



FAST-TRACK
CITIES

CITIES ENDING THE AIDS EPIDEMIC



UNAIDS | 2016

CITIES ENDING THE AIDS EPIDEMIC

CONTENTS

Foreword	p. 2
Introduction	p. 4
1. Ending the AIDS epidemic in cities by 2030	p. 10
2. Putting people at the centre	p. 20
3. Addressing the causes of risk, vulnerability and transmission	p. 26
4. Using the AIDS response for positive social transformation	p. 31
5. Building and accelerating an appropriate response to local needs	p. 36
6. Mobilizing resources for integrated public health and development	p. 42
7. Uniting as leaders	p. 47
Conclusion	p. 53
References	p. 54
Annex 1: City data	p. 58
Annex 2: Cities featured in this report	p. 60

FOREWORD

Cities are at the forefront of global development: taking a leading role in national agendas and delivering on global targets. Urban strategies and actions are central to achieving the Sustainable Development Goals, including ending the AIDS epidemic by 2030. To achieve the end of AIDS, cities must meet the 90-90-90 target for HIV treatment by 2020 and reach ambitious milestones for preventing new HIV infections and eliminating stigma and discrimination.

Cities have inherent advantages in responding to complex health problems such as HIV. They are dynamic centres of economic growth, education, innovation and positive social change. Cities have large service infrastructures and—through the power of networks—have the potential to deliver services where they are most needed, in a way that is both equitable and efficient while respecting the dignity of its citizens.

The health and welfare of billions of people who live, work and study in cities relies on visionary leadership, good governance and inclusive services. For three decades, cities have been leading the AIDS response through community advocacy, implementing new scientific and medical developments, and sustaining political leadership. Cities are often pathfinders in the AIDS response: scaling up the numbers of people receiving antiretroviral therapy and adopting innovative approaches to reduce HIV transmission and AIDS-related deaths.

Yet cities are also facing challenges and rapidly evolving demands. People continue to migrate to cities in large numbers, searching for economic opportunities and fleeing climate change, global economic pressures and civil strife. As cities respond to health-related issues such as disease control, nutrition and access to clean water and sanitation, they also face substantial challenges ranging from social and economic inequalities, poverty and over-crowding, to violence, human rights abuses, discrimination and stigma that restrict access to health and other essential services. Too many people are living in unhealthy slums and other deprived urban areas, with poor access to essential services such as HIV and tuberculosis prevention, testing, treatment and care.

Since World AIDS Day 2014, when we jointly launched the Paris Declaration on Fast-Track Cities Ending the AIDS Epidemic, more than 200 cities and municipalities around the world have committed to accelerate, focus and scale up their AIDS responses. Leaders in these cities, and many others, have recognized that their strategies for responding to the AIDS epidemic offer them a platform for transformation that addresses the need for social inclusion, protection, safety and health. Integrating the HIV response into the Sustainable Development agenda provides further opportunity to ensure better health, reduce inequality, advance human rights, and promote inclusive and equitable societies.

Beyond their strong political commitments, and building upon past experiences and successes, a significant number of cities have made remarkable progress

in responding to HIV and are reaching or getting close to aspirational targets. Notably, Fast-Track cities in every region of the world have embraced the vision of ending the AIDS epidemic and they have developed strategies and action plans that include diverse stakeholders and use data and local knowledge to monitor progress and be accountable for their results.

This report testifies to the many actions and achievements of cities around the world in responding to the AIDS epidemic. By exploring and celebrating these efforts and outcomes, we can learn and inspire other pioneers to explore innovative, local solutions to ending their urban AIDS epidemics, especially in cities that are lagging behind.

From Amsterdam, Paris, New York City and San Francisco, to Durban, Mumbai and São Paulo, the local AIDS response in cities is amplified when it engages affected communities, thus ensuring that no-one is left behind. Yet, many cities have a long way to go and we call upon them to guard against inaction or complacency.

By sharing approaches and solutions, collaborating to probe issues and using data for smart insights into causes and effects, cities, their partners and communities will have a better chance to reach the ambitious targets set in the Paris Declaration. We commend cities for their efforts, welcome new cities to join the growing network of urban leaders in the global AIDS response and take courage from the determination to work together and in solidarity with the global community to end the AIDS epidemic by 2030.



Anne HIDALGO
Mayor of Paris



Michel SIDIBÉ
UNAIDS



Joan CLOS
UN-Habitat



José M. ZUNIGA
IAPAC

INTRODUCTION

Accelerated, strategic and sustained implementation of scientific knowledge combined with political commitment and civil society engagement provides an opportunity to end the AIDS epidemic as a public health threat by 2030. This has led UNAIDS and its partners to endorse a new set of global targets to guide and Fast-Track the AIDS response, alongside the advancement of human rights and gender equality (1). It includes the 90–90–90 treatment target for 2020, whereby 90% of people living with HIV know their HIV status, 90% of people who know their HIV-positive status are accessing treatment and 90% of people on treatment have suppressed viral loads, in addition to accelerating efforts to prevent new HIV infections and eliminating stigma and discrimination. A new sustainable development agenda, together with investment in science, innovative solutions, national and local leadership and strong political commitment will help to achieve these targets by 2020.

Cities play a critical role in fast-tracking the response to HIV and ending the AIDS epidemic by 2030. More than half of the world's population currently live in cities (2) and cities account for large proportions of national HIV burdens (Figure 1). In most countries, HIV prevalence is higher in urban compared to rural areas and urban dynamics often exacerbate the risk and vulnerability to acquiring HIV infection (2). It is estimated that about one quarter of all people living with HIV are residing in about 200 cities. Of these, 156 cities are in 30 countries that account for almost 90% of people newly infected with HIV. However, cities have a comparative advantage and offer important opportunities for effective action to end AIDS. Large numbers of people can be reached in cities, including people at high risk of HIV infection, with cost-effective health and other social protection services. Cities also have large and relatively good service infrastructure, resources and regulatory powers, and are centres for education, innovation, creativity, positive social change and sustainable development.

Many cities have already committed to ending the AIDS epidemic by 2030 and are making significant progress towards reaching the Fast-Track targets. This report explores the commitment, leadership and action taken by cities to accelerate the AIDS response and end one of the largest epidemics in recent history.

Strong leadership from and within cities to end AIDS

Ending the AIDS epidemic is a scientific, political and social undertaking and builds on successes in the biomedical, community and political arenas. Structural change by bold and envisioned leaders has resulted in more supportive environments. High-risk behaviour for HIV transmission has been reduced through inclusive community-led interventions. Cities have been at the forefront of responding to HIV, showing leadership and strong political commitment since the early years of the epidemic and are ensuring that services are delivered to populations in need. Cities from across the world are making progress. Amsterdam, Paris, London, and New York are close to reaching the 90–90–90 treatment target, as shown in Chapter 1. Windhoek and Harare are examples of cities with large epidemics in the general population that have reached more than 95% of pregnant women living with HIV with services to prevent mother-to-child transmission of HIV.

Cities are at the centre of social transformation

Cities committing to end AIDS recognize the importance of eliminating stigma and discrimination against key populations and people living with HIV. In Panama City, for example, discrimination based on HIV status, sexual orientation or gender identity is prohibited by law, and in Buenos Aires, the city's own by-laws guarantee the availability of integrated health services for transvestite, transsexual, transgender and intersex individuals. Information and communication technology and social media are now widely used in cities, which are often early adopters of new technology. In Abidjan, the use of mobile phone technology is proposed to improve HIV services, including patient retention in care and treatment adherence, and to help break down stigma and discrimination. Although the majority of key populations often live in cities, they are not always easy to reach or do not come forward for services because of stigma, discrimination and fear of other human rights violations and cities have to find ways to provide services to key populations where they are most needed. Integration of HIV services with other health issues is common, as cities strive to get the most from scarce resources. The transgender community in Bangkok, for example, is now better served because HIV services have integrated other transgender-related health services.

Integrating the AIDS response into broader urban health and development programmes

Adopting a Fast-Track AIDS response requires development efforts to ensure good health, reduce inequalities, promote just and inclusive societies and revitalize partnerships. Integrating the AIDS response into the Sustainable Development agenda presents opportunities to respond more effectively, not only to HIV and tuberculosis (TB), but also to other communicable and non-communicable diseases and can provide valuable lessons for addressing the spread of emerging epidemics such as Zika and Ebola.

The World Health Organization (WHO) announced the End TB Strategy in 2016. The strategy, which is incorporated into the Sustainable Development Goals and aligned with the Fast-Track approach for HIV, aims to end the tuberculosis epidemic by 2030. The targets for 2030 are to reduce the number of tuberculosis deaths by 90%, to reduce the tuberculosis incidence rate by 80% and to have zero tuberculosis-affected families facing catastrophic costs due to tuberculosis.

Many cities are integrating tuberculosis screening into HIV testing services at primary health care centres. HIV services are also being delivered under the umbrella of universal health coverage and combined with other health services such as child and maternal care, screening for sexually transmitted infections and other bloodborne viruses and psychosocial counselling to maximize efficiency, reach more clients and achieve more effective and synergistic health outcomes. Some cities, including New York and Vancouver, are addressing the relationship between HIV and issues of social protection, such as housing. This illustrates how HIV relates to the Sustainable Development Goals beyond the health sector, in this case to “ensure access for all to adequate, safe and affordable housing and basic services”.

Cities present unique challenges to the AIDS response

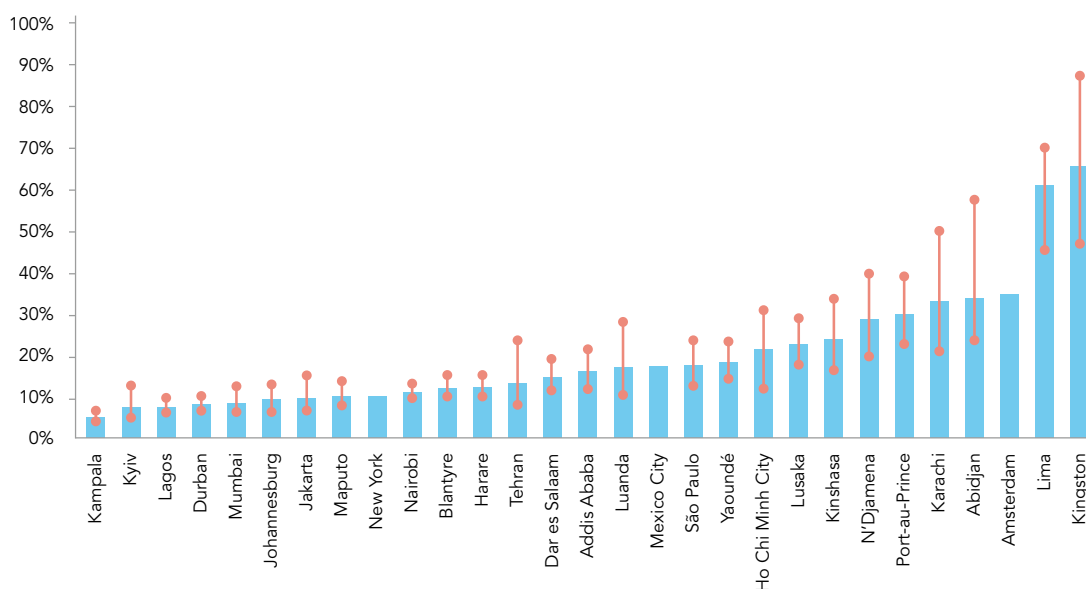
Despite the opportunities in cities to accelerate the HIV response, cities face significant challenges, including high population density and overcrowding, population migration, social and economic inequalities, violence, and uneven distribution of housing, health and social services (2). In the absence of adequate low-cost housing, informal settlements and other deprived areas expand, and the associated health and social inequalities proliferate. Rapidly changing social systems and greater freedom in terms of lifestyle and sexual behaviour contribute to the risk of HIV transmission. Populations known to be at increased risk of acquiring HIV, including men who have sex with men, transgender people, sex workers and people who inject drugs, tend to move to cities for economic and social reasons. The demand and opportunities for sex work are also higher in cities, adding to the vulnerability of girls and young women.

Paris Declaration commits cities to ending AIDS by 2030

On World AIDS Day 2014, mayors from 26 cities met in Paris and endorsed and launched the Paris Declaration on Fast-Track Cities Ending the AIDS Epidemic. The gathering of mayors was inspired by the leadership of Anne Hidalgo, Mayor of Paris, and other Fast-Track cities partners UNAIDS, UN-Habitat and the International Association of Providers of AIDS Care (IAPAC). These 26 cities have since been joined by many more: to date, more than 200 cities and municipalities have pledged, by signing the Paris Declaration, their commitment to achieving the 90–90–90 treatment target and ending AIDS by 2030 (Figure 2). Modelling studies have shown that, if these targets are achieved by 2020, together with accelerated prevention efforts and in an environment free from stigma and discrimination, the AIDS epidemic can be ended by 2030 (1, 3).

Figure 1

Proportion of the national number of people living with HIV in major cities, 2014/2015



Source: UNAIDS 2015, Ending the Urban AIDS Epidemic; City specific reported data 2016

CITIES SIGNING THE PARIS DECLARATION COMMIT TO SEVEN OBJECTIVES:

1. Ending the AIDS epidemic in cities by 2030 and reaching ambitious goals by 2020.
2. Putting people at the centre of the AIDS response.
3. Addressing the causes of risk, vulnerability and HIV transmission.
4. Using the city AIDS response for positive social transformation and building societies that are equitable, inclusive, responsive, resilient and sustainable.
5. Building and accelerating an appropriate response to local needs.
6. Mobilizing resources for integrated public health and development.
7. Uniting as leaders, working inclusively and reporting annually on progress.

This report examines each of these seven commitments to demonstrate how cities are addressing the HIV epidemic and accelerating the response through applying new and innovative solutions, using national and local leadership and institutions and integrating the response into the new sustainable development agenda. With just over four years left to reach the 2020 targets, cities are leading the way to the end of AIDS.

What defines a city?

There is no universal definition for a city or metropolitan area. Population sizes and density and how populations are administered often influence this classification. In many examines, people who live beyond the formal city boundary also access city health services and other essential services. In some locations, informal settlements or slums with tens of thousands of people can struggle to provide essential services because they lack recognition and political representation.

Some large cities may be governed by a cluster of city authorities, while broader district, state or regional authorities may be responsible for delivering certain services. The activities and decisions taken by and about larger cities can strongly influence nearby towns and smaller cities.

This report therefore considers cities as they are defined in each location and includes broader administrations where relevant. The analysis reflects on how cities work with all people within the city boundaries and beyond—and the various options and powers that cities possess to respond to the AIDS epidemic.

Figure 2

Cities that have signed the Paris Declaration on Fast-Track Cities Ending the AIDS Epidemic by 2030



Source: UNAIDS, May 2016



* 19 municipalities have signed in Cameroon
 34 municipalities have signed in Côte d'Ivoire
 17 municipalities have signed in Honduras
 2 municipalities have signed in Panama
 15 municipalities have signed in Senegal
 12 municipalities have signed in South Africa
 2 municipalities have signed in Togo
 2 municipalities have signed in Uruguay
 51 municipalities have signed in Zambia

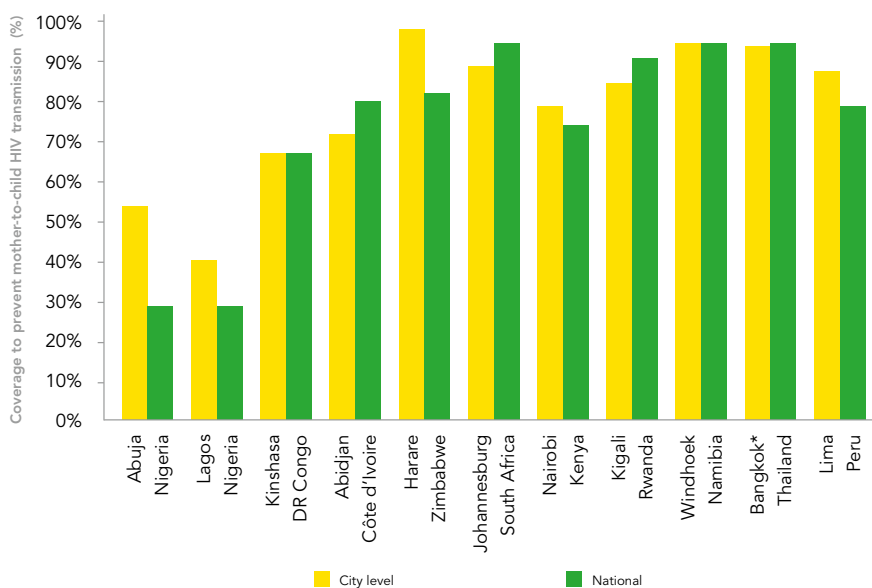
1. ENDING THE AIDS EPIDEMIC IN CITIES BY 2030

Cities are taking the lead in scaling up proven, high-impact HIV services and strategies, expanding testing, treatment and prevention for HIV and supporting and addressing the basic needs of key and vulnerable populations. As a result, many cities are making important progress towards achieving the 90–90–90 treatment target by 2020, and the numbers of people newly infected with HIV and dying from AIDS-related causes are declining. In many cities, the target of eliminating mother-to-child transmission of HIV is within reach because of the significant scale-up of treatment services for pregnant women living with HIV (Figure 3).ⁱ

Recent scientific advances in HIV treatment and prevention have transformed an HIV diagnosis from a death sentence to a manageable chronic condition, and studies have shown that the early provision of antiretroviral therapy can benefit individual patients clinically and benefit prevention at the population level (4–6). The treatment and prevention benefits of antiretroviral therapy (also to prevent transmission of HIV from mothers to their children), pre-exposure prophylaxis for populations at high risk of HIV infection, condom use during sexual activity, medical male circumcision, harm reduction, needle and syringe programmes and opioid substitution therapy for people who inject drugs have all been proven effective in responding to HIV (7–10).

Figure 3

Cities are making progress in eliminating mother-to-child transmission of HIV: coverage of antiretroviral regimens to prevent mother-to-child transmission of HIV in major cities compared with national level, 2015



*Data provided for 2014

Source: City-specific reported data 2016; Global AIDS Response Progress Reporting, 2016

Making 90–90–90 a reality in cities

Cities are making progress towards meeting the target of 90% of people living with HIV knowing their HIV status by scaling up accessible, innovative modes of delivery and creating demand for HIV testing services. Bangkok, Buenos Aires, Mexico City and Tehran, for example, are providing HIV testing services where they can have maximum benefit, using mobile clinics or a community-based approach to get services to hard-to-reach populations.

