

# ENDING THE AIDS EPIDEMIC: THE ADVANTAGE OF CITIES



ENDING THE AIDS EPIDEMIC: THE ADVANTAGE OF CITIES  
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Previously published in September 2015 as  
"Ending the Urban AIDS Epidemic".

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HS Number: HS/074/15E  
ISBN Number:(Volume) 978-92-1-132683-3

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# **ENDING THE AIDS EPIDEMIC:**

THE ADVANTAGE OF CITIES



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# FOREWORD

Urbanization is changing the way we live and work and how we approach problems and think about the future. Already the majority of the world's population lives in urban areas, and by 2050 it is projected that seven in 10 people will live in cities and municipalities.

There are important reasons why people are choosing to live in urban areas. Cities are sources of economic growth and prosperity, serve as centres of innovation and offer extraordinary educational, cultural and recreational opportunities. Urban areas often have greater success in tackling difficult challenges, due to cities' comparatively greater concentration of services, creativity and productive capacity.

Yet urbanization is also closely linked to another, more concerning trend that characterizes life in the early 21<sup>st</sup> century. As urban areas grow and evolve, they also reflect profound social and economic inequalities. Although millions of city dwellers have been lifted out of poverty over the last 15 years, the number of people living in urban slums and disadvantaged areas continues to increase each year.

Informal settlements, slums and disadvantaged areas contain high levels of inequality that affect people's health and well-being and diminish their security and future prospects. People who are economically and

socially marginalized are substantially less likely to have meaningful access to critical health and social services including HIV prevention, testing, treatment and support.

Cities gave rise to the first cases of HIV infection ever recognized, and the role of urban areas in the global AIDS response has only intensified over time. Globally, 200 cities account for roughly 25% of all people living with HIV. In many countries, a single city accounts for 40% or more of all people living with HIV.

As the world embarks on a historic quest to end the AIDS epidemic as a public health threat by 2030, it is plain that this fight will largely be won or lost in urban areas. Cities have unique strengths in the response to HIV, offering opportunities for innovative and visionary partnerships, more inclusive and participatory responses, and effective action to address the social, economic and legal determinants of HIV risk and vulnerability. Only by harnessing the unique advantages of urban life – and by effectively addressing the challenges that urbanization presents – will it be possible to end the epidemic.

As urban areas work to scale up the services that reduce HIV-related illness and death and prevent new HIV infections, they will need to develop innovative service models that take account of the evolving nature of HIV

care and treatment. Increasingly, HIV is transitioning from a disease that is almost invariably fatal to one that is chronic and manageable. As medical management of HIV increasingly resembles care for other chronic diseases, innovative models of service integration will be needed. These new approaches have the potential not only to accelerate progress towards ending the AIDS epidemic as a public health threat, but also to improve health outcomes for chronic, non-communicable diseases that are exacting an increasing toll in low- and middle-income countries.

Ending the AIDS epidemic in cities will have profound, long-lasting benefits for countless urban communities across the globe. But the AIDS response can also play another transformative role, as a pathfinder for broader health and development gains in urban areas. The key characteristics of the AIDS response – multisectoral, evidence-based and people-centred action; community

engagement and leadership; innovation to overcome barriers and improve outcomes; a focus on concrete targets and accountability for results; a commitment to human rights and gender equity and an insistence that no one be left behind – can help inspire new coalitions, innovative delivery platforms and broad-based action to ensure sustained growth and shared prosperity in the post-2015 era.

This report includes examples of cities in every region that are displaying courageous, innovative, transformative leadership on AIDS. As of August 2015, more than 100 cities have formally joined as partners in the Fast-Track Cities Initiative, pledging to take focused action to speed the day when the epidemic is no longer a public health threat. It is our hope that these examples will inspire other urban areas across the world to join in this historic undertaking and help make our world healthier, more secure and more just.

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# INTRODUCTION

The world today is increasingly defined by its urban spaces. Cities form the bedrock of modern human progress by being home to the largest and most dynamic economies; by incubating talent, creativity and innovation; and by having young, mobile, diverse populations. More than half of the global population currently lives in urban areas.

Urbanization is a powerful driver of development. It has generated economic growth and prosperity in many countries and it has been the driving force behind improved health and social, cultural and political change. Nevertheless, urban growth and development are also associated with many challenges, and city leaders routinely face the difficult task of allocating limited resources to contend with a range of development issues, including maintaining and developing infrastructure, improving living conditions (including within slums and deprived neighbourhoods), creating jobs and expanding the provision of basic health and social services.

Urban dynamics such as unplanned high population density, high mobility, informal settlements and a high concentration of marginalized, fragile and stigmatized communities also create and exacerbate vulnerability to HIV infection.

The global trend of rapidly increasing urbanization, especially in low- and middle-income countries, calls for renewed efforts to address urban epidemics of HIV, tuberculosis and other health challenges as an urgent development concern. Although cities

often have resources, public and private health systems, legal authority and the capacity for innovation and service delivery, they sometimes struggle to design and implement focused, effective and rights-based AIDS responses, often leaving behind the most vulnerable and marginalized populations.

Recent advances in science, accumulated implementation experience, stronger institutions, political commitment, civil society and community activism, global solidarity and associated resources offer an opportunity to end the AIDS epidemic as a public health threat by 2030. This goal is reflected in the UNAIDS Fast-Track approach, which requires rapidly scaling up and focusing the implementation and delivery of proven, high-impact HIV prevention and treatment services: an approach that urban leaders are increasingly adopting.

Cities are critical to these collective efforts to end the AIDS epidemic by 2030. They provide decision-making, political commitment, norm-setting and service delivery. Cities are central to bringing a paradigm shift to the AIDS response—a concerted move towards shared responsibility between national and city authorities and community-based organizations in support of local leadership and local evidence to transform the social, political and economic determinants of HIV risk and vulnerability. National planning approaches that recognize and foster the strategic importance of cities in the AIDS response will help to ensure that cities have the necessary financial,

technical and political support to lead and tailor their own responses.

This report provides an overview of the HIV epidemics in urban and city contexts: it explores why cities often account for large proportions of the national HIV burden and examines the critical opportunity to fast-track the response towards ending the AIDS epidemic.

The report argues that cities should increasingly assume a leadership

role in the urban AIDS response, with targeted support from national and global partners. City leaders have a unique opportunity to seize the dynamism, innovation and transformative force of the AIDS response—led by people living with HIV—to overcome urban challenges of social exclusion, inequality and extreme poverty. This would establish renewed efforts for an urban health approach that serves the evolving needs of cities and the people who live and work within them.

## KEY MESSAGES

- **Urbanization is one of the most important global trends of the 21st century. It is a transformative force that can be harnessed to enhance economic growth and productivity, as well as wealth and state-building. However, high levels of inequality affect people's health and well-being and diminish their physical security and future prospects.**
- **A large and growing proportion of people living with HIV reside in cities; ending the AIDS epidemic will rely on action by and in cities.**
- **People living in informal settlements and deprived areas are vulnerable to economic and social marginalization and are more likely to lack access to basic health services while also having a greater need for HIV services.**
- **HIV is increasingly becoming a chronic disease and not only presents an emerging challenge to cities for providing sustained quality health care, but also offers an opportunity to apply innovative and structured approaches to HIV, to other noncommunicable health conditions in both urban and rural areas.**
- **The structure, solutions and approaches created by the AIDS response in cities can serve as a pathfinder for broader health and development gains, providing innovative delivery-platforms for sustained growth and shared prosperity.**

# PART ONE

**CENTURY**

**OF THE CITY**

Urbanization is transforming the economies, social orders and political systems of the world; it is reshaping how countries and regions develop. It is one of the most profound global trends of our time, and its impact will keep growing.

At the beginning of the 19th century, about 2% of the world’s population lived in cities and towns. By 1900, that proportion had increased to about 13% and today more than half the world’s population lives in urban areas.<sup>1</sup>

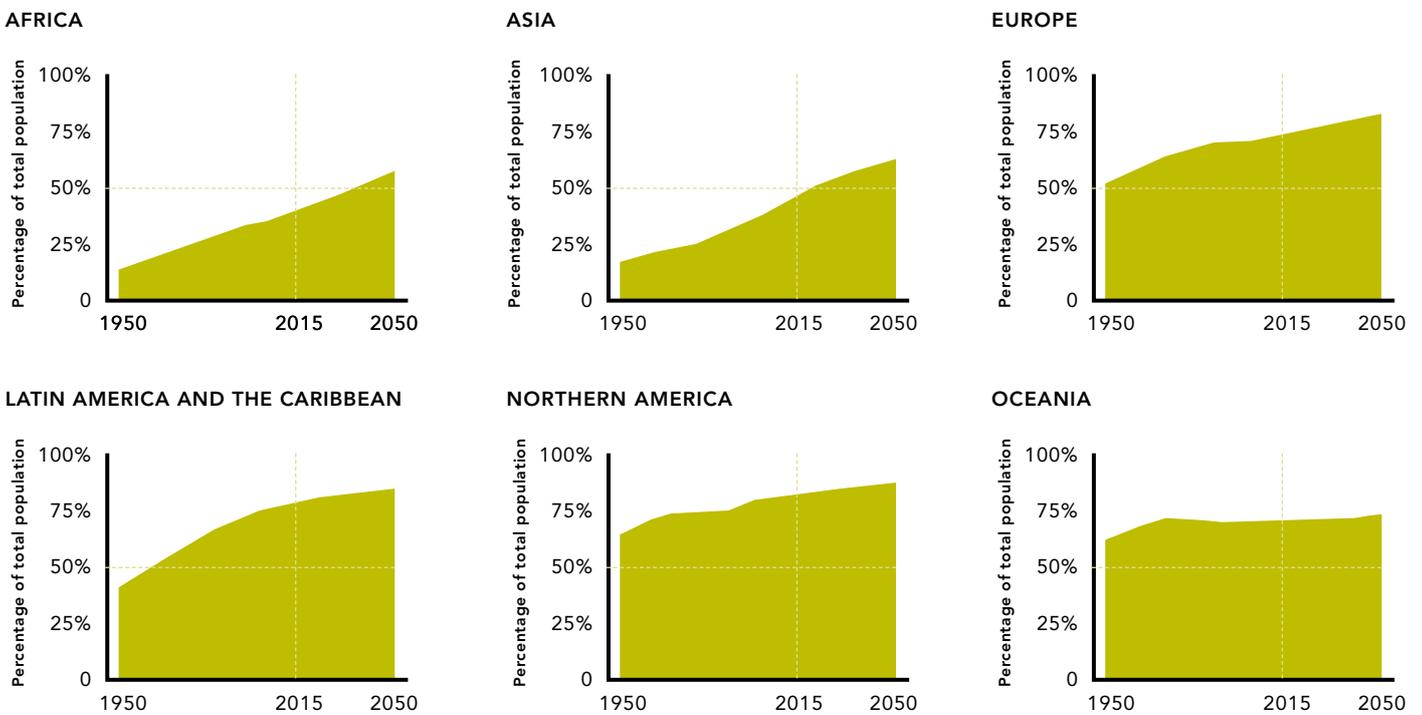
Every day nearly 200 000 people are added to the world’s urban population. However, the urban growth has not been uniform across all regions. In Europe and the Americas, more than 70% of the population are already

urbanized, whereas the pace of urbanization in Asia and Africa started to increase rapidly only in recent decades (Figure 1). Projections indicate that, by 2050, the majority of people will be living in cities in every region of the world, including in Africa and Asia (1).

