Part 02
Where services are needed

Part 2 of this report presents data on HIV epidemics and the number of people who need HIV services within maps of 29 of the 35 Fast-Track priority countries that account for 90% of the people newly infected with HIV worldwide. These data are disaggregated by the first and sometimes second administrative levels, highlighting the heterogeneity of countries’ HIV epidemics and variation in service coverage.

The variables shown in these maps include the following.

- The number of adolescent girls and young women (15–24 years old) who were newly infected with HIV in 2014. Young women focus in these maps because they comprise a disproportionate share of the people newly infected with HIV in many Fast-Track priority countries. The data are estimates developed by subnational models. In a few cases (Malawi, Mozambique, Namibia and Swaziland), data on women 15–49 years old were used because data for women 15–24 years old were not available. For Botswana, the number of women newly infected in this age group was not available, and the HIV prevalence among women 15–24 years old is therefore presented.

- The number of people (both adults and children) living with HIV who are not receiving antiretroviral therapy. When possible, treatment coverage data for mid-2015 have been used. Countries submitted the number of people receiving antiretroviral therapy by province or region in the Global AIDS Response Progress Reporting in mid-2015. The numbers of people living with HIV are subnational estimates modelled by countries in 2015.

- The number of adults (15-49 years old) living with HIV who have never been tested. The calculations for these maps are derived from household surveys in which respondents are tested for HIV but are not provided with the survey test results. In the same survey, they also report having never been tested for HIV. Where these data are available, they show an interesting pattern of where additional testing is needed. The proportion of people living with HIV who have never been tested comes from the household survey and the number of people living with HIV (15–49 years old) is derived from subnational HIV estimates.
The percentage of the general adult population (15–49 years old) with discriminatory attitudes toward people living with HIV. The variable is defined as the percentage of adults 15–49 years old who state “no” to the following question: “Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?” Where this percentage is high, more information, education and communication efforts are needed.

Population size estimates and HIV prevalence estimates for key populations. Many countries have sparse data on key populations. The lack of data identifies areas in which data collection efforts are needed. The key population maps show two data points when available. The colour of the regions identifies the estimated size of the key population. The number written above the region is the estimated prevalence for the key population in that region.

The maps provide a quick overview of the information HIV programme managers can use to focus their response on the geographical areas in greatest need. Each map includes a short text of background information.
Botswana

Overview
Geographically, the Kgalagadi Desert covers about 70% of the area of Botswana, with most of the population being located in the northern and eastern parts of the country. This is also the location of the cities, Gaborone and Francistown. HIV has spread primarily along the eastern corridor, which has the country’s busiest roads and trucking routes; it thus remains clustered in the northern and eastern parts of the country. With a relatively good transport system and roads, the population is highly mobile, and there is therefore no significant disparity between urban and rural areas in HIV prevalence.

The epidemic in Botswana is dynamic and heterogeneous, affecting different subpopulations and locations differently. There is a strong gender disparity in HIV prevalence. The age group with highest HIV prevalence is 35–39 years old at 44%; the prevalence is even higher among women in this age group: 51%. The burden of disease is more concentrated in the northern parts of the country than in the southern parts. The HIV prevalence ranges from 11% in Kgalagadi South to 27% in Selebi-Phikwe, a mining town in the eastern part of the country.

Progress
Important achievements have been made in reducing the number of people newly infected with HIV in Botswana by providing such services as HIV testing and counselling, safe male circumcision, services for preventing mother-to-child transmission and antiretroviral therapy for those eligible for HIV treatment. In its latest proposal for the Global Fund to Fight AIDS, Tuberculosis and Malaria and Country Operational Plan of the United States President’s Emergency Plan for AIDS Relief (PEPFAR), Botswana incorporated the geographical disparity in the HIV epidemic to adjust the services and resources appropriately.

Botswana has made significant progress in preventing mother-to-child transmission. A successful treatment programme has resulted in the number of people dying from AIDS-related causes declining by about 70% in the past 10 years.

Opportunities
With the available new evidence, the country is in the process of moving towards a treat all policy, and this could greatly enhance the Fast-Track move towards achieving the 90–90–90 treatment target.

The need for services is clustered near the capital city and other major cities, enabling cost efficiency in reaching people living with HIV treatment services and key populations with prevention services.
Special attention needs to be paid to prevention programmes for adolescents and young adults. Programmes should be designed to help these people understand their risk of HIV infection. Initiatives are in place to strengthen the adolescent and youth component of HIV programmes through assessments that determine who is most affected, where and what specific interventions are required to reach them. Comprehensive sexuality education, condom programming for youth and providing youth-friendly services have been identified as key gaps in youth programming.

**Botswana map 1**

**HIV prevalence among women (20–24 years old), 2013**

The overall HIV prevalence among women 20–24 years old (16%) is three times higher than among men in the same age group (5%). Eight districts had HIV prevalence rates exceeding 20% for all women, but no districts had a prevalence rate exceeding 20% for men. The high-prevalence districts for this age group include three mining town areas and one tourist town, and the rest are situated along the eastern corridor.

Brazil

Overview
Most of the population of Brazil is located on the east coast of the country, with major cities located in the south-east. The HIV epidemic is currently considered to be stable in Brazil, based on the relatively constant detection rate of around 20 people newly infected per 100,000 population during the past five years. However, the incidence varies between states. To address the regional disparities, the Department of STI, AIDS and Viral Hepatitis is focusing specific action and policies on these regions through a task force approach involving civil society and the three levels of government: federal, state and municipal.