Ensuring that 90% of people who know their HIV status receive antiretroviral therapy requires linking HIV testing services to the provision of equitable, safe and stigma-free HIV treatment services. Many cities are supporting this by implementing policies for universal treatment access, including Buenos Aires, Rio de Janeiro and São Paulo, and by linking newly diagnosed cases to immediate treatment, such as in Amsterdam, Bangkok, Casablanca and San Francisco.

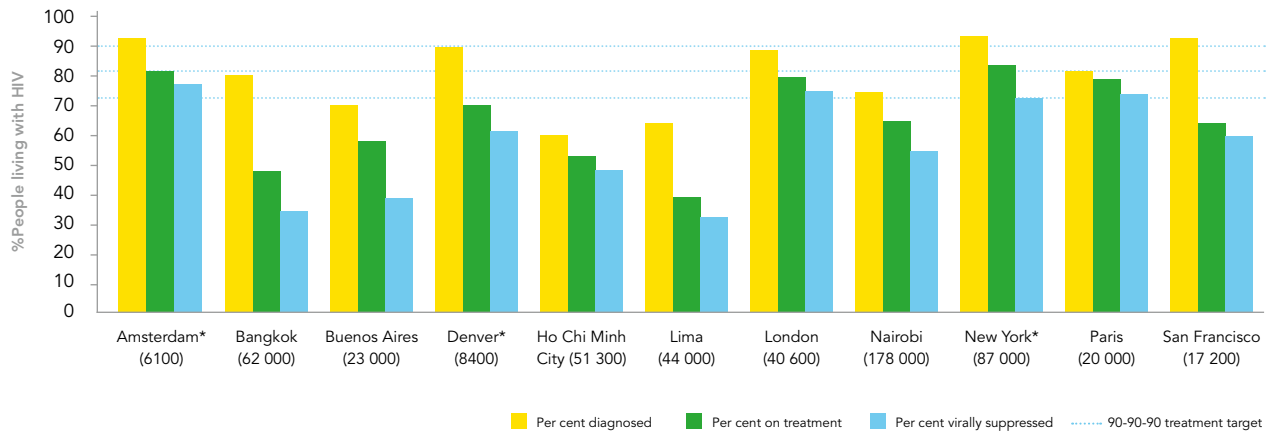
Cities that are making progress towards achieving viral suppression among people receiving antiretroviral therapy are focusing on retention in care and support for better treatment adherence while monitoring viral load among people living with HIV. In Washington, DC, 70% of about 12 700 people diagnosed as living with HIV were retained in care in 2014, and 77% of these achieved viral suppression. Denver is another Fast-Track city that is diligently monitoring its HIV care continuum, showing that, in 2015, 90% of all people living with HIV were diagnosed, 78% of those diagnosed with HIV were retained in care and 87% of those in care were virally suppressed.

Cities across the world, despite significant variation in the HIV burden, are making important progress towards achieving the 90–90–90 treatment target, as illustrated in Figure 4. However, while some cities are getting close to reaching the targets, substantial efforts will be required in other cities to achieve the targets by 2020, with no room for complacency.

Ending AIDS requires addressing HIV-related stigma and discrimination, since these are often barriers to seeking and accessing high-quality HIV prevention and treatment services. Jakarta and Nairobi are examples of cities addressing these barriers by sensitizing health-care workers to provide non-judgemental HIV care.

Figure 4

Cities across the world are making progress towards reaching the 90-90-90 treatment target, 2014/2015



* Retained in care values were used as a proxy for the percentage of people on ART because the national policy suggest provision of treatment for all people living with HIV

- Numbers in brackets are people living with HIV in the city
- 2014 Cascade data are provided for: Amsterdam, Bangkok, London, New York, San Francisco
- 2015 Cascade data are provided for: Buenos Aires, Denver, Ho Chi Minh City, Lima, Nairobi, Paris

The 90-90-90 treatment target for 2020 are that 90% of people living with HIV will know their HIV status, 90% of people who know their HIV-positive status are accessing treatment and 90% of people on treatment have suppressed viral loads.

Sources: City specific reported data 2016; Amsterdam, Netherlands: Ard van Sighem, HIV Monitoring Foundation, personal communication; Kenya Ministry of Health, National AIDS and STI Control Programme, National ACT Dashboard, Febr 2016; Lert F (Mairie de Paris) Towards and AIDS free Paris, Febr 2016; Nairobi City County, HIV Fast-Track Report 2015; New York City HIV Surveillance Registry; Public Health England 2015, Annual Epidemiological Spotlight on HIV in London, 2014 data; San Francisco Department of Public Health, personal communication 2016. USAID, PEPFAR, FHI360, Vietnam Administration. Results from the Vietnam ART Cascade Completion Study, March 2015.

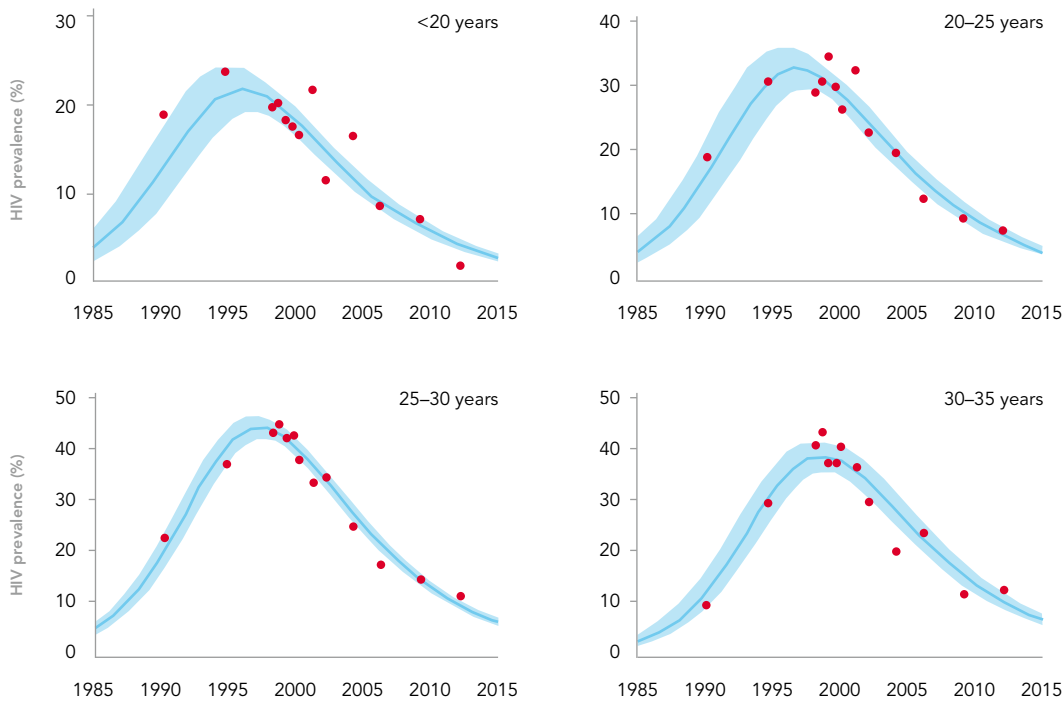
Cities striving to end AIDS by 2030

Cities have historically taken the lead in providing HIV services to key populations at increased risk of HIV. In many cities such as Amsterdam, Frankfurt, New York and San Francisco, “harm-reduction” programmes, including needle-syringe programmes and opioid substitution therapy for people who inject drugs, were first rolled out at the city level before being adopted in other places (11–13). Thailand’s condom use campaign aimed at sex workers and their clients started in Bangkok in the early 1990s, with widespread distribution of condoms in public spaces, brothels and massage parlours. Brazil was among the first countries in the world to offer universal HIV treatment services, and the cities of São Paulo and Rio de Janeiro have actively engaged civil society in the delivery of services.

In Zimbabwe, one of the countries hardest hit by the AIDS epidemic, Harare has made significant progress in reversing its HIV epidemic. The estimated prevalence of HIV in Harare, which at the peak was almost twice as high as the national prevalence, has been declining since 2005, from 19.3% to 12.6% in 2013, while

Figure 5

Declining HIV epidemic trends among women attending antenatal clinics in Harare, Zimbabwe, across all ages



Sources: Gonese E, Hargrove J. Personal communication

● HIV prevalence from antenatal clinic surveillance Epidemic curve fitted to data obtained from antenatal clinic surveillance

Source: Gonese, E. Hargrove, J. Personal communication.

incidence has fallen rapidly since the mid-1990s (Figure 5). More recently, the city has implemented a comprehensive testing and treatment approach and services for HIV testing, provision of antiretroviral therapy and treatment for opportunistic infections have been made available in all city clinics and hospitals. In 2004, only one clinic provided services for opportunistic infections and antiretroviral therapy; by 2014, there were clinics in 43 locations (14). Services for preventing mother-to-child transmission have also expanded. There were no sites offering these services in 2004; now, with the recent adoption of Option B+, there are 43 sites and the coverage of services to prevent mother-to-child transmission reached close to 100% in 2015. In addition, Harare has initiated viral load testing services, supporting efforts to achieve the Fast-Track Target for viral suppression.

As a result of the expansion of service delivery and the increased uptake of services, HIV testing rates have improved dramatically. Four times as many people were offered HIV tests in 2014 as in 2010, and the HIV testing acceptance rates reached 99%. The establishment of seven adolescent-friendly units within clinics has helped to increase the uptake of services by adolescents and young adults.

Despite tremendous success, Harare still faces challenges in its AIDS response. Identifying HIV among children is difficult because of age limits to obtain consent, HIV service uptake among men is low and key populations are marginalized and have limited access to services. To address these challenges, the city has been working with men's organizations to develop male-friendly services, connecting with child rights organizations, and engaging networks of key populations.

European cities take action

Amsterdam was the first European city to launch a project to eliminate HIV transmission at the city level. The HIV Transmission Elimination Amsterdam (H-TEAM) initiative is a collaboration of all partners involved in HIV treatment and prevention combining the latest scientific knowledge with innovative research while aiming its campaigns at key populations, general and other health professionals.

An estimated 200–300 of the 1000 people annually diagnosed with HIV in the Netherlands live in Amsterdam, with most of these being men who have sex with men and migrants from areas where HIV prevalence is high (15). Innovative strategies are being developed to address the gaps in Amsterdam's continuum of care, including enhancing the awareness of acute HIV infection and the benefits of testing, early diagnosis and providing immediate treatment among key populations and their health-care providers. In addition, HIV-negative men who have sex with men at high risk of HIV infection are offered pre-exposure prophylaxis as part of an integrated prevention package in the Amsterdam pre-exposure prophylaxis project, a demonstration project for initially 370 participants.

The policy of offering treatment to all people diagnosed with HIV has contributed significantly to reaching the 90–90–90 treatment target. By the end of 2014, of the estimated 6100 people living with HIV, 93% were diagnosed and linked to care. Of those diagnosed, 88% were retained in care and 94% had viral load suppression (personal communication, Ard van Sighem, HIV Monitoring Foundation, Amsterdam). Of all people living with HIV in Amsterdam, 77% had an undetectable viral load compared to 70% in the country as a whole. Moreover, among men who have sex with men living with HIV, the overall proportion with undetectable viral load was 80%, contributing to a significant reduction in HIV transmission.

One example of the H-TEAM initiative includes a campaign to promote knowledge of acute HIV infection among men who have sex with men. Participants are trained in recognizing acute symptoms and are offered an online interactive risk assessment tool that refers them, if required, to rapid point-of-care HIV RNA testing to detect infection as early as one to two weeks after exposure and to initiate immediate treatment. In the first six months of the campaign, more than 100 000 participants actively engaged with the online information, and more than 50 000 completed the online risk assessment and screening tool, which resulted in more than 900 downloads of referral letters for acute HIV infection testing. Other examples are the extensive Test & Treat educational programme to encourage and educate general practitioners to more frequently test individuals at high risk for HIV.

With guidance from the Amsterdam Public Health Service, the city has been making treatment and harm-reduction services more accessible for people who inject drugs while integrating them into its larger strategy of addressing drug use and dependence. Heroin-assisted treatment, methadone provision and needle dispensing have been

made available through various facilities in the city, including in police stations, prisons and mental health centres. The city's harm-reduction response has achieved high coverage in the city and has enabled a supportive environment for responding to HIV. Declining trends in injection drug use and sexual risk behaviour have been accompanied by a decline in HIV incidence in a cohort of Amsterdam drug users from 6 per 100 person-years in the late 1980s to less than 1 per 100 person years from 1997 onwards, to the point where people who inject drugs are no longer considered at high risk of HIV transmission (16).

Paris is working closely with local partners, using all available scientific and medical technologies towards ending the AIDS epidemic by 2030. Excellent quality specialized care is provided to people living with HIV and has resulted in significant progress in reaching the Fast-Track Targets. About 81% of people living with HIV have been diagnosed, 96% of people in care are receiving antiretroviral therapy and 94% of those receiving treatment are virally suppressed. Many dynamic civil society organizations are also involved in the response, supporting key activities from activism and prevention to social and mutual support.

The development of the new HIV strategy *Vers Paris sans sida* (Paris: towards the end of AIDS) was supported by 130 partners through the Paris Committee on 90–90–90 and was launched in February 2016. The focus of the strategy is to reach people living with HIV and key populations with prevention tools, including regular and repeated testing, free pre-exposure prophylaxis and treatment-as-prevention services; to promote sexual health and well-being; and to scale up outreach activities. Managed by Paris and the regional health authority, the strategy will be implemented during the coming year, and a public-private structure will be created to provide additional funding for implementation.

North American cities: at the forefront from the start

San Francisco, the first city to adopt the Fast-Track cities approach in North America, is on its way to ending AIDS in the city, where HIV diagnosis, treatment and outreach services, including housing, substance abuse counselling and mental health counselling, are integrated under one umbrella of care. The city halved the number of people acquiring HIV infection between 2004 and 2011 and is currently reporting only about 300 new cases per year. Its aim is to further reduce this number by 25% during the coming year.

When HIV treatment became available, San Francisco embraced it as a life-saving intervention. Clinicians, researchers, public health officials and the community have all been involved in efforts to improve treatment and prevention in the city and beyond. Through the many testing centres and clinics set up throughout the city by the government and community-based organizations, HIV is consistently detected in its earlier stages. This makes it easier to treat, keeps people healthier and prevents onward transmission. The city pioneered the test-and-treat strategy and has set up a programme to help people access treatment on the day of diagnosis. Of the 17 200 people estimated to be living with HIV in the city in 2014, 93% have been diagnosed and 94% of people in care are receiving treatment.

The San Francisco Getting to Zero initiative (www.gettingtozerosf.org) is a multisectoral independent consortium operating under the principles of collective impact. Modelled after the UNAIDS goals, the vision is to reduce HIV transmission

and HIV-related deaths in San Francisco by 90% before 2020. The comprehensive approach, working under the umbrella of the City of San Francisco, coordinates efforts around the city and leverages resources for expanding pre-exposure prophylaxis, the RAPID antiretroviral therapy programme to ensure that people diagnosed with HIV can rapidly access antiretroviral therapy and the development of systems and programmes to increase retention in care and viral load suppression among people living with HIV.

New York State was the first state in the United States of America and the first jurisdiction in the world to have a plan to end the AIDS epidemic by 2020. The plan focuses on expanding HIV testing and linkage to care, retention in care and access to HIV treatment for all people living with HIV. With about 80% of the state's HIV epidemic concentrated in New York City, the city's active and coordinated response is essential to New York State ending its HIV epidemic.

New York City has been a leader in the AIDS response since the beginning of the epidemic, primarily through the work of its scientists, community activists and strong municipal leadership. Consequently, the number of people newly diagnosed with HIV decreased by more than 50% between 2001 and 2014, from 5862 people in 2001 to 2718 in 2014 (Figure 6) (17). The number of children perinatally infected with HIV has also declined steeply, and by November 2015, it was announced that no children in New York City had been reported to be born with HIV in the preceding 12 months (18).

New York City has had much success in the HIV treatment and care cascade during the past decade. HIV testing rates have increased, and more than one third of all city residents received an HIV test in 2013 while linkage to care within three months of a positive HIV test increased from 63% in 2010 to 72% in 2014 (17, 19, 20). By 2014, viral suppression among people in HIV care had risen to 81% (17).

The New York City Department of Health and Mental Hygiene has directly funded clinical sites providing routine HIV testing and provides free testing kits to clinical facilities, earmarked for uninsured people or special HIV testing events. The Department has also partnered with clinical and community partners in testing initiatives in specific boroughs. These initiatives use social marketing campaigns, special testing events and community mobilization to increase the number of people knowing their HIV status and to link those living with HIV to care. Following on the success of The Bronx Knows HIV testing initiative, The Brooklyn Knows HIV testing initiative has been one of the largest testing efforts in the United States. The two campaigns have brought over 160 partners on board to conduct more than 1.8 million HIV tests, identifying 4544 people newly diagnosed with HIV and linking 79% of these to care (21).

Access to pre-exposure prophylaxis for high-risk populations is a priority in New York City. Pre-exposure prophylaxis is available to high-risk individuals and is covered by insurance plans, and uninsured individuals can receive it through a patient assistance programme. The City recently transitioned its "Play Safe" messaging to "Play Sure", recommending daily pre-exposure prophylaxis for people at high risk of HIV and using condoms and lubricant, combined with regular testing for HIV and other sexually transmitted infections (22). The city also provides its own brand of condoms with key prevention messages and supports mobile apps (23).

The response to HIV goes beyond health to encompass the social support that is vital to keep people living with HIV in treatment programmes. New York City invests US\$ 23 million annually to provide nearly 200 000 residents with HIV prevention and health-care services and critical social services, such as housing and nutrition. Mayor Bill de Blasio stated: “We must make sure their basic needs are met—a roof over their heads, enough food to eat and healthy food to eat, because no New Yorker with HIV or AIDS should have to choose between medicine and rent, medicine and food.”

