

GLOBAL REPORT

UNAIDS report on the global AIDS epidemic 2013

Copyright © 2013
Joint United Nations Programme on HIV/AIDS (UNAIDS)
All rights reserved

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of UNAIDS concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. UNAIDS does not warrant that the information published in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

WHO Library Cataloguing-in-Publication Data

Global report: UNAIDS report on the global AIDS epidemic 2013.

"UNAIDS / JC2502/1/E"- Revised and reissued, November 2013

1.HIV infections – prevention and control. 2.HIV infections – transmission. 3.Acquired immunodeficiency syndrome – prevention and control. 4.Social stigma. 5.Anti-retroviral agents – supply and distribution. 6.AIDS-related opportunistic infections. 7.National health programs. 8.International cooperation. I.UNAIDS.

ISBN 978-92-9253-032-7

(NLM classification: WC 503.6)

GLOBAL REPORT

UNAIDS report on the global AIDS epidemic 2013

CONTENTS

Foreword	2
Introduction	4
1. Reduce sexual transmission of HIV by 50% by 2015	12
2. Halve the transmission of HIV among people who inject drugs by 2015	30
3. Eliminate HIV infections among children and reduce maternal deaths	38
4. Reach 15 million people living with HIV with lifesaving antiretroviral treatment by 2015	46
5. Halve tuberculosis deaths among people living with HIV by 2015	60
6. Close the global AIDS resource gap	68
7. Eliminate gender inequalities and gender-based abuse and violence and increase the capacity of women and girls to protect themselves from HIV	78
8. Eliminate HIV-related stigma, discrimination, punitive laws and practices	84
9. Eliminate HIV-related restrictions on entry, stay and residence	92
10. Strengthen HIV integration	98
References	106
Annexes	A1

FOREWORD



Michel Sidibé
UNAIDS Executive Director

In 2000, the global community took an historic step in the United Nations Millennium Declaration by acknowledging the importance of an effective response to HIV/AIDS and by placing it in the context of the broader development agenda. Among the many health targets that were then established in the Millennium Development Goals (MDGs), MDG 6 calls for unprecedented action to halt and begin to reverse the AIDS epidemic. As the United Nations Member States implicitly recognized when they endorsed the Millennium Declaration, the persistent burden associated with communicable diseases undermines efforts to reduce poverty, prevent hunger and preserve human potential in the world's most resource-limited settings.

We are now less than two years from the deadline for the MDGs. Over the years, the gloom and disappointments chronicled in the early editions of the *UNAIDS Global report on the AIDS epidemic* have given way to more promising tidings, including historic declines in AIDS-related deaths and new HIV infections and the mobilisation of unprecedented financing for HIV-related activities in low- and middle-income countries. Yet AIDS remains an unfinished MDG, underscoring the need for continued and strengthened international solidarity and determination to address this most serious of contemporary health challenges.

When the Millennium Development Goals were established at the dawn of this century, a lack of critical HIV treatment and prevention tools often hindered efforts to respond effectively to the epidemic. As this latest *Global report* makes clear, today we have the tools we need to lay the groundwork to end the AIDS epidemic.

This report highlights continued progress towards the global vision of zero new HIV infections, zero discrimination and zero AIDS-related deaths. The annual number of new HIV infections continues to decline, with especially sharp reductions in the number of children newly infected with HIV. More people than ever are now receiving life-saving antiretroviral therapy, contributing to steady declines in the number of AIDS-related deaths and further buttressing efforts to prevent new infections.

These achievements reflect the synergistic efforts of diverse stakeholders – the leadership and commitment of national governments, the solidarity of the international community, innovation by programme implementers, the historic advances achieved by the scientific research community and the passionate engagement of civil society, most notably people living with HIV themselves. As a result of working together, many countries are now within reach of achieving several of the key targets outlined in the 2011 UN Political Declaration on HIV and AIDS, and they are thus making clear progress towards MDG 6.

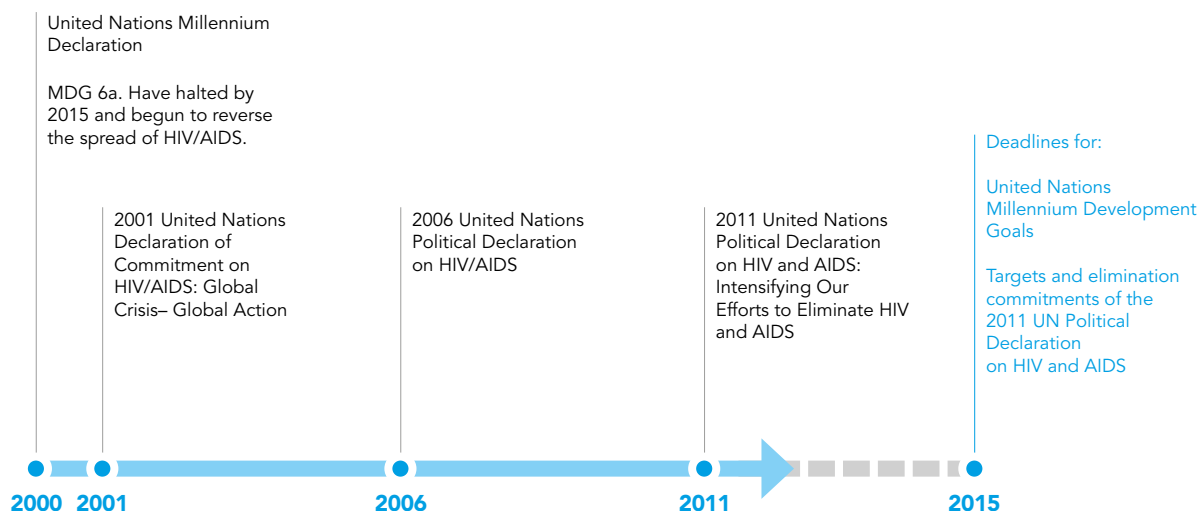
However, this report also includes notes of caution, as well as signs of stagnating progress towards other targets and elimination commitments in the 2011 UN Political Declaration. In several countries that have experienced significant declines in new HIV infections, disturbing signs have emerged of increases in sexual risk behaviours among

young people. Stigma and discrimination remain rife in many parts of the world, and punitive laws continue to deter those most at risk from seeking essential HIV services. Although total financial resources for HIV programmes in low- and middle-income countries rose modestly in 2012, our ability to lay the foundation for an end to the AIDS epidemic continues to be undermined by a major resource gap.

These challenges are real, and they must be taken seriously if countries are to achieve their AIDS targets. However, the enormous progress that this report describes highlights the undeniable fact that the AIDS response has encountered – and overcome – such challenges in the past.

As this report emerged, just over two years remain before we reach the deadline for targets and commitments made in the 2011 UN Political Declaration. It is my hope that countries will use the results summarised in this report – both the evidence of all that has been achieved, as well as proof of where countries are falling short – to redouble their determination to keep the commitments they have made. In addition to doing more, we also need to do better, improving the strategic focus of our work and enhancing the efficiency and effectiveness of our efforts.

In endorsing the 2011 UN Political Declaration, United Nations Member States aimed to outline a series of targets and elimination commitments that were ambitious and visionary. However, these targets remain achievable – if we recognize our shared responsibility for the AIDS response and put into practice the many lessons we have learned.



INTRODUCTION

When countries gathered in New York at the beginning of this century to articulate a new development agenda, one of the most momentous steps they took was to elevate health on the global development agenda. Acknowledging the historic impact of the AIDS epidemic, Millennium Development Goal 6 called for global efforts to halt and begin to reverse the epidemic, an objective that has helped inspire unprecedented action.

Through a series of high-level meetings, the United Nations General Assembly established strategies, goals and targets to give life to MDG 6 and to accelerate progress towards achieving those objectives by 2015. At the 2011 High-Level Meeting on HIV and AIDS, UN Member States reviewed a decade of historic progress in the HIV response. Determined to build on prior gains in reducing new HIV infections and AIDS-related deaths, and looking forwards to the eventual end of the AIDS epidemic, they endorsed the 2011 UN Political Declaration on HIV/AIDS, which set forth a series of ambitious targets and elimination commitments for 2015.

HISTORIC GAINS, CONTINUING CHALLENGES

As the 2015 deadline draws ever closer, this report summarizes progress towards the targets and elimination commitments established in the 2011 UN Political Declaration, which support achievement of MDG 6. Specifically, the report describes both gains and persistent challenges for 10 targets and commitments. The pledges made by countries in the 2011 UN Political Declaration include specific improvements in health outcomes (e.g. 50% reductions in both sexual and drug-related HIV and the transmission, elimination of new HIV infections among children); coverage and resource targets (e.g. reaching 15 million people with HIV treatment, mobilizing US\$ 22–24 billion for HIV programmes); elimination targets (e.g. elimination of stigma and discrimination, gender inequalities and restrictions on entry, stay and residence); and steps to ensure the sustainability of the response (e.g. integrating HIV with other health and development efforts).

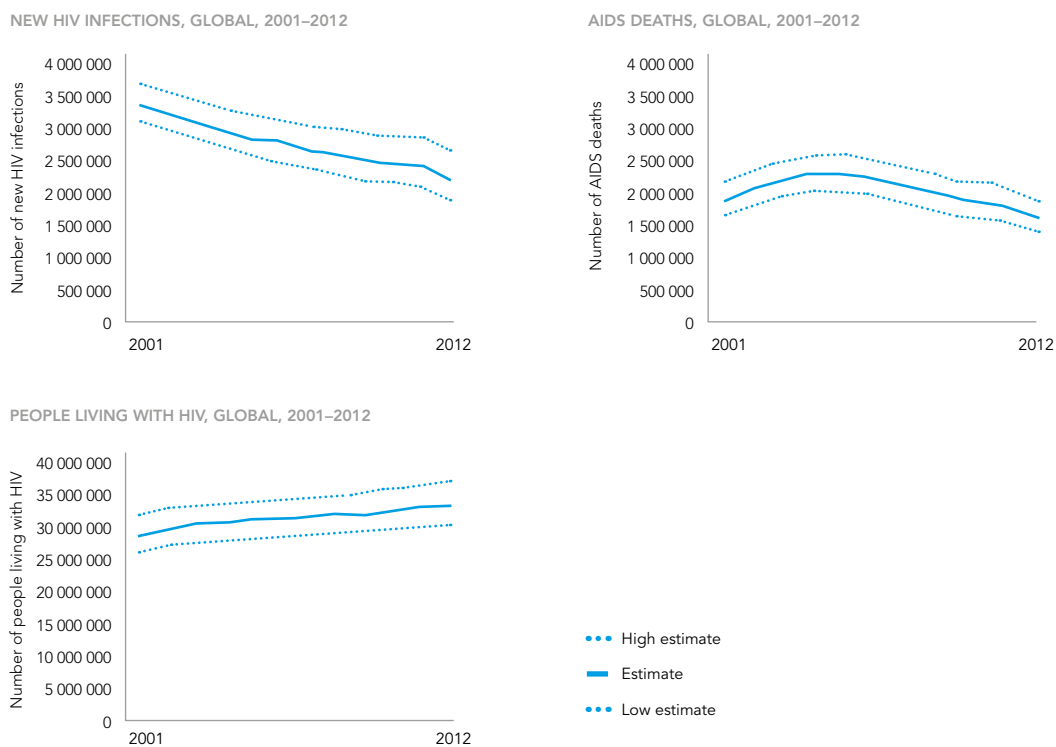
Globally, an estimated 35.3 (32.2–38.8) million people were living with HIV in 2012. An increase from previous years as more people are receiving the life-saving antiretroviral therapy. There were 2.3 (1.9–2.7) million new HIV infections globally, showing a 33% decline in the number of new infections from 3.4 (3.1–3.7) million in 2001. At the same time the number of AIDS deaths is also declining with 1.6 (1.4–1.9) million AIDS deaths in 2012, down from 2.3 (2.1–2.6) million in 2005 (see Figure A).

As this report reveals, striking gains have been made towards many of the 2015 targets and elimination commitments, although significant challenges remain.

1. Reduce sexual transmission of HIV by 50% by 2015

The annual number of new HIV infections among adults and adolescents decreased by 50% or more in 26 countries between 2001 and 2012. However, other countries are not on track to halve sexual HIV transmission, which underscores the importance of intensifying prevention efforts. Although trends in sexual behaviours in high-

FIGURE A
Numbers of people living with HIV, new HIV infections, and AIDS deaths, 2001-2012, globally



Source: UNAIDS 2012 estimates.

prevalence countries have generally been favourable over the last decade, recent surveys in several countries in sub-Saharan Africa have detected decreases in condom use and/or an increase in the number of sexual partners. Efforts to reduce transmission related to sex work and men who have sex with men remain insufficient, as evidence by recent trends in prevalence among these groups. However, prospects for strengthening prevention efforts have never been more promising, as a series of highly effective biomedical prevention tools have emerged in recent years to buttress the prevention benefits of behavioural and structural approaches. Momentum accelerated in 2012 towards the scale-up of one such biomedical intervention – voluntary medical male circumcision.

2. Halve the transmission of HIV among people who inject drugs by 2015

The world is not on track to reduce HIV transmission among people who inject drugs by 50%, as recent evidence suggests little change in the HIV burden in this population. HIV prevalence among people who inject drugs remains high – up to 28% in Asia. HIV prevention coverage for people who inject drugs remains low, with only two of 32 reporting countries providing the recommended minimum of at least 200 sterile syringes per year for each person who injects drugs. Among 35 countries providing data in 2013, all but four reached less than 10% of opiate users with

substitution therapy. In addition to exceptionally low coverage, an effective AIDS response among people who inject drugs is undermined by punitive policy frameworks and law enforcement practices, which discourage individuals from seeking the health and social services they need.

3. Eliminate HIV infections among children and reduce maternal deaths

As a result of sustained progress, the world has the potential to reach at least 90% of pregnant women living with HIV with antiretroviral interventions by 2015. Antiretroviral coverage among pregnant women living with HIV reached 62% in 2012, and the number of children newly infected with HIV in 2012 was 35% lower than in 2009. However, achieving the global goal of reducing the number of children newly infected by 2015 will require similar scale-up of other prevention strategies, including primary HIV prevention for women and access to contraception and other family planning services. However, substantially greater efforts are needed to link pregnant women and children to HIV treatment and care; pregnant women living with HIV are less likely than treatment-eligible adults overall to receive antiretroviral therapy, and treatment coverage among children living with HIV in 2012 was less than half the coverage for adults.

4. Reach 15 million people living with HIV with lifesaving antiretroviral treatment by 2015

The world is within reach of providing antiretroviral therapy to 15 million people by 2015. In 2012, 9.7 million people in low- and middle-income countries received antiretroviral therapy, representing 61% of all who were eligible under the 2010 World Health Organization (WHO) HIV treatment guidelines. However, under the 2013 WHO guidelines, the HIV treatment coverage in low- and middle-income countries represented only 34% (32-37%) of the 28.6 million people eligible in 2013. Antiretroviral therapy not only prevents AIDS-related illness and death: it also has the potential to significantly reduce the risk of HIV transmission and the spread of tuberculosis. From 1996 to 2012, antiretroviral therapy averted 6.6 million AIDS-related deaths worldwide, including 5.5 million deaths in low- and middle-income countries. But despite historic gains in expanding treatment services, efforts to reach universal treatment access face considerable challenges. In addition to persistent low treatment coverage for children, men are notably less likely than women worldwide to receive antiretroviral therapy, and key populations often experience major barriers to obtaining treatment and care services. Only relatively modest gains in treatment access have occurred in Eastern Europe and Central Asia and in North Africa and the Middle East, underscoring the need to extend recent coverage gains to all parts of the world.

5. Halve tuberculosis deaths among people living with HIV by 2015

As a result of sustained progress in meeting the needs of tuberculosis patients living with HIV, the world is within reach of achieving the 2015 target of reducing by 50% tuberculosis-related deaths among people living with HIV. Since 2004, tuberculosis-related deaths among people living with HIV have declined by 36% worldwide and slightly less in Africa, home to 75% of all people living with tuberculosis and HIV. WHO estimates that the scale-up of collaborative HIV/TB activities (including HIV testing, antiretroviral therapy and recommended preventive measures) prevented 1.3 million people from dying from 2005 to 2012. However, challenges persist, as progress

in reducing tuberculosis-related deaths among people living with HIV has slowed in recent years. While antiretroviral therapy reduces the risk that a person living with HIV will develop tuberculosis, inadequate use is currently being made of this life-saving tool; among the 10 reporting countries with the largest number of HIV/TB patients, only two (Kenya and Malawi) were delivering antiretroviral therapy in 2012 to more than 50% of HIV-positive TB patients, while the pace of treatment scale-up for HIV/TB patients has slowed. Less than half (46%) of notified tuberculosis patients were tested for HIV in 2012, and the number of people with HIV/TB co-infection receiving isoniazid preventive therapy (500 000) represented a mere fraction of those who could benefit from the intervention.

6. Close the global AIDS resource gap

Continued gains were made in mobilizing financial resources for the AIDS response in 2012, although AIDS expenditures remain short of the global target of US\$ 22-24 billion in annual financial resources. In 2012, an estimated US\$ 18.9 billion were available for HIV programmes in low- and middle-income countries – a 10% increase over 2011. Although international HIV assistance remained flat in real terms in 2012, many low- and middle-income countries have increased financial outlays for HIV; domestic spending accounted for 53% of all HIV-related spending in 2012. Although increases in domestic investments have occurred among countries at all income levels, spending has risen most sharply among upper middle-income countries, with many lower middle-income and low-income countries remaining heavily dependent on international assistance. In 2012, 51 countries looked to international sources for more than 75% of HIV-related spending. Whereas domestic resources account for the majority of spending for treatment and care, international spending financed the majority of prevention efforts. In an effort to promote long-term sustainability of national responses, a growing number of countries are exploring innovative financing methods, including dedicated tax levies and AIDS trust funds.

7. Eliminate gender inequalities and gender-based abuse and violence and increase the capacity of women and girls to protect themselves from HIV

Gender inequalities and harmful gender norms continue to contribute to HIV-related vulnerability. As one manifestation of the role of gender issues in national epidemics, a recent review found that women who have experienced intimate partner violence are 50% more likely to be living with HIV. Nearly all countries (92%) that conducted mid-term reviews of their national AIDS response acknowledged the central importance of addressing gender inequalities. However, mid-term reviews indicate that less than half of countries allocate funds for women's organizations, broadly integrate HIV and sexual and reproductive health services, or have scaled-up initiative to engage men and boys in national responses.

8. Eliminate HIV-related stigma, discrimination, punitive laws and practices

HIV-related stigma and discrimination persist as major obstacles to an effective HIV response in all parts of the world, with national surveys finding that discriminatory treatment of people living with HIV remains common in multiple facets of life, including access to health care. In 2012, 61% of countries reported the existence of anti-discrimination laws that protect people living with HIV. The proportion of countries reporting the existence of HIV-related legal services increased from 45%

in 2008 to 55% in 2012, but the frequent lack of accessible legal services means that many instances of HIV-related discrimination are never addressed. As of 2013, 63 countries have in at least one jurisdiction specific provisions that allow for the prosecution of HIV non-disclosure, exposure and/or transmission. Criminalisation of key populations also remains widespread, and 60% of countries report having laws, regulations or policies which present obstacles to effective HIV prevention, treatment, care and support for key populations and vulnerable groups.

9. Eliminate HIV-related restrictions on entry, stay and residence

Since 2010, eight countries, territories or areas have eliminated restrictions on entry, stay and residence for people living with HIV. However, eliminating the remaining HIV-related restrictions on freedom of movement will require intensified action to remove such counterproductive and discriminatory laws that remain in force in 44 countries. Removing HIV-related restrictions to entry, stay and residence is a priority for both symbolic and practical reasons. In addition to reflecting and reinforcing the stigma and discrimination that impedes an effective AIDS response, such restrictions also impose severe hardship on many people living with HIV. Increasingly, business leaders are encouraging countries to repeal HIV-related travel restrictions on economic grounds, arguing that in a globalized world companies require flexibility to recruit and deploy workers where they are most needed.

10. Strengthen HIV integration

Although a clear trend towards integration of HIV with diverse systems and sectors is apparent, greater efforts are needed to eliminate parallel structures and systems and to ensure integration of HIV in broad health and development efforts. Nearly all countries (90%) recognize integration as a core HIV priority, 82% address integration in their national strategic plans and 45% report that HIV has been aligned with other disease-specific planning. More than half (53%) of countries have either fully integrated HIV and tuberculosis services or strengthened joint service provision, 70% of countries have integrated services to prevent mother-to-child HIV transmission in antenatal care, and two-thirds have integrated HIV and sexual and reproductive health services. Nearly one in four (23%) countries have linked HIV and management of chronic non-communicable diseases, and more than half have integrated HIV testing and counselling and/or antiretroviral therapy in general outpatient care.

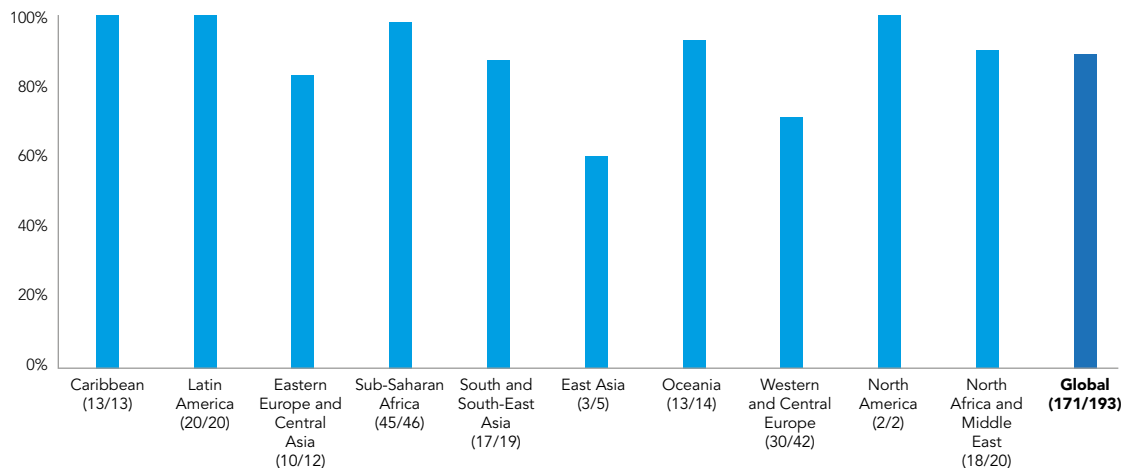
GLOBAL AIDS RESPONSE PROGRESS REPORTING AND HIV ESTIMATES

This report draws on an unprecedented body of data and analysis. It is primarily based on three sources: epidemiological estimates, Global AIDS Response Progress Reporting (GARPR) 2013 and the national mid-term reviews conducted in 2013 of progress towards the targets and elimination commitments for 2015 that were established in the 2011 UN Political Declaration. GARPR and the model-derived HIV estimates provide the sources for information on quantifiable progress towards the 10 targets and elimination commitments. Beginning this year and continuing until 2015, countries are now reporting annually, rather than biennially, on progress in their national response. The move to annual reporting reflects the urgency of intensified accountability and accelerated action as the 2015 deadline approaches.

In 2013, 172 countries submitted GARPR reports on progress towards core HIV indicators (see Figure B). Of these 172 countries, 12 (11 from Western and Central Europe and one from Oceania) requested that UNAIDS use data submitted in 2012. As countries become accustomed to annual rather than biennial reporting, UNAIDS anticipates that the number of countries submitting up-to-date, annual progress reports will again reach the 186 that reported in 2012.

The HIV estimates are developed by country teams using Spectrum, a standard software developed by the Futures Institute and supported by UNAIDS and partners. In 2013, Spectrum files were available for 155 countries globally.

FIGURE B
Proportion of countries that participated in the 2013 Global AIDS Response Progress Reporting (GARPR), by region



Source: GARPR 2013.

Note: Countries reporting / total number of UN Member States in the region.

MID-TERM REVIEWS OF TARGETS AND ELIMINATION COMMITMENTS

To provide qualitative assessments of progress towards the targets and commitments in the 2011 UN Political Declaration and to identify priority actions in moving forward, UNAIDS encouraged countries to conduct mid-term progress reviews. For each of the 10 targets and commitments, countries were asked to specify national priorities and objectives, summarize achievements to date and identify gaps. With the aim of expediting progress in the time remaining before expiration of the 2015 targets, countries were requested to identify opportunities for innovation and more efficient service delivery. They were also asked about their plans for increasing domestic investment, accelerating action to respond to lags in progress and options for sustaining progress on the 10 targets beyond 2015. Mid-term reviews were intended to consist of a formal

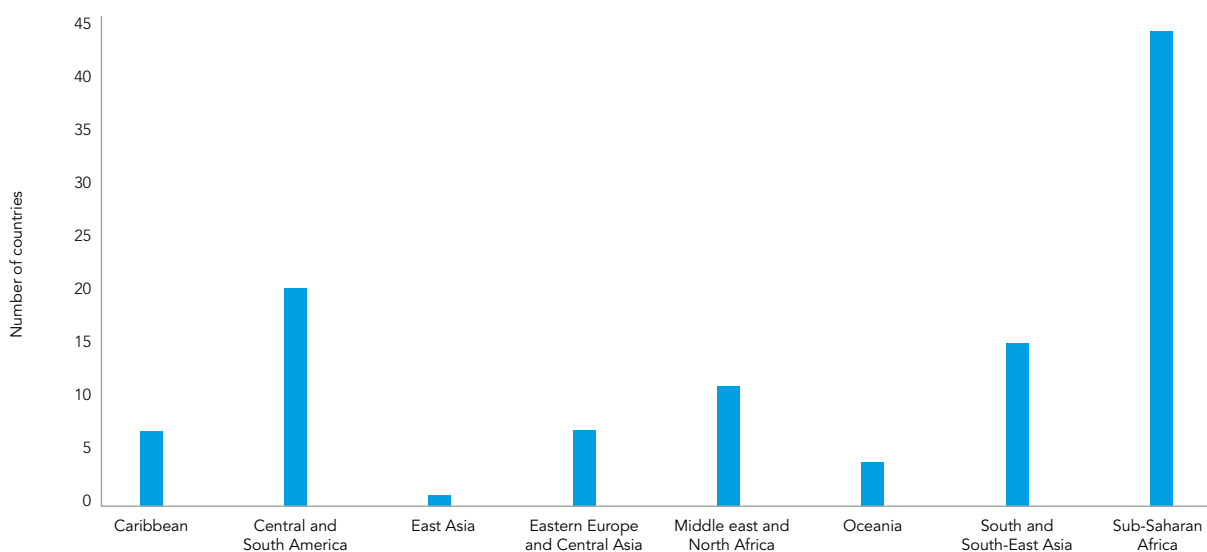
stocktaking exercise, as well as a national consultation of stakeholders including people living with HIV, to review progress and chart future directions. UNAIDS asked that countries submit a report summarizing key findings from the mid-term review, as well as a matrix of responses to specific questions posed for each target.

Mid-term reviews aimed to serve four key purposes:

- Reaffirming and strengthening leadership and commitment to achieve the targets and commitments in the 2011 UN Political Declaration on HIV and AIDS.
- Strengthening accountability, ownership and transparency regarding strategic data on progress towards targets and commitments.
- Improving the effectiveness and efficiency of national programmes by using the mid-term review as a springboard for development of national HIV investment cases.
- Promoting and applying principles of shared responsibility and global solidarity regarding HIV responses and identifying strategies to ensure long-term sustainability.

One hundred and twenty low- and middle-income countries committed to conduct mid-term reviews of progress in relation to the 10 targets and commitments. As of 5 August 2013, 109 countries had conducted mid-term reviews of national progress, representing 91% of those that had made the commitment (see Figure C). Of these 109 countries, 100 had conducted a formal stocktaking exercise and 101 had also held a national stakeholders' consultation.

FIGURE C
Number of countries that conducted mid-term reviews in 2013



Source: Mid-Term Reviews 2013.

In four regions – sub-Saharan Africa, Central and South America, Middle East and North Africa, and Oceania – 100% of countries¹ that committed to hold a mid-term review had completed the process as of August 2013. Mid-term reviews were also conducted by 94% of countries in South and South East Asia, and 70% in Eastern Europe and Central Asia. The lowest rate was reported in the Caribbean, where 54% of countries that had committed to hold a mid-term review had done so as of August 2013.

MOVING FORWARD: 2015 AND BEYOND

This report summarizes findings for each of the 10 targets and commitments. Each section takes account of GARPR results, findings from the mid-term reviews and other important developments that have occurred over the past year.

Each section looks both to the past and to the future. While progress as of December 2012 is noted, with findings derived primarily from GARPR reporting and the HIV estimates, each section also examines what needs to happen to accelerate progress in each area. The forward-looking component of each section draws primarily from mid-term reviews, highlighting commitments that countries have made to expand the reach of key services, improve service efficiency and enhance domestic investment.

The following analysis demonstrates that HIV continues to be a pathfinder in the provision of people-centred and rights-based services. As section 10 discusses, elements of the HIV response are being integrated with other health and development programmes in an effort to eliminate parallel systems and achieve greater effectiveness and efficiencies. Yet, for the sake of continued progress against the AIDS epidemic, the high priority accorded to HIV needs to be maintained and the effective aspects developed further and embedded into future health and development goals.

¹ One country was not able to hold a mid-term review as a result of the security situation.

1. REDUCE SEXUAL TRANSMISSION OF HIV BY 50% BY 2015

Prevention efforts continue to bear fruit, with the number of new HIV infections among adults in low- and middle-income countries in 2012 being 1.9 million (1.6–2.3), which was 30% lower than in 2001 (see Figure 1.1). Declining rates of new HIV infections in 26 low- and middle-income countries are a testament to these efforts. Reductions in new infections among adults since 2001 primarily represent a reduction in sexual transmission, although the declining trend in the global number of new HIV infections among adults needs to be accelerated if the 2015 target is to be reached.

While challenges persist in preventing new infections, opportunities to dramatically lower HIV incidence have never been more promising. In recent years, evidence has emerged that antiretroviral therapies can reduce the risk of HIV transmission by as much as 96%,¹ voluntary medical male circumcision by approximately 60%,^{2,3,4} pre-exposure antiretroviral prophylaxis by more than 40% among men who have sex with men⁵ and 49% among people who inject drugs.⁶

Structural approaches, including cash transfers, vouchers and food and nutrition support, show potentially promising results as a possible strategy to reduce vulnerability to HIV infection faced by girls and young women. While these new approaches have proven effective in trials, they have not yet led to a measurable and sustained decline in new infections at the population level, in large measure due to the failure to bring these strategies to scale.

As the 2011 UN Political Declaration on HIV and AIDS confirms, HIV prevention must remain the cornerstone of the HIV response. To be optimally effective, prevention efforts should include strategic combinations of behavioural, bio-medical and structural programming and approaches that focus on rapid scale-up in geographic settings and populations at greatest risk of acquiring and transmitting HIV.

Countries where adult HIV incidence declined more than 50% between 2001 and 2012:

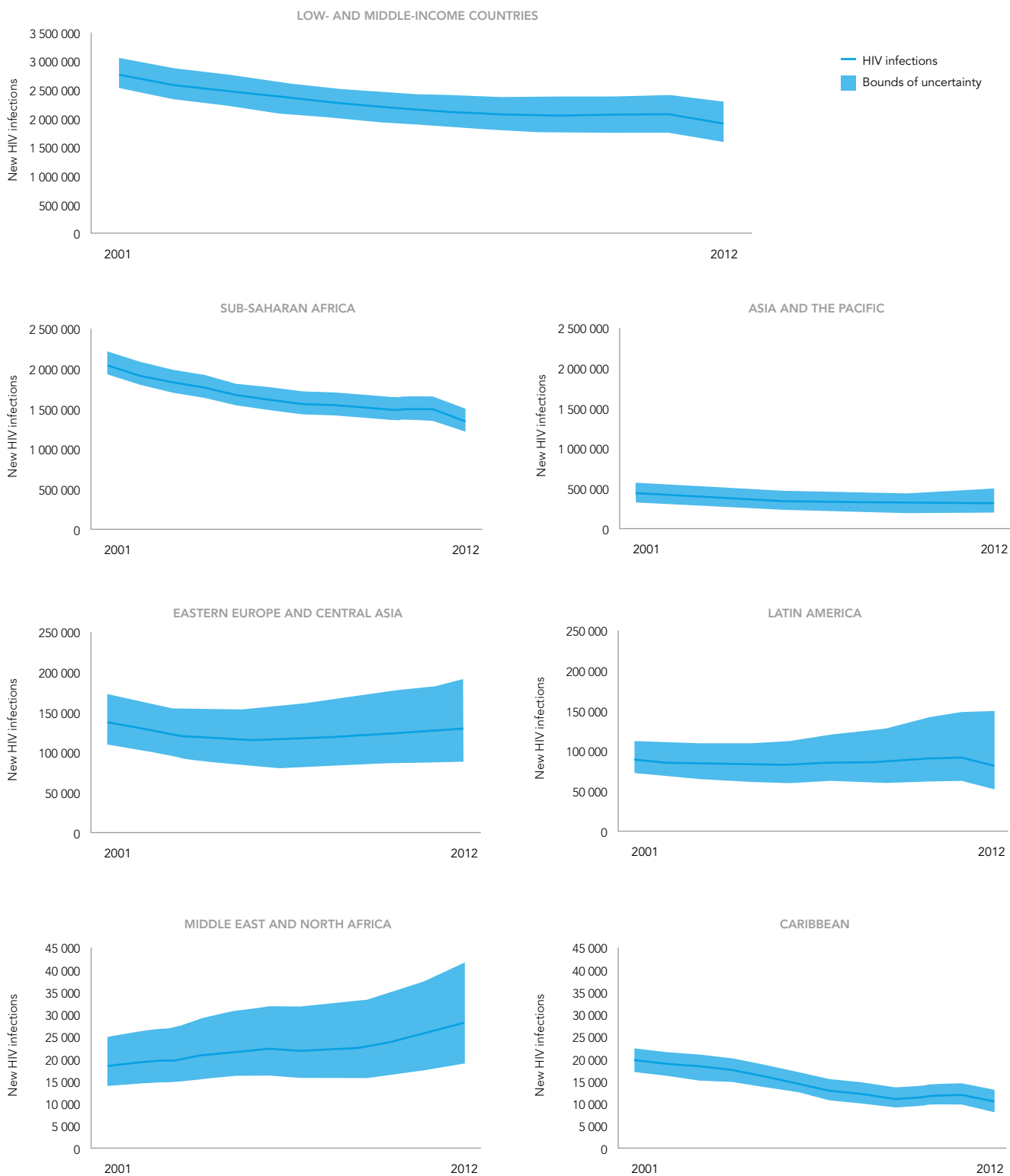
1. Belize
2. Botswana
3. Cambodia
4. Côte d'Ivoire
5. Djibouti
6. Dominican Republic
7. Eritrea
8. Ethiopia
9. Gabon
10. Ghana
11. India
12. Jamaica
13. Liberia
14. Malawi
15. Myanmar
16. Namibia
17. Nepal
18. Niger
19. Nigeria
20. Papua New Guinea
21. São Tomé and Príncipe
22. Senegal
23. Thailand
24. Togo
25. Ukraine
26. Zambia

TRENDS IN SEXUAL HIV TRANSMISSION

Trends in new adult infections differ among regions. The epidemic continues to disproportionately affect sub-Saharan Africa, home to 70% of all new HIV infections in 2012.

However, since 2001, the annual number of new HIV infections among adults in sub-Saharan Africa has declined by 34%. The most pronounced decline in new infections since 2001 (49%) has occurred in the Caribbean. New HIV infections have been on the rise in Eastern Europe and Central Asia in recent years despite declines in Ukraine. By contrast, new HIV infections continue to rise in the Middle East and North Africa.

FIGURE 1.1
New HIV infections among adults in low- and middle-income countries, by region, 2001–2012



Source: UNAIDS, 2012 estimates.

Although the natural dynamics of the epidemic have undoubtedly also played an important role, changes in sexual behaviour, such as delayed sexual debut, high levels of condom use and reductions in multiple partners, are also responsible for significant declines in high-prevalence countries. For example, in Zimbabwe, declines in HIV incidence (new infections) were driven by behavioural shifts, notably a reduction in multiple sexual partners.^{7,8}

Recent trends (since 2000) in sexual behaviour, demonstrated in most countries, continue to indicate that more people are adopting safer sexual behaviours. Knowledge regarding the prevention of HIV transmission has increased amongst young people; the proportion of 15–24 year olds who have had sex before 15 years is decreasing; condom use has risen amongst people with multiple sexual partners; and the proportion of young people who have received an HIV test and learned their results has also increased.

However, there are signs of an increase in risky sexual behaviours in several countries. Recent evidence indicates a significant increase in the number of sexual partners in some countries (Burkina Faso, Congo, Côte d'Ivoire, Ethiopia, Gabon, Guyana, Rwanda, South Africa, Uganda, the United Republic of Tanzania and Zimbabwe), as well as a decline in condom use (in Côte d'Ivoire, Niger, Senegal and Uganda); see Table 1.1.

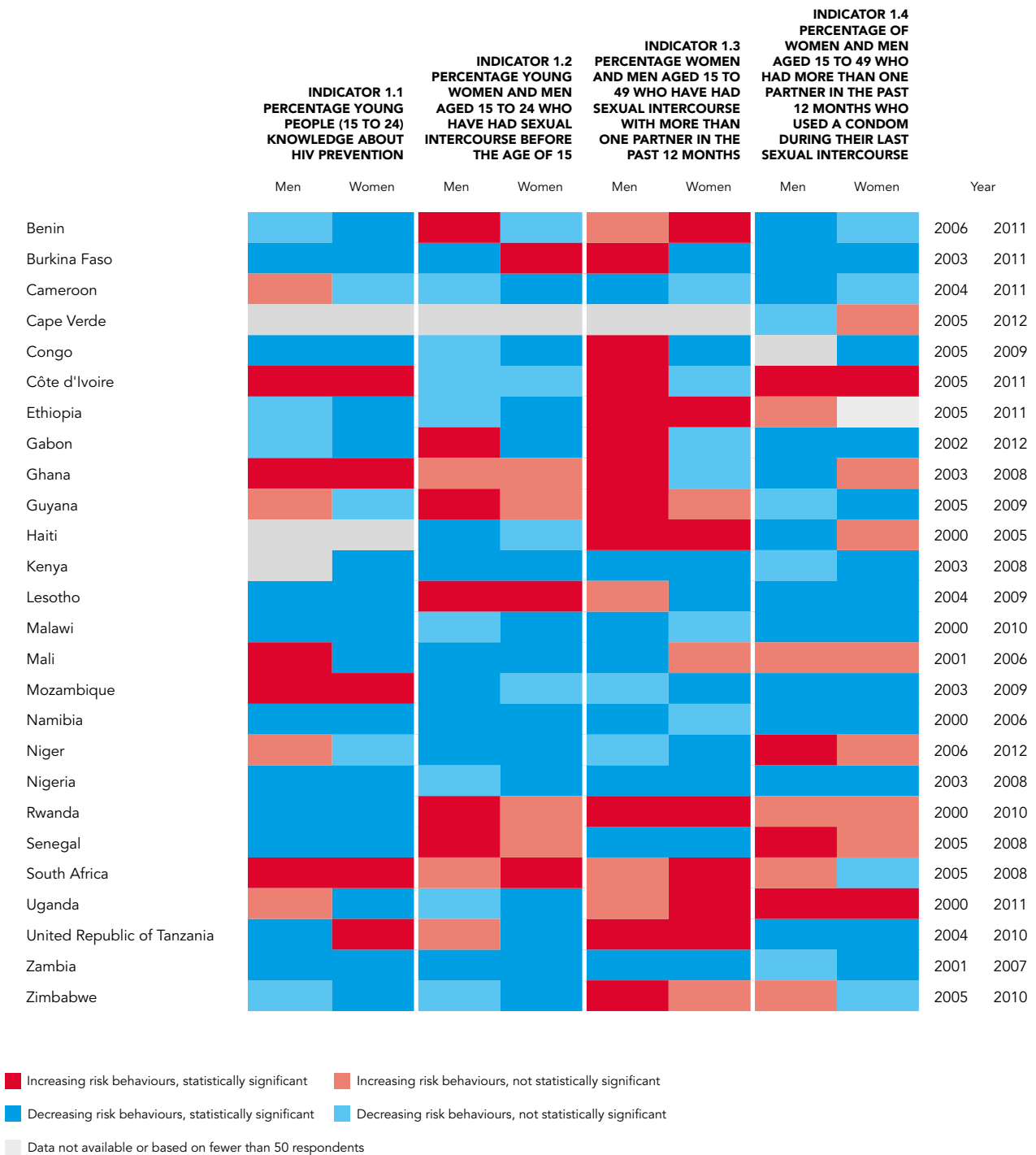
REINTEGRATING SOCIAL AND BEHAVIOUR CHANGE

Although a global meta-analysis of studies determined that 'behavioural interventions reduce sexual risk behaviour and avert sexually transmitted infections and HIV',⁹ many countries lack a comprehensive strategy for rolling out these programmatic approaches. Social-behavioural programmes are often implemented in isolation, uncoordinated, insufficiently tailored to address the needs of the intended population and lacking in rigorous evaluation at a scale necessary for widespread roll-out. It is clear that only when a comprehensive set of HIV prevention initiatives is rolled out at a national scale, with sufficient access to, and frequent use of, quality services, will countries realize the optimal prevention returns.

