014
	36.7

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2010	...	\$8 104 228	...	\$6 354 280	\$1 676 938	\$16 472 586

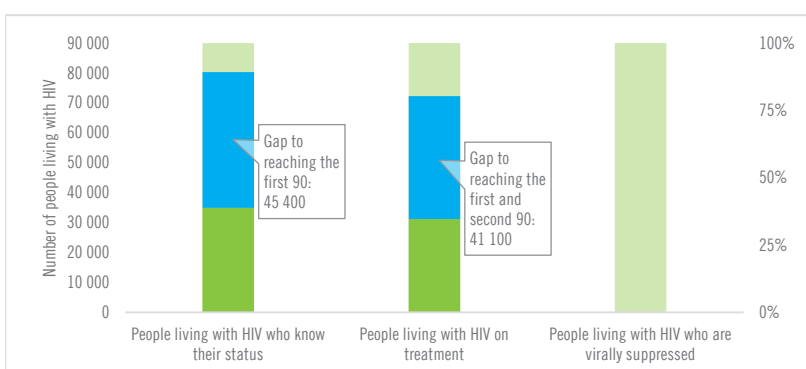
EPIDEMIC TRANSITION METRICS



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	8.1%	41.2%	...	...	3.9%
Know their HIV status	...	...	...	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	86.3%	64.1%	...	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	17.2%	10.4%	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	2010	2018
All ages	39% [30–51%]	35% [27–46%] 31 200
Children (0–14)	25% [19–33%]	25% [19–33%] 2000
Women (15+)	43% [32–56%]	36% [27–47%] 19 800
Men (15+)	36% [28–48%]	36% [28–48%] 9500

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	14% [10–17%]	25% [17–36%]
Early infant diagnosis	8.2% [6.5–10.7%]	1.9% [1.3–2.7%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	5200 [2700–8500]
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 (2015)	
— Women	26.7%
— Men	45.3%
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	...
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)	25 000 [14 000–47 000]	21 000 [11 000–40 000]	17 000 [9100–32 000]
New HIV infections (0–14)	5800 [3000–11 000]	4400 [2300–8300]	2600 [1300–4900]
New HIV infections (women, 15+)	11 000 [5800–20 000]	9200 [5000–17 000]	7800 [4200–15 000]
New HIV infections (men, 15+)	8700 [4700–17 000]	7500 [4100–14 000]	6400 [3500–12 000]
HIV incidence per 1000 population	1.3 [0.69–2.44]	0.95 [0.51–1.79]	0.7 [0.37–1.32]
AIDS-related deaths			
AIDS-related deaths (all ages)	24 000 [17 000–34 000]	22 000 [16 000–32 000]	16 000 [11 000–23 000]
AIDS-related deaths (0–14)	4900 [3000–8000]	3300 [2000–5500]	2300 [1400–3700]
AIDS-related deaths (women, 15+)	10 000 [7000–15 000]	8800 [6100–13 000]	5300 [3600–7700]
AIDS-related deaths (men, 15+)	9100 [6700–13 000]	10 000 [7500–15 000]	8400 [6100–12 000]
People living with HIV			
People living with HIV (all ages)	480 000 [380 000–610 000]	470 000 [370 000–600 000]	460 000 [360 000–580 000]
People living with HIV (0–14)	48 000 [35 000–64 000]	38 000 [28 000–51 000]	31 000 [23 000–41 000]
People living with HIV (women, 15+)	250 000 [200 000–320 000]	260 000 [210 000–330 000]	260 000 [210 000–330 000]
People living with HIV (men, 15+)	180 000 [140 000–230 000]	170 000 [140 000–230 000]	170 000 [130 000–210 000]
HIV prevalence (15–49)	3.6 [2.8–4.6]	2.9 [2.3–3.8]	2.6 [2–3.3]

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	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	...
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	2012	2016
	44.5	53
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months	2016	
	2.4	
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent	2016	
	3.4	

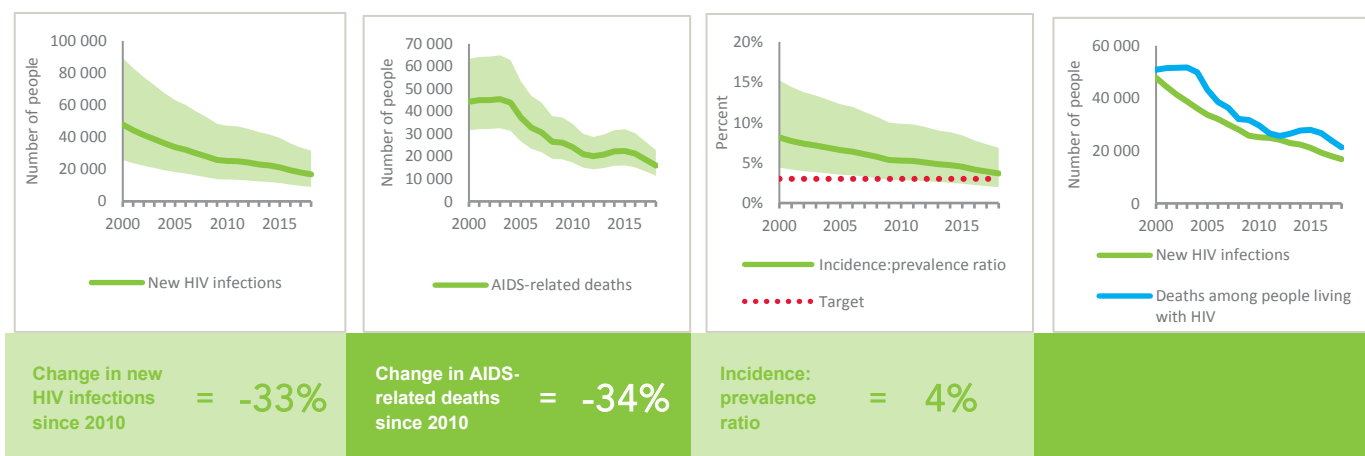
VIOLENCE

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	\$130 057	\$8 334 163	\$51 530 751	\$2 036 899	\$980 810	\$63 012 680

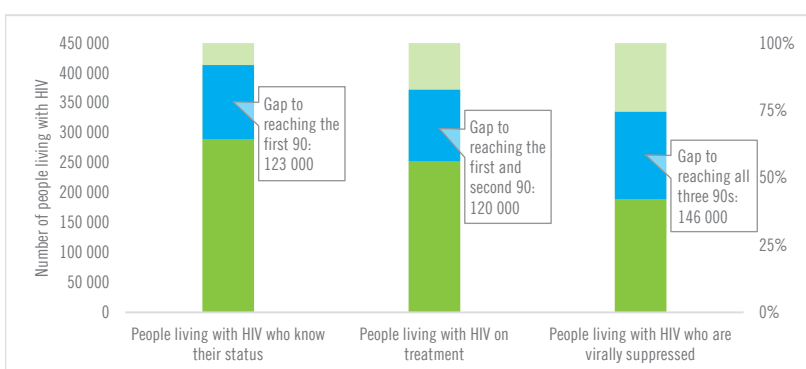
EPIDEMIC TRANSITION METRICS



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	...	...	...	...	41 000
HIV prevalence	12.2%	12.3%	...	...	1.2%
Know their HIV status	91.8%	13.3%	...	...	...
Antiretroviral therapy coverage	...	...	...	...	96.8%
Condom use	93.8%	75.1%	...	...	...
Coverage of HIV prevention programmes	96.2%	39.1%	...	...	...
Avoidance of health care because of stigma and discrimination	5.8%	22.6%	...	...	...
Expenditures (2013)	\$970 587	\$186 543	\$18 756	...	...

HIV TESTING AND TREATMENT CASCADE



	63% [50–80%]	55% [44–70%] 252 000	41% [33–52%]
All ages			
Children (0–14)	40% [29–54%]	40% [29–54%] 12 300	24% [18–32%]
Women (15+)	72% [58–91%]	67% [53–84%] 176 000	51% [41–64%]
Men (15+)	53% [41–68%]	39% [31–50%] 64 300	29% [23–37%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	34% [24–45%]	90% [65–>95%]
Early infant diagnosis	27.7% [20.8–38.2%]	56.3% [42.3–77.5%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	7300 [4600 –10 000]
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	1.6%
Knowledge of HIV prevention among young people aged 15–24 years (2015)	
— Women	24%
— Men	33%
Condom use at last sex with a non-marital, non-cohabiting partner (2016)	
— Women	30.4%
— Men	41.8%
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2016)	33.7%
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)	31 000 [24 000–37 000]	22 000 [16 000–29 000]	19 000 [13 000–26 000]
New HIV infections (0–14)	12 000 [9500–15 000]	7900 [5500–10 000]	7000 [5400–8600]
New HIV infections (women, 15+)	14 000 [11 000–17 000]	11 000 [7500–15 000]	8700 [5900–13 000]
New HIV infections (men, 15+)	4500 [3400–5800]	3500 [2400–4900]	2800 [1800–4300]
HIV incidence per 1000 population	0.45 [0.35–0.54]	0.28 [0.2–0.37]	0.21 [0.14–0.29]
AIDS-related deaths			
AIDS-related deaths (all ages)	34 000 [27 000–40 000]	23 000 [18 000–29 000]	13 000 [10 000–17 000]
AIDS-related deaths (0–14)	9300 [7500–11 000]	6700 [5100–8300]	4200 [3000–5400]
AIDS-related deaths (women, 15+)	18 000 [15 000–22 000]	12 000 [8500–14 000]	6600 [4800–8700]
AIDS-related deaths (men, 15+)	6400 [5200–8000]	5200 [3900–6500]	2700 [2000–3400]
People living with HIV			
People living with HIV (all ages)	480 000 [400 000–560 000]	450 000 [370 000–520 000]	450 000 [370 000–530 000]
People living with HIV (0–14)	83 000 [67 000–97 000]	70 000 [55 000–84 000]	64 000 [50 000–76 000]
People living with HIV (women, 15+)	290 000 [240 000–330 000]	280 000 [220 000–320 000]	280 000 [230 000–330 000]
People living with HIV (men, 15+)	110 000 [89 000–130 000]	100 000 [86 000–120 000]	110 000 [87 000–120 000]
HIV prevalence (15–49)	1.1 [0.9–1.3]	0.9 [0.7–1]	0.8 [0.6–0.9]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	...
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	...
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	2007	2014
	53.9	49.2
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months		2012
		6.1
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent		2012
		9.9

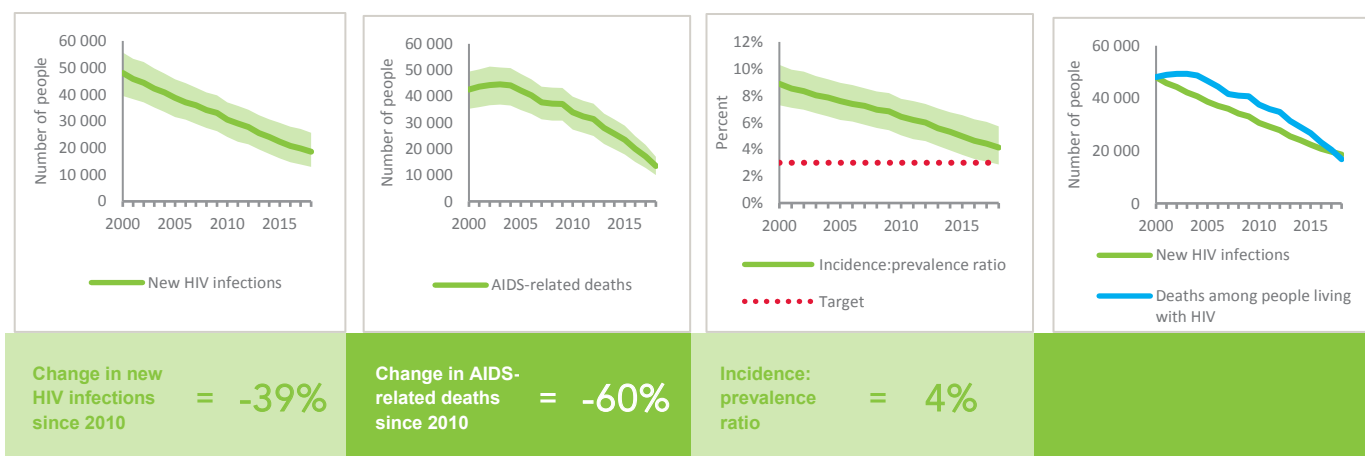
VIOLENCE

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	2014
	36.8

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2014	\$97 139 495	\$30 383 681	\$40 330 212	\$38 728 196	\$15 841 111	\$222 422 695

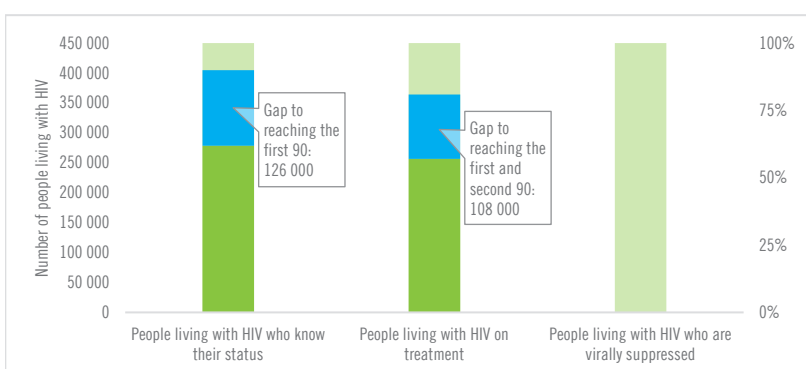
EPIDEMIC TRANSITION METRICS



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	350 000	190 000	160 000	...	...
HIV prevalence	...	3.3%	5.9%	...	1.6%
Know their HIV status	...	...	...	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	...	77.4%	...	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2014)	\$6188	\$185 650	\$0	...	...