The growth of urban populations partly reflects improvements in health systems that have led to better child survival, reduced burden of disease and improvements in life expectancy, although these benefits have not been equitably distributed. The future social and economic development of urban centres will require maintaining a good balance between accessible and affordable health systems, food security, urban planning and smart technologies.

## FIGURE 1

### Urban populations as a proportion of total populations, by major regions, 1950–2050



Source: Department of Economics and Social Affairs, Population Division, United Nations (2).

1. Unless otherwise indicated, all urban population data are from the Population Division of the United Nations Department of Economic and Social Affairs and the Global Urban Observatory of the United Nations Human Settlements Programme.

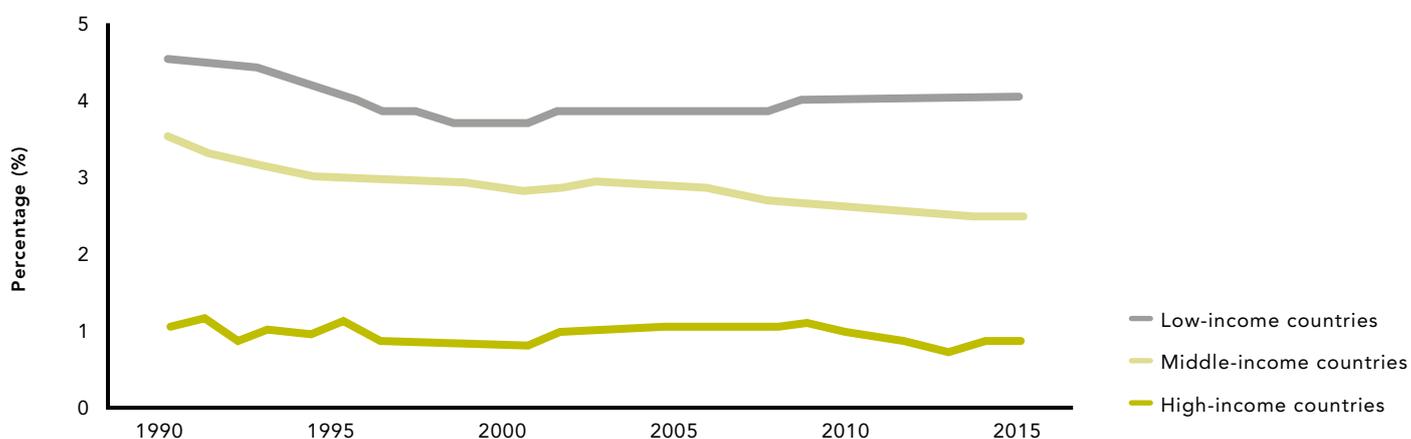
## URBAN POWERHOUSES IN THE 21ST CENTURY

Cities in low- and middle-income countries are now growing at a faster pace than those in high-income countries (Figure 2), mainly because of natural population growth in cities and towns, migration from rural areas and the transformation of rural land to urban land. More than 90% of urban

growth during the next few decades is predicted to be in low- and middle-income countries, where the urban population will increase from 2.9 billion in 2015 to an estimated 5.2 billion in 2050. Projections show that as many as 7 of 10 people globally will be living in an urban area by 2050 (Table 1).

### FIGURE 2

**Annual urban population growth rates (%) in low-, middle- and high-income countries, 1990–2014**



Source: Department of Economics and Social Affairs, Population Division, United Nations (2).

### TABLE 1

**Current and projected levels (%) of urbanization by region, 2015 and 2050**

REGION	Urban 2015 (%)	Urban 2050 (%)
Africa	40	56
Asia	48	64
Latin America and Caribbean	74	82
Europe	80	86
North America	82	87
Oceania	71	74
World	54	66

Source: Department of Economics and Social Affairs, Population Division, United Nations (2).

## Defining urbanization

Urbanization usually refers to a process by which towns and cities are formed or grow in number and size as increasing numbers of people begin living and working in central areas defined as urban (1). For the purposes of this report, urbanization includes migration from rural to urban areas, proportional increases in the urban population and the spatial expansion of cities.

Urbanization influences consumption and production patterns as well as levels and rates of urban socioeconomic activities, growth and development. Further, it alters cognitive processes: the changing of mindsets in ways that profoundly influence social development and innovation (3).

The term urban is less easily defined. Definitions vary from country to country, with the criteria usually including population size, population density and the proportion of the population that is active in non-agricultural occupations (1).

In some countries, towns with a few thousand people may be classified as urban areas. Urbanization levels—the proportion of people living in urban areas—are calculated based on how countries define what constitutes urban.

The transformative force of urbanization has far reaching implications beyond demographic change. Urbanization brings with it other important social, behavioural, political, economic and environmental ramifications. The potential strength of this transformative force is related to both the level and rate of urbanization in this wider context (3).

Urbanization can also take on new spatial and administrative forms.

Urban agglomeration refers to the population contained within the contours of a contiguous territory inhabited at urban density levels without regard to administrative boundaries. It usually incorporates the population in a city or town plus that in the suburban areas lying outside of but adjacent to the city boundaries. Many cities now span geographical areas that extend far beyond former city and administrative boundaries; some are merging into megaregions: urban corridors or city region settlements that extend across vast areas and sometimes even straddle national borders.

Megaregions result from the growth and convergence of previously discrete metropolitan areas. Examples include China's Hong Kong–Shenzhen–Guangzhou megaregion and the São Paulo–Rio de Janeiro megaregion in Brazil.

Urban corridors usually link together settlements along transport routes. A good example is the 600-kilometre Ibadan–Lagos–Cotonou–Lomé–Accra urban corridor, which spans four countries and is an important engine of the economy of western Africa.

City regions are the most common of these spatial configurations and are formed when large cities draw neighbouring towns into the orbits of their administrative and infrastructure systems. Examples include metropolitan São Paulo, Brazil, which sprawls across 8000 km<sup>2</sup>, and Manila, Philippines, where the metropolitan government coordinates approximately 17 local authorities. Such urban configurations are creating new complexities and hierarchies, which require innovative management, planning and governance, including for the development of health infrastructure and services.

# 90%

**OF URBAN GROWTH  
IN THE NEXT FEW  
DECADES WILL  
BE IN LOW- AND  
MIDDLE-INCOME  
COUNTRIES**

## URBANIZATION DRIVES ECONOMIC GROWTH AND DEVELOPMENT

Urbanization is a powerful driver of economic development, social progress and the improvement of public health. It is already recasting administrative and governance systems while playing major roles in generating economic growth, even far beyond their boundaries (4). Further, it will become even more prominent as cities explore new ways to generate economic growth and to manage their administrative and political systems. It also offers great scope for bringing improved services closer to residents and for strengthening the participation of communities in urban governance.

Urban areas account for a large proportion of the world's gross domestic product (GDP) as well as new job creation. In 2011, for instance, it is estimated that only 600 urban centres generated about 60% of the global GDP (5). By some estimates, the 300 largest cities were responsible for nearly half (47%) of all global economic output in 2014 and nearly 40% of global economic growth while being home to just 20% of the global population (6).

Globalization and the explosive growth in trade and financial services seen in recent decades are further boosting the economic importance of cities. Technological advances and a quest to lower wage costs have led to production and distribution chains that link urban nodes thousands of kilometres apart, many of them in low-wage economies in low- and middle-income countries. Meanwhile, the increasingly precarious status of small-scale agrarian production in many economies has continued to fuel migration as people move to cities and towns in search of income opportunities, adding further impetus to urbanization. The current dominant

trend is to focus national, in some cases regional, economic development on cities. Some countries are using cities to propel national economic development and societal progress.

Cities have become central economic players. For example, six cities in South Africa contribute more than 50% of that country's national GDP (4). Indeed, the output of some cities equals or exceeds that of entire countries. In 2014, one third of the world's 300 largest city economies outpaced their national economies in both employment and growth of GDP per capita (6).

Countries everywhere are trying to capitalize on the many advantages of urban-centred development:

- the scale of cities and the apparent cost-effectiveness of investing in them;
- their advantages for leveraging global flows of capital, trade and information; and
- their dynamic concentrations of infrastructure, finances, skills and innovation.

As one example, China's state-led urban reform programme and export-oriented economic strategy dramatically increased urbanization levels over the past three decades. Today, about 55% of China's population resides in cities. Economic growth rates have accelerated, poverty has fallen and living standards have improved dramatically: since the 1980s, these trends have lifted the income of more than half a billion people above the poverty line of US\$ 1.25 per day (7) and have permitted the emergence of a middle class.



**STOP  
THE  
STIGMA**

Around the globe, low- and middle-income countries have taken advantage of globalization. Collectively, their share of world merchandise trade almost doubled,

from 25% to 47% between 1980 and 2010, a trend that has strengthened the economic, social and political weight of cities capable of capitalizing on that.

## CITIES AS THE LOCOMOTIVES OF CHANGE

Throughout history, cities have attracted newcomers with promises of freedom, economic opportunities and a better and healthier life. Cities provide jobs and incomes, offer refuge to people fleeing conflict or natural disasters and excel as the root of creativity, networking hubs and springboards for change. The inventive spirit that flourishes when large numbers of people live and work in close proximity has made cities focal points for innovation, the arts, enterprise and civic mobilization.

Urbanization brings about dramatic transformations in the social, political and economic life of its citizens. It is changing production and consumption patterns, lifestyles, social relations and ways of governing and of solving disputes.

Urbanization is also substantially influencing how people live, work and organize their lives and their surroundings. When large numbers of people live and work in close proximity, transaction costs tend to be lower and public spending on infrastructure and health, education and other basic services becomes more cost-efficient.

City life, and its promise of progress, also encourages social mobilization and civic action as residents organize around demands for greater democracy, civil and human rights, social justice and a fairer distribution of resources and livelihood opportunities. Cities often become testing grounds

for new forms of popular participation in civic affairs and for new institutional arrangements that can enhance social inclusion, equity and public accountability. This is leading to important progress in many cities, especially in housing, tenure security, access to clean water and sanitation and better access to health services.

Civil society demands and actions have led to more inclusive and collaborative forms of governance and innovations, such as participatory budgeting processes that were pioneered in cities in Brazil in the 1990s. Much of the impetus for increased awareness and action on AIDS in cities around the world has come from city-based organizations and activists. A human rights-based approach to urbanization is gaining traction around the world (8).

Urbanization strengthens the interdependence between rural and urban areas. It transforms rural communities, linking them to urban areas through the flow of people, goods, services, remittances, information and lifestyles (4). Providing improved infrastructure, basic services and amenities in rural areas and introducing innovative practices that have been pioneered in urban areas can potentially accelerate rural development and reduce poverty and the vulnerability of rural communities. This will increase the prospects of access to health services and advance regional equity.

## AS CITIES GROW, SO DO THEIR CHALLENGES

Cities bustle with economic vitality, learning, innovation and civic dynamism, but they are also marked by deprivation, risk and inequity. Today, all major cities face multiple challenges, ranging from climate change to the management of communicable, noncommunicable and chronic diseases. This is especially true where people are crowded together in unplanned and deprived neighbourhoods. In addition, urban health is also burdened by road traffic accidents, injuries, violence and crime.

In the context of widening economic and social inequalities in most societies, urban development has assumed increasingly exclusive forms. Inequalities have long been a feature of city life, but cities today exhibit vast disparities in income, access to paid employment and other economic opportunities and to basic services, secure housing and personal safety. Although hunger, malnutrition and poor health are often framed as rural problems, urban poor people are also at high risk of such poor health conditions, sometimes more so than their average rural counterparts (9,10).