“We are resolved to end this epidemic—we have the tools and we’re committed to using them”

New York City Mayor Bill de Blasio, World AIDS Day 2015

The early adoption of a treatment-as-prevention approach to the HIV epidemic by the province of British Columbia, Canada, has had a significant impact on its AIDS response (24). Starting in 2004 with the financial support of the provincial government, the British Columbia Centre for Excellence in HIV/AIDS led a stepwise expansion of free access to antiretroviral therapy. Since 2011, Metro Vancouver hospitals have offered free voluntary HIV testing to everyone who comes through their doors. Since 2014, all British Columbia residents have been offered a free voluntary HIV test every five years under an expanded programme aimed at preventing transmission of HIV in the province. In 2014, St. Paul’s Hospital in Vancouver closed the doors of its AIDS Ward, which had opened in 1997 when there was one AIDS-related death on average every day. The former AIDS ward has been redeveloped to provide cutting-edge care and treatment for people ageing with HIV as well as treatment for co-morbidities such as hepatitis B and C.

Vancouver is also known for its successful programmes to support people who inject drugs, including harm reduction initiatives, supervised injection facilities, a medicalized heroin program, and a strong and rapidly growing addiction medicine program. All of these have been successful in improving the lives of people who inject drugs, and have served as the effective basis to build strong HIV/AIDS programmes serving this community. One of the flagships of British Columbia’s harm-reduction programmes is the supervised injection facility, Insite (the first supervised injection facility on the continent), where people can inject drugs in a protected environment under the supervision of health care providers. This programme provides an opportunity to bring people who inject drugs into the health-care system and provides them with information about drug dependence treatment programmes, primary health care and social services.

A comprehensive report on the drug situation in Vancouver in 2013 showed that health-focused policies have been more effective than federal law enforcement measures at reducing illicit drug use and improving public health and safety (25). The analysis found an overall decline in illicit drug use in recent years, fewer people are injecting drugs and syringe sharing has declined substantially. HIV incidence rates among people who inject drugs declined from a high of 8.1 per 100 person-years in 1997 to 0.37 new HIV infections per 100 person-years in 2011. In addition, data on the cascade of care from British Columbia show that among people who inject drugs diagnosed with HIV, 98% are linked to care, 85% are on antiretroviral therapy and 58% are virally suppressed (Figure 7).

Vancouver is supporting the basic needs of people living with HIV through a partnership with the McLaren Housing Society of British Columbia. McLaren seeks to provide Positive Housing for Positive People, offering affordable housing, support services and a sense of community in their buildings. In doing so, it also addresses the problem of homelessness in the city, including among people living with HIV.

Eliminating tuberculosis in cities

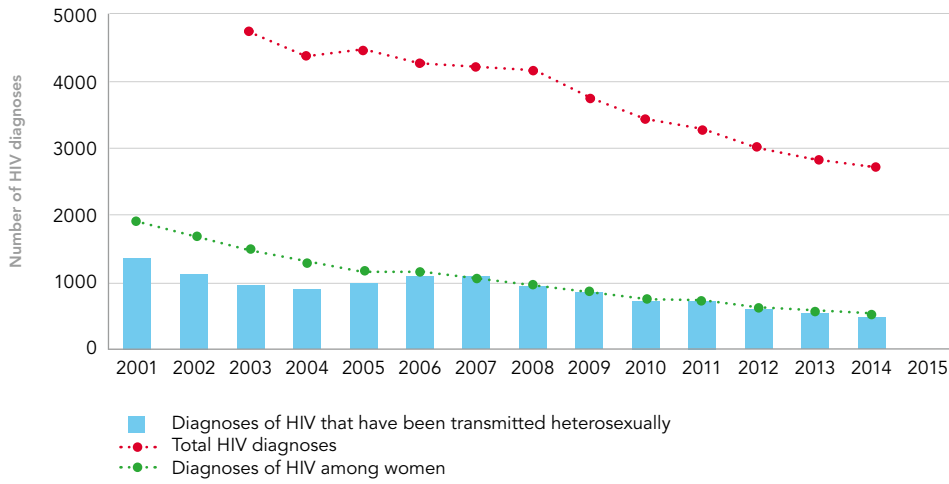
Efforts to end AIDS also require a greater focus on tuberculosis prevention and treatment, a leading cause of AIDS-related deaths. Tuberculosis infection rates and risk factors are high in some cities and among urban populations, including in slums and among homeless or migrant populations, people in prisons and other closed settings because of poor living conditions, overcrowding, lack of clean water and sanitation.

Among people living with HIV, the use of antiretroviral therapy will reduce the risk of developing tuberculosis by more than 60% (26, 27). Reaching the HIV target of 90–90–90 will therefore also have a very substantial impact on tuberculosis. In South Africa, more than 70% of people with tuberculosis are coinfecting with HIV and cities such as Johannesburg and Durban have integrated tuberculosis screening with HIV testing at primary health-care facilities. In 2015, the Minister of Health in South Africa launched the country's five year campaign to ensure that at least 90% of vulnerable and risk populations are screened for tuberculosis, at least 90% of all people diagnosed with tuberculosis in the country are started on treatment, and to achieve at least 90% treatment success.

Other cities are doing studies to better understand local tuberculosis epidemics. Lima is one city participating in the Zero TB Cities Project (28), with the goal of eliminating tuberculosis in the municipal areas of countries with a high burden of tuberculosis. Clustering of people with multidrug-resistant tuberculosis suggests that localized transmission is a key driver of the epidemic, and a targeted response to highly affected areas may be the most effective strategy to interrupt transmission (29). Chennai, another Zero TB Cities Project site, has partnered with local and international civil society and global health organizations, national research institutes and local stakeholders to focus on active case detection, improved diagnosis and treatment of all forms of the disease. Similarly, Karachi is engaging with the private sector to increase tuberculosis case detection using innovative approaches. A strategy in one hospital that included financial incentives and mobile phone technology for case detection, community member participation and a communication campaign resulted in a two-fold increase in tuberculosis cases reported to the national tuberculosis programme (30).

Figure 6

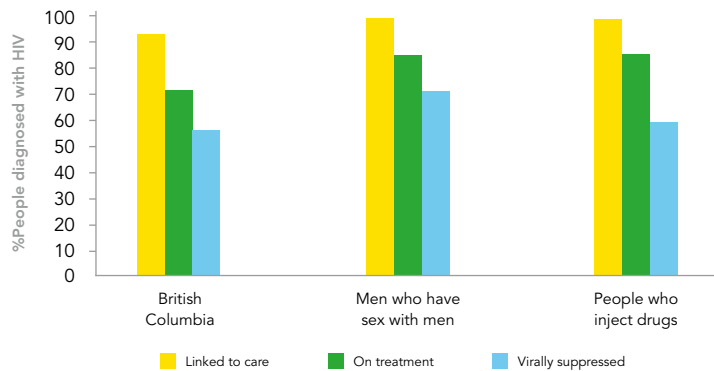
Declining trends in the HIV epidemic in New York City, United States of America



Source: UNAIDS 2015, Focus on Location and Population; New York City Health Department

Figure 7

Estimated cascade of care by risk population in British Columbia, Canada



Source: British Columbia Centre for Excellence in HIV/AIDS. HIV Monitoring Quarterly Report for British Columbia. Fourth Quarter 2015.

2. PUTTING PEOPLE AT THE CENTRE

Effective responses to HIV in cities require putting people at the centre of strategies and programmes and focusing on the populations at higher risk or vulnerability to HIV and delivering services appropriate to their needs. This also requires active and sustained engagement with vulnerable and affected communities to ensure that the response to HIV remains focused and relevant. It entails organizing services so that they are accessible, easily reachable and comprehensive, addressing the basic health and social needs of the people for whom they are intended. It also requires society-wide efforts to ensure that actions taken are fundamentally rights-based, which may challenge and change social attitudes and norms. This approach can drive social transformation, increase societal resilience and promote sustainable development.

Focusing on the people at greatest risk

Responses to HIV in cities are most often focused on the populations that are at greatest risk of infection. For example, the general population is the primary focus in Blantyre, a city of more than 660 000 people in the region with the highest HIV prevalence in the world. According to Malawi's Ministry of Health, the city itself, with an estimated HIV prevalence of 18%, is home to about 115 000 people living with HIV, including 11 000 children. Reaching people of childbearing age in the general population with HIV prevention, treatment and care services is a priority for the city, and the Mayor of Blantyre, Noel Chalamanda, has made it his personal mission to end mother-to-child transmission of HIV in the city.

On a citywide scale, this requires Blantyre's six hospitals and 18 health clinics to follow standard protocols to counsel and test all pregnant women, provide antiretroviral therapy to all living with HIV, for their own health and to prevent vertical transmission of the virus, and to retain them on antiretroviral therapy.

Also in southern Africa, the multisectoral HIV strategic plan for Johannesburg includes both key populations and the general population. In 2012, when the HIV prevalence among the general population in Johannesburg was estimated to be 11% [8–15%] (31), the city put in place a four-year strategic plan to respond to the epidemic. This plan covered not only the public health aspect of HIV, but importantly, set out to address the social and structural factors that influence HIV, sexually transmitted infections and tuberculosis. It also set strategic objectives to prevent people from becoming newly infected with these diseases, sustain health and well-being and protect human rights and access to justice.

The plan's overarching focus is people-centred: to take programmes to where people are, make them accessible and measure results. This means going door-to-door if necessary with HIV awareness campaigns, focusing efforts on specific groups within the general population, including young people, mothers, men, older people, children who head households and traditional healers. The plan aims to reach out to people not just via the health system but also in schools, workplaces and communities and through the health system.

Young people have been a key focus in the AIDS response in Johannesburg, with outreach carried out in 33 primary and 36 high schools across the city. The programme improved the knowledge of more than 10 000 students surveyed by nearly 75%, specifically on HIV, substance abuse, teenage pregnancy and male medical circumcision. The strategic plan also prompted citywide workplace-centred campaigns, condom distribution in 284 sites in municipal workplaces, training on workplace wellness, HIV and AIDS for 120 managers, and peer education programmes to help mainstream HIV care into the core mandate of municipal departments through the use of 310 peers.

Ensuring a rights-based response

Sex workers in South Africa experience a disproportionate burden of HIV, sexually transmitted infections and tuberculosis, and often face violence, harassment, intimidation and abuse. In Cape Town, the Women's Legal Centre, a grantee of the Open Society Foundation, works to educate women who have experienced sexual violence on their rights, and provides legal services for sex workers in collaboration with sex worker organizations (<http://www.wlce.co.za/>). The Women's Legal Centre started its outreach by offering weekly group workshops on human rights to sex workers but soon expanded by employing four former and current sex workers as paralegals to provide peer-based legal assistance. The paralegals partner with a counselling and advocacy organization, Sex Worker Education and Advocacy Taskforce, to do community outreach. They provide male, female and transgender sex workers with legal information and advice, and assist with court hearings, bail applications, and filing of complaints about police abuse.

At a national level, the Deputy President of South Africa launched a progressive plan in 2016 to ensure equitable access for sex workers to health services to prevent and treat HIV, sexually transmitted infections and tuberculosis. In addition, the plan aims to provide sex workers with access to justice and legal protection services.

Making services accessible

Services must be accessible and easily reachable by everyone in need. In Kyiv, the main population of concern is people who inject drugs. With a population of almost 3 million, Kyiv was estimated to account for 10% of all people who inject drugs, 10% of sex workers and about 20% of men who have sex with men in Ukraine in 2013.

To increase HIV case finding and early detection of HIV among people who inject drugs, Kyiv has used an innovative testing strategy involving assisted testing, whereby a client self-tests for HIV using a rapid test kit with the support of a social worker, linked to a community-initiated treatment intervention. This effectively shifts the task of testing away from health-care workers and increases the scope of testing services. The number of people who inject drugs who were tested for HIV doubled from 2014 to 2015, from about 9000 to 18 000, and the number of people newly diagnosed with HIV rose from 259 in 2014 to 421 in 2015.

“AIDS has not only affected Blantyre City, but Malawi as a whole. We want to conduct vigorous awareness-raising to achieve the 90-90-90 campaign by 2020 so that, by 2030, we should be able to achieve the world target of zero new HIV infections, zero discrimination and zero HIV- and AIDS-related deaths”

Noel Chalamanda,
Mayor of Blantyre City

The city's programme for people who inject drugs relies on highly trusted outreach workers to engage with and assist people who are living with HIV to start treatment or to improve adherence, including those who have recently been diagnosed with HIV and those who were diagnosed some time ago but dropped out of care. Outreach workers mediate between the client and the health-care system and ensure that clients receive the services to which they are entitled. Because of the community-initiated treatment intervention, the cascade of care among clients of harm-reduction programmes has improved significantly. Among programme clients, 64% know their HIV status, 59% are in care and 40% are receiving treatment; among those who are not in the programme, only 31% know their HIV status, 27% are in care and 16% are receiving treatment.

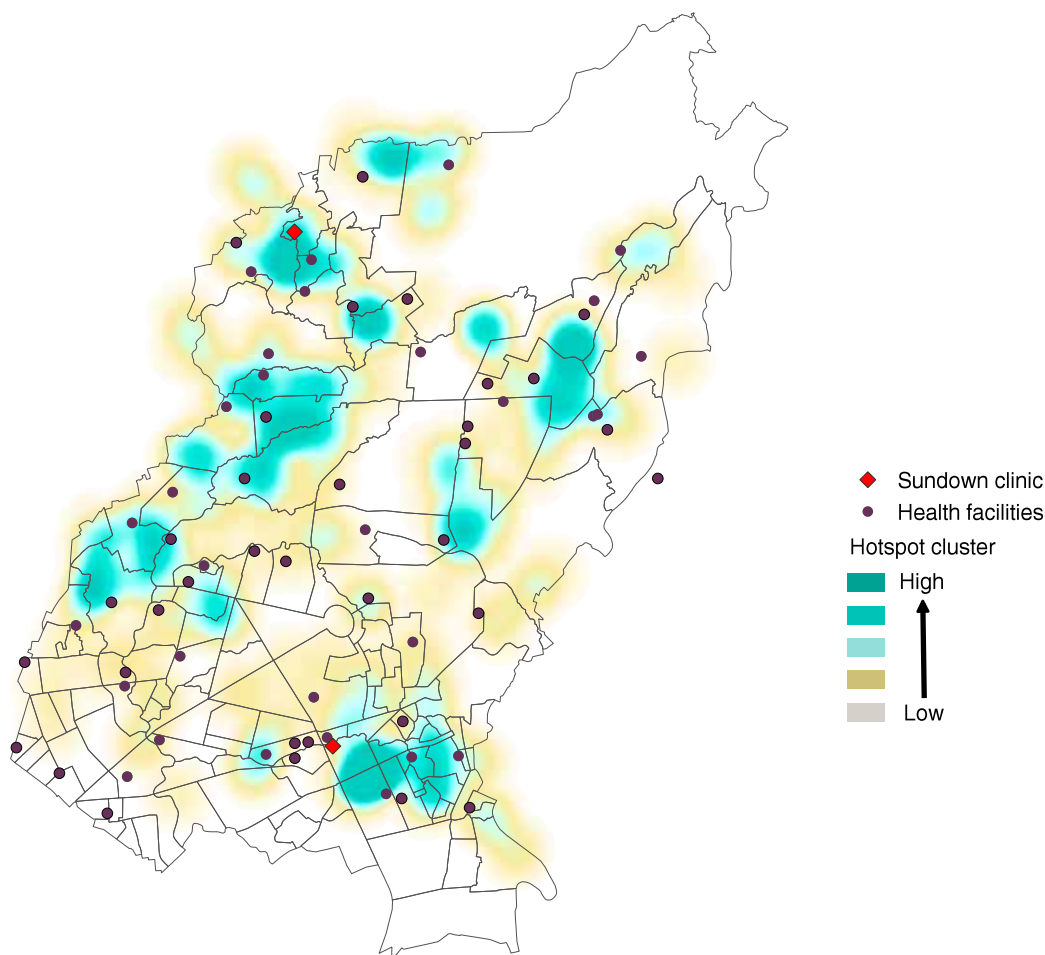
In St Petersburg, the City Council has made significant efforts to address HIV epidemics among key populations, including people who inject drugs and sex workers. Working in partnership with nongovernmental organization service providers, various fixed-site and outreach services are available for sex workers. Condoms and lubricant as well as needles and syringes are distributed to known sex work venues, including clubs and apartments. Mobile outreach buses take commodities to street-based sex workers and encourage referral for HIV and sexually transmitted infection testing, contraception, antiretroviral therapy, care and support. By working with nongovernmental organizations that are trusted by key population communities, the city is able to reach more people and get those diagnosed with HIV into treatment programmes.

Quezon City has responded to the expanding HIV epidemic among men who have sex with men. Klinika Bernardo, the city's first stigma-free and non-discriminatory HIV service environment for men who have sex with men, opened in 2012 with predominantly male staff, a discreet and confidential number-based registration process and evening opening hours. By the end of 2014, the clinic had conducted more than 2500 HIV tests and identified over 200 clients who were living with HIV. The success of the first sundown clinic has led to the planned opening of four more clinics across the city (Figure 8).

Men having sex with men at the highest risk of HIV in Bangkok are being reached through the Metropolitan Administration working hand in hand with civil society and communities. The city delivers community-based, community-led services through the Thai Red Cross AIDS Research Centre, SWING (Service Workers in Group) Foundation, Rainbow Sky Association of Thailand and HIV Foundation in collaboration with the City health facilities. In addition, a community-led service model facilitated implementation of a national test-and-treat policy in 2014, which resulted in improving uptake of HIV counselling and testing and earlier enrolment in antiretroviral therapy. In just one year, the number of people enrolled in antiretroviral therapy increased by 15%, and the number of people who start treatment early has increased dramatically.

Figure 8

Map of Quezon City, Philippines, indicating areas where men who have sex with men gather and locations of health facilities in the city



Source: UNAIDS 2015, Focus on Location and Population; Quezon City Health Department

Focusing on key populations

São Paulo, the most populous city in the Americas with a population of almost 12 million, used to be the epicentre of Brazil's HIV epidemic. The country's first HIV case was identified in the city in 1980, where the first AIDS programme was launched four years later. In 2015, when Mayor Fernando Haddad signed the Paris Declaration on Fast-Track Cities Ending the AIDS Epidemic, he set the city on course to be a leader in the global response towards ending AIDS by 2030.

São Paulo has been expanding HIV prevention services and making it more accessible to populations most in need and among whom the epidemic has hit hardest. The number of condoms made freely available to the general population increased by 50% between 2014 and 2015, and by the beginning of 2016, jumbo

“The health system has been improved to offer more of the tools necessary for citizens to prevent and treat [HIV]; society must also do its part, seeking and using these services in response to the epidemic.”