HIV TESTING AND TREATMENT CASCADE



	2010	2018
All ages	62% [51–73%]	57% [47–67%] 256 000
Children (0–14)	25% [20–30%]	25% [20–30%] 16 000
Women (15+)	64% [52–75%]	58% [47–69%] 162 000
Men (15+)	79% [64–91%]	73% [60–85%] 78 000

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	7% [5–8%]	44% [33–52%]
Early infant diagnosis	2.8% [2.3–3.7%]	19.7% [16.5–26.1%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	20 000 [13 000–28 000]
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 (2014)	
— Women	18.6%
— Men	24.9%
Condom use at last sex with a non-marital, non-cohabiting partner (2014)	
— Women	22.6%
— Men	30.7%
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2014)	19.5%
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	...
— 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)	3900 [3100–5000]	4700 [3300–6800]	5100 [3100–8000]
New HIV infections (0–14)	810 [630–1000]	860 [570–1200]	910 [550–1400]
New HIV infections (women, 15+)	1600 [1200–2000]	1900 [1300–2700]	2000 [1200–3300]
New HIV infections (men, 15+)	1500 [1200–2100]	2000 [1300–2900]	2200 [1200–3500]
HIV incidence per 1000 population	4.41 [3.45–5.61]	4.34 [2.93–6.28]	4.21 [2.49–6.65]
AIDS-related deaths			
AIDS-related deaths (all ages)	1400 [970–1900]	1600 [1100–2300]	1800 [1200–2600]
AIDS-related deaths (0–14)	<500 [<500–560]	<500 [<500–650]	530 [<500–770]
AIDS-related deaths (women, 15+)	510 [<500–740]	<500 [<200– <500]	<500 [<200– <500]
AIDS-related deaths (men, 15+)	<500 [<500–610]	860 [590–1200]	1000 [710–1400]
People living with HIV			
People living with HIV (all ages)	35 000 [29 000–41 000]	52 000 [43 000–63 000]	62 000 [50 000–81 000]
People living with HIV (0–14)	3700 [3000–4700]	4900 [3800–6100]	5300 [3800–7100]
People living with HIV (women, 15+)	16 000 [14 000–19 000]	24 000 [20 000–29 000]	30 000 [24 000–38 000]
People living with HIV (men, 15+)	15 000 [13 000–18 000]	23 000 [19 000–28 000]	28 000 [22 000–36 000]
HIV prevalence (15–49)	5.7 [4.8–6.7]	6.7 [5.6–8.2]	7.1 [5.6–9.2]

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	...
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

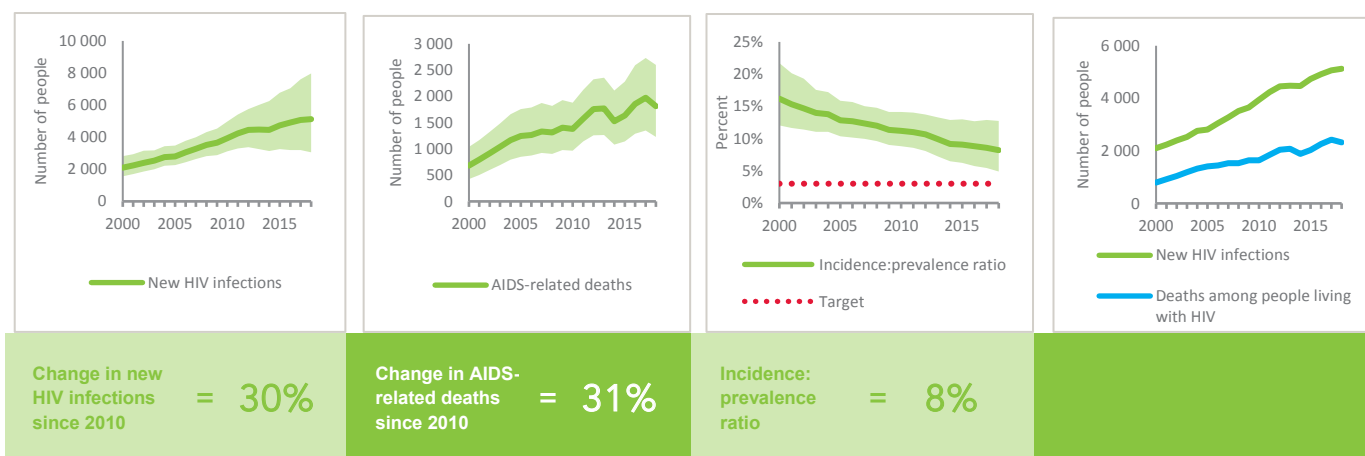
VIOLENCE

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	\$260 066	\$7 844 051	...	...	\$132 193	\$8 715 789

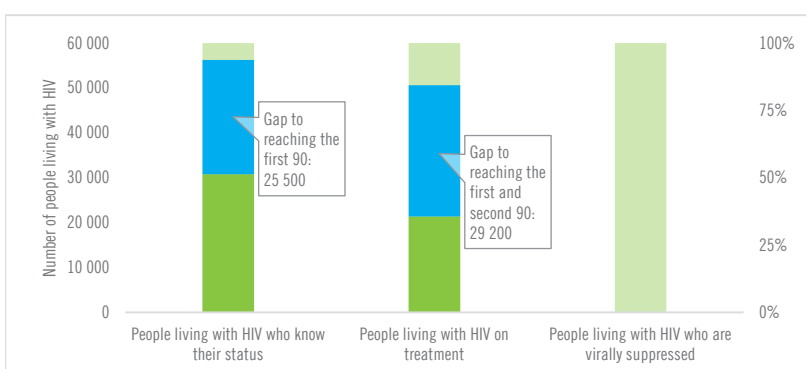
EPIDEMIC TRANSITION METRICS



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



	49% [39–64%]	34% [27–44%] 21 400	...% [...–...%]
All ages			
Children (0–14)	14% [10–19%]	14% [10–19%] 770	...% [...–...%]
Women (15+)	64% [52–83%]	53% [43–68%] 15 800	...% [...–...%]
Men (15+)	40% [31–52%]	18% [14–23%] 4800	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	16% [12–20%]	50% [35–68%]
Early infant diagnosis	...% [...–...%]	...% [...–...%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	950 [790–1100]
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)	2900 [2200–3900]	2500 [1700–3900]	2000 [1100–3900]
New HIV infections (0–14)	660 [<500–880]	<500 [<500–760]	<500 [<200–700]
New HIV infections (women, 15+)	1600 [1200–2100]	1400 [900–2200]	1100 [610–2200]
New HIV infections (men, 15+)	670 [<500–950]	610 [<500–960]	<500 [<500–1000]
HIV incidence per 1000 population	1.85 [1.42–2.51]	1.36 [0.9–2.13]	1.01 [0.57–1.98]
AIDS-related deaths			
AIDS-related deaths (all ages)	1600 [1100–2100]	1200 [820–1700]	1200 [790–1700]
AIDS-related deaths (0–14)	<500 [<500–660]	<500 [<500–550]	<500 [<200– <500]
AIDS-related deaths (women, 15+)	870 [580–1100]	530 [<500–790]	540 [<500–800]
AIDS-related deaths (men, 15+)	<500 [<200– <500]	<500 [<200– <500]	<500 [<500– <500]
People living with HIV			
People living with HIV (all ages)	43 000 [36 000–51 000]	51 000 [41 000–63 000]	53 000 [43 000–67 000]
People living with HIV (0–14)	3400 [2600–4400]	3400 [2500–4300]	3200 [2300–4400]
People living with HIV (women, 15+)	27 000 [23 000–32 000]	33 000 [27 000–40 000]	35 000 [28 000–44 000]
People living with HIV (men, 15+)	12 000 [10 000–15 000]	15 000 [12 000–18 000]	16 000 [12 000–19 000]
HIV prevalence (15–49)	4.1 [3.4–5]	4 [3.2–5]	3.8 [2.9–4.9]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	No, but prosecutions exist based on general criminal laws
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 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	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 **2013**
13.7

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

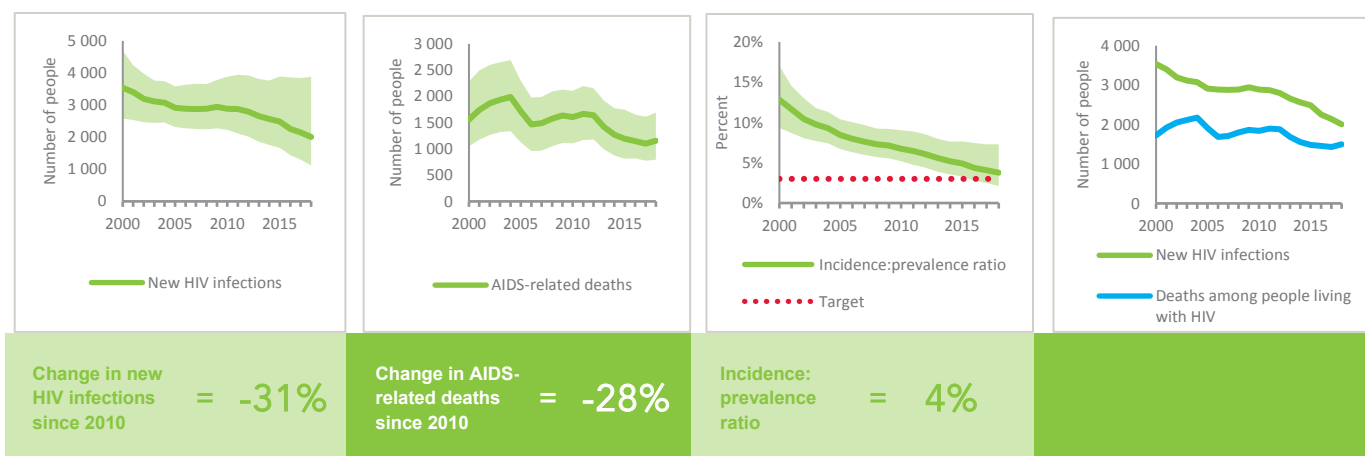
VIOLENCE

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: 2014	\$1 190 251	\$4 808 085	...	...	\$454 441	\$6 452 777

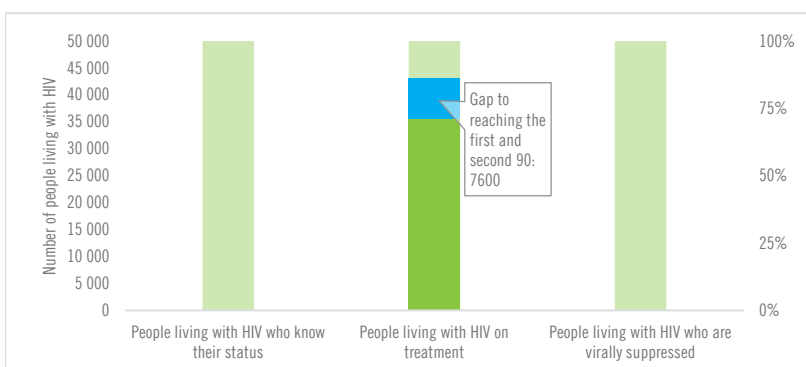
EPIDEMIC TRANSITION METRICS



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



	...	2010	2018
All ages	...% [...-...%]	67% [54-85%] 35 600	...
Children (0-14)	...% [...-...%]	57% [41-78%] 1900	...
Women (15+)	...% [...-...%]	65% [52-82%] 22 400	...
Men (15+)	...% [...-...%]	74% [59-92%] 11 400	...