Income inequality is mostly worse in cities and towns than in rural areas, and health disparities in cities can be severe (11).

New, overlapping forms of deprivation and social exclusion have emerged, often concentrated in specific sections of cities, especially in informal settlements, slum areas and marginalized neighbourhoods. Land and housing speculation is accelerating the creation of divided cities typified by enclaves of privilege and vast impoverished areas. The prevailing patterns of urban development are forcing impoverished residents towards

the outer fringes of cities into makeshift neighbourhoods or poor housing zones where infrastructure and basic services are sorely lacking. The unequal provision of public goods and services creates areas of concentrated disadvantage in parts of the city, and this further exacerbates inequalities and different forms of exclusion and marginalization (12).

Low-income communities often have large proportions of their populations in need of health, education, security and other services, and yet they frequently struggle to compete effectively for essential services. Political systems and administrative procedures tend to neglect their needs in favour of the interests of more affluent sections (13).

As a result—in addition to high unemployment, crime, physical insecurity and environmental hazards (13)—the lack of adequate shelter, safe water, acceptable sanitation, nutrition, basic education and health care are endemic problems for residents of low-income areas. These pressures tend to undermine the conventional approach of top-down urban planning and management as residents improvise solutions. They also foster stigma and discrimination and increase vulnerability to the spread of diseases, including tuberculosis and HIV infection.

Intense competition for work and access to basic entitlements and services is also leading to social fragmentation within disadvantaged communities (14). All in all, high levels of inequality affect people's health and well-being and diminish their physical security and future prospects (15,16). Different forms of inequalities—social, legal, spatial, cultural and political—interact with each other to produce extreme levels of deprivation (14).

Estimates indicate that income inequalities have increased since 1980 (17)—and in some cases to worrying levels above the United Nations alert line.<sup>2</sup> In 2012, almost 30% of urban populations in low- and middle-income countries and more than 60% in sub-Saharan Africa were estimated to live in overcrowded and poorly serviced

slums and informal settlements (14). Although some cities and countries have improved the living conditions in slum areas, slum populations continue to grow. United Nations projections suggest that one in three new city dwellers may soon be living in a slum (18), large proportions of them young people (19).

## HIGH LEVELS OF INEQUALITY AFFECT PEOPLE'S HEALTH AND WELL-BEING

### THE HEALTH BENEFITS OF URBANIZATION ARE NOT SPREAD EQUITABLY

Increasingly, manifestations of social and health inequities are used as an indicator of social accountability and are progressively becoming a reliable way for measuring shared prosperity and how well a city is meeting the needs of its residents (20). Health is generally better in the urban areas than in the rural areas of a country. However, the benefits are usually greater for affluent people than for poor people (21). In many parts of the world, some segments of city dwellers suffer disproportionately from poor access to sanitation, water and health. These inequities can be traced back to differences in their social and living conditions as well as some forms of institutionalized deprivation. Therefore, health indicators in slums and other impoverished city areas are worse than in higher-income neighbourhoods and occasionally worse than in rural settings in many countries. For example, infant mortality rates tend to be higher in the low-income areas of cities than in rural areas. The prevalence of HIV infection is often higher in urban slums than in other parts of cities or in rural areas. Nationally, the HIV prevalence in South Africa in urban formal settlements was 10% in 2012, half that of urban informal settlements

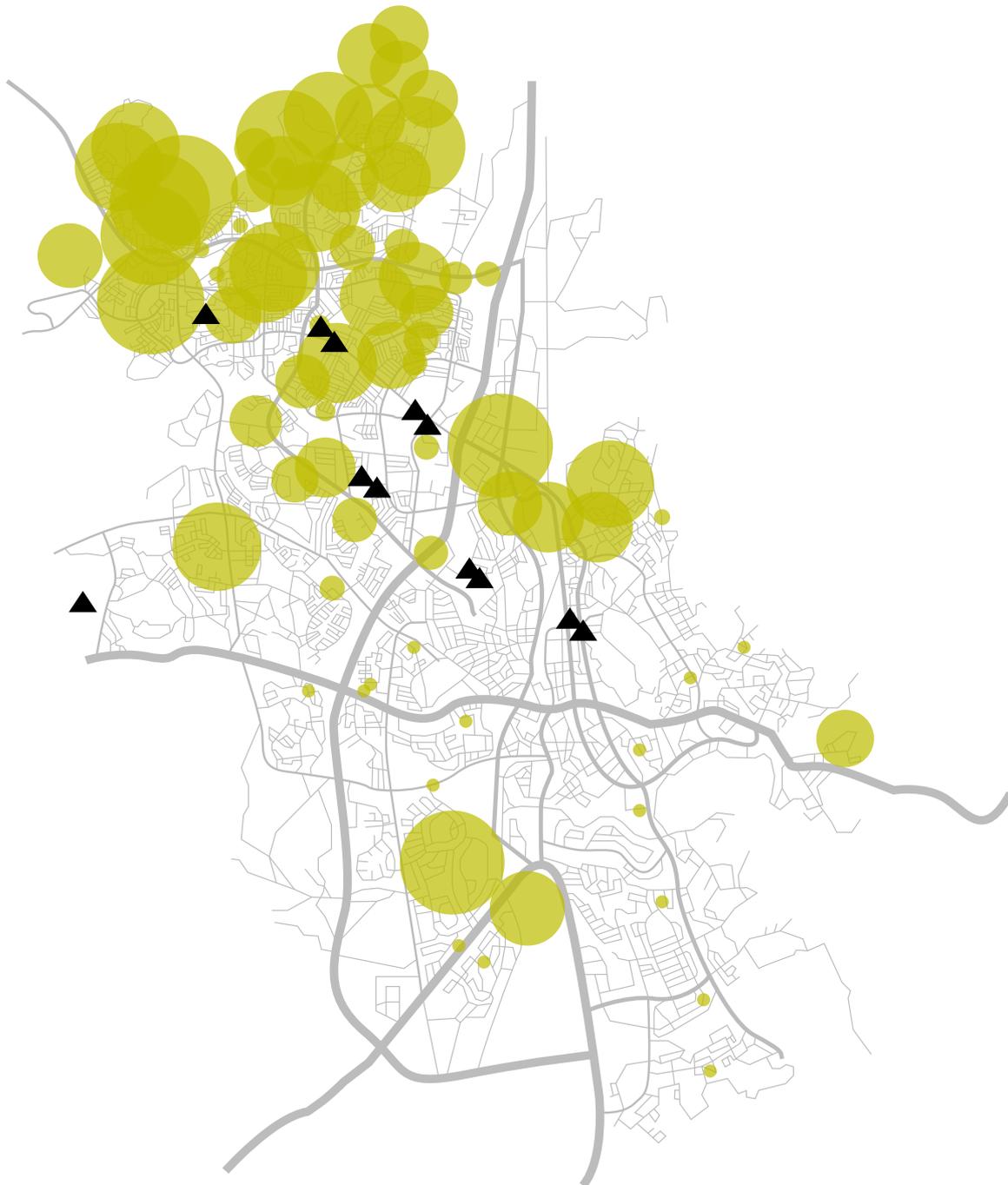
(20%) (22). In 2008–2009, 12% of slum dwellers in Nairobi, Kenya, were living with HIV versus 5% of residents in the rest of the city (23). Despite the heightened risk of diseases associated with precarious and overcrowded living conditions, access to and the quality of health services in poor neighbourhoods tend to lag behind because authorities often give those areas low priority for service delivery.

Around the world, health-care services, both public and private, tend to be concentrated in more affluent parts of cities. For example, studies from India show that residents in impoverished parts of cities have minimal access to health care, with services either unavailable or substandard, while outreach and referral systems are weak and ineffective (24). In Namibia, people acquiring HIV infection in the capital city of Windhoek were clustered in informal settlements in the north of the city, and follow-up service mapping indicated that few of the city health facilities were operating in the areas where HIV prevalence was highest (Figure 3) (25–27). Similarly, the HIV prevalence is higher among people living in the slums of Nairobi, and yet slum dwellers have inadequate and inequitable access to HIV services (23).

2. The United Nations determines the alert line: when countries or cities reach a Gini coefficient in income exceeding 0.4.

### FIGURE 3

HIV prevalence in 2009 and coverage of HIV testing, treatment and counselling services in 2012, in Windhoek, Namibia



2 km

- Size of circle indicates HIV prevalence per primary sampling unit (HIV prevalence range 0-47%)
- ▲ Health facilities providing antiretroviral therapy and HIV counselling and testing

Sources: Know your HIV epidemic/know your response (KYE/KYR) policy synthesis; Incidence of HIV in Windhoek, Namibia: Demographic and Socio-Economic Associations (25).

## ADDRESSING THE CHALLENGES IN CITIES

Many factors limit the uptake of services, including poverty and overcrowding, insecurity, stigma, limited knowledge, unfavourable attitudes, discriminatory laws and the inequitable provision of basic services. Nevertheless, cities are also well placed to use their advantages to resolve these challenges.

The distribution of public health services in many cities is often not aligned with need, in part because some city leaders consider informal settlements to be outside their jurisdiction for service provision. However, health and development challenges do not respect municipal boundaries, and one of the great characteristics of cities is their encouragement of interaction among diverse groups and communities. A lack of investment in public health services where need is greatest, including in informal settlements and deprived areas, exposes all city residents to greater health risks and long-term costs while undermining progress towards the goal of shared prosperity.

Services are most effective when they are accessible and affordable and fit with the realities of people's lives and the risks they entail. Cities that have succeeded in reversing their HIV epidemics have used approaches that empower and respect the rights

of affected communities, tackle discrimination, address violence and exclusion, strengthen accountability and put equity at the forefront.

Successful programmes have drawn on the knowledge, energy and networks of communities and other stakeholders. These programmes link and collaborate with nongovernmental and community organizations and academic institutions, enabling them to tap into problem-solving creativity that is intrinsic to life in dynamic and growing cities. It also allows experimentation with new methods to track HIV epidemics, assess gaps in implementation, map the provision of quality services and medicines and develop people-centred ways to reach those ill-served by mainstream service systems.

Cities offer the density and economies of scale, institutional response frameworks, public and private sector infrastructure and health systems that can help to address the AIDS epidemic in a more effective manner and contribute to national and international responses towards ending the AIDS epidemic.

Part two of this report explains the risks of HIV infection in cities and provides an account of the AIDS epidemic in specific cities.