Progress
Brazil was one of the first countries to implement the treat all strategy of providing antiretroviral therapy to all people living with HIV regardless of CD4 count. Health-related scientific progress is most effective when guided by respect for human rights and combating prejudice and discrimination. Brazil has adopted a zero-discrimination strategy by enacting a law that criminalizes discriminatory conduct towards people living with HIV.

Opportunities
Brazil has a strong commitment to reaching the 90–90–90 treatment target by strengthening and expanding combination prevention strategies and reducing the gaps in the HIV continuum of care. Specific plans include: reducing the number of people living with HIV who have not started antiretroviral therapy; implementing new forms of diagnosis and treatment, including shared HIV management in primary care and scaling up the availability of high-quality health services; and committing all segments of Brazilian society to remove social and cultural barriers to ensure that the most vulnerable groups have access to health services.
The largest numbers of people living with HIV who know their status are in the south-eastern part of Brazil. Overall, the proportion of people living with HIV who know their status and who are receiving antiretroviral therapy is quite high in Brazil.

The recent change in national guidelines to the treat all strategy has enabled treatment options to be simplified, thus enabling additional points of HIV care to reach more people living with HIV.

Source: Department of STI, AIDS and Viral Hepatitis, Government of Brazil.
Overview
The population of Cameroon is unevenly distributed over the national territory, with large populations in the regions of Extrême-Nord, Centre and Littoral. The urban proportion is 45%, with high concentrations in Douala and Yaoundé (about 2.7 million inhabitants each). Most of the population is located in the south-western part of the country. HIV has spread primarily along the trucking routes and thus remains clustered in the South.

Progress
Efforts in recent years have led to more than 145 000 people living with HIV receiving antiretroviral therapy by December 2014, and about 158 000 by the end of July 2015. Important achievements have been made in reducing the number of new HIV infections in Cameroon through outreach to sex workers and other vulnerable populations, such as truck drivers. In its latest national strategic plan, proposal for the Global Fund to Fight AIDS, Tuberculosis and Malaria and Country Operational Plan of the United States President’s Emergency Plan for AIDS Relief (PEPFAR), Cameroon incorporated the geographical disparity in the HIV epidemic to adjust the services and resources appropriately.

Opportunities
The need for services is clustered near the capital city, Yaoundé, and two other major cities, Douala and Bamenda, enabling cost-efficiency in reaching people living with HIV with treatment services and key populations with prevention services.
New infections among women (15–24 years old), 2014

The North-west and the Centre regions have the highest rates of new HIV infections among young women. In response, Cameroon is focusing prevention efforts in these areas through PEPFAR programmes. The other regions with many new HIV infections among young women will benefit from Global Fund support to implement activities targeting young women.

In the next two years, the national HIV programme will intensify prevention of mother-to-child transmission community services in these regions to increase the number of pregnant women HIV tested and initiating treatment, and to improve the retention on treatment of mothers and children. This will reinforce the cascade of prevention of mother-to-child transmission services and the related monitoring.

Focus on location and population

Number of people living with HIV not receiving antiretroviral therapy, mid-2015

Besides Yaoundé, the regions with the greatest antiretroviral therapy gap are in the western part of Cameroon. In part, the currently low coverage levels in the western regions are due to challenges in transport.

Female sex workers: population size estimate and HIV prevalence, 2014

The HIV prevalence among female sex workers is high in some of the main cities, including the two largest: Yaoundé (Centre region) and Douala (Littoral region). Prevention efforts were redoubled in these regions in the past year.

Men who have sex with men: population size estimate and HIV prevalence, 2013

Although the HIV prevalence among men who have sex with men is quite low in most regions, it was very high in Yaoundé and Douala. Additional outreach and services are needed in Douala and Yaoundé. The CHAMP project is already responding to this need in the field.

IMPORTANT ACHIEVEMENTS HAVE BEEN MADE IN REDUCING THE NUMBER OF NEW HIV INFECTIONS IN CAMEROON THROUGH OUTREACH TO SEX WORKERS AND OTHER VULNERABLE POPULATIONS, SUCH AS TRUCK DRIVERS.
Overview
The majority of the population of Chad reside in the southern provinces. Higher HIV prevalence has been observed in the area of Lake Chad, which borders on Cameroon, Niger and Nigeria. Although there has been progress in reducing new infections among key populations and through mother-to-child transmission, achievements are still inadequate. Greater efforts are needed to ensure effective coordination within regions and at the national level to achieve optimal use of resources and improve service coverage, accessibility and use.

Progress
The number of people living with HIV accessing treatment has steadily increased. Training community volunteers based on harmonized tools has strengthened community-based prevention activities, including scaling up the provision of services for preventing mother-to-child transmission.

Opportunities
Implementation of the new World Health Organization treatment recommendations has led to an increase in the number of people living with HIV who are accessing treatment. Additional resources will be needed to continue expanding treatment access, especially as free treatment is provided by the Government through external funding. Social marketing has contributed to the availability of high-quality condoms and removing geographical, cultural and financial barriers to their use. The decentralization of HIV services is an opportunity to reach most of the population.
Chad map 1

Percentage of adults (15–49 years old) who have discriminatory attitudes towards people living with HIV, 2010

Discriminatory attitudes are highest in the far north of the country, where HIV prevalence is low and many people are not familiar with HIV. Activities to raise awareness about HIV and non-discrimination towards people living with HIV and key populations among health-care workers, employers and the general population are planned. It is also planned to provide legal support for people living with HIV to enable them to seek redress for rights violations.