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	24% [18-30%]	72% [52- >95%]
Early infant diagnosis	4.8% [3.8-6.4%]	17.4% [12.9-24.0%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	2200 [1400-3300]
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 (2018)	4.4%
People coinfectd with HIV and hepatitis C virus starting hepatitis C treatment (2018)	100%

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)	1800 [1400–2500]	2000 [1500–2800]	2200 [1500–3200]
New HIV infections (0–14)	<500 [<200– <500]	<500 [<200– <500]	<500 [<200– <500]
New HIV infections (women, 15+)	930 [700–1200]	1000 [740–1500]	1100 [760–1600]
New HIV infections (men, 15+)	690 [510–930]	760 [550–1000]	820 [570–1200]
HIV incidence per 1000 population	1.13 [0.84–1.55]	1.08 [0.78–1.51]	1.06 [0.74–1.54]
AIDS-related deaths			
AIDS-related deaths (all ages)	970 [660–1400]	900 [610–1300]	980 [650–1400]
AIDS-related deaths (0–14)	<200 [<200– <500]	<200 [<200– <500]	<200 [<200– <500]
AIDS-related deaths (women, 15+)	<500 [<500–640]	<500 [<200–510]	<500 [<500–520]
AIDS-related deaths (men, 15+)	<500 [<500–500]	<500 [<500–580]	<500 [<500–670]
People living with HIV			
People living with HIV (all ages)	18 000 [15 000–23 000]	23 000 [19 000–29 000]	26 000 [21 000–33 000]
People living with HIV (0–14)	1600 [1200–2000]	1800 [1400–2300]	1900 [1400–2500]
People living with HIV (women, 15+)	9900 [7900–12 000]	13 000 [10 000–16 000]	15 000 [12 000–19 000]
People living with HIV (men, 15+)	7000 [5700–8900]	8500 [6900–11 000]	9300 [7600–12 000]
HIV prevalence (15–49)	1.9 [1.5–2.4]	1.9 [1.6–2.4]	1.9 [1.6–2.5]

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	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	2013 51
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	

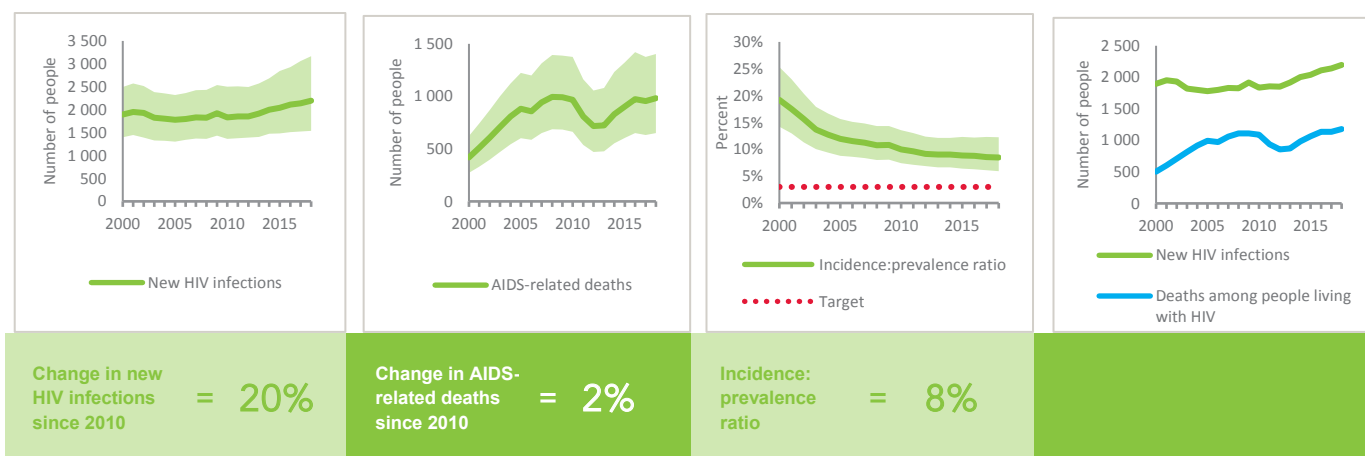
VIOLENCE

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 7.3
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EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2014	...	\$3 850 001	...	...	...	\$3 850 001

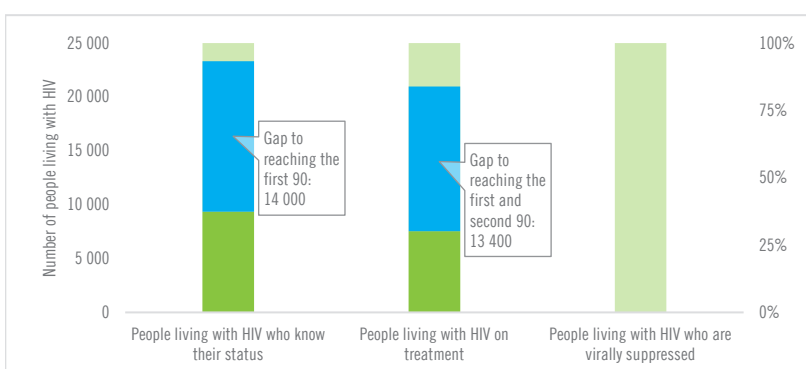
EPIDEMIC TRANSITION METRICS



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	11.0%	34.4%	...	...	...
Know their HIV status	100%	100%	...	...	...
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



	36% [29–46%]	29% [24–38%] 7500	...% [...–...%]
All ages			
Children (0–14)	30% [23–39%]	30% [23–39%] 550	...% [...–...%]
Women (15+)	46% [37–59%]	37% [30–48%] 5400	...% [...–...%]
Men (15+)	22% [18–29%]	17% [14–22%] 1600	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	70% [54–92%]	68% [54–86%]
Early infant diagnosis	...% [...–...%]	28.2% [22.1–35.5%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	700 [530–900]
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)	22 000 [18 000–26 000]	21 000 [17 000–27 000]	20 000 [15 000–26 000]
New HIV infections (0–14)	5000 [3700–6300]	4700 [3400–6200]	3300 [2200–5000]
New HIV infections (women, 15+)	11 000 [8900–13 000]	11 000 [8200–13 000]	11 000 [8100–14 000]
New HIV infections (men, 15+)	5900 [4700–7400]	5800 [4600–7700]	6000 [4400–8200]
HIV incidence per 1000 population	0.91 [0.74–1.09]	0.79 [0.63–1]	0.7 [0.53–0.91]
AIDS-related deaths			
AIDS-related deaths (all ages)	17 000 [14 000–19 000]	14 000 [11 000–17 000]	14 000 [11 000–18 000]
AIDS-related deaths (0–14)	3900 [3100–4800]	3200 [2400–4100]	2800 [1900–3900]
AIDS-related deaths (women, 15+)	8200 [6800–9600]	6100 [4700–7700]	5600 [4200–7100]
AIDS-related deaths (men, 15+)	4400 [3600–5400]	4400 [3400–5500]	5800 [4600–7200]
People living with HIV			
People living with HIV (all ages)	300 000 [250 000–340 000]	320 000 [270 000–370 000]	330 000 [280 000–390 000]
People living with HIV (0–14)	36 000 [29 000–41 000]	33 000 [26 000–39 000]	30 000 [23 000–37 000]
People living with HIV (women, 15+)	170 000 [140 000–200 000]	190 000 [160 000–220 000]	200 000 [170 000–240 000]
People living with HIV (men, 15+)	91 000 [76 000–110 000]	100 000 [85 000–120 000]	100 000 [86 000–120 000]
HIV prevalence (15–49)	1.9 [1.6–2.2]	1.8 [1.5–2.1]	1.7 [1.4–2]

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	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	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 and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	2008	2014
	62.1	67.7
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months		2014
		1.4
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent		2014
		7.9

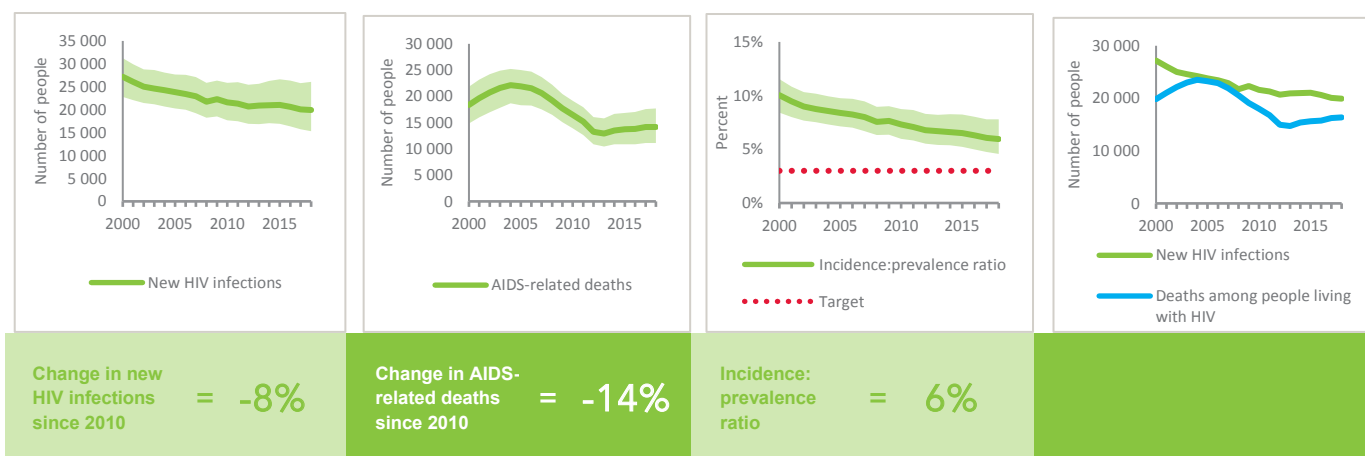
VIOLENCE

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	\$18 822 217	\$6 606 220	\$7 798 785	\$34 722 511	\$129 736	\$68 079 469

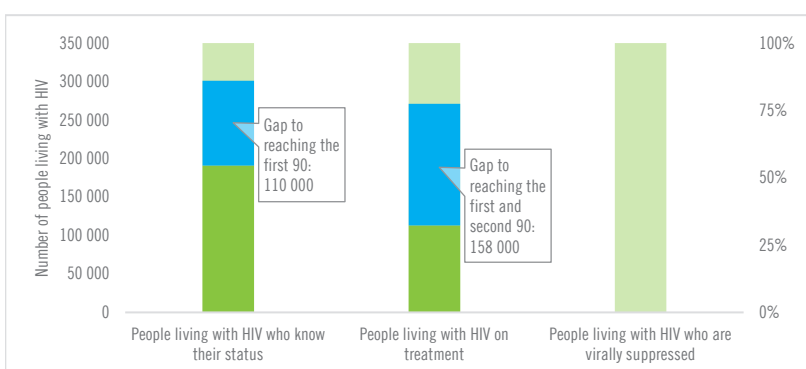
EPIDEMIC TRANSITION METRICS



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	6.9%	18.0%	...	...	0.4%
Know their HIV status	...	...	...	...	...
Antiretroviral therapy coverage	...	3.7%	...	...	100%
Condom use	89.9%	...	...	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2016)	\$2 901 806	\$1 838 393	\$0	...	...