**PEOPLE IN  
DEPRIVED AREAS  
ARE LESS LIKELY  
TO HAVE ACCESS  
TO BASIC HEALTH  
SERVICES**

# PART TWO

**USING THE**

**ADVANTAGES**

**OF CITIES TO**

**END THE AIDS**

**EPIDEMIC**

## THE HIV BURDEN IN CITIES

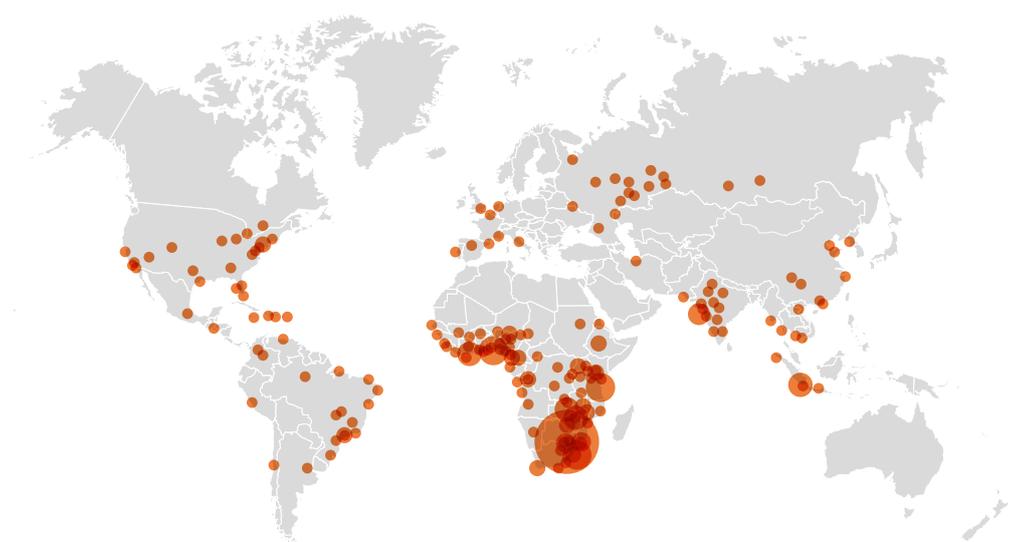
The distribution of HIV infections between urban and rural areas varies from country to country. In many countries, large proportions of people living with HIV reside in urban areas. In other countries, the distribution of people living with HIV is primarily restricted to just a few cities.

UNAIDS has identified 200 cities likely to have the largest number of people living with HIV (Figure 4) and estimated that together, these cities—which are

located in 63 countries—accounted for more than one quarter of the estimated 35 million [33.2 million–37.2 million] people living with HIV globally in 2013. Almost half (94) of the 200 cities are in countries with large HIV epidemics and in which HIV is transmitted mainly through unprotected heterosexual sex. In the remaining 106 cities, unprotected sex between men, paid sex and the sharing of contaminated drug-injecting equipment are the main drivers of the epidemic.

## FIGURE 4

The 200 cities with the largest estimated numbers of people living with HIV



	Estimated numbers of people living with HIV	Uncertainty bounds
200 top-ranked cities	8 340 000	[5 861 000–11 832 000]
Eastern and southern Africa (43 cities)	3 725 000	[2 791 000–4 795 000]
Western and central Africa (51 cities)	1 789 000	[1 292 000–2 423 000]
Asia and the Pacific (32 cities)	1 086 000	[652 000–1 799 000]
North America and western Europe (31 cities)	739 000	[469 000–1 266 000]
Latin America and the Caribbean (25 cities)	556 000	[389 000–800 000]
Eastern Europe and central Asia (16 cities)	427 000	[259 000–717 000]
Middle East and North Africa (2 cities)	17 000	[10 000–31 000]

Note: Bubble sizes on the map represent the number of people living with HIV.

Source: Analyses based on 2013 UNAIDS estimates and city-specific data sources

The UNAIDS Fast-Track approach particularly focuses on 30 countries that account for nearly 90% of all the people newly infected with HIV worldwide. More than three quarters (156) of the 200 cities with the

highest burden of HIV infection are in the UNAIDS Fast-Track countries. Tables 2 and 3 show that key cities in the Fast-Track countries account for large proportions of the total number of people living with HIV.

**TABLE 2**

**Cities with the greatest HIV burdens in Fast-Track countries**

Fast-Track country	City	Total population—Nationally	Total population—City	Estimated adults and children living with HIV—Nationally	Estimated adults and children living with HIV—Nationally		Estimated total population living with HIV in the city		Estimated percent of total population living in the city	Estimated percent of total population living with HIV in the city	
					Low estimates	High estimates	Low estimates	High estimates		Low estimates	High estimates
Angola	Luanda	19 000 000	5 100 000	250 000	180 000	340 000	24 000	70 000	26%	9%	28%
Brazil	São Paulo	200 000 000	21 000 000	730 000	660 000	810 000	90 000	170 000	10%	12%	24%
Cameroon	Yaoundé	22 000 000	2 800 000	600 000	560 000	650 000	81 000	140 000	12%	13%	23%
Chad	N'Djaména	14 000 000	1 200 000	210 000	170 000	250 000	39 000	83 000	8%	19%	40%
China	Chongqing	...	12 000 000	...	...	...	15 000	45 000			
Côte d'Ivoire	Abidjan	20 000 000	4 600 000	370 000	330 000	410 000	120 000	210 000	23%	31%	58%
DR Congo	Kinshasa	68 000 000	11 000 000	440 000	370 000	520 000	69 000	150 000	16%	16%	33%
Ethiopia	Addis Ababa	87 000 000	3 100 000	790 000	720 000	890 000	90 000	170 000	4%	11%	21%
Haiti	Port-au-Prince	10 000 000	2 300 000	140 000	130 000	150 000	30 000	54 000	22%	22%	39%
India	Mumbai (Bombay)	1 200 000 000	20 000 000	2 100 000	1 700 000	2 700 000	110 000	260 000	2%	5%	12%
Indonesia	Jakarta	250 000 000	10 000 000	640 000	420 000	1 000 000	39 000	94 000	4%	6%	15%
Iran (Islamic Republic of)	Tehran	76 000 000	8 300 000	70 000	47 000	110 000	5 300	16 000	11%	8%	23%
Jamaica	Kingston	2 800 000	590 000	30 000	25 000	35 000	14 000	27 000	21%	46%	87%
Kenya	Nairobi	43 000 000	3 600 000	1 600 000	1 500 000	1 700 000	74 000	130 000	8%	5%	8%
Malawi	Blantyre-Limbe	15 000 000	760 000	1 000 000	970 000	1 100 000	91 000	150 000	5%	9%	15%
Mozambique	Maputo	26 000 000	1 200 000	1 600 000	1 400 000	1 800 000	110 000	210 000	5%	7%	14%
Nigeria	Lagos	170 000 000	12 000 000	3 200 000	3 000 000	3 600 000	170 000	310 000	7%	5%	10%
Pakistan	Karachi	180 000 000	16 000 000	68 000	41 000	130 000	14 000	34 000	9%	21%	50%
Russian Federation	Saint Petersburg	...	5 000 000	...	...	...	29 000	130 000			
South Africa	Johannesburg	51 000 000	8 900 000	6 300 000	6 000 000	6 500 000	760 000	1 200 000	17%	12%	20%
Uganda	Kampala	37 000 000	1 800 000	1 600 000	1 500 000	1 700 000	56 000	97 000	5%	4%	6%
Ukraine	Kiev	45 000 000	2 900 000	210 000	180 000	250 000	8 800	27 000	6%	4%	13%
United Republic of Tanzania	Dar es Salaam	44 000 000	4 600 000	1 400 000	1 300 000	1 500 000	150 000	260 000	10%	11%	19%
United States of America	New York Newark	...	1 900 000	...	...	...	68 000	250 000			
Viet Nam	Ho Chi Minh City	89 000 000	6 900 000	250 000	230 000	280 000	46 000	170 000	8%	19%	67%
Zambia	Lusaka	15 000 000	2 000 000	1 100 000	1 100 000	1 200 000	190 000	310 000	13%	17%	28%
Zimbabwe	Harare	14 000 000	1 500 000	1 400 000	1 300 000	1 400 000	120 000	200 000	11%	9%	14%

Sources: UNAIDS 2013 HIV estimates and UNAIDS outlook 2014: the city report (29).

For example, according to estimates:

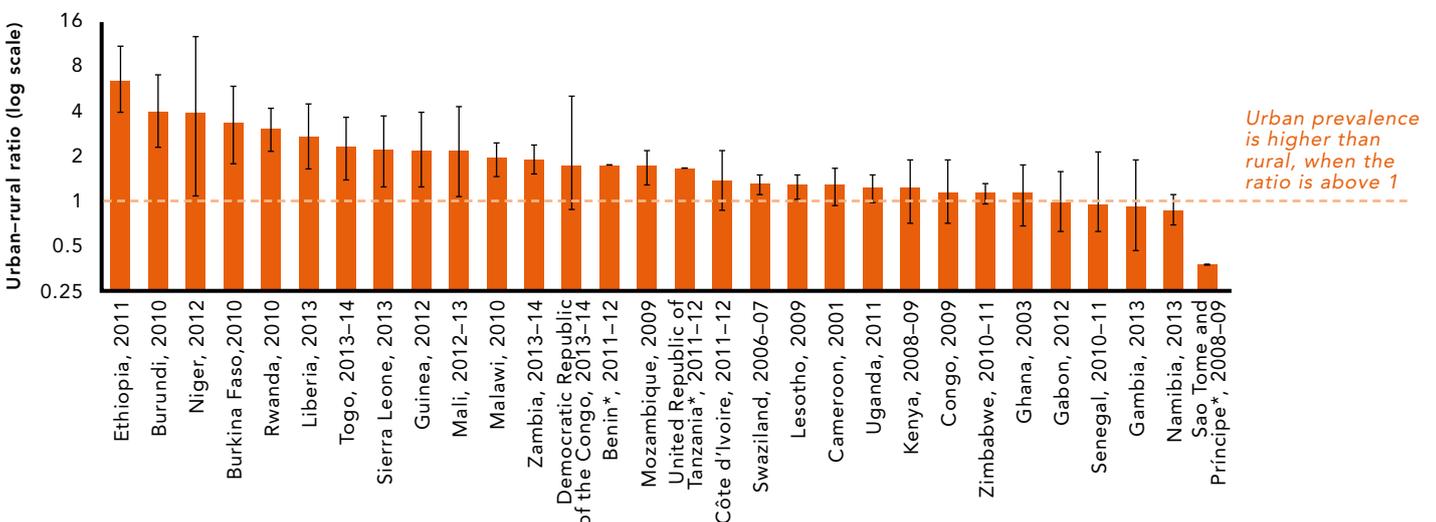
- Côte d'Ivoire: 23% of the total population live in the capital, Abidjan, yet the city accounts for 31–58% of all people living with HIV.
- Pakistan: Karachi accounts for 9% of the overall population but 21–50% of all people living with HIV.
- Viet Nam: 19–67% of all people living with HIV live in Ho Chi Minh City.
- Philippines: 12% of the national population reside in the capital region, which is also home to about half of all new HIV cases reported in 2012.
- South Africa: almost 35% of all people living with HIV reside in seven cities (Cape Town, Durban, Johannesburg, Pietermaritzburg, Port Elizabeth, Pretoria and Vereeniging).
- United States: new HIV diagnoses are concentrated primarily in large metropolitan areas (81% in 2011), with Los Angeles, Miami and New York reporting the highest numbers of cases (28).

In the Asia–Pacific region, about 25% of all people living with HIV are estimated to be residing in 31 major cities, while in western and central Europe, an estimated 60% of all people living with HIV reside in 20 cities.

The importance of HIV epidemics in cities is also evident in sub-Saharan Africa, the region with the largest HIV burden and rising urbanization. Data from 30 countries that have conducted nationally representative household-based population surveys show that HIV prevalence among people 15–49 years old living in urban areas is higher than among those living in rural areas in most countries (Figure. 5). Even in countries that are still predominantly rural, cities are often home to disproportionate numbers of people living with HIV (30). In Burundi, less than 20% of the population lives in urban areas, but these account for one third of the country's HIV burden. Urban areas account for only 18% of Ethiopia's population but for almost 60% of people living with HIV nationally. According to the Rwanda Demographic and Health survey of 2010, HIV prevalence in Rwanda is higher in urban areas (7%) than in rural areas (2%) and highest in Kigali City (7%).