Source: 2010 Multiple Indicator Cluster Survey.
Overview

HIV was first identified in China in 1985, followed by an outbreak among people who inject drugs in the border regions in the south-western part of China in 1989 and among former plasma donors in central China around 1995. In recent years, sexual transmission (including heterosexual and between men) has become the dominant mode of HIV transmission.

The HIV epidemic in China has significant geographical diversity. Yunnan, Sichuan, Guangxi, Xinjiang, Guangdong and Henan provinces are each estimated to have more than 50,000 people living with HIV; together, they account for 65% of the estimated national figure.

Clear evidence indicates a significant epidemic among men who have sex with men, with increasing trends in HIV prevalence despite implementation of core programme components. Heterosexual transmission represents a significant proportion of the people newly infected with HIV identified in China. Current data from sentinel surveys suggest that the annual number of people newly infected through heterosexual transmission is fairly stable. However, given the size of the general heterosexual population and potential impact of further spread in this population, investment must focus on this population to better understand risks and identify ways to mitigate the spread of HIV.

Progress

China has made significant progress in its response to the HIV epidemic, with positive results noted to date. These include successful harm-reduction approaches for people who inject drugs, which is now considered to be a global best practice, the reduction of secondary transmission within serodiscordant couples, the reduction of mother-to-child transmission of HIV, which has shown decreased HIV transmission rates in recent years, and significant scale-up of antiretroviral therapy consistent with World Health Organization treatment guidelines.
Opportunities

Although programme implementation and coverage have improved in China, there are challenges that need to be addressed including late diagnosis of HIV, heterosexual HIV transmission, HIV transmission among men who have sex with men, of people dying from AIDS-related causes and mother-to-child transmission.

China has the potential to bring forward innovation in approaches and strategies that will bring it closer to the goals for ending the AIDS epidemic. Building on the experiences learned globally and considering the local context, China is increasingly taking steps to go beyond its initial success in rolling out large-scale programmes, and it is focusing on how to reach the people who are currently not sufficiently reached by prevention, treatment and care services.
Men who have sex with men: population size estimate and HIV prevalence

The HIV epidemic is growing among men who have sex with men in all provinces, municipalities and autonomous regions. The national HIV prevalence among men who have sex with men increased 5.5-fold in a decade, from 1.4% in 2005 to 7.7% in 2014. The proportion of newly diagnosed HIV cases attributed to male homosexual contact increased from 3.4% in 2007 to 25.8% in 2014.

The HIV epidemic among men who have sex with men varies geographically and temporally. Provinces in the south-east and north-east regions consistently exhibit higher prevalence levels than other parts of China (the prevalence exceeded 20% in several megacities in the south-east provinces). The HIV prevalence in municipalities and capital cities of provinces (10.7%) was significantly higher than in other non-capital cities (6.3%). In megacities such as Beijing, Shanghai, and Tianjin, the proportion of newly diagnosed HIV cases attributed to male homosexual contact is as high as 75%.

Currently, men who have sex with men represent about 2–4% of the sexually active men in China (5–10 million).

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Côte d'Ivoire

Overview
Most of the population of Côte d’Ivoire is located in the south-eastern part of the country, in and around Abidjan, the economic capital, which is both the largest and the most populous city (4.7 million inhabitants). HIV has spread primarily along the trucking routes and thus remains clustered in the southern part of the country.

Progress
The epidemic in Côte d’Ivoire is more severely affecting women, with an HIV prevalence of 4.6% for women versus 2.7% for men according to the Demographic and Health Survey for 2011–2012. In addition, three key populations at higher risk of HIV infection have extremely high prevalence: sex workers (29%), men who have sex with men (19%) and the prison population (28%).

Important achievements have been made in reducing the number of people newly infected with HIV in Côte d’Ivoire through outreach to sex workers and other vulnerable populations, such as truck drivers. In its latest national strategic plan, the country incorporated the geographical disparity in the HIV epidemic to adjust the services and resources appropriately. In addition, targeted services are implemented across the country.

Opportunities
The need for services is clustered near the major cities, enabling cost-efficiency in reaching people living with HIV with treatment services and key populations with prevention services. In addition, the strong mainstreaming of gender in most of the programmes has reduced the vulnerability to acquiring HIV among vulnerable populations and key populations at higher risk of HIV infection.
Women (15–24 years) old newly infected with HIV, 2014

The number of young women newly infected with HIV is larger in the regions in the southern part of the country along the coast. Programmes to reach these provinces have been developed and are being implemented. However, the uptake of prevention services among young people needs to be strengthening. According to the 2011–2012 Demographic and Health Survey, 20% of women and 14% of men 15–24 years old have their first sexual intercourse before age 15 years. Knowledge among women is still limited: according to the Demographic and Health Survey, only 16% of women 15–24 years old were able to correctly identify how to prevent acquiring HIV and misconceptions about HIV transmission.
In Côte d’Ivoire, antiretroviral therapy has been free of charge for the entire population since 2008. The prefectures with the largest numbers of people who need antiretroviral therapy are along the coast, where most of the people living with HIV reside and most of the HIV services are available. The current decentralization of care and treatment services needs to be strengthened.

Stigma and discrimination are still frequent in Côte d’Ivoire. The regions with the highest discriminatory attitudes are also the regions with some of the lowest HIV prevalence. The discrimination needs to be addressed through information and education campaigns to reduce the discriminatory attitudes.