Fernando Haddad,
Mayor, São Paulo (32)

dispensers with a stock capacity of 16 000 condoms were placed in 36 key strategic locations such as metro stations and health centres. Condoms are also available in the city’s urban bus terminals. By the end of 2016, the programme will have resulted in doubling the available number of condoms to 120 million. Mobile technology is being used in the city to reach young people, especially young gay men and other men who have sex with men. A mobile app puts a calculator for HIV and sexually transmitted infection risk in their hands and provides information on how and where to access condoms, HIV testing and post-exposure prophylaxis services.

The city is engaging multiple sectors of public policy and social development, including health, education, labour and employment, public safety and housing to support and address risks among people who use drugs. In 2014, the Open Arms programme focused on the social needs of crack users (with an estimated HIV prevalence of 5%), including paid employment, food, shelter and comprehensive health care. By July 2015, 1323 beneficiaries had registered, and in the first year of service the programme delivered more than 54 000 health-care and 600 dental-care treatments to its beneficiaries, many of whom are people living with HIV.

Numerous initiatives exist to reach men who have sex with men as well as transgender people in São Paulo, including a mobile HIV testing unit and training for nongovernmental organization staff to offer HIV testing to their community clients. In six months, up to December 2015, the LGBT Citizenship Center’s mobile unit had tested 407 people for HIV, of whom 6% tested positive. Among people found to be living with HIV, large numbers are linked to health-care facilities (including 61% of those detected through community testing and 85% of young people).

Transgender people: reaching populations being left behind

Transgender communities across the world have advocated for people-centred HIV services, specifically catering to their unique circumstances and needs, as opposed to being combined with those provided for men who have sex with men. Several cities are achieving this through strong engagement with the transgender community in the structuring and delivery of HIV services, as well as partnerships with the health sector.

Brazil’s first clinic for transgender people opened in São Paulo in 2010. Since then, the city has expanded holistic health care to transgender people, including hormone therapy, psychological support and endocrinology services in nine additional primary health-care services in the city centre, where more than 70% of the transgender people in the city live and work. The clinics are an expression of São Paulo’s Municipal Policy for Integral Health of the lesbian, gay, bisexual and transgender population.

In Lima, transgender women have a high HIV prevalence (about 30%) (33), but health services only reach about 4% of all transgender people, according to the Ministry of Health. In response, the city developed a health strategy to strengthen transgender community health services, including paying specific attention to the rights of transgender people. The project was initiated in December 2015 and aims to reach 50% of the transgender population in its first year. Mobile health

teams employ transgender peer educators, who are a key source of information and condom distribution in their communities.

Similar transgender-led initiatives exist in many other cities, such as the Femina Trans Project in Cebu. This project is operated by COLORS, a community-based organization led by transgender women, and focuses on peer education and training, HIV information and HIV counselling and testing. Space for testing is provided by the Cebu Social Hygiene Clinic, with COLORS volunteer staff conducting HIV testing and counselling for the transgender community (34). This partnership with a government clinic facilitates rapid referral for treatment, care and support services and ensures that the community-based organization's role in reaching this otherwise elusive community is officially recognized.

Similarly, Sisters, a transgender-led community-based organization in the tourist resort of Pattaya, is staffed exclusively by transgender women. Sisters runs a drop-in centre and partners with a local public hospital to ensure that a transgender nurse is on-site to offer HIV testing and counselling.

3. ADDRESSING THE CAUSES OF RISK, VULNERABILITY AND TRANSMISSION

City dynamics contribute to HIV risk and vulnerability

The risk factors associated with HIV are typically exacerbated in cities, where economic and social disparities can create social marginalization. Stigma, discrimination, criminalization and violence can increase vulnerability among key populations and make them harder to reach. Such factors can also restrict access to high-quality health and social services, including HIV testing, prevention and treatment.

Better economic prospects in cities often attract people in search of better job opportunities, including sex workers and migrant workers. These groups often experience social exclusion, which may limit their access to HIV information and support. In India, for example, the HIV prevalence among migrants from rural to urban areas is more than three times higher than the national average (0.9% versus 0.27%) (35). In China, more than half of all people living with HIV in urban areas are migrant workers (36). Female migrants, especially those who engage in sex work, are especially vulnerable to HIV, through sexual violence, high-risk sexual behaviour and poor access to health services.

Gender inequality and violence increase the vulnerability to and risk of HIV infection for many women and restrict their ability to protect themselves from HIV (37). Economically disadvantaged women may choose to pursue sex, for which there are greater opportunities in cities, or informally trade sex for financial support, favours or gifts. In 2015, Harare opened a dedicated 24-hour clinic to provide care for victims of violence, including sexual assault. The clinic is the first in the country specifically dedicated to gender-based sexual violence, and doctors, nurses and counsellors are available to accommodate the needs of clients at all times.

Young people are another vulnerable population requiring special attention in city AIDS responses. Kigali supports several youth-friendly centres and clinics that provide a comprehensive package of HIV and sexual and reproductive health services to young people and adolescents. The Women's Equity in Access to Care & Treatment clinic, dedicated to working with women and vulnerable youth and adolescents living with HIV, is following nearly 400 young people living with HIV, of whom 90% are on HIV treatment and 84% have undetectable viral loads. The clinic is recognizing the importance of treatment adherence among adolescents to improve survival and the quality of life and is using the approach of directly observed therapy (commonly used for people with tuberculosis) to help adolescents stay on treatment. It also offers psychosocial support programmes for children and youth facilitated by young adult peer leaders.

Refugees face similar vulnerability from social exclusion, stigma and violence. Unaware of their own rights and living in poverty, many are harassed and sexually exploited and have limited social support. The rate of HIV infection

among refugees is not necessarily greater than among non-refugees, but their displacement and the conditions in which many live are often barriers to accessing or adhering to HIV prevention and treatment services (38, 39).

Strategic information improves understanding of HIV transmission and sources of vulnerability and risk

The success of the Fast-Track cities approach relies on the ability to identify people living with HIV and at risk of becoming infected with HIV, on making services accessible, and on identifying and addressing the barriers people face in accessing services and treatment. Several cities have performed studies to assess the modes of HIV transmission, such as Durban, which was among the first cities in sub-Saharan Africa to develop evidence-based, urban response models and good practices to guide the HIV response. Abidjan has mapped transmission locations together with available health care services to inform programme planning and resource allocation, while Algiers is working with national AIDS authorities to develop a detailed epidemiological profile of the city. Libreville is undertaking a situation analysis for HIV treatment and Accra is planning to intensify outreach to key locations.

Washington, DC, is also recognizing the importance of detailed understanding of the dynamics of HIV transmission and the associated risk factors. The city now reports all new cases of HIV in terms of transmission by sexual contact and/or injecting drug use, recognizing the diverse genders and types of sexual contacts among residents. With this type of data reporting, the city aims to reduce stigmatization and prevent the misclassification of cases among transgender people. In addition to understanding the local HIV epidemic, the approach can help to design an appropriate response for all populations at risk.

It is equally important to identify the geographical locations in which vulnerable populations are concentrated within a city. Geographical mapping exercises and key population enumeration studies have been conducted in cities around the world to help with programme planning, including cities in India, Kenya, Namibia, the Philippines, South Africa and the United States for example, AIDSvu (40).

In addition to understanding the transmission dynamics in cities, it is essential for cities to monitor and evaluate the impact of the response on the epidemic. As part of the Fast-Track cities approach, IAPAC is supporting cities to develop city-specific dashboards as a monitoring and evaluation advocacy tool. It allows cities to track progress towards achieving targets, map hotspots and other key data, and serve as a platform for communication and sharing of best practices.

Windhoek was among the first cities in Africa to address the need for a city-specific strategic and evidence-informed approach by carrying out a “know your epidemic, know your response” study in 2010. The Windhoek HIV/AIDS Strategic Plan for 2013–2016 was based on the findings of this study and specifically addresses the identified sources of risk and vulnerability: a generalized epidemic with the highest number of people newly infected with HIV being in the general adult population; poor access to primary health-care services in informal settlements; and high HIV prevalence among sex workers and men who have sex with men. As a result, the city has been advocating for the provision of HIV services in informal settlements, and councillors and management have been sensitized to the needs of the underserved and key populations in the city. Overall, about 26 000 people were tested in the city (including in informal settlements) in 2015, and the proportion of people living with HIV who are receiving antiretroviral therapy reached 80% in 2015.

Collaboration between the PharmAccess Foundation, Windhoek and the Ministry of Health and Social Services has helped to provide mobile health services to informal settlements. The mobile clinics provide integrated services, including HIV counselling, testing and linkage to treatment and care; screening for tuberculosis; diagnosis and treatment of selected communicable diseases; and testing, referral and follow-up for chronic diseases. Ensuring HIV counselling and testing services in informal settlements has been given priority as one of the key strategies to accelerate the AIDS response, to reach the ambitious 90–90–90 treatment target and to meet the commitments of the Accra Declaration and Plan of Action (from the Fourth World Summit of Mayors and Leaders from Africa and of African Descent) and Paris Declaration on Fast-Track cities Ending the AIDS Epidemic.

A survey of 3000 sex workers in Windhoek in 2013 estimated HIV prevalence to be 37%, and a survey of 2400 men who have sex with men showed that HIV prevalence exceeded 20% (41). In response, city councillors and managing officials have been sensitized to the needs of key populations through information sessions, and there is ongoing advocacy and collaboration with local authorities and law enforcement on the legal rights of key populations. The city is currently funding civil society–led condom outreach programmes for sex workers and more than 40 support groups for people living with HIV.

Windhoek has scaled up provision of HIV treatment and services to end new HIV infections among children and keep their mothers alive. Recent estimates suggest that such services have reached more than 95% of pregnant women (42). Much progress has also been made in scaling up voluntary medical male circumcision in Windhoek, resulting in more than 27% of men being circumcised, which is substantially higher than the national average of 10%. Complementary funds have been provided to the civil society sector to reach informal settlements with interventions that specifically target stigmatized and marginalized populations.

Support those who need it most

In the mega-city of Mumbai, HIV prevention is focused on key and bridge populations, including female sex workers, men who have sex with men, transgender people, people who inject drugs, male migrants and truck drivers. The city regularly uses mapping activities to estimate the size of each of these populations and identify areas of high concentration where they can be reached. This facilitates registration of clients to ensure regular access to prevention, care and treatment services provided

by nongovernmental and community-based organizations. Currently, Mumbai has 48 projects run by 28 civil society organizations whose efforts have reached close to 200 000 people with HIV comprehensive prevention services in 2014–2015, including female sex workers, men who have sex with men, transgender people, people who inject drugs, migrants and truck drivers (43). The prevention services also provide links to appropriate care and treatment services for sexually transmitted infections, including HIV.

Although access to HIV prevention and treatment has significantly expanded in Mumbai and sustained awareness campaigns focusing on female sex workers have resulted in a significant decline in the number of people newly infected with HIV, challenges remain. Most cases are not detected early, and many new cases are being detected among other vulnerable populations such as migrants living in slums and young people, who are less likely to be covered by services focusing on traditional key populations.

Tehran's AIDS response focuses on providing basic services to people who inject drugs, including harm reduction and HIV prevention and treatment services. HIV prevalence in this population has been reported by the Ministry of Health and Malekinejad et al. (44) to vary from 9% to 27% since 2007. Services are delivered across a range of outlets in Tehran, including voluntary counselling and treatment centres, women's centres, opioid substitution treatment facilities, night shelters and via outreach teams. More than 100 outlets and at least 28 outreach teams, typically operated by local nongovernmental organizations, offer a range of services from HIV prevention and treatment to harm reduction to addressing the basic needs of people at higher risk of HIV infection, including shelter, food, and health services.

To address stigma and discrimination, Positive Clubs have been providing a variety of support services for their members (key populations, people living with HIV and their families) during the past 10 years. In addition, advocacy campaigns, policy dialogues involving civil society and people living with HIV and training for health-care providers are carried out to reduce discrimination in health settings in the city. Outreach is being improved for key populations. In 2015, a refurbished AIDS bus visited 10 locations in the city and provided rapid diagnostic testing and counselling services using outreach workers on motorbikes to recruit individuals. Counselling services included information on HIV risk through injecting drug use and sexual transmission. The project attracted more than 2200 visitors and carried out more than 1500 voluntary counselling sessions and HIV tests in three weeks. People living with HIV are automatically linked to counselling, care and treatment services. Antiretroviral therapy coverage and retention in care remain challenging but are being addressed as part of the city's goal to achieve the 90–90–90 treatment target.

The AIDS Bus was also very successful in reaching the general population. Men younger than 40 years comprised the largest group of clients who sought the mobile voluntary counselling and testing services, often seeking services after dark and appreciating the anonymity that it facilitates.

Holistic approaches work best

Mexico City accounted for 17% of the national HIV burden in 2012 (45). The rate of new HIV infections is four times higher than the national average, and the epidemic is heavily concentrated among men who have sex with men and transgender women.

The Clinica Codesa is addressing the causes of HIV risk and vulnerability for a range of key populations through programmes for women, transgender people, people who use drugs, victims of sexual violence, men who have sex with men and people in prisons and other closed settings. With more than 10 000 users, the clinic is the main centre for HIV testing in the city, and it offers free and comprehensive services to people who are living with HIV, including dental care, nutrition and men's and women's health. Sexual and reproductive health programmes cover sexually transmitted infections screening and vaccination against human papillomavirus.

Civil society organizations have partnered with the municipal AIDS programme in Mexico City to reach key populations through mobile services. Buses have been adapted to serve mobile testing and care units, providing HIV voluntary counselling and testing and basic care services where key populations can be found.

The city's transgender women are at particularly high risk of HIV, with prevalence of 20–60% (46). In response, two dedicated HIV care centres have been opened, providing specialized gender and HIV services. The centres offer HIV and sexually transmitted infection testing services, antiretroviral therapy, post-exposure prophylaxis and specialized medical care, including hormonal therapy. One of the centres receives 20 new clients each month, of which more than one third are people living with HIV.

4. USING THE AIDS RESPONSE FOR POSITIVE SOCIAL TRANSFORMATION

Cities present their own unique challenges and opportunities to building a multisectoral approach to the HIV epidemic and can benefit from social transformation opportunities associated with a strong AIDS response. Equity, inclusiveness, resilience and sustainability are not only key to a successful health care strategy: they are also the building blocks of a thriving city.

The AIDS response requires a multisectoral approach to address the social and structural drivers

The success of the AIDS response requires a unified approach involving health and social sectors, enabling it to reach the most marginalized populations and support the basic needs of all people living with HIV. As such, the local response to HIV can be leveraged to drive forward positive social change in cities, for which the outcomes not only help to reduce new HIV infections, but also benefit broader public health and social transformation.

Poverty, violence (especially gender-based violence), punitive laws and discriminatory social norms all play a key role in fuelling the HIV epidemic, and in creating inequities in access to health care, education, housing and economic opportunity. By investigating the underlying risk and contextual factors associated with HIV, city leaders are taking a multisectoral approach to tackling some of their most intractable social problems with new ideas and are leveraging the impact of existing initiatives and giving them renewed impetus.

Cities are prime locations for social transformation

The leadership of numerous cities around the world recognizes the inextricable links between HIV, broader health needs and other socioeconomic issues. They are capitalizing on the city's role as a hub for education, innovation, science, technology and communication to bring about lasting and widespread social change through their response to one disease.

Given the necessary vision, political will and the personal commitment, city leaders can incorporate HIV prevention, treatment and care into existing social protection and transformation programmes. How cities respond to the HIV epidemic will determine not only the trajectory of the epidemic itself but also the extent to which it can foster social transformation.

Cities, even those in highly resource-constrained settings, can use their response to HIV to benefit broader socially transformative goals. In Blantyre, Malawi, for example, structural factors associated with the HIV epidemic, including gender-based violence, child abuse, stigma and discrimination are being addressed through existing programmes such as police victim support units and community policing measures. The city is also looking at ways to co-opt existing facilities for children such as community-based early childhood development centres, youth clubs and support groups for people living with HIV.

Cities are also well placed to develop programmes to promote gender equality, the integration of migrants and other interventions to reduce vulnerability to HIV and increase the reach of HIV services. Kyiv, for example, has worked hard to eliminate the stigma and discrimination that prevent people living with HIV and key populations from accessing services. In six of the city's 20 health care facilities preselected for an anti-stigma pilot project (RESPECT), 720 health-care workers underwent training on how to provide stigma-free services, and the programme greatly reduced confidentiality breaches (down to 25% of health-care workers from 47% before the programme). In addition, knowledge levels on HIV transmission among health-care workers increased by 15 percentage points to 65%, while the indicator for stigma, induced by the fear of getting HIV, was reduced by a factor of 2.5. The health-care workers received further training in provider-initiated testing and provision of services. Of the people who were newly diagnosed with HIV in the RESPECT facilities, 85% were linked to care versus only 35% on average in the city.

Through an inclusive and enabling environment, cities can promote social transformation that ultimately benefits the efforts to end AIDS. For example, the AIDS response in Buenos Aires, in partnership with implementing civil society organizations, reaches out to the members of gay entertainment venues, providing condoms and HIV prevention and testing information. In addition, although the city has legal policies to protect the rights of lesbian, gay, bisexual, transgender and intersex communities, the Directorate-General of Living Together in Diversity is implementing programmes to promote social inclusion. These activities include events to celebrate and discuss diversity, capacity-building and sensitization within the police department on diversity and human rights, access to employment for transgender people and collaboration between sectors of government to address human rights violations.

Strengthening civil society organizations through the AIDS response in China

In China, participation of community-based organizations in the AIDS response is essential, especially to mobilize key population communities and deliver peer-based services to people living with HIV. In three cities—Chengdu, Harbin and Shanghai—clinics, local governments and the local Centres for Disease Control and Prevention are working with community-based organizations to reach underserved populations with HIV prevention, treatment and care services.

Chengdu, home to more than 12 million residents and an estimated 15 000 people living with HIV, has a collaborative network of civil society organizations, primary health-care providers and the local centre for disease control and prevention to ensure that people living with HIV get the services they need. Although all antiretroviral therapy and most blood tests are free of user charges, the Ministry of Health and other national organizations also make some provision to cover health-care and living expenses. People living with HIV can choose their service provider from a range that includes more than 12 agencies organized by peers. This approach has helped Chengdu to ensure that 90% of HIV cases are followed up, 90% of people diagnosed with HIV get treated and 94% of those who are treated are virally suppressed. The next step for the city will be to reach mobile and migrant populations who are difficult to track and retain in care.