## FIGURE 5

**Ratio of HIV prevalence in urban and rural areas among people 15–49 years old, selected countries in sub-Saharan Africa, most recent data available**



\* Uncertainty bounds not available because of missing data for 95% confidence intervals

Source: Demographic and Health Surveys, 2003–2014 (30).

Several cities are home to significant proportions of all people living with HIV nationally. In Congo, more than 75% of all people living with HIV are found in only two cities, Brazzaville and Pointe-Noire. Similarly, Abidjan, Bouake and San Pedro are home to more than half of all people living with HIV in Côte d'Ivoire. Fifteen cities account for around 60% of all people living with HIV in Brazil (Baixada Santista, Belém,

Belo Horizonte, Brasília, Campinas, Curitiba, Florianópolis, Fortaleza, Grande Vitória, Manaus, Pôrto Alegre, Recife, Rio de Janeiro, Salvador and São Paulo). Another 15 cities account for more than half of all people living with HIV in the Russian Federation (Chelyabinsk, Kazan, Krasnodar, Krasnoyarsk, Moscow, Nizhny Novgorod, Novosibirsk, Perm, Samara, Saint Petersburg, Saratov, Tolyatti, Ufa, Volgograd and Yekaterinburg).

## HIV RISKS IN CITY LIFE

Why is the risk of acquiring HIV infection so high in so many cities? The dynamics of HIV epidemics in cities vary from place to place, but there are commonalities. Several aspects of urban living can generate and exacerbate the risk of and vulnerability to acquiring HIV infection. For example, urbanization involves substantial, often abrupt, shifts in social systems, values and communal structures of authority. This often means that community influence over people's sexual and social behaviour diminishes in cities and traditional norms and structures weaken, resulting in higher rates of premarital and non-spousal sex in urban areas (14).

At the same time, the vibrancy, stress and anonymity of urban life, and its bustle of encounters and interactions, provide increased opportunities for behaviour and sexual networking that may increase the risk of HIV infection.

Important underlying factors also contribute to the risk of and vulnerability to acquiring HIV infection in cities. Work and other opportunities in cities may be more plentiful than in rural areas, meaning that cities can contribute to poverty reduction (4), but the competition is also greater and the opportunities are not distributed equitably, especially for women. Where material and gender inequality strongly overlap, sex work can become an important survival tactic and income source.

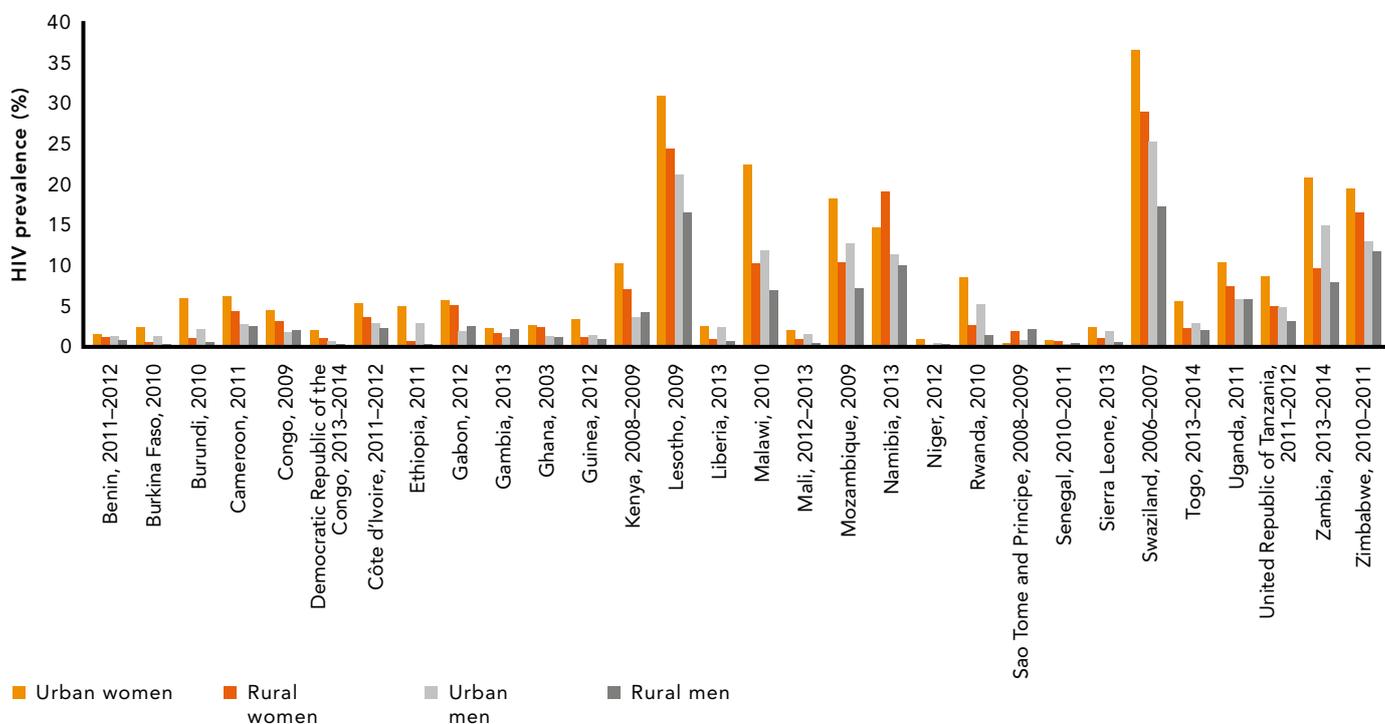
This may help explain why migration into cities is sometimes associated with an elevated risk of acquiring HIV. In China, studies have shown that rural-to-urban migrants are at high risk of acquiring sexually transmitted infections and viral hepatitis infections (31). In Khutsong, Carletonville, a mining town in South Africa, female migrants were found to be 1.6 times more likely to be living with HIV than non-migrant women (32). In India, the prevalence of HIV infection among migrants (0.99%) in 2010–2011 was substantially higher than the estimated national adult prevalence (0.27%) (33).

In many countries in sub-Saharan Africa, HIV prevalence is elevated in urban areas, compared to rural areas and also noticeably higher among women compared to men (Figure 6).

Although sex work occurs in both rural and urban settings, urban life offers increased opportunities for the exchange of sex for money or gifts. Large concentrations of men in cities with disposable incomes may lead to increased frequency of transactional sex and sex work, which increases the potential exposure to HIV and other sexually transmitted infections for both parties. In an analysis of national population-based survey data in 16 countries, males living in urban areas were found to be more likely than their rural peers to report having paid for sex (34).

## FIGURE 6

### HIV prevalence among women and men (15–49 years old) in rural and urban areas, selected countries in sub-Saharan Africa, most recent data available



Source: Demographic and Health Surveys, 2003–2014 (30).

The relative anonymity offered by cities enables people to explore their sexual identities more freely. Although sex between men is hardly limited to cities, their large populations and greater scope for social interaction mean that the HIV prevalence among men who have sex with men is often elevated in cities. This may also result in exposure to HIV for men living in rural areas who may travel to cities for sex.

Similar to other key populations, transgender people often migrate to cities in search of safer and more secure communities. Nevertheless, they still face inordinate hardships, including discrimination and violence. Globally, transgender women are estimated to be 49 times (confidence interval of 21.2–76.3 times) more likely to acquire HIV infection than women of reproductive age generally (35).

Multiple factors heighten their HIV risks, including engaging in sex work and other risky sexual behaviour, sharing injecting equipment and lack of access to treatment for sexually transmitted infections. Cities also tend to be significant markets for narcotic substances, including injectable drugs. This has important implications for many city AIDS responses. The dense networks of people who inject drugs can lead to increased numbers of people sharing contaminated drug-injecting equipment for a short time. The spread of HIV infection—increasing prevalence within a key population—elevates the risk of people becoming newly infected.

Key populations face exceptionally high risks of acquiring HIV and other infectious diseases. City-based examples include:

## SOCIAL AND LEGAL BARRIERS LIMIT ACCESS TO SERVICES FOR KEY POPULATIONS

- Each year, 8% of the men living in Chiang Mai, Thailand who have sex with men become infected with HIV, while in Bangkok, men who have sex with men have an annual incidence exceeding 5% (36). The HIV incidence at a national level in Thailand was estimated to be around 0.02% in 2013–2014.
- In six cities in Indonesia (37), the HIV prevalence among people who inject drugs exceeds 50%, significantly higher than the estimated national prevalence of HIV (estimated to be about 0.5% in 2013–2014).
- In 24 cities in Mexico, studies among men who have sex with men found that approximately 17% were HIV-positive (38), while the national adult HIV prevalence in 2013–2014 was estimated to be 0.2%.
- The HIV prevalence among men who have sex with men is 17% in Nigeria. In the Federal Capital Territory, it is more than twice as high (38%) (39).
- In 20 metropolitan areas in the United States of America, HIV prevalence among people who injected drugs in 2009 was higher (9% [2–19%]) (40) than in the general population (estimated to be 2% among heterosexuals people living in the cities with high HIV prevalence) (41).

## ADDRESSING HIV INFECTION AMONG KEY POPULATIONS IN CITIES

An accelerated, more effective AIDS response starts with a firm understanding of the main modes of HIV transmission and the factors fuelling the epidemic in a specific city. It then becomes possible to identify and focus efforts on the populations and areas in which the HIV epidemic is highly concentrated and to identify the places where services are lacking or failing to reach people.

Cities provide major opportunities and advantages for reaching key populations with services that can prevent and treat HIV infection and for delivering these interventions in a cost-effective manner. Implementing these services to maximum effect requires:

- strategies that address structural barriers such as violence, stigmatization and criminalization (42);
- political foresight and commitment to remove discriminatory laws; and
- halting practices that hinder efforts to reach key populations with life-saving services (43, 44).

Cities can offer political autonomy and greater social flexibility for these

actions. An additional advantage of cities is the potential for strong community mobilization, which is an important requirement for effective services for key populations (45).

Too often, however, national and city governments adopt a punitive approach, enacting laws and practices that block access to HIV and sexual health services for sex workers and allow the epidemic to continue, including in parts of Europe where injecting drug use is a major driver of the HIV epidemic (46). Meanwhile, social stigma, limited funding, discriminatory and rights-violating laws and practices could impede efforts to reach men who have sex with men with effective HIV services (43). In 2013, for example, 78 countries had laws that criminalized sex between men (47).

Intensified action could have an immediate impact, starting with removing obstacles that prevent access to services for key populations. A public health approach benefits from rights-based policies and explicit efforts to sensitize service providers, law enforcement agencies and

communities. In many cities, enough residents highly value social tolerance and solidarity to make such a human rights-based public health approach feasible. This tolerance provides an

avenue to provide rights-based care to marginalized populations at the local level through city ordinances and policies even though they may contradict unfairly punitive national laws.