Source: 2012 Demographic and Health Survey.
Democratic Republic of the Congo

Overview
The Democratic Republic of the Congo’s most populated regions are Kinshasa, Katanga, Kasai Occidental, Kasai Oriental, Maniema and Orientale province. Seven provinces where the largest cities are located have the highest HIV prevalence and are home to 75% of people living with HIV. The majority of key populations, including sex workers, men who have sex with men and mobile populations, are in the cities of Kinshasa and Lubumbashi in Katanga. In Orientale Province, sexual and gender-based violence has been reported in humanitarian and conflict contexts. Challenges include the facts that 84% of young women have never been tested for HIV and people younger than 18 years of age cannot access HIV testing without parental consent.

Progress
Since 2000, the number of new HIV infections has declined by 34%, and AIDS-related deaths have declined by 26%. Between 2011 and 2014, access to services to prevent mother-to-child transmission and treatment for people living with HIV has improved. HIV prevention and care services for sex workers and men have who have sex with men have been implemented in the cities of Kinshasa, Kisangani, Matadi and Lubumbashi. Lessons learned and preliminary data have informed national strategic plans, prioritizing key populations and young women as well as geographical focus on Kinshasa, Katanga and Orientale provinces in the concept note of the Global Fund to Fight AIDS, Tuberculosis and Malaria and the PEPFAR Country Operational Plan.

Opportunities
The need for services is clustered in and around the capital and other major cities, allowing for cost-efficiency in reaching people living with HIV with treatment and key populations with prevention services. Coordination among partners to increase synergy, harmonization and efficiency and to avoid duplication at the operational level, as well as city-led action plans that involve communities, including key populations, people living with HIV and youth networks, provide further opportunities to reach people needing HIV services.
New infections among women (15–24 years old), 2014

In 2014, new HIV infections among young women occurred mainly in Katanga, Maniema, Orientale, Kinshasa and Kasai Oriental provinces.

Katanga and Kinshasa provinces have benefited from the successful pilot of Option B+, with support from UNAIDS, UNICEF, WHO and PEPFAR.

HIV prevention programmes and prevention of mother-to-child transmission coverage among young women is low, particularly in Maniema, Province Orientale, Kasai Oriental and Kasai Occidental. Katanga Province has been prioritized in the 2015 PEPFAR Country Operational Plan.

Source: Democratic Republic of the Congo 2014 preliminary subnational estimates.
An estimated 81% of people living with HIV in the Democratic Republic of the Congo are concentrated in the provinces of Kinshasa, Katanga, Kasai Occidental, Kasai Oriental, Maniema and Oriental. Antiretroviral therapy coverage is less than 10% in Kasai-Oriental and Maniema.

Treatment coverage scale-up is planned in Maniema and Kasai through a grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria. Katanga Province has been prioritized in the PEPFAR Country Operational Plan to reach the 90–90–90 treatment targets.

Stigma and discrimination towards people living with HIV are strongly affecting the HIV response across the country. Discriminatory attitudes are highest in the Bas Congo, Bandundu and Kasai Oriental provinces.

UNAIDS and UNDP are currently implementing a project on HIV and the law with parliament, ministers, lawyers and the police in Bas Congo, Bandundu, Kasai Oriental, Kinshasa and Nord Kivu to address these challenges.
Female sex workers: population size estimate and HIV prevalence, 2012

While size estimates are not available for several provinces, the available data indicate there are large numbers of female sex workers in Katanga, Kinshasa and Orientale provinces. HIV prevalence is more than 10% in Kinshasa, Lubumbashi and Mbuji Mayi.

Condom distribution and social support programs for sex workers are currently being implemented in Lubumbashi, Kisangani and Matadi.

Sources: Enquête intégrée de surveillance comportementale et de seroprevalence en Republique Democratique du Congo: Ministère de la Santé Publique: rapport d’enquête, Mars 2014
Rapport de l’enquête sur l’estimation de la taille des populations clés dans six provinces (Bas Congo, Katanga, Kinshasa, Orientale, Nord et Sud Kivu) en RDC.
Présidence de la République. Programme National multisectoriel de lutte contre le SIDA (PNMLS).
Since 2000, the number of new HIV infections has declined by 34% in the Democratic Republic of the Congo, and AIDS-related deaths have declined by 26%.
Overview

The population of Ghana is concentrated in the southern part of the country along the coast and in the far North. National adult HIV prevalence is less than 2%, with much of the transmission occurring among key populations at increased risk to HIV.

Progress

Access to life-saving antiretroviral therapy has been increasing dramatically in Ghana. The number of antiretroviral therapy sites in Ghana increased from just 5 in 2004 to 197 in 2014, and more than 14,500 more people initiated treatment in 2014 alone. The number of people newly infected with HIV across all ages declined by 46% (more than the target of 20%) from an estimated 21,000 in 2004 to 11,000 in 2014, thereby reversing the epidemic. The number of people dying from AIDS-related causes declined by 52%, from an estimated 19,000 to 9,200 during the same period. Mapping, size estimation, behaviour and biological surveys have been conducted for sex workers, men who have sex with men and prisoners, and innovative outreach services have been intensified among these key populations and also among people with disabilities. In its latest successful proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), Ghana incorporated the geographical disparity in the HIV epidemic to adjust services and resources appropriately.