HIV TESTING AND TREATMENT CASCADE



	2010	2018
All ages	57% [48–66%]	34% [28–39%] 113 000
Children (0–14)	20% [15–25%]	20% [15–25%] 5900
Women (15+)	69% [59–81%]	40% [34–47%] 81 700
Men (15+)	43% [36–51%]	25% [21–30%] 25 600

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	33% [26–41%]	79% [58– >95%]
Early infant diagnosis	<1% [<1– <1%]	58.2% [45.6–78.5%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	9500 [4500 –16 000]
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 (2014)	
— Women	19.9%
— Men	27.2%
Condom use at last sex with a non-marital, non-cohabiting partner (2014)	
— Women	17.1%
— Men	39.1%
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2014)	41.2%
Men aged 15–49 years who are circumcised (2014)	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)	8200 [6800–9600]	7400 [5800–9400]	6600 [4800–8900]
New HIV infections (0–14)	1900 [1400–2400]	1700 [1200–2200]	1300 [780–1800]
New HIV infections (women, 15+)	3600 [3000–4400]	3300 [2500–4300]	3100 [2200–4200]
New HIV infections (men, 15+)	2600 [2100–3300]	2400 [1800–3200]	2200 [1500–3100]
HIV incidence per 1000 population	0.78 [0.65–0.92]	0.63 [0.49–0.8]	0.52 [0.38–0.71]
AIDS-related deaths			
AIDS-related deaths (all ages)	4100 [3300–5000]	4100 [3200–5200]	4300 [3300–5400]
AIDS-related deaths (0–14)	1400 [1100–1700]	990 [670–1300]	950 [600–1300]
AIDS-related deaths (women, 15+)	1600 [1200–2100]	1400 [1000–1800]	1800 [1400–2300]
AIDS-related deaths (men, 15+)	1100 [850–1500]	1800 [1400–2300]	1500 [1200–1900]
People living with HIV			
People living with HIV (all ages)	100 000 [90 000–120 000]	120 000 [98 000–130 000]	120 000 [100 000–140 000]
People living with HIV (0–14)	12 000 [9300–14 000]	11 000 [8400–13 000]	10 000 [7900–13 000]
People living with HIV (women, 15+)	55 000 [47 000–63 000]	63 000 [53 000–74 000]	67 000 [57 000–79 000]
People living with HIV (men, 15+)	37 000 [31 000–43 000]	41 000 [35 000–48 000]	42 000 [35 000–50 000]
HIV prevalence (15–49)	1.6 [1.3–1.9]	1.5 [1.3–1.8]	1.4 [1.2–1.7]

LAWS AND POLICIES

Laws criminalizing the transmission of, non-disclosure of or exposure to HIV transmission	Yes
Criminalization of sex work among consenting adults	Issue is determined/differs at subnational level
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	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

Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	2012	2016
(2016 refers to women only)	80.1	80

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

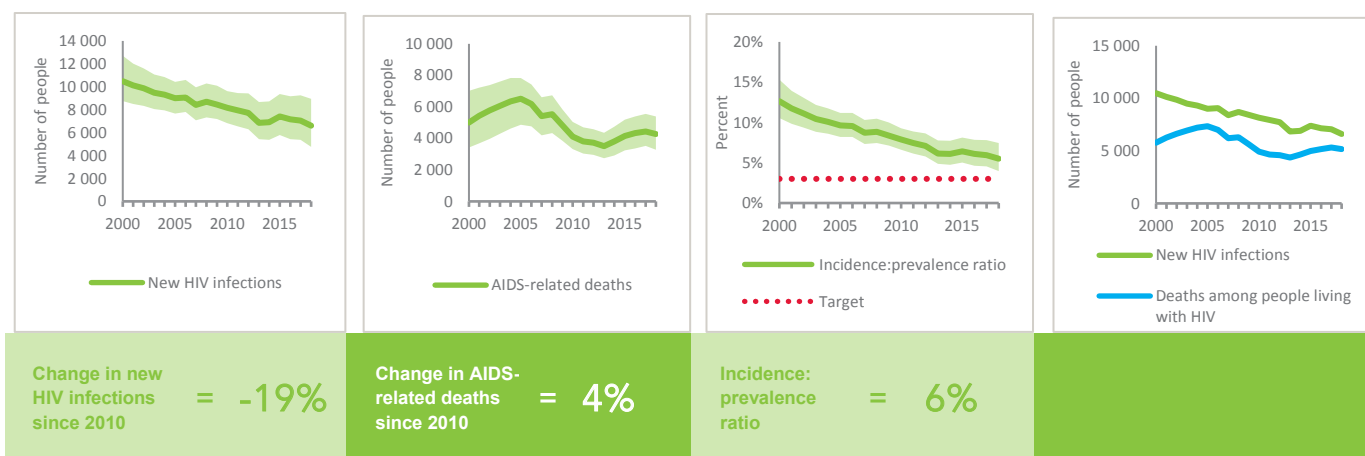
VIOLENCE

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: 2018	\$16	\$28 832	...	\$5 347 536	\$1093	\$5 377 478

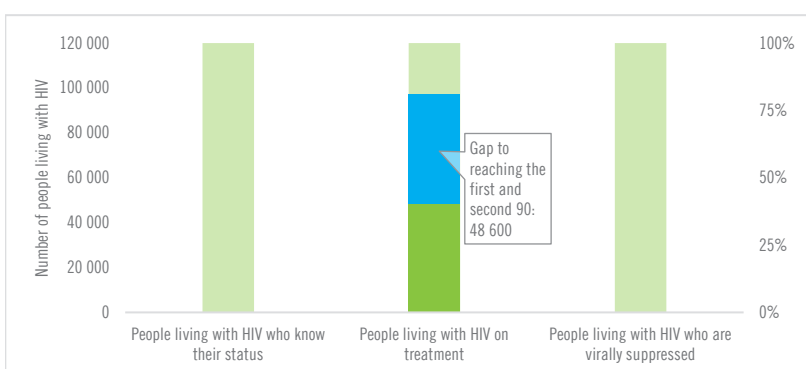
EPIDEMIC TRANSITION METRICS



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	10.7%	11.4%	...	...	2.3%
Know their HIV status	96.8%	93.0%	11.0%	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	93.5%	65.5%	49.1%	...	...
Coverage of HIV prevention programmes	...	17.1%	...	...	...
Avoidance of health care because of stigma and discrimination	1.5%	...	...	...	...
Expenditures (2017)	\$0	\$0	\$0	...	...

HIV TESTING AND TREATMENT CASCADE



	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	19% [14–25%]	65% [48–84%]
Early infant diagnosis	5.3% [4.2–7.2%]	15.0% [11.7–20.4%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	19% [14–25%]	65% [48–84%]
Early infant diagnosis	5.3% [4.2–7.2%]	15.0% [11.7–20.4%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	5600 [3600–8100]
People living with HIV who started TB preventive therapy (2017)	18.2%
Women who tested positive for HIV among those screened for cervical cancer (programme data) (2018)	55.9%
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	15.2%
— 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)	3400 [2900–3900]	2900 [2400–3400]	2600 [2100–3100]
New HIV infections (0–14)	960 [810–1100]	780 [610–970]	730 [540–890]
New HIV infections (women, 15+)	1400 [1200–1700]	1200 [990–1400]	1100 [860–1300]
New HIV infections (men, 15+)	1000 [850–1200]	880 [710–1100]	780 [610–990]
HIV incidence per 1000 population	2.31 [1.98–2.64]	1.72 [1.41–2.01]	1.43 [1.13–1.72]
AIDS-related deaths			
AIDS-related deaths (all ages)	1900 [1500–2200]	1900 [1500–2200]	1800 [1400–2100]
AIDS-related deaths (0–14)	610 [530–710]	<500 [<500–540]	<500 [<500–550]
AIDS-related deaths (women, 15+)	740 [570–910]	630 [<500–780]	590 [<500–710]
AIDS-related deaths (men, 15+)	540 [<500–710]	800 [640–1000]	720 [590–860]
People living with HIV			
People living with HIV (all ages)	38 000 [34 000–42 000]	43 000 [38 000–48 000]	44 000 [39 000–49 000]
People living with HIV (0–14)	5600 [4900–6400]	5900 [5000–6700]	5700 [4700–6600]
People living with HIV (women, 15+)	19 000 [17 000–21 000]	22 000 [19 000–24 000]	24 000 [21 000–26 000]
People living with HIV (men, 15+)	13 000 [12 000–15 000]	15 000 [13 000–16 000]	15 000 [13 000–17 000]
HIV prevalence (15–49)	3.8 [3.4–4.3]	3.7 [3.2–4.2]	3.5 [3–4]

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 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	...
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	2006	2014
(2006 refers to women only)	48	63

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

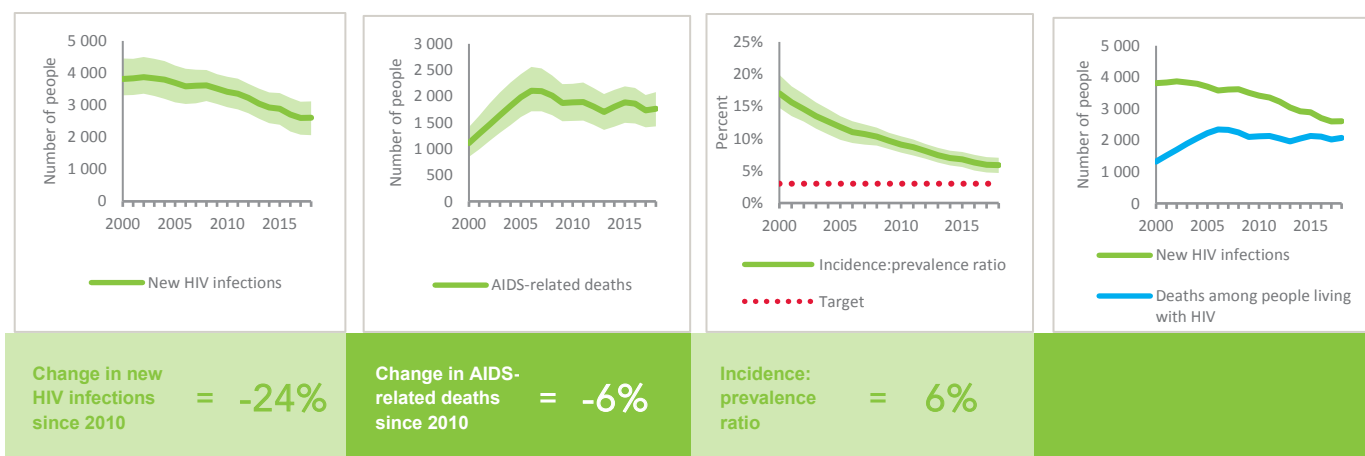
VIOLENCE

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: 2010	...	\$611 774	...	...	\$3 959 113	\$5 258 837