In Harbin, men who have sex with men account for an estimated 76% of HIV transmission (47). Community-based organizations are transforming the city's response to HIV by helping the community to overcome the distrust towards government health-care providers and encouraging people who have had unprotected sex to get tested. The City Infectious Disease Hospital provides sites for community-based organizations to conduct HIV screening and epidemiological investigations; those found to be living with HIV are provided with antiretroviral therapy, viral load testing and care free of charge.

In 2015, one community-based organization tested 4100 people, an increase of 13% compared with 2014, and diagnosed 24% of all people living with HIV across the city. All people who tested positive were followed up and linked to treatment and care programmes.

In Shanghai, one of China's largest cities, with a population of 24 million, homosexual transmission accounted for 65% of newly reported HIV cases in 2015. The Shanghai government continues to support civil society HIV service programmes, and in 2014 and 2015, allocated a ¥4 million (US\$ 616 000) annual budget to seven civil society and community-based organizations to support key populations. The Council of Shanghai Ziqiang Social Services has 1100 social workers and provides services to 80 000 people who use drugs in Shanghai. The Social Services, together with the Shanghai Commercial Sex Worker and Men Who Have Sex with Men Service Center, reached 9500 people who use drugs and 3250 men who have sex with men with HIV prevention and testing services in 2015.

In 2014, the Shanghai Center for Disease Control and Prevention set up an AIDS prevention centre in downtown Shanghai with office space for community-based organizations. One such organization for men who have sex with men and another for people living with HIV provide one-stop HIV services, including community mobilization, HIV counselling and testing, CD4 rapid testing and promotion of early antiretroviral therapy. HIV prevention and testing services provided at the centre to men who have sex with men increased by 60% between 2014 and 2015.

Partnering with communities of sexual minorities

When Panama City Mayor Jose Blandon publicly appeared with the city's community of Lesbian, Gay, Bisexual and Transgender people (LGBT), to attend the annual Gay Pride Parade in 2015, he sent a powerful message to city residents: their city has no room for stigma and discrimination (48). His action garnered the support of the City Council to approve a municipal decree prohibiting discrimination based on HIV status, sexual orientation and gender identity, with penalties for those who violated this principle.

Panama City subsequently signed the Paris Declaration and developed a plan of action to accelerate its AIDS response, in which existing initiatives are being incorporated. For example, the action plan builds on the existing Safe Women project, which seeks to eradicate violence against female sex workers by the police. It provides support for Casa Hogar el buen Samaritano, a shelter that also provides livelihood and support services for people living with HIV who are living on the street. Similarly, the action plan incorporates support for

“There are many different HIV/AIDS resources. I think it is important to integrate them together and then we can all be more efficient.”

Han De Lin, Director,
HIV department, Chengdu
Center for Disease Control,
Chengdu, Peoples Republic of
China

“Equitable services are about equal partnerships with communities and civil society, so the Bangkok Metropolitan Administration values and continues to strengthen its collaboration with community organizations in the delivery of HIV and other essential health services.”

Pusadee Tamthai,
Deputy Governor of Bangkok

PROBIDSIDA, a service offering HIV testing, counselling and psychosocial support services for people diagnosed with HIV as well as education programmes for schools, public institutions and the private sector.

The action plan has introduced new activities, such as ensuring that HIV counselling and testing services are available at all municipal sociocultural events and activities promoted by the city. In addition, Mayor Blandon signed an agreement with education and health ministries to implement comprehensive sex and sexuality education, including on HIV, in all public schools in the district of Panama.

In Bangkok, the integration of other health services with an HIV programme has enabled the Thai Red Cross AIDS Research Centre to overcome barriers to reaching transgender people with HIV services. Extensive consultations with the transgender community to better understand their health-related needs revealed that transgender people face significant obstacles to accessing hormone level testing and therapy, the most basic health service that they regularly require to affirm their gender identity.

Using hormone therapy services as the service entry point, the Tangerine Community Health Centre opened in late November 2015 and became the first clinic catering specifically to the needs of transgender people in Bangkok. Most of the clients have since come to seek hormone level testing and injections, but they are also offered a package of services including anal and neo-vaginal pap smears, cervical smear tests for transgender men, testing for sexually transmitted infections, and an HIV test free of charge (all Thai nationals are entitled to two HIV tests per year free of charge). The Centre provides both pre- and post-exposure HIV prophylaxis and harm-reduction services for safe injection. Tangerine’s catchment area is Greater Bangkok, and it has a target to see more than 400 clients in the first year of operation, with at least 600 consultations. In the first two months of operation, the clinic was already on track to far exceed these targets. The Centre’s key strengths are its foundations built on extensive community engagement and its model of integrated health services with a self-sustaining funding model.

Bangkok is also contributing to positive social change through its AIDS response in other ways. It was a pioneer in the system-wide effort to reduce stigma in health-care settings launched in Thailand in 2015. The city was one of the first to measure stigma in health facilities, among people living with HIV and among key populations. A series of evidence-informed stigma reduction interventions are being implemented in Bangkok under the Ending AIDS Strategy (49). In addition, partnerships of public sector and civil society in Bangkok effectively implement online outreach to men having sex with men and use mobile applications that empower and enable communities to report on the access to and quality of HIV and related health services. Outreach also helps to address violence and other forms of violation of human rights, primarily of sex workers, men who have sex with men and transgender people.

In 2015, Bangkok reviewed the patterns and trends of the HIV epidemic among men who have sex with men from 1984 to 2014. This strategic information enabled the city stakeholders to better plan and implement collaborative

prevention interventions. The latest developments in medical and social science have been incorporated in Bangkok's response to HIV. Civil society organizations and communities actively engage in research and development, and research confirms that they are instrumental in bringing HIV testing and treatment to where it is most needed.

The AIDS response goes mobile

Cities contend with some of their country's worst social problems, but they also have the best information and communication technology at their disposal and are often in a strong position to collaborate with the private sector on socially transformative projects. The use of mobile phone technology in the field of health (mHealth) is expanding in low- and middle-income countries. Abidjan plans to use this tool to reach people living with HIV in the city and collect information to improve its AIDS response.

Abidjan is home to about one third of all people living with HIV in Côte d'Ivoire and has an estimated HIV prevalence of 5.1%, substantially higher than the national prevalence of 3.7%. The mobile phone penetration rate in Abidjan is 175% versus 88% in the countryside, and the mobile data penetration rates are 39% versus 23%, respectively. Building on the high penetration of mobile technology in the city, telecommunication operator Orange signed a memorandum of understanding in March 2016 to collaborate with UNAIDS on a new project to strengthen links between health-care providers and people living with and affected by HIV through mHealth. This will be used not only to anonymously and confidentially gather data to expose service gaps; it will also enable health workers to communicate with people enrolled in care via text messages, voice mail and mobile-based surveys. Health professionals will be able to send messages, conduct text or voice surveys to evaluate user perceptions on the quality of services and answer questions through a virtual call centre. One of the main objectives is to empower people to manage their own health care. A four-month pilot phase started at the end of April 2016 in Abidjan, involving 1000 people living with HIV who are enrolled in HIV treatment programmes, including 300 sex workers and men who have sex with men. Using simple mobile phone technology as part of the response to HIV shows the way for other health and social protection programmes.

“Through extensive consultations with the transgender community, we understood the barriers they face when accessing health services.”

Nittaya Phanuphak,
Chief, Prevention
Department, Thai Red Cross
AIDS Research Centre

5. BUILDING AND ACCELERATING AN APPROPRIATE RESPONSE TO LOCAL NEEDS

Effective responses to HIV comprehensively address the needs of local populations and deliver appropriate and integrated services in a safe, equitable and accessible manner, often with key involvement from the community. Examples include treatment for people living with HIV, harm-reduction programmes for people who inject drugs, condom and lubricant access for men who have sex with men, prevention and treatment of sexually transmitted infections for sex workers, tuberculosis screening and treatment for homeless populations and others at risk for tuberculosis and programmes to address the basic needs of vulnerable people, including housing, food and employment.

Tailoring services for affected people and delivering them where they are needed

The involvement of community-based and civil society organizations is vital in responding to local needs, including in advocacy, bringing community issues to the attention of policy-makers, and in the provision of HIV services. For example, pressure on the government from civil society groups in Rio de Janeiro led to a broad collaboration on evidence-informed policies for the local AIDS response, and several civil society groups have been involved in providing services in the city.

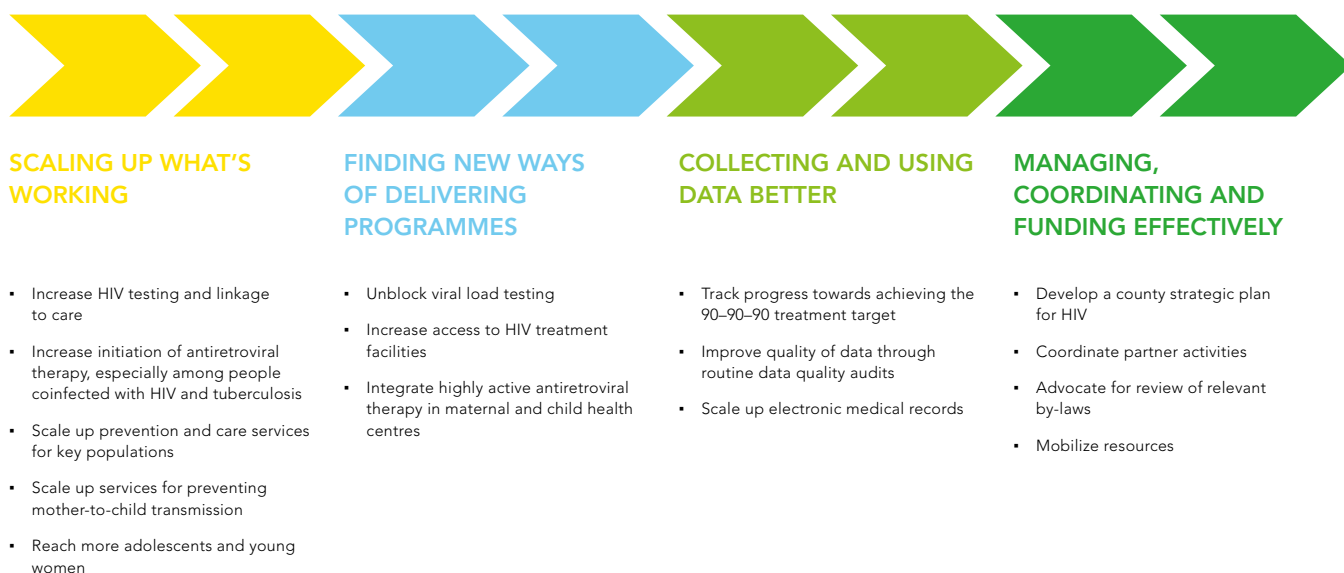
With an HIV prevalence of about 8%, Nairobi has a substantial HIV burden but is successfully implementing the Fast-Track approach to end AIDS in the city, including in informal settlements (Figure 9). Adopting an approach with clear priorities that focuses on population and location, Nairobi is involving its partners in the accelerated response. Each year, about 3400 people are estimated to be newly infected with HIV, of which an estimated one third are among key populations (50). To address this, Nairobi launched a 10-day campaign at the end of 2015 to increase HIV and other health services and promote HIV education on and awareness of key populations among health providers and the public. The target to test 2000 individuals was surpassed in this campaign: 6602 individuals from key populations received HIV testing and counselling, and 192 individuals testing positive were linked through peer educators to care and treatment clinics. Health education and male and female condoms and lubricants were provided to all clients tested. In addition, sensitization meetings with health-care workers to promote stigma- and discrimination-free health services to key populations were carried out in four facilities in Starehe and Embakasi sub-counties.

Nairobi is also aiming to provide comprehensive services to the more than 6000 people who inject drugs. Medically assisted therapy with antiretroviral therapy for people who inject drugs and who are living with HIV are provided at the Mathari hospital. SAPTA (Support for Addiction, Prevention and Treatment in Africa) is a civil society organization supporting people who inject drugs through two strategically located drop-in centres, which also act as safe havens for people who inject drugs. Psychosocial counselling, testing for HIV and

other sexually transmitted infections, and needle and syringe programmes are available through the facility, as well as referrals to the nearby methadone clinic for follow-up and adherence support. In addition, the centres provide basic meals, cleaning facilities and economic empowerment activities for people who use drugs.

Figure 9

Nairobi's approach to fast-tracking the HIV response



Source: Nairobi City Country 2015, HIV Fast-Track Report

Buenos Aires has taken a rights-based approach to increase access to health services for transgender populations. In addition to the National Gender Identity Law to freely develop one's gender identity and which guarantees access to integrated care and treatment, the city's own by-law guarantees the availability of integrated health services for transvestite, transsexual, transgender and intersex individuals. Buenos Aires has a network of eight hospitals, 23 health centres, one mental health centre and six nongovernmental organizations providing comprehensive and integrated services to transgender populations, and outside this network, 250 health-care professionals have received training on the particular health needs of transgender people. Overall, these actions in Buenos Aires have reduced stigma and discrimination and increased the visibility of transgender populations within health-care settings.

Casablanca has Morocco's first and largest centre for support for adults and children living with HIV. The city focuses on testing, treatment and retention in care of people living with HIV, and it was the first city in the country to implement a test-and-treat strategy in 2015. In all, 98 of its 134 public health centres offer HIV testing services. In 2014, more than 52 000 tests were performed. Of the estimated 4600 people living with HIV in the city, 56% were receiving antiretroviral therapy at the end of 2015. This was substantially higher than the national coverage of 36%. Of all people living with HIV receiving antiretroviral therapy in the city, 82% have an undetectable viral load after 12 months of treatment.

An appropriate response to local needs also entails programmes to address the basic needs of vulnerable populations, such as housing, food and employment. Lack of adequate, stable and safe housing is often a barrier to accessing HIV and other health services, leading to poor health outcomes, and is associated with a higher HIV transmission risk. Housing assistance improves many of these outcomes (51). Chicago, New York City and Vancouver all have programmes providing affordable and community-friendly housing for people living with HIV and services to support employment.

Women and children first

Local city programmes that empower and protect women against gender-based and sexual violence and economic and social inequality can reduce their HIV risk and facilitate access to HIV services. Initiatives that promote equal economic opportunities for women may mitigate the effects of social and gender inequality that lead to women pursuing sex work or young girls seeking out older and higher-risk sexual partners in informal exchange for financial support or other gifts. Children and adolescents also require a focus in local responses, including providing HIV testing, treatment and long-term care services for children with or exposed to HIV and making HIV services more accessible and appropriate for adolescents.

Dar es Salaam has shown that increasing the demand for, access to and uptake of key interventions is crucial to reducing the impact of HIV on adolescents and young adults. Increased behaviour change communication efforts on HIV in the city in the past two years has made more adolescents and young adults willing and motivated to get tested for HIV, and those who are positive are enrolled in HIV treatment and care programmes. Post-test and peer education clubs help to ensure adherence. The faith-based organization PASADA is implementing various HIV testing and counselling strategies in Dar es Salaam, at health facilities and other institutions and in the community, to improve the identification and enrolment of children and adolescents living with HIV into care, treatment and support. Of the more than 25 000 people who were tested between January 2014 and March 2015, 19% were children 0–14 years old, and 56% were 15–24 years old.

In addressing the needs of pregnant women and children, Nairobi has significantly scaled up services for preventing mother-to-child transmission. By 2015, 79% of pregnant women living with HIV in the city were receiving services to prevent mother-to-child transmission, which has resulted in a significant decline in the number of children newly infected with HIV (52).

It was also estimated that 77% of children living with HIV are receiving treatment. Part of this success results from improved adherence among pregnant women or mothers living with HIV through the combined delivery of HIV and reproductive health services. At the Umoja Health Centre in Embakasi, downtown Nairobi, women living with HIV receive pre- and postnatal services, including information on children's health, family planning and preventing mother-to-child transmission of HIV. In addition, as part of a national campaign to improve children's health and maternal outcomes, including HIV outcomes, eight mobile clinics have been set up in Kibera, Nairobi's largest informal settlement. These simple, prefabricated facilities comprise a few rooms to provide maternal and child health services, along with HIV testing. The eight mobile clinics have served more than 50 000 people so far (53). Three facilities have started delivering antiretroviral therapy, and it is anticipated that the remaining clinics will start delivering them in 2016 as well.

Local evidence-driven HIV services: equitable and stigma-free

Jakarta adopted the Fast-Track cities approach and signed the Paris Declaration in October 2015, calling for the expansion of HIV testing and treatment across five priority districts. The city plan builds on the strategic roll-out of antiretroviral therapy policies in these districts.

Since 2013, the AIDS response in Jakarta has focused on increasing HIV testing and treatment coverage among key populations, including men who have sex with men, transgender populations (waria) and people who inject drugs (54). One in five of the people newly infected with HIV in Indonesia are men who have sex with men, and the HIV prevalence in this group has been rising in Indonesia, from 5% in 2007 to 12% in 2011 (55,56). In Jakarta, 17% of men who have sex with men and 31% of waria are estimated to be living with HIV (56). Jakarta is promoting and delivering services that are community friendly and free from stigma and discrimination, and clinics have taken different approaches to adapt to the needs of men who have sex with men in dedicated clinics and in the wider general health practice.

In addition, some clinics offer a same-day service for HIV counselling and testing, providing results and offering treatment for working people who cannot afford to take multiple days off work or opening one Saturday each month. At the Ruang Carlo clinic in the St Carolus Hospital in Jakarta, services are provided on a fee-for-service basis, but assistance is available for people with very low incomes. Services are strictly confidential, and the clinic setting is anonymous. Clients go directly to the point of service without having to register first in the main hospital, and all clinic personnel have received training on the care and treatment of people with HIV, including on the need to maintain their confidentiality in all circumstances. A key and consistent feature found in a best-practices review of facilities in Jakarta providing one-stop services for men who have sex with men was "friendly, compassionate and non-judgemental attitudes and behaviour of the health-care providers".