Opportunities

As Ghana moves into the implementation phase under the new funding mechanism of the Global Fund, HIV prevention, treatment and care services need to be intensified in the major cities and fragile communities with high HIV prevalence to enable cost-efficiency, accelerate the downward trend of the number of people newly infected with HIV and move towards eliminating the mother-to-child transmission of HIV. Both prevention and treatment programmes need to accelerate and improve access to HIV testing and counselling, thereby identifying people living with HIV, improving comprehensive knowledge and condom use, especially among young people, and increasing the number of people receiving treatment and having their viral load...
suppressed. The level of stigma and discriminatory attitudes towards people living with HIV needs to improve if the country is to achieve its target of zero discrimination towards people living with HIV, and this provides the opportunity to intensity anti-stigma campaigns, mobilize HIV networks, build the capacity of policy-makers for monitoring policy and public accountability, and actively involve all stakeholders in anti-stigma dialogue and education.

_Ghana map 1_

**Percentage of people (15–49 years old) who have discriminatory attitudes towards people living with HIV, 2014**

The level of stigma in Ghana varies from region to region, with the percentage of adults with discriminatory attitudes towards people living with HIV being higher in the Northern Region and lowest in the Greater Accra Region.

Sources: Demographic and Health Survey.
Female sex workers: population size estimate and HIV prevalence, 2011

HIV prevalence among and population size of female sex workers have been measured and mapped. A behavioural surveillance survey was conducted among clients across the country in 2011. The overall HIV prevalence among female sex workers was estimated to be 11%. The Greater Accra, Eastern and Ashanti regions have the highest numbers of female sex workers. Programming to promote 100% condom use, HIV testing and antiretroviral therapy among female sex workers, all offered without stigmatizing attitudes, is crucial to reduce the number of people newly infected with HIV in these regions.

Men who have sex with men: population size estimate and HIV prevalence, 2011

The HIV prevalence among men who have sex with men has only been measured in three sites. Prevalence was high in each site; Accra had the highest prevalence and the largest population of men who have sex with men. Programming to promote condom use, HIV testing and antiretroviral therapy among men who have sex with men in a non-stigmatizing environment in both public and private service centres is crucial to reversing the epidemic in this subpopulation in these three cities.

Haiti

Overview
Much of the population in Haiti is located in the western part of the country. This is also the location of the largest cities, where HIV has spread primarily by heterosexual intercourse among people 25–39 years old. In the general population, the HIV prevalence is higher in urban areas.

Five years after the disastrous earthquake, Haiti has made significant strides to recover and move forward. The accessibility and quality of HIV clinical services are being improved, health-care infrastructure is being built and surveillance and epidemiology, laboratory and health management information systems are being strengthened. A special focus is preventing HIV transmission by providing care and treatment to people living with HIV and preventing mother-to-child transmission.

Progress
Important achievements have been made in reducing the number of people newly infected with HIV in Haiti through services for preventing the mother-to-child transmission of HIV with the implementation of Option B+, increased availability and use of antiretroviral therapy, and increased condom use through education and availability.

In 2006, about 20 institutions offered antiretroviral therapy services. In 2015 there are 134, with coverage in every department and province. In addition, the programme for preventing the mother-to-child transmission of HIV assures that all pregnant women will be tested and that treatment is available for children.

Opportunities
Programmes addressing the most severely affected groups are among the new developments in the HIV response, including the All In initiative for adolescents. Implementing test and treat will promote progress towards reaching the 90–90–90 treatment target.

Alternative methods of mobilizing resource are being explored to address decreasing funding leading to the loss of skilled workers and the closing of clinics.
New infections among women (15–24 years old), 2014

The highest estimated numbers of people newly infected with HIV live in the Nord-Ouest, Ouest and Artibonite regions.

Women 15–19 years old are a particularly vulnerable segment of the population because of the absence or inadequacy of sexual education, resulting in experimentation with drug use, alcohol consumption or sex work. Moreover, they are often victims of sexual violence.

The ambitious adolescent initiative All In has been officially inaugurated with the aim of addressing this specific population.

Focus on location and population

Number of people living with HIV not receiving antiretroviral therapy, 2014

The most populous part of the country has the greatest gap in antiretroviral therapy coverage: the Ouest and Artibonite regions. In addition, almost 50% of all antiretroviral therapy services for people living with HIV are located in the Ouest region.

Greater strides to close this gap are expected with the new treat all strategy.

The HIV prevalence among female sex workers is highest in the Nord region and along the border with the Dominican Republic. Services for sex workers require wider coverage than currently available. Services are more concentrated in the Ouest and Artibonite regions, where they are provided by organizations such as FOSREF and FEBS.

Source: HIV prevalence among female sex workers and men who have sex with men in Haiti, 2011.
Men who have sex with men: population size estimate and HIV prevalence, 2011

The HIV prevalence among men who have sex with men is highest in six departments: le Grand Nord (Nord, Nord-Est, Nord-Ouest and Artibonite), Ouest and Sud. Men who have sex with men are very mobile and highly stigmatized. Although services are available, men who have sex with men often do not approach these services because of past experience with discrimination, including by service providers.

Recently initiated programmes specifically address key populations. In addition, the community of men who have sex with men itself is organizing associations.

Sources: HIV prevalence among female sex workers and men who have sex with men in Haiti; Global AIDS Response Progress Reporting 2015 and HIV prevalence among FSWs and MSM in Haiti. IBBS, 2011.
THE ACCESSIBILITY AND QUALITY OF HIV CLINICAL SERVICES IN HAITI ARE BEING IMPROVED, HEALTH-CARE INFRASTRUCTURE IS BEING BUILT AND SURVEILLANCE, EPIDEMIOLOGY, LABORATORY AND HEALTH MANAGEMENT INFORMATION SYSTEMS ARE BEING STRENGTHENED.
Overview
With more than 1.2 billion people spread across 29 states and 7 union territories, India is the second most populous country in the world and the seventh largest by area. It has an epidemic concentrated among key populations, including people who inject drugs, men who have sex with men, transgender people and female sex workers.