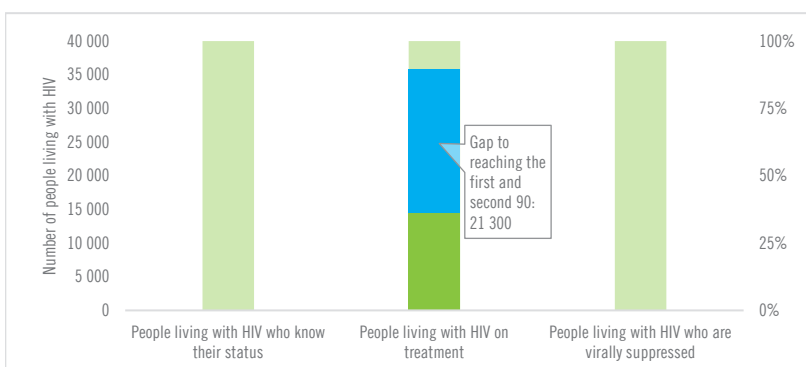
EPIDEMIC TRANSITION METRICS



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	18.0%	3.0%	...	...	...
Know their HIV status	...	...	...	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	22.5%	12.2%	...	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	...	33% [29–37%] 14 600	...
All ages	...% [...–...%]		...% [...–...%]
Children (0–14)	...% [...–...%]	6% [5–7%] 350	...% [...–...%]
Women (15+)	...% [...–...%]	49% [43–55%] 11 700	...% [...–...%]
Men (15+)	...% [...–...%]	17% [15–19%] 2500	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	16% [13–18%]	48% [38–58%]
Early infant diagnosis	<1% [<1– <1%]	26.7% [22.0–33.8%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	2200 [1400–3200]
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	22.5%
— Men	21.7%
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	...
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)	2700 [2600–2800]	2300 [2200–2400]	1900 [1800–2000]
New HIV infections (0–14)	720 [540–870]	<500 [<500–600]	<500 [<500– <500]
New HIV infections (women, 15+)	1200 [1100–1200]	1000 [990–1100]	920 [860–980]
New HIV infections (men, 15+)	810 [740–890]	730 [680–810]	650 [590–710]
HIV incidence per 1000 population	0.71 [0.68–0.75]	0.52 [0.5–0.54]	0.39 [0.38–0.41]
AIDS-related deaths			
AIDS-related deaths (all ages)	2700 [2600–2900]	2300 [2100–2500]	1800 [1700–1900]
AIDS-related deaths (0–14)	590 [<500–680]	<500 [<500–510]	<500 [<500– <500]
AIDS-related deaths (women, 15+)	1200 [1200–1300]	980 [900–1100]	590 [510–670]
AIDS-related deaths (men, 15+)	890 [820–980]	940 [870–1000]	920 [870–980]
People living with HIV			
People living with HIV (all ages)	41 000 [37 000–46 000]	40 000 [37 000–45 000]	39 000 [36 000–44 000]
People living with HIV (0–14)	5500 [4500–6100]	4600 [3700–5300]	3700 [3000–4400]
People living with HIV (women, 15+)	21 000 [19 000–24 000]	21 000 [20 000–24 000]	22 000 [20 000–24 000]
People living with HIV (men, 15+)	14 000 [13 000–16 000]	14 000 [13 000–16 000]	14 000 [12 000–15 000]
HIV prevalence (15–49)	1.7 [1.5–2]	1.4 [1.3–1.6]	1.3 [1.1–1.4]

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	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	...
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	2007	2013
	51.5	52.7
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months	2013	
	2.5	
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent	2013	
		15.7

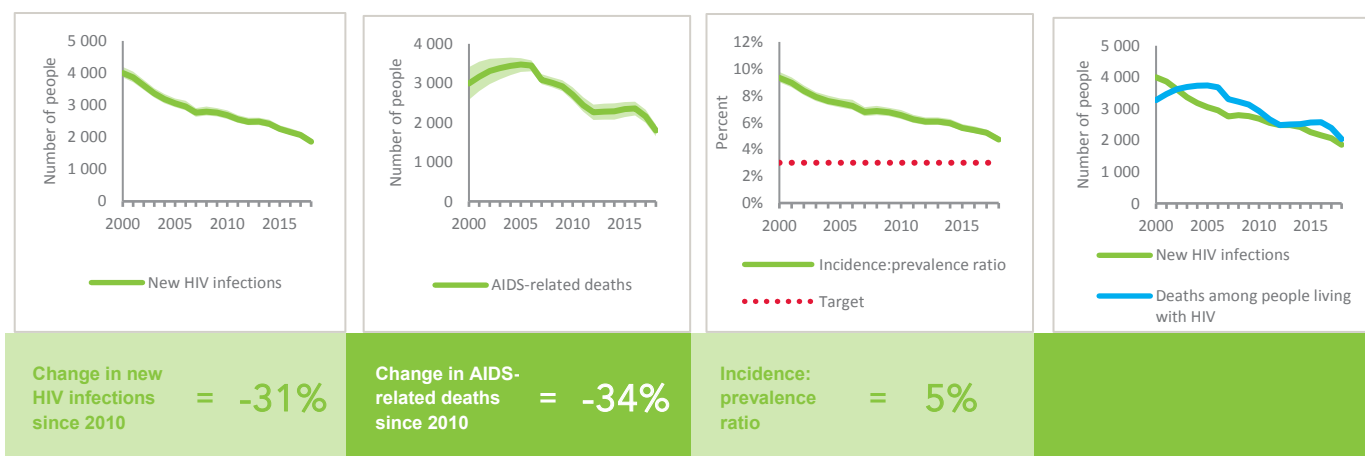
VIOLENCE

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: 2015	\$8130	...	...	\$10 272 345	...	\$10 280 475

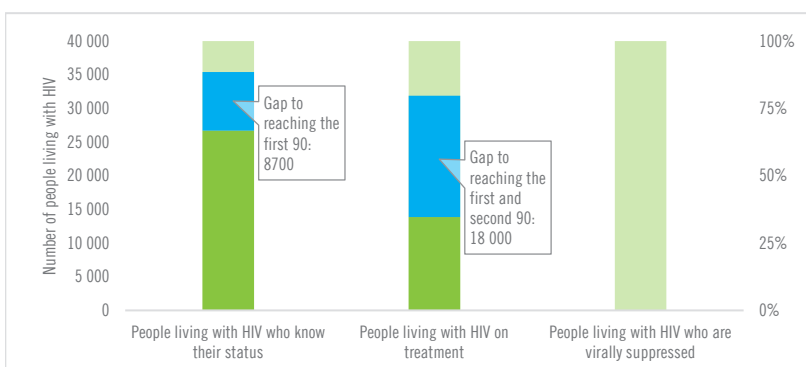
EPIDEMIC TRANSITION METRICS



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	83.4%	...	57.0%	80.0%	...
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	68% [62–76%]	35% [32–39%] 13 900	...% [...–...%]
Children (0–14)	18% [14–21%]	18% [14–21%] 680	...% [...–...%]
Women (15+)	85% [78–94%]	45% [41–49%] 9800	...% [...–...%]
Men (15+)	54% [49–61%]	25% [22–28%] 3400	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	23% [18–28%]	93% [70– >95%]
Early infant diagnosis	4.6% [3.8–6.0%]	14.7% [12.5–19.4%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	2200 [1400–3200]
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)	No
— Safe injection rooms available (2019)	No

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	9400 [7300–12 000]	12 000 [9100–16 000]	14 000 [11 000–20 000]
New HIV infections (0–14)	2900 [2200–3800]	3100 [2300–4200]	3500 [2800–4900]
New HIV infections (women, 15+)	4100 [3000–5300]	5300 [4100–7400]	6700 [5000–9500]
New HIV infections (men, 15+)	2400 [1800–3200]	3200 [2500–4300]	4000 [2900–5700]
HIV incidence per 1000 population	0.65 [0.5–0.84]	0.69 [0.54–0.96]	0.78 [0.6–1.12]
AIDS-related deaths			
AIDS-related deaths (all ages)	5300 [4100–6700]	6500 [4800–8400]	6500 [5000–8700]
AIDS-related deaths (0–14)	2000 [1600–2500]	2100 [1600–2700]	2200 [1700–3000]
AIDS-related deaths (women, 15+)	2000 [1600–2600]	2300 [1600–3000]	2400 [1700–3300]
AIDS-related deaths (men, 15+)	1200 [940–1700]	2100 [1600–2700]	1900 [1500–2500]
People living with HIV			
People living with HIV (all ages)	120 000 [94 000–140 000]	140 000 [110 000–170 000]	150 000 [120 000–190 000]
People living with HIV (0–14)	18 000 [15 000–22 000]	18 000 [15 000–23 000]	19 000 [15 000–24 000]
People living with HIV (women, 15+)	63 000 [50 000–75 000]	75 000 [59 000–92 000]	85 000 [68 000–110 000]
People living with HIV (men, 15+)	38 000 [30 000–45 000]	43 000 [33 000–51 000]	48 000 [38 000–59 000]
HIV prevalence (15–49)	1.4 [1.1–1.6]	1.3 [1.1–1.6]	1.4 [1.1–1.7]

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	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 and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	2013	2015
	45.8	55.9

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

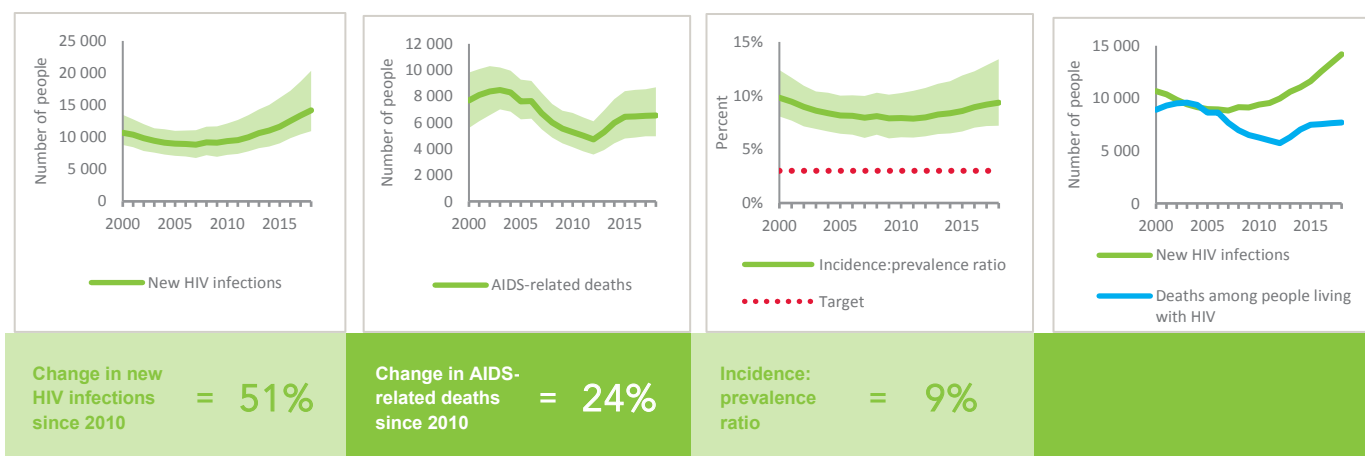
VIOLENCE

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	2006	2013
	21.5	26.9

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2012	\$207 918	\$6 136 480	\$388 726	\$9 560 778	\$3 322 622	\$21 794 990

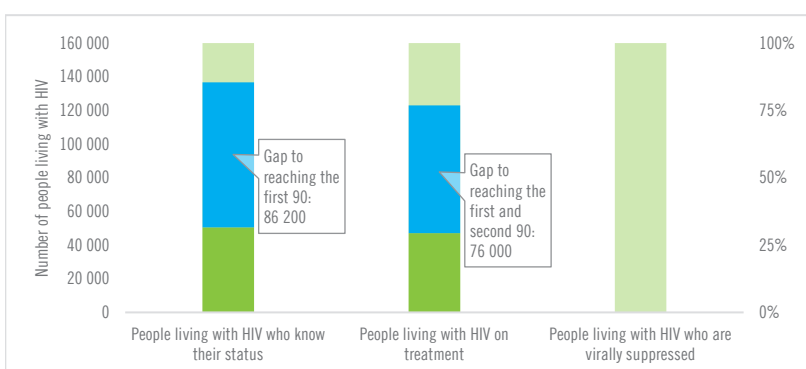
EPIDEMIC TRANSITION METRICS



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	...	13.7%	...	...	1.4%
Know their HIV status
Antiretroviral therapy coverage
Condom use	...	76.9%	...	...	...
Coverage of HIV prevention programmes
Avoidance of health care because of stigma and discrimination
Expenditures (0)

HIV TESTING AND TREATMENT CASCADE



	33% [26–41%]	31% [25–39%] 47 100	...% [...–...%]
All ages			
Children (0–14)	18% [14–23%]	18% [14–23%] 3400	...% [...–...%]
Women (15+)	37% [29–46%]	35% [28–44%] 30 100	...% [...–...%]
Men (15+)	33% [27–41%]	29% [23–36%] 13 600	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	28% [22–34%]	24% [19–31%]
Early infant diagnosis	6.1% [5.0–7.7%]	13.8% [10.7–16.9%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	1200 [740–1700]
People living with HIV who started TB preventive therapy (2017)	37%
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 (2015)	
— Women	20.4%
— Men	28.7%
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	...
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)	2
— 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 [<200– <500]	<200 [<100– <500]	<200 [<100– <500]
New HIV infections (0–14)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
New HIV infections (women, 15+)	<100 [<100– <100]	<100 [<100– <100]	<100 [<100– <100]
New HIV infections (men, 15+)	<200 [<100– <500]	<100 [<100– <200]	<100 [<100– <200]
HIV incidence per 1000 population	0.08 [0.05–0.12]	0.04 [0.02–0.07]	0.03 [0.02–0.07]
AIDS-related deaths			
AIDS-related deaths (all ages)	<500 [<500– <500]	<500 [<500– <500]	<500 [<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+)	<500 [<200– <500]	<500 [<200– <500]	<200 [<200– <500]
People living with HIV			
People living with HIV (all ages)	7100 [5900–8400]	6100 [5000–7600]	5600 [4500–7200]
People living with HIV (0–14)	<500 [<500– <500]	<500 [<500– <500]	<500 [<500– <500]
People living with HIV (women, 15+)	2200 [1900–2500]	2100 [1800–2500]	2000 [1700–2500]
People living with HIV (men, 15+)	4500 [3700–5500]	3700 [2900–4700]	3200 [2600–4300]
HIV prevalence (15–49)	0.4 [0.3–0.4]	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, death penalty
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	Yes
Mandatory HIV testing for marriage, work or residence permits or for certain groups	No