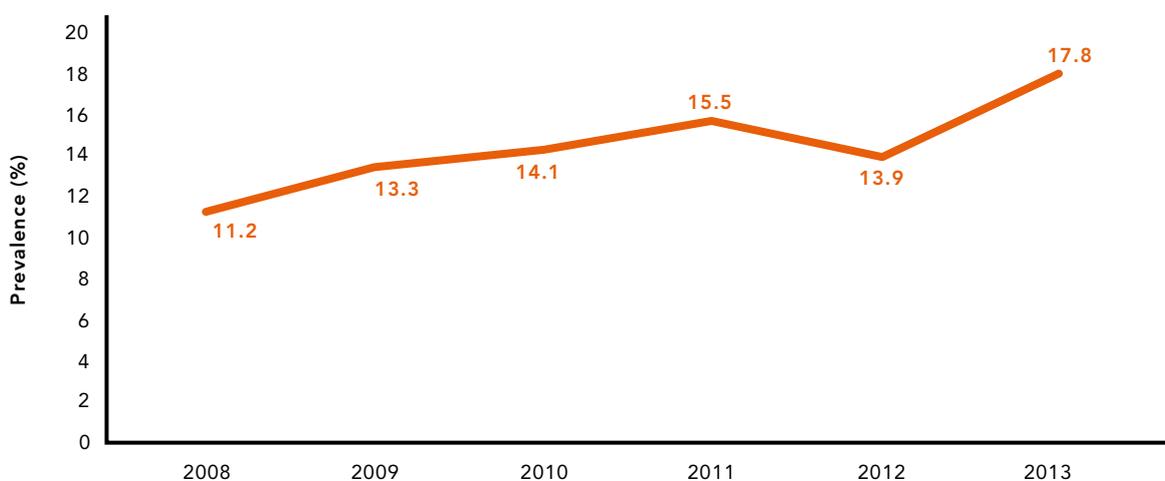
## CHENGDU, CHINA: Meeting the HIV-related needs of men who have sex with men

Studies have revealed a steady increase in HIV prevalence among men who have sex with men in the city of Chengdu, Sichuan Province, China (48). By 2013, almost one in five men surveyed who have sex with men had acquired HIV (Figure 7).

The city responded with a strategy to reverse this growing epidemic. Drawing on research showing that communities of men who have sex with men were mainly concentrated in six districts of Chengdu, the city focused its HIV activities on those priority districts using venue and social network mapping, field visits and ongoing research to inform the municipal programme.

City resources were allocated to community-based services and to leverage social media and other new technologies. Chengdu has adopted an all-in-one service delivery approach that links HIV testing, prevention, follow-up or treatment and care, including nutritional services and psychosocial support. After expanding community and hospital-based rapid HIV testing, more than 89% of individuals eligible for HIV treatment had started antiretroviral therapy in 2013 (49,50).

**FIGURE 7**  
**Increase in HIV prevalence among men who have sex with men in Chengdu, China, 2008–2013**



Source: Intensifying HIV response among MSMs with city-approach in Chengdu city, China (49).



**CITIES ARE  
SPRINGBOARDS  
FOR CHANGE**

## PROTECTING YOUNG PEOPLE IN CITIES

Many of the factors that put city residents generally at risk for HIV infection are magnified in the lives of young people. In the absence of adequate sexual health knowledge and services, young people's quests for intimacy and sexual affirmation can entail great health risks, including the risk of acquiring HIV infection. Despite significant improvements in people's knowledge about HIV prevention in recent years, large differences still remain between the poorest and the most affluent city residents, as well as between men and women living in urban areas, with the poorest urban women knowing the least about the behavioural risks of HIV transmission (51). Data from South Africa emphasize the inequalities in transmission risks, with lower HIV prevalence among young people living in urban formal areas (prevalence among people 15–24 years old in urban formal areas, 5.7% [4.5–7.1%]) versus those

living in urban informal areas (11.3% [8.0–15.6%]), rural informal areas (8.0% [6.4–9.8%]) and rural formal areas (9.1% [6.8–12.1%]) (22).

In places with high youth unemployment rates and endemic poverty, young people—especially men—can be drawn towards using or abusing drugs. Gender disparities weigh especially heavy on young women, who also are more likely to experience gender-based violence than older women in some countries. Cities can invest in their future by giving priority to services and programmes that enable young people to avoid such risks. Youth participation and empowerment—including economic empowerment—will deliver clear benefits in the years ahead. Young people are often more receptive to prevention messages than older people, and prevention efforts involving young people in cities will strongly influence the HIV epidemic.

## FAST-TRACKING THE AIDS RESPONSE IN CITIES

Ending the AIDS epidemic requires that resources, services and support for prevention and treatment reach affected populations and areas, especially those with the largest concentrations of people living with HIV or at high risk of acquiring HIV infection. Cities offer unique opportunities for doing so in consistent ways that would reduce the number of people acquiring HIV infection and the number of people dying from AIDS-related illnesses, along with coinfections such as tuberculosis and hepatitis C.

By virtue of their size and economic weight, cities have the potential to offer better access to education, health and other services and have better infrastructure than rural areas. These potential benefits, combined with the large numbers of people living and working in relatively close proximity, have fostered an urban advantage in many settings that helps improve health outcomes. Harnessing this urban advantage to its full effect and ensuring

that all people reap the benefits of city life is vitally important for efforts to end the global AIDS epidemic.

Cities have been at the forefront of the AIDS response since the epidemic began. From San Francisco to Bangkok, Zurich to Kampala, São Paulo to Kigali, courageous community activists and health workers and far-sighted public officials have created projects that inspired a global movement to end the AIDS epidemic. They have led the way with rights-based approaches, benefiting both urban and rural areas, that have reduced the number of people acquiring HIV infection in some of the populations worst affected by the epidemic.

Three decades later, that movement has turned the tables on the AIDS epidemic in most parts of the world. About 35% fewer people were newly infected with HIV globally in 2014 compared with 2000 (52). The number of people dying from AIDS-related illnesses continues to fall,

with 1.2 million [980 000–1.6 million] in 2014, down by 41% from the peak in 2005. A key reason for these favourable trends is the massive scaling up of HIV treatment along with the strategic use of other HIV prevention measures. About 15 million people living with HIV were receiving life-saving HIV treatment by 2015. The scaling up of antiretroviral therapy has averted more than an estimated 8.1 million deaths since 1995 and has contributed significantly to reducing HIV transmission.

The AIDS epidemic can now be successfully controlled and, as a result, the numbers of people acquiring HIV infection have been falling dramatically in many cities. Chennai, New York, Vancouver and Yangon are just a few examples of cities and states making significant commitments and progress. However, their achievements are not yet the norm. The numbers of people newly infected with HIV have been increasing in some cities in recent years, such as in cities in the United Kingdom of Great Britain and Northern Ireland (53) and among African-American men who have sex with men in several cities in the United States of America (54). These examples serve as a reminder that AIDS responses have to be sustained and continually adapted to outpace the epidemic.

By rapidly scaling up effective treatment and prevention interventions—and by harnessing recent scientific breakthroughs—the world can realistically reduce the number of people acquiring HIV infection and reduce AIDS-related deaths to levels that no longer constitute a public health threat to any population or country in the foreseeable future (55). This can be achieved if the following milestones are reached by 2020:

- 90% of people living with HIV know their HIV status;
- 90% of people who know their HIV status are receiving antiretroviral therapy (100% of children younger than five years);

- 90% of people receiving treatment have achieved sustained viral suppression;
- the number of people newly infected with HIV is reduced to fewer than 500 000 per year globally; and
- zero stigma and discrimination

Ending the AIDS epidemic will have important health benefits. Globally, rapidly scaling up the AIDS response by 2020 to achieve ambitious new targets could reduce the number of people newly infected with HIV annually by almost 95% by 2030 and the number of people dying from AIDS-related illnesses by an estimated 80% (55). It will also improve health, educational and economic outcomes for children and young people, reduce the vulnerability of women and key populations and improve health outcomes—directly and indirectly—for people living in informal areas. In addition, it will free up resources for other priorities, greatly advancing human equality and development around the world.

Given the centrality of cities in the AIDS epidemics of so many countries—and the many advantages that cities offer for accelerating the response—it is clear that city-based action will be decisive for the success of the Fast-Track approach. Significant benefits can be achieved by providing effective HIV services in cities and other urban locations where people living with HIV and populations at high risk of acquiring HIV infection are concentrated, but continued efforts will also need to reach and engage people living in rural areas.

Fast-Tracking HIV prevention and treatment services in cities can reach large numbers of people in cost-effective ways. Success in urban areas will also stimulate and inform national responses. Fast-Tracking the AIDS response requires focusing

effective programmes where they can have the greatest impact; specifically, among populations and in geographical locations where HIV transmission is highest. It also means mobilizing and

reallocating resources for maximum effectiveness and removing social and legal barriers that marginalize some populations and areas from receiving vital HIV and other services.

## **A RAPID RESPONSE IN CITIES WILL HELP TO END THE GLOBAL AIDS EPIDEMIC**

In cities that effectively leverage their urban advantages, social services may often be more plentiful, better resourced and easier to access. In addition, public sector infrastructure and health systems tend to be stronger in cities than in rural areas (10). Doctors and other health professionals tend to prefer to work in cities rather than in remote areas. Many cities host academic and research institutions, including teaching hospitals, some of which have proved to be invaluable partners with public health authorities. Transport options are typically greater in cities, making it easier for residents to access services. Reaching people with information and outreach services can also be easier in cities.

Cities around the world have harnessed these urban advantages to save lives and improve people's well-being. For example, in the early days of the HIV epidemic, San Francisco focused its HIV prevention efforts on bathhouses and other venues frequented by men who have sex with men and undertook concerted efforts to also engage and empower local communities of bisexual and transgender people and managed to bring its epidemic under control. HIV transmission, in and beyond the sex trade, was limited in Dakar, Senegal, by offering sex workers screening and testing for sexually transmitted infections. In Abidjan, Côte d'Ivoire, la Clinique Confiance d'Abidjan provides HIV services to sex workers and their clients in a programme that is recognized as good practice in the HIV response.

Vancouver and several European cities (including Frankfurt, Lisbon and Zurich)

have shown that city governments can promote public health by implementing harm-reduction programmes that provide safe, supervised injecting spaces where counselling and other support is available (56-58). Cities that have implemented robust public health-focused harm-reduction and treatment programmes have seen sharp declines in the number of people who inject drugs acquiring HIV infection (58).

In cities that account for 40% or more of all people living with HIV nationally, successful urban AIDS responses will decisively affect the national epidemic. Since the movement of people at high risk of infection in and out of cities is often a major driver of national epidemics, success in cities will trigger declines in HIV transmission elsewhere.

Irrespective of the size and patterns of national HIV epidemics, cities can set national and international trends with good practices and innovations, sharing lessons and expertise and providing other crucial support. Indeed, lessons learned through local innovation have helped inform and drive much of the historic success that the AIDS response has achieved in the last 15 years.

Recent milestones in city engagements such as the Paris Declaration of 1 December 2014 on Fast-Track Cities to End the AIDS Epidemic, are demonstrating that cities are taking the lead to Fast-Track the AIDS response to end the epidemic by 2030. The Paris Declaration was developed by the

**A FAST-TRACK AIDS  
RESPONSE IN  
CITIES CAN REACH  
MANY PEOPLE  
EFFICIENTLY AND  
EFFECTIVELY**

City of Paris, UNAIDS, UN-HABITAT and the International Association of Providers of AIDS Care (IAPAC). It was initially signed by 26 mayors and by mid-2015 had attracted more than 100 cities that have committed to:

- achieve ambitious goals by 2020;
- put people at the centre of the response;
- address the causes of risk, vulnerability and HIV transmission;
- use the city response for positive social transformation;
- build and accelerate an appropriate response to local needs;
- mobilize resources for integrated public health and development; and

- unite as leaders, work inclusively and report on progress.

Ending the AIDS epidemic as a public health threat provides an enormous opportunity to create enduring health and economic benefits for the people who live and work in cities. City leaders can end one of the greatest sources of illness, misery and death. In doing this, they can help ensure that all cities and human settlements are inclusive, safe, resilient and sustainable.