India is home to the third largest number of people living with HIV globally. At the national level, the number of people newly infected with HIV has dropped and the number of people dying from AIDS-related causes has also decreased with the expansion of prevention efforts and the introduction and scale-up of antiretroviral therapy from 2004 onwards. India’s HIV epidemic is dynamic and continues to be heterogeneous, especially in terms of its geographical spread, epidemic trends and number of people living with HIV.

In recent years, the prevention, care and treatment efforts have rapidly expanded across the country, with a focus on increasing service access points through institutional scale-up and outreach.

Progress
Prevention and care as well as support and treatment constitute the two main pillars of the HIV response efforts in India. Coverage of related services has expanded over the years. In 2014–2015, the prevention programme has covered 80% of female sex workers, 75% of people who inject drugs and 68% of men who have sex with men. HIV counselling and testing services have been provided through more than 16,000 centres, and more than 15 million people and 12 million pregnant women attending antenatal care have tested for HIV. Data on transgender people are much more limited. There is a growing commitment to improve strategic information on this group, which shows the highest HIV prevalence in the country.

As of March 2015, care, support and treatment services were being provided free of charge to about 850,000 people living with HIV. Progress has also been made in reducing stigma and discrimination.

Opportunities
The great wealth of strategic information collected during the past two decades, including HIV sentinel surveillance, HIV estimates, programme monitoring, operational research and special studies, provides an important opportunity to Fast-Track the national AIDS response through universal access to HIV prevention, treatment, care and support services. Analysis of data from various sources has been intensified at local levels in states and districts, and it will continue to be a focus, especially in the context of emerging epidemics in some of India’s 36 states and union territories.
Female sex workers are mainly concentrated in the southern states of India: Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu. The HIV prevalence in this population in these four states is higher than the rest of India. Andhra Pradesh hosts the largest number of female sex workers, an estimated 156,000 individuals. Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu account for more than 30% of the total estimated number of female sex workers in India. (NACO 31 Indicator Programme Data, 2015; HSS 2010-11; HRG Mapping Estimates 2008-09)

Many targeted programmes have been established in Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu. Mapping estimates were taken into consideration during the scaling up of the targeted programmes in these states. Prevention services include behaviour change communication, condom distribution, referral to HIV testing, care, support and treatment, as well as clinical services and community mobilization.

Sources: Programme data for the National AIDS Control Organization management information system (2014); HIV sentinel surveillance 2010-2011.
Men who have sex with men: population size estimate and HIV prevalence, 2010

The HIV prevalence among men who have sex with men has been measured in two thirds of Indian states through gradual expansion in the number of sentinel surveillance sites. HIV prevalence among men who have sex with men is highest in Chhattisgarh, Manipur and Nagaland, followed by Andhra Pradesh, Madhya Pradesh and Maharashtra states. According to population size estimations, men who have sex with men are mainly concentrated in Andhra Pradesh, Delhi, Gujarat, Karnataka, Maharashtra and Tamil Nadu. These six states account for 66% of the men who have sex with men. (NACO 31 Indicator Programme Data, 2015; HSS 2010-11; HRG Mapping Estimates, 2008-09)

Targeted services for men who have sex with men are aligned with prevalence and population size estimates, distributed across 26 states with a special focus on Gujarat, Haryana, Karnataka, Kerala, Mumbai, New Delhi and Tamil Nadu. Targeted services include information, education and communication, condom and lubricant distribution, referral to HIV testing and regular sexually transmitted infection check-ups.

Sources: Programme data for the National AIDS Control Organization management information system (2014); HIV sentinel surveillance 2010–2011.
People who inject drugs: population size estimate and HIV prevalence, 2010

The HIV prevalence reported among people who inject drugs is highest in the north-western and north-eastern states of the country. The highest HIV prevalence is noted in Punjab, at 21%, and in the capital state of Delhi, at 18%. According to mapping information, people who inject drugs are mainly concentrated in Delhi, Maharashtra, Manipur, Nagaland, Punjab, Uttar Pradesh and West Bengal. These states account for 67% of the total estimate. (NACO 31 Indicator Programme Data, 2015; HSS 2010-11; HRG Mapping Estimates, 2008-09)

Targeted services and harm-reduction programmes for people who inject drugs have been scaled up in these states. HIV programmes for people who inject drugs include harm reduction (provision of sterile needles and syringes and opioid substitution therapy), behaviour change communication, condom distribution, and referral to HIV testing, care, support and treatment. Overdose management, abscess management, clinical services and community mobilization are also provided.

Sources: Programme data for the National AIDS Control Organization management information system (2014); HIV sentinel surveillance 2010–2011.
Overview
Most of the population in Indonesia is located in the south-western part of the country. This is also the location of the largest cities, with high numbers of people living with HIV. HIV has spread primarily along the economic centre and thus remains clustered in the southern part of the country.

Progress
Important achievements have been made in increasing the number of people tested, increasing the number of people living with HIV receiving antiretroviral therapy and reducing the number of people newly infected with HIV in the country. This has been done through comprehensive prevention programmes, such as outreach to sex workers, men who have sex with men, people who inject drugs and other vulnerable populations (such as pregnant women). Increasing the number of facilities for people living with HIV is also one of the achievements.