STIGMA AND DISCRIMINATION

	2011	2015
Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV (2011 refers to women only)	70.5	76

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

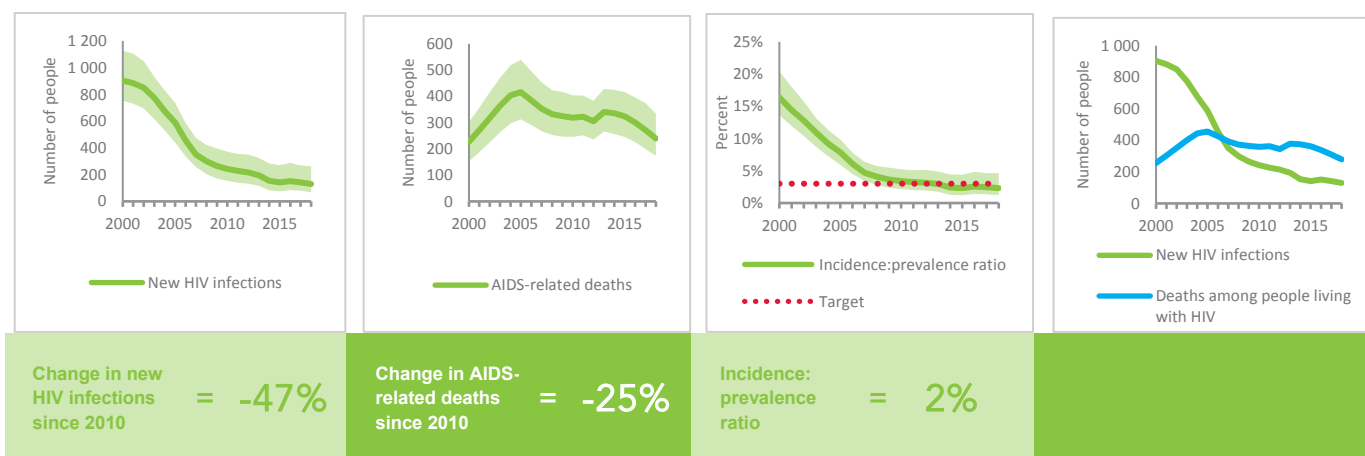
VIOLENCE

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: 2018	\$186 196	\$1 154 286	...	\$2 247 167	...	\$3 587 649

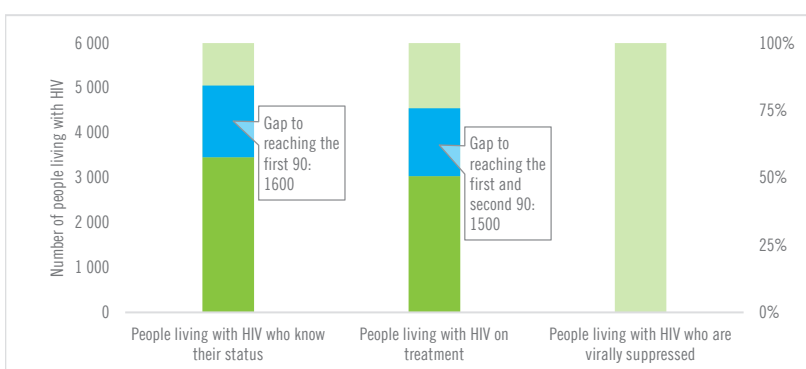
EPIDEMIC TRANSITION METRICS



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	4.0%	...	...	...	2.9%
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



	62% [50–79%]	54% [44–69%] 3000	...% [...–...%]
All ages			
Children (0–14)	54% [46–66%]	54% [46–66%] 180	...% [...–...%]
Women (15+)	77% [64–95%]	75% [63–93%] 1500	...% [...–...%]
Men (15+)	53% [42–70%]	41% [32–54%] 1300	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	16% [14–19%]	38% [31–47%]
Early infant diagnosis	...% [...–...%]	...% [...–...%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	160 [68–300]
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 (2015)	
— Women	8.3%
— Men	8.9%
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	...
— 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)	1500 [1100–2200]	1700 [1200–2400]	1700 [1200–2500]
New HIV infections (0–14)	<500 [<200– <500]	<500 [<500– <500]	<500 [<500–550]
New HIV infections (women, 15+)	620 [<500–920]	640 [<500–990]	640 [<500–990]
New HIV infections (men, 15+)	680 [<500–980]	680 [<500–1000]	670 [<500–1000]
HIV incidence per 1000 population	0.1 [0.07–0.14]	0.09 [0.06–0.13]	0.08 [0.06–0.12]
AIDS-related deaths			
AIDS-related deaths (all ages)	1700 [1300–2100]	1500 [1200–2000]	1200 [970–1700]
AIDS-related deaths (0–14)	<500 [<500– <500]	<500 [<200– <500]	<500 [<200– <500]
AIDS-related deaths (women, 15+)	<500 [<500–600]	<500 [<500– <500]	<500 [<500– <500]
AIDS-related deaths (men, 15+)	860 [650–1100]	970 [770–1200]	720 [560–970]
People living with HIV			
People living with HIV (all ages)	37 000 [32 000–42 000]	37 000 [31 000–43 000]	36 000 [30 000–43 000]
People living with HIV (0–14)	3800 [3200–4400]	2900 [2400–3500]	2500 [2100–3200]
People living with HIV (women, 15+)	15 000 [13 000–17 000]	17 000 [14 000–19 000]	17 000 [15 000–21 000]
People living with HIV (men, 15+)	18 000 [15 000–20 000]	17 000 [14 000–20 000]	16 000 [14 000–20 000]
HIV prevalence (15–49)	0.4 [0.4–0.5]	0.3 [0.3–0.4]	0.3 [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	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

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

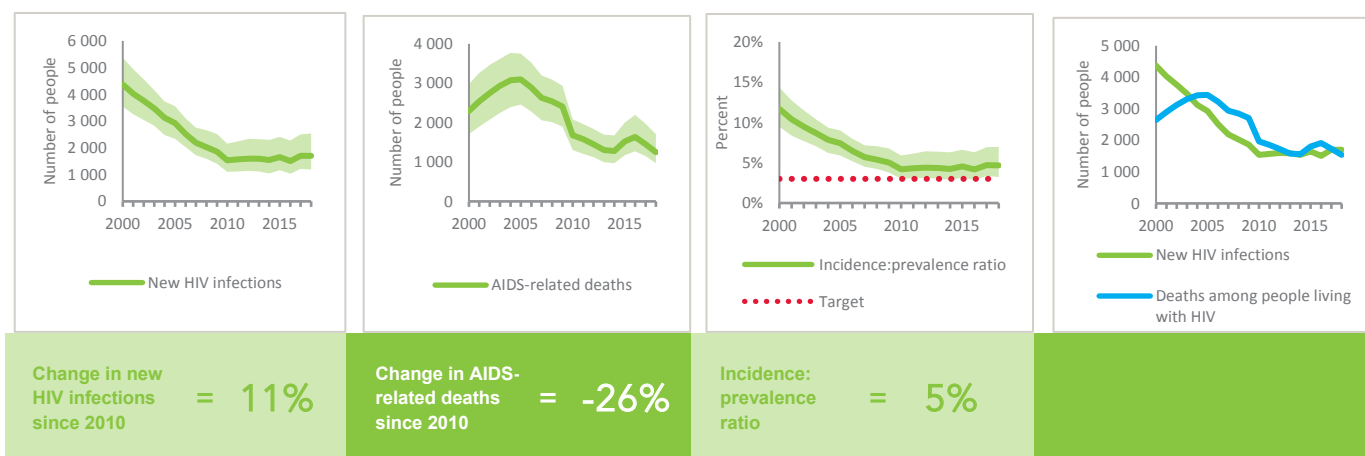
VIOLENCE

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	...	\$245 636	\$155 413	\$18 825 476	\$12 990 061	\$32 216 586

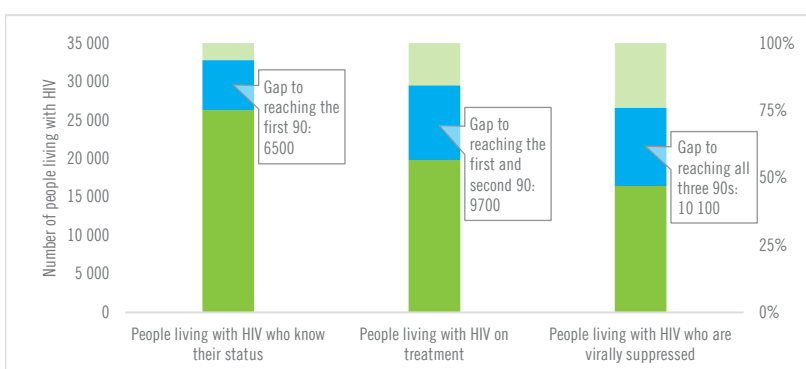
EPIDEMIC TRANSITION METRICS



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	17.0%	...	...	...	1.9%
Know their HIV status	35.7%	38.7%	...	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	88.0%	78.9%	...	...	...
Coverage of HIV prevention programmes	59.1%	46.4%	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2017)	\$0	\$0	\$0	...	...

HIV TESTING AND TREATMENT CASCADE



	72% [60–86%]	54% [45–65%] 19 800	45% [38–54%]
All ages			
Children (0–14)	52% [42–66%]	52% [42–66%] 1300	40% [32–50%]
Women (15+)	85% [71–>95%]	69% [58–82%] 12 000	58% [48–69%]
Men (15+)	62% [51–73%]	39% [32–46%] 6400	33% [27–39%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	>95% [>95–>95%]	58% [48–70%]
Early infant diagnosis	...% [...–...%]	7.7% [6.4–9.3%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	830 [530–1200]
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 (2018)	8%
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	15.8%
— Men	25.5%
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)	120 000 [74 000–190 000]	110 000 [71 000–180 000]	130 000 [77 000–200 000]
New HIV infections (0–14)	26 000 [15 000–41 000]	20 000 [11 000–32 000]	24 000 [14 000–38 000]
New HIV infections (women, 15+)	50 000 [30 000–80 000]	51 000 [31 000–81 000]	55 000 [33 000–87 000]
New HIV infections (men, 15+)	44 000 [26 000–72 000]	44 000 [26 000–73 000]	47 000 [28 000–77 000]
HIV incidence per 1000 population	0.77 [0.47–1.21]	0.65 [0.4–1.02]	0.65 [0.4–1.03]
AIDS-related deaths			
AIDS-related deaths (all ages)	72 000 [42 000–120 000]	51 000 [30 000–85 000]	53 000 [31 000–89 000]
AIDS-related deaths (0–14)	18 000 [9600–30 000]	13 000 [7000–22 000]	14 000 [7400–23 000]
AIDS-related deaths (women, 15+)	25 000 [13 000–44 000]	14 000 [7400–25 000]	14 000 [7300–25 000]
AIDS-related deaths (men, 15+)	30 000 [17 000–49 000]	24 000 [14 000–40 000]	26 000 [15 000–42 000]
People living with HIV			
People living with HIV (all ages)	1 500 000 [1 100 000–2 100 000]	1 700 000 [1 300 000–2 300 000]	1 900 000 [1 400 000–2 600 000]
People living with HIV (0–14)	150 000 [97 000–230 000]	140 000 [91 000–220 000]	140 000 [91 000–220 000]
People living with HIV (women, 15+)	740 000 [560 000–980 000]	890 000 [670 000–1 200 000]	1 000 000 [750 000–1 300 000]
People living with HIV (men, 15+)	640 000 [470 000–870 000]	710 000 [530 000–970 000]	770 000 [570 000–1 000 000]
HIV prevalence (15–49)	1.6 [1.2–2.1]	1.6 [1.1–2.1]	1.5 [1.1–2.1]