A test-and-treat approach combined with one-stop service delivery was cited as a main reason for high success in clinic utilization. Of the 2796 tests offered in the last 12 months, the Ruang Carlo clinic, which attracts a high number of men who have sex with men, had a 100% HIV testing acceptance rate and

“The values of non-discrimination and inclusion are very important. Buenos Aires is a tolerant city. You can count on us. We will implement the commitments we make by signing the Paris Declaration.”

Horacio Rodríguez Larreta,
Mayor of Buenos Aires

86% of diagnoses were linked to treatment programmes (57). The test-and-treat services are also offered to female sex workers and people who inject drugs.

Young people have an elevated risk of HIV infection in Buenos Aires. More than half of all people living with HIV are younger than 35 years, and 16% of the people newly diagnosed with HIV in the city are 15–24 years old (58). Young people cannot protect themselves from HIV without easily accessible and easy-to-understand information appropriate to this group’s specific needs and behaviour, and Buenos Aires is addressing this with the Chau Tabú (meaning Bye Taboo) initiative. The initiative aims to promote healthy sexual and reproductive behaviours among young people within an environment free from discrimination, pressure or violence. It includes an online service, two separate youth friendly spaces in different parts of the city to provide sexual and reproductive health as well as addiction prevention services, and a mobile clinic which offers workshops at schools and for nongovernmental organizations working with the youth.

The online service, #ChauTabú, provides reliable and non-stigmatizing information about HIV, sexuality, sexual and reproductive health and about the services available in the city. The interactive content on the website and Facebook pages was designed by an interdisciplinary team of doctors, psychologists, educators and community activists, focusing strongly on human rights, gender equality and sexual diversity. Users can ask questions through the online sites and find reproductive and sexual health services, including HIV testing centres, on an interactive map. They can also read personal stories from their peers on relevant topics, such as getting an HIV test, coming to terms with one’s sexual orientation, having sex without a condom and teenage pregnancy.

Since it was launched in 2013, the initiative has been successful in reaching young people of both sexes. More than 433 000 young people have visited the webpage and 7750 queries have been made through the online question and answer section. Of all the users, 61% are 18–34 years old, and 47% are women. Of all the questions submitted online, 71% are from people 15–19 years old and two thirds of these are from young women. About 65 000 young people comment on, share or like one of the Facebook posts from #ChauTabú each day. Popular aspects of the online sites include the personal stories from peers, a question-and-answer test about sexual and reproductive health and videos about condom use and HIV.

Civil society organizations and activists have been instrumental in driving forward and supporting an equitable AIDS response in Buenos Aires. For example, the advocacy of the Argentinean Network of Young People and Adolescents Living with HIV has ensured that the proposal to renew the Argentinean AIDS law retains the provisions of the original law to protect the privacy and anonymity of people living with HIV, including the rights of children born with HIV. Individual activists among young people and the transgender community also reach out to their peers, providing support and recruiting them to join in community efforts to support and improve the AIDS response for all people at higher risk of or living with HIV.

Casablanca has focused its response to HIV on local key populations. The HIV prevalence of men who have sex with men was estimated to be 4.4% in 2015. Providing HIV testing services among key populations has been challenged by a lack of HIV screening facilities outside health-care facilities. To address this, a pilot community testing programme using rapid diagnostic tests administered by community members was successfully implemented in 2015, reaching 1974 people, including 981 female sex workers, 487 men who have sex with men and 506 migrants. More than half of the diagnoses were linked to treatment and care programmes. Casablanca is also the first city in Morocco to start introducing methadone maintenance programmes in prisons.

6. MOBILIZING RESOURCES FOR INTEGRATED PUBLIC HEALTH AND DEVELOPMENT

The response to HIV is a shared responsibility, and more than individual health is at stake. The extent to which a city considers funding its AIDS response to be an investment in the productivity, prosperity and well-being of its population directly affects how well it can Fast-Track an end to AIDS. The experiences of cities that invested early in the AIDS epidemic, such as Bangkok and San Francisco, show that not only more money is needed but also smarter, more targeted uses of HIV investments that can be successfully and effectively integrated with broader public health goals.

Funding the roadmaps that can end AIDS

Six months after the Paris Declaration was signed, a meeting in Mumbai, India brought together officials from 13 municipalities in Asia, Africa and Latin America to develop practical implementation plans that focus, scale up and accelerate the AIDS response in the respective cities. By mid-2015, 12 of the 13 cities had developed draft 18-month implementation plans. These implementation plans demonstrate that the cities are looking for innovative ways to deliver programmes, including decentralizing services at the community level; new approaches on HIV testing, such as self-testing and adopting a test-and-treat model; and use of technology for improving patient follow-up and programme monitoring (Figure 10). The plans also show that cities want to drop programmes that do not work, to get the most out of their available resources. For example, eThekweni/Durban intends to avoid the fragmentation of service delivery; Tshwane/Pretoria intends to avoid uncoordinated HIV action plans; and Jakarta wants to extend treatment initiation beyond hospitals only and lower its dependence on external funding.

The right funding approach to reach more people

The way in which HIV services are funded profoundly affects their reach, especially among key populations. Five years ago, San Francisco established Linkages to Care navigators to aggressively seek out people living with HIV who had been lost to follow-up. This program, expanded in 2015 with financial support from the MAC AIDS Fund, locates patients who miss appointments and do not respond to calls from clinic staff. Navigators not only re-connect patients to clinical care, but also help to link them to support services such as housing, mental health, nutrition and other programs that will help to retain them in care. Over a two-year period, almost three quarters of re-linked patients remained in care and were twice as likely to be virally suppressed as unlinked patients with similar characteristics (59).

The State of Washington, United States, has invested significantly in HIV prevention for populations at high risk of infection. In 2014, the State spent US\$ 2 million to purchase pre-exposure prophylaxis and health insurance for individuals at high risk of HIV infection to reinforce their goal of reducing new infections by 50% by 2020. The awareness and advertising campaign contributed to a 27% decline in the number of people newly infected with HIV between 2010 and 2014 (60).

Identifying and addressing gaps in the AIDS response

In 2011, the Philippines was one of just nine countries globally that saw an increase in the number of people newly infected with HIV from 2001, and Quezon City showed that the HIV prevalence among its key populations was substantially higher than the national average. Among men who have sex with men, HIV prevalence increased from under 1% in 2007 to almost 7% in 2013 (61), which is more than three times the national average for men who have sex with men. Although registered female sex workers were well covered by existing interventions—in 2011, 93% had been reached with condom programmes—this was not the case for men who have sex with men: just 25% had any contact with a formal HIV prevention programme. Moreover, it was homosexual sex not heterosexual sex that was now fuelling the epidemic, accounting for more than half of the city's new cases.

To address the gaps in Quezon City's AIDS response the Quezon City Health Department developed an Investment Plan for AIDS 2012–2016. Every component of the investment plan was then costed and weighed against the existing funding environment to identify the funding gap, which was then used as stimulus to find innovative and sustainable ways to bridge it. The plan also built in strong mechanisms for monitoring and evaluating progress. The total investment target for the plan to achieve its goals from 2012 to 2016 is an estimated P547 million (US\$ 11.8 million), predominantly in facility-based prevention services, such as screening and treatment for sexually transmitted infections, condom provision, peer education and HIV testing and treatment. The gap between existing and required funding was substantial: with an average annual investment target of P109 million and secured funding of P20 million, the plan required an additional P89 million in funding.

One of the most important ways to fill this gap was to incorporate the response to HIV into the larger goal of achieving universal health coverage, by encouraging increased enrolment in the accreditation of health facilities by the national social health insurance provider PhilHealth. The plan also encourages greater collaboration with the private sector, since corporate social responsibility funding was identified as a potential source of financial support. In 2015, Quezon City reviewed its existing investment plan and developed a plan for 2016–2019 with updated annual targets and investment needs. Pioneering efforts in mapping key populations informed the plan, and population-level modelling helped to determine the potential impact of current programmes on HIV incidence and AIDS-related deaths.

The AIDS investment plan was an important tool to mobilize local resources, both financial and technical, to implement innovative HIV solutions. These include opening two additional HIV clinics; institutionalizing peer HIV education by increasing the number of city educators from 10 in 2012 to 35 by end of 2015; and

“The innovation and ‘can-do’ spirit of Mumbai will help shape our city’s response to ending AIDS.”

Snehal Ambekar,
Mayor of Mumbai

increasing the annual coverage of voluntary counselling and testing from less than 500 clients in 2009 to more than 14 000 by the end of 2015, almost 10 000 of whom were men who have sex with men. A satellite treatment hub was also opened in the city; by the end of 2015, it had enrolled 223 people living with HIV.

Resource-constrained cities focus on community engagement

While Quezon City grapples with a concentrated HIV epidemic, other cities such as Lusaka are faced with a more widespread population at higher risk of HIV infection and have to adopt an investment plan that reflects both this challenge as well as severe resource constraints. The Mayor of Lusaka, George Nyendwa, has committed to ending the HIV epidemic in the city by signing the Paris Declaration during the Fourth World Summit of Mayors and Leaders from Africa and of African Descent in June 2015 in Accra, and he has incorporated the Fast-Track approach into the Lusaka City Council Strategic Plan (2016–2020). Scarcity of funding and facility-based health-care workers means that any effective plan must incorporate the work of community-based organizations to provide HIV prevention, diagnosis and care services.

To do this, the city leadership needed to engage with district- and community-level stakeholders. With US\$ 40 000 in seed money from UNAIDS, Mayor Nyendwa mobilized the city's HIV and health service providers and community groups, with an initial focus on scaling up HIV testing and counselling services and eliminating mother-to-child transmission. Both campaigns will run throughout 2016. The testing campaign specifically focuses on unemployed young men and women in areas with a high prevalence of HIV, while the campaign for preventing vertical transmission serves all pregnant women in the city.

Lusaka's strategy of galvanizing community-based organizations has given the city's AIDS response tremendous reach on a tight budget: the testing campaign reached 94% of its targeted 20 000 clients in the first month, and within weeks more pregnant women living with HIV were being tracked and supported. The City Council also approved a budget to fund these high-impact interventions, including expanded treatment programmes, between 2014 and 2018. During the last quarter of 2015, 5770 people living with HIV in Lusaka initiated antiretroviral therapy. One challenge the city is facing is the lack of viral load testing machines (only two machines are available). Hence, no information is available on viral load suppression among those receiving antiretroviral therapy.

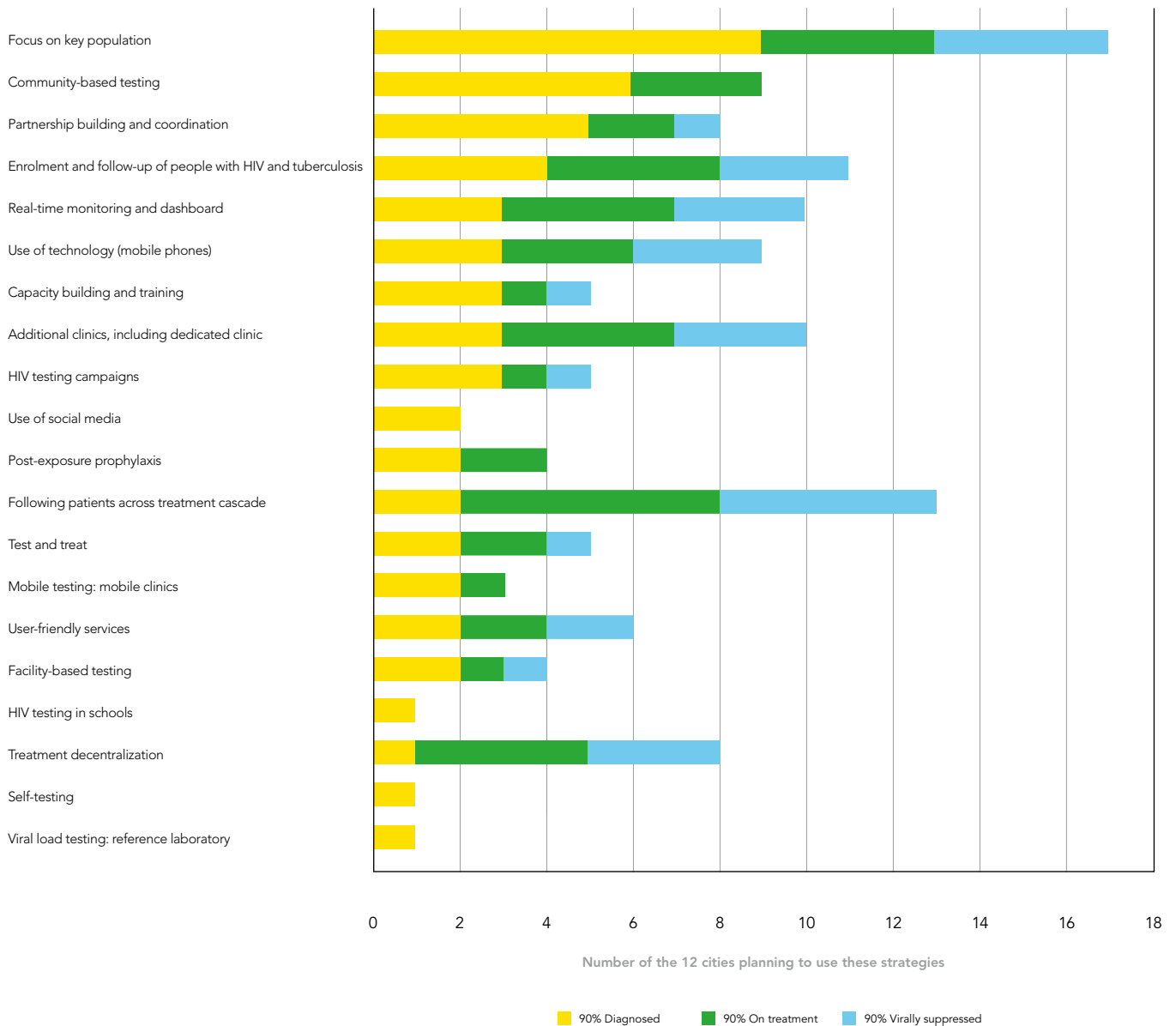
Integrating health services maximizes efficiency

A strategic plan to address the HIV epidemic is important for focusing attention and resources where they are needed, but how it is implemented is equally important. Ho Chi Minh City has learned that integrating HIV and other health services is an effective use of resources and can maximize efficiency.

Ho Chi Minh City has a population of 8 million and is home to about 50 000 of the estimated 250 000 people living with HIV in the country (62). The HIV prevalence is estimated to be about 13% among men who have sex with men, 4% among female sex workers and 17% among people who inject drugs (62). Since 2003, the city's counselling and community support centres had offered integrated HIV services for these populations, including counselling, testing, prevention,

Figure 10

Fast-Track implementation plans in 12 selected cities that attended the Mumbai meeting in 2015. Frequency of strategies or programmes to address the 90–90–90 treatment target as proposed in their Fast-Track implementation plans



treatment and care services, all offered in user-friendly environments. However, with staff shortages and historically heavy dependence on donor funding (for example, the United States President's Emergency Plan for AIDS Relief (PEPFAR) fully funded staffing for the community support centres), and with the threat of donors' shifting priorities, the centres became unsustainable. At the same time, neither the public nor private hospitals were sufficiently engaged in HIV care.

In response, the Ho Chi Minh City People's Committee increased its investment in the AIDS response by almost 10-fold, from 1.245 billion Vietnamese dong (US\$ 56 000) in 2008 to 12 billion Vietnamese dong (US\$ 538 000) in 2015. The City government also piloted alternative service delivery models and staffing options in 2010 to make more efficient use of existing resources while ensuring the quality of services. HIV services became based in the preventive health sector, with services delivered at community health stations by staff receiving salaries from the government budget. This created integrated sites where all HIV services could be accessed including harm-reduction programmes for people who inject drugs.

Offering services through one-stop clinics within the district health care system both reduced operating costs and improved services for patients. Late-stage initiation of HIV treatment fell from 42% in 2011 to 32% in 2015, and retention on methadone maintenance therapy improved. Both the annual number of people newly infected with HIV and the annual number of people dying from AIDS-related causes have declined from 2006 to 2015 in Ho Chi Minh City: from 9111 to 1697 people newly infected with HIV and from 1148 to 203 people dying from AIDS-related causes. HIV sentinel surveillance data also show declines in new HIV infections among key populations. In 2015, the Ho Chi Minh City People's Committee approved the budget for increasing the staffing of district preventive medicine centres and commune health stations from 1.75 per 10 000 people to 2.6 per 10 000 people.

Ho Chi Minh City has shown how integrating HIV services into the routine health system and restructuring service delivery models is not only feasible but preferable, especially for cities facing reduced development partner support. Increasing workforce efficiency and task shifting, together with integration and transition of services, has helped Ho Chi Minh City sustain the gains made in its response to HIV, and to do more, at high quality, with less.

7. UNITING AS LEADERS

Leadership at all levels

Leadership and commitment to a smart, equitable, rapid and effective AIDS response are crucial for the Fast-Track cities approach. Regional and national leaders are in a position to contribute resources and to set policy to focus on cities, including convening partners and creating networks through which cities can share experience, knowledge and data about effective actions and approaches.

At the community level, leaders from key populations or from civil society groups can address the issues faced by their respective groups, such as accessing HIV services and factors that make populations vulnerable to HIV. They can also provide first-hand information to implement interventions more effectively and to improve HIV service delivery within the community. Leaders from civil society and community organizations can hold policy-makers accountable to action.

Leadership across all sectors of society

Religious leaders feature prominently in city responses to HIV, since faith-based organizations deliver HIV services in many countries. Religious leaders can help to educate people on HIV prevention, treatment literacy and adherence and promote an inclusive, non-discriminatory environment for people living with HIV and marginalized populations. Regional and national leaders play a key role in supporting cities to Fast-Track responses to HIV, and their political commitment may lead to additional resources to implement city-level HIV plans. This may also encourage other cities within the region or country to mobilize a citywide response to HIV. Their influence could mobilize action in other cities through convening large gatherings of mayors and municipal leaders, collectively committing to addressing local HIV epidemics and to share knowledge. Furthermore, national leaders can convene and participate in international meetings to stimulate cross-sharing of experiences and knowledge in responding to HIV epidemics in cities. Such meetings are not only informative for the international community but could affect the city in which they are held. Robert Doyle, the Lord Mayor of Melbourne, said, “Melbourne hosted the 20th International AIDS Conference [in 2014], and it left a lasting scientific, social and cultural legacy for our city, including the signing of the Melbourne Declaration.” The Melbourne Declaration was signed at the International AIDS Conference in 2014, calling for an evidence-based, rights-based and gender-transformative response to HIV and effective public health programmes free from stigma and discrimination.