Its Indonesia gives priority to the response in 141 of more than 500 districts to implement the strategic use of antiretroviral medicines through a comprehensive prevention programme. The geographical prioritization is in line with the Strategic Plan of the Ministry of Health 2015–2019, and it is also incorporated into the National Strategy and Action Plan on HIV/AIDS.

Opportunities
The need for services is clustered in the major cities, enabling cost-efficiency in reaching people living with HIV with treatment services and key populations with prevention services. The Governor of Jakarta signed the Paris Declaration for Fast-Track cities in October 2015, and other cities around the country are expected to follow Jakarta’s example.
Female sex workers: population size estimate and HIV prevalence, 2013

Female sex workers are working throughout the archipelago. Larger numbers are found in large cities in Java island, including provinces with some of the highest HIV prevalence rates. Papua, especially Mimika district, has the highest HIV prevalence among female sex workers and moderately large numbers of women selling sex. Programming for sex workers is needed throughout Indonesia.

Men who have sex with men: population size estimate and HIV prevalence, 2013

Men who have sex with men live throughout Indonesia. Their numbers are proportional to the population in the provinces, and higher in urban areas. The HIV prevalence among men who have sex with men was highest in Surabaya with 22.1% followed by Bandung (21.3%) and Jakarta (19.6%). Prevention and treatment programs should be prioritized in these areas, while surveillance should be expanded.

People who inject drugs: population size estimate and HIV prevalence, 2013

The HIV prevalence among people who inject drugs varies among all regions where it is measured. Large numbers of people who inject drugs are distributed across Java and in northern Sumatra. HIV prevalence ranged between 27% in Medan to 59% in Malang. Harm reduction programmes need to give priority to these areas.

Transgender people: population size estimate and HIV prevalence, 2013

Transgender people, primarily transgender women, are relatively concentrated in Java, Sumatra and Sulawesi. HIV among transgender people reached over 30% in two sites in Java. Prevention programmes should be given priority in the areas of high concentration of transgender people and high HIV prevalence.

INDONESIA GIVES PRIORITY TO THE RESPONSE IN 141 OF MORE THAN 500 DISTRICTS TO IMPLEMENT THE STRATEGIC USE OF ANTIRETROVIRAL MEDICINES THROUGH A COMPREHENSIVE PREVENTION PROGRAMME.
Iran (Islamic Republic of)

Overview
The Islamic Republic of Iran is a largely urbanized country, with about 70% of the population living in urban areas. Close to half that urban population is concentrated in just four cities: Tehran (the capital), Esfahan, Mashhad and Shiraz. Historically, the HIV epidemic has been driven by injecting drug use, and the country has responded to this through its nationwide harm reduction programme. More recently, however, sexual transmission has accounted for an increasing proportion of new cases, and the national response is being re-engineered based on the best available evidence to address this emerging development.

Progress
The country's harm-reduction programme is frequently cited as a best practice, and the HIV prevalence among people who inject drugs has been stable at about 14–15% for close to a decade. The country has also begun to roll out its prevention of mother-to-child transmission programme in phases through the primary health-care system, giving priority to areas with the greatest projected need. Antiretroviral therapy is provided free of charge to everyone eligible in accordance with World Health Organization guidelines, and the fourth national strategic plan has been revised with a view to scaling up antiretroviral therapy coverage significantly and bringing the country closer to achieving the 90–90–90 treatment target. The country has also been a pioneer in positive health, dignity and disease prevention, establishing 25 “positive clubs” around the country during the past decade. Finally, the Islamic Republic of Iran has increasingly recognized the importance of strategic information in guiding programme development and implementation, and it is committing increasing resources to generating timely, quality data.
Opportunities
The country has embraced the 90–90–90 treatment target and is restructuring its response within the framework of an ambitious fourth national strategic plan, which aims to rapidly scale up core services: HIV testing and counselling and antiretroviral therapy. An extensive primary health-care system and the family physician scheme potentially provide a platform for integrating complementary approaches (such as alternative testing strategies) on a wider scale. The network of positive clubs can also be integrated into this new set-up and play a more effective role in treatment coverage, adherence and effectiveness. The country can also build on its investment in strategic information by further building subnational capacity to monitor and respond to the epidemic, thereby helping to channel resources where they are most needed and to the populations that most need them.
The nationwide HIV prevalence among people who inject drugs has remained steady at about 14–15% since 2007, based on several rounds of biobehavioural surveillance. However, reliable subnational estimates of prevalence or population size are, with some exceptions (2), not yet available.

There are very few harm reduction service gaps. More than 1000 facilities provide HIV testing and counselling services, more than 550 sites provide needle and syringe services and nearly 6000 sites provide opioid substitution therapy services. The country has begun to address these gaps by conducting subnational size estimation exercises for the main key populations and is revising protocols for biobehavioural surveillance to enable valid subnational prevalence figures to be generated.

Sources: Published data from 2010-2015.
The Islamic Republic of Iran has increasingly recognized the importance of strategic information in guiding programme development and implementation, and it is committing increasing resources to generating timely, quality data.
Overview
The population of Kenya is distributed unevenly across the country with the south-eastern coastal area and the far West having the highest population density. The HIV epidemic in Kenya is also geographically diverse, ranging from a high prevalence of 24% in Homa Bay County in Nyanza region to a low of about 0.2% in Wajir County in the north-eastern region. More than 70% of the adults acquiring HIV infection in 2014 lived in nine of the 47 counties. The epidemic is deeply rooted among the general population, although key populations also have a high HIV prevalence.