Cities are a natural focal point for applying the lessons of the AIDS response to tackle myriad health and development challenges. Part three of this report explores how cities can use the planning experience and insights from their AIDS response as a pathfinder to improve the policy- and decision-making environment to address other diseases and development challenges (59).

# PART THREE

**HARNESSING**

**THE AIDS**

**RESPONSE**

**FOR HEALTHIER,**

**SUSTAINABLE**

**CITIES**

In the 21st century—the century of the city—the global effort to end the AIDS epidemic as a public health threat will largely be won or lost in cities. Change starts locally, in cities, which have served as centres of human organization and political action since ancient times. Cities are home to talent, technologies, authority and energy. They have invaluable resources to galvanize accelerated progress

towards ambitious Fast-Track targets for the AIDS response.

By harnessing the extraordinary urban strengths described earlier in this report—and by rising to new challenges that rapid urbanization will inevitably bring—cities can play a pivotal role in laying the foundation to end the AIDS epidemic as a public health threat.

## KIGALI, RWANDA

In Kigali, home to one third of all people living with HIV in Rwanda, a review of the city's AIDS response in 2010–2011 found considerable political support but highlighted the need for more comprehensive and coordinated city action.

Kigali developed a strategic AIDS plan for 2013–2016 that includes both short- and long-term goals and targets. Having a set of ambitious, agreed targets helps unite diverse stakeholders around a common goal, increases commitment, catalyses innovation and enhances accountability for results.

### ASSEMBLING INCLUSIVE, MULTISECTORAL COALITIONS TO END THE AIDS EPIDEMIC

The local civil society activism that has transformed local responses and inspired worldwide action on AIDS highlights the greater accessibility of governance at the municipal level compared with national governments. Whereas nongovernmental partners often perceive national governments as being remote and opaque, the comparatively easier access to local decision-makers encourages robust public–private partnerships to tackle difficult problems. By offering to unite diverse partners and stakeholders in a common undertaking, cities are ideal venues for assembling inclusive multisectoral coalitions to address AIDS and other development challenges. Coalitions offer an excellent opportunity

to involve populations often left behind and also engage in innovative ways with the private sector, faith-based groups and non-health sectors, broadening political participation and inclusion mechanisms.

New innovative partnerships can strengthen local efforts to concern raised about spacing services to scale, addressing the social and economic determinants of risk and vulnerability, and sustain city responses over the long term. Experience has demonstrated that a commitment to human rights and keeping people at the centre of the response helps build the kind of broad-based coalition needed to drive progress on AIDS at the local level.

## SÃO PAULO AND RIO DE JANEIRO, BRAZIL

Brazil was an early leader in the global AIDS response and pioneered participatory city partnerships to respond to AIDS. In key cities such as São Paulo and Rio de Janeiro, civil society groups pressured the local government to increase support for evidence-informed HIV services and policies, eventually joining together in a broad collaboration to strengthen and sustain the local response.

In Rio de Janeiro, the local government partnered with nongovernmental organizations to overhaul the local AIDS response, offering free HIV tests and free antiretroviral therapy in more than 45 centres throughout the city. Civil society groups such as Sociedade Viva Cazusa, Grupo pela Vida and Grupo Arco Iris played an important role in service delivery in the city. An increasing number of municipal authorities and local stakeholders share the same basic philosophy of bringing local governments within the reach of ordinary people through enhanced mutual engagement.

The value to cities of adopting new partnership approaches is evident not only within individual cities but also between cities. Indeed, South-South collaboration is emerging as a critical strategy for disseminating good practices and driving progress in local AIDS response. With the support of the United Nations Development Programme (UNDP), seven cities in southern Asia are sharing experiences and applying lessons learned with respect to HIV programming for men who have sex with men and transgender people. In 2015, mayors from Africa and of African descent from more than 30

countries gathered in Accra, Ghana, to strategize with UNAIDS and IAPAC on collaborative efforts to Fast-Track local AIDS responses, including exploring ways to work together and to work with civil society, key populations and disadvantaged communities. In Mumbai, India, UNAIDS, IAPAC and several UNAIDS Cosponsors and other multilateral organizations, convened a South-South meeting of city administrators and civil society on Fast-Tracking their AIDS response. This included a detailed review of how cities are using their networks and harnessing relationships to address health issues in a collaborative manner.

### ADDRESSING STRUCTURAL, SOCIAL AND ECONOMIC DETERMINANTS OF HIV RISK AND VULNERABILITY

As the trend towards urbanization continues, cities will be home to more and more fragile communities whose needs are unlikely to be effectively addressed through mainstream approaches or business as usual. For example, in both the global North and South, migration is on the rise, affecting one in seven

people worldwide (60). Continuing high levels of inequality will generate large populations of unemployed city dwellers and growing slums, informal settlements and deprived neighbourhoods. As urban areas increase in population, they will have to confront the needs of a growing number of young people, women

and racial and ethnic minorities. In 2013, three key populations—men who have sex with men, people who inject drugs and sex workers and their clients—accounted for one in three of the people acquiring HIV infection

worldwide (52). If cities are to be in the vanguard of the global push to the AIDS epidemic, they will need to find innovative ways to ensure that local responses meet the needs of the people most likely to be left behind.

## MUMBAI, INDIA

The experience of Mumbai illustrates that city action can help to reduce gender inequities and empower women and girls to protect their own health.

The Maharashtra State Commission for Women, a Mumbai-based statutory body constituted to improve the status and dignity of women, now has a policy to support female sex workers and transgender people. Medical insurance, biometric smart cards, women’s collectives and wellness clinics for sex workers are some of the civil society innovations that are helping reduce vulnerability to HIV infection in Mumbai.

## LAGOS, NIGERIA

Cities can help overcome the historic exclusion and disenfranchisement of marginalized groups. This is evident in Lagos, Nigeria, home to more than 200 000 people living with HIV.

Studies determined that transmission among sex workers, men who have sex with men and military and police personnel were contributing factors in propelling the local epidemic.

In response, the city of Lagos developed a Municipal Action Plan on AIDS and Key Populations based on information from a UNDP-supported needs assessment. Focusing initially on the Ikeja and Shomolu areas, the plan calls for increased access to HIV and sexually transmitted infection services for key populations, strengthened access to justice and rights-based interventions, dialogue and partnerships between municipal authorities and communities and capacity-building support for community groups.

Although the increasing concentration of highly vulnerable groups in urban areas places enormous burdens on city systems, cities are ideally suited to devise intersectoral responses that address the root causes of HIV risk and vulnerability. For example, in cities in Africa, Asia and Latin America, momentum is growing to upgrade informal and slum settlements and improve the access to basic services of urban poor people. Likewise, cities across the world are having success

in developing strategic and targeted initiatives to advance gender equality (61). Local initiatives have also proven effective in integrating migrants into city life and reducing their social marginalization and economic impediments (62).

Structural interventions to reduce vulnerability and increase the reach of programmatic efforts are increasingly recognized as a critical component of an effective sustainable AIDS

response; the evidence base for structural action has also substantially grown in recent years (55). By harnessing their unique capacity to

address longstanding social, legal and economic challenges, cities can help usher in a world that is more inclusive, safe, resilient and sustainable.

## **LEVERAGING CITIES' COMPARATIVE ADVANTAGE IN DELIVERING SERVICES**

Since tools and strategies now exist to end the AIDS epidemic as a public health threat, a central challenge in the AIDS response is delivering essential services to those who need them. As previously described, cities have natural advantages in service delivery, including proximity to the users of services, a concentration of skilled health-care workers, and comparatively greater accessibility of essential health technologies. Service initiatives that fill gaps—such as multifaceted HIV testing promotion campaigns, including home-based testing, social marketing, community-focused testing outreach, mobile testing, and workplace testing—are also easier to mount in concentrated urban settings.

However, cities are likely to confront major challenges in service delivery, not only for HIV but also for other health and development issues. As the trend towards urbanization continues in future years, the demand for urban service delivery systems will grow, not only from city residents but also from rural dwellers who travel to cities for services. As urban populations increasingly attract fragile communities and key populations, the challenge of effectively linking services to those in need will become more and more complex and labour-intensive. Meeting these challenges will require additional investment in service delivery and health personnel and the tailoring of services to the needs of fragile communities and key populations.

Ensuring access to high-quality services in informal settlements and

deprived areas helps to reduce health inequalities within cities and advances the goal of ending the AIDS epidemic as a public health threat—in all settings and for all populations. Giving priority to health services in settlements with concentrated disadvantages not only promotes equity in the response but also helps protect the well-being of all city dwellers, regardless of where they live. A distinctive characteristic of cities is that they can facilitate interactions and encounters among broadly diverse communities. Health problems that are unaddressed in one part of an urban area will likely have effects in others. Addressing health issues in slum neighbourhoods is not only a goal in itself for a better quality of life but it also positively influences the health burden and the economic development of the entire city.

As a result of the extraordinary impact of antiretroviral therapy in reducing HIV-related illness and death, HIV is being transformed from an invariably fatal disease to one that is chronic and manageable. This transformation presents both challenges and opportunities. As medical management of HIV increasingly resembles care for other chronic diseases, innovative models of service integration will be needed. These new approaches have the potential not only to accelerate progress towards ending the AIDS epidemic as a public health threat, but also to improve health outcomes for chronic, noncommunicable diseases that are exacting an increasing toll in low- and middle-income countries.



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## **CITIES AS LABORATORIES FOR INNOVATION IN THE QUEST TO END THE AIDS EPIDEMIC**

Cities' longstanding role as engines of creativity and innovation will be vitally important in the effort to lay the foundation to end the AIDS epidemic. For example, achieving the 90–90–90 targets will require innovative strategies to close gaps in HIV testing, linkage to care, retention in care and treatment adherence for all people.

Cities have repeatedly demonstrated their value in the AIDS response as laboratories for innovation. In the

Khayelitsha township of Cape Town, South Africa, peer-driven adherence clubs have generated adherence rates of 97% among roughly 6000 people living with HIV. Similarly, Kinshasa in the Democratic Republic of the Congo has successfully piloted the community distribution of antiretroviral therapy, reducing burdens on overstretched HIV clinics while achieving 89% adherence at 12 months (63). The same innovative spirit will be crucial in fast-tracking the AIDS response in cities during the next five years.

## **BUILDING AND SUSTAINING LEADERSHIP IN THE AIDS RESPONSE**

The role of cities in driving change at the national level, described earlier in this report, will benefit efforts to Fast-Track the AIDS response. The engagement of mayors and city leaders is critical to gaining political and financial commitment for change. City leaders with a clear vision and commitment to end the AIDS epidemic can demonstrate an understanding and highlight how this will generate broad-based benefits for their cities.

Cities often offer more room to manoeuvre on difficult issues than at the national level. In the early years of the AIDS epidemic in the United States

of America, for example, visionary city leaders took steps to guarantee basic rights to men who have sex with men and to mitigate the harsh effects of national drug laws on people who inject drugs, even though progress at the state or national level on such issues was unlikely at the time. The creative capital of cities touches on numerous aspects of contemporary life, including technology, institutions, organizations and modes of operation. Cities can unleash undeveloped potential and make fuller use of local resources and assets, and achievements at the local level can inspire action both in other cities and nationally.

## **AIDS AS A PATHFINDER FOR BROADER HEALTH AND DEVELOPMENT GAINS**

The AIDS response offers important lessons about how cities can build the resilience they will need to address multiple health and development challenges (52). Key aspects of the AIDS response of relevance to the post-2015 agenda sustainable development include multisectoral and integrated

action, coordinated responses, strong institutional management, a commitment to approaches informed by evidence and based on human rights, transparency and accountability for results, inclusive and people-centred approaches, innovative action, smart partnerships and continual monitoring.