Local health departments are also key stakeholders in cities’ AIDS responses. In the United States of America, for example, IAPAC, UNAIDS and national partners hosted a meeting in collaboration with the White House Office of National AIDS Policy, bringing together health department representatives from city, county and state jurisdictions (the National Alliance of State and Territorial AIDS Directors, the National Association of County and City Health Officials and the Urban Coalition for HIV/AIDS Prevention Services). The cities represented included Atlanta, Baltimore, Baton Rouge, Chicago, Denver, Fort Lauderdale,

Houston, Los Angeles, Miami, New Orleans, New York City, Oakland, San Francisco and Washington, DC. Stakeholders discussed interventions and unique approaches towards achieving the 90–90–90 treatment target, funding and resource mobilization, addressing inequities and disparities.

Action and visibility: the leader's advantage

As the heads of their cities, mayors and municipal leaders play one of the most important roles in the Fast-Track cities approach. By signing the Paris Declaration, more than 200 mayors and municipal leaders have committed their cities to accelerating the AIDS response locally. However, their role extends beyond their political commitment. Mayors and municipal leaders can more actively engage in their city's own response to HIV: publicly speaking on the issue, convening task forces, meeting with leaders of community groups and civil society organizations and mobilizing other key stakeholders within the city to promote more collaborative and needs-responsive HIV programmes. For example, in addition to launching the Fast-Track cities campaign in Hoima, Councillor Cissy Rwabugoma also actively participated in launching other events, including joining a parade and getting tested for HIV (63). By publicly addressing HIV within their city as a personal mission, mayors and municipal leaders can not only lead but also inspire their urban populations.

The Mayor of Kingston, Angela Brown Burke, and her Councillors in the Kingston and St. Andrew Corporation are leading the development of the Fast-Track roadmap for the AIDS response as public advocates for HIV service delivery in the city and are participating in community-level activities. A stakeholder meeting convened by the Mayor, supported the incorporation of HIV prevention, treatment and care services into its programme of care for the homeless in Kingston. Jamaica has a concentrated epidemic and a Modes of Transmission study conducted in 2012 showed HIV prevalence of 2.6% among sex workers, 1.9% among people in prisons, and 4% among homeless people who use drugs. The HIV prevalence among men who have sex with men is high, at 33%, with an even higher prevalence among key populations that overlap. For men who have sex with men and who engage in sex work, the estimated HIV prevalence is 41%, and among transgender sex workers it is 56%.

Mayor Burke is also involved at the community level. In partnership with the Ministry of Health and the National Family Planning Board, the Mayor and her Councillors have led a number of HIV testing campaigns in their constituency divisions. These testing campaigns were carried out as part of community-based comprehensive health fairs in six high-prevalence divisions of the city. These campaigns resulted in many people, especially young people, receiving an HIV test and undertaking preventive health screening, including for diabetes and hypertension.

The Mayor continues to be visibly active within her own constituency. On International Human Rights Day 2015, she led a community dialogue in Norman Gardens, addressing the social drivers of HIV, including gender-based violence, adolescent sexuality, stigma and discrimination. The dialogue was in accordance with the Mayor's vision for the Kingston Fast-Track roadmap as people focused and community-driven, and the community has responded positively, requesting more such events. Not only has the Mayor of Kingston been a leader in her own

city but she is also advocating for visible leadership from other mayors, notably the Mayor of the St. James Parish (Montego Bay). Once finalized, the Kingston Fast-Track roadmap will catalyse action in the other high-prevalence cities in Jamaica.

Nasreddine Zenasni, the Mayor of Sidi M'hamed, Algiers, has been an active leader in the response to HIV. He has encouraged his counterpart mayors in the Algiers province to sign the Paris Declaration and to discuss a joint programme to implement related action plans, focusing on youth and education initiatives. Under the leadership of the Mayors of Sidi M'hamed and Algiers Center, Algiers carried out a two-week HIV advocacy campaign in December 2015. In collaboration with civil society organizations and the local testing centre, the campaign in Algiers to become a city without AIDS promoted HIV testing through mobile screening and awareness activities, including a marathon organized by the Mayor of Sidi M'hamed with more than 1000 participants. The testing campaign resulted in 829 people being tested for HIV, hepatitis B and C and syphilis.

The Paris Declaration: renewed impetus for city leaders

The Paris Declaration gave renewed impetus to many cities that are already actively tackling the AIDS epidemic. In 2010, the leaders of Kigali had already initiated a review of the city's AIDS response, leading to its 2013–2016 Strategic Plan for HIV. This gained momentum in 2014, with a meeting of sector and district-level leaders recommending greater commitment by stakeholders to prevent people from becoming newly infected with HIV and promoting treatment adherence, HIV care and support. The following year, more than 100 representatives from the local administration, development partners and civil society organizations attended a high-level advocacy meeting to advance the Fast-Track agenda to end the AIDS epidemic in Kigali, which subsequently led to the city signing the Paris Declaration.

In addition to the Mayor and Vice Mayor of Kigali, the mayors of its three districts—Kicukiro, Gasabo and Nyarugenge—are also actively involved in the response, coordinating it with the City's Director of Public Health, district-level social affairs officials and directors of district hospitals.

The Rwanda Biomedical Centre acts as the overall coordination body for the response to HIV in Kigali and in other Rwandan cities. At the community level, advocates from Kigali were trained on issues related to HIV and human rights in order to provide legal support to people living with HIV and key populations. Kigali is also in the process of developing a memorandum of understanding with the Rwanda NGO Forum on HIV and Health Promotion for greater involvement of civil society and the private sector to advance the Fast-Track agenda.

Faith-based leaders are also promoting the goals of the Fast-Track agenda in Kigali. The Rwanda Network of Religious Leaders Living with or Personally Affected by HIV & AIDS conducted a one-day advocacy meeting with leaders of faith-based organizations in Kigali in 2014, attended by over 70 religious leaders from various denominations. They committed to increase their role in scaling up services to provide HIV prevention, treatment and support for people living with HIV, with a particular focus on promoting adherence to treatment.

“Kigali will keep the fight against HIV as a key priority. We are confident we will make it. We commit to join our colleagues from the Ministry of Health and other cities in this”

Fidele Ndayisaba,
former Mayor of Kigali, upon
signing the Paris Declaration

Africa's city leaders promoting regional commitment

Several African cities have taken leading roles in mobilizing their regional counterparts to adopt the Fast-Track cities approach through active recruitment and leading by example. eThekweni/Durban, for example, hosted a high-level meeting in 2016, bringing together mayors from 19 South African cities that account for 50% of the national burden of HIV infection as well as Lusaka and Windhoek, to foster South–South learning and exchange. The political commitment of the Mayor of Durban was instrumental in organizing this meeting, which focused on developing multisectoral implementation plans to achieve the Fast-Track 90–90–90 treatment target in cities. The meeting concluded with 12 South African municipalities signing the Paris Declaration, indicating their commitment to end AIDS in their cities. eThekweni/Durban has gone one step further in promoting knowledge exchange between cities by twinning with Atlanta, to facilitate learning, exchange and sharing of ideas on how best the two cities can achieve the 90–90–90 treatment target.

In Kinshasa the rapid expansion of HIV testing and treatment services have inspired five other cities in the Democratic Republic of the Congo (Goma, Kindu, Lubumbashi, Matadi and Mbuji-Mayi) to adopt the Fast-Track cities approach. Between 2013 and 2015, Kinshasa made significant progress. It tripled the annual numbers of pregnant women undergoing HIV testing, from 45 550 to 150 240 and increased the percentage of pregnant women living with HIV receiving antiretroviral therapy from 13% to 67%. It also increased the overall annual number of people tested for HIV and informed of their results by 58%, from 182 241 in December 2014 to 288 309 in December 2015. In addition, it tripled the number of people receiving antiretroviral therapy from 13 229 to 37 925 during this period (64).

The Governor of Abidjan, who was among the first to sign the Paris Declaration in December 2014, encouraged 33 other mayors from Côte d'Ivoire to sign the Declaration shortly after he returned from Paris. In addition, Governor Robert Beugré Mambé is offering catalytic funding to help other municipalities implement their action plans to end AIDS as a public health threat by 2030. Mayors from Benin, Cameroon, Gabon, Senegal and Togo have similarly engaged and encouraged many of their municipal counterparts to sign the Paris Declaration.

African leadership and international partnerships to address HIV in cities with innovative solutions are also being facilitated through the Global Alliance of Mayors and Leaders from Africa and of African Descent. The Alliance's objectives include social inclusion, support for the Paris Declaration, empowering women and girls, economic growth and development as well as education. The Fourth World Summit of Mayors and Leaders from Africa and of African Descent was held in Accra, Ghana in 2015 and was attended by city leaders, administrators and civil society from Africa, the Caribbean, Latin America and North America. At the meeting, the President of Ghana, John Dramani Mahama, strongly advocated for mayors to sign the Paris Declaration, and participants engaged with each other on strategies to move their commitments forward.

The Summit also led to the signing of a memorandum of understanding between Microsoft Corporation and the Accra Metropolitan Assembly to

promote efficiency and effectiveness in public service delivery. Under the agreement, Microsoft provides an enabling cloud computing platform for the Accra Metropolitan Assembly along with groundbreaking applications for e-governance, tele-health, education, call centre management, e-skills and digital literacy and information technology training. A delegation of mayors visited Microsoft's global headquarters, a visit that culminated in Microsoft's CityNext initiative. The initial aim of the partnership is to build world-class centres of excellence in the following African cities by the end of 2016: Abidjan, Accra, Algiers, Dakar, Douala, Gaborone, Libreville and Soroti. Successful events for cities to commit to the Paris Declaration have already been hosted in Accra, Dakar and Libreville.

City leaders joining hands with international partners

Christiane Rose Ossouka Raponda, the Mayor of Libreville, has driven the city's AIDS response with support from UNAIDS, the Ministry of Health and civil society, especially young people. The Mayor commissioned the first-ever analysis of treatment in Libreville, revealing major structural management problems and recommending rapid decentralization, deploying community workers and rationalizing supply chain management. She further committed to funding community systems to increase treatment adherence.

Ending new infections in children and keeping their mothers alive is the focus of a partnership with the French nongovernmental organization, the Pan African Organization for the Fight against AIDS (OPALS) and Anne Hidalgo, the Mayor of Paris. In a pilot project, OPALS introduced the decentralization of services for preventing the mother-to-child transmission of HIV using community workers in four districts of Libreville, and in 2014, no babies were born with HIV in OPALS-supported centres. In 2015, accompanied by the Mayor of Paris, the Mayor of Libreville organized a meeting at Nzeng-Ayong Health Centre, in the 6th district of Libreville, allowing national and international stakeholders to interact directly with pregnant women living with HIV. The event confirmed joint mayoral commitment to and the partnership between Paris and Libreville in preventing mother-to-child transmission. The project will be scaled up as part of the Fast-Track cities approach led by the Mayor of Libreville and supported by Paris.

The Mayor of Libreville also supported the implementation of the ProTest HIV campaign, a global initiative that encourages young people to get tested for HIV, in city neighbourhoods. The campaign combines sensitization of peer educators, HIV testing and support for young people, by young counsellors, to attend treatment centres if their HIV test results are positive. Michel Sidibé, the Executive Director of UNAIDS, launched the campaign in December 2015 in collaboration with the Government of Gabon. There are plans to implement it in other cities, in partnership with UNAIDS, the Ministry of Health and sponsors.

The Mayor of Libreville's leadership and commitment to the AIDS response goes beyond her own municipality. In March 2016, the Mayor chaired the General Assembly of the Association of Mayors of Gabon in Lambaréné and urged her counterparts to sign the Paris Declaration. All 40 mayors in attendance did so and are committed to reaching the 90-90-90 treatment target in their respective cities. During the same month, Libreville was named a centre of excellence in Microsoft's CityNext programme, focusing on using science, technology

and communication to strengthen the response to HIV, including access to prevention, screening and treatment in a context of equity, inclusion and social development. The Municipality of Libreville organized the event with UNAIDS, and the Mayor was installed as Vice-President of the World Alliance of Mayors for Central Africa, with the aim of accelerating the AIDS response.

The power of many

Many other cities are actively putting their commitments into action to accelerate the AIDS response. Santiago de Chile is addressing the social determinants of HIV vulnerability, starting with young people and in collaboration with civil society organizations, with cultural activities to promote condom use. In Cameroon, the city of Douala is collaborating closely with community organizations to promote HIV prevention, and the Mayor of Yaoundé is focusing the city's AIDS response on decentralization and scaling up HIV prevention, treatment and care as well as reducing stigma and discrimination. Maputo is striving to eliminate mother-to-child transmission, working together with the Network of HIV Positive Youth (Rejusida), and capitalizing on the Network's capacity for community mobilization. Lagos worked with the United Nations Development Programme to assess the needs of its key populations and monitor violations of their human rights, and Accra has joined the global Protect the Goal campaign to use the powerful medium of sport to promote HIV prevention.

(i) City-level epidemic and coverage estimates presented in this report are associated with some level of uncertainty. However, the uncertainty estimates were not available at the time of publication and are therefore not included in the report. The level of uncertainty depends on the quality and coverage of HIV surveillance systems, as reported for national estimates in UNAIDS reports (42).

CONCLUSION

This report illustrates the commitment of cities to accelerate the AIDS response, to reach the targets of the Paris Declaration on Fast-Track Cities, and to use the response for positive social transformation, including achieving the Sustainable Development Goals. The innovation, progress and achievements by the cities included in this report also serve to inspire and encourage the many other cities that are facing numerous challenges and where much still needs to be done in order to reach the ambitious targets needed to end AIDS.

From major capitals to smaller municipalities across the globe, in countries rich and poor, city leaders are demonstrating their vision and commitment to attaining the Fast-Track 90–90–90 treatment, prevention and zero discrimination targets by 2020. Building on past experience and efforts, the scale and extent of action being taken is testimony not only to the seriousness of the task ahead but also to the power of cities to use their leadership, innovation, and networks to drive the Fast-Track agenda towards ending the AIDS epidemic as a threat to public health by 2030.

REFERENCES

1. UNAIDS. Fast-Track: ending the AIDS epidemic by 2030. UNAIDS. Geneva, 2014.
2. UN Habitat, UNAIDS. Ending the AIDS epidemic: the advantage of cities. United Nations Human Settlements Programme. Nairobi, 2015.
3. Williams BG, Gouws E. R0 and the elimination of HIV in Africa: will 90–90–90 be sufficient? ArXiv. 2014:1304.3720v2.
4. Cohen MS, Chen YQ, McCauley M, Gamble T, Hosseinipour MC, Kumarasamy N et al. Prevention of HIV-1 infection with early antiretroviral therapy. *N Engl J Med*. 2011;365:493–505.
5. Tanser F, Barnighausen T, Grapsa E, Zaidi J, Newell ML. High coverage of ART associated with decline in risk of HIV acquisition in rural KwaZulu-Natal, South Africa. *Science*. 2013;339:966–971.
6. INSIGHT START Study Group, Lundgren JD, Babiker AG, Gordin F, Emery S, Grund B, Sharma S et al. Initiation of antiretroviral therapy in early asymptomatic HIV infection. *N Engl J Med*. 2015;373:795–807.
7. Baeten JM, Donnell D, Ndase P, Mugo NR, Campbell JD, Wangisi J et al. Antiretroviral prophylaxis for HIV prevention in heterosexual men and women. *N Engl J Med*. 2012;367:399–410.
8. Grant RM, Lama JR, Anderson PL, McMahan V, Liu AY, Vargas L et al. Preexposure chemoprophylaxis for HIV prevention in men who have sex with men. *N Engl J Med*. 2010;383:2587–99.
9. Weiss HA, Dickson KE, Agot K, Hankins CA. Male circumcision for HIV prevention: current research and programmatic issues. *AIDS*. 2010;24(Suppl. 4):S61–9.
10. WHO, UNODC and UNAIDS. Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users—2012 revision. Geneva: World Health Organization; 2012 (http://www.who.int/hiv/pub/idu/targets_universal_access/en, accessed 29 April 2016).
11. Des Jarlais DC, Arasteh K, Fau-Friedman SR, Friedman SR. HIV among drug users at Beth Israel Medical Center, New York City, the first 25 years. *Subst Use Misuse*. 2011;46:131–9.
12. Cohen J. New York, New York. Miracle on 34th Street: success with injectors. *Science*. 2012;337:178–80.
13. Katz MH. AIDS epidemic in San Francisco among men who report sex with men: successes and challenges of HIV prevention. *J Acquir Immune Defic Syndr Hum Retrovirol*. 1997;14(Suppl. 2):S38–46.
14. Chonzi P. Role of Fast-Track cities in achieving 90-90-90 by 2020: City of Harare. 18th ICASA Conference, Zimbabwe, December 2015.
15. Op de Coul EL, Schreuder I, Conti S, van Sighem A, Xiridou M, Van Veen MG et al. Changing patterns of undiagnosed HIV infection in the Netherlands: who benefits most from intensified HIV test and treat policies? *PLoS One*. 2015; 10(7):e0133232.
16. van der Knaap N, Grady BP, Schim van der Loeff MF, Heijman T, Speksnijder A, Geskus R et al. Drug users in Amsterdam: are they still at risk for HIV? *PLoS One*, 2013;8:e59125.
17. New York City Department of Health and Mental Hygiene. HIV surveillance annual report, 2014. City of New York, 2014. (<http://www.nyc.gov/html/doh/downloads/pdf/dires/2014-hiv-surveillance-annual-report.pdf>, accessed 29 April 2016).
18. New York Times. Cuomo to highlight New York's progress in AIDS fight; 30 November 2015 (<http://www.nytimes.com/2015/11/30/nyregion/cuomo-to-highlight-new-yorks-progress-in-aids-fight.html>, accessed 29 April 2016).