Progress
Important achievements have been made in reducing the number of people newly infected with HIV through outreach to general and key population groups, such as sex workers, men who have sex with men and people who inject drugs. In its most recent national strategic framework, proposal for the Global Fund to Fight AIDS, Tuberculosis and Malaria and Country Operational Plan of the United States President’s Emergency Plan for AIDS Relief (PEPFAR), Kenya has adjusted service and resource allocation to reflect the geographical disparity of the HIV epidemic across the country.

Opportunities
The greatest need for services is mainly concentrated among counties located in the Western and Nyanza districts and in the cities of Nairobi, Kisuma, Mombasa and Nairobi. This allows for cost-efficiency in reaching people living with HIV with HIV treatment services and key populations with prevention services.
Number of women (15–24 years old) newly infected with HIV, 2014

The numbers of women 15–24 years old newly infected with HIV are highest in the Nyanza, Rift Valley and Coast regions. More than 2000 women were estimated to be newly infected with HIV in Nyanza in 2014.

Number of people living with HIV not receiving antiretroviral therapy, mid-2015

Most of the gap in antiretroviral therapy coverage is in the Nyanza and Rift Valley regions.

More than 80% of the adults and children living with HIV are not accessing antiretroviral therapy in Turkana County. More than an estimated 50 000 people in each of the Homa Bay, Kisuma and Siaya counties are not accessing antiretroviral therapy.

Female sex workers: population size estimate and HIV prevalence, 2011

Kenya has an estimated 138 000 female sex workers, with the greatest estimated numbers in the Nairobi (29 500), Rift Valley (22 000) and Coast (20 000) regions.

The HIV prevalence among female sex workers in the Nairobi region was estimated at 29%, more than four times the national HIV prevalence for the general population. Sex worker programmes are spread across 32 of the 47 counties.

Kenya has an estimated 18 500 men who have sex with men, with an estimated 75% of men who have sex with men living in the Nairobi and Nyanza regions (10 000 and 4000, respectively).

The epidemic among men who have sex with men varies greatly across regions. The HIV prevalence among men who have sex with men is estimated at 18% in Nairobi and 11% in Nyanza. Cultural norms and stigma still present barriers to services for men who have sex with men in Kenya. Several efforts have been implemented to promote condom use among men who have sex with men.

People who inject drugs: population size estimate and HIV prevalence

The HIV prevalence among people who inject drugs in Kenya is 19% in Nairobi and Nyanza versus only 5.3% [4.7–6.1%] in the general population. This figure is attributed to high-risk injecting behaviour, such as needle sharing and blood flushing, as well as unsafe sexual behaviour and practices among this population.

Kenya has an estimated 18 000 people who inject drugs. About 80% are in the Nairobi and Coast regions (8500 and 6200, respectively). Recently, injection drug use has been reported in Kisumu, too.

Since 2013, the country has made important steps towards addressing the public health concerns of people who inject heroin. National standard operating procedures for medically assisted therapy, as well as standard operating procedures for needle–syringe programmes have been developed and launched. With support from donor agencies, four sites are currently offering methadone to people who inject drugs.

Lesotho

Overview

Most of the people living with HIV in Lesotho are located in the largest towns along the lowlands and foothills of the country. HIV has spread primarily along the large towns of Leribe, Berea and Maseru City, which are host to apparel factories, and in areas with huge infrastructural development projects (Mohale’s Hoek and Mafeteng). It thus remains clustered in the lowlands and foothills in the south-western part of the country. The burden of disease from HIV and tuberculosis is largely concentrated in the five major cities of the Maseru, Leribe, Berea, Mafeteng and Mohale’s Hoek districts. About three of four people living with both HIV and TB are located in these five districts, including high risk and other vulnerable groups—young women and girls, sex workers, men who have sex with men, factory workers and inmates.

Progress

Important achievements have been made in reducing the number of people newly infected with HIV in Lesotho through outreach to young people, especially women and girls, sex workers and other vulnerable populations (such as factory workers and herd boys). In its latest national HIV and AIDS strategic plan, proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria and Country Operational Plan of the United States President’s Emergency Plan for AIDS Relief (PEPFAR), Lesotho incorporated the population and geographical disparity in the HIV epidemic to adjust the services and resources appropriately.

Opportunities

The need for services is clustered near the capital city and other major cities, enabling cost-efficiency in reaching people living with HIV with treatment services and key populations with prevention services.
The districts with the greatest need for antiretroviral therapy are those in the lowlands and foothills of the country: Maseru, Leribe, Berea, Mafeteng and Mohale’s Hoek, respectively. Collectively, they account for about 75% of the burden of HIV and TB coinfection. This primarily results from challenges of weak links and follow-up between the communities and health facilities in that region, and from fewer men accessing HIV prevention and treatment services. Further, many clients who test positive for HIV through community initiatives do not reach the health facilities. Stigma and discrimination towards people living with HIV is also still pervasive. Efforts are underway to strengthen partnerships to mobilize communities through traditional, religious, political and community-based organizations structures, including networks of people living with HIV, to create accelerated demand for uptake of HIV testing and antiretroviral therapy services. In addition, priority will be given to improving the logistics system in the country and alerting the national system of critical medicine stock-outs.

Sources: 2014 submission for the Global AIDS Response Progress Reporting and 2009 Demographic and Health Survey to estimate the numbers of people living with HIV by region.