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	Yes, imprisonment (up to 14 years)
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 and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	2013	2016
	46.8	52.8

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

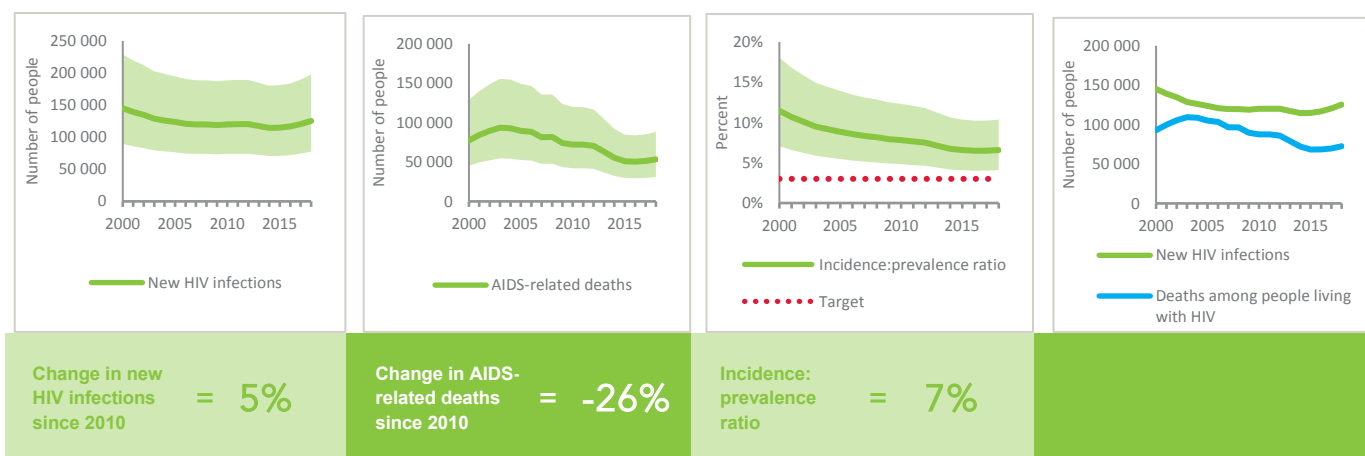
VIOLENCE

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	2008	2013
	14.7	11

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2018	...	\$10 477 615	\$355 972 445	\$73 035 769	...	\$439 485 829

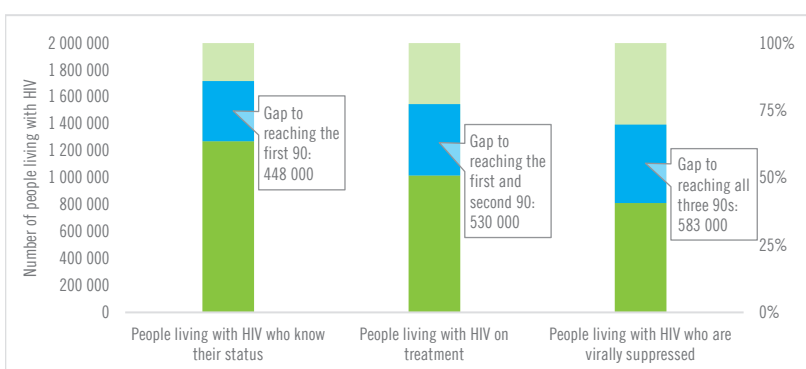
EPIDEMIC TRANSITION METRICS



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	14.4%	23.0%	3.4%	...	...
Know their HIV status	...	...	...	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	98.1%	...	83.2%	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2016)	\$19 577 441	\$7 593 767	\$8 398 306		

HIV TESTING AND TREATMENT CASCADE



	67% [49-89%]	53% [40-71%] 1 016 000	42% [32-57%]
All ages			
Children (0-14)	35% [22-53%]	35% [22-53%] 50 200	...% [...-...%]
Women (15+)	74% [55- >95%]	68% [51-90%] 678 000	...% [...-...%]
Men (15+)	63% [47-85%]	37% [28-51%] 288 000	...% [...-...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	27% [18-38%]	44% [28-62%]
Early infant diagnosis	9.7% [6.8-14.9%]	18.1% [12.8-28.0%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	58 000 [37 000 -85 000]
People living with HIV who started TB preventive therapy (2017)	39.5%
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	29.3%
— Men	27.9%

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	...
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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 (2017)	364
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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)	2100 [1700–2800]	1400 [970–2000]	1300 [860–1900]
New HIV infections (0–14)	880 [740–1100]	560 [<500–720]	<500 [<500–570]
New HIV infections (women, 15+)	770 [570–1100]	530 [<500–790]	550 [<500–810]
New HIV infections (men, 15+)	<500 [<500–660]	<500 [<500–<500]	<500 [<500–<500]
HIV incidence per 1000 population	0.17 [0.14–0.23]	0.1 [0.07–0.14]	0.08 [0.05–0.12]
AIDS-related deaths			
AIDS-related deaths (all ages)	1300 [1000–1800]	1700 [1300–2200]	1300 [1000–1600]
AIDS-related deaths (0–14)	640 [550–770]	540 [<500–650]	<500 [<500–<500]
AIDS-related deaths (women, 15+)	<500 [<500–530]	640 [<500–860]	<500 [<500–600]
AIDS-related deaths (men, 15+)	<500 [<500–<500]	510 [<500–650]	<500 [<500–550]
People living with HIV			
People living with HIV (all ages)	44 000 [39 000–50 000]	43 000 [38 000–49 000]	42 000 [37 000–47 000]
People living with HIV (0–14)	5700 [5000–6600]	5100 [4500–5900]	4500 [3700–5100]
People living with HIV (women, 15+)	25 000 [22 000–28 000]	25 000 [22 000–28 000]	25 000 [22 000–28 000]
People living with HIV (men, 15+)	14 000 [12 000–16 000]	13 000 [11 000–15 000]	12 000 [11 000–14 000]
HIV prevalence (15–49)	0.6 [0.5–0.6]	0.5 [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	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	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

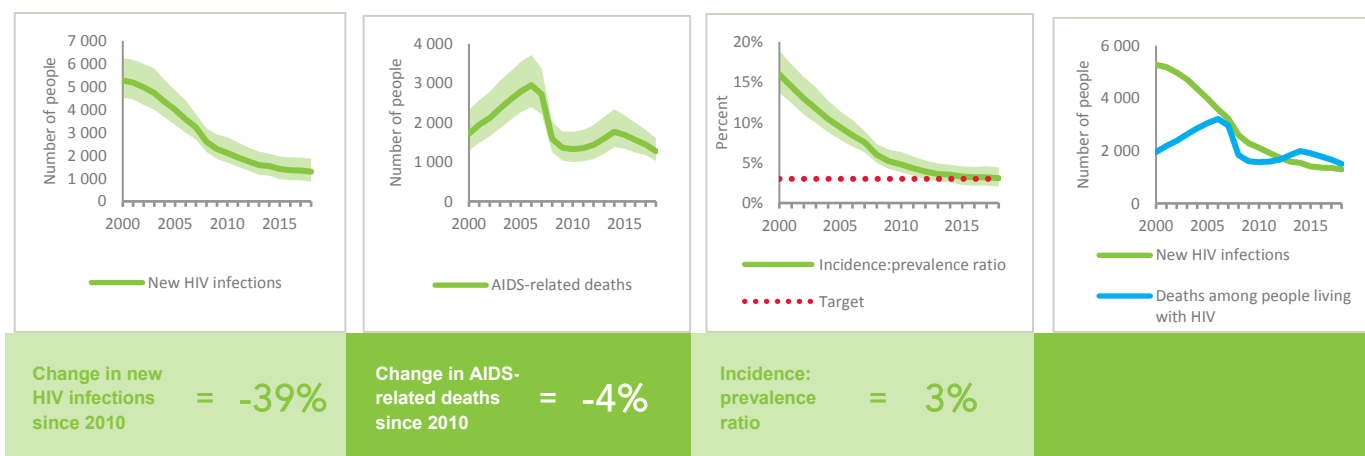
Percentage of women and men aged 15–49 years who report discriminatory attitudes towards people living with HIV	2013	2017
	53.4	65.5
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months	2012	
		2.7
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent	2012	
		3.1
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	2017	
		12.2

VIOLENCE

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2015	\$1 394 264	\$1 920 965	...	\$6 725 861	\$2 715 793	\$12 756 882

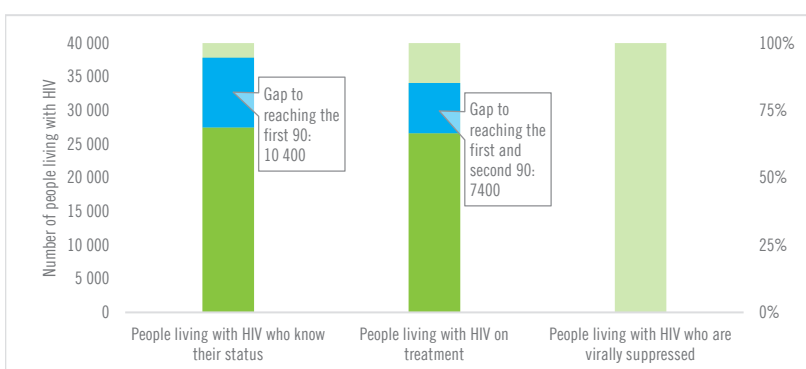
EPIDEMIC TRANSITION METRICS



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	...	...	3100	...	9500
HIV prevalence	6.6%	27.6%	1.6%	...	2.0%
Know their HIV status	...	63.4%	100%	...	...
Antiretroviral therapy coverage	19.7%	...	...	...	...
Condom use	94.1%	75.8%	...	...	...
Coverage of HIV prevention programmes	...	6.4%	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2015)	\$97 811	\$133 872	\$63 017	...	...

HIV TESTING AND TREATMENT CASCADE



	65% [57–74%]	63% [55–71%] 26 600	...% [...–...%]
All ages			
Children (0–14)	31% [26–35%]	31% [26–35%] 1400	...% [...–...%]
Women (15+)	74% [65–84%]	72% [63–81%] 18 000	...% [...–...%]
Men (15+)	60% [52–69%]	58% [50–66%] 7200	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	22% [19–25%]	65% [56–75%]
Early infant diagnosis	10.2% [8.9–11.8%]	23.8% [20.7–27.8%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	1200 [830–1600]
People living with HIV who started TB preventive therapy (2017)	2%
Cervical cancer screening of women living with HIV	...
People coinfectd with HIV and hepatitis B virus receiving combined treatment (2018)	95.9%
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	26.2%
— Men	33.1%
Condom use at last sex with a non-marital, non-cohabiting partner (2017)	
— Women	41.8%
— Men	70.8%
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2017)	54.1%
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	...
— Needles and syringes distributed per person who injects (2018)	3
— Coverage of opioid substitution therapy (2018)	23.8%
— Naloxone available (2019)	Yes
— Safe injection rooms available (2019)	...