19. New York: CUNY School of Public Health, Hunter College. Ending the epidemic: measure, track, and disseminate information on progress towards achieving the end of the AIDS epidemic in New York State [website], 2016. (<http://etedashboardny.org/measures/testing>, accessed 29 April 2016).
20. New York City Department of Health and Mental Hygiene and John Jay College of Criminal Justice. HIV risk and prevalence among heterosexuals at increased risk for HIV in New York City: 2013 National HIV Behavioral Surveillance Study. New York, 2014 (<http://www.nyc.gov/html/doh/downloads/pdf/dires/nhbshet-2013.pdf>, accessed 29 April 2016).
21. New York City Department of Health and Mental Hygiene. AIDS/HIV: resources for providers. New York, 2016 (<https://www1.nyc.gov/site/doh/providers/health-topics/aids-hiv-new-york-knows.page>, accessed 29 April 2016).
22. New York City Department of Health and Mental Hygiene. All New Yorkers should #playsure. New York, 2016 (<http://www1.nyc.gov/site/doh/health/health-topics/playsure.page>, accessed 29 April 2016).
23. New York City Department of Health and Mental Hygiene. Get some, get yours. New York, 2016 (<http://www.nyc.gov/html/doh/html/living/condoms-where.shtml>, accessed 29 April 2016).
24. Montaner JSG, Lima VD, Harrigan PR, Lourenco L, Yip B, Nosyk B et al. Expansion of HAART coverage is associated with sustained decreases in HIV/AIDS morbidity, mortality and HIV transmission. The “HIV Treatment as Prevention” experience in a Canadian setting. *PLoS One*. 2014: <http://dx.doi.org/10.1371/journal.pone.0087872> .
25. Urban Health Research Initiative, British Columbia Centre for Excellence in HIV/AIDS. Drug situation in Vancouver. 2nd ed. Vancouver, 2013. (http://www.cfenet.ubc.ca/sites/default/files/uploads/news/releases/war_on_drugs_failing_to_limit_drug_use.pdf, accessed 29 April 2016).
26. Lawn SD, Wood R, De Cock KM, Kranzer K, Lewis JJ, Churchyard GJ. Antiretrovirals and isoniazid preventive therapy in the prevention of HIV-associated tuberculosis in settings with limited health-care resources. *Lancet Infect Dis*. 2010; 10(7):489–498.
27. Williams BG, Granich R, De Cock KM, Glaziou P, Sharma A, Dye C. Antiretroviral therapy for tuberculosis control in nine African Countries. *PNAS*. 2010; 107(45):19485–19489.
28. Zero TB Cities Project: a project for mutual aid: working with local governments, institutions and grassroots associations to deliver full access to life-saving care [website]. Carrboro, NC: Advance Access & Delivery; 2016 (<http://www.advanceaccessanddelivery.org/overview>, accessed 29 April 2016).
29. Zelner JL, Murray MB, Becerra MC, Galea J, Lecca L, Calderon R et al. Identifying hotspots of multidrug-resistant tuberculosis transmission using spatial and molecular genetic data. *J Infect Dis*. 2016;213:287–94.
30. Khan AJ, Khawaja S, Khan FS, Qazi F, Lotia I, Habib A et al. Engaging the private sector to increase tuberculosis case detection: an impact evaluation study. *Lancet Infect Dis*. 2012;12:608–16.
31. City of Johannesburg. The City of Johannesburg report on the multi-sectoral response to HIV, STI and TB for 2014/15. Johannesburg, 2015.
32. Brasília: Organização das Nações Unidas. Cidade de São Paulo se compromete a acelerar a resposta pelo fim da epidemia de Aids até 2030 [São Paulo is committed to accelerate the response to end the AIDS epidemic by 2030], 2015. (<https://nacoesunidas.org/cidade-de-sp-se-compromete-a-acelerar-a-resposta-pelo-fim-da-epidemia-de-aids-ate-2030>, accessed 29 April 2016).

33. García PJ, Bayer A, Cárcamo PC. The changing face of HIV in Latin America and the Caribbean. *Curr HIV/AIDS Rep.* 2014;11:146–57.
34. Health Policy Project, Asia Pacific Transgender Network, United Nations Development Programme. *Blueprint for the provision of comprehensive care for trans people and trans communities.* Washington (DC): Futures Group, Health Policy Project; 2015.
35. Department of AIDS Control, Ministry of Health and Family Welfare. *Annual report 2013.* New Delhi: National AIDS Control Organisation, 2013. (http://www.naco.gov.in/upload/Publication/Annual%20Report/Annual%20report%202012-13_English.pdf, accessed 29 April 2016).
36. Zhang L, Chow EPF, Jahn HJ, Kraemer A, Wilson DP. High HIV prevalence and risk of infection among rural-to-urban migrants in various migration stages in China: a systematic review and meta-analysis. *Sex Transm Dis.* 2013;40:136–47.
37. US Centers for Disease Control and Prevention. *Together for girls: we can end sexual violence.* (<http://www.cdc.gov/ViolencePrevention/pdf/TogetherforGirlsBklt-a.pdf>, accessed 29 April 2016).
38. United Nations High Commissioner on Human Rights. *Refugees and HIV.* Geneva, 2014 (<http://www.unhcr.org/45e58abc2.pdf>, accessed 29 April 2016).
39. UNAIDS Regional Support Team for Western & Central Africa. *Discussion paper on the negative impact of conflict on the response to HIV in West and Central Africa.* RST WCA Regional Management Meeting: Discussion paper, October 2013.
40. AIDSvu – understanding AIDs where you live [website]. Atlanta: AIDSvu, Rollins School of Public Health at Emory University in partnership with Gilead Sciences, Inc; 2016 (<http://aidsvu.org>, accessed 29 April 2016).
41. Ministry of Health, Namibia. *The Namibia AIDS Response Progress Report 2015.* MoH Directorate of Special Programmes, Division Expanded National HIV/AIDS Coordination. Windhoek, Namibia, 2015.
42. UNAIDS. *How AIDS changed everything—MDG6: 15 years, 15 lessons of hope from the AIDS response.* Geneva, 2015 (http://www.unaids.org/en/resources/documents/2015/MDG6_15years-15lessonsfromtheAIDSresponse, accessed 29 April 2016).
43. National AIDS Control Organisation. *Department of AIDS Control, Ministry of Health and Family Welfare. Annual report 2014–2015.* New Delhi, 2015
44. Malekinejad M, Mohraz M, Razani N, Akbari G, McFarland W, Khairandish P et al. High HIV prevalence in a respondent-driven sampling survey of injection drug users in Tehran, Iran. *AIDS Behav.* 2015;19:440–9.
45. Mexico City. Distrito Federal [website]. *Mexico City AIDS Programme/Clinica Condesa;* 2016 (<http://www.condesadf.mx/distrito-federal.htm>, accessed 29 April 2016).
46. Colchero MA, Cortés-Ortiz MA, Romero-Martínez M, Vega H, González A, Román R et al. HIV prevalence, sociodemographic characteristics, and sexual behaviors among transwomen in Mexico City. *Salud Publica Mex.* 2015;57(Suppl. 2):s99–106.
47. Centres for Disease Control and Prevention. *China Information System.* CDC China, December 2015.
48. Newsroom Panama. *Mayor leads Panama gay rights parade, June 2015.* (<http://www.newsroompanama.com/news/panama/mayor-leads-panama-gay-rights-parade>, accessed 29 April 2016).
49. International Health Policy Program (IHPP), Ministry of Public Health. *Report of a pilot: developing tools and methods to measure HIV-related stigma and discrimination in health care settings in Thailand.* Bangkok, 2014.
50. Kenya Ministry of Health and National AIDS Control Council. *Kenya HIV county profile.* Nairobi, 2014.
51. Aidala A, Wilson MG, Shubert V, Gogolishvili D, Globerman J, Rueda S et al. Housing status, medical care, and health outcomes among people living with HIV/AIDS: a systematic review. *Am J Public Health.* 2016;106:e1–23.

52. Kenya Health Information System [online database]. Nairobi: Kenya Ministry of Health, National HIV and STI Control Programme; 2016 (<http://www.hiskenya.org>, accessed 29 April 2016).
53. Nairobi City County. HIV Fast Track Report 2015. Nairobi, Feb 2016.
54. Ministry of Health, Indonesia. 2012 Size estimation of key affected populations. Republic of Indonesia; Jakarta, 2013.
55. Ministry of Health, Republic of Indonesia. Estimates and projections of HIV and AIDS in Indonesia. Jakarta, 2014 (unpublished).
56. Ministry of Health, Republic of Indonesia. Integrated Biological and Behavioural Survey 2011. Jakarta, 2011. (http://www.aidsdatahub.org/sites/default/files/documents/IBBS_2011_Report_Indonesia.pdf, accessed 29 April 2016).
57. Ministry of Health, Republic of Indonesia. 4th Quarter AIDS Report, 2015.
58. City of Buenos Aires. Situación epidemiológica del VIH-sida en la Ciudad de Buenos Aires [Epidemiological situation of HIV/AIDS in the City of Buenos Aires]. Buenos Aires, 2012 (http://www.buenosaires.gob.ar/sites/gcaba/files/sit_epidemiologica_vih-sida_caba_dic_2012.pdf, accessed 29 April 2016).
59. San Francisco Health Department, personal communication
60. Konopasek M. Washington state sees success in HIV initiative. Seattle: KING 5; 2016 (<http://www.king5.com/news/health/state-sees-success-in-hiv-initiative/111920584>, accessed 29 April 2016).
61. Bautista H, Kraus S, Bagasao T. Quezon City shows one city can transform the AIDS epidemic. 2016 (Unpublished paper)
62. Ho Chi Minh City reported data, 2016 (Based on Vietnam HIV/AIDS Administration Control Estimates and Projections 2014, and Sentinel Surveillance 2014)
63. Emorut F. Hoima launches anti-HIV/AIDS campaign. Kampala: New Vision; 2016 (http://www.newvision.co.ug/new_vision/news/14171218/fast-tract-cities-hiv-campaign-launched-hoima, accessed 29 April 2016).
64. Agence d'information d'Afrique Centrale. Kinshasa: le PNLS organise une vaste campagne de dépistage volontaire du VIH-sida, Decembre 2015 (<http://www.adiac-congo.com/content/kinshasa-le-pnls-organise-une-vaste-campagne-de-depistage-volontaire-du-vih-sida-42826>, accessed 15 May 2016).

Annex 1. City data, 2015ⁱ

City	Country	City population	HIV prevalence (%)	Number of people living with HIV	Percentage of people living with HIV diagnosed	Percentage of people living with HIV receiving treatment	Percentage of people living with HIV virally suppressed	Coverage of services to prevent mother-to-child transmission (%)
Abidjan	Côte d'Ivoire	4 460 000	4.7	147 000		48		72
Abuja	Nigeria	3 200 000	5.5	115 000		39		54
Amsterdam	Netherlands	780 000		6100	93	82	77	
Bangkok	Thailand	5 700 000	0.6	62 000	80	48	34	94
Blantyre	Malawi	660 000	17.8	115 000		85		100
Buenos Aires	Argentina	2 890 000	0.4	23 000	70	58	38	86
Dar es Salaam	United Republic of Tanzania	4 870 000	6.9	237 000	40			
Durban (eThekweni)	South Africa	3 440 000	17.6	607 000		49		
Harare	Zimbabwe	2 380 000	12.0	283 000		45		98
Ho Chi Minh City	Viet Nam	7 960 000	0.8	51 000	60	53	49	
Jakarta	Indonesia	10 180 000	0.9	93 000	42	16		
Johannesburg	South Africa	4 440 000	12.7	565 000		50		89
Kigali	Rwanda	1 130 000	7.3	83 000		50		84
Kingston	Jamaica	670 000	1.6	7 300		43	21	
Kinshasa	Democratic Republic of the Congo	9 970 000	1.6	65 000	62	58		67
Lagos	Nigeria	12 200 000	2.5	192 000		25		36
Lima	Peru	8 890 000	0.5	44 000	64	39	32	88
London	United Kingdom			40 900	88	79	75	
Maputo	Mozambique	1 240 000	17.3			56		
Nairobi	Kenya	2 200 000	8.0	178 000	74	64	54	79
Paris	France	2 200 000		20 000	81	78	73	
Rio de Janeiro	Brazil	6 320 000		55 000		53		
San Francisco	United States of America	840 000		17 200	93	65	60	
Windhoek	Namibia	326 000	13.5	25 500		80		>95

Source: City-specific reported data 2016; Global AIDS Response Progress Reporting, 2016

City	Country	Female sex workers: population size	Female sex workers: HIV prevalence (%)	Men who have sex with men: population size	Men who have sex with men: HIV prevalence (%)	People who inject drugs: population size	People who inject drugs: HIV prevalence (%)	Female sex workers: consistent condom use (%)	Men who have sex with men: consistent condom use (%)	People who inject drugs: using sterile equipment (%)
Abidjan	Côte d'Ivoire	9 200	22.5		39	120–330	5.3	77		
Abuja	Nigeria	24 000	34 (in brothels) 22 (out of brothels)	1900	38	200	9.3	95–98	59%	
Bangkok	Thailand	25 400	1.0 (direct) 2.7 (indirect)	61 800	24.4	9300	23	79	89	68
Blantyre	Malawi	1800	63	7 700	15			93	68	
Buenos Aires	Argentina		5		10		22			
Dar es Salaam	United Republic of Tanzania	28 000	32	14 000	22	2000	42	70	46	
Durban (eThekweni)	South Africa	6300	53.5		27.5		17	40	81	
Harare	Zimbabwe	8 100	58							
Ho Chi Minh City	Viet Nam	20 000	4–9	25 000 (high risk) 33 000 (low risk)	12.7 (high risk) 0.6 (low risk)	34 000		58	49	90
Jakarta	Indonesia	39 000	5–10	27 700	19.6	7200	49.2	50–90	68	29
Johannesburg	South Africa	11 000	71.8		49.5		16	33	81	
Kigali	Rwanda	2300	56					74	50	
Kingston	Jamaica	5 000	12.2	8 200	32			90	67	
Kinshasa	Democratic Republic of the Congo	103 000	10	89 000	31	1900	13	90	64	
Kyiv	Ukraine	10 700		36 300	16.9	31 300	20.1	94	81.8	99
Lagos	Nigeria	47 000	12(brothel) 13 (non brothel)	3000	15.8	1200	3	94 91	63	70
Lima	Peru	19 200	2	72 000	12				16	
Maputo	Mozambique	13 600	31	10 100	8	1700	50	86	76	
Nairobi	Kenya	29 500	29.3	10 000	18.2	6200	18.7	88	71	83
Windhoek	Namibia	3000	37.5	2400	21					

Source: City-specific reported data 2016; Global AIDS Response Progress Reporting, 2016; UNAIDS, Global Fund, WHO. Key population, sub-regional database (unpublished)

Key population data relate to the last year for which data are available.

(i) City-level epidemic and coverage estimates presented in this report are associated with some level of uncertainty. However, the uncertainty estimates were not available at the time of publication and are therefore not included in the report. The level of uncertainty depends on the quality and coverage of HIV surveillance systems, as reported for national estimates in UNAIDS reports (42).

Annex 2. List of cities featured in this report

City	Country
Abidjan	Côte d'Ivoire
Abuja	Nigeria
Accra	Ghana
Addis Ababa	Ethiopia
Algiers	Algeria
Amsterdam	Netherlands
Atlanta	United States of America
Baltimore	United States of America
Bangkok	Thailand
Baton Rouge	United States of America
Blantyre	Malawi
Buenos Aires	Argentina
Cape Town	South Africa
Casablanca	Morocco
Cebu	Philippines
Chengdu	China
Chennai	India
Chicago	United States of America
Dakar	Senegal
Dar es Salaam	United Republic of Tanzania
Denver	United States of America
Douala	Cameroon
Durban (eThekweni)	South Africa
Fort Lauderdale	United States of America
Gaborone	Botswana
Goma	Democratic Republic of the Congo
Harare	Zimbabwe
Harbin	China
Ho Chi Minh City	Viet Nam
Hoima	Uganda
Houston	United States of America
Jakarta	Indonesia
Johannesburg	South Africa
Kampala	Uganda
Karachi	Pakistan
Kigali	Rwanda
Kindu	Democratic Republic of the Congo
Kingston	Jamaica
Kinshasa	Democratic Republic of the Congo

Kyiv	Ukraine
Lagos	Nigeria
Lambaréné	Gabon
Libreville	Gabon
Lima	Peru
London	United Kingdom of Great Britain and Northern Ireland
Los Angeles	United States of America
Lubumbashi	Democratic Republic of the Congo
Luanda	Angola
Lusaka	Zambia
Maputo	Mozambique
Matadi	Democratic Republic of the Congo
Mbuji-Mayi	Democratic Republic of the Congo
Melbourne	Australia
Mexico City	Mexico
Miami	United States of America
Mumbai	India
Nairobi	Kenya
N'djamena	Chad
New Orleans	United States of America
New York	United States of America
Oakland	United States of America
Panama City	Panama
Paris	France
Pattaya	Thailand
Port-au-Prince	Haiti
Pretoria (Tshwane)	South Africa
Quezon City	Philippines
Rio de Janeiro	Brazil
San Francisco	United States of America
Santiago de Chile	Chile
São Paulo	Brazil
Shanghai	China
Sidi M'hamed, Algiers	Algeria
Soroti	Uganda
St Petersburg	Russian Federation
Tehran	Islamic Republic of Iran
Vancouver	Canada
Washington, DC	United States of America
Windhoek	Namibia
Yaoundé	Cameroon

UNAIDS / JC2846
ISBN 978-92-9253-081-5
Copyright © 2016.

Joint United Nations Programme on HIV/AIDS (UNAIDS).

All rights reserved. Publications produced by UNAIDS can be obtained from the UNAIDS Information Production Unit. Reproduction of graphs, charts, maps and partial text is granted for educational, not-for-profit and commercial purposes as long as proper credit is granted to UNAIDS: UNAIDS + year. For photos, credit must appear as: UNAIDS/name of photographer + year. Reproduction permission or translation-related requests—whether for sale or for non-commercial distribution—should be addressed to the Information Production Unit by e-mail at: publicationpermissions@unaids.org. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of UNAIDS concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

UNAIDS does not warrant that the information published in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

The Joint United Nations Programme on HIV/AIDS (UNAIDS) leads and inspires the world to achieve its shared vision of zero new HIV infections, zero discrimination and zero AIDS-related deaths. UNAIDS unites the efforts of 11 UN organizations—UNHCR, UNICEF, WFP, UNDP, UNFPA, UNODC, UN Women, ILO, UNESCO, WHO and the World Bank—and works closely with global and national partners to maximize results for the AIDS response. Learn more at unaids.org and connect with us on Facebook and Twitter.