There are worrisome signs that social and behavioural programming might now have a lower priority. Mid-term reviews identified declining support for social-behavioural HIV prevention programmes in several countries, including in Namibia, where the highly successful 'Take control' campaign was discontinued in 2011. However, as new biomedical tools are rolled out, effective social-behavioural and structural programmes will not only remain essential in their own right but will also be needed to maximize the efficacy of biomedical approaches, including averting the possible emergence of risk compensation. Prevention programmes must be able to address the biomedical aspects of HIV prevention without focusing solely on the medical aspects of sexual relations. It is necessary to harmonize messages and the dissemination of information about HIV transmission and various prevention approaches. Behavioural and structural programmes also help to overcome barriers to service uptake, such as social exclusion, criminalization, stigma and inequity. These activities amplify the impact of antiretroviral therapy, other antiretroviral-based HIV prevention strategies (such as pre-exposure prophylaxis) and voluntary medical male circumcision.

The global revolution in information and communications technology – which has dramatically altered the ways in which people network, interact, communicate and share information – offers new opportunities to expand and reinvigorate social-behavioural and structural programming. These include strategic use of 'old' media opportunities

TABLE 1.1
Knowledge, sexual behaviour and testing in countries with HIV prevalence among adults greater than 1%, 2000–2012*



Sources: GARPR 2013; nationally representative household surveys.

*Comparison of indicators is carried out between the two most recent surveys and test of significance at 0.05.

(such as fictional television series that promote HIV prevention in Zambia),¹⁰ as well as increased leveraging of new information tools, such as strategies that integrate mobile telecommunications within health programmes for improved delivery of services.

INVESTING IN CONDOM PROGRAMMING

Condom programming is an integral component of effective HIV prevention. When used correctly and consistently, condoms remain one of the most efficient technologies available to prevent sexual transmission of HIV. In South Africa, modelling indicates that increases in condom use, which occurred at the same time that distribution of male condoms significantly increased, played a primary role in the declines in national HIV incidence that occurred during 2000–2008.¹¹ Condom and lubricant programming is an especially critical element of an evidence-based package to prevent HIV transmission especially for people involved in short-term sexual partnerships, serodiscordant couples, sex workers, men who have sex with men and other key populations including people who inject drugs and their sexual partners. Programmes that combine couples' counselling with condom distribution have proven effective in many countries, such as Kenya¹² and Zambia.¹³ Condom programming should be an integral component of behavioural approaches, especially those that empower women and young people to negotiate condom use.

In light of their especially high risk of acquiring HIV, uninfected partners in serodiscordant couples (where one of the partners is HIV-negative) have an urgent need for effective HIV prevention programming. Key prevention strategies include testing (to enable individuals to be aware of their own and their partner's status), condom use and provision of antiretroviral therapy to the partner living with HIV, regardless of their CD4 count. Antiretroviral therapy for the HIV-negative partner is also an efficacious strategy.

Funding challenges undermine efforts to ensure ready access to both male and female condoms. With condom programming largely funded by international donors in many countries, funding uncertainties have complicated national forecasting, procurement, supply and distribution. In 2012, the donor community decreased their supplies of both male and female condoms compared to 2011. Approximately 2.4 billion male condoms and 31.8 million female condoms were donated in 2012 as compared to 3.4 billion male condoms and 43.4 million female condoms in 2011.¹⁴ Country reports confirm that condom access dropped in 2012; Namibia reports that funding challenges contributed to a decline in the number of condoms distributed in 2011–2012, while Uganda reports frequent periodic shortages and stock-outs of free condoms.

A review of sex workers' experiences of public health facilities in four countries in Eastern and Southern Africa identified insufficient access to condoms and lubricants among their unmet health needs.¹⁵ A 2012 survey in 165 countries among 5 000 men who have sex with men also found that they had difficulties in accessing lubricants.¹⁶

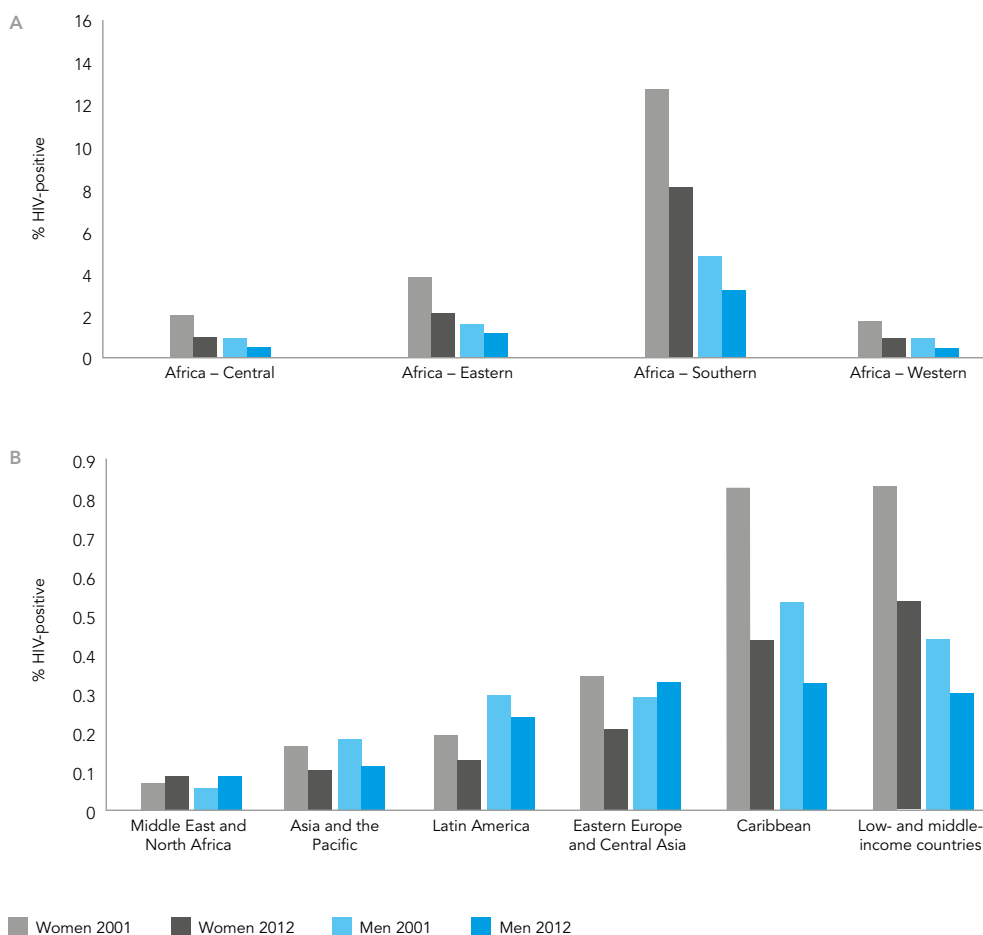
New technological advances in condom design aim to generate products that meet the needs and desires of the people who are most likely to use them. PATH, an international health organization, is testing a new female condom in an effort to generate a more user-friendly product, while the Origami condom is a collapsible, accordion-shaped product designed for use by both men and women during both vaginal and anal intercourse.¹⁷ In 2012, the World Health Organization (WHO) prequalified a female condom produced by Cupid Ltd., and this product has been added to the procurement list of the United Nations Population Fund (UNFPA).

PREVENTING NEW HIV INFECTIONS AMONG ADOLESCENTS AND YOUNG PEOPLE

Across sub-Saharan Africa, diverse countries have achieved notable reductions in HIV prevalence among young people (15–24 years). In sub-Saharan Africa, HIV prevalence among young women and men fell by 42% from 2001 to 2012. Even with these favourable trends, HIV prevalence among young women remains more than twice as high as among young men throughout sub-Saharan Africa.

Trends are mixed among other regions, with the Caribbean experiencing substantial declines but with no clear downward trend apparent in the Middle East or North Africa (see Figure 1.2). Evidence is limited regarding HIV prevalence among young people who are members of key populations at higher risk (or members’ partners), although limited surveys and anecdotal reports suggest that their HIV risk is extremely high.

FIGURE 1.2
Prevalence of HIV among young women and men (15–24 years), by region, 2001 and 2012



Source: UNAIDS 2012 estimates.

An estimated 2.1 million adolescents (10–19 years) were living with HIV in 2012 in low- and middle-income countries. Data on young adolescents (10–14 years) are limited, resulting in little information on progress toward preventing new infections or averting deaths for the adolescent age group.

In sub-Saharan Africa, the percentage of young people (15–24 years) demonstrating comprehensive and accurate understanding of HIV rose by five percentage points for men and by three for women from 2002 to 2011, although knowledge levels remain low (36% for young men and 28% for young women). The percentage of young people reporting condom-use the last time they had sex also rose during this period for both women and men.

Persistent challenges to effective HIV prevention for adolescents and young people include inadequate access to high-quality, youth-friendly HIV and sexual and reproductive health services, and sexual violence against young women and girls.¹⁸ In addition, some young people are hindered in their ability to obtain essential services by limited protection for young people's confidentiality and right to medical privacy.¹⁹ Inadequate access to comprehensive sex education, shown to be effective in delaying sexual debut and increasing condom use among young people who are sexually active,²⁰ also undermines efforts to protect young people from acquiring HIV.

New strategies have emerged to reduce young people's vulnerability to HIV, including social cash transfers that create incentives for safer behaviours. Recently, a randomized controlled study in Lesotho found that a programme of financial incentives reduced the probability of acquiring HIV by 25% over two years.²¹ In a separate randomized controlled study in Malawi, cash transfers for schoolgirls were found to reduce new HIV infections by 60%.²² There is clear potential for cash transfers to support HIV prevention for young people, and continued research on the HIV prevention role of such programmes is recommended.²³

SCALING UP VOLUNTARY MEDICAL MALE CIRCUMCISION

It is projected that circumcising 80% of all uncircumcised adult men in the countries with high HIV prevalence and low prevalence of male circumcision by 2015 would avert one in five new HIV infections by 2025, with long-term prevention benefits for women as well as men.²⁴ At the same time that priority countries scale-up voluntary medical male circumcision for adults, they are advised to roll out the routine offer of medical circumcision for newborn males.

Immediately following issuance of the recommendation for scale-up in 2007, progress in implementing voluntary medical adult male circumcision was initially slow, although there are encouraging signs that the pace of uptake may be increasing. However, scale-up of voluntary medical adult male circumcision varies considerably among priority countries (see Figures 1.3, 1.4).

As of December 2012, 3.2 million African men had been circumcised through specific services for voluntary medical male circumcision. The cumulative number of men circumcised almost doubled in 2012, rising from 1.5 million as of December 2011. Still, it is clear that reaching the estimated target number of 20 million in 2015²⁵ will require a dramatic acceleration.

UNAIDS priority countries for voluntary medical male circumcision:

1. Botswana
2. Ethiopia
3. Central African Republic
4. Kenya
5. Lesotho
6. Malawi
7. Mozambique
8. Namibia
9. Rwanda
10. South Africa
11. South Sudan
12. Swaziland
13. Uganda
14. United Republic of Tanzania
15. Zambia
16. Zimbabwe

FIGURE 1.3
Annual number of voluntary medical male circumcisions, selected countries, 2009–2012

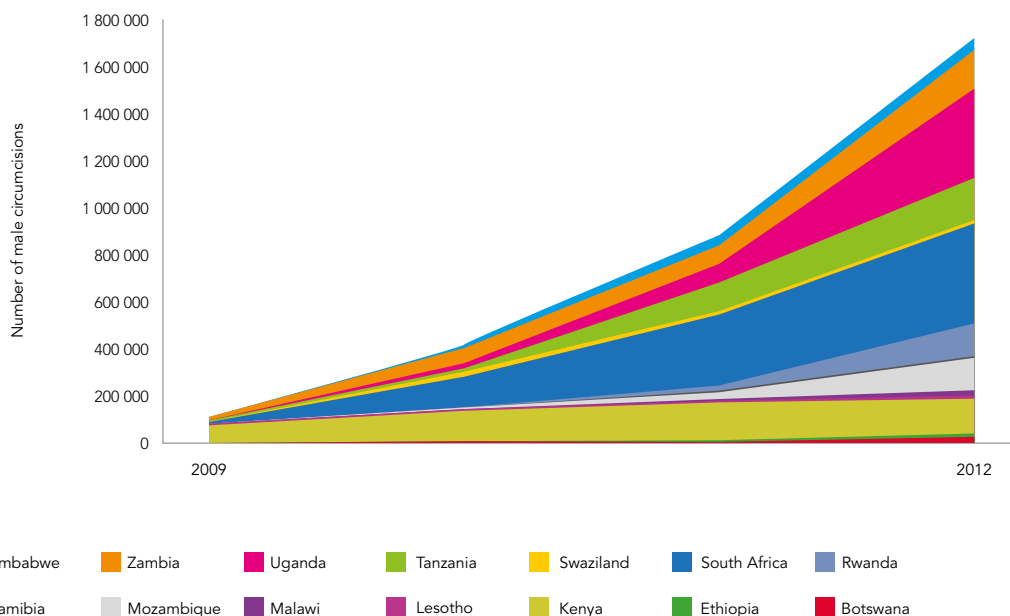
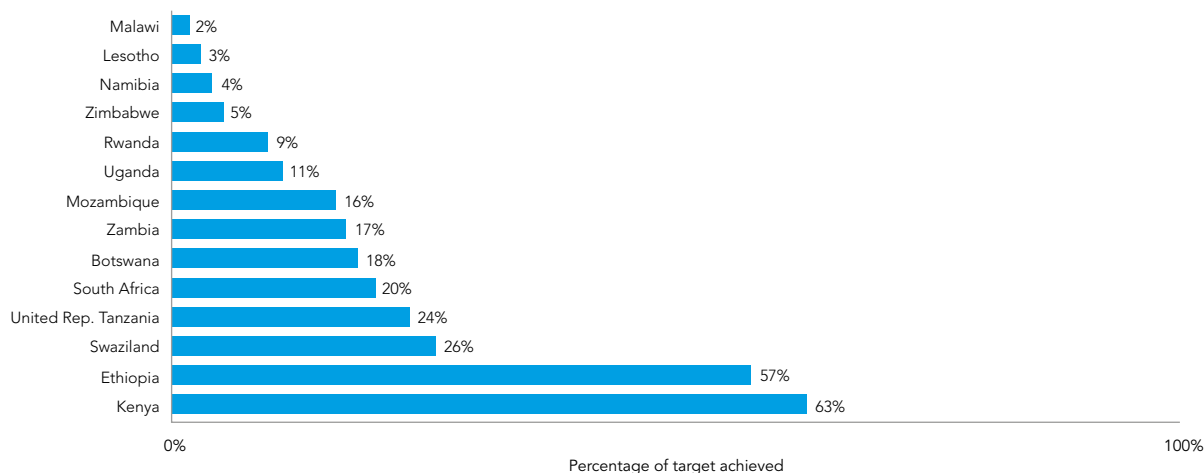


FIGURE 1.4
Voluntary medical male circumcision: countries' progress towards 2015 targets, by December 2012



Sources: GARPR 2013; WHO (2012). Progress in Scaling up Voluntary Medical Male Circumcision for HIV Prevention in East and Southern Africa, January–December 2012.

Notes:

1. Implementation of voluntary male medical circumcisions (VMMCs) is done at different rates in the priority countries.
2. At the end of December 2012 just over 3 million VMMCs were reported in these countries, which amounts to the achievement of 15% of the estimated number needed to reach the 80% prevalence rate overall.

Progress has been most pronounced in the provinces prioritized for scale-up in Ethiopia (reaching 57% of the coverage target) and Kenya (63%). In five countries where voluntary medical male circumcision is stated to be a priority (Lesotho, Malawi, Namibia, Rwanda and Zimbabwe), coverage of voluntary medical male circumcision for adults is less than 10%.

Twelve countries submitted national mid-term reports that identified voluntary medical male circumcision as a priority. Five countries (Botswana, Malawi, Namibia, the United Republic of Tanzania and Zimbabwe) cited low male circumcision uptake as a challenge in their national response. Mid-term reports identified a variety of impediments to expedited scale-up, including financial constraints (Namibia), stock-outs of essential circumcision commodities (Uganda) and human resource limitations (Zimbabwe). Swaziland's mid-term report makes no mention of voluntary medical male circumcision, even though the country has been identified as a key priority for scale-up. Moving forward, Lesotho has committed to increase resources for adult and neonatal medical male circumcision; Zimbabwe aims to provide improved circumcision training for nurses; and Uganda has pledged to intensify circumcision scale-up in the formal health sector and among district health systems.

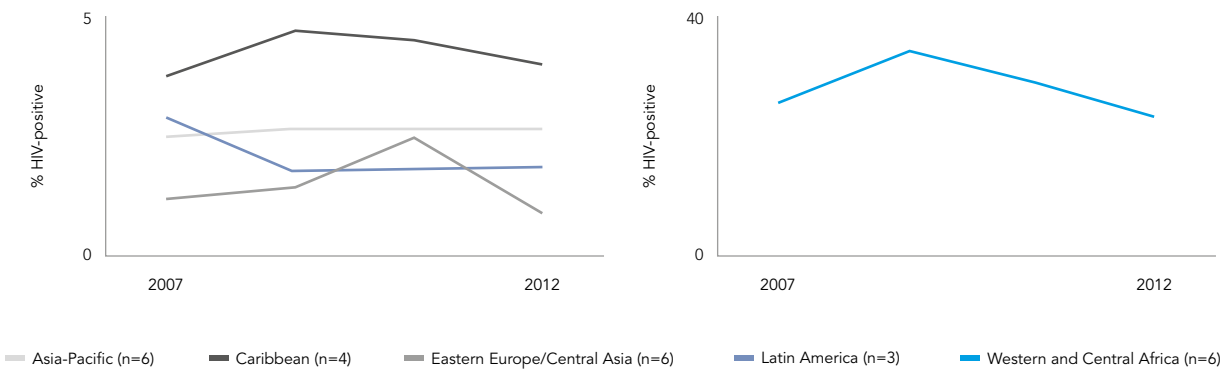
There is evidence that programmes have had much greater success in reaching males younger than 25 years.²⁶ As men in sub-Saharan Africa are at highest risk for acquiring HIV when they are in their twenties and thirties, men in these age groups are the top priority for scale-up. While voluntary medical circumcision confers a clear HIV prevention benefit on young men and should be continued, it has less immediate impact on new HIV infections than circumcision for men at greater risk. In an effort to reach men aged 25–29 years whose circumcisions would be more likely to result in immediate HIV prevention benefits, studies are currently underway to evaluate various innovative strategies to build demand for circumcision.

In 2013, WHO prequalified the first adult circumcision device for use in low-resource settings. The device, PrePex, requires no sutures or injected local anaesthetic and may be placed and removed by trained mid-level health providers including nurses. It is hoped that the device will accelerate scale-up by providing men with an alternative and by relieving demands on the limited number of surgeons available in priority countries.

HIV PREVENTION FOR SEX WORKERS

The epidemic continues to have a profound effect on female, male and transgender sex workers. Globally, female sex workers are 13.5 times more likely to be living with HIV than other women.²⁷ In countries in West Africa, substantial proportions of new infections (10–32%) were estimated to occur as a result of sex work; in Uganda, Swaziland and Zambia, 7–11% of new infections are thought to be attributable to sex workers, their clients and clients' regular partners.²⁸ Median HIV prevalence among sex workers varies across the world, from 22% in Eastern and Southern Africa (eight countries) and 17% in Western and Central Africa (17 countries) to less than 5% in all other regions (see Figure 1.5). These surveys are typically conducted in capital cities and are not nationally representative, so the findings may not be applicable to the entire population. A separate analysis of available data found a pooled HIV prevalence among female sex workers of 36.9% in sub-Saharan Africa, 10.9% in Eastern Europe and 6.1% in Latin America.²⁹ Median prevalence among male sex workers gleaned from published literature from 24 countries since 2006 is 14%.

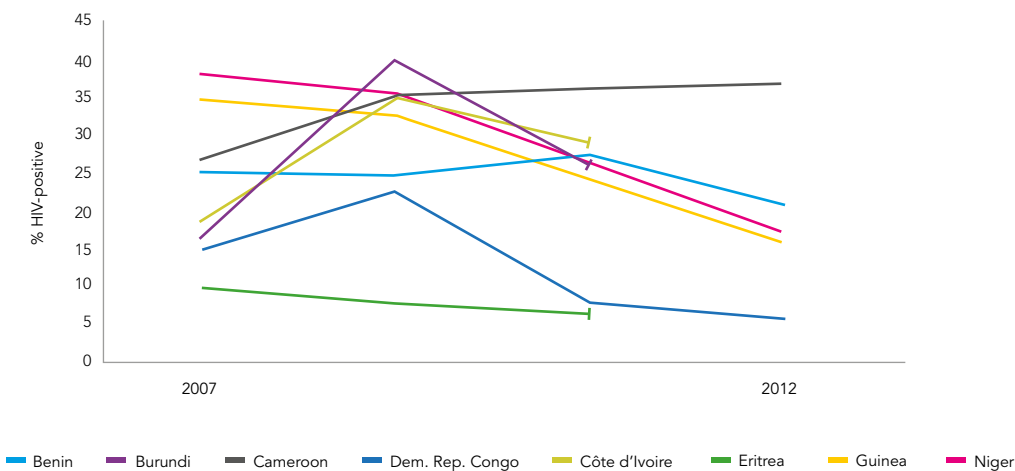
FIGURE 1.5
HIV median prevalence among sex workers, by region, 2007–2012*



Source: GARPR 2013.

*Data on HIV prevention, care and treatment services for key populations can be difficult to obtain. Most countries rely on community or facility-based surveys to estimate programme coverage for these populations. Frequency of these surveys varies from semi-annual to every three to four years. This approach yields valuable data for local programmes but cannot be readily extrapolated to provide a fully accurate picture of a national situation. UNAIDS excludes data that derive from small (< 100) samples (unless the country is very small), other clearly biased samples (e.g. HIV testing uptake from a VCT site) or and data collected more than three years ago. Data where background information is not submitted is included. Further key populations are unevenly distributed throughout most countries and may be reluctant to participate in government-led activities depending on the local legal environment. This makes surveys of key populations challenging.

FIGURE 1.6
HIV prevalence among sex workers in Africa, selected countries, 2007–2012*



Source: GARPR 2013.

*See footnote to Figure 1.5.

Among countries reporting data in 2013, median HIV prevalence among sex workers appears to have declined in recent years in parts of West and Central Africa. However, it is difficult to draw firm conclusions based on the limited survey data available, and HIV prevalence among sex workers remains extremely high in many countries. Among 62 countries reporting data, prevalence ranged from < 1% in 14 countries to 70% (from a survey of 323 female sex workers) in Swaziland. In other regions, where HIV prevalence among sex workers is considerably lower, prevalence trends appear to be stable, although there are indications of a reduction in HIV prevalence since 2007 among sex workers in the Caribbean. Among eight countries in Eastern and Southern Africa, median HIV prevalence among sex workers under 25 years is 11% (range: < 1%, 64%), and 29% (range: < 1%, 74%) among sex workers older than 25.

Countries report that condom use at last commercial sex is high and improving; 44 countries reported higher median condom use in 2012 than in 2009: 85% compared to 78% (see Figure 1.7).

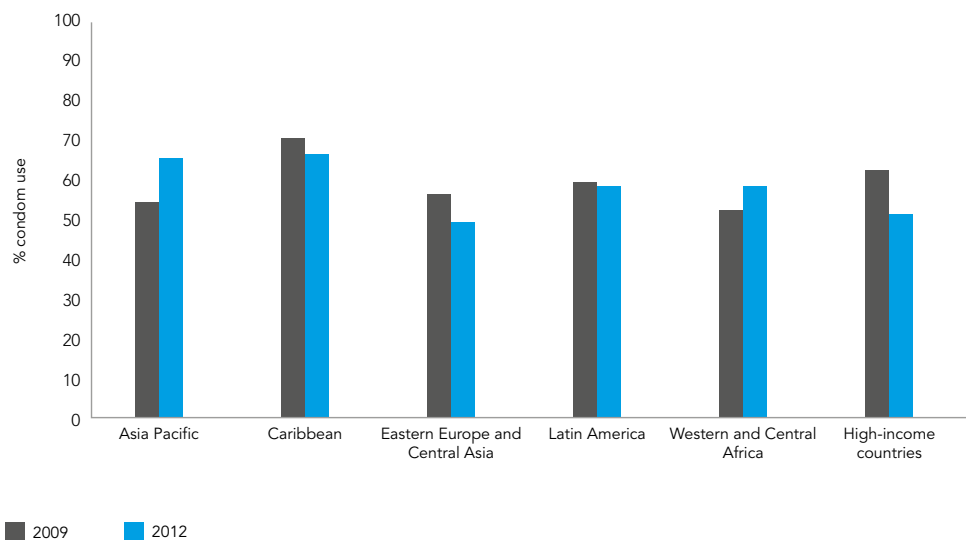
Inadequate financing for HIV prevention programming focused on sex workers is a critical reason why HIV prevention coverage remains so low. Notwithstanding sex workers' disproportionate risk of acquiring HIV, prevention programmes for sex workers account for a meagre share of HIV prevention funding globally.³⁰ In most regions, national governments have allocated relatively few national resources to preventing HIV among sex workers, with international donors funding the overwhelming majority of HIV prevention efforts for this group (see Figure 1.8). Notable exceptions to these global patterns are Latin America and Southern Africa, where domestic spending on HIV prevention services for sex workers outweighs international contributions.

For sex workers, as for men who have sex with men and other marginalized populations who have elevated risk of acquiring HIV, programmatic deficits are compounded by social and legal disadvantages that increase vulnerability and deter individuals from obtaining the services they need. These factors are addressed in greater detail in Section 8.

PREVENTING NEW HIV INFECTIONS AMONG MEN WHO HAVE SEX WITH MEN

Recent modes of transmission analyses found new infections among men who have sex with men, along with other key populations, to be important components of national epidemics in Kenya and South Africa. According to modes of transmission analyses in Latin America, men who have sex with men represent the largest source of new infections in the region, ranging from 33% in Dominican Republic to 56% in Peru. Median HIV prevalence among men who have sex with men exceeds 1% in all regions of the world and is consistently higher than prevalence among men overall. In 2012, according to national GARPR reports, the highest median HIV prevalence among men who have sex with men was reported in Western and Central Africa (19%) and Eastern and Southern Africa (15%), with somewhat lower but still high levels of HIV infection reported among men who have sex with men in Latin America (12%), Asia and the Pacific (11%), Western and Central Europe and North America (8%) and the Caribbean (7%). This information is roughly consistent with a 2012 global analysis of available epidemiologic studies, which found that HIV prevalence among men who have sex with men in the Americas, South and South-East Asia and sub-Saharan Africa ranging from 14–18%.³¹ As in the case of sex workers, epidemiological surveys of men who have sex with men are limited and may not be nationally representative. Epidemiological trends among men who have sex with men vary by region.

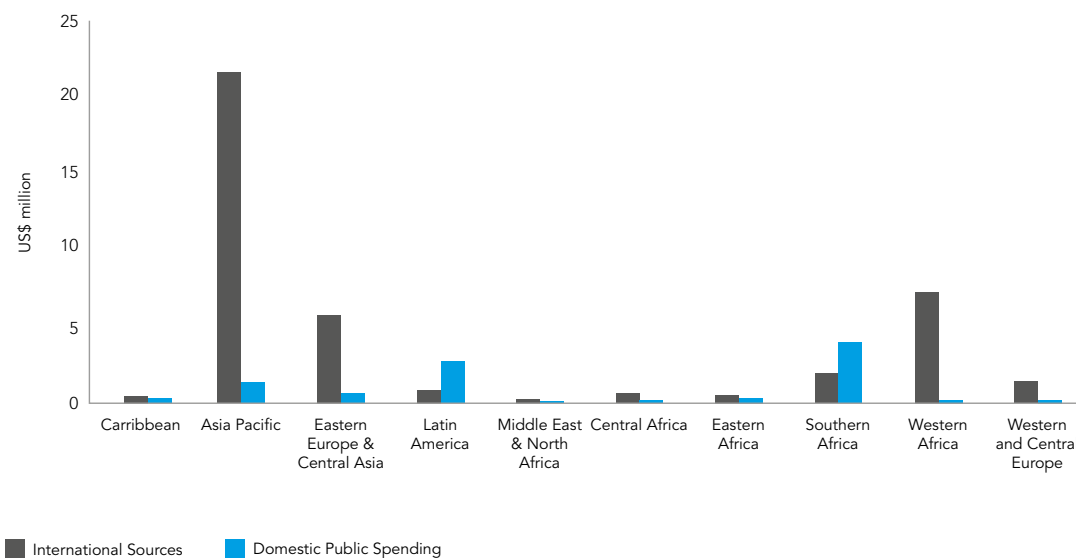
FIGURE 1.7
Reported condom use at last commercial sex, by region, 2009–2012*



Source: GARPR 2013.

*See footnote to Figure 1.5.

FIGURE 1.8
International and domestic public spending on programmes for sex workers in low- and middle-income countries, by region, latest available data as of 2013



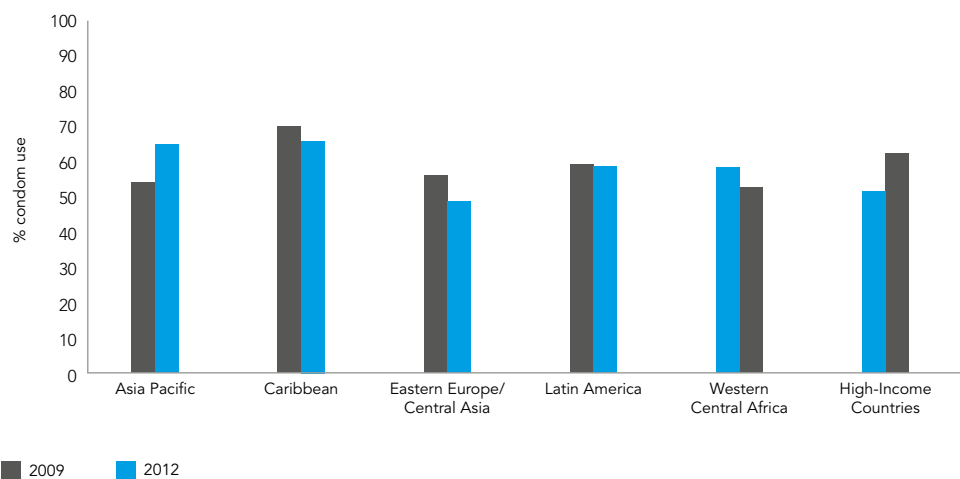
Source: GARPR 2013.

Globally, prevalence among men who have sex with men appears to have increased slightly, and has been at very high levels in recent years. Reported HIV prevalence among men who have sex with men in 2012 ranged from < 1% in seven countries to 57% in Guinea (survey of 242 men) (see Figure 1.9). Men who have sex with men are often infected while quite young, with median HIV prevalence of 5.4% for men who have sex with men under 25 years old, according to studies primarily in countries with concentrated epidemics. Median prevalence rises to over 15% among men who have sex with men 25 years and older in the 20 countries reporting age-disaggregated data for this key population.

According to surveys, men who have sex with men often have extremely limited access to condoms, water-based lubricants, HIV education and support for sexual risk reduction.³² Antiretroviral-based HIV prevention methods, including HIV treatment as prevention and pre-exposure antiretroviral prophylaxis, offer promise in terms of improving HIV prevention efforts for men who have sex with men,³³ although minor side-effects and possible long-term effects still need to be assessed. The fear of disapproval and discrimination by health care providers might also deter many men who have sex with men from accessing mainstream health services.³⁴ Increasing the access of men who have sex with men to culturally sensitive HIV counselling and testing and antiretroviral therapy is an urgent global health priority.

The percentage of men who have sex with men reached by HIV prevention programmes, reported by 20 countries in both 2009 and 2012, was relatively stable at a mean of 52% and 54%, respectively. Median coverage rose appreciably in Asia and the Pacific and in Eastern Europe and Central Asia (34% vs 56% and 43% vs 64%, respectively). In Latin America, the median was unchanged, at 51%. Median condom use at last anal sex reported from

FIGURE 1.9
Median prevalence of reported condom use at last anal intercourse among men who have sex with men, by region, 2009–2012*

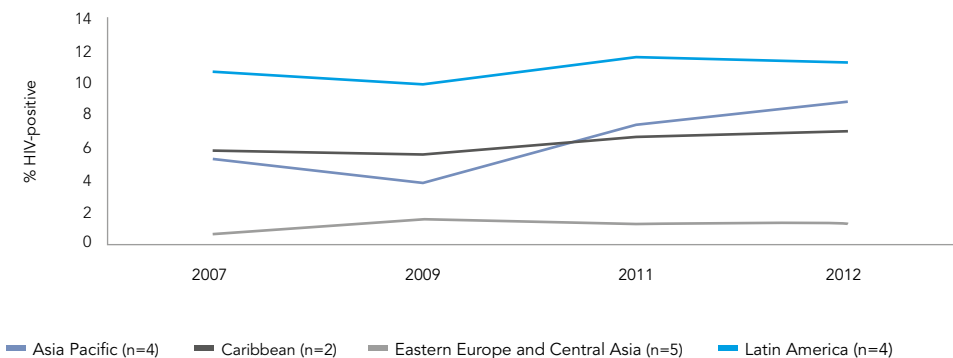


Source: GARPR 2013.

*See footnote to Figure 1.5. 43 countries reporting.

43 countries, at 57%, did not change over the same time period (see Figure 1.10). With only 20 countries reporting HIV prevention coverage data for men who have sex with men, reported figures may not be indicative of global coverage. The limited information provided by countries through GARPR generates estimates of HIV prevention coverage for men who have sex with men that are considerably higher than other estimates, with one international review concluding that fewer than one in ten men who have sex with men receive a basic package of HIV prevention interventions.³⁵ GARPR reporting may overestimate programmatic reach, as countries that have made no commitments on HIV prevention among men who have sex with men do not provide reports.

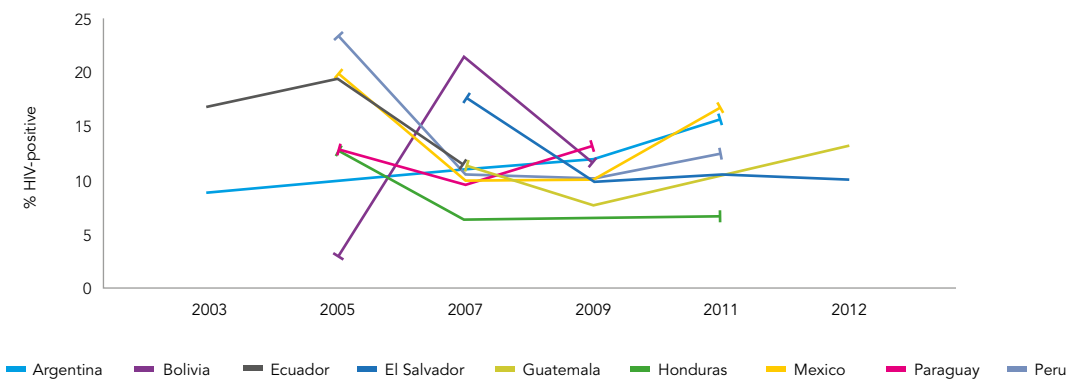
FIGURE 1.10
HIV median prevalence among men who have sex with men, by region, 2007–2012*



Source: GARPR 2013

*See footnote to Figure 1.5.

FIGURE 1.11
Percentage of men who have sex with men living with HIV in selected countries of Latin America, 2003–2012*

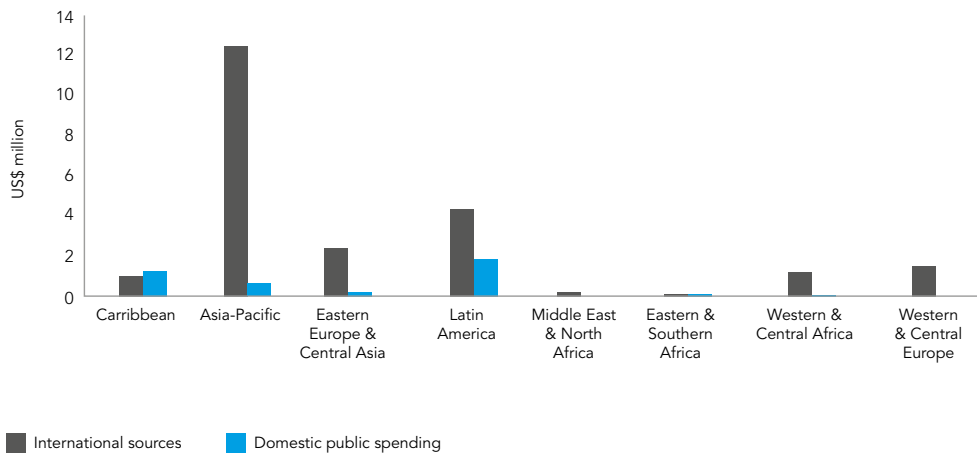


Source: GARPR 2013

*See footnote to Figure 1.5.

FIGURE 1.12

International and domestic public spending for programmes for men who have sex with men in low- and middle-income countries, by region, latest data available (2007–2012)



Source: GARPR 2013

Inadequate resources impede efforts to reach men who have sex with men with essential HIV prevention services. International funding vastly outweighs domestic spending on focused prevention services for men who have sex with men globally, including in all regions except the Caribbean. Funding for HIV prevention services for men who have sex with men is especially limited in East Asia, the Middle East and North Africa, and across sub-Saharan Africa (see Figure 1.12).

The effects of limited funding are compounded by a host of additional challenges, including the deterrent effects of homophobia on the ability or willingness of men who have sex with men to seek essential HIV services. Punitive laws regarding same-sex sexual relations, an issue addressed at greater length in Section 8, also create a climate of fear and intolerance that is inconsistent with a rights- and evidence-based response.

TOWARDS 2015

Political commitment and strategic action are needed to reduce the number of adults who acquire HIV sexually. The world is not on track to halve sexual transmission by 2015 and that is particularly true of several high-prevalence countries. Momentum needs to be revived. In particular, key HIV prevention programme elements – including social-behavioural approaches (with financial incentives, where appropriate), condom and lubricant promotion, male circumcision and HIV prevention programmes focused on key populations, such as men who have sex with men and sex workers – need to be scaled up and strategically combined to maximize the impact of finite funding. To maximize the number of new infections averted, scale-up of these key elements of HIV prevention programmes need to be coupled with continued roll-out of HIV treatment.

There appears to be strong commitment on which to build. Among the 109 countries reporting results from mid-term reviews, all identified reducing sexual transmission as a national priority, with the target integrated into all national HIV strategic plans.

Social-behavioural programmes need to be better coordinated and more strategically focused. Intensified efforts are needed to ensure that social-behavioural programmes are evidence-informed, rigorously evaluated, gender- and youth-sensitive and address key drivers of the epidemic, including concurrency among sexual partners. High transmission zones are heterogeneously distributed across countries, whether sexual transmission is primarily among heterosexual, non-commercial partners, sex workers and their clients or men who have sex with men. National responses should consider the distribution of HIV infection to focus resources on geographic and population zones where transmission risks are greatest. In concentrated epidemics, it is also important to recognize data gaps and to structure the national response to allow for uncovering other, as yet unrecognized, high transmission zones. Structural and financial empowerment approaches urgently need to be scaled up and linked synergistically with other HIV prevention efforts.

All key stakeholders, including international donors and health ministries, should work to expand access to male and female condoms, as well as lubricants, and to increase their use. Steps to ensure the consistency and reliability of condom and lubricant supplies are critical. Specific efforts should focus on ensuring condom security for young people and key populations, and learning from marketing in other fields should be leveraged to increase the reach and effectiveness of condom programming.

Priority countries where scale-up of voluntary medical male circumcision has been slow should take immediate action to promote and deliver this essential HIV prevention method, using lessons learnt from settings where rapid scale-up has occurred. Among priority countries generally, enhanced efforts are needed to reach men in their twenties and thirties, who are currently less likely to seek circumcision services than younger men.

Countries need to translate recognition of HIV prevention needs among sex workers and their clients and partners into scaled-up evidence- and rights-based programmes. According to Malawi's mid-term review, sex workers have high HIV prevalence, but the national prevention approach lists eight categories of key populations for HIV prevention including truck drivers, teachers and male vendors, though not people who inject drugs. Prevention programmes for people who inject drugs should take into account the fact that, in some countries, many people who inject drugs are also engaged in sex work.

National commitments to respond to the HIV epidemic among men who have sex with men lag behind those for other key populations. Where data are collected, men who have sex with men typically share a disproportionate burden of HIV infection. In many countries, data on HIV prevalence among men who have sex with men do not exist. Countries need to undertake more concerted efforts to measure the extent of the epidemic among men who have sex with men while building comprehensive services that remove barriers to access. Stigma, discrimination and oppressive legal environments in many settings discourage men who have sex with men from seeking HIV testing and appropriate, high-quality prevention, care and treatment

services. National programmes should endeavour to remove legal obstacles to practising homosexuality, increase sensitivity to the health needs of men who have sex with men, improve access to health services and build programmes to intensify HIV preventive behaviours in this population through improved access to condoms and lubricants and by creating a cultural norm of safer sex. Programmes should also consider using STI services targeted to men as a gateway to improve HIV prevention, treatment and care for men who have sex with men.

At the same time, countries should seize the HIV prevention potential of antiretroviral therapy by accelerating scale-up of HIV treatment and taking steps to implement the 2013 WHO antiretroviral guidelines (discussed in section 4).

Major resources should be directed towards critical enablers and development synergies that reduce vulnerability and enhance the effectiveness, efficiency and reach of HIV prevention efforts. Such approaches should include legal reform, stigma reduction, legal services, rights literacy, sensitization of police and training of health care workers. Among the many populations who could benefit from critical enablers and development synergies, such funding is notably important for sex workers, men who have sex with men and other marginalized groups at high risk of HIV.

Rapidly scaling-up voluntary medical male circumcision in the United Republic of Tanzania

Benefiting from strong political commitment, strategic focusing of services, innovative marketing strategies and implementation of recommended human resource strategies, the United Republic of Tanzania has recorded rapid progress in its quest to deliver voluntary medical male circumcision services to at least 80% of previously uncircumcised adult men. By circumcising 1.4 million men, it is projected that the United Republic of Tanzania could avert 200 000 new HIV infections by 2025.

The circumcision campaign in the United Republic of Tanzania prioritizes scale-up in the Iringa and Njombe regions, where HIV prevalence (estimated at 16%) is three times the national average. Only one in three men in these regions has been circumcised. Geographic information systems and other methods have been used to track service uptake and to identify areas where scale-up is lagging, enabling programme implementers to reallocate human and financial resources as needed.

The United Republic of Tanzania has had enormous success in mounting time-limited campaigns that reach large numbers of men with circumcision services. A six-week campaign in Iringa in 2010 performed more than 10 000 circumcisions, exceeding the campaign target by 72%.³⁶

Scale-up of voluntary medical male circumcision has been aided by implementation of task-shifting in service settings, reducing demands on the limited number of surgeons. According to the US Agency for International Development, nurses account for 70% of the 200 health providers working on circumcision scale-up.

Results achieved in recent years have been impressive, demonstrating the feasibility of rapid scale-up. As programmatic scale-up accelerated, the annual number of men circumcised in the United Republic of Tanzania rose from 1 033 in 2009 to 183 480 in 2012.

2. HALVE THE TRANSMISSION OF HIV AMONG PEOPLE WHO INJECT DRUGS BY 2015

Recent data suggest little change has occurred in the HIV burden among people who inject drugs. HIV incidence among this population remains high, with people who inject drugs accounting for more than 40% of new infections in some countries.

The prominence of injecting drug use as a driver of national HIV epidemics varies from country to country. In part, this is a result of substantial differences in the prevalence of injecting drug use around the world. As estimated by the United Nations Office on Drugs and Crime (UNODC), regional prevalence of injecting drug use ranges from less than 0.2% in sub-Saharan Africa to approximately 1.3% of adults in Eastern Europe and Central Asia. Globally, at least 158 countries reported injecting drug use and 120 countries have documented HIV among people who inject drugs.¹ According to recent modes of transmission analysis, people who inject drugs and their sexual partners accounted for 68% of new HIV infections in Iran (uncertainty range = 57–78%), 40% in Eastern European countries where such studies were conducted, and 36% in the Philippines.²

In several parts of the world where people who inject drugs represent sizable components of national epidemics, countries have yet to demonstrate a robust response to this public health challenge. In addition to lacking strong political and programmatic commitment to reduce HIV transmission among people who inject drugs, these countries also lack relevant data. Of the top four countries representing roughly 45% of the global injecting drug using population,³ only China and Brazil reported this year; without data from Russia and the United States, it is difficult to make accurate global statements about people who inject drugs. Considerably greater efforts to implement evidence-based strategies and sound policy frameworks will be needed if the world is to achieve its goal of halving the number of new HIV infections among people who inject drugs.

THE EPIDEMIC'S ENDURING IMPACT ON PEOPLE WHO INJECT DRUGS

Although people who inject drugs account for an estimated 0.2–0.5% of the world's population, they make up approximately 5–10% of all people living with HIV.^{4,5} All regions report high HIV prevalence in this population, although the severity varies. HIV prevalence among people who inject drugs ranged from 5% in Eastern Europe to 28% in Asia.

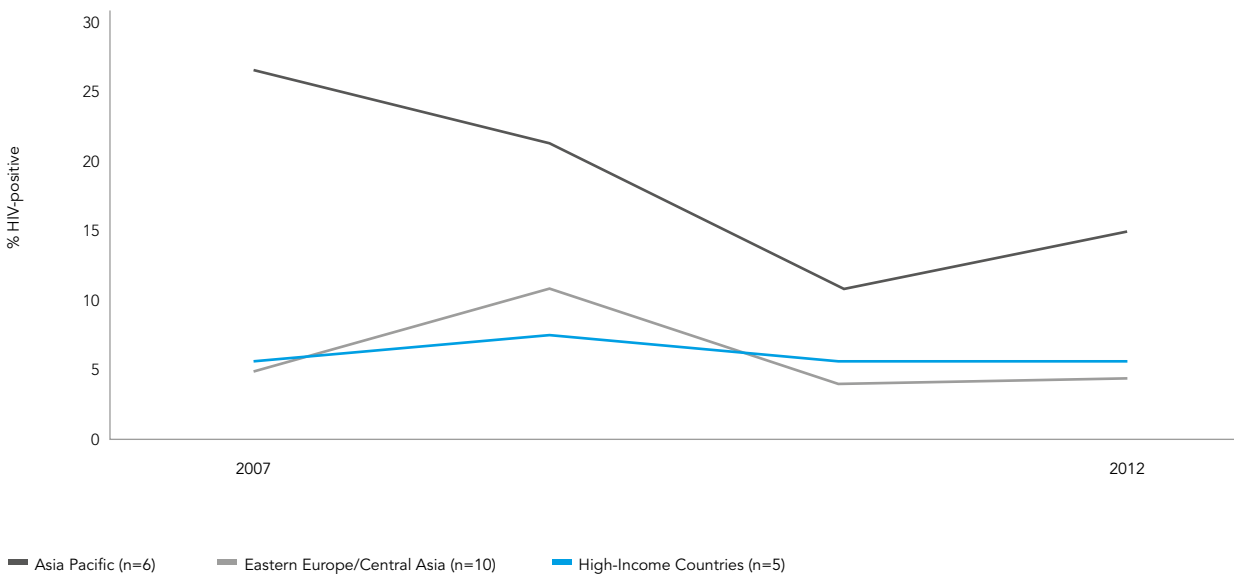
Monitoring HIV prevalence among people who inject drugs is challenging. Country reports of prevalence data in this population often differ by year and may rely on surveys that use different methodologies. In addition, extrapolation from setting-specific studies to estimate national prevalence among people who inject drugs can be difficult.

Fifty-one countries reported HIV prevalence data for people who inject drugs in 2012, although data are often derived from local surveys that are not nationally representative. Taking methodological challenges into account, there appears to be little change at the regional level in HIV prevalence among people who inject drugs although the recent trend in Asia Pacific is of concern (see Figure 2.1).

Among those countries with consistent reporting since 2009, HIV prevalence has declined in each. For example, in Eastern Europe and Central Asia – where HIV transmission related to injecting behaviour is driving many national epidemics – HIV prevalence among people who inject drugs appears to have fallen by more than half in Ukraine from 2007 to 2012, though this is likely attributable to changes in survey methods. HIV case reports among people who inject drugs in Ukraine remained relatively stable, with 6 500 to 7 000 per year in the same time period.⁶ HIV prevalence in this population appears to have remained stable for other countries in Eastern Europe and Central Asia (see Figure 2.2). Median HIV prevalence among young (< 25) people who inject drugs was 3%, and 6% among older people who inject drugs; in Asia younger people who inject drugs had 9% HIV prevalence and older people 19%.

In Asia, available evidence also suggests that HIV prevalence among people who inject drugs has fallen since 2005–2007 in several countries, including Myanmar, Nepal and Vietnam. In Malaysia, the Philippines and Thailand have reported increasing HIV prevalence among people who inject drugs, while other Asian countries appear to have remained stable.

FIGURE 2.1
HIV median prevalence among people who inject drugs, by region, 2007–2012*

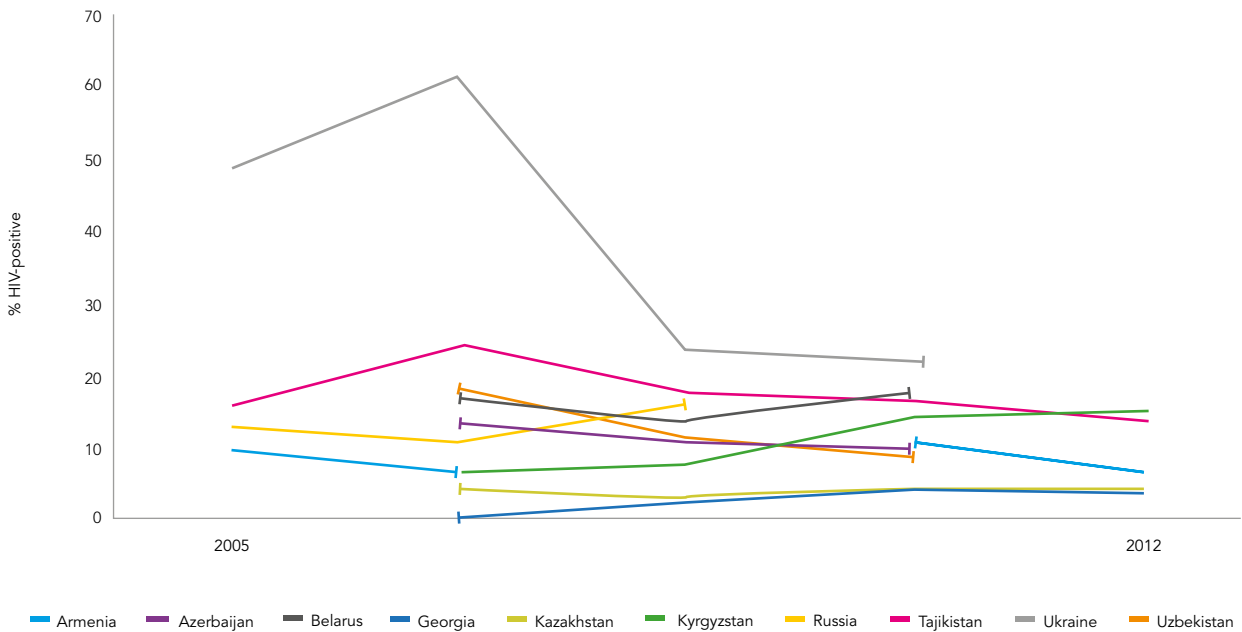


Source: GARPR 2013.

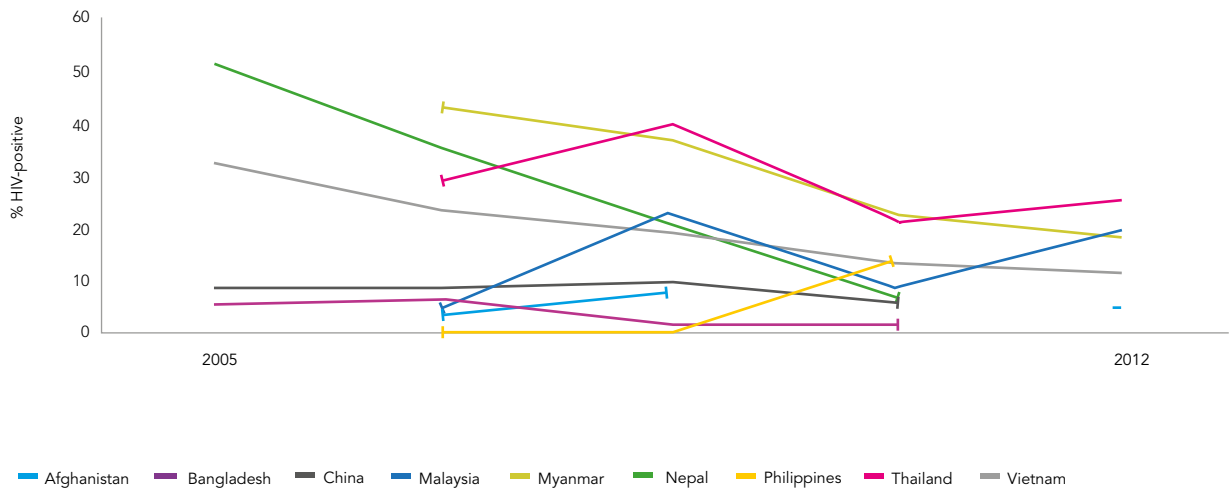
*See footnote to Figure 1.5.

FIGURE 2.2

HIV prevalence among people who inject drugs in Eastern Europe, Central Asia, East Asia and South-East Asia, selected countries, 2005–2012*



Armenia Azerbaijan Belarus Georgia Kazakhstan Kyrgyzstan Russia Tajikistan Ukraine Uzbekistan



Afghanistan Bangladesh China Malaysia Myanmar Nepal Philippines Thailand Vietnam

Source: GARPR 2013.

*See footnote to Figure 1.5.

THE STATE OF HIV PREVENTION SERVICES FOR PEOPLE WHO INJECT DRUGS

A package of HIV prevention, care and treatment services is recommended for the prevention of new HIV infections among people who inject drugs.⁷ Recommended services include access to HIV testing and counselling, sterile injecting equipment (through needle and syringe programmes), opioid substitution therapy, antiretroviral therapy and other health and social services. People who inject drugs and their sexual partners also need counselling, education, behavioural interventions and access to condoms to prevent sexual transmission.

Coverage of HIV prevention services for people who inject drugs is quite low. Only in high-income countries does the annual number of syringes distributed per person who injects drugs approach the global recommendation of 200. Among 32 low- and middle-income countries reporting needle distribution in 2011 and 2012, only two countries with a significant epidemic among people who inject drugs, Bangladesh and Malaysia, reported more than 200 syringes per year (see Figure 2.3). Countries in Asia, overall, had higher needle distribution compared to other regions, while countries in the Middle East and North Africa showed expansion of needle distribution per person who injects drugs, with gains reported in Afghanistan, Iran and Morocco. Based on available data, overall coverage for needle and syringe programmes did not appear to have meaningfully increased between 2011 and 2012.

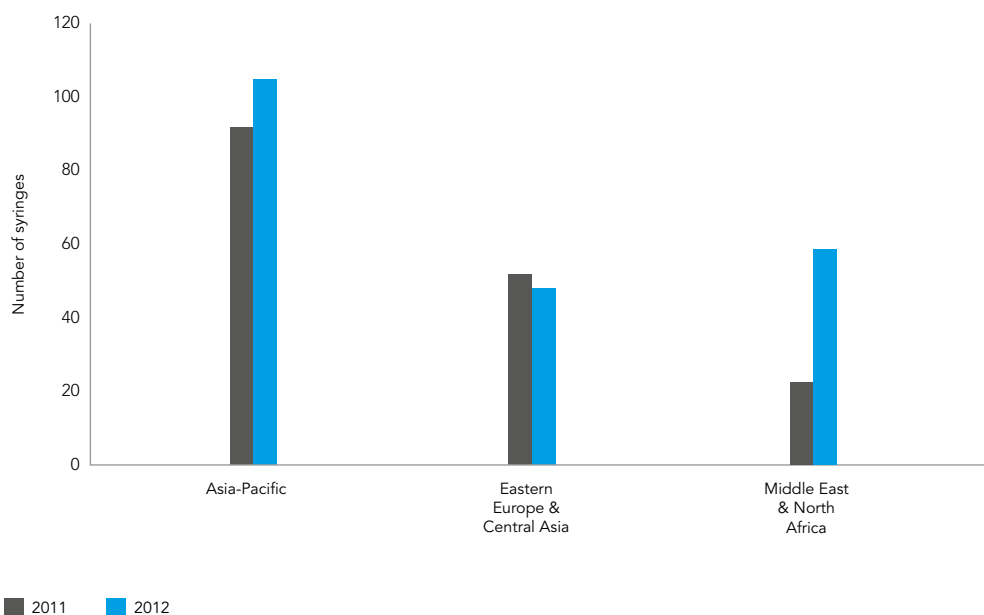
Data on opiate substitution therapy were reported by 35 countries (11 in Asia and 15 in Eastern Europe and Central Asia), with over 400 000 receiving methadone. Among the 20 countries providing coverage estimates for opioid substitution therapy, coverage ranged from less than 1% of opiate users in several countries to 26% in Malaysia, with all but four countries reporting coverage of less than 10%.

Despite persistent low programmatic coverage, surveys indicate that more people who inject drugs report having used sterile equipment the last time they injected. It is possible that people who inject drugs access clean needles and syringes through channels other than needle and syringe programmes. With the exception of Latin America, Asia and the Pacific, survey data indicate that at least 70% of people who inject drugs used sterile equipment during their most recent episode of injecting drug use. In 2012, out of 40 reporting countries, 23 reported having reached the global target of 80% for use of sterile injecting equipment.

In all regions, the median proportion of people who inject drugs who report using a condom the last time they had sex was less than 50%. Substantially greater success in reaching people who inject drugs with effective sexual risk reduction strategies will be needed to reduce sexual transmission from people who inject drugs to their sexual partners.

FIGURE 2.3

Number of syringes distributed by needle and syringe programmes, per person who injects drugs per year, by region, 2011–2012*



Source: GARPR 2013.

*See footnote to Figure 1.5.

RESOURCE CHALLENGES FACING AN EFFECTIVE RESPONSE TO HIV FOR PEOPLE WHO INJECT DRUGS

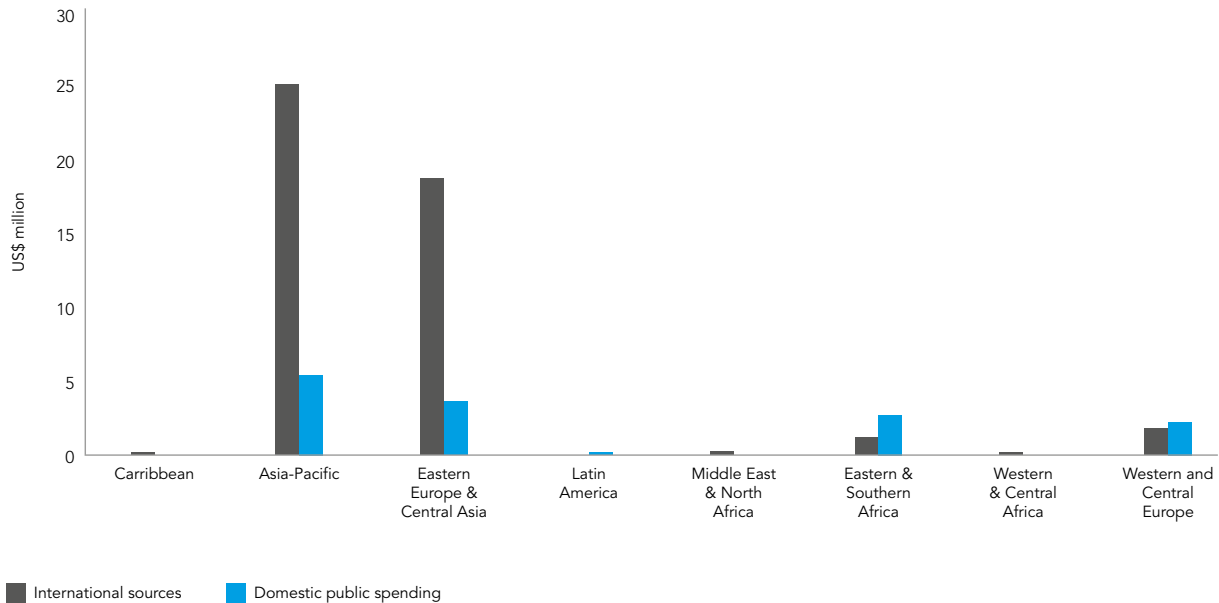
Given the severity of the challenge, HIV prevention programming for people who inject drugs is badly under-resourced. Only two regions – Eastern Europe and South and South-East Asia – have large-scale funding in place for harm reduction services. In these regions, as well as globally, international donors account for the overwhelming majority of funding for harm reduction services (see Figure 2.4).

The degree of domestic financing for harm reduction services is closely correlated with national income level. Whereas domestic funding accounts for 10% of harm reduction funding in low-income countries, domestic sources fund 18% and 36% of harm reduction services in lower-middle and upper-middle income countries, respectively.

Several countries have allocated a substantial share of national HIV spending to harm reduction services. Programmes for people who inject drugs represent 31% of HIV spending in Macedonia, 23% in Pakistan, 18% in Georgia and 16% in Bangladesh.

FIGURE 2.4

International and domestic public spending for harm reduction programmes for people who inject drugs in low- and middle-income countries, by region, latest data available (2007–2012)



Source: GARPR 2013.

However, funding lags in a number of countries where HIV prevalence among people who inject drugs is high. Ten countries in which HIV prevalence among people who inject drugs exceeds 10% allocate less than 5% of HIV spending to harm reduction programmes.

LOOKING FORWARD

Among the 109 countries that reported results from mid-term reviews, 45 identified prevention of HIV among people who use drugs as a national priority, with all but one country having recognized this target in their national strategic plans. A majority (27, or 60%) of these 45 countries report that they are on track to reduce new infections among people who inject drugs by 50% by 2015 – a conclusion that does not appear to be supported by available data on HIV prevalence and prevention-related indicators.

Countries that undertook mid-term reviews reported numerous impediments to effective HIV prevention for people who inject drugs. Even in countries where the national HIV epidemic is heavily concentrated among people who inject

drugs, there are often no reliable estimates of the size of this population. Uptake of voluntary HIV testing and counselling is extremely low among people who inject drugs, and criminalization, stigma and discrimination deter individuals from seeking services.

Funding for services to address the HIV-related needs of people who inject drugs is likely to pose a particular challenge. Several countries, such as Armenia, currently receive grant funding for harm reduction services from the Global Fund to Fight AIDS, Tuberculosis and Malaria, but such support is scheduled to expire in 2015. As many of the countries with epidemics driven by injecting drug use are middle-income, other international financing sources for HIV programmes are likely to be quite limited. It is vital that countries recognize the public health importance of these programmes and step forward with new financing.

National ownership of the HIV response for people who inject drugs is critical. Currently, many countries have yet to face up to the gap between current responses and the agreed target of halving new infections among people who inject drugs by 2015. In Central Asia, for example, seven out of eight countries report that they are 'on target' to achieve the 50% target, even though draconian policy and legislative obstacles, and low service coverage, prevent meaningful HIV prevention for many people who inject drugs in many countries in the region.

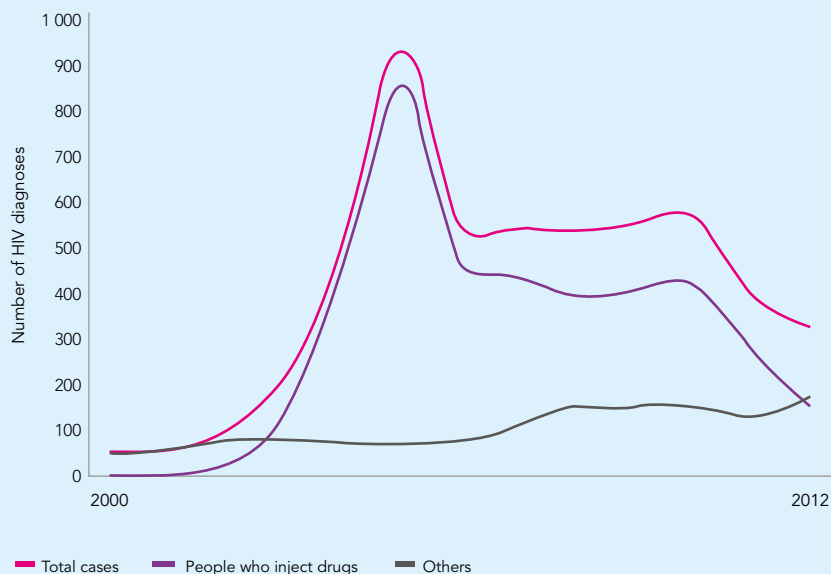
While countries that have introduced needle and syringe programmes, opioid substitution therapy and other harm reduction components should be applauded, urgent attention is now needed to bring these services to scale. In Azerbaijan, only 68 people are receiving opioid substitution therapy. In Georgia and Kazakhstan, the figures are 650 and 207 people, respectively – a tiny fraction in each country of the number of people who need the service.

Scaling up harm reduction in Mauritius

HIV transmission through injecting drug use plays a critical role in the national epidemic in Mauritius (see Figure 2.5). In 2011, it was estimated that 51.6% of the country's 10 000 people who inject drugs were living with HIV, with a particularly heavy concentration in Port Louis. In 2012, a separate study determined that 22.3% of the 9 125 sex workers in the country were living with HIV, with 40% of sex workers also injecting drugs. People who inject drugs account for 40% of prison inmates, a population with an estimated HIV prevalence in 2012 of 24.8%.

Mauritius demonstrates the potential for political will to expedite service scale-up and dramatically improve health outcomes for people who inject drugs. Following the introduction of large-scale harm reduction measures in 2006, the proportion of estimated HIV transmissions stemming from injecting drug use fell from 92% in 2005 to 47% in 2012. Harm reduction coverage is much higher in Mauritius than in many other countries – 25% for needle and syringe programmes, 60% for opioid substitution therapy and 75% for antiretroviral therapy.

FIGURE 2.5
HIV diagnoses among people who inject with drugs and other populations, Mauritius, 2000–2012



Source: Mauritius National AIDS Secretariat (2013). National Strategic Framework for HIV and AIDS 2013–2016, p. 30.

3. ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

As a result of sustained progress in scaling up services to prevent mother-to-child transmission, the world is within reach of key components of the push to eliminate new infections among children. If scale-up is continued, it is possible to provide services to 90% of pregnant women living with HIV by 2015 to prevent mother-to-child transmission of HIV. If other services to end vertical transmission and safeguard maternal health are accelerated (see box below), it will be possible to reduce the number of new HIV infections among children by 90%. To keep mothers alive and healthy, continued progress is needed in scaling up antiretroviral therapy.

GAINS IN SCALING UP ANTIRETROVIRAL MEDICINES FOR PREGNANT WOMEN

As of December 2012, over 900 000 pregnant women living with HIV globally received antiretroviral prophylaxis or treatment. Coverage of antiretroviral programmes for prevention of mother-to-child transmission (excluding the less-effective single dose nevirapine regimen) increased from 57% (51–64%) in 2011 to 62% (57–70%) in 2012. Four priority countries (Botswana, Ghana, Namibia and Zambia) have already met the goal of providing antiretroviral medicines to 90% of pregnant women living with HIV.

Priority countries of the Global Plan towards the elimination of new infections among children by 2015 and keeping their mothers alive:

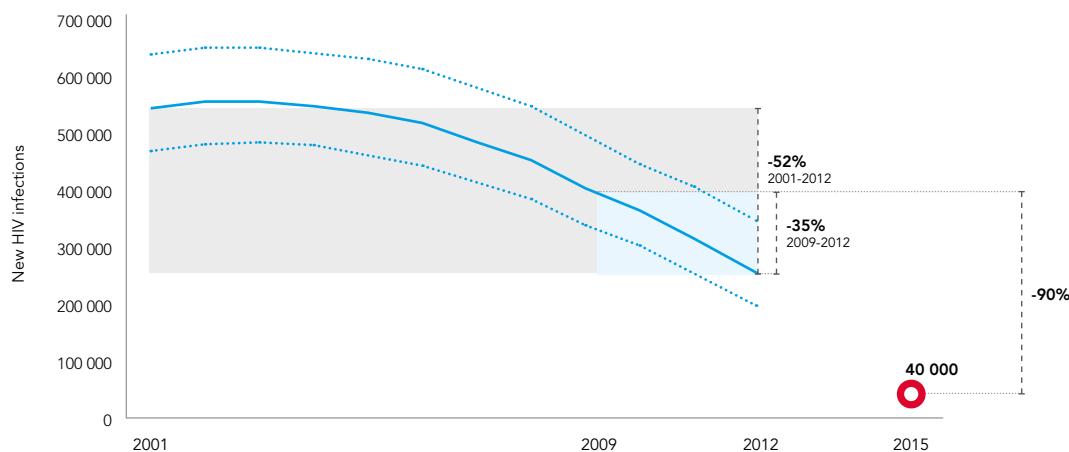
1. Angola
2. Botswana
3. Burundi
4. Cameroon
5. Chad
6. Côte d'Ivoire
7. Democratic Republic of the Congo
8. Ethiopia
9. Ghana
10. India
11. Kenya
12. Lesotho
13. Malawi
14. Mozambique
15. Namibia
16. Nigeria
17. South Africa
18. Swaziland
19. Uganda
20. United Republic of Tanzania
21. Zambia
22. Zimbabwe

IMPACT OF SCALED-UP ANTIRETROVIRAL PREVENTION SERVICES

As a result of scaled-up HIV prevention services, the annual number of newly infected children in 2012 was 260 000 (230 000 – 320 000) in low- and middle-income countries, 35% lower than in 2009 (see Figure 3.1). From 2001 to 2012, there was a 52% decline in new HIV infections among children. Expanded access to services to prevent mother-to-child transmission prevented more than 670 000 children from acquiring HIV from 2009 to 2012. To reach the global target of reducing by at least 90% the number of new infections among children by 2015 (using a 2009 baseline), programme expansion will need to accelerate.

Low- and middle-income countries that are now approaching the low HIV transmission rates among children seen in high-income countries have achieved this by providing high coverage of services for pregnant women living with HIV, to prevent mother-to-child transmission of HIV. In Ghana, for example, the risk that a woman living with HIV will transmit the virus to her child has declined from 31% in 2009 to 9% (7–11%) in 2012. The coverage of services for women living with HIV, to prevent mother-to-child transmission in Ghana, increased dramatically from 32% (27–38%) in 2009 to more than 90% in 2012.

FIGURE 3.1
Number of new HIV infections among children in low- and middle-income countries, 2001–2012 and 2015 target



Source: UNAIDS 2012 estimates

Key elements of eliminating new HIV infections among children and keeping their mothers alive

The Global Plan towards the elimination of new infections among children by 2015 and keeping their mothers alive recommends a set of priority actions under four key programmatic components:

1. Preventing new HIV infections among women of reproductive age.
2. Helping women living with HIV avoid unintended pregnancies.
3. Ensuring that pregnant women have access to HIV testing and counselling; and that those who test positive have access to antiretroviral medicines to prevent transmission during pregnancy, delivery or breastfeeding.
4. Providing HIV care, treatment and support for women, children living with HIV and their families.

The Global Plan prioritizes scale-up in 22 priority countries that collectively account for almost 90% of pregnant women living with HIV

LAGS IN COVERAGE OF ANTIRETROVIRAL PREVENTION SERVICES FOR PREGNANT WOMEN

Among regions, there is considerable variation in the coverage of prevention services for pregnant women living with HIV. Coverage is highest in Eastern and Central Europe and the Caribbean (more than 90%), while coverage is much lower in Asia and the Pacific and the Middle East and North Africa (less than 20%). Among

the 21 sub-Saharan African countries prioritized by the Global Plan, antiretroviral medicines were provided during pregnancy for the prevention of new HIV infections among children to 65% (57–70%) of pregnant women living with HIV compared to 62% (57–70%) in all low- and middle-income countries overall (see Table 3.1).

TABLE 3.1
Coverage of antiretroviral prevention services for pregnant women living with HIV in generalized epidemic countries, 2012

Less than 50%	50–79%	80% and above
Angola	Burkina Faso	Botswana
Benin	Burundi	Ghana
Chad	Cameroon	Haiti
Congo	Côte d'Ivoire	Liberia
Democratic Republic of the Congo	Gabon	Mozambique
Djibouti	Kenya	Namibia
Eritrea	Lesotho	Rwanda
Ethiopia	Malawi	Sierra Leone
Guinea	Uganda	South Africa
Guinea-Bissau	United Republic of Tanzania	Swaziland
Nigeria		Togo
Papua New Guinea		Zambia
South Sudan		Zimbabwe

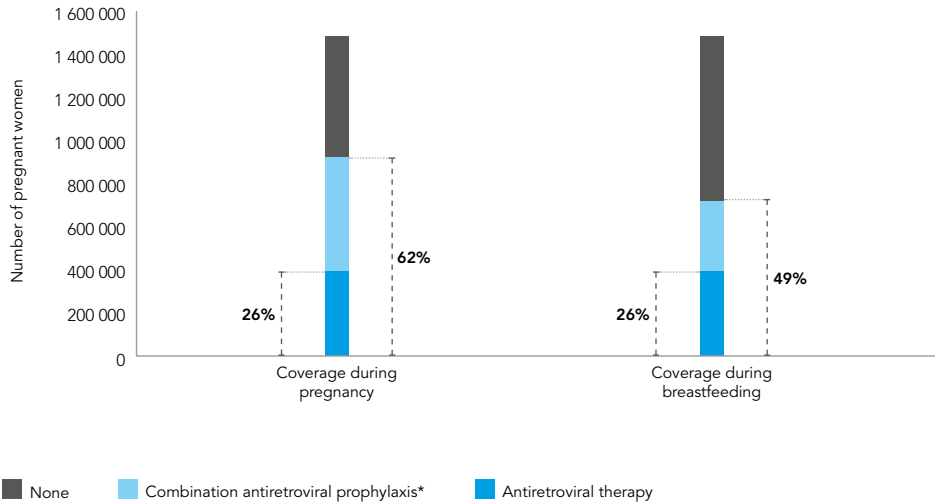
Source: UNAIDS 2012 estimates

While many countries have made historic strides in expanding access to anti-retroviral medicine for pregnant women living with HIV, progress has been much slower in other countries. As of December 2012, 13 countries with generalized epidemics – including five priority countries (Angola, Chad, Democratic Republic of the Congo, Ethiopia and Nigeria) – reached less than 50% of pregnant women living with HIV with antiretroviral medicines to prevent vertical transmission. Although vertical transmission prevention coverage among pregnant women living with HIV typically trends upwards, even in settings where sub-optimal coverage prevails, notable declines in coverage occurred in Lesotho (from 75% in 2011 to 58% in 2012) and Kenya (66% to 53%), while it stalled in Angola (17% in both years).

Breastfeeding women living with HIV are advised to use antiretroviral medicines when breastfeeding their newborns. In 2012, antiretroviral coverage was substantially lower during the breastfeeding period (49%) than during pregnancy and delivery (62%). It is now estimated that half of all new episodes of HIV transmission to children occur during the breastfeeding period when the majority of lactating women are not receiving the prophylaxis necessary to prevent HIV transmission (see Figure 3.2).

FIGURE 3.2

Number and percentage of HIV-positive pregnant women in low- and middle-income countries who received antiretroviral medicine to prevent new HIV infections among children, during pregnancy and breastfeeding, 2012



Source: UNAIDS 2012 estimates

* The 2006 WHO guidelines proposed starting ARV prophylaxis in the third trimester of pregnancy, with a regimen of twice daily zidovudine (AZT), single-dose nevirapine (NVP) at onset of labour, a combination of AZT+3TC during delivery and one week postpartum, as well as infant prophylaxis for one week after birth. The 2010 guidelines introduced options A and B, which should start earlier in pregnancy. Option A is twice-daily AZT for the mother and infant prophylaxis with daily NVP infant prophylaxis for one week after the end of the breastfeeding period, or either AZT or NVP for six weeks after birth if the infant is not breastfeeding. Option B is a three-drug prophylactic regimen for the mother taken during pregnancy and throughout the breastfeeding period, as well as infant prophylaxis for six weeks after birth, whether or not the infant is breastfeeding. <http://www.who.int/hiv/pub/mctct/PMTCTfactsheet/en/>

PERSISTENT GAPS IN KEY ELEMENTS OF PREVENTION OF MOTHER-TO-CHILD HIV TRANSMISSION

While access to antiretroviral medicines to prevent mother-to-child HIV transmission has increased, progress has been more modest on other programmatic aspects of the Global Plan, including primary HIV prevention for women. The number of women newly infected with HIV declined by 44% from 2009 to 2012 in Ghana, by 23% in Uganda and by 21% in South Africa. In other priority countries, however, the decline in the number of new HIV infections among women has decreased more slowly or even stalled, and remains at high levels. Globally, the pace of decline in new HIV infections among women has slowed since 2008, underscoring the need for intensified efforts to prevent new HIV infections among women and their sexual partners.

The unmet need for family planning services among women living with HIV continues to undermine efforts to eliminate new HIV infections among children. For women globally, unmet need for family planning declined from 15.4% in 1990 to 12.3% in 2010, according to a recent review of nationally representative surveys.¹ In East Africa and West Africa, however, more than 20% of women had an unmet need for family planning services, with no reduction in unmet need reported for 1990–

2010. This means that more than one in five women in the region express the desire to delay or stop childbearing, but are not using contraception. In addition to reducing the risks of HIV acquisition among children, rights-based prevention of unintended pregnancies also helps improve maternal morbidity and reduces maternal deaths.

TREATMENT COVERAGE DEFICITS FOR PREGNANT WOMEN

Among pregnant women who needed antiretroviral therapy for their own health in 2012, 58% received HIV treatment – lower than the 64% (61-69%) treatment coverage for adults overall. In ten priority countries in 2012, fewer than half of pregnant women living with HIV and with CD4 counts equal to or lower than 350 cells per microlitre (the threshold for HIV treatment initiation under the earlier 2010 World Health Organization (WHO) antiretroviral treatment guidelines) received antiretroviral therapy for their own health. However, the gap between pregnant women and all adults is declining as new guidelines are being rolled out on the importance of starting pregnant women on antiretroviral therapy.

To spur accelerated HIV treatment scale-up, Malawi has begun systematically offering lifelong antiretroviral therapy to pregnant women living with HIV (Option B+), leading to a 7.5-fold increase in the number of such women receiving therapy over a 15-month period in 2011–2012.² In 2013, WHO issued new consolidated guidelines for use of antiretroviral medicines for HIV treatment and prevention, recommending initiation of lifelong antiretroviral therapy for all pregnant and breastfeeding women living with HIV, regardless of their CD4 count.

National empirical data on maternal mortality are rare as the result of various monitoring challenges, including the frequent lack of complete civil registration systems and the lack of reliable attribution of death in the civil registration systems that do exist. Most countries continue to rely on modelling to estimate maternal mortality and UNAIDS is working with partners to improve estimates of excess pregnancy-related mortality associated with HIV. However, current data suggest that, in high-prevalence countries, HIV contributes significantly to pregnancy-related mortality, and points at the urgent need to ensure that eligible women living with HIV receive complete treatment, and that HIV treatment services be integrated into sexual and reproductive health services. Recent research demonstrates that provision of antiretroviral therapy would avert much of the maternal mortality in countries with a heavy HIV burden.³

TREATMENT COVERAGE DEFICITS FOR CHILDREN

Children living with HIV continue to experience persistent treatment gaps. In 2012, 647 000 children under 15 years of age were receiving antiretroviral treatment. HIV treatment coverage for children (34% (31-39%)) remained half of coverage for adults 64% (61-69%) in 2012. Although the number of children receiving antiretroviral therapy in 2012 increased by 14% in comparison to 2011, the pace of scale-up was substantially slower than for adults (a 21% increase). In priority countries, only three in 10 children receive HIV treatment.

The failure to expand access in many settings to early infant diagnosis is an important reason explaining why HIV treatment coverage remains much lower for children than for adults. In three priority countries, coverage of less than 5% was reported for early infant diagnostic services in 2012.

IMPROVING PROGRAMMATIC PERFORMANCE AND RESULTS

Since services to prevent mother-to-child transmission were launched, programme managers have struggled to find effective strategies to minimize the number of pregnant women who drop out of services at some point during the process. Until recently, receipt of antiretroviral medicines to prevent HIV transmission has tended to be the final service outcome that has been routinely monitored. Although programmatic aspirations today extend further, with the aim of ensuring HIV-free child survival, monitoring systems have not always kept pace. Key aspects of the service cascade for prevention of mother-to-child transmission, each of which requires rigorous data collection and analysis, include attendance at antenatal clinics, receipt of HIV test results, receipt of antiretroviral medicines during pregnancy and delivery, receipt of antiretroviral medicines during breastfeeding, infant feeding counselling and support, early diagnosis of HIV-exposed newborns, linking HIV-positive newborns to care, and survival for children living with HIV.

Improving both short- and long-term health outcomes for pregnant women living with HIV and their children requires the implementation of systems and protocols for the routine collection, analysis and strategic use of data across the breadth of the service cascade for prevention of mother-to-child transmission. Using such a data-driven approach, countries such as Malawi have gained an increased understanding of the impact of the service cascade and used these findings to inform programme development and implementation.

LOOKING TOWARDS 2015

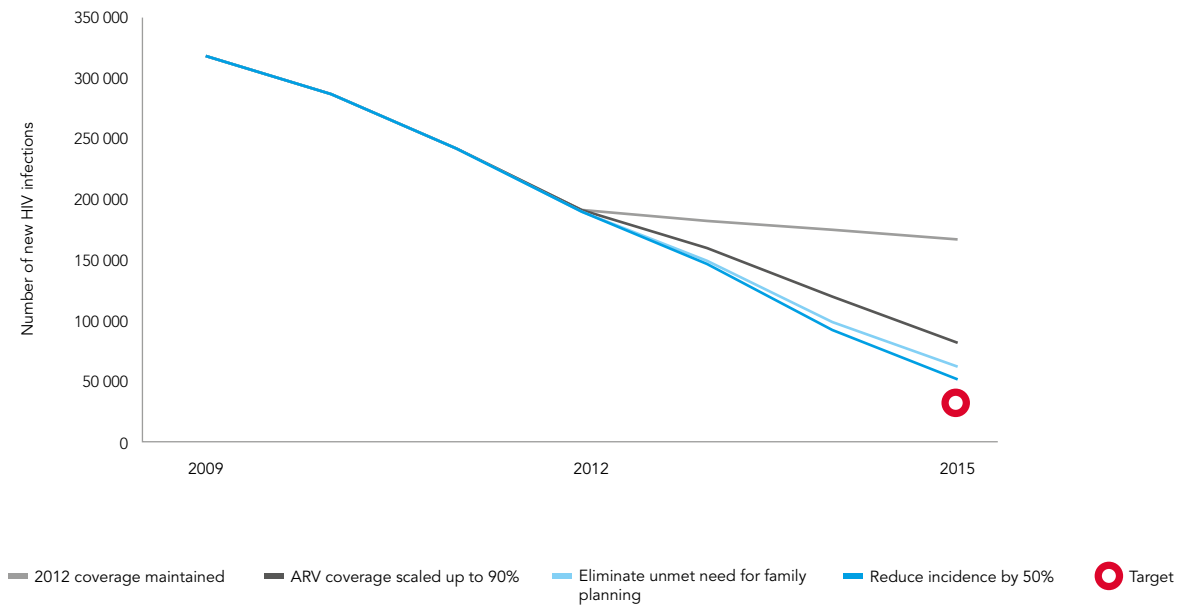
Among 109 countries reporting results in the mid-term reviews, all but two identified elimination of new HIV infections among children and substantially reducing AIDS-related maternal deaths as a national priority. In all countries recognizing this target as a national priority, it has been integrated into national strategic plans. Although most mid-term reviews in all 22 Global Plan priority countries concluded that these countries are on track to reach the 2015 elimination target, the 2013 Global Plan progress report suggests that only about half of priority countries are on track to achieve the 2015 target. The report concluded that improving the situation would require a number of steps, including: reducing the number of women acquiring HIV infection, reducing the unmet need for family planning, increasing access to safe and noncoercive HIV testing, improving the availability of antiretroviral medicines for pregnant women living with HIV and improving the diagnosis and treatment of HIV among children.⁴

An updated analysis of what it will take to reach a 90% reduction in new child infections between 2009 and 2015 shows that, given the achievements by 2012 in the 21 sub-Saharan African Global Plan priority countries, significant effort and innovation will be needed to reach the target. If 90% of HIV positive pregnant women received combined ARV (50% started during the pregnancy and 40% started ART before the pregnancy) and 100% of those women received prophylaxis during breastfeeding HIV incidence was reduced by 50% among reproductive age women, and women living with HIV were able to meet their family planning needs the reduction in new child infections would still only reach an 83% reduction from 2009 levels in 2015. Additional efforts to reduce unmet need for family planning

among women living with HIV and to reaching higher levels of ARV coverage will allow countries to reach the goal of eliminating new child infections (see Figure 3.3).

National mid-term reviews noted several challenges to reaching the target of eliminating new HIV infections among children and substantially improving health outcomes for pregnant women living with HIV. These include operational issues (e.g. women's lack

FIGURE 3.3
Projected impact on new child HIV infections by programmes to prevent mother to child transmission, 21 Global Plan priority countries in sub-Saharan Africa, 2009–2015



Source: UNAIDS analysis 2013, data from 2013–2015 are projections

of awareness of services, loss of mother-baby pairs across the service cascade, insufficient male involvement, failure to identify many children exposed to HIV, stock-outs of key commodities, difficulties in implementing recommended policy changes for infant feeding, shortages of essential human and financial resources, and insufficient integration and decentralization of services), issues of programmatic reach (e.g. late diagnosis of many pregnant women, inadequate access to safe delivery and post-delivery follow-up, a high proportion of home deliveries in many countries) and policy issues (e.g. deterrent effects of stigma and discrimination). The Global Plan provides a framework to enable countries to critically examine existing barriers and improve service delivery and health outcomes for mothers living with HIV and their children.

During mid-term reviews, countries recognized the need to take action to speed scale-up and address programmatic shortcomings. Key actions include focused training and capacity building support for health care workers, further integration and decentralization of services, expanded access to early infant diagnosis, implementation of task shifting and other measures to address human resource challenges, and investment in programming to generate greater demand for services. Countries also cited the need to strengthen procurement and supply management systems, enhance community engagement, broaden efforts to promote the realization of women's human rights, and increase the investment of national governments in services to prevent mother-to-child transmission and in broader services for maternal and child health. A number of countries in sub-Saharan Africa reported planning to offer Option B+, for lifelong antiretroviral therapy to all pregnant women living with HIV.

While attention to date has primarily focused on scaling up HIV testing and counselling and antiretroviral prophylaxis in antenatal settings, countries cited an urgent need to improve results relating to other key aspects of the Global Plan. In particular, countries emphasized the importance of primary HIV prevention, reducing unmet need for family planning among women living with HIV and reaching HIV-positive breastfeeding women with prevention services. Modelling commissioned by UNAIDS indicates that integrating the continued scale-up of antiretroviral prophylaxis with strengthened primary prevention, achievement of high prevention coverage for breastfeeding women and elimination of the unmet need for family planning services would increase the likelihood of achieving the 2015 target compared to an approach that does not include these gains.

Cambodia's Boosted Linked Response

In 2008, Cambodia introduced the Linked Response initiative to reach all pregnant women by developing and utilizing linkages between existing HIV/STI and sexual and reproductive health services and mobilizing existing community based entities. Building on the success of this initiative, in 2013 Cambodia launched the Boosted Linked Response strategy to accelerate uptake of services to prevent mother-to-child transmission, reduce loss across the HIV prevention cascade, improve service quality and health outcomes for women living with HIV and their children and reduce deaths among mothers living with HIV and HIV-exposed children. The overarching goal of the Boosted Linked Response is to achieve the virtual elimination of new HIV infections among children, lowering the mother-to-child transmission rate to less than 5% in 2015 and to less than 2% by 2020. The Boosted Linked Response also seeks to reduce the incidence of congenital syphilis to 0.5 cases per 1 000 live births.

The Boosted Linked Response calls for focused programmatic action⁵ to:

- Increase access to antenatal care for pregnant women.
- Increase coverage of HIV and syphilis testing for pregnant women.
- Improve early service uptake and retention of pregnant women infected with HIV and/or syphilis throughout the prevention cascade.
- Improve the health, dignity and access to prevention of women living with HIV or at high risk of acquiring HIV.
- Reduce loss to follow-up among HIV-exposed infants to optimize antiretroviral prophylaxis and ensure early infant diagnosis through HIV DNA-PCR testing.
- Ensure rapid enrolment of infants living with HIV in paediatric HIV care.

4. REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Sustained progress in scaling up access to HIV treatment has put within reach the goal of providing antiretroviral therapy to 15 million people by 2015. However, access to treatment varies considerably within and between countries and regions, with especially poor coverage for children.

Antiretroviral therapy can help to prevent people living with HIV from dying from AIDS and from developing tuberculosis, becoming ill and transmitting tuberculosis and HIV. Emerging science indicates that people should start HIV treatment earlier to realize these benefits. The new HIV treatment guidelines provided by the World Health Organization (WHO), issued in June 2013, recommend starting treatment when an individual's CD4 count falls below 500 cells/ μ L and immediately for pregnant women, HIV-positive partners in serodiscordant couples, children younger than five and people with HIV-associated tuberculosis and Hepatitis B. The 2013 WHO guidelines on HIV treatment will require substantially faster scale-up, coupled with innovation and programmatic adaptation, to ensure that those who are eligible for HIV treatment receive it.

In July 2013, UNAIDS joined with WHO, the US President's Emergency Plan For AIDS Relief (PEPFAR), the Global Fund to Fight AIDS, tuberculosis and Malaria and other partners to launch the *Treatment 2015* initiative, which aims to ensure that the world reaches its 2015 HIV treatment target as a critical stepping-stone towards universal treatment access. *Treatment 2015* emphasizes *speed* in scaling up, enhanced strategic *focus* to intensify scale-up in key geographic areas and populations, and *innovation* in programme planning and service delivery.

CONTINUED PROGRESS IN 2012

As of December 2012, an estimated 9.7 million people in low- and middle-income countries were receiving antiretroviral therapy, an increase of 1.6 million over 2011. That brings the world nearly two-thirds of the way towards the 2015 target of 15 million people accessing antiretroviral treatment. Under the 2010 WHO guidelines, 61% (57–66%) of all persons eligible for HIV treatment in low- and middle-income countries had obtained antiretroviral therapy in 2012 (see Figure 4.1). Taking into account the 875 000 people receiving antiretroviral therapy in high-income countries, a total of 10.6 million people were receiving antiretroviral therapy as of December 2012. However, under the 2013 WHO guidelines,

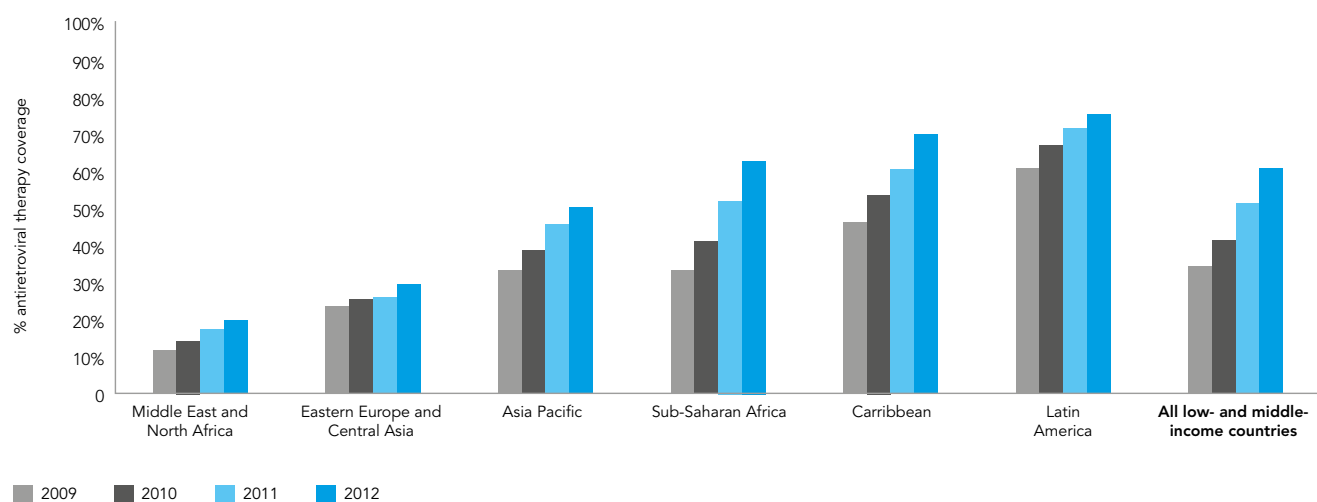
Countries where 90% of the people with an unmet need for antiretroviral treatment live:

1. Angola
2. Brazil
3. China
4. Cameroon
5. Central African Republic
6. Chad
7. Colombia
8. Côte d'Ivoire
9. Democratic Republic of the Congo
10. Ethiopia
11. Ghana
12. India
13. Indonesia
14. Kenya
15. Lesotho
16. Malawi
17. Mozambique
18. Myanmar
19. Nigeria
20. Russian Federation
21. South Africa
22. South Sudan
23. Thailand
24. Togo
25. Uganda
26. Ukraine
27. United Republic of Tanzania
28. Viet Nam
29. Zambia
30. Zimbabwe

the 9.7 million people receiving antiretroviral therapy in low- and middle-income countries represents only 34% (32-37%) of the 28.6 (26.5-30.9) million people eligible in 2013.

It is increasingly clear that everyone infected with HIV will eventually need treatment. With an estimated 35.3 (32.2-38.8) million people now living with HIV, this represents a significant need to scale up HIV testing and treatment, while continuing to invest in prevention and other programmes to combat new HIV infections.

FIGURE 4.1
Percentage of people eligible who are receiving antiretroviral therapy (based on 2010 WHO guidelines) in low- and middle-income countries, by region, 2009–2012



Source: UNAIDS 2012 estimates.

Globally, the number of people receiving antiretroviral treatment has tripled over the last five years. Since 2005, sharp increases in the number of people receiving antiretroviral treatment have occurred in all regions of the world, with the exception of Eastern Europe, Central Asia, the Middle East and North Africa.

National mid-term reviews highlighted several approaches that have proven effective in spurring accelerated HIV treatment scale-up. Bringing services closer to people living with HIV through decentralization has improved treatment uptake. Establishment and updating of clinical protocols have enhanced the quality of care and strengthened HIV treatment capacity. In the face of limited human resources for health, many countries have successfully implemented task shifting in clinical settings, with nurses administering antiretroviral therapy. Efforts to maximize existing human resources for health need to be combined with intensified efforts to train and deploy new physicians, nurses, community health workers and other health personnel.

PERSISTENT DEFICITS IN COVERAGE

Although progress in scaling up HIV treatment is genuine, health gains from antiretroviral therapy are unevenly shared as a result of substantial variations in treatment access.

As Section 3 explained, HIV treatment coverage for children is a little more than half that of adults. In nine of the 22 countries prioritized by the Global Plan in relation to the elimination of new infections among children by 2015 and efforts to keep their mothers alive, 25% or less of treatment-eligible children received antiretroviral therapy in 2012.

In most regions, including sub-Saharan Africa, HIV treatment coverage for men is lower than coverage among women. In low and middle income countries, 57% of treatment-eligible men received antiretroviral therapy in 2012, compared to 73% of treatment-eligible women.

Key populations also experience unique barriers to HIV treatment, often as the result of fears that they will experience discrimination if they seek services in mainstream health settings. Although reliable HIV treatment coverage estimates are not available for men who have sex with men, people who inject drugs, sex workers or transgender individuals, previous reports indicate that these populations face substantial barriers to essential health services and experience extremely low HIV treatment coverage. A lack of clear commitments to scale-up coverage for many key populations has contributed to the neglect of their needs in the establishment and expansion of HIV treatment services.

People affected by humanitarian crises confront unique barriers to health care access, including concerns regarding confidentiality, denial of access to asylum procedures, fears regarding refoulement and restrictions on freedom of movement. Globally, there were an estimated 45.2 million refugees in 2012, including 26.4 million internally displaced persons.¹ Adolescents (10–19 years) are the only age group in which AIDS deaths have risen between 2001 and 2012. This trend in AIDS deaths is a result of poor prioritization of adolescents in strategic plans for scale-up of HIV treatment and lack of testing and counselling.

IMPACT OF SCALED-UP ANTIRETROVIRAL THERAPY

By reducing the virus circulating within a setting or population, scaled-up antiretroviral therapy helps reduce the number of new HIV infections. From 1995 to 2012, antiretroviral therapy averted 6.6 million AIDS-related deaths worldwide, including 5.5 million deaths in low- and middle-income countries (see Figure 4.2).

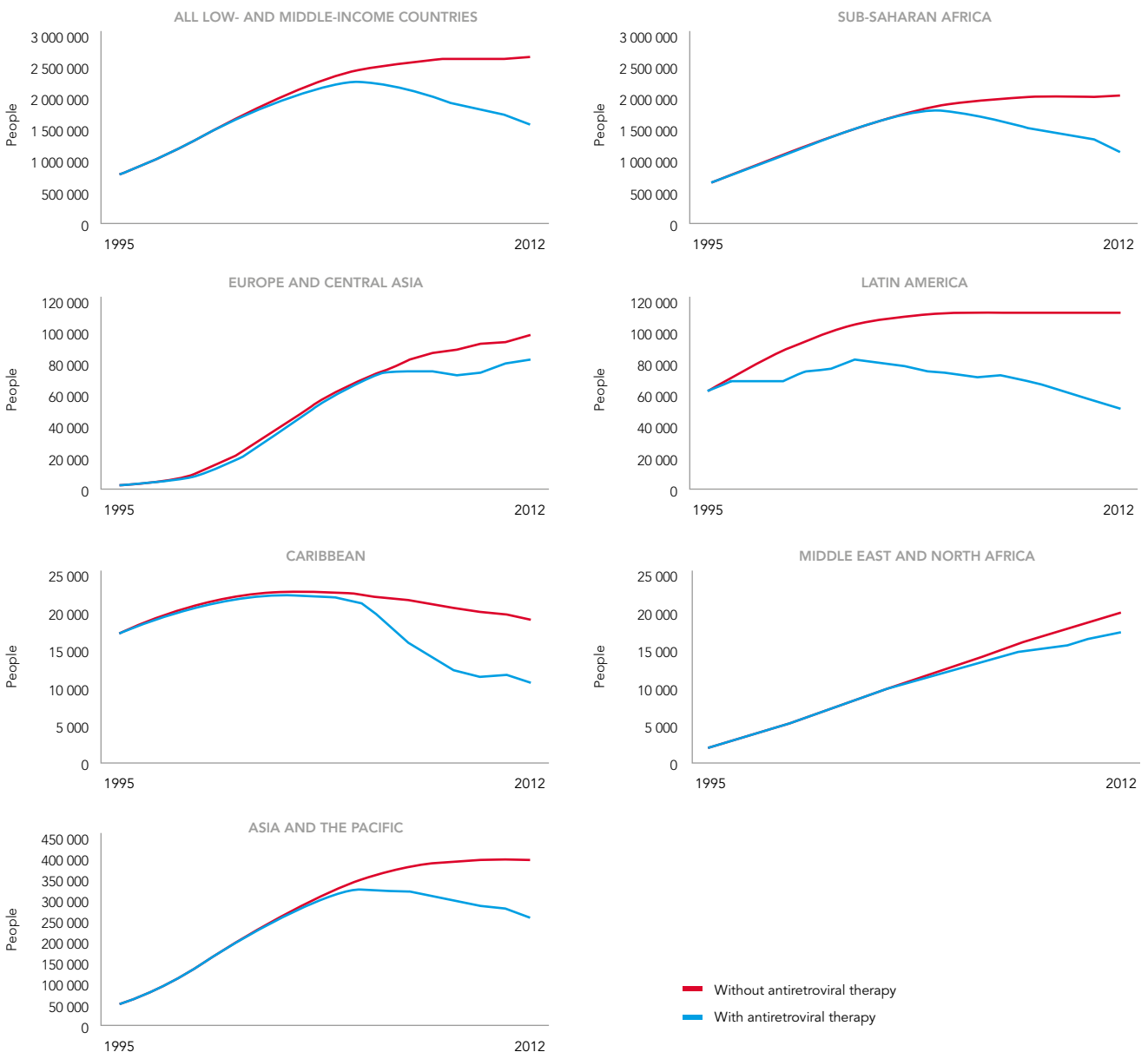
Where antiretroviral therapy has been scaled up, clear health gains have resulted. In 2011, life expectancy in the KwaZulu-Natal province of South Africa was 11.3 years higher than in 2003, when HIV treatment scale-up began.²

Investment in antiretroviral therapy is cost-effective and may also result in cost savings. Recent economic analysis found that investment in HIV treatment services generates economic returns up to three times greater as a result of increased employment and productivity and averted or deferred future expenses for medical services and care of orphans.³

Declines in the annual number of AIDS-related deaths illustrate the powerful health benefits of scaled-up antiretroviral treatment. From a high of 2.3 (2.1–2.6) million in 2005, the annual number of AIDS-related deaths fell to 1.6 (1.4–1.9) million in 2012. Despite the slow increase in antiretroviral treatment coverage among children aged 0–14 years, AIDS-related deaths among children have declined more quickly due to the impact of efforts to prevent mother-to-child transmission. In 2012, 210 000 (190 000 – 250 000) children died of AIDS-related causes, compared to 320 000 (290 000 – 360 000) in 2005.

Scaled-up antiretroviral therapy has the potential to dramatically alter the trajectory of national epidemics, lowering viral loads within communities and thereby slowing the spread of HIV. Further scale-up will be required to maximize the impact of HIV treatment and help create a foundation for ending the AIDS epidemic. A recent analysis by Futures Institute estimates that achieving 80% of the HIV treatment coverage recommended by the 2013 antiretroviral guidelines would lower the annual number of adults acquiring HIV from 2.4 million in 2011 to 800 000 in 2025 (compared to the 1.25 million suggested by the 2010 guidelines).⁴

FIGURE 4.2
Estimated number of AIDS-related deaths, with and without antiretroviral therapy, in low- and middle-income countries, and by region, 1995–2012



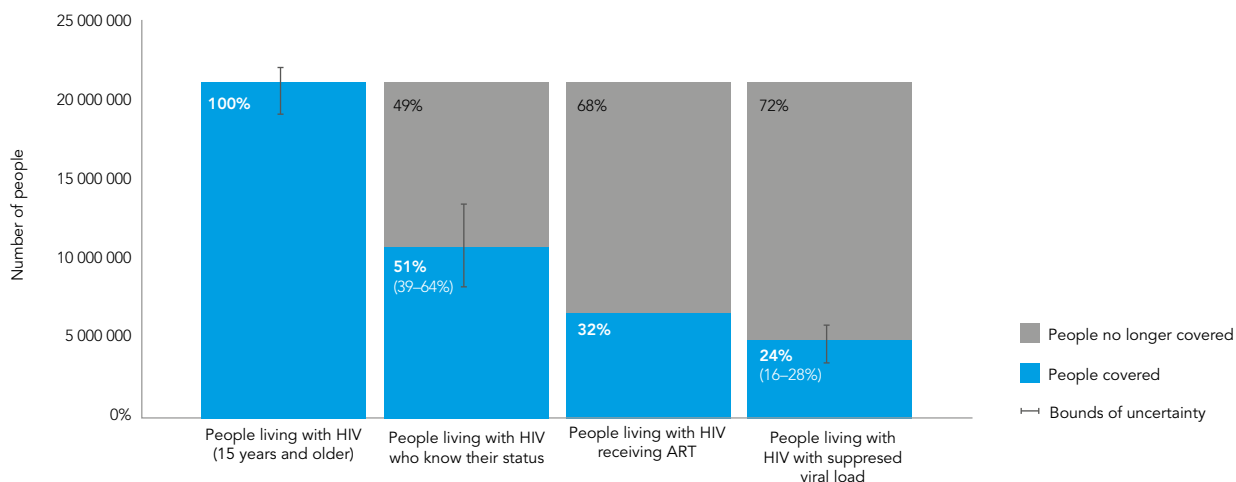
Source: UNAIDS 2012 estimates.

CLOSING GAPS IN THE HIV TREATMENT CASCADE TO MAXIMIZE ITS PUBLIC HEALTH IMPACT

Over the years, the goal of antiretroviral treatment has expanded to include not only prevention of AIDS-related morbidity and mortality but also prevention of HIV transmission. The public health and clinical goal is to ensure that everyone living with HIV knows their status, accesses care and treatment, and achieves sustained viral suppression. However, despite the ongoing scale-up of antiretroviral therapy, HIV transmission and AIDS-related mortality remain high in many parts of the world. In the quest to optimize HIV treatment, the HIV treatment cascade has emerged as an important tool that graphically illustrates key transitions in the HIV treatment continuum and how each of these steps affects the ultimate aim of ensuring viral suppression.

To achieve viral suppression, an individual must be diagnosed with HIV, linked to care, remain engaged in care and receive antiretroviral therapy where medically indicated. Although the number of people receiving antiretroviral therapy continues to rise in sub-Saharan Africa, helping lower rates of HIV-related illness and death, the region has yet to experience the full potential benefit of HIV treatment. In sub-Saharan Africa, it is estimated that approximately three-quarters of adults living with HIV have not achieved viral suppression as a result of gaps/shortfalls at each stage of the treatment cascade (see Figure 4.3).

FIGURE 4.3
Abbreviated HIV treatment cascade for sub-Saharan Africa, 2012



Sources:

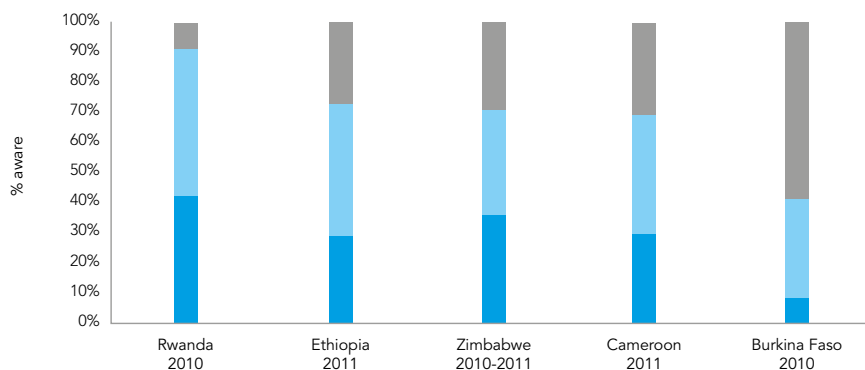
- UNAIDS 2012 estimates.
- Demographic and Health Surveys, 2007–2011 (www.measuredhs.com) and one community based survey in South Africa (Kranzer, K., van Schaik, N., et al. (2011). High prevalence of self-reported undiagnosed HIV despite high coverage of HIV testing: a cross-sectional population based sero-survey in South Africa. *PLoS ONE* 6(9): e25244.) 51% is the mid-point between the low and high bounds. The low bound (39%) is the percentage of people living with HIV who are very likely to know their status – they tested positive in the survey and report receiving the results of an HIV test in the previous twelve months. The high bound (64%) is calculated as the percentage who tested positive in the survey and who self-report ever being tested for HIV (the test conducted in the survey is not disclosed to the recipients). Those persons who report never having been tested for HIV do not know their HIV status and make up the remaining 36%.
- GARPR 2012.
- Barth R E, van der Loeff MR, et al. (2010). "Virological follow-up of adult patients in antiretroviral treatment programmes in sub-Saharan Africa: a systematic review." *Lancet Infect Disease* 10(3): 155-166.

Notes: No systematic data are available for the proportion of people living with HIV who are linked to care, although this is a vital step to ensuring viral suppression in the community.

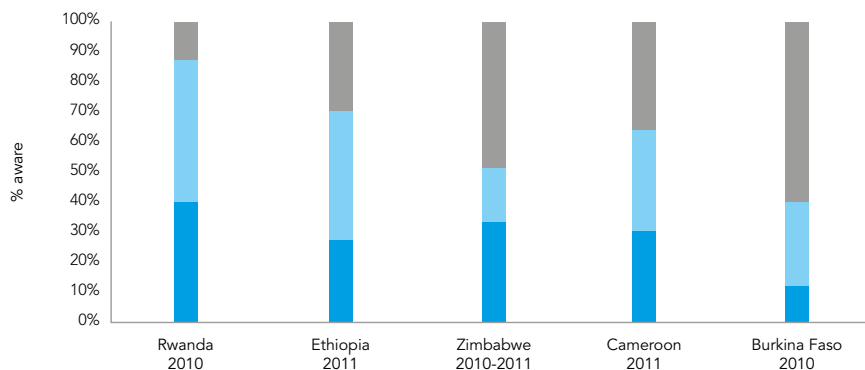
A major impediment to the goal of zero AIDS-related deaths and of achieving widespread viral suppression among people living with HIV occurs at the beginning of the HIV treatment cascade. Notwithstanding that HIV testing has been significantly scaled up in sub-Saharan Africa in the past decade, according to 15 household surveys conducted between 2007 and 2011 in sub-Saharan Africa, an estimated 36% of people in the region have never been tested for HIV. While the estimated 39% of people in sub-Saharan Africa tested within the last year are likely to know their HIV status, the additional 25% of people who were tested in earlier years may not have knowledge of their current HIV status (see Figure 4.4). In geographic settings and populations with high HIV prevalence and incidence, annual HIV testing is recommended among HIV-negative persons.

FIGURE 4.4
Knowledge of HIV status among men and women living with HIV, selected countries, 2010–2011

A HIV-positive women



B HIV-positive men



■ Likely aware of status – tested in last 12 months
 ■ Awareness of status is unknown
 ■ Not aware of status – never tested

Source: Demographic and Health Surveys 2010–11

Due to lack of access to testing, one in four people who initiate antiretroviral therapy in low- and middle-income countries have CD4 counts under 100, reflecting late diagnosis and, therefore, a high risk of HIV-related illness and death.⁵

In all regions, women are more likely to have been tested than men, most likely due to the implementation of the routine offer of HIV testing in antenatal settings. While the number of HIV tests performed in 76 countries submitting relevant data in their Global AIDS Progress Reports rose by nearly 12% in 2012, substantially greater gains in HIV testing uptake will be needed to increase the proportion of people living with HIV who have access to treatment.

Until recently, stand-alone voluntary counselling and testing clinics were the principal testing modality in many countries. In 2004, UNAIDS amplified its testing guidance to support provider-initiated offers of HIV testing and detailed WHO/UNAIDS guidance on provider-initiated testing was issued in 2007. Some country studies suggest that provider-initiated counselling and testing has increased HIV testing coverage.⁶ In recent years, door-to-door home-based testing has been demonstrated to increase the reach of HIV testing services in sub-Saharan Africa.^{7,8} Using rapid diagnostic tests delivers an initial HIV test result in less than 30 minutes, potentially accelerating an individual's receipt of the information, services and support systems they need. Such tests have provided some promising results in hard-to-reach populations.

Limitations of these approaches have been noted, including the under-use of stand-alone and facility-based voluntary counselling and testing, low rates of client-initiated testing among key populations,⁹ high costs and anonymity concerns associated with door-to-door campaigns, and lack of access by men, rural populations and the poor.¹⁰ Recognizing the need to increase knowledge of HIV status and to encourage earlier diagnosis of infection, many countries are using partner/couples testing and other innovative testing approaches.

In addition to their suitability for facility-based and community settings, rapid diagnostic tests may be used by an individual to test themselves in the privacy of their own home. In 2012, an HIV oral fluid rapid diagnostic test was approved by the United States Food and Drug Administration (US FDA) and made available for over-the-counter purchase in the United States. Oral fluid rapid diagnostic tests have been prequalified by WHO since 2004, but they remain relatively expensive. With the anonymity offered by self-testing and the high acceptability found in pilot exercises in both concentrated and generalized epidemic settings, the approach offers potential for rethinking conventional approaches and assumptions about testing. The impact of self-testing on linkage to care is under investigation in a number of studies. Preliminary results from a major cluster-randomized trial in Malawi found that, in the initial follow-up period (four months), HIV treatment uptake in communities with self-testing alone was no better than the control condition, but uptake more than doubled when self-testing was accompanied by assisted home initiation of antiretroviral therapy.

Ensuring that people living with HIV are diagnosed earlier requires scale-up of both clinical and community-based HIV testing. Brazil, Kenya, Malawi, South Africa, Uganda, the United Republic of Tanzania and Zambia have integrated the promotion of HIV testing in community campaigns that provide screening or prevention services for multiple diseases (e.g. distribution of long-lasting insecticide treatment bed nets, safe water filters, diabetes, hepatitis and/or screening for sexually-transmitted

infections). Grass-roots community organizations played a pivotal role in increasing testing uptake in Zimbabwe in the mid-2000s.¹¹ Project Accept (HPTN 043), a large randomized community trial, found that community engagement, mobile testing and post-test services resulted in higher uptake of testing than standard clinic-based voluntary counselling and testing. A systematic review and meta-analysis of evidence for community-based HIV testing and counselling showed that community-based testing achieved high rates of uptake, reached people living with HIV with high CD4 counts, and linked individuals into care.¹²

Little systematic data exist on the proportion of people living with HIV who are linked to care.¹³ Once linked to care there are mixed findings regarding retention in care. According to data from 18 countries, retention in HIV care declines over time, with 12- and 60-month retention rates of 86% and 72%, respectively. There is considerable variation in reported retention rates among countries. Food support has been shown to support HIV treatment success, including adherence and retention in care.¹⁴

Improving retention through community engagement

Catholic Relief Services, a member organization of Caritas Internationalis, has worked with a consortium of partners to implement AIDSRelief, an HIV care and treatment program that was funded by the US President's Emergency Plan for AIDS Relief (PEPFAR) since 2004. The AIDSRelief programme supported the rapid scale-up of HIV care and treatment services for poor and underserved people in 10 countries across Africa, the Caribbean, and Latin America. The programme worked mainly with faith-based local partners including hospitals, clinics, dispensaries, and local community groups, including people living with HIV.

AIDSRelief developed an approach that enabled strong adherence to treatment, by using family and community engagement, optimal drug selection, use of longitudinal medical records and the provision of qualified medical, laboratory, community and pharmacy support. AIDSRelief understood how to treat each patient for the best individual outcomes and how to scale that model to treat tens of thousands without compromising quality or capping patient enrolment. Catholic Relief Services and its partners deliberately strengthened local capacities and later transitioned the AIDSRelief program to local ownership. By the end of the AIDSRelief programme in February 2013, it had enrolled more than 700 000 patients in care including 395 000 patients on antiretroviral therapy, with 10.6% loss to follow-up, an 85% retention rate, 7.8% mortality rate and 88.2% viral suppression.

Recent cascade analyses in Brazil, China, Malawi and Viet Nam confirm that many individuals are lost at various stages of the HIV treatment continuum, reducing the proportion of people living with HIV who achieve viral suppression and other treatment benefits.¹⁵ Such analyses can help national planners and programme implementers in devising focused interventions to improve programme outcomes. These exercises also provide useful guidance for planning and implementing studies to identify risk factors for non-retention and evaluate interventions to reduce patient loss during the HIV treatment process. Community groups and caregivers can play an important role in treatment adherence. Efforts to monitor results across the HIV treatment cascade should use the total population of people living with HIV, diagnosed and undiagnosed, as the denominator for analysis.

Continuity of care is particularly challenging for people living with HIV who are affected by humanitarian crises. A 2013 mapping exercise conducted by UNHCR concluded that many people receiving antiretroviral therapy in the Central African Republic were forced to flee as a result of conflict, leading to the discontinuation of HIV treatment for thousands as a result of the lack of functional health services in the remote settings to which they migrated.

As an adjunct to the cascade, countries may find it useful to estimate the proportion of the total adult population that has unsuppressed HIV. In countries with very low HIV treatment coverage, this will be roughly the same as adult HIV prevalence. However, as countries scale up HIV treatment, the proportion with an unsuppressed virus load will decline, reflecting a safer population-level environment with fewer opportunities for transmission. As HIV prevalence is projected to increase as people live longer as a result of HIV treatment, the percentage of people with an unsuppressed virus load may become a more useful indicator of the potential for transmission of HIV.

ENHANCING THE DURABILITY AND EFFICIENCY OF HIV TREATMENT

HIV treatment is life-long and, in most cases, should lead to a near-normal life span. Towards this end, optimal durability of treatment regimens is needed to delay the emergence of drug resistance, which reflects treatment failure and signals the need to switch regimens. Earlier assessments had suggested that 6% of all individuals receiving first-line therapy in sub-Saharan Africa needed to switch to second-line regimens in any given year. Despite the shortfalls seen in the HIV treatment cascade, strong results are achievable. Recently, Rwanda reported that 86% of people starting antiretroviral therapy were virally suppressed 18 months later, while Senegal reported that 80% of people receiving antiretroviral therapy had viral suppression after five years.¹⁶

With the aim of increasing HIV treatment durability, simplifying procurement, saving costs, minimizing side effects and enhancing treatment adherence, the 2013 WHO antiretroviral guidelines recommend that eligible patients receive a simplified, daily, single-pill regimen where possible. WHO recommends that patients currently receiving more complicated regimens be switched to the simpler regimen and that particular efforts focus on transitioning patients off regimens that contain d4T (stavudine), which has been associated with sometimes-severe side effects. In 2012, Viet Nam's use of daily, single-pill regimens was associated with increases in HIV treatment adherence.

Using optimized, more durable regimens is an important component of the Treatment 2.0 approach, which aims to catalyse a new phase of HIV treatment and care. According to mid-term reports, countries in Latin America, Asia and the Pacific, Eastern Europe and Central Asia are using Treatment 2.0 as a tool to aid them in defining and implementing locally relevant HIV treatment policies and programmes. Some aspects of Treatment 2.0, such as laboratory simplification, remain works in progress; CD4 technologies that may be used at the point of care are being rolled out in some settings, such as Jamaica, but additional work is needed to build sufficient capacity for the monitoring of antiretroviral treatment, using tests of viral loads. Consistent with the Treatment 2.0 goal of leveraging community engagement to increase HIV treatment uptake, Argentina has strengthened linkages between treatment centres and community groups to support treatment adherence.

Treatment 2015: Speed, Focus, Innovation

Treatment 2015 aims to catalyze faster progress towards universal access to HIV treatment. New ways of thinking and operating will be needed. Treatment 2015 builds on previous work to expand access to HIV treatment including the earlier 3x5 effort, the PEPFAR Blueprint: creating an AIDS-free generation, the Treatment 2.0 initiative and the Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive. Treatment 2015 emphasizes three critical elements of success:

Speed. Rapid scale-up enables responses to modify the epidemic itself, with prevalence increasing as more people live longer and healthier lives, and with the potential to reduce new HIV infections in communities. In numerous countries and areas, rapid HIV treatment scale-up has led to sharp reductions in AIDS-related deaths while high coverage of treatment is associated with lower rates of new HIV infections.

Focus. As those currently receiving HIV treatment may be the easiest to reach, further progress towards universal access will demand intensified action to bring HIV testing and treatment services to those who currently lack it. Treatment 2015 calls for all countries to immediately use available data to identify key geographic settings and populations with high HIV prevalence and disproportionate unmet need for HIV treatment. Globally, Treatment 2015 urges particularly intensive focus on 30 countries where 90% of the people with an unmet need for HIV treatment are living.

Innovation. New approaches are needed to more swiftly translate scientific advances into concrete action in countries. Innovation should be unleashed to re-conceptualize HIV testing, link individuals to comprehensive treatment and care at an early stage of infection and strengthen community systems.

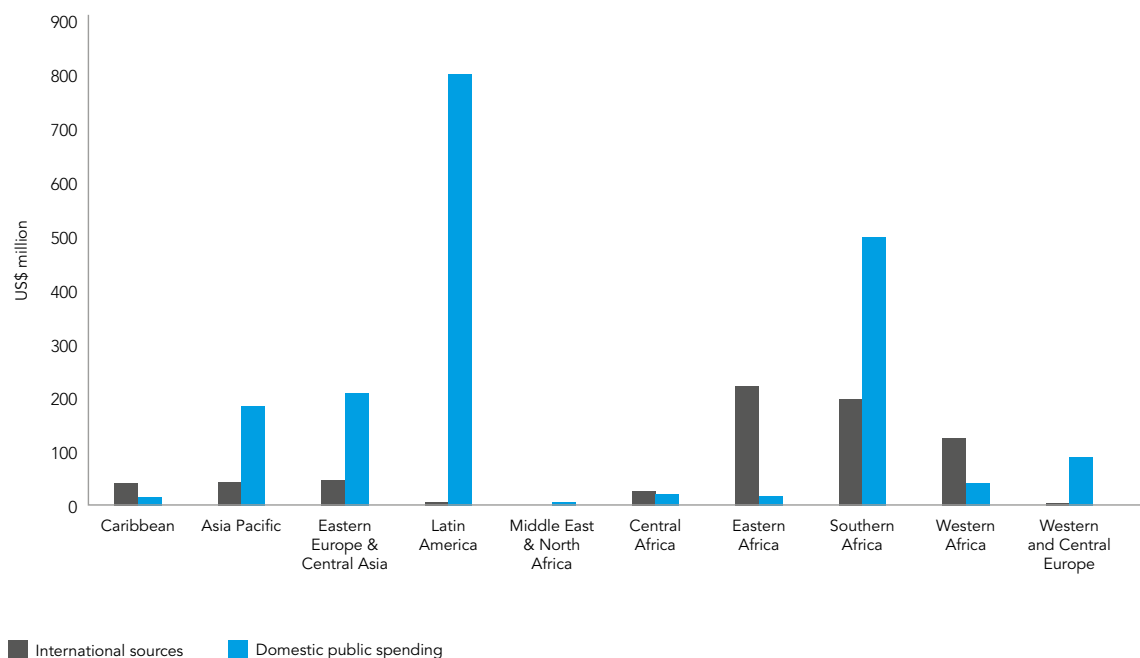
FUNDING OF ANTIRETROVIRAL THERAPY

In 2012, an estimated US\$ 9.9 billion was available for HIV treatment and care in low- and middle-income countries. In most regions, domestic expenditure represents the single largest source of funding for HIV treatment programmes. However, many countries, notably those in East, Central and West Africa, remain heavily dependent on international financing for their antiretroviral treatment programmes (see Figure 4.5). Several countries are exploring innovative strategies to diversify funding sources and generate renewable sources of funding for HIV programmes, an issue addressed in greater detail in Section 6.

Although the cost of antiretroviral medicines has declined, further reductions will be needed to expedite uptake and ensure the sustainability of HIV treatment programmes. One strategy to reduce dependence on international funding for HIV treatment is to build robust capacity in low- and middle-income countries to import and also manufacture essential medicines. The African Union's *Roadmap on Shared Responsibility and Global Solidarity for the AIDS, Tuberculosis and Malaria Response in Africa* calls for investment in the establishment of regional pharmaceutical manufacturing hubs, stepped-up efforts to ensure that knowledge and technology are transferred to the region, harmonization of regulatory systems and maximum use of flexibilities permitted under the TRIPS (Trade-Related Aspects of Intellectual Property Rights) Agreement.

FIGURE 4.5

International and domestic public spending on antiretroviral therapy in low- and middle-income countries, by region, various years up to 2013



Source: GARPR 2013.

Although several countries have effectively used available flexibilities to enhance the affordability of essential HIV medicines, TRIPS flexibilities remain under-utilized as a strategy to further lower antiretroviral drug prices. While mid-term country reviews acknowledged the impact of intellectual property rights on access to medicines, only a very few countries from the Asia Pacific and Latin America regions mentioned concrete actions to use existing TRIPS flexibilities. Some countries cited concerns regarding the potential impact of bilateral and multinational free trade agreements on the future availability of affordable medicines, although country reports also cited lack of knowledge and expertise as barriers to the development of favourable legislative environments to minimise intellectual property barriers to accessing essential medicines.

LOOKING AHEAD

All 109 countries that reported results of their mid-term review as of August 2013 identified HIV treatment as a priority in the national strategic plan. Of these 109 countries, 15 report that they are not on track to achieve their HIV treatment targets by 2015. Globally, although the 2015 target of reaching 15 million people with antiretroviral treatment is within reach, the pace of scale-up will need to accelerate if the world is to attain this goal. If all low- and middle-income countries adopt the 2013 WHO guidelines the estimated number of people in need of antiretroviral therapy will increase to 30.7 million in 2015.

National mid-term reviews noted several challenges to accelerated HIV treatment scale-up, including difficulties in motivating people to learn their HIV status, the deterrent effects of stigma and discrimination, frequent stock-outs of antiretroviral medicines, and the lack of laboratory capacity for CD4, viral load and drug resistance monitoring. As an overarching concern, countries expressed anxiety regarding the sustainability of HIV treatment programmes, citing the need for further reductions in antiretroviral drug prices (including but not limited to second- and third-line regimens) and sustainable financing. A number of countries from Latin America, Asia and the Pacific, and West and Central Africa have expressed concerns regarding the financial implication of implementing the 2013 WHO HIV treatment guidelines, which substantially increase the number of people eligible for HIV treatment.

With the aim of reaching the 2015 HIV treatment target, mid-term reviews identified several key strategies for moving forward. Reports emphasized the critical importance of strong and sustained political commitment to ensure the investments that will be needed to continue scaling up. Efforts must intensify to involve civil society in demand creation, service delivery, treatment literacy programming and development of early warning systems for antiretroviral stock-outs. Countries called for regional and global initiatives to address bottlenecks in the pharmaceutical market, including regulatory aspects such as drug quality control, management of intellectual property rights, optimal drug pricing and local production of antiretroviral drugs. Numerous country reports also emphasized the need for further integration of the HIV response in the health and other sectors.

The *Treatment 2015* framework provides a clear way forward to expedite progress in scaling up HIV treatment. Using the 2015 target as a key milestone for scaling up, *Treatment 2015* provides a framework for accelerated scale-up towards universal HIV treatment access. To generate robust demand for HIV treatment, countries should re-conceptualize HIV testing by adopting multiple, proactive strategies to encourage knowledge of HIV status; invest in community literacy initiatives; remove deterrents to HIV treatment access; and emphasize the preventative, as well as therapeutic, benefits of HIV treatment. To ensure that we invest in accelerating scale-up, domestic and international contributions should increase, continued strides should be made in improving the efficiency of HIV treatment programmes, health and community systems should be strengthened, programmatic innovation to spur swifter scale-up should be encouraged, and the means to manufacture antiretroviral medicines in Africa should be created. Finally, steps are needed to effectively deliver services through implementation of efficient, innovative delivery models; take steps to ensure equitable access; promote accountability through rigorous measurement of outcomes; and forge strategic HIV treatment partnerships that leverage the unique experience and expertise of diverse stakeholders.

Treatment 2015 calls for enhanced focus to accelerate scale-up.¹⁷ Although the framework is applicable in all countries and regions, it calls for intensified efforts in 30 countries where 9 out of 10 people who have an unmet need for HIV treatment live: Angola, Brazil, China, Cameroon, Central African Republic, Chad, Colombia, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, India, Indonesia, Kenya, Lesotho, Malawi, Mozambique, Myanmar, Nigeria, Russian Federation, South Africa, South Sudan, Thailand, Togo, Uganda, Ukraine, United Republic of Tanzania, Viet Nam, Zambia and Zimbabwe.

Just as HIV treatment is contingent upon the scale-up of HIV diagnosis, by the same token the simplification, improvement, availability, new standard eligibility criteria and scaled up access to HIV treatment have profound impacts on HIV testing and the meaning and implications of learning one's status. Empowering people to know their status requires simplification in testing technologies and in the way that people can access testing services.

LEADERSHIP AND INNOVATION FOR HIV TREATMENT SCALE-UP

Throughout the world, countries have taken bold steps to deliver HIV treatment services to those who need them. For example, Viet Nam is rapidly scaling up, with new patients accounting for 23% of the 72 711 individuals receiving antiretroviral therapy in 2012. Viet Nam has expanded antiretroviral therapy in closed settings (such as education centres and prisons), and achieved a retention rate exceeding 80%. It has also implemented projects in two districts for early initiation of antiretroviral therapy.

Several countries have worked to extend human resources for health. For example, Malawi has been a pioneer in nurses' administration of antiretroviral therapy and integration of community health workers in various HIV services, including administration of HIV treatment for specialized community health workers.

Innovative efforts are helping improve the quality of HIV treatment services. Mozambique, for example, is at the forefront with regard to the use of new diagnostic tools, such as point-of-care devices that are already being used for CD4 readings and are currently being studied for viral load monitoring. Use of mobile technology in Mozambique is helping improve patient retention, provide adherence support and enhance information management.

Argentina has established early warning systems to monitor viral resistance and foster HIV treatment adherence. Interdisciplinary teams in hospitals and health centres collaborate with civil society organizations in an effort to improve treatment efficiency.

South Africa is enhancing the long-term sustainability of its HIV treatment programme. In 2012, a nearly US\$ 700 million tender for fixed-dose antiretroviral regimens led to price reductions of 38% for one fixed-dose combination (tenofovir, emtricitabine and efavirenz), yielding savings estimated at US\$ 260 million in 2013–2014.

Ensuring universal access to antiretroviral treatment in middle-income countries

Although efforts to expand access to antiretroviral therapy have primarily focused on low-income countries, ensuring universal HIV treatment access in middle-income countries remains a major challenge. In June 2013, delegates from more than 20 middle-income countries, from all regions, joined civil society representatives and international organizations in Brazil to explore strategies to expand HIV treatment access in middle-income countries. Success in middle-income countries will play a critical role in the push for universal access, as it is projected that a majority of people living with HIV will be living in such countries by 2020.

Middle-income countries, increasingly viewed as potentially lucrative pharmaceutical markets, often do not benefit from international drug access initiatives. Many middle-income countries pay high prices for antiretroviral medicines. Although this is especially true for drugs used in second- and third-line regimens, even certain WHO-recommended first-line, fixed-dose combinations are unaffordable for some middle-income countries. Currently, antiretroviral treatment in middle-income countries is financed through a combination of domestic budget allocations and out-of-pocket spending. As demand grows for HIV treatment, in part due to expanded eligibility under the 2013 WHO consolidated antiretroviral guidelines, future access to affordable HIV treatment options is potentially jeopardized.

The Brasilia meeting included considerable discussion and analysis regarding markets and pricing for HIV medicines, their regulatory status in different countries and strategies that are being implemented to ensure a public health-oriented management of intellectual property rights. The importance of information-sharing and technical support between middle-income countries was emphasized, with a particular focus on establishing or improving platforms for the exchange of information regarding prices and patents. Participants developed recommendations for how countries and multilateral agencies might collaborate to overcome bottlenecks pertaining to pricing mechanisms, regulatory issues, intellectual property management and community mobilization:¹⁸

- Mapping on pricing mechanisms
- Information exchange platforms on pricing and patents
- Support civil society on intellectual property (IP) related advocacy
- Improve transparency of licence agreements
- Strengthen collaboration between WHO and national drug regulatory agencies on quality control under the WHO pre-qualification programme
- Campaigning on the quality of generics.

5. HALVE TUBERCULOSIS DEATHS AMONG PEOPLE LIVING WITH HIV BY 2015

Tuberculosis remains the leading cause of death among people living with HIV. In 2012, people living with HIV accounted for 1.1 million (13%) of the estimated 8.7 million people globally who developed tuberculosis. Of the 2.8 million people with tuberculosis who received an HIV test result in 2012, 20% tested HIV-positive, including 42% of people with tuberculosis in sub-Saharan Africa. More than 75% of the estimated HIV-positive incident tuberculosis cases live in just 10 countries (Ethiopia, India, Kenya, Mozambique, Nigeria, South Africa, United Republic of Tanzania, Uganda, Zambia and Zimbabwe).

As a result of sustained progress in meeting the needs of tuberculosis patients living with HIV, the world is within reach of achieving the 2015 target of reducing by 50% tuberculosis-related deaths among people living with HIV. However, progress in reducing deaths is levelling off; hence countries need to continue stepping up their efforts.

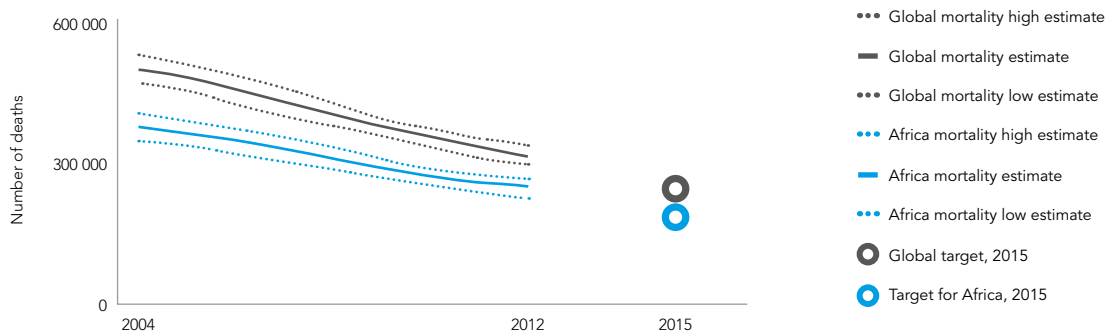
There is an urgent need to implement proven prevention and treatment strategies for the linked epidemics of HIV and tuberculosis. If gains are to be accelerated, scaled-up antiretroviral therapy is critical. While focused efforts to deliver antiretroviral therapy to all HIV-positive people with TB are vital, broader scale-up of HIV treatment would also contribute to the global goal by reducing the number of people who develop active tuberculosis. To further buttress prevention efforts, the *Three Is of HIV/TB* – *Intensified* case finding, *Isoniazid* preventive therapy and *Infection* control in clinical settings – must be effectively implemented.

PROGRESS IN REDUCING TUBERCULOSIS-RELATED DEATHS

The global target calls to halve the number of tuberculosis-related deaths among people living with HIV to less than 250 000 in 2015. The world has made substantial gains towards this goal (see Figure 5.1). Since 2004, tuberculosis-related deaths among people living with HIV have declined by 36% worldwide, and slightly less in Africa, home to 75% of all people living with tuberculosis and HIV. The World Health Organization (WHO) estimates that the scale-up of collaborative HIV/tuberculosis activities (including HIV testing, antiretroviral therapy and the *Three Is*) prevented some 1.3 million people from dying during 2005 to 2012.

Among the 41 countries with high HIV/TB burden, 17 have been estimated to have reduced tuberculosis-related deaths among people living with HIV by over 50%, nine countries have reduced deaths by 25–50%. However, in some of the countries, mortality has decreased less, or even risen.

FIGURE 5.1
Estimated number of tuberculosis-related deaths among people living with HIV, globally and for Africa, 2004–2012



Source: Global tuberculosis report 2013. Geneva, World Health Organization, 2013 (detailed country estimates are in the WHO report).

TABLE 5.1
Estimated change in tuberculosis-related deaths among people living with HIV in 41 tuberculosis/HIV high-burden countries, 2004–2012

>50% reduction	25%–50% reduction	<25% reduction
Botswana	Cameroon	Angola
Burkina Faso	Chad	Brazil
Burundi	China	Congo
Cambodia	Djibouti	Dem. Rep. Congo
Central African Republic	India	Indonesia
Côte d'Ivoire	Kenya	Lesotho
Ethiopia	Mali	Mozambique
Ghana	United Republic of Tanzania	Russian Federation
Haiti	Zambia	Sierra Leone
Malawi		South Africa
Myanmar		Sudan
Namibia		Swaziland
Nigeria		Togo
Rwanda		Ukraine
Thailand		Viet Nam
Uganda		
Zimbabwe		

SCALING UP ANTIRETROVIRAL THERAPY TO PREVENT TUBERCULOSIS-RELATED DEATHS AMONG PEOPLE LIVING WITH HIV

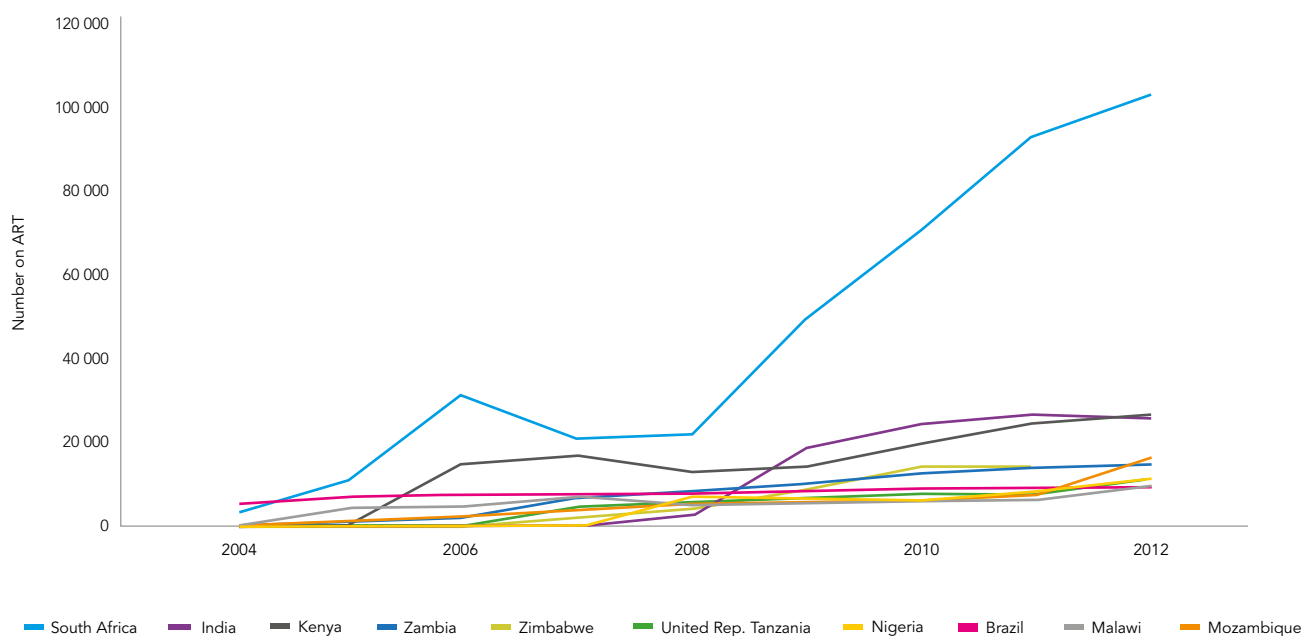
Antiretroviral therapy reduces by 65% the risk that a person living with HIV will develop tuberculosis,¹ and HIV treatment lowers the risk of death among people living with HIV who have tuberculosis by about 50%. Among individuals co-infected with HIV and latent tuberculosis, antiretroviral therapy repairs immune systems damaged by HIV, preventing the development of active tuberculosis. Where latent infection has progressed to active tuberculosis, antiretroviral therapy boosts the body’s capacity to respond to

the disease. Acknowledging the central role of antiretroviral therapy in preventing tuberculosis-related deaths among people living with HIV, WHO's policy on collaborative HIV/tuberculosis activities together with the 2013 antiretroviral guidelines recommends immediate initiation of HIV treatment for all people living with HIV who develop tuberculosis, regardless of CD4 count.

Among the 10 countries with the largest number of tuberculosis cases living with HIV receiving antiretroviral therapy, South Africa has experienced the most noteworthy success in scaling up antiretroviral therapy, with more than 100 000 individuals with HIV and tuberculosis receiving HIV treatment in 2012. The percentage of those estimated to have HIV-associated tuberculosis who received antiretroviral therapy in 2012 was 59% in Kenya, 57% in Malawi, 41% in Zambia and 34% in the United Republic of Tanzania. Among those countries, the greatest gains in increasing the number of people in antiretroviral therapy in 2012 were made in Mozambique (a 101% increase), Malawi (a 48% increase), the United Republic of Tanzania (a 43% increase), and Nigeria (a 29% increase) (see Figure 5.2).

Despite these gains, coverage continues to lag in the countries with the greatest HIV/tuberculosis burdens. Among the 10 reporting countries with the largest number of HIV/tuberculosis cases on antiretroviral therapy, only Kenya and Malawi were delivering antiretroviral therapy in 2012 to more than 50% of estimated incident HIV positive tuberculosis cases. In general, the pace of antiretroviral treatment scale-up for people living with both HIV and tuberculosis is levelling in the top 10 HIV/tuberculosis high-burden countries.

FIGURE 5.2
Number of HIV positive tuberculosis patients on antiretroviral therapy, as reported by ten countries, 2004–2012



Source: GARPR reporting 2013, UNAIDS; Global tuberculosis report 2013. Geneva, World Health Organization, 2013

Globally, antiretroviral treatment coverage for people living with both HIV and tuberculosis remains inadequate (see Table 5.2). Whereas antiretroviral treatment reached 65% of all treatment-eligible people living with HIV in 2012, only 57% of people diagnosed with HIV and tuberculosis co-infection received antiretroviral therapy. Among 41 priority countries for collaborative HIV/tuberculosis activities, only four (Brazil, Kenya, Malawi and Ukraine) reached at least 50% treatment coverage among estimated incident HIV and tuberculosis cases, with extremely low coverage reported in Congo, and Sudan, where less than 5% of estimated HIV-positive incident tuberculosis cases received HIV treatment in 2012. Especially in areas with a high prevalence of multi-drug resistant tuberculosis, the costs of essential drugs can be high, underscoring the importance of generic alternatives to ensure the affordability of HIV/tuberculosis efforts.

HIV TESTING: A CRITICAL BOTTLENECK

Prompt diagnosis of HIV infection among tuberculosis patients is required for effective HIV treatment. The number of people living with HIV who are diagnosed with tuberculosis is increasing each year, but implementation of routine HIV testing and counselling in tuberculosis care settings remains inadequate, slowing further progress in reaching HIV-positive tuberculosis cases with essential HIV treatment.

The proportion of people with tuberculosis who received HIV testing in 2012 increased by 14% in comparison to 2011, to 2.8 million. Greatest progress has been reported in sub-Saharan Africa, where 75% of notified tuberculosis cases were tested for HIV in 2012 (see Table 5.3).

TABLE 5.2
Percentage of HIV-positive new tuberculosis patients receiving antiretroviral therapy

>50%		50–25%		<25%	
Ukraine	92	Botswana	49	Viet Nam	24
Kenya	59	Rwanda	48	Sierra Leone	24
Malawi	57	China	47	Nigeria	24
Brazil	57	Cambodia	47	Burundi	24
		Namibia	46	Myanmar	22
		Lesotho	42	Cameroon	22
		Zambia	41	Angola	21
		Togo	40	India	20
		Ghana	37	Mozambique	19
		Mali	35	Djibouti	15
		Ethiopia	35	Chad	15
		United Rep. Tanzania	34	Dem. Rep. Congo	14
		Burkina Faso	31	Congo	4
		South Africa	31	Sudan	1
		Côte d'Ivoire	30		
		Thailand	30		
		Haiti	29		
		Swaziland	29		
		Uganda	28		

Source: GARPR reporting 2013, UNAIDS; Global tuberculosis report 2013. Geneva, World Health Organization, 2013

Note: Indonesia tuberculosis and AIDS programme numbers had discrepancies, hence one coverage number could not be included.

TABLE 5.3

HIV testing, treatment for HIV-positive tuberculosis patients and prevention of tuberculosis among people living with HIV, UNAIDS regions, 2012*

	ESTIMATED HIV-POSITIVE TUBERCULOSIS CASES			NUMBER OF TUBERCULOSIS PATIENTS WITH KNOWN HIV STATUS	PERCENTAGE OF NOTIFIED TUBERCULOSIS PATIENTS TESTED FOR HIV	PERCENTAGE OF TESTED TUBERCULOSIS PATIENTS HIV-POSITIVE	PERCENTAGE OF IDENTIFIED HIV-POSITIVE TUBERCULOSIS PATIENTS STARTED/CONTINUED ON ANTIRETROVIRAL THERAPY	NUMBER OF HIV- POSITIVE PEOPLE SCREENED FOR TUBERCULOSIS
	BEST	LOW	HIGH					
Caribbean	5	4.2	5.8	17.4	77	20	47	3.97
East Asia	7.8	6.9	8.7	317	31	1.9	59	295
Eastern Europe and Central Asia	16	14	18	175	65	6.7	74	23.3
Latin America	25	22	28	103	52	16	83	0.52
Middle East and North Africa	7	6.2	7.8	36.2	26	4	56	12.8
North America	1.2	1.1	1.3	8.93	79	7.6	...	...
Oceania	1.1	0.73	1.5	5.38	21	7.1	89	2.86
South and South-East Asia	190	170	200	1050	36	6.1	60	1360
Sub-Saharan Africa	830	760	900	1050	75	43	55	2390
Western and Central Europe	2.7	2.6	2.9	28.8	43	4.1	78	0.22
Global	1100	1000	1200	2790	46	20	57	4090

* Figures are in thousands, except where indicated as percentages.

However, global coverage of HIV testing remains insufficient, with just 46% of notified tuberculosis cases being tested for HIV in 2012. In East Asia, South and South-East Asia, home to one in six tuberculosis cases living with HIV globally, HIV testing coverage for people living with HIV is especially low (31% and 36%, respectively, in 2012).

EFFECTIVE TB PREVENTION FOR PEOPLE LIVING WITH HIV

The *Three Is* have yet to be fully implemented, contributing to the persistence of tuberculosis as the leading cause of death for people living with HIV. In 2012, 42 countries reporting data provided isoniazid preventive therapy to nearly 520 000 people living with HIV. Although the trend towards increased uptake of preventive therapy is encouraging, the number currently receiving isoniazid preventive therapy is believed to represent a fraction of the number of people living with HIV who could benefit from the intervention. Among 30 countries reporting both denominator and numerator for preventive therapy, 30% of those newly registered in care received isoniazid preventive therapy.

HIV service settings are increasingly integrating tuberculosis screening. From 2010 to 2012, the number of people in HIV care who were screened for tuberculosis rose by more than 70%, from 2.4 million to 4.1 million.

MEASURING KEY HIV/TB INDICATORS

Available data, summarized in country GARPR reports, provide a general understanding of the current situation regarding the interaction between HIV and tuberculosis, as well as some indication of trends for HIV-positive people with tuberculosis. However, available information also involves important uncertainties regarding data inputs and the reliability of extrapolations used to compensate for missing data elements in order to estimate tuberculosis incidence, prevalence, mortality, HIV-associated tuberculosis and multi-drug-resistant tuberculosis. The percentage of people living with HIV who die of tuberculosis remains unclear, with autopsy findings suggesting a proportion that is higher than that generated by case reports. Due to diagnostic challenges, information on tuberculosis among children living with HIV remains scarce. Implementation of the *Three Is* is inadequately monitored, and there is little information available on people living with HIV among the 500 000 estimated cases of extreme multi-drug-resistant tuberculosis. Data provided by countries regarding key indicators such as HIV or tuberculosis screening, antiretroviral therapy for people living with HIV and tuberculosis, and receipt of preventive services, is of unequal quality, reflecting underreporting, missing reports, misclassifications or duplication of entries that result in over-reporting.²

Efforts are needed to improve the completeness and accuracy of strategic HIV/TB data. As an example of the practical challenges that monitoring and evaluation efforts confront, HIV and tuberculosis programmes in many countries interpret treatment indicators differently, resulting in substantial data discrepancies. Greater integration and coherence between tuberculosis and HIV data collection systems could help improve data quality while simultaneously facilitating enhanced linkages between tuberculosis and HIV services for people living with HIV and tuberculosis.

LOOKING FORWARD

Nearly all countries that reported results from mid-term reviews (103 of 109) identified the reduction of tuberculosis deaths as a national priority. One hundred and one countries indicate that the target has been integrated in national strategic plans.

Although the world appears to be on track to achieve the 2015 target for reducing tuberculosis deaths among people living with HIV, progress is not uniform, with 26 countries reporting that they are not making adequate progress to reach the 2015 target. Moreover, the 2015 milestone represents but an interim step towards the ultimate goal of controlling and eventually eliminating tuberculosis. The continuing high level of morbidity and mortality associated with tuberculosis among people living with HIV can and must be stopped. tuberculosis is entirely preventable, including for people living with HIV, and no one should die from a disease that is both preventable and curable.

Of all available tools, antiretroviral therapy is the single most powerful for HIV-associated tuberculosis – reducing the risk of death by between 54% and 95%.³ Improving access to early HIV diagnosis and antiretroviral therapy for those who test HIV-positive is essential to reducing tuberculosis deaths among people living with HIV. In this regard, it is cause for concern that no national mid-term review report discussed early antiretroviral therapy as a strategy to reduce tuberculosis-related mortality among people living with HIV.

All available tools need to be mobilized. These include effective prevention measures, including enhanced screening and diagnosis, isoniazid preventive therapy (life-long where indicated) and proper infection control. Contacts of adults with tuberculosis should receive isoniazid preventive therapy, and occupational health programmes for health care workers are urgently needed to ensure delivery of prevention interventions to workers who have been exposed to tuberculosis.

Full and rapid implementation of the 2013 WHO antiretroviral guidelines and of earlier guidance on collaborative HIV/TB activities is essential. This will demand immediate steps to strengthen collaborative HIV/TB activities and to implement policies and protocols that regularize the delivery of antiretroviral therapy for all HIV-positive people with tuberculosis, regardless of CD4 count.

Focused efforts are needed to address the impediments to an effective response to HIV-associated tuberculosis identified by national mid-term reviews. These include poor uptake of prevention and treatment interventions, lack of clear policy guidance on immediate initiation of antiretroviral therapy for people living with HIV who have tuberculosis, lack of HIV testing in many tuberculosis clinics and lack of proper infection control.

Innovation is urgently needed to enhance the reach, timeliness and effectiveness of tuberculosis screening and treatment programmes for people living with HIV. Programme planners and implementers should be encouraged to adopt innovative testing and delivery strategies, and communities need to be engaged as partners in the effort to reduce tuberculosis deaths among people living with HIV. The ZAMSTAR study in Zambia and South Africa in 2010 showed that an integrated household approach to tuberculosis and HIV led to a reduction of the overall burden of tuberculosis in the community and a reduction in ongoing community transmission.⁴ New technologies should be developed and rapidly implemented. GeneXpert MTB/Rif, an automated molecular diagnostic test that more rapidly diagnoses tuberculosis and drug-resistant tuberculosis and is now being rolled out in many countries, represents the result of new thinking and offers an example of the potentially transformative impact of new health tools.

Leadership and innovation in HIV and tuberculosis in South Africa

South Africa's HIV and tuberculosis epidemics are inextricably linked, with 330 000 of the country's estimated 520 000 new tuberculosis cases in 2011 also living with HIV. Tuberculosis remains the leading cause of death for people living with HIV in South Africa, with 87 000 [76 000 – 100 000] tuberculosis deaths occurring in 2011. The country's tuberculosis challenge is compounded by the high caseload of multi-drug-resistant tuberculosis (MDR-TB) and extensively drug resistant tuberculosis (XDR-TB); in 2011, an estimated 8 100 cases of MDRTB occurred in South Africa among notified pulmonary tuberculosis cases, with only 5 643 (70%) being enrolled on treatment. Among MDR-TB patients started on treatment in 2009, 42% had a successful outcome and 18% died, with poorer outcomes in XDR-TB.

In response to this health challenge, South Africa has taken a number of important public health actions to prevent tuberculosis among people living with HIV. In particular, the country has prioritized an integrated approach to HIV and tuberculosis; strategies for the two diseases are integrated and programme administration is closely linked.

South Africa's response to the linked epidemics of HIV and tuberculosis has been strengthened by a major expansion of HIV testing and treatment services. Following the launch of a major national testing campaign, the number of people receiving antiretroviral treatment in South Africa reached more than 2.15 million in 2012, representing 83% coverage under the 2010 WHO HIV treatment guidelines and a 27% increase over 2011. Antiretroviral therapy is offered to people diagnosed with both HIV and tuberculosis, with 101 937 (or 31% of estimated HIV-positive incident tuberculosis cases) receiving HIV treatment in 2012.

South Africa has also implemented tuberculosis screening for people living with HIV. To address challenges in diagnosing tuberculosis in people living with HIV, the country developed and initiated a national plan for phased implementation of the Xpert MTB/RIF assay as a replacement for microscopy as the initial diagnostic method. Using existing microscopy centres, South Africa introduced more than 290 GeneXpert machines in more than 140 centres, performing nearly 1.2 million tests in nine provinces as of March 2013, with plans in place for further expansion in additional centres. When compared with smear microscopy, GeneXpert doubled the number of laboratory-confirmed tuberculosis cases and detected 7% rifampin resistance, enabling clinicians to tailor regimens to the needs of individual patients.⁵

Enhanced screening has also enabled South Africa to scale up isoniazid preventive therapy. With some 370 000 people living with HIV receiving isoniazid preventive therapy in 2012, South Africa is now the largest provider of the prophylactic regimen in the world.

6. CLOSE THE GLOBAL AIDS RESOURCE GAP

Financial resources for the AIDS response reached their highest level ever in 2012, with increased contributions from both domestic sources and international donors. With funding increases in both 2011 and 2012, the world now has a meaningful chance to achieve the 2015 target of mobilizing annual funding of US\$ 22–24 billion for HIV activities in low- and middle-income countries. However, to achieve the 2015 resource target, substantial additional funding will be needed.

Although genuine progress has been made in mobilizing resources for the response, an increase in new infections in many countries and regions and projected flattening in international HIV assistance in the coming years suggest that innovative funding mechanisms and new domestic resources will be required to ensure continued scale-up of life-saving services. International donors also need to renew their commitments to the HIV response in accordance with principles of shared responsibility and global solidarity.

HIV FUNDING GROWS, BUT MORE IS NEEDED

In 2012, an estimated US\$ 18.9 (16.6–21.2) billion was available for HIV programmes in low- and middle-income countries (see Figure 6.1). This represents a 10% increase on the US\$ 17.1 (15.7–18.5) billion estimated to have been spent in 2011, according to updated estimates, meaning that considerable further investment is needed to reach the 2015 target.

For the second consecutive year, domestic sources accounted for the majority of HIV funding, at an estimated US\$ 9.9 (7.7–12.2) billion, corresponding to 53% of all global resources available in 2012.* International spending on HIV programmes also rose slightly in 2012, bringing it back to the level of the funding peak achieved in 2009 when the global financial and economic downturn began.

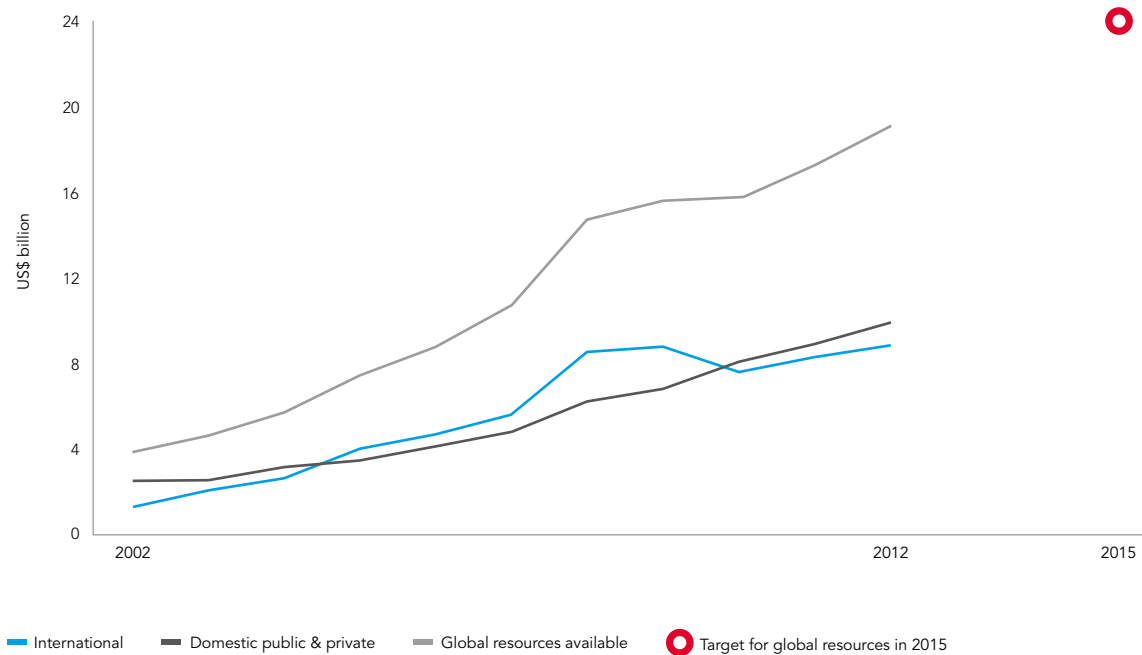
Including all sources, Eastern and Southern Africa accounted for 47% of all HIV spending in 2012, followed by Latin America (17%). Every other region made up less than 10% of global HIV spending.

Although the 2015 target is within reach, the 2013 World Health Organization (WHO) antiretroviral guidelines modestly increase the total resource needs for the HIV response. It is estimated that full implementation of the new guidelines, which increase the number of people eligible for antiretroviral therapy and also encourage the use of standardized first-line regimens, will require a 5–10% increase in total HIV funding until 2025.

* On HIV spending, reported data for any year ever reported are available for 136 of 141 low- and middle-income countries, with 43 countries having reported data for 2012. Trends in domestic public HIV funding are derived from modelling based on the data submitted through the Global AIDS Response Progress Reporting mechanism. Domestic private expenditure is estimated separately.

FIGURE 6.1

Resources available for HIV in low- and middle-income countries, 2002–2012 and 2015 target*



Source: UNAIDS estimates.

* The UN General Assembly 2011 Political Declaration on HIV and AIDS set a target of US\$ 22bn – 24bn by 2015.

COUNTRY LEADERSHIP IN RESOURCE MOBILIZATION

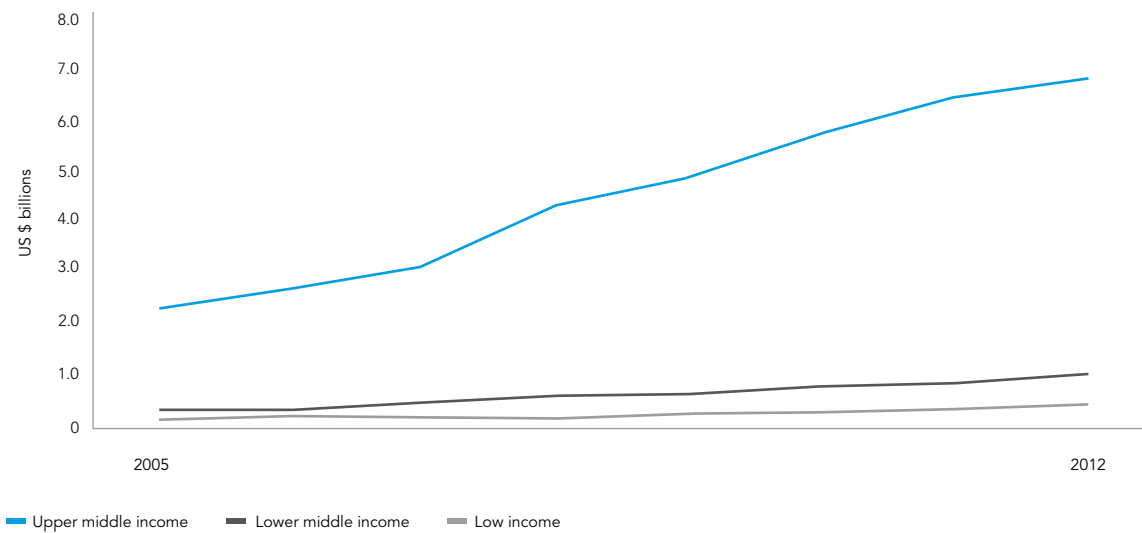
Low- and middle-income countries are developing and leading efforts to mobilize resources for the HIV response. Among countries that undertook mid-term reviews, 90% cited resource mobilization as a national priority. More than 90% of national strategic plans address resource mobilization. In sub-Saharan Africa, numerous countries – including Kenya, South Africa, Togo and Zambia – have sharply increased domestic HIV spending in recent years.¹

Based on total amount of funding, the upward trend in domestic HIV funding is especially visible among upper-middle-income countries, which generally finance a larger proportion of health services through domestic resources (see Figure 6.2). Proportionally, however, the estimated increase in 2012 was greatest for low-income countries (29%), followed by lower-middle-income countries (26%) and upper-middle-income countries (6%).

Among the 43 low- and middle-income countries reporting AIDS spending data in 2012, more than two-thirds reported an increase in domestic HIV spending. In several countries – Chad, Guinea, Kyrgyzstan and Sierra Leone – domestic funding for HIV activities more than doubled.

FIGURE 6.2

Domestic public funding for HIV in low- and middle-income countries, by income category, 2005–2012



Source: UNAIDS estimates.

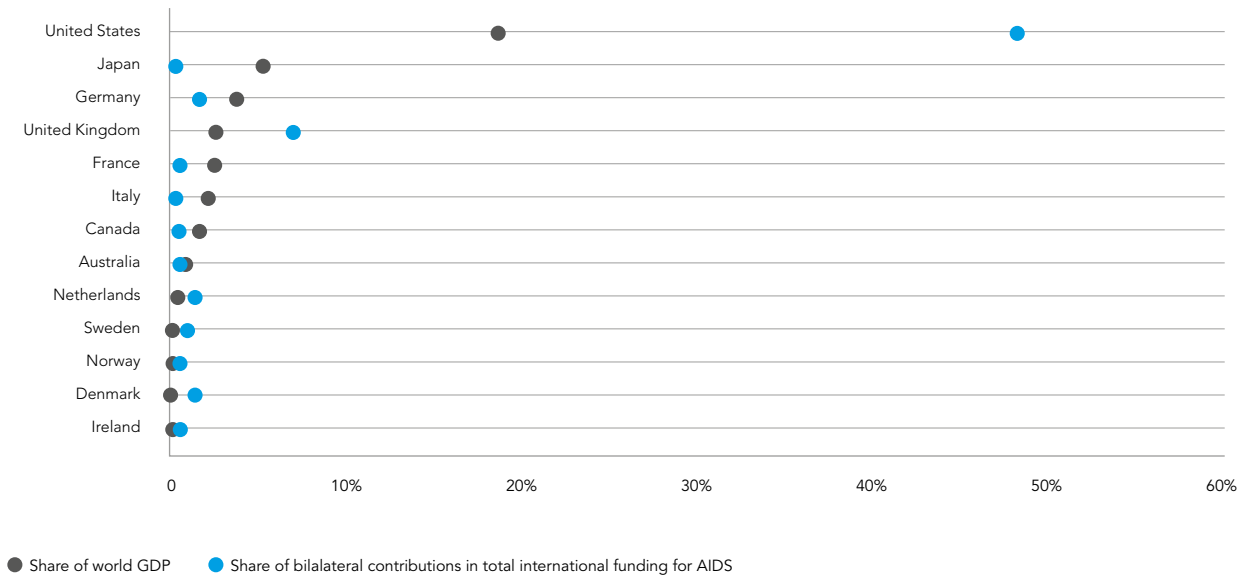
INTERNATIONAL HIV ASSISTANCE RECOVERS

International investment in HIV programmes reached an estimated US\$ 8.9 billion in 2012, an 8% increase on amounts available from the international community in 2011 (see Figure 6.3). Bilateral aid (that is, funds disbursed directly from a donor country to a recipient country) accounted for approximately 67% of international contributions, with the remainder provided through multilateral (28%) and philanthropic channels (5%).

In 2012, HIV disbursements by donor governments, bilaterally and multilaterally, and by private philanthropic funders increased nominally but remained essentially flat in real terms. This nominal increase was primarily driven by an acceleration of bilateral disbursements by the US government, whereas most recent resource-tracking investigations suggest that most European donor governments decreased their HIV assistance in 2012. Without renewed commitment from international donors, it is projected that international funding for HIV activities will not grow in coming years.

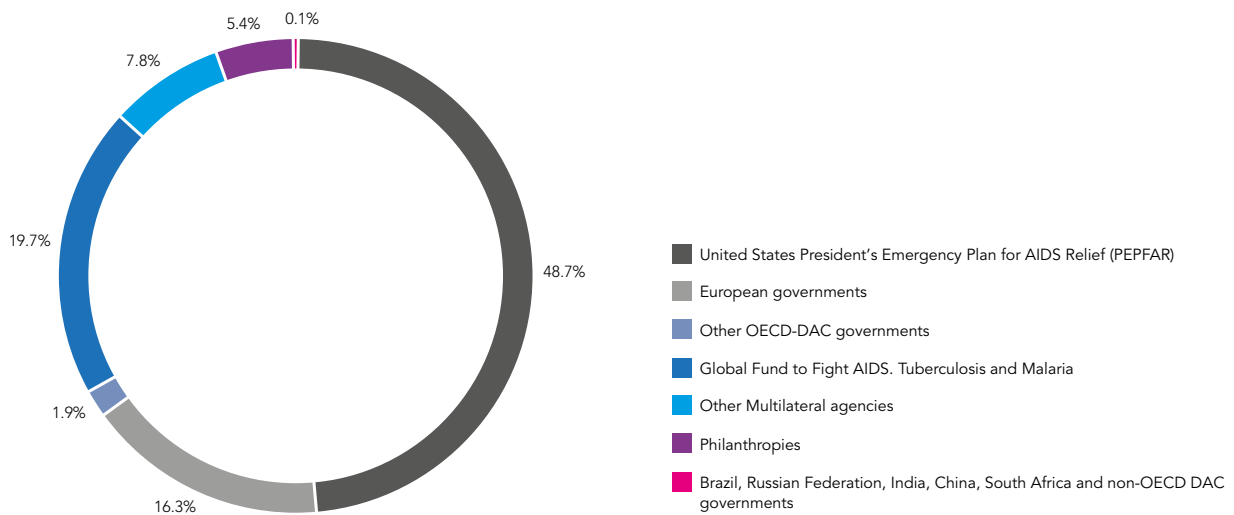
As shown in Figure 6.4, in 2012 the US President’s Emergency Plan for AIDS Relief (PEPFAR), a bilateral aid programme, made up approximately 73% of all bilateral aid for HIV, almost half (48.7%) of all international HIV contributions and 23% of total HIV funding available from all sources (including international, domestic, public and private). The UK accounted for an estimated 10.7% of all bilateral funding available in 2012, followed by the Netherlands (2.8%), Denmark (2.6%) and Germany (2.4%). A number of countries – including Denmark, Ireland, the Netherlands, Norway, Sweden, the UK and the US – contributed a share of international HIV funding that exceeds their respective share of global gross domestic product.

FIGURE 6.3
Share of international HIV funding versus share of global GDP, selected countries, 2012



Source: IMF on the share of world GDP; UNAIDS estimates on share of international funds

FIGURE 6.4
International assistance funding for HIV, 2012



Source: UNAIDS estimates

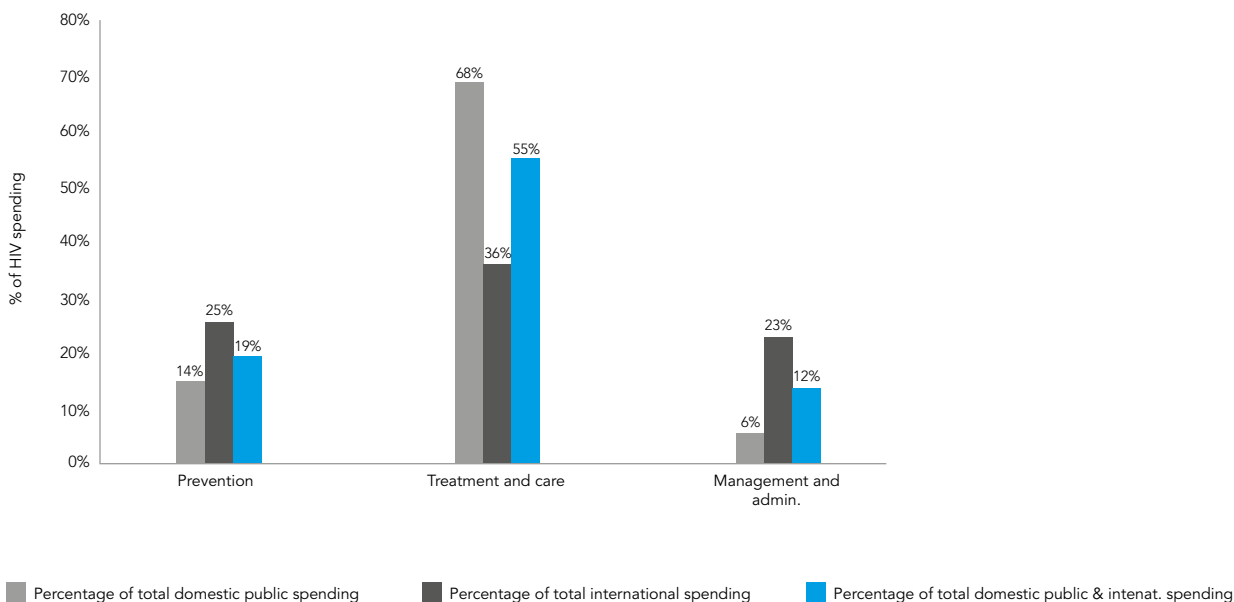
A sizeable proportion (28%) of all international assistance is provided through multilateral institutions, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the global health organization UNITAID, and United Nations agencies. Multilateral funding accounted for 13% of total funding available for HIV activities from all sources (including international, domestic, public and private). Private philanthropic funders in the US and the European Union contributed more than 5% of international HIV assistance disbursed in 2012.

HIV SPENDING PATTERNS: WHO PAYS FOR WHAT?

Care and treatment services consumed more than half (55%) of HIV expenditure in 2012, while prevention programmes represented 19% of HIV spending, a share that has remained relatively stable in recent years (see Figure 6.5). A notable share (12%) of spending supported programme management and administration.

Whereas domestic resources account for the majority of spending for HIV treatment and care, international spending financed the majority of HIV prevention efforts. Nearly one-quarter of international HIV spending (23%) supports programme management and administration. It has to be noted, however, that the latter also covers investment in health systems, for example strengthening national drug supply systems.

FIGURE 6.5
Distribution of HIV spending by programme categories and funding source, low- and middle-income countries, latest data available as of 2013



Source: GARPR 2013.

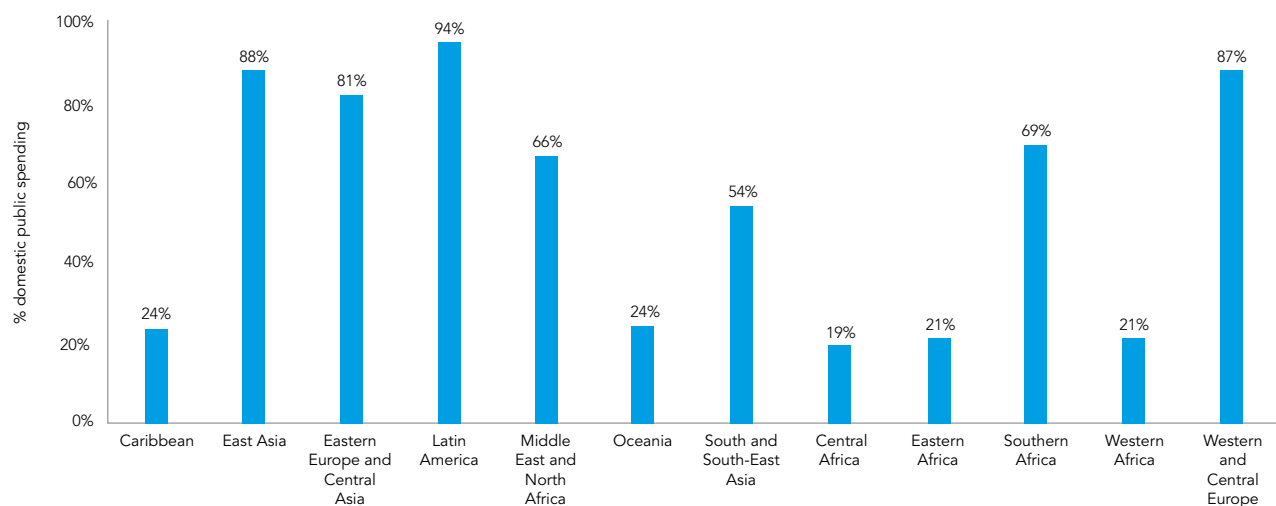
PERSISTENT DEPENDENCY ON INTERNATIONAL FINANCING

Based on the latest data officially reported to UNAIDS, low-income countries received 56% of international HIV spending, followed by lower-middle-income countries (26%) and upper-middle-income countries (18%). Consistent with these patterns, low-income countries remain the most dependent on international financing for their HIV responses, with domestic resources making up only 16% of HIV funding. Donor dependency also represents a challenge to the sustainability of HIV responses in lower-middle-income countries, where domestic sources account for only 27% of HIV funding overall. By contrast, upper-middle-income countries themselves contribute 88% of costs associated with HIV activities.

The differences in funding patterns based on national income are reflected in regional differences in the mix of HIV financing. In Latin America, East Asia, Eastern Europe and Central Asia, domestic sources account for more than 80% of HIV spending (see Figure 6.6). Domestic sources also account for 69% of HIV spending in Southern Africa, as the foundation for a sustainable response has been established in many countries, especially in upper-middle-income countries in Southern Africa with a high burden of disease.

Fifty-one low- and middle-income countries looked to international assistance for 75% or more of HIV financing in 2012. Twenty-nine countries used domestic resources to finance at least 75% of the cost of HIV activities (see Table 6.1).

FIGURE 6.6
Domestic public spending as a percentage of total domestic public and international spending in low- and middle-income countries, latest data available in 2013



Source: GARPR 2013.

TABLE 6.1

Dependency of the national HIV response on international sources

Funding from international sources as a percentage of the total international and domestic public funding in low- and middle-income countries, latest reports available as of 2013

0–24%

Algeria 2012
 Argentina 2010
 Botswana 2011
 Brazil 2010
 Chile 2012
 China 2012
 Colombia 2011
 Costa Rica 2010
 Cuba 2011
 Democratic People's Republic of Korea 2011
 Dominica 2011
 Ecuador 2010
 Gabon 2012
 Iran (Islamic Republic of) 2009
 Kazakhstan 2012
 Latvia 2011
 Lithuania 2012
 Malaysia 2012
 Mexico 2009
 Panama 2010
 Romania 2012
 Russian Federation 2008
 Seychelles 2012
 South Africa 2009
 Syrian Arab Republic 2011
 Thailand 2011
 Turkey 2012
 Uruguay 2007
 Venezuela (Bolivarian Republic of) 2011

25–49%

Angola 2011
 Azerbaijan 2011
 Bulgaria 2011
 Cape Verde 2012
 Egypt 2008
 El Salvador 2012
 Grenada 2011
 Guatemala 2012
 Honduras 2010
 Lebanon 2011
 Marshall Islands 2012
 Mauritius 2010
 Morocco 2012
 Namibia 2010
 Peru 2010
 Philippines 2011
 Samoa 2011
 Serbia 2012
 Sri Lanka 2010
 The former Yugoslav Republic of Macedonia 2010
 Ukraine 2010
 Uzbekistan 2012

50–74%

Albania 2005
 Antigua and Barbuda 2012
 Belarus 2011
 Belize 2010
 Benin 2012
 Cameroon 2010
 Chad 2012
 Congo 2010
 Dominican Republic 2008
 Georgia 2012
 Indonesia 2010
 Jamaica 2010
 Kyrgyzstan 2012
 Madagascar 2012
 Mongolia 2011
 Nicaragua 2010
 Niger 2012
 Nigeria 2010
 Pakistan 2010
 Palau 2011
 Paraguay 2011
 Republic of Moldova 2012
 Saint Vincent and the Grenadines 2012
 Suriname 2011
 Swaziland 2009
 Togo 2012
 United Republic of Tanzania 2005
 Yemen 2011

75–100%

Afghanistan 2012
 Armenia 2012
 Bangladesh 2012
 Bolivia (Plurinational State of) 2011
 Bosnia and Herzegovina 2009
 Burkina Faso 2010
 Burundi 2012
 Cambodia 2012
 Central African Republic 2008
 Comoros 2012
 Côte d'Ivoire 2009
 Democratic Republic of the Congo 2010
 Djibouti 2012
 Eritrea 2009
 Ethiopia 2008
 Fiji 2012
 Gambia 2008
 Ghana 2011
 Guinea 2012
 Guinea-Bissau 2010
 Haiti 2011
 Jordan 2012
 Kenya 2011
 Kiribati 2012
 Lao People Democratic Republic 2011
 Liberia 2011
 Malawi 2011
 Mali 2010
 Mauritania 2012
 Micronesia (Federated States of) 2012
 Montenegro 2009
 Mozambique 2008
 Myanmar 2011
 Nepal 2009
 Papua New Guinea 2010
 Rwanda 2009
 Saint Lucia 2007
 São Tomé and Príncipe 2012
 Senegal 2011
 Sierra Leone 2009
 Solomon Islands 2011
 Somalia 2009
 Tajikistan 2011
 Timor-Leste 2009
 Tunisia 2011
 Tuvalu 2011
 Uganda 2008
 Vanuatu 2012
 Viet Nam 2010
 Zambia 2006
 Zimbabwe 2012

Never reported or no recent disaggregated data

India 2011
 Lesotho 2010
 Tonga 2011
 Bhutan
 Guyana
 Iraq
 Libya
 Maldives
 Slovakia
 Turkmenistan

Source: GAPR 2013.

LOOKING FORWARD

Closing the AIDS resource gap has been identified as a national priority in 99 of the 109 countries that reported results of mid-term reviews. In 91 countries, the target has been integrated in national strategic plans. Forty per cent of the countries that formally prioritize closing the AIDS resource gap (39 out of 99) report that they are not on track to reach their resource mobilization targets by 2015.

To meet the 2015 resource target, at least US\$ 2.9–5.4 billion in additional annual funding needs to be generated. In their mid-term reviews, countries identified several strategies for closing the resource gap, with priority approaches varying little depending on regional, epidemic type or socio-economic context.

First and foremost, countries identified the need for high-level, sustained leadership and commitment to ensure sufficient national investments commensurate with national ability to pay, burden of disease and rate of economic growth. Mid-term reviews emphasized the importance of developing resource mobilization plans that clearly identify potential national and international sources of funding. As important strategies to close the resource gap, countries stressed the need to forge and strengthen public-private partnerships that leverage private sector resources as well as innovative mechanisms for sustainable funding, such as fund pooling, inclusion of HIV services in national social protection and health insurance schemes and use of different levies or taxes to generate new funding.

Mid-term reviews urgently called on the international community not to abandon the HIV response, especially at a moment when historic progress could be jeopardized by funding uncertainties. Even with increased domestic allocations, some countries, especially those with few resources and heavy HIV burdens, will be unable to close their resource gap without external assistance. For example, Malawi estimates that domestic resources are sufficient to cover only 30% of the HIV resource gap. Similarly, Viet Nam, which has committed to increase domestic HIV funding by 20% annually during 2012–2020, nevertheless projects that it will need US\$ 100 million per year in external aid to ensure an effective HIV response.

UNAIDS has urged countries to pursue an investment approach to HIV financing, focusing limited resources on interventions, settings and populations where impact is likely to be greatest. Recognizing the difficult international funding climate, as well as the urgent need to lay the groundwork for a sustainable response, a growing number of countries are developing ‘investment cases’ that promote mobilization of sufficient resources to do the ‘right things’ at the ‘right scale’ in order to maximize impact and minimise future costs. Jamaica, Nigeria and Thailand have already developed their investment cases, while several other countries have initiated processes to develop them.

Sustainability of HIV financing – increased domestic funding through innovative mechanisms

In 2012, the African Union (AU) took the visionary step of articulating a *Roadmap on Shared Responsibility and Global Solidarity for the AIDS, tuberculosis and Malaria Response in Africa*.² The first pillar of the roadmap stressed the need for sustainable HIV financing through diversified funding sources for AIDS, tuberculosis and malaria programmes in the region.

Consistent with the AU Roadmap's emphasis on innovative approaches to resource mobilization, several African countries have explored a variety of strategies to generate substantial new domestic funding for the HIV response. Several countries, such as Ethiopia, Malawi and Namibia, are 'mainstreaming' HIV funding, requiring diverse government entities to allocate at least 2% of their budgets to HIV activities. Kenya, the United Republic of Tanzania and Zambia are considering options for establishing HIV trust funds. For the last 12 years, Zimbabwe has instituted a National HIV and AIDS levy as a component of the national tax system, and is now exploring ways to tap in to private and informal sector contributions to this levy. Seeking ways to diversify and increase domestic investment in AIDS, Malawi has projected that, by allocating to HIV programmes 1% of an existing 5% levy on the operating surpluses of telecommunication firms, up to US\$ 2.4 million would be generated by 2013. Simultaneously, by introducing a levy of 3 cents per minute for calls terminated in Malawi, US\$ 5.3 million could be generated for HIV funding by 2013. Likewise, Namibia aims to generate US\$ 4.1 million by 2020 through an airline levy of US\$ 5 per passenger on outbound flights.

While the need to reduce dependency on international HIV funding is especially pressing in sub-Saharan Africa, countries in other regions are also working to generate sustainable funding by integrating HIV with broader health sector funding instruments. For example, Moldova has provided treatment for HIV and opportunistic infections through its national health insurance system, which was launched in 2004. Since 2005, Thailand has similarly provided access to free antiretroviral therapy and voluntary HIV counselling and testing as part of its universal health insurance scheme. In addition, India and Georgia are also making plans to include essential HIV services in the standard benefit package of their universal health insurance systems.

Nigeria investment case

To implement the commitments in the 2011 UN Political Declaration on HIV and AIDS and accelerate progress towards universal access to HIV prevention, treatment, care and support, Nigeria has developed the President's Comprehensive Response Plan (PCRP).³ Nigeria has the second-largest population of people living with HIV, with only one-third of treatment-eligible individuals receiving HIV treatment and only 18% of HIV-positive pregnant women receiving antiretroviral medicines to prevent mother-to-child transmission.

PCRP aims to bridge the current gap in service provision and funding, offering an investment case for HIV financing. The investment case assesses needs and gaps, identifies focus areas, quantifies the degree of scale-up required to close gaps, projects financing needed and analyses expected impact in terms of lives saved, new infections averted and costs saved.

As priorities for scale-up over the next three years, PCRPs identified prevention of sexual transmission among young people and key populations at higher risk, HIV counselling and testing, provision of treatment and care for those in need and prevention of mother-to-child transmission. PCRP set target coverage levels for priority interventions, such as a 140% increase in HIV prevention efforts among key populations and a 400% increase in the provision of antiretroviral therapy to pregnant women.

Nigeria projects that implementation of the President's plan would save 46 000 lives and avert 105 000 new infections by 2015. It is projected that PCRPs would save the lives of 13 000 children and avert 55 000 new infections among children. Total cost savings are projected at US\$ 1.65 billion through delayed or averted HIV treatment costs.

To implement the plan, it will need to be funded. It is anticipated that total HIV investment in Nigeria would need to increase by 37%. PCRPs call for domestic investment to rise by 73%, which would increase the proportion of overall domestic spending on HIV from 25% to 45% during 2014–2015. However, it is projected that domestic spending alone will not be able to close the country's resource gap. To further contribute to needed resource mobilization, PCRPs call for reductions in programme management costs, which are projected to save US\$ 27.3 million that can be reinvested in prevention activities.

7. ELIMINATE GENDER INEQUALITIES AND GENDER-BASED ABUSE AND VIOLENCE AND INCREASE THE CAPACITY OF WOMEN AND GIRLS TO PROTECT THEMSELVES FROM HIV

HIV continues to be driven by gender inequalities and harmful gender norms that promote unsafe sex and reduce access to HIV and sexual and reproductive health services for men, women and transgender persons. The epidemic imposes a particular burden on women and girls. In addition to their greater physiological susceptibility to HIV acquisition, the pervasive social, legal and economic disadvantages faced by women reduce their ability to protect themselves from HIV infection, and diminish access to essential HIV and reproductive health services, in particular for women living with HIV. Women and girls also shoulder the primary care-giving burden, typically providing such vital services without compensation. Although country reports demonstrate recognition that gender equality is vital to an effective HIV response, focused investments and enhanced political leadership will be needed to reach the global goal of eliminating gender inequalities and gender-based abuse and violence and increasing the capacity of women and girls to protect themselves from HIV.

ENDURING IMPACT OF GENDER INEQUALITY ON HIV EPIDEMICS

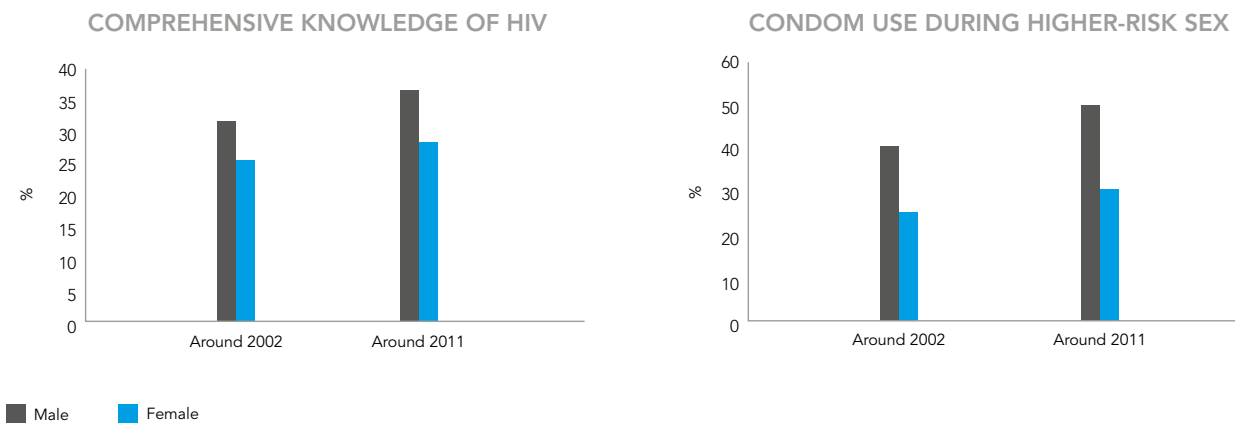
Globally, women comprise 52% of all people living with HIV in low- and middle-income countries, and men 48%. However, in sub-Saharan Africa, the centre of the global epidemic, women still account for approximately 57% of all people living with HIV.

In addition to the greater physiological vulnerability of women to HIV, gender inequalities include vulnerability to rape, sex with older men,¹ and unequal access to education² and economic opportunities.³ These make HIV-related risks especially acute for girls and young women. In comparison to men, women are more likely to acquire HIV at an early age, resulting in a global HIV prevalence among girls and young women that is double or greater than among males of the same age.⁴

In sub-Saharan Africa, national surveys find that young women (age 15–24 years) have lower levels of accurate and comprehensive HIV knowledge than young men of their own age. Young women in sub-Saharan Africa are also less likely to report having used a condom the last time they had sex (see Figure 7.1).

FIGURE 7.1

HIV knowledge and condom use during higher risk sex, young men and women (15–24 years), around 2002 and 2011 in Sub-Saharan Africa



Source: DHS data, countries with available data in Sub-Saharan Africa

In addition to the direct health impact of HIV infection, the epidemic also undermines the health and wellbeing of women in other ways. In settings with high HIV prevalence, young women aged 15–24 experience tuberculosis rates 1.5–2 times higher than men in the same age group.⁵ Women living with HIV also face a heightened risk of cervical cancer, underscoring the urgency of ensuring women's access to HIV testing and treatment together with comprehensive sexual and reproductive health services.⁶ They also face significant barriers to accessing services due to economic constraints and gender-related discrimination.⁷ Moreover, the disproportionate care-taking burden shouldered by women and girls diminishes their educational and economic opportunities.⁸

Women from key populations are particularly affected by HIV. Among female sex workers, global HIV prevalence is estimated at 12%, increasing to approximately 30% in settings with medium to high HIV prevalence.⁹ Though data are scarce, a global review of available data found that transgender women are 49 times more likely to be living with HIV than women overall, with a pooled HIV prevalence among transgender women of 19%.¹⁰

Although particular attention has focused on the need for gender-sensitive responses in sub-Saharan Africa, women, particularly those from key populations, face significant risk of HIV acquisition and shoulder a disproportionate socio-economic burden in concentrated epidemics, as well. In the Asia and Pacific region, where men outnumber women among people living with HIV, women in HIV-affected households are more likely to be in debt and to assume the bulk of care tasks.¹¹

The vulnerability of transgender women to acquiring HIV is also increased as a result of gender inequalities. Manifestations include the non-recognition of gender identity, which results in denial of basic citizenship rights, such as access to accurate personal identification documents. As a result, transgender women are often unable to access HIV services and encounter discriminatory treatment by health service providers.¹²

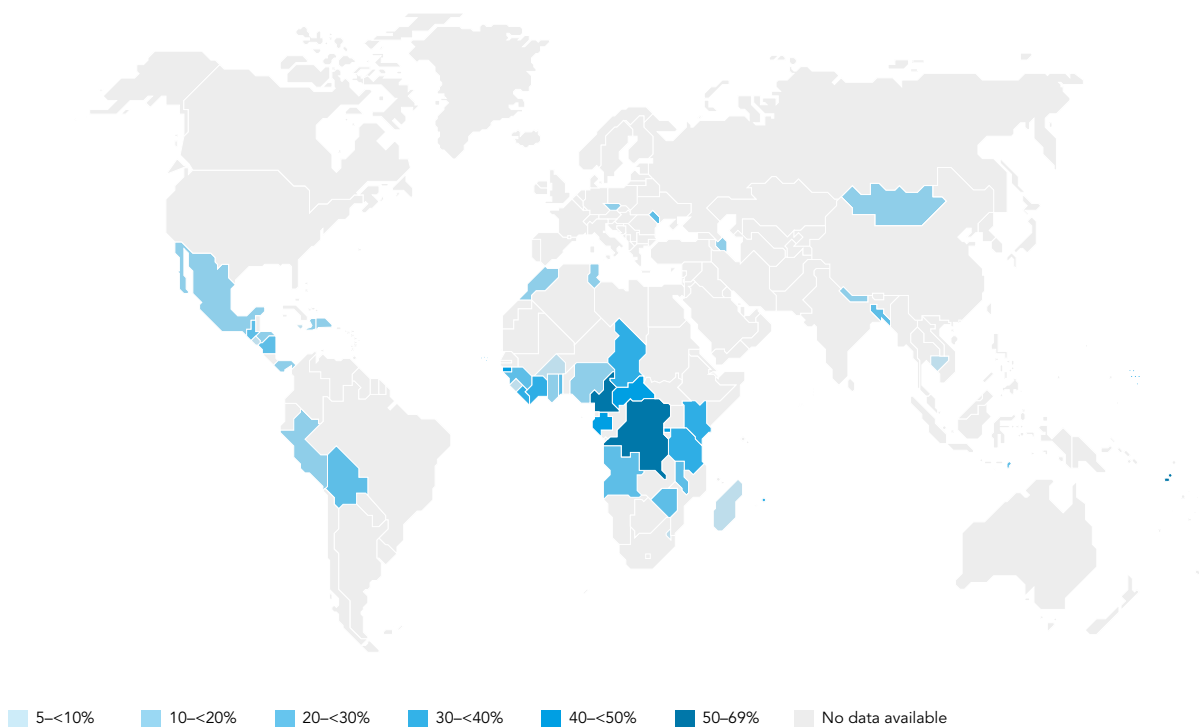
Unequal gender norms also undermine effective HIV responses for men. Prevailing concepts of masculinity encourage men's sexual risk-taking and discourage men from seeking health and HIV services.¹³ In addition, health services are often not designed to suit the needs of men, with opening hours that clash with work obligations and providers' frequent lack of sensitivity to men's needs.¹⁴ As a result, men are less likely to be tested for HIV, have lower CD4 counts when they enter treatment and are less likely to adhere to treatment.^{15,16} Consequently, men receiving antiretroviral therapy have consistently higher AIDS-related mortality rates than women.^{17,18}

GENDER-BASED VIOLENCE AND WOMEN'S VULNERABILITY TO HIV

Gender-based violence is a worldwide phenomenon and a serious violation of human rights. Of the almost 50 countries that reported data on the prevalence of intimate partner violence, between 9% and 60% of women aged 15 to 49 years reported having experienced violence at the hands of an intimate partner in the last 12 months (see Figure 7.2).

Gender-based violence increases the risk of HIV infection. Two recent studies of women in Uganda (15–49 years) and South Africa (15–26 years) found that women who had experienced intimate partner violence were 50% more likely to have acquired HIV than women who had not experienced violence.^{19,20}

FIGURE 7.2
Intimate partner violence in the past 12 months reported by women aged 15–49 years



Source: GARPR 2013

Women from key populations, such as female drug users, female sex workers and transgender women, are particularly likely to experience violence.^{21,22} Studies in different countries have detected the high prevalence of rape, physical violence and other forms of abuse among sex workers.^{23,24} Women in conflict-affected situations face increased vulnerability to sexual violence and mass rapes during conflicts.²⁵ Transgender women, many of whom may be engaged in sex work as a survival strategy, are also often targets of violence and abuse.²⁶ The ‘corrective’ rape of lesbian women is a further source of trauma and HIV risk.

The links between violence against women and increased risk for HIV are multi-faceted: social, physiological and psychological. The experience of violence during childhood is associated with increased risk-taking later in life.²⁷ Fear of violence undermines the capacity of women and girls to negotiate safer sex.²⁸ Concerns regarding the possibility of stigma and discrimination, abuse and violence further deter women from seeking HIV testing or other essential health services. Sexual violence may result in traumatic injury to women’s genitalia, which in turn increases susceptibility to HIV acquisition; with physiological susceptibility being greater in cases of experience of sexual violence as a child or adolescent and repeated violence.²⁹ Results of violence may be especially severe for women who are sex workers, use drugs or are transgender, as a result of the compounding effects of multiple forms of stigma and mistreatment.

One study in Uganda found that 29% of surveyed women living with HIV reported physical or sexual intimate-partner violence in the last 12 months, and that those on antiretroviral treatment were twice as likely to report intimate-partner violence.³⁰ This violence may be partly attributable to the fact that women, who have higher testing rates, are more likely to be the first within a household to learn their HIV status and may be blamed accordingly.

Despite the disturbing prevalence and severe effects of gender-based violence, services for women who have experienced violence remain wholly inadequate. A recent survey in Kenya found that only one-quarter of females and 13% of males aged 18 to 24 who experienced sexual violence prior to age 18 knew of a place to seek services.³¹

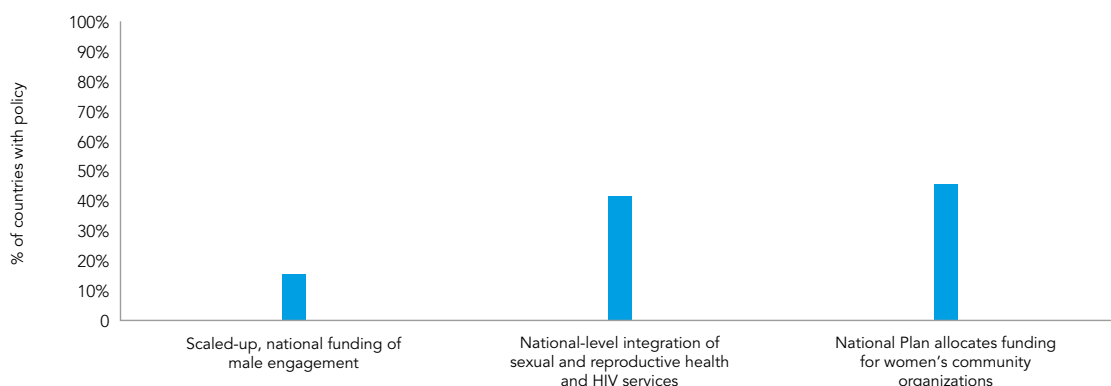
POLICIES FOR GENDER-TRANSFORMATIVE HIV RESPONSES

Increasingly, HIV responses are incorporating a focus on gender equality. This focus is especially common in sub-Saharan Africa but less prominent in countries where epidemics are concentrated among key populations.³² In the Middle East and North Africa and in Eastern Europe and Central Asia, gender issues, including gender-based violence, often go unaddressed in national responses, with little sex-disaggregated data collection or participation of women’s networks and groups of women living with HIV.

Reports from countries that conducted mid-term reviews of implementation of the 2011 UN Political Declaration on HIV/AIDS reveal widespread recognition that addressing gender inequalities is a critical component of an effective HIV response for women. One hundred of the 109 countries reporting in 2013 indicated that elimination of gender inequalities is a national priority. However, only 52% of countries reported in 2013 that they were on track to eliminate gender inequalities. While commitments by national governments are encouraging, there is an urgent need to see them more consistently translated into robust actions.

Figure 7.3 suggests that country policies and resource allocation are particularly lagging behind in key aspects of a comprehensive effort to overcome gender inequality: engaging men and empowering women, as well as providing services to help women fulfil their sexual and reproductive needs and rights and to access HIV prevention and other HIV services. Barely half of countries collect data on the links between HIV and gender-based violence, and less than one-quarter of national HIV strategic plans address gender-based violence.³³

FIGURE 7.3
Policies on key elements of gender-transformative HIV programming in 72 countries



Source: UNAIDS Agenda for Accelerated Country Action for Women, Girls, Gender Equality and HIV Mid-Term review, report to UNAIDS PCB 2012.

MOVING FORWARD

To achieve zero new HIV infections, zero AIDS-related deaths and zero discrimination, there should be zero tolerance for gender-based violence. Towards this end, sustained progress is needed to eliminate gender inequality. Effective HIV responses must respond to, and seek to transform, harmful gender norms that perpetuate the HIV epidemic. While much has been done, investment by countries is required in a number of strategic areas with the support of civil society and development partners.

Specifically, countries should work to reduce HIV infection among girls and young women by protecting them from sexual violence and providing universal access to comprehensive sex education and social protection services. To ensure access, girls and young women may require independent access points for needed services. Policy and programmatic steps are needed to transform harmful gender norms to prevent gender-based violence and provided integrated services to survivors of gender-based violence.

HIV services need to be more sensitive to sexual and reproductive health and gender needs and rights of women, men and transgender persons in all their diversity, in particular those living with HIV, from key populations at higher risk or living in conflict-affected settings. There is a need to invest in strengthening the evidence base in order to successfully respond to the gender dimensions of the HIV epidemic. Epidemic contexts and responses should be surveyed from the perspective of gender and inclusive and participatory assessments undertaken.

The needs of women and girls must be prioritized in the post-2015 development agenda. The goals of zero discrimination, zero tolerance for gender-based violence, and zero violation of sexual and reproductive health and rights should be at the centre of development policy at national and international levels in discussions regarding post-2015 priorities.

ENGAGING THE TRANSGENDER COMMUNITY IN NICARAGUA

Nicaragua's female transgender community is estimated at 3 000 people, with an estimated HIV prevalence of 15–19%. To address the transgender community's health care needs, nine organizations joined together to formulate the Strategic Plan of Comprehensive Care for the Transgender Population.

The process of developing the plan included a situation analysis, prioritization of interventions, planning and identification of resources. A review of available evidence on underlying determinants of the epidemic among transgender populations identified the most robust studies on socio-economic factors, life and work conditions, health services, biological and genetic factors, social and community networks and behaviours.

The plan aims to close gaps relating to social determinants of HIV risk and vulnerability for transgender people in Nicaragua. Key action steps include advocacy for legal changes, human rights promotion, fund-raising, training workshops, health education and behaviour change communication. Although the plan is both ambitious and visionary, more than 80% of transgender participants in the planning process identified the proposed actions as feasible.

Political leadership on gender-transformative responses in Liberia and Rwanda

Liberia's HIV response now includes a cadre of civil society organizations such as the Catholic and Lutheran churches, the Concerned Muslims of Liberia, traditional leaders and the Liberian Women Living with HIV Network that actively champions HIV and gender issues. Women living with HIV, together with the Ministry of Gender and Development, are also represented on the Global Fund Country Co-ordinating Mechanism - the highest in-country decision-making body of the Global Fund to fight AIDS, Tuberculosis and Malaria.

The National AIDS Commission, chaired by the President, was formed by an Act of Parliament. It includes representation from women living with HIV and the Ministry of Gender and Development and has an annual statutory budget allocation from the Government. An HIV Office in the Ministry of Gender and Development has been established and largely funded by the Government to co-ordinate work on AIDS and gender and an amendment to the Health act has been passed into law to protect the rights of people including women living with HIV.

A mid-term review in 2012 of Liberia's national operational plan on Women and Girls, Gender Equality and HIV found that the plan had resulted in a stronger national AIDS response, with new linkages to broader efforts against gender-based violence and strengthened capacity within the Government. The plan was launched in 2010 by President Ellen Johnson Sirleaf, accompanied by UNAIDS Executive Director, Michel Sidibe and Princess Mathilda of Belgium in order to contribute to rebuilding the country's health system, which had been destroyed by the civil war, and to stop the high rates of rape and sexual violence against girls and women.

8. ELIMINATE HIV-RELATED STIGMA, DISCRIMINATION, PUNITIVE LAWS AND PRACTICES

HIV-related stigma and discrimination persist as major obstacles to an effective HIV response in all parts of the world. The People Living with HIV Stigma Index and other research have quantified and enhanced understanding of the prevalence and impact of stigma and discrimination, with a notable share of people living with HIV reporting having encountered employment discrimination and denial of family planning, dental and other health services (Table 8.1).

EFFECTS OF STIGMA AND DISCRIMINATION

Numerous studies have linked HIV-related stigma with delayed HIV testing, non-disclosure to partners and poor engagement with HIV services.^{1,2,3,4} Stigma and discrimination persist within many health care facilities, with people living with HIV experiencing judgemental attitudes from providers and refusal of services. There have been numerous reports of involuntary sterilization of women living with HIV, including instances that resulted in legal action in several countries, such as Chile,⁵ Kenya⁶ and Namibia⁷.

People who experience stigma and discrimination report a range of negative effects, including loss of income, isolation from communities and inability to participate as a productive member of society as a result of their HIV status. According to surveys conducted via the People Living with HIV Stigma Index, instances of stigma and discrimination exact profound psychological costs, resulting in feelings of guilt, shame and suicidal thoughts. As a result of the pernicious effects of stigma and discrimination, on both people living with HIV and the effectiveness of HIV programmes, the Global Commission on HIV and the Law urged that countries take immediate steps to repeal punitive laws and prohibit discrimination.⁸

LEGAL PROTECTION AGAINST HIV DISCRIMINATION

Protective laws, adequately resourced and enforced, help broaden access to essential health and social services, enhance the quality and effectiveness of services and protect people living with or vulnerable to HIV from stigma, discrimination and violence. In 2012, 61% of countries reported the existence of anti-discrimination laws that protect people living with HIV.

TABLE 8.1

People living with HIV reporting being denied health services and jobs in the last 12 months because of their HIV status, selected countries, 2008–2013

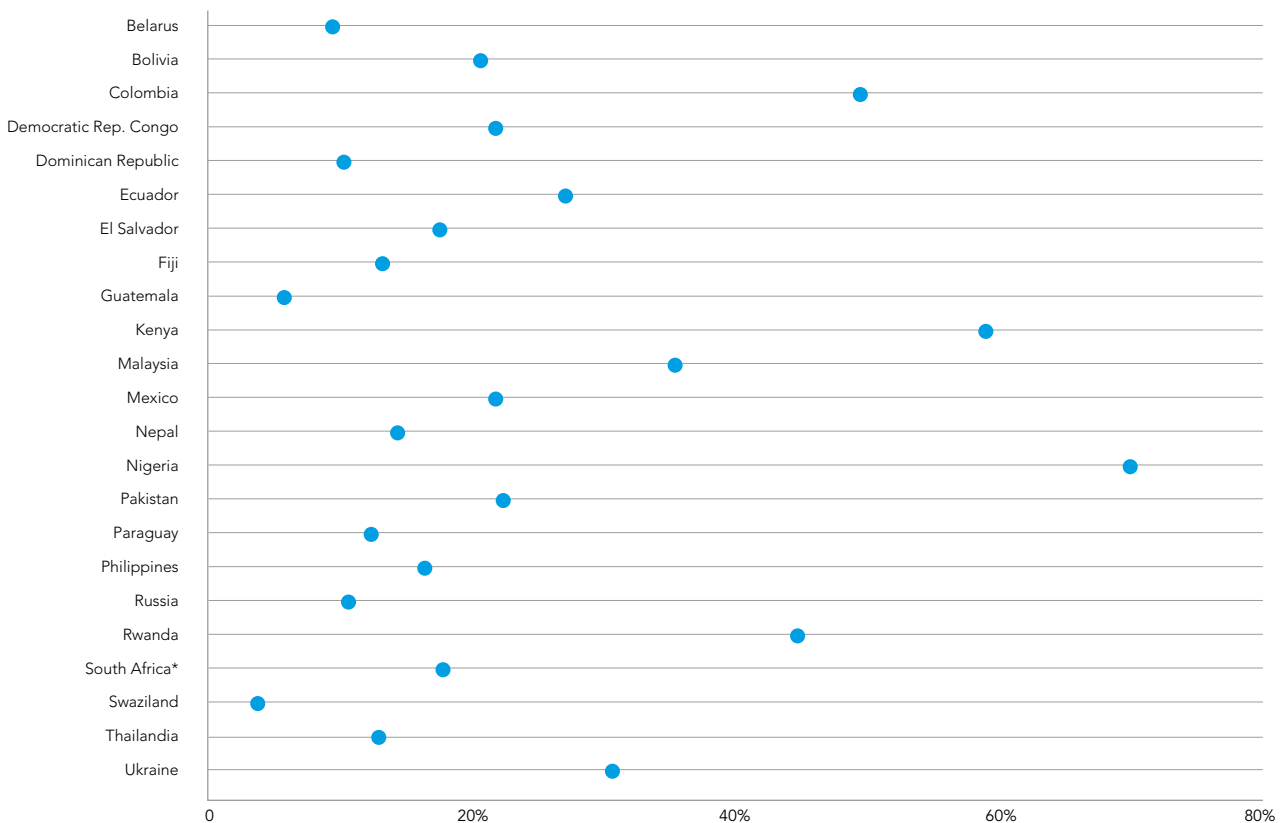
	DENIED HEALTH AND/OR DENTAL SERVICES (%)	DENIED FAMILY PLANNING SERVICES (%)	REFUSED EMPLOYMENT (%)
Argentina	16	45	13
Bangladesh	4	4	9
Belarus	18	19	6
Bolivia	19	5	10
Cameroon	2	3	7
China	12	...	15
Colombia	27	...	9
Democratic Republic of the Congo	6	...	13
Dominican Republic	8	2	10
Ecuador	20	5	10
El Salvador	8	4	3
Ethiopia	7	6	21
Fiji	13	11	14
Germany	19	...	...
Guatemala	6	10	3
Jamaica	3	...	...
Malawi	5	8	...
Malaysia	...	...	12
Mexico	14	2	5
Moldova	13	2	5
Myanmar	10	35	15
Nepal	21	3	4
Nigeria	21	6	...
Pakistan	33	3	35
Paraguay	17	4	9
Philippines	8	6	...
Poland	20	3	11
Russia	10	5	3
Rwanda	13	88	37
South Africa (O.R. Tambo Region, Eastern Cape)	5	7	3
Sri Lanka	...	...	4
Swaziland	4	1	3
Thailand	20	14	26
Ukraine	20	3	8
Zambia	8	10	17

Source: Surveys conducted using People Living with HIV Stigma Index, www.stigmaindex.org

However, many who experience rights abuses do not obtain redress through legal means.⁹ In 17 out of 23 countries where the People Living with HIV Stigma Index research was conducted, less than 30% of people living with HIV who have experienced rights violations reported having sought legal redress (regardless of whether redress was successful) (see Figure 8.1).

To ensure access to legal redress, HIV-related legal services must be in place for people living with HIV. In 2012, 55% of countries reported the existence of HIV-related legal services (compared to 45% in 2008), while 57% indicated that judges and magistrates had received training on HIV discrimination (up from 46% in 2008). Countries reporting the existence of free or reduced-cost legal services to people living with HIV through private sector law firms or university-based centres increased from 39% in 2008 to 52% in 2012 (see Figure 8.2).

FIGURE 8.1
People living with HIV whose rights have been violated and who sought legal redress, selected countries, 2008–2013

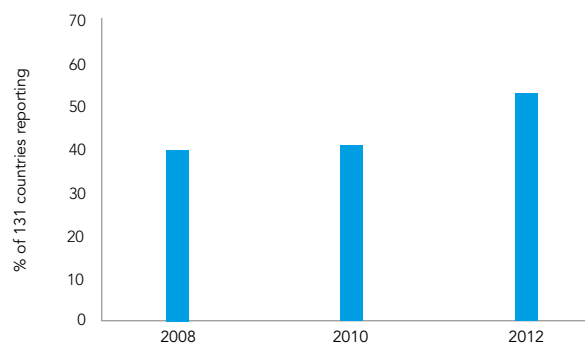


Source: Surveys conducted using People Living with HIV Stigma Index, selected countries 2008–2013, www.stigmaindex.org

*O.R. Tambo Region, Eastern Cape

FIGURE 8.2

Countries where private-sector law firms or university-based centres provide free or reduced-cost legal services to people living with HIV



Source: 2008, 2010, 2012 NCI country reporting, nongovernmental sources (www.unaids.org/ncpi)

CRIMINALIZATION OF HIV NON-DISCLOSURE, EXPOSURE AND TRANSMISSION

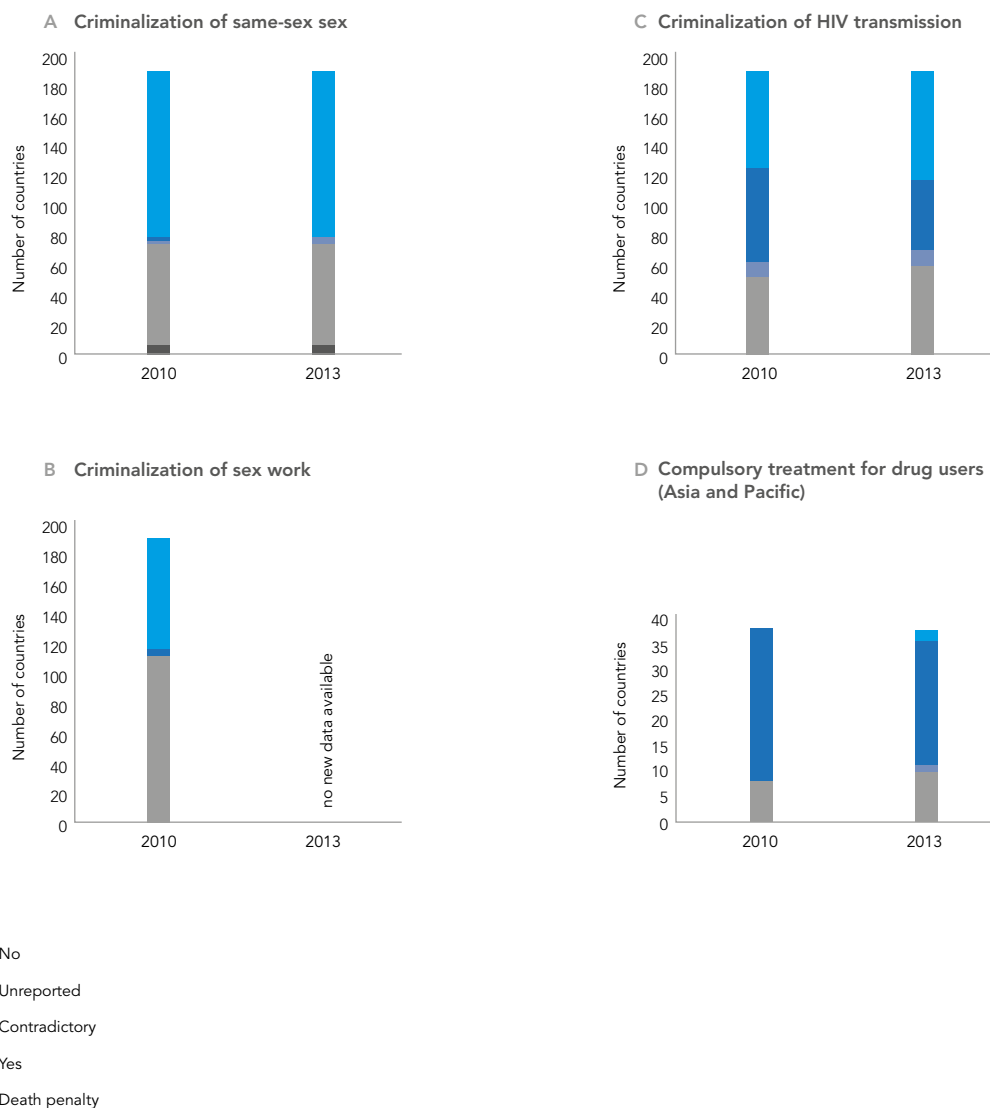
As of 2013, 63 countries have, in at least one jurisdiction, HIV-specific provisions that allow for the prosecution of HIV non-disclosure, exposure and/or transmission. In other countries, prosecutions for HIV non-disclosure, exposure or transmission have been based on general criminal law offences such as sexual assault, grievous bodily harm, criminal nuisance, manslaughter or attempted homicide.

Reviews of these laws and prosecutions for HIV non-disclosure, exposure and transmission demonstrate that they often do not reflect the best available HIV-related scientific and medical evidence regarding modes of HIV transmission and the benefit of treatment.¹⁰ Furthermore, these laws and prosecutions often ignore generally applicable criminal law and human rights principles. For instance, prosecutions for HIV exposure have been reported against people living with HIV for acts such as spitting or biting that represent no risk of HIV transmission.¹¹

Prosecutions have also been reported against people living with HIV who use condoms during sexual relations.¹² Such prosecutions are contrary to the best scientific and medical evidence and are likely to result in miscarriages of justice. Prosecution of people living with HIV for these acts is also counterproductive, in that it creates a climate of fear that undermines public health efforts to encourage people to voluntarily seek HIV prevention, testing and treatment services.

As recommended by the Global Commission on HIV and the Law, several countries have begun reviewing such laws, restricted their application or dropped them altogether (see Figure 8.3). In 2011, Fiji removed HIV-specific criminal offences for transmission or exposure from a broader HIV statute; Guyana firmly rejected a proposed HIV-specific criminal law; and at least four African countries – Congo, Guinea, Senegal and Togo – have since 2010 restricted the use of criminal laws solely to cases of intentional transmission. In order to provide support to countries in this area, UNAIDS has recently published a new guidance note: on *Ending overly-broad criminalisation of HIV non-disclosure, exposure and transmission*.¹³

FIGURE 8.3
HIV-related punitive laws, 2010–2013



Sources:

Criminalization of same-sex sexual activities

2010: International Lesbian, Gay, Bisexual, and Trans and Intersex Association. State-sponsored Homophobia (accessed 8 April 2010).
 2013: International Lesbian, Gay, Bisexual, and Trans and Intersex Association. State-sponsored Homophobia (published May 2013, 8th edition).

Criminalization of sex work

2010: United States Department of State. 2009 Country Reports on Human Rights Practices.

Criminalization of HIV-transmission

2010: Global Network of People Living with HIV. Global Criminalisation Scan (accessed 8 April 2013).
 2013: Global Network of People Living with HIV. Global Criminalisation Scan (accessed 23 June 2013).

Compulsory treatment for drug users

2010: International Planned Parenthood Federation. Verdict on a Virus: Public Health, Human Rights and Criminal Law.
 2013: UNAIDS. Punitive laws hindering the HIV response in Asia and the Pacific in June 2013.

CRIMINALIZATION OF KEY POPULATIONS

Punitive laws focused on key populations at higher risk of HIV remain common throughout the world. In 2012, non-governmental informants in 70% of countries and national governments in 60% reported the existence of laws, regulations or policies that present obstacles to effective HIV prevention, treatment, care and support for key populations and vulnerable groups.

Seventy-six of 193 countries currently criminalize same-sex relations, with some jurisdictions permitting imposition of the death penalty for convictions under such laws.¹⁴ Seven of the 10 countries receiving the largest amounts of funding from the Global Fund, as well as more than half of the 88 countries receiving PEPFAR support, criminalize consensual sexual relations among people of the same sex.¹⁵

Punitive policies pertaining to drug use – including harsh penalties for possession of small amounts of drugs for personal use, criminalization of drug dependence, compulsory drug detention and bans on drug substitution therapy or needle and syringe programmes – prevent or deter many people who inject drugs from receiving the services they urgently need.¹⁶ Compulsory drug detention regimes in some countries are so severe that a United Nations Special Rapporteur on torture or other cruel, inhuman or degrading treatment or punishment singled them out for denunciation in 2013.¹⁷ In 2012, 12 UN system agencies jointly called for the closure of compulsory drug detention and rehabilitation centres.

Most countries have laws in place that criminalize some aspects of sex work,¹⁸ and sex workers are often vulnerable to police harassment and mistreatment. The UN Development Programme (UNDP), the World Health Organization (WHO), the UN Population Fund (UNFPA), UNAIDS and the Network of Sex Worker Projects have called for the decriminalization of sex work and the elimination of the unjust application of laws and regulations against sex workers.

While the situation for key populations is worsening in some countries, there are some encouraging signs in others of leadership and innovation to ensure rights-based responses for key populations. For example, Malaysia is transitioning away from compulsory drug and rehabilitation centres, creating a network of non-incarceration ‘cure and care’ clinics that are associated with a 37% decline in injecting drug use and a 76% reduction in arrests.¹⁹ The South African Commission on Gender Equity, a constitutionally mandated entity, has recommended the decriminalization of sex work on human rights grounds.²⁰ In June 2013, the US Supreme Court invalidated a US policy that required recipients of federal funds to explicitly agree with the government’s policy to oppose ‘prostitution.’

PROGRAMMING TO REDUCE HIV STIGMA

Anti-stigma programmes are most effective when they simultaneously address individual, organizational and public policy factors that enable stigma and discrimination.²¹ Evidence indicates that anti-stigma programming reduces social isolation and improves HIV treatment adherence.²² Given the particularly serious effects of discrimination within health care settings on people living with HIV, intensified efforts are needed to reduce stigmatizing attitudes and behaviours among health care workers.

A recent systematic review found that, over the last decade, the evidence base for effective programming to reduce stigmatizing and discriminatory attitudes has expanded substantially.²³ Notwithstanding the clear benefits of anti-stigma efforts to HIV responses, such programming remains badly under-resourced. Although the proportion of Global Fund grants that include activities addressing stigma and human rights increased from 13% in Round 8 to 62% in Round 10, a review determined that anti-stigma activities are frequently not integrated into grant work plans, budgets or performance frameworks.²⁴

LOOKING AHEAD

Nearly all countries that reported results of mid-term reviews (103 of 109) identified eliminating stigma and discrimination as a national priority, with 99 having integrated this target in their national HIV strategic plans. Although national mid-term reviews reflect clear recognition of the harmful effects of stigma and discrimination on national HIV responses, 62% of countries in Eastern and Southern Africa and 50% of countries in Asia and the Pacific report that they are not on track to eliminate stigma and discrimination.

In addition to a shortage of strategic information on stigma and discrimination and insufficient enforcement of anti-discrimination provisions that are in place, national mid-term reviews also cited the inadequacy of resources for programmes to address stigma and discrimination as a major impediment to achieving zero discrimination. The majority (54%) of the 133 countries reporting HIV spending did not invest at all in human rights programmes and, out of those that did invest, only eight spent more than 1% of the total budget on these programmes.

Urgent efforts are needed to review national legal and policy frameworks to assess their adherence to human rights principles, revising or repealing laws as needed to ensure a rights-based response that provides equitable access to essential HIV programmes. Every national response needs to address stigma and discrimination and increase access to justice. Through education and awareness-raising, responses should address the causes of stigma and discrimination, including irrational fears of infection and moral judgement.

As recommended by the Global Commission on HIV and the Law, particular attention needs to focus on the removal of punitive laws regarding key populations. Legal frameworks need to be complemented by robust, sustained investment in anti-stigma programming that works to forge healthier social norms of inclusion, tolerance and non-discrimination. Much greater investment in enforcement mechanisms for anti-discrimination laws is needed, including support for legal services for people living with HIV and members of key populations, as well as programmes that educate people living with or affected by HIV regarding their rights.

Efforts to eliminate stigma and discrimination must reach beyond traditional health stakeholders and engage all arms of government, including legislative and judicial branches, as well as civil society and people living with HIV. Steps are also needed to inform and sensitize those who make the laws (parliamentarians) and those who enforce them (Ministers of Interior and Justice, police, prosecutors, judges, lawyers, prison officials and traditional and religious leaders) regarding human rights in the context of HIV.

Leadership to end discrimination

In many countries, leadership and innovation have had a positive effect on human rights-based HIV responses.

Countries across the world have taken steps to remove punitive laws that impede rights-based HIV responses. In 2012, Viet Nam passed legislation that effectively ended the practice of holding sex workers in administrative detention centres. In June 2013, the Chinese Guangdong province announced its intention to abolish restrictions that prevent people living with HIV from working as teachers. In 2012, the East African Legislative Assembly passed the HIV and AIDS Prevention and Management Act, which aims to provide a rights-based legal framework for Burundi, Kenya, Rwanda, Uganda and the United Republic of Tanzania.

Several countries have also taken steps to enhance the enforcement of rights provisions and improve access to justice for people who have experienced discrimination. In 2010, Moldova implemented a multi-faceted programme to address human rights violations against people living with HIV and key populations, providing legal aid, strategic litigation and human rights training for judges, lawyers and those who work in law enforcement. Belize, Morocco and other countries report having engaged national human rights institutions and ombudsperson offices to respond to allegations of HIV-related stigma and discrimination. Kenya has established an HIV equity tribunal to enable individuals who have experienced discrimination to obtain redress.

The inclusion of religious leaders in capacity-building around HIV and Human Rights has been strengthened by the creation in August 2013 of a new framework for dialogue between religious leaders and people living with HIV.²⁵ The Framework for Dialogue is a tool for increasing systematic, inclusive and sustained dialogue and collaboration between people living with HIV and religious leaders at the national level to address stigma, discrimination and other issues of concern. It is intended to be used by national networks of people living with HIV, networks of religious leaders living with HIV, religious leaders, faith-based organizations, and inter-governmental bodies and development agencies working on related issues, including UNAIDS country offices.

9. ELIMINATE HIV-RELATED RESTRICTIONS ON ENTRY, STAY AND RESIDENCE

Since 2010, 10 countries, territories or areas have eliminated restrictions on entry, stay and residence for people living with HIV. However, eliminating the remaining HIV-related restrictions on equal freedom of movement will require intensified action to remove such counterproductive and discriminatory laws that remain in force in 43 countries. This will involve the sensitization of key decision-makers in relation to how HIV is and is not transmitted, improving public attitudes about people living with HIV and about migrants, and galvanizing commitment to HIV programmes that reach people on the move.

HIV-related restrictions on entry, stay and residence are not justified by public health considerations. There is no evidence that individuals who travel pose a risk of HIV transmission and, in any event, available evidence and extensive international experience indicate that evidence- and rights-based strategies, not mandatory testing and other punitive or coercive approaches, are most effective in preventing transmission. Furthermore, HIV-related restrictions on entry, stay and residence may limit the uptake of HIV voluntary testing and hinder adherence to HIV treatment.

PROGRESS TOWARDS ELIMINATION OF HIV-RELATED RESTRICTIONS ON ENTRY, STAY AND RESIDENCE

The overwhelming majority of countries worldwide have rejected restrictions on the entry, stay and residence of people living with HIV (see Table 9.1), and there is a clear international trend towards repeal of such discriminatory laws. From 2000 to mid-2013, the number of countries, territories and areas with HIV-related travel restrictions fell by more than half – from 96 to 43 (see Figure 9.1).

From 2010 to 2012, eight countries (Armenia, China, Fiji, Namibia, the Republic of Korea, the Republic of Moldova, Ukraine and the US) repealed their restrictions. In January 2013, Mongolia lifted HIV-related restrictions on entry, stay and residence when it implemented broader legislation that also removed employment restrictions that prevented people living with HIV from taking certain jobs, including in the food industry. In mid-2013, Andorra reported the removal of its restrictions.

CONTINUING CHALLENGES POSED BY DISCRIMINATORY RESTRICTIONS

Although the trend is towards removal of restrictions on entry, stay and residence of people living with HIV, these laws persist in many countries (see Figure 9.2). Five countries maintain a blanket ban on entry by people living with HIV, five require proof of HIV-negative status for those seeking to stay for 10–90 days, and at least 19 countries authorize deportation of individuals found to be living with HIV.

TABLE 9.1

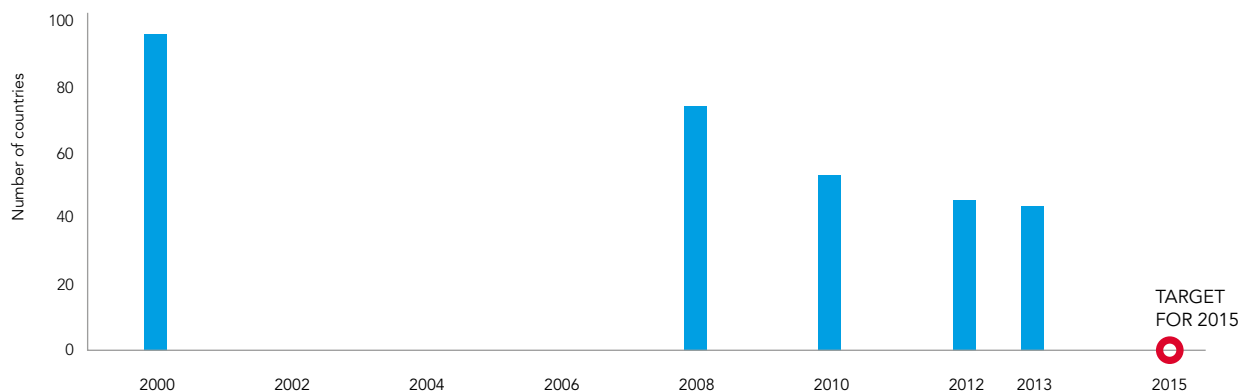
Countries, territories and areas with restrictions on entry, stay or residence for people living with HIV as of July 2013

1. Aruba	15. Jordan	30. Saudi Arabia
2. Australia	16. Kuwait	31. Singapore
3. Bahrain	17. Lebanon	32. Slovakia
4. Belarus	18. Lithuania	33. Solomon Islands
5. Belize	19. Malaysia	34. Sudan
6. Brunei Darussalam	20. Marshall Islands	35. Syrian Arab Republic
7. Comoros	21. Mauritius	36. Chinese Taipei
8. Cuba	22. New Zealand	37. Tajikistan
9. Cyprus	23. Nicaragua	38. Tonga
10. Democratic People's Republic of Korea	24. Oman	39. Turkmenistan
11. Dominican Republic	25. Papua New Guinea	40. Turks and Caicos Islands
12. Egypt	26. Paraguay	41. United Arab Emirates
13. Iraq	27. Qatar	42. Uzbekistan
14. Israel	28. Russian Federation	43. Yemen
	29. Samoa	

Source: UNAIDS database on HIV-related restrictions on entry, stay and residence, updated August 2013.

FIGURE 9.1

Number of countries with restrictions on entry, stay and residence for people living with HIV, 2000–2013 and 2015 target

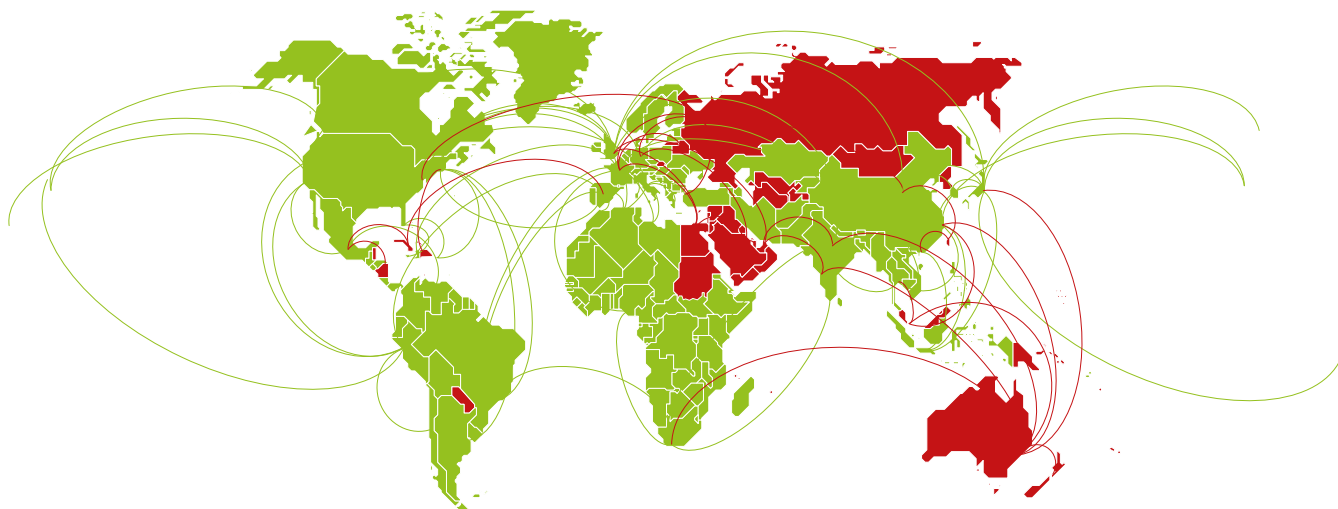


Source: for 2000, Weissner, P., Haerry, D. Entry and residency restrictions for people living with HIV. International Task Team on HIV-related Travel Restrictions. First Meeting, 24–25 February 2008, Geneva, Switzerland; for 2008, 2010, 2012 and 2013, UNAIDS database on HIV-related restrictions on entry, stay and residence.

FIGURE 9.2
Restrictions on entry, stay and residence for people living with HIV as of July 2013



Restrictions on entry, stay and residence for people living with HIV, which may involve the following: mandatory and periodic HIV testing without confidentiality, counselling or referral to services or treatment; incarceration; deportation; total bar on entry or bars on short-term or long-term stays/work; and waiver requirements.



Source: UNAIDS database on HIV-related restrictions on entry, stay and residence, updated August 2013.

These laws and the ways they are carried out violate the human rights of people living with HIV. People seeking to relocate or migrate are often tested without informed consent or counselling and are then denied visas. Others who become infected in the country of destination are found to be HIV-positive when seeking to renew their visas; they are often not told they are being tested for HIV, given their test results or counselled but instead are detained and deported summarily, sometimes without the opportunity to collect their personal effects and receive their final salary. Restrictions on entry, stay and residence based on HIV status exist in all Gulf Cooperation Council (GCC) countries, a major destination for migrant workers, in particular from Asia.

Women migrants face additional challenges as they are often more vulnerable to physical, sexual and verbal abuse. Many sexual abuse survivors, fearing societal blame and stigmatization as a result of the sexual abuse and violence they have experienced, never report incidents, thereby facing alone the negative physical and psychological consequences of rape, including the risk of being infected by HIV.¹ The trauma of abuse and violence is compounded by the stigma and financial consequences of being deported on account of their HIV-positive status.

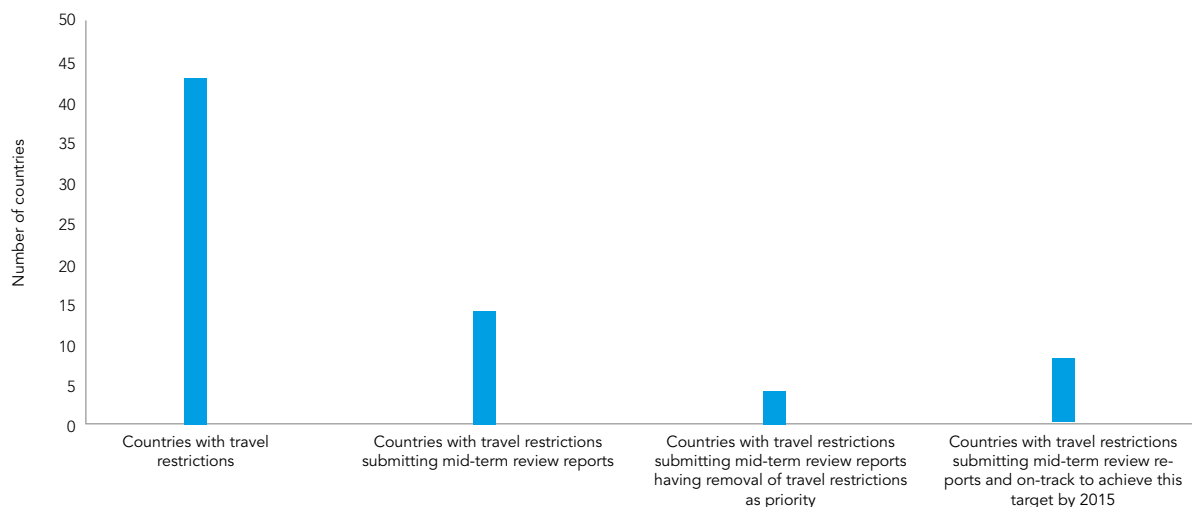
Restrictions in the Middle East and North Africa not only affect people migrating from other regions but also people living with HIV within the region. In reporting

the findings of its mid-term review, Jordan highlights the practice of national restrictions on migrants from neighbouring countries (notably Egypt, Iraq and Syria), as well as the effect of mandatory HIV screening policies on the estimated 1 million Jordanians working abroad, mostly in GCC countries.

Of the 43 countries, territories and areas worldwide that retain discriminatory HIV-related restrictions on entry, stay and residence, 15 submitted reports on their national mid-term reviews. Among these countries, only four (Egypt, Jordan, Mauritius and Paraguay) have indicated that lifting restrictions is a priority issue, and three of these countries (Egypt, Mauritius and Paraguay) indicate that they are on-track to achieve this target by 2015. Lebanon, Malaysia, Papua New Guinea, Sudan and Tajikistan have also reported that they are on-track for lifting restrictions by 2015 (see Figure 9.3).

FIGURE 9.3

Mid-term reviews, priorities and plans in countries with restrictions on entry, stay and residence for people living with HIV, 2013



Source: Mid-term review reports 2013

GROWING RECOGNITION OF THE HARM CAUSED BY HIV-RELATED RESTRICTIONS ON ENTRY, STAY AND RESIDENCE

There is increasing understanding that discriminatory restrictions on entry, stay and residence are inconsistent with the needs of an increasingly globalized business world. In November 2012, over 40 corporate chief executive officers (CEOs), representing nearly 2 million employees worldwide, cited both economic and human rights considerations in urging repeal of all HIV-related travel restrictions. Representing such prominent employers as Coca-Cola, Heineken, Johnson & Johnson, Kenya Airways, Merck, the National Basketball Association, Pfizer and Thomson Reuters, the CEOs emphasized that companies need the freedom to send their employees overseas, regardless of their HIV status, in order to succeed in a globalized, highly competitive world.

TOWARDS 2015

Reaching the goal of eliminating remaining HIV-related restrictions on entry, stay and residence will require accelerated progress, particularly in sensitizing senior officials and advancing law and regulatory reform. National coalitions or task forces – bringing together both government officials and civil society, including people living with HIV – have a potentially important role to play in building momentum for elimination of these restrictions. Efforts to educate and persuade key decision-makers should engage ministries of health, interior, migration, justice and labour.

It appears that the largest numbers of migrants affected by mandatory HIV testing, restrictions and deportation are those seeking entry, stay and residence in countries of the Middle East and North Africa region. As such, much greater regional action is required, for example through study visits from national officials in GCC countries to other countries in the Middle East and North Africa that have no restrictions, such as Morocco and Tunisia. As countries that have lifted restrictions and reported no negative effects, such learning opportunities can play a potentially important role in helping decision-makers understand that no public health rationale exists for HIV-related restrictions on entry, stay and residence.

In lieu of discriminatory policies, countries should ensure that all people on the move, citizens and non-citizens alike, should have access to essential HIV services. Countries should implement evidence- and rights-based HIV prevention, treatment, care and support programmes for people on the move, for both the formal and informal sectors.

REFORMING IMMIGRATION LEGISLATION

Papua New Guinea is among the countries reporting action towards lifting its restrictions. A review of the Migration Act and Migration Regulation, which is being led by the Department of Foreign Affairs and Immigration, has presented an opportunity for national stakeholders in the HIV response to call for the removal of HIV and AIDS from the list of diseases that are defined as representing a 'danger to the community'. As part of this review process, there have been calls for consular officials, immigration officers and medical officers to be provided with guidance that supports consistent application of immigration medical assessment criteria. All immigration health assessments should respect the HIV/AIDS Management and Prevention Act, which makes discrimination on the basis of HIV status unlawful.

10. STRENGTHEN HIV INTEGRATION

As sustainability has become a more prominent international priority in responding to AIDS, strides have been made towards the elimination of parallel systems and the integration of HIV in health systems and broader development efforts.* Countries are prioritizing the integration of HIV in diverse systems, with more than 90% of countries (103 out of 109) indicating that integration is a national priority. However, a smaller proportion (77 out of 109, or 70%), report that they are on track to achieve national integration commitments, with those not on track often citing donor policies and practices that use disease-specific funding channels and reporting requirements that undermine integration efforts.

Different countries have taken different approaches, reflecting in part the need for population-specific service delivery. The scope and scale of the integration of HIV services into other health services, and vice versa, vary depending on the nature of the epidemic and the needs of key populations.

ALIGNING NATIONAL PLANNING PROCESSES

At the level of national planning, many countries have taken major steps to align HIV with broader health or development plans. The overwhelming majority of countries that undertook mid-term reviews (82%) address integration in their national HIV strategic plans or equivalent documents. Many countries (45%) report that HIV has been aligned with other disease-specific planning (such as joint planning for HIV and other sexually transmitted infections (STIs)), or integrated into national health and development plans.

In their efforts to harmonize planning, countries have taken a number of approaches. Several countries (e.g. Brazil, Cameroon, Côte d'Ivoire, Fiji, Madagascar, Malawi, Mauritania, Republic of Moldova and Togo) have aligned or fully integrated strategic planning and budget cycles for HIV and health generally. Through the Sector-Wide Approach and the Pool Fund mechanism, Nepal is financing HIV interventions within a broader framework that promotes integrated approaches. Other countries, such as Ethiopia, Gabon, Georgia, Malawi, Morocco, Thailand, Senegal, South Africa and Zambia, are in the process of integrating – or have integrated to different degrees – HIV services into their national health insurance, health funds or other domestic funding schemes.

* As this cross-cutting section addresses integration of various HIV services (e.g. HIV counselling and testing, antiretroviral treatment, prevention of mother-to-child transmission and HIV/TB services) with health services and broader development, it touches on issues that are also addressed – yet from a different angle – in other sections of this report.

SERVICE INTEGRATION

As HIV responses were first being developed and scaled up, many countries established specialized service systems to address the needs of people living with HIV. While this approach was warranted in earlier stages of the response, it has become increasingly clear that maximizing the effectiveness of services and sustaining responses demands strategic integration of HIV services within health systems and other sectors.

No single approach to service integration will fit the needs of all countries. Diverse approaches to service integration have been adopted in different settings, responding in part to differences in underlying HIV service systems, health systems and needs and priorities of countries. Notwithstanding the plethora of approaches pursued, available evidence suggests that integrated approaches are beneficial, enhancing service uptake and improving coordination of care. Examples include tuberculosis and HIV services,^{1,2} services to prevent mother-to-child transmission integrated with maternal and child health care,^{3,4} linking HIV and chronic non-communicable diseases^{5,6} and, more broadly, HIV services integrated within primary health care and overall health and community systems.⁷ In addition to improving access to health services, integrated service delivery models may reduce unit costs, as reflected in lower costs of HIV testing and counselling when such services are integrated with other health services.⁸

Progress has been made in the integration of service delivery, as reflected by 2012 GARPR data and reports of countries that conducted mid-term reviews⁹ (see Figure 10.1):

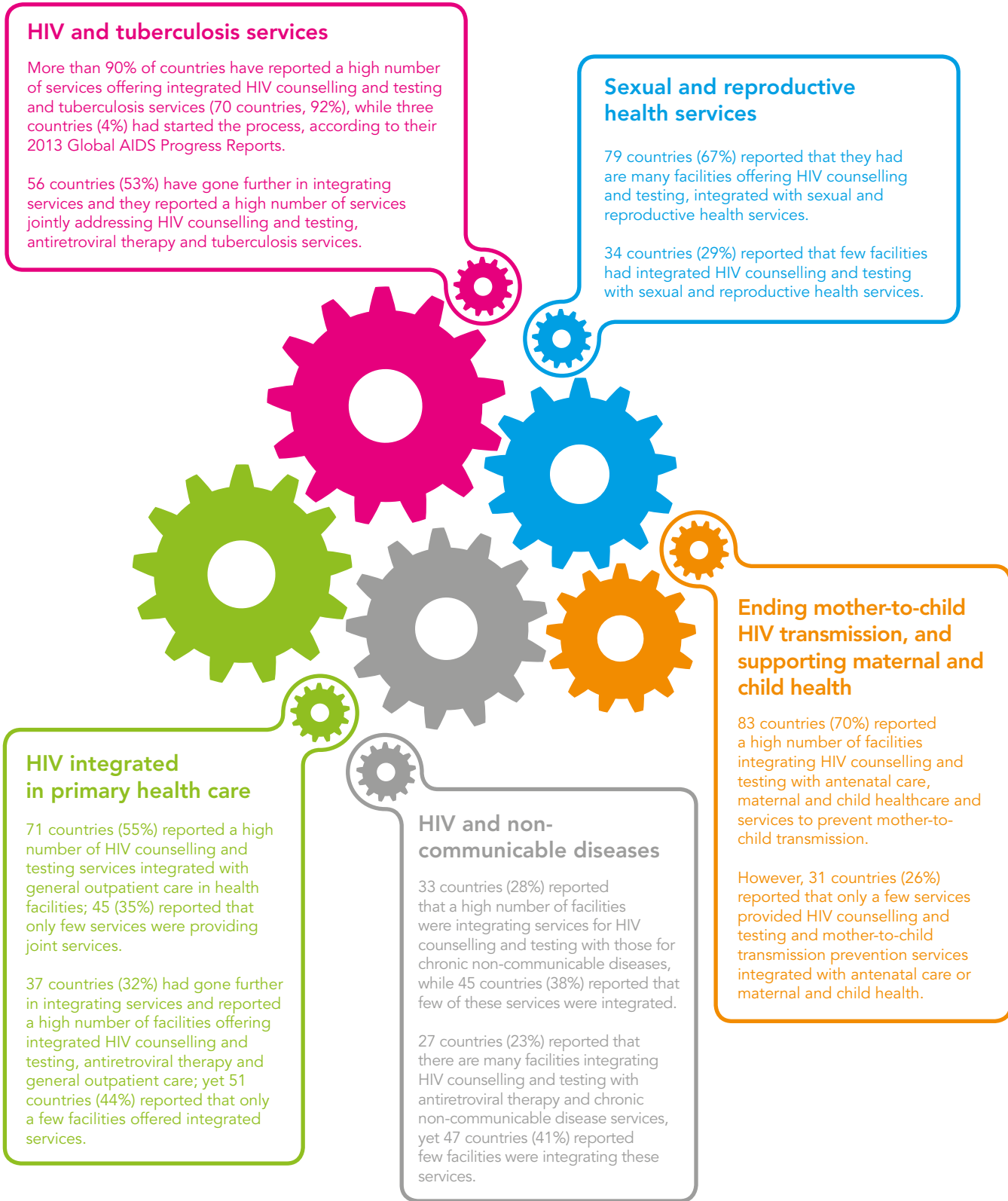
- **HIV and tuberculosis.** Among 105 countries reporting, 56 (53%) have taken active steps towards either fully integrating HIV/TB services or strengthening joint service provision. The degree of HIV/TB integration varied considerably, ranging from fully integrated service delivery to the addition of specific services (e.g. tuberculosis diagnostic services in HIV clinics). Several countries, including Armenia, Botswana, Comoros, Democratic Republic of the Congo, Ethiopia, Eritrea, Namibia, North Sudan and South Africa, identified the need to further integrate HIV and tuberculosis services in order to scale-up timely diagnosis and treatment of HIV/TB co-infections.
- **Services to prevent mother-to-child transmission and support maternal and child health.** Of the 118 countries reporting pertinent data, 70% said they had integrated HIV testing, counselling and services within antenatal care and maternal and child health services to prevent mother-to-child transmission. Forty-three countries report having linkages or integrated service delivery between services to prevent mother-to-child HIV transmission and broader maternal and child health services. Country examples include Gambia, Guinea-Bissau, Ethiopia and Viet Nam (see box below).
- **HIV and services for STIs and sexual and reproductive health.** Two-thirds of countries report having integrated HIV in sexual and reproductive health services, with more than 45 countries having conducted the rapid assessment for sexual and reproductive health and HIV linkages. For example, Nepal has established a coordination mechanism to integrate reproductive health services within HIV programmes, with coordinated provider training

programmes for HIV and sexual and reproductive health. In Morocco, the integration of HIV into public health services expanded the number of people receiving HIV counselling and testing, from 46 000 in 2010 to 222 620 people tested in 2012, while coverage of services for HIV-positive pregnant women to prevent mother-to-child HIV transmission rose from 29% in 2010 to 48% in 2012. Several countries reported that national leadership is key to effective integration. Some donors have separate funding streams for HIV and STI services, which may hinder effective integration.

- **HIV and non-communicable diseases.** HIV service scale-up has provided impetus for the development of broader chronic care systems in many countries where services for chronic diseases have historically been scarce. Among 115 countries submitting pertinent information, 27 (23%) report having integrated HIV counselling, testing and antiretroviral treatment with services for chronic non-communicable diseases. Among countries that have taken steps towards such service integration, the extent and depth of integration varies. Some have started realizing positive synergies and spill-over effects for management of HIV and other chronic diseases.
- **HIV and primary care and overall health and community systems.** Fifty-five per cent of countries report having integrated HIV counselling and testing in general outpatient care, with 32% of countries integrating antiretroviral treatment in such settings. Primary health care and antenatal settings are providing integrated services for reproductive health, STIs, tuberculosis and HIV in Armenia; the Bahamas have integrated HIV and STI services in primary care; stand-alone antiretroviral clinics in Namibia are in the process of being integrated within primary health care. Brazil is providing integrated HIV and primary care services through the country's public, decentralized health service. Additional efforts are needed to strengthen community systems and promote further decentralization of HIV service provision.

Although integrated service delivery models have the potential to generate benefits in all regions, what works in one country or community may not be effective in another. As many key populations avoid mainstream service systems, especially in settings where stigma and discrimination are rife or where their status or behaviours are criminalized, special service delivery approaches are needed.¹⁰

FIGURE 10.1
Integration of HIV in health service delivery



Source: GARPR 2013

INTEGRATION OF HIV WITHIN NON-HEALTH SECTORS

Critical enablers and development synergies ensure the efficacy, equity and roll-out of basic HIV programme activities. By integrating HIV responses not only within health sectors but also within non-health sectors, the sustainability of a robust response to HIV is enhanced.

Use of social protection initiatives to promote HIV prevention is one example of how HIV responses may be effectively integrated within non-health development initiatives. Likewise, as food insecurity has been found to inhibit effective HIV prevention and treatment,¹¹ HIV should be integrated within nutrition, feeding and other programmes to increase food security. Several studies have generated promising findings regarding the potential impact of education in general¹² and cash transfers in particular on young people's sexual behaviour and HIV risks.^{13,14,15}

TOWARDS 2015

There is strong official support among countries for the integration of HIV with broader health and development efforts. Of the countries that reported results of mid-term reviews and identified HIV integration as a national priority, 94 have included integration commitments in their national HIV strategic plans.

Although considerable gains have been made in taking AIDS out of isolation, countries are at different stages of integrating the HIV response within the broader health sector and other development sectors.

National mid-term reviews identified numerous challenges, including the need for enhanced leadership and commitment to eliminating parallel structures, moving towards service integration and improving cross-sectoral collaboration. Several countries reported that external funding should move from funding single diseases to funding integrated health services. Countries reported that to effectively improve their health systems requires investment in delivery of integrated services, such as physical infrastructure, new training requirements, new management approaches or integrated reporting structures for monitoring and evaluation. Systems for monitoring the effectiveness of integrated service delivery models should be improved and more detailed evidence provided. Such data can then be used to develop meaningful indicators with which impact can be measured.

BEYOND 2015

Debates regarding the post-2015 agenda articulate a global health agenda that focuses on health rather than disease. As the previous discussion reveals, the HIV response is already recognizing and acting on the need to integrate elements of the HIV response within the health system. The high priority accorded to HIV, however, must be maintained. Those aspects of the response that have made it effective must be protected and embedded in future health and development goals. Some aspects of the HIV response do, however, require careful consideration regarding whether integration of services will add value. Key populations living with HIV may not

necessarily access public health care services. Service delivery models need to be tailored to the needs of these groups, for instance through the provision of bundled outreach services or other models, and to involve affected communities.¹⁶

As a pathfinder in the provision of person-centred and rights-based services, the HIV response has many lessons to share with the emerging health and development paradigm.

Eliminating parallel systems and usefully integrating programmes and services require three different sets of action:

- **The national-level policy and planning perspective.** Joint budgeting is needed for HIV and other disease programmes or overall health sectors, and health planning should be informed by and linked to other sectoral planning (e.g. finance, education, labour, human rights, gender). HIV monitoring should be embedded in broader health information systems.
- **The management perspective.** Donor approaches should support, rather than undermine, integrated planning and programme management, while governance structures should be strengthened and adapted to support integration. Human resources for health will need to be rigorously analysed to ensure sufficient numbers of workers and the right distribution of skills to deliver integrated health care.
- **The point of service delivery perspective.** At the point of delivery, HIV services should be integrated with health and other services where appropriate. Quality of service delivery should be closely monitored and improved where necessary.

As the body of evidence relating to country experiences expands, capturing both positive and negative outcomes will be essential to providing clearer guidance and indicators on how best to approach integration of the HIV response within wider health and development efforts and identifying which elements are key to successful outcomes.

NATIONAL LEADERSHIP AND INNOVATION

Integrating services for the prevention of mother-to-child HIV transmission within maternal and child health services.

Throughout the world, countries are pursuing innovative approaches to the integration of prevention of mother-to-child HIV transmission with broader maternal and child health services. These approaches, in turn, are improving health outcomes for women and children.

As a result of an integrated approach to service delivery for women and children, Gambia has exceeded its target for the number of babies born to women living with HIV who receive cotrimoxazole within the first two months of life (target: 944; current: 1070 (113%)). Uptake of prophylaxis has been aided by its alignment with the DPT1 immunization schedule delivered through integrated infant welfare clinics.

Guinea-Bissau has integrated HIV testing and counselling within sexual and reproductive health services. Prevention of mother-to-child HIV transmission is an integral component of antenatal care, integrated within almost all public sector antenatal clinics, with systematic screening and an acceptance rate for HIV testing of 85%. Through scale-up of services integrated in health facilities and antenatal clinics, the proportion of HIV-positive pregnant women receiving antiretroviral therapy increased from 32% in 2010 to 50% in 2012.

Ethiopia has steadily integrated a wide range of HIV-related services – including HIV testing and counselling, antiretroviral therapy and prevention of mother-to-child transmission – within the reproductive, maternal, newborn and child health platform. Despite these steps, coverage for services to prevent new infections among children remains below 50%, underscoring the need for continued efforts to generate robust demand for services and improve access to and quality of services. It is especially important that prevention of new HIV infections among children be fully integrated within maternal and child health programmes and reproductive health services at diverse points of delivery.

In 2012, Viet Nam launched a pilot model to integrate services for prevention of mother-to-child HIV transmission, sexually transmitted infections and sexual and reproductive health in two provinces with low HIV prevalence. For the provision of integrated health services, including HIV counselling and testing, the model uses midwives as the first point of contact for pregnant women. Viet Nam plans to expand the model to other regions following regional needs assessment of sexual and reproductive health and HIV service needs, human resource capacity and infrastructure. To further support service integration, management of prevention of mother-to-child transmission is being transferred from the Viet Nam Administration for AIDS Control to the Maternal and Child Health Department within the Ministry of Health.

From a regional perspective, in Eastern and Southern Africa, the regional Joint Linkages SRH/HIV Project aims to integrate HIV and sexual and reproductive health services at the policy development, service delivery and knowledge generation levels. Funded by the European Union, the project has undertaken rapid assessments and baseline surveys in various countries, mapped HIV and sexual and reproductive health services, and implemented a set of integrated interventions. The project has been aligned with other regional initiatives, including the Maputo Plan of Action and the Southern African Development Community strategies for HIV and sexual and reproductive health.

REFERENCES

1. REDUCE SEXUAL TRANSMISSION OF HIV BY 50% BY 2015

1. Cohen, M. et al. (2011). Prevention of HIV-1 infection with early antiretroviral therapy. *New England Journal of Medicine*, 365: 493–505.
2. Auvert, B. et al. (2005). Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: The ANRS 1265 trial. *PLoS Medicine*, 2: e298.
3. Gray, R. et al. (2007). Male circumcision for HIV prevention in men in Rakai, Uganda: A randomized trial. *Lancet*, 369: 657–666.
4. Bailey, R.C. et al. (2007). Male circumcision for HIV prevention in young men in Kisumu, Kenya: A randomised controlled trial. *Lancet*, 369: 643–656.
5. Grant, R.M. et al. (2010). Preexposure chemoprophylaxis for HIV prevention in men who have sex with men. *New England Journal of Medicine*, 363: 2587–2599.
6. Choopanya, et al. (2013). Antiretroviral prophylaxis for HIV infection in injecting drug users in Bangkok, Thailand (the Bangkok Tenofovir Study): A randomised, double-blind, placebo-controlled phase 3 trial. *Lancet*, 381(9883): 2083–9200.
7. Halperin, D.T. et al. (2011). A surprising prevention success: Why did the HIV epidemic decline in Zimbabwe? *PLoS Medicine*, 8(2): e1000414.
8. Gregson, S. et al. (2010). HIV decline in Zimbabwe due to reductions in risky sex? Evidence from a comprehensive epidemiological review. *International Journal of Epidemiology*, 39(5): 1311–1323.
9. Scott-Sheldon, et al. (2011). Efficacy of behavioral interventions to increase condom use and reduce sexually transmitted infections: A meta-analysis, 1991 to 2010. *Journal of Immune Deficiency Syndromes*, 58: 489–498.
10. http://www.aidstar-one.com/sites/default/files/AIDSTAR-One_Case_Study_Club_Risky_Zambia.pdf.
11. Johnson, L.F., et al. (2012). The effect of changes in condom usage and antiretroviral treatment coverage on human immunodeficiency virus incidence in South Africa: a model-based analysis. *J R Soc Interface*. 9(72):1544-1554.
12. Eyawo, O., et al. (2010). HIV status in discordant couples in sub-Saharan Africa: A systematic review and meta-analysis. *Lancet Infectious Diseases*, 10: 770–777.
13. Burton, J., Darbes, L. and Operario, D. (2010). Couples-focused behavioural interventions for prevention of HIV: Systematic review of the state of evidence. *AIDS Behavior*, 14: 1–10.
14. UNFPA (2013) (in press). Donor Support for contraceptives and condoms for family planning and STI/HIV prevention in 2012, final draft (New York: United Nations Population Fund).

15. Scorgie, F., et al. (2013). 'We are despised in the hospitals': Sex workers' experiences of accessing health care in four African countries. *Culture, Health and Sexuality*, 5(4): 450–465.
16. Global Forum on HIV and MSM (2012). *Access to HIV Prevention and Treatment for Men who have Sex with Men: Findings from the 2012 Global Health and Rights Study*. http://www.msmsgf.org/files/msmgf/documents/GMHR_2012.pdf
17. <http://www.dailymail.co.uk/news/article-2306128/Collapsible-origami-condom-wins-praise-Bill-Melinda-Gates-Foundation.html>.
18. Jewkes, R.K. et al. (2010). Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: A cohort study. *Lancet*, 376(9734): 41 -48 <http://download.thelancet.com/pdfs/journals/lancet/PIIS014067361060548X.pdf>.
19. Binagwaho, A. et al. (2012). Adolescents and the right to health: Eliminating age-related barriers to HIV/AIDS services in Rwanda. *AIDS Care*, 24 (7): 936–942.
20. UNESCO (2009). *International Technical Guidance on Sexuality Education* (Geneva: UNESCO).
21. Björkman-Nyqvist, M., Corno, L. and de Walque, D. and Svensson, J. (2013). Evaluating the impact of short term financial incentives on HIV and STI incidence among youth in Lesotho: A randomized trial. TUPDC0106 – Poster Discussion Session, IAS 7th International AIDS Conference on HIV Pathogenesis, Treatment and Prevention, Kuala Lumpur, July..
22. Baird, S., McIntosh, C. and Özler, B. (2012). Effect of a cash transfer programme for schooling on prevalence of HIV and herpes simplex type 2 in Malawi: A cluster randomised trial. *Lancet*, 379(9823): 1320–1329.
23. Lutz, B. (2012). *Can (Conditional) Cash Transfers Contribute to HIV Prevention for Girls?* (Geneva: UNESCO, Gender Equality, HIV and Education).
24. Njeuhmeli, E. et al. (2011). Voluntary Medical Male Circumcision: Modeling the Impact and Cost of Expanding Male Circumcision for HIV Prevention in Eastern and Southern Africa. *PLoS Med* 8(11).
25. Ibid.
26. Cherutich, P. et al. (2012). Progress in voluntary medical male circumcision service provision – Kenya, 2008–2011. *Morbidity and Mortality Weekly Report*, 61: 957–961.
27. Baral, S., et al. (2012). Burden of HIV among female sex workers in low-income and middle-income countries: A systematic review and meta-analysis. *Lancet Infectious Diseases*, 380: 367–377.
28. Gouws, C. et al. (2012). Focusing the HIV response through estimating the major modes of HIV transmission: A multi-country analysis. *Sexually Transmitted Infections*, 88: i76–i85. DOI: 10.1136/sextrans-2012-050719
29. Kerrigan, D. et al. (2010). *The Global HIV Epidemics among Sex Workers* (Washington, DC: World Bank).

30. UNFPA (2010). HIV and Sex Work: Preventing HIV Risk and Vulnerability (Geneva: UNFPA).
31. Beyrer, C. et al. (2012). Global epidemiology of HIV infection in men who have sex with men. *Lancet*, 380: 367–377.
32. Wilson, P., Santos, G., Herbert, P. and Ayala, G. (2011). *Emerging Strategies: A Global Survey of Men Who Have Sex with Men (MSM) and their Health Care Providers* (Oakland, CA: Global Forum on MSM and HIV).
33. Sullivan, P.S., et al. (2012). Successes and challenges of HIV prevention in men who have sex with men. *Lancet*, 380: 388–399.
34. Fay, H., et al. Stigma, healthcare access, and HIV knowledge among men who have sex with men in Malawi, Namibia, and Botswana. *AIDS Behav.* 2011, 15:1088–1097.
35. Wilson et al., *Emerging Strategies*.
36. Mahler, H.R., et al. (2011). Voluntary medical male circumcision: Matching demand and supply with quality and efficiency in a high-volume campaign in Iringa Region, Tanzania. *PLoS Medicine*, 8: 31001131.

2. HALVE THE TRANSMISSION OF HIV AMONG PEOPLE WHO INJECT DRUGS BY 2015

1. Harm Reduction International (2012). *The Global State of Harm Reduction 2012: Towards an Integrated Response* (London: Harm Reduction International).
2. Gouws, C. et al. (2012). Focusing the HIV response through estimating the major modes of HIV transmission: a multi-country analysis. *Sexually Transmitted Infections*, 88: i76–i85. DOI: 10.1136/sextrans-2012-050719.
3. Strathdee, S.A. and Stockman, J. (2010). Epidemiology of HIV among injecting and non-injecting drug users: Current trends and implications for interventions. *Current HIV/AIDS Report*, 7(2): 99–106.
4. Mathers, B.M., et al. Global epidemiology of injecting drug use and HIV among people who inject drugs: A systematic review. *Lancet*, 372: 1733–1745.
5. UNODC (2013). *World Drug Report 2013* (New York: United Nations).
6. Abdul-Quader, A. et al. (2012). *Ukraine HIV Data Synthesis Project: Final Report, May 2012* (Atlanta, GA: Centers for Disease Control and Prevention).
7. WHO, UNODC and UNAIDS (2013). *Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users* (Geneva: United Nations).

3. ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

1. Alkema, L, et al. (2013). National, regional and global rates and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015: A systematic and comprehensive analysis. *Lancet*, 381(9878): 1642–1652.

2. United States Centers for Disease Control and Prevention (2013). Impact of an innovative approach to prevent mother-to-child transmission of HIV: Malawi, July 2011–September 2012. *Morbidity and Mortality Weekly Report*, 62: 148–151.
3. Zaba, B., et al. (2013). Effect of HIV infection on pregnancy-related mortality in sub-Saharan Africa: Secondary analyses of polled community-based data from the network for Analysing Longitudinal Population-based HIV/AIDS data on Africa (ALPHA). *Lancet*, 381: 1763–1771.
4. UNAIDS, PEPFAR, UNICEF, WHO (2013), *2013 progress report on the Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive* (Geneva: UNAIDS).
5. Cambodia Ministry of Health (2013). *Standard Operating Procedures for Implementation of the Boosted Linked Response between HIV and SRH for Elimination of New Paediatric HIV Infections and Congenital Syphilis in Cambodia* (Phnom Penh: Ministry of Health).

4. REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

1. UNHCR (2012). *UNHCR Global Trends 2012: A Year of Crises* (Geneva: UNHCR).
2. Bor, J., et al. (2013). Increases in adult life expectancy in rural South Africa: Valuing the scale-up of HIV treatment. *Science*, 339: 961–965.
3. Resch, S., et al. (2011). *Economic Returns to Investment in AIDS Treatment in Low and Middle Income Countries*. PLoS ONE 6:e25310.
4. WHO (2011). *Universal Access Report* (Geneva: WHO).
5. WHO, UNAIDS and UNICEF (2013). *Global Update on HIV Treatment 2013: Results, Impact and Opportunities* (Geneva: WHO, UNAIDS and UNICEF).
6. See Kennedy, C. et al. (2013). Provider-Initiated HIV Testing and Counseling in Low- and Middle-Income Countries: A Systematic Review. *AIDS and Behavior* 17(5): 1571-1590 and, in the context of antenatal care, Hensen, B. et al. (2012). Universal voluntary HIV testing in antenatal care settings: a review of the contribution of provider-initiated testing & counselling. *Tropical Medicine & International Health* 17(1): 59-70.
7. Mutale, W., Michelo, C. et al. (2010). Home-based voluntary HIV counselling and testing found highly acceptable and to reduce inequalities. *BMC Public Health*, 10: 347–347.
8. Sekandi, J.N., Sempeera, H. et al. (2011). High acceptance of home-based HIV counseling and testing in an urban community setting in Uganda. *BMC Public Health*, 11: 730–730.
9. See, for instance, Adam, P.C., de Wit, J.B., Toskin, I., Mathers, B.M. et al. (2009). Estimating levels of HIV testing, HIV prevention coverage, HIV knowledge, and condom use among men who have sex with men (MSM) in low-income and middle-income countries. *Journal of Acquired Immune Deficiency Syndromes*, 52(2): S143–S151.

10. Choko, A.T., Desmond, N., Webb, E.L., Chavula, K., Napierala-Mavedzenge, S. et al. (2011). The uptake and accuracy of oral kits for HIV self-testing in high hiv prevalence setting: A cross-sectional feasibility study in Blantyre, Malawi. *PLoS Medicine*, 8(10): e1001102. DOI:10.1371/journal.pmed.1001102.
11. Gregson, S., Nyamukapa, C.A., Sherr, L., Mugurungi, O. and Campbell, C. (2013). Grassroots community organizations' contribution to the scale-up of HIV testing and counselling services in Zimbabwe. *AIDS*, 27(10): 1657–1666.
12. Suthar, A. B. et al. (2013). Towards Universal Voluntary HIV Testing and Counselling: A Systematic Review and Meta-Analysis of Community-Based Approaches. *PLoS Med* 10(8): e1001496.
13. Kranzer, K., D. Govindasamy, et al. (2012). “Quantifying and addressing losses along the continuum of care for people living with HIV infection in sub-Saharan Africa: a systematic review.” *J Int AIDS Soc* 15(2): 17383.
14. Ivers, et al. (2009). “HIV/AIDS, undernutrition, and food insecurity.” *Clin Infect Dis* 49(7): 1096–1102.
15. For Brazil, see Grinsztejn, B. (2013). PowerPoint presentation: Research on maximizing the treatment and prevention benefits of ART in MSM/TG in Brazil. Presented at the 7th IAS Conference, Kuala Lumpur, Malaysia, 30 June -3 July. Organization: Oswaldo Cruz Foundation.
For Viet Nam, see Bui Duc Duong (2013). PowerPoint presentation: Getting to Three Zeros in Viet Nam. Organization: Viet Nam Authority of HIV/AIDS Control.
For China, see Ying-Ru Lo (2013). PowerPoint presentation: HIV Research Priorities. The Strategic Use of Antiretrovirals and Combination Prevention. Presented at the 2nd Asia HIV/AIDS Research Network Meeting, National Center for Global Health and Medicine, Tokyo, Japan, 19 -20 January. Organization: World Health Organization Regional Office for the Western Pacific.
For Malawi, see Integrated HIV Program report (2012). Government of Malawi Ministry of Health. http://www.hivunitmohmw.org/uploads/Main/Quarterly_HIV_Programme_Report_2012_Q4.pdf.
16. WHO, UNAIDS and UNICEF, *Global Update on HIV Treatment 2013*.
17. UNAIDS (2013). *Treatment 2015* (Geneva: UNAIDS).
18. International consultation focuses on access to HIV medicines for middle-income countries(UNAIDS 13 June 2013) <http://www.unaids.org/en/resources/presscentre/featurestories/2013/june/20130613brazil/>

5. HALVE TUBERCULOSIS DEATHS AMONG PEOPLE LIVING WITH HIV BY 2015

1. Suthar, A.B. et al. (2012). Antiretroviral therapy for prevention of tuberculosis in adults with HIV: A systematic review and meta-analysis. *PLoS Medicine*, 9(7): e1001270. DOI: 10.1371/journal.pmed.1001270.
2. WHO (2012). *Global TB Report* (Geneva: WHO), pp. 96, 100, 102.

3. Lawn SD, Kranzer K, Wood R. Antiretroviral therapy for control of the HIV-associated tuberculosis epidemic in resource limited settings. *Clinics in Chest Medicine*. 2009, 30(4):685–699
4. Ayles, H. et al. Effect of household and community interventions on the burden of tuberculosis in southern Africa: the ZAMSTAR community-randomised trial. *The Lancet, Early Online Publication*, 1 August 2013 doi:10.1016/S0140-6736(13)61131-9
5. Stevens, W. (2013). South Africa's 'Reality Check'. Presented at the 5th GLI Meeting, Global Forum of Xpert MTB/RIF implementers, Supranational Reference Laboratory Network Consultation, Veyrier-du-Lac, France, 16 April 2013. Organization: University of the Witwatersrand and National Health Laboratory Service. <http://goo.gl/eUkVXU> accessed 28 August 2013.

6. CLOSE THE GLOBAL AIDS RESOURCE GAP

1. African Union and UNAIDS (2013). *Delivering Results Toward Ending AIDS, Tuberculosis and Malaria: African Union Accountability Report on Africa–G8 Partnership Commitments*.
2. African Union. Roadmap on Shared Responsibility and Global Solidarity for AIDS, TB and Malaria Response in Africa. 2012. http://www.au.int/en/sites/default/files/Shared_Res_Roadmap_Rev_F%5B1%5D.pdf (Addis Ababa: African Union).
3. The President's Comprehensive Response Plan. <http://www.zero-hiv.org/wp-content/uploads/2013/07/PCRP-Summary.pdf>

7. ELIMINATE GENDER INEQUALITIES AND GENDER-BASED ABUSE AND VIOLENCE AND INCREASE THE CAPACITY OF WOMEN AND GIRLS TO PROTECT THEMSELVES FROM HIV

1. Leclerc-Madlala S. (2008). Age-disparate and intergenerational sex in southern Africa: the dynamics of hypervulnerability. *AIDS*, 22 Suppl 4:S17–25.
2. UNESCO (2011). *Global Education Digest* (Paris: UNESCO).
3. ILO (2012). *Key Indicators on the Labour Market*, 7th edn (Geneva: ILO).
4. UNAIDS (2012). *Global Report on the HIV Epidemic* (Geneva: UNAIDS).
5. DeLuca, A., Chaisson, R.E. and Martinson, N.A. (2009). Intensified case finding for tuberculosis in prevention of mother-to-child transmission programs: a simple and potentially vital additional for maternal and child health. *Journal of Acquired Immune Deficiency Syndrome*, 50: 1 96–199.
6. Francheschi, S. and Guglielmo, R. (2010). The prevention of cervical cancer in HIV-infected women. *AIDS*, 16: 2579–2580.
7. Janet M. Turan, Laura Nyblade (2013). HIV-related Stigma as a Barrier to Achievement of Global PMTCT and Maternal Health Goals: A Review of the Evidence. *AIDS and Behavior*, Volume 17, Issue 7, pp 2528-2539
8. Orner, P (2006). Psychosocial impacts on caregivers of people living with AIDS. *AIDS Care*, 18(3): 236-40.

9. Baral, S. et al. (2012). Burden of HIV among female sex workers in low-income and middle-income countries: a systematic review and meta-analysis. *Lancet Infectious Diseases*, 12: 538–549.
10. Baral S, et al. (2013). Worldwide burden of HIV in transgender women: a systematic review and meta-analysis. *Lancet Infectious Diseases*, 13(3):214–22.
11. United Nations Development Programme (2011). *The Socio-economic Impact of HIV at the Household Level: A Regional Analysis* (New York: UNDP).
12. United Nations Development Programme (2012). *Lost in Transition: Transgender People, Rights and HIV Vulnerability in the Asia-Pacific Region* (New York: UNDP).
13. Barker, G. and Ricardo, C. (2005). Young men and the construction of masculinity in sub-Saharan Africa: implications for HIV/AIDS, conflict, and violence. In G. Barker and C. Ricardo, *Young Men and the Construction of Masculinity in Sub-Saharan Africa: Implications for HIV/AIDS, Conflict, and Violence* (Geneva: World Bank).
14. Byamugisha, R. et al. (2010). Research determinants of male involvement in the prevention of mother-to-child transmission of HIV. *Reproductive Health*, 7: 12.
15. Ochieng-Ooko, V., et al. (2010). Influence of gender on loss to follow-up in a large HIV treatment programme in western Kenya. *Bulletin of the World Health Organization*, 88: 681–688.
16. Taylor-Smith, K., et al. (2010). Gender differences in retention and survival on antiretroviral therapy of HIV-infected adults in Malawi. *Malawi Medical Journal*, 22: 49–56.
17. Cornell, M., et al. (2012). Gender differences in survival among adult patients starting antiretroviral therapy in South Africa: a multicentre cohort study. *PLoS Medicine*, 9: e1001304.
18. Kanters, S. et al. (2013). Increased mortality among HIV-positive men on antiretroviral therapy: survival differences between sexes explained by late initiation in Uganda. *HIV/AIDS – Research and Palliative Care*, 5: 111–119.
19. Jewkes, R. et al. (2010). Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: a cohort study. *The Lancet*, 376(9734): 41–48.
20. Kouyoumdjian, F.B., et al. (2013). Intimate partner violence is associated with incident HIV infection in women in Uganda. *AIDS*, 27: 1331–1338.
21. World Health Organization (2013). *Global and Regional Estimates of Violence against Women* (Geneva: WHO).
22. Wechsberg, W.M. et al. (2010). *Drugs, Sex, Gender-based Violence, and the Intersection of the HIV/AIDS Epidemic with Vulnerable Women in South Africa*. Research Triangle Park, North Carolina: RTI Press).
23. World Health Organization & Global Coalition on Women and AIDS (2005), *Violence against sex workers and HIV prevention*. Information Bulletin Series, 3.

24. Shannon, K. et al. (2009). Prevalence and structural correlates of gender based violence among a prospective cohort of female sex workers. *British Medical Journal*, 339: 2939.
25. Deering, K.N. (2013). Violence and HIV risk among sex workers in Southern India. *Sexually Transmitted Diseases*