City leaders can focus attention and catalyse action on other urgent challenges—including eliminating poverty, reducing inequality, climate change and environmental sustainability, empowering women and preventing gender-based violence, reducing maternal and

child mortality and accelerating progress towards the global goal of eliminating slums and marginalized neighbourhoods. This can help cities to promote sustainable and inclusive development and garner the resources needed for universal access to public health services.

## COMMITTING TO THE HUMAN RIGHTS OF ALL AFFECTED PEOPLE

The AIDS response has focused attention on myriad ways that legal frameworks and social and economic conditions affect health and well-being. As a result of the AIDS response, global awareness is increasing regarding the need to rethink punitive approaches to drug use, same-sex relations and sex work. Over the past decade, the number of countries with discriminatory HIV-related restrictions on entry, stay and residence has steadily declined as countries have moved to align their national laws with human rights principles. City leaders are also recognizing the benefits of human rights to their local economic and social development, which contributes to national and global objectives.

Even where legal reform has yet to

occur, a commitment to human rights in the AIDS response has generated strategies to ensure access to basic service, despite discriminatory laws and policies. For example, communities have helped to sensitize law enforcement officials to the needs of marginalized populations and to ensure access to services for criminalized populations (64).

A similar commitment to human rights will strengthen city efforts to tackle other development challenges. Indeed, a commitment to a human rights approach will be critical to achieving gender equality, reducing inequality within and among countries and promoting peaceful and inclusive societies and access to justice for all—as expressed in the new sustainable development goals.

## ACCOUNTING FOR STRUCTURAL AND SOCIAL DETERMINANTS

Multisectoral action has enabled the AIDS response to address the root causes and drivers of risk and vulnerability. HIV-sensitive social protection schemes have mitigated the epidemic's impact on children and households and show promise in reducing the risk that young women will acquire HIV infection (65). The AIDS response has taken on board the

global push to eliminate gender-based violence, recognizing that violence and other manifestations of gender inequality reduce women's ability to protect themselves from HIV infection.

Similarly, the structural approaches made possible by multisectoral action could provide major benefits on other development issues. Effectively

addressing the needs of residents of informal settlements includes not only safe and secure housing but also: improving access to safe water and sanitation; implementing public safety reforms, such as street lights or safe, well-lit markets; adopting new models of law enforcement and policing; implementing legal changes to incorporate informal settlements into city jurisdictions; preventing the exploitation

of children; expanding educational and employment opportunities; and dramatically expanding and strengthening public health services. Heeding lessons learned through the AIDS response enables stronger horizontal links to be created among actors and sectors with the necessary expertise to deliver coordinated action for better policies, implementation and resource allocation.

## **LINKING THE GLOBAL NORTH AND SOUTH THROUGH A COMMON UNDERTAKING**

Linking North and South and developing South–South support in the AIDS response has generated new approaches for providing public goods such as essential medicines and diagnostics. Generic manufacture of pharmaceuticals, aided by the use of flexibilities available under international rules for intellectual property, has combined with negotiated price reductions on patented medicines to achieve a reduction of more than 90% in the average price of first-line antiretroviral regimens in low-income countries during the past 15 years.

As the world advances towards a new era of sustainable development, global public goods require the widespread delivery of essential services and technologies, especially for people who have been left behind or excluded from services. The innovative approaches to global public goods pioneered by the AIDS response have the potential to strengthen broader health and development efforts by ensuring that those who need essential services and technologies are able to obtain them.

## **EMPOWERING COMMUNITIES WITH PEOPLE-CENTRED APPROACHES**

From the outset of the AIDS epidemic, communities have been at the front line of the response. Communities advocate for their needs, hold decision-makers accountable for results and deliver essential services. Across the world, inclusive planning processes have involved affected communities in developing, implementing and monitoring national AIDS strategies. This inclusive approach helps to ensure that programmes and policies are grounded in the reality of people's lives, respect the human rights of affected groups and can reach people who need services the most.

An inclusive approach, which leverages and builds social capital, is ideally suited to address difficult, multifaceted urban planning challenges: for example, including communities in the process of developing strategies to address the needs of people living in slums. Similarly, programmes are unlikely to address women's real needs if women are not involved when key decisions are made. At the same time that inclusive approaches increase the likelihood that programmes will meet a community's needs, engaging communities also contributes to long-term sustainability

and builds the kind of broad support demanded by efforts to tackle difficult problems. Civil society

organizations provide a quick and relatively resource-efficient way to engage communities.

## **INNOVATING FOR THE URBAN FUTURE**

Innovation has been a hallmark of the AIDS response. In the face of the new AIDS epidemic, before HIV was identified as the cause, communities of men who have sex with men in high-income countries mobilized on their own to promote condom use and other changes in sexual behaviour. More recent innovations in the AIDS response include home testing, community-based service delivery and the use of mobile technologies.

Cities that think outside the box will be better able to cope with the effects of epidemics and chronic health conditions as well as climate change and other evolving challenges. Finding new tools and forging new partnerships will help cities to contribute to a more sustainable world. Urban AIDS-related innovations have typically resulted from cooperation and dialogue among diverse stakeholders. New health and development challenges can benefit from these catalytic processes that bring together a variety of perspectives, resources, types of capacity and types of human capital, linking them in a common undertaking.

The AIDS response has invested in scientific research, with the fruits of this investment now visible in a rapidly expanding array of strategic therapeutic and prevention tools, such as rapid HIV testing, less toxic and more durable antiretroviral therapy regimens and the use of antiretroviral medicines to prevent the transmission of HIV. The AIDS response has emphasized the rapid scale-up of new technologies, helping to minimize the delays traditionally associated with the uptake of new therapies, preventive medicines and diagnostics.

Other development efforts will benefit from a similar spirit of innovation. New outreach strategies and decision-making models will be needed to engage slum communities and other disadvantaged groups more effectively in city life—and to ensure that informal settlements reap the many urban advantages. In addition, technological innovations offer hope to prevent hunger, improve sanitation and further reduce maternal and infant mortality.

## **USING SMART PARTNERSHIPS**

Partnerships have contributed to the historic gains made against the AIDS epidemic. In many countries, faith-based organizations deliver a large share of HIV services and religious leaders have helped increase HIV awareness, reduce stigma and promote HIV prevention. The private sector also plays a key role in the

AIDS response: companies and businesses, especially in Africa, have invested considerable resources in workplace HIV programmes and have joined together in HIV-focused business coalitions. In partnership with established AIDS organizations and national governments, media organizations—both globally and in

countries—have used innovative social media tools to encourage young people to get tested for HIV infection.

As centres of change and innovation, cities are ideally positioned to promote and leverage innovative solutions to tackle difficult development challenges. From sanitation to food, security to education and other pivotal challenges, outcomes will be improved by developing and rapidly adopting technological improvements, more effective and accountable service delivery strategies and approaches that capture entrepreneurial dynamism to support and accelerate development gains. Giving priority to and valuing local innovation—through industrial and science parks and other urban policies that encourage the clustering of strategic industries—can also have profound and long-lasting economic benefits for urban areas.

Ending the AIDS epidemic as a public health threat would generate enormous, enduring health and economic benefits for cities. Bringing an end to this widespread and important source of illness, misery and death would take the world much closer to the goal of ensuring that all cities and human settlements are inclusive, safe, resilient and sustainable.

Urban leadership and collaborative action across sectors is essential to address the social, legal and economic determinants of HIV risk and vulnerability, including social exclusion, violence, gender inequities, human rights violations, punitive laws and law enforcement practices,

limited economic and educational opportunities and precarious housing.

Cities can also provide ready, flexible and creative platforms that can address diverse forms of crises in a pragmatic, balanced and efficient way. Cities that act as forums are able to build links, trust, respect and inclusiveness that increase resilience to crises (15). Acting locally in different areas and spaces, urban responses to health problems and development challenges can be structured and included in national agendas for more efficiency and long-term impact.

Urban areas require leadership to end the AIDS epidemic. Elected and other leaders across the community can promote inclusive, people-centred and rights-based responses that focus resources on evidence-informed strategies in the settings and populations where the needs are greatest.

At the same time that cities Fast-Track their local AIDS responses to lay the groundwork to end the epidemic, they can draw key lessons from the response to drive progress on other development challenges.

By giving priority to these proven touchstones of an effective development response, cities can ensure that ending the AIDS epidemic is just one of many development successes that will make the future world one that is healthier and more just, prosperous and sustainable.

## **CITIES CAN USE LESSONS FROM THEIR AIDS RESPONSE FOR OTHER DEVELOPMENT CHALLENGES**

# ANNEX 1.

## Notes on UNAIDS methods to estimate the burden of HIV infection in cities

### Data sources

Analysis was conducted in 2014, using the latest (2013) UNAIDS modelled estimates (available at [www.unaids.org](http://www.unaids.org)), population-based household surveys with HIV testing, antenatal care surveillance, HIV surveys among key populations and case-based HIV reports.

Population size estimates for 2013 were taken from World Population Prospects (66), in which cities are defined as areas of urban agglomeration with more than 300 000 inhabitants. These areas may include one or more political jurisdictions.

### Deriving estimates of the number of people living with HIV in cities

Analysis of the UNAIDS modelled estimates indicate that the HIV prevalence in the urban areas of countries in sub-Saharan Africa is on average about twice the national HIV prevalence; thus, a value of twice the national estimate of HIV prevalence was multiplied by the population sizes of cities to identify a preliminary list of 300 cities in which the largest number of people living with HIV were likely to reside. For each of the 300 cities, all available data sources were comprehensively reviewed to refine the modelled estimates and to produce a final estimate of the total number of people living with HIV in each city for the newly ranked

200 cities. In 30 of the 300 cities, estimates could not be constructed because available surveillance, survey and case report data were lacking. For these 30 cities, estimates were constructed from UNAIDS-modelled 2013 national data and adjusted upwards by a further 10% in eastern Europe and central Asia and 59% in Asia and the Pacific based on evidence of a higher concentration of people living with HIV in cities relative to other areas in these regions. For all city-specific estimates of the number of people living with HIV, upper and lower bounds were calculated using UNAIDS national uncertainty ranges for 2013. This range was increased by an additional 20% to account for the additional uncertainty of limiting the estimates to the cities.

### HIV prevalence in urban and rural areas

Residence-specific HIV prevalence data for women and men aged 15-49 years were abstracted from 30 population-based surveys in sub-Saharan Africa. Comparison of urban versus rural HIV prevalence among people aged 15-49 years are shown as the ratio of HIV prevalence in urban areas divided by the HIV prevalence in rural areas for 30 selected countries. Uncertainty around ratios was obtained by dividing the limits of lower and upper 95% confidence intervals for urban and rural HIV prevalence.

## **Limitations**

In 2013, UNAIDS did not systematically collect and validate data at the subnational level, and thus the findings of the report are derived from analysis of secondary data sources, which may be of limited quality. The results in these countries may not reflect the actual geographical distribution of the epidemic burden. For many countries, an estimate of burden—either HIV prevalence or the number of people living with HIV—was available for the primary municipality in the city but not for other geographical

areas that comprise the total area of urban agglomeration. Where this occurs, the number of people living with HIV is estimated for the larger geographical area assuming the same HIV prevalence and proportion of people living with HIV in the primary municipality. Finally, estimates of people living with HIV and prevalence in urban and rural areas have been derived using country-specific definitions of urban and rural areas, which are known to vary across countries. As a result, the results may not be directly comparable across countries.

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