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	5200 [4100–6500]	4700 [3400–6400]	4100 [2700–5700]
New HIV infections (0–14)	1300 [990–1700]	920 [670–1500]	680 [<500–930]
New HIV infections (women, 15+)	2300 [1800–2800]	2200 [1600–3000]	2000 [1300–2800]
New HIV infections (men, 15+)	1600 [1300–2100]	1600 [1100–2200]	1400 [900–2100]
HIV incidence per 1000 population	0.84 [0.67–1.05]	0.68 [0.48–0.92]	0.55 [0.36–0.77]
AIDS-related deaths			
AIDS-related deaths (all ages)	2900 [2400–3600]	2800 [2200–3500]	2100 [1600–2800]
AIDS-related deaths (0–14)	920 [700–1200]	740 [540–1000]	570 [<500–790]
AIDS-related deaths (women, 15+)	1100 [900–1400]	880 [650–1200]	630 [<500–840]
AIDS-related deaths (men, 15+)	880 [680–1100]	1200 [950–1500]	930 [700–1200]
People living with HIV			
People living with HIV (all ages)	58 000 [48 000–70 000]	66 000 [53 000–80 000]	70 000 [56 000–86 000]
People living with HIV (0–14)	7800 [6100–9700]	7400 [5800–9400]	6600 [5100–8500]
People living with HIV (women, 15+)	29 000 [25 000–36 000]	35 000 [29 000–43 000]	38 000 [31 000–47 000]
People living with HIV (men, 15+)	20 000 [17 000–25 000]	23 000 [19 000–28 000]	25 000 [19 000–31 000]
HIV prevalence (15–49)	1.5 [1.2–1.9]	1.5 [1.2–1.9]	1.5 [1.2–1.9]

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, 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	Criminalized
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	2011	2017
	51.2	72.1
Percentage of people living with HIV denied health services because of their HIV status in the last 12 months	2013	1.2
Percentage of people living with HIV who reported a health-care professional told others about their HIV status without their consent	2013	8

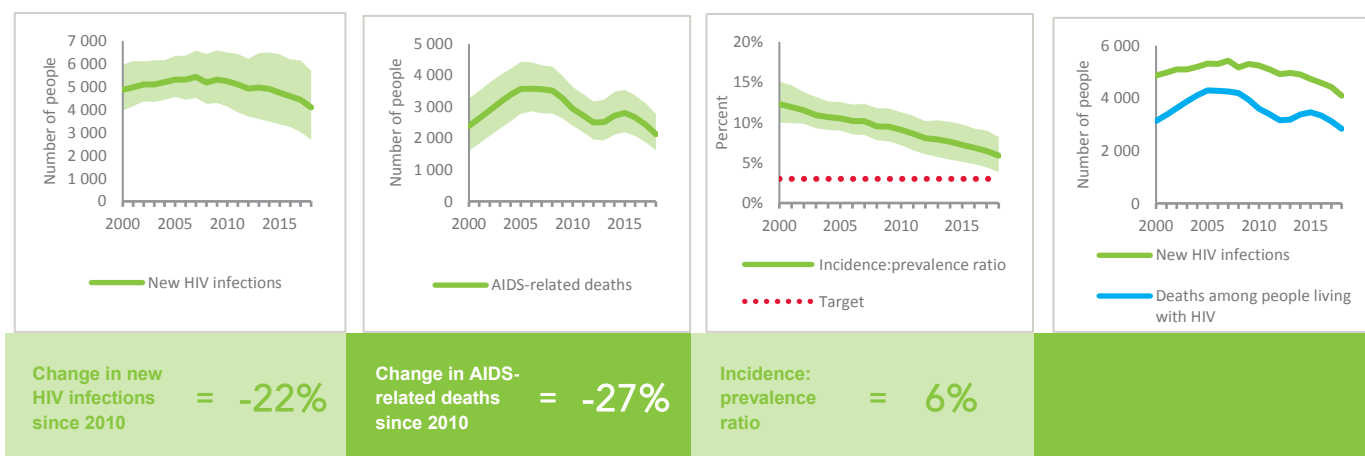
VIOLENCE

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	28.6
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EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2011	\$40 385	\$168 584	\$2 957 997	\$3000	\$3 394 829	\$20 905 243

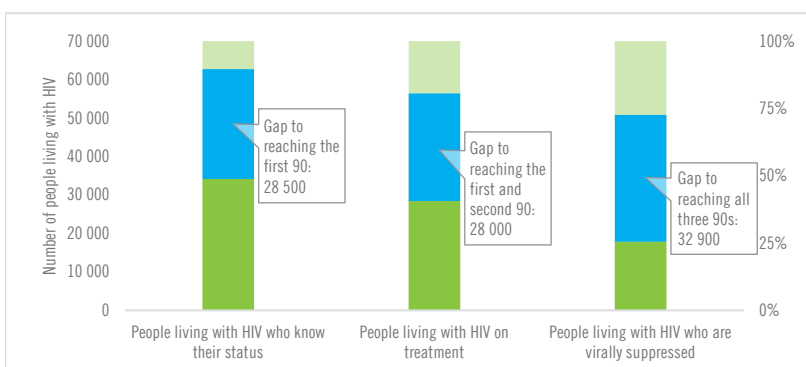
EPIDEMIC TRANSITION METRICS



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	...	...	...	...	...
HIV prevalence	6.7%	14.0%	8.5%	15.3%	8.7%
Know their HIV status	...	...	...	...	...
Antiretroviral therapy coverage	...	...	...	...	...
Condom use	14.9%	...	32.1%	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (0)	...	...	...	...	...

HIV TESTING AND TREATMENT CASCADE



	49% [39–60%]	41% [33–50%] 28 400	26% [21–32%]
All ages			
Children (0–14)	17% [13–22%]	17% [13–22%] 1100	8% [6–10%]
Women (15+)	61% [49–75%]	53% [42–64%] 20 300	34% [27–41%]
Men (15+)	38% [30–48%]	29% [22–36%] 7000	17% [13–22%]

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)	2800 [1800–4000]
People living with HIV who started TB preventive therapy (2017)	22.5%
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	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 (2014)	40.7%
— Needles and syringes distributed per person who injects	...
— Coverage of opioid substitution therapy	...
— Naloxone available (2019)	No
— Safe injection rooms available (2019)	Yes

EPIDEMIC ESTIMATES

	2010	2015	2018
New HIV infections			
New HIV infections (all ages)	7200 [6700–7700]	5700 [5200–6000]	5000 [4600–5300]
New HIV infections (0–14)	2400 [1800–2900]	1400 [1000–1700]	1200 [910–1500]
New HIV infections (women, 15+)	3000 [2700–3200]	2600 [2400–2800]	2300 [2100–2400]
New HIV infections (men, 15+)	1900 [1700–2100]	1700 [1500–1900]	1500 [1300–1600]
HIV incidence per 1000 population	1.28 [1.18–1.37]	0.87 [0.8–0.93]	0.7 [0.65–0.75]
AIDS-related deaths			
AIDS-related deaths (all ages)	5700 [5100–6300]	4900 [4300–5400]	3800 [3300–4200]
AIDS-related deaths (0–14)	1800 [1400–2000]	1200 [910–1400]	980 [760–1100]
AIDS-related deaths (women, 15+)	2300 [1900–2800]	1900 [1600–2300]	1200 [1000–1500]
AIDS-related deaths (men, 15+)	1600 [1500–1800]	1800 [1600–2000]	1600 [1400–1700]
People living with HIV			
People living with HIV (all ages)	100 000 [96 000–110 000]	110 000 [99 000–120 000]	110 000 [100 000–120 000]
People living with HIV (0–14)	16 000 [14 000–18 000]	14 000 [12 000–16 000]	12 000 [11 000–14 000]
People living with HIV (women, 15+)	54 000 [50 000–58 000]	58 000 [53 000–62 000]	60 000 [56 000–65 000]
People living with HIV (men, 15+)	34 000 [31 000–37 000]	35 000 [32 000–38 000]	35 000 [32 000–38 000]
HIV prevalence (15–49)	2.9 [2.6–3.1]	2.5 [2.3–2.7]	2.3 [2.1–2.5]

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 (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	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 **2014**
45.8

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

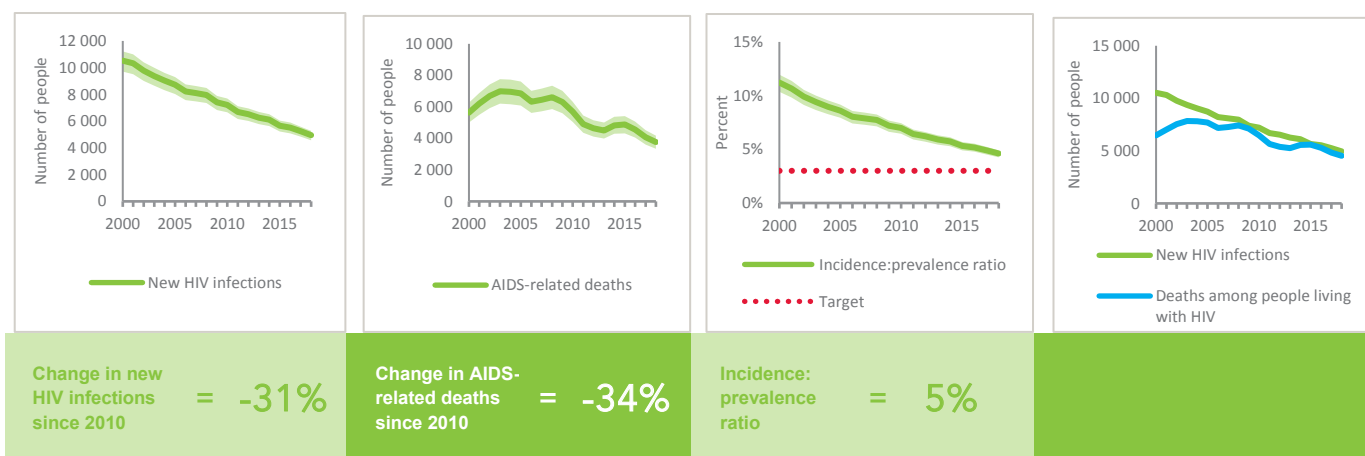
VIOLENCE

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 **2014**
12.7

EXPENDITURES

	Financing sources					Total
	Domestic private	Domestic public	International: PEPFAR	International: Global Fund	International: all others	
Last available report: 2017	\$2 695 359	\$4 799 019	...	\$26 668 417	\$4 709 604	\$38 872 399

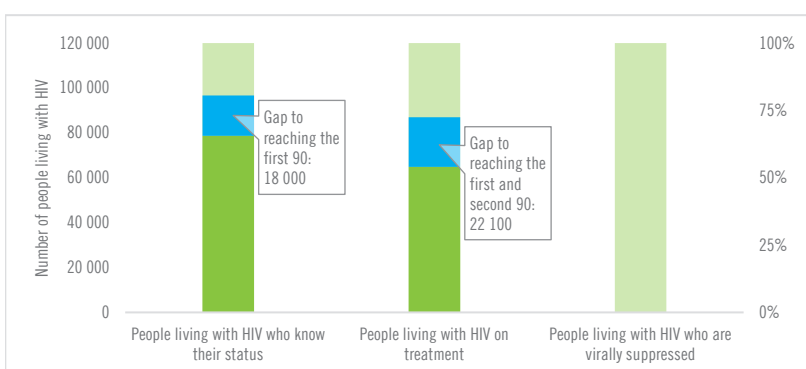
EPIDEMIC TRANSITION METRICS



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	...	...	...	...	5200
HIV prevalence	13.2%	22.0%	...	...	...
Know their HIV status	96.8%	95.4%	44.7%	...	...
Antiretroviral therapy coverage	23.7%	14.1%	1.0%	...	...
Condom use	86.4%	80.2%	...	...	...
Coverage of HIV prevention programmes	...	...	...	...	...
Avoidance of health care because of stigma and discrimination	...	...	...	...	...
Expenditures (2016)	\$162 508	\$403 423	\$0	...	...

HIV TESTING AND TREATMENT CASCADE



	73% [68–79%]	60% [56–65%] 64 800	...% [...–...%]
All ages			
Children (0–14)	34% [29–38%]	34% [29–38%] 4200	...% [...–...%]
Women (15+)	84% [77–91%]	72% [67–79%] 43 700	...% [...–...%]
Men (15+)	69% [63–76%]	49% [45–54%] 17 000	...% [...–...%]

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION

	2010	2018
Percentage of pregnant women living with HIV accessing antiretroviral medicines	16% [12–18%]	80% [62–92%]
Early infant diagnosis	16.6% [14.5–21.4%]	46.0% [40.0–59.1%]

HIV COMORBIDITIES

Estimated number of incident tuberculosis cases among people living with HIV (2017)	580 [380–830]
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	23.3%
— Men	31.6%
Condom use at last sex with a non-marital, non-cohabiting partner (2014)	
— Women	42.9%
— Men	60.7%
Women aged 15–49 years who have their demand for family planning satisfied by modern methods (2014)	37.4%
Men aged 15–49 years who are circumcised (2014)	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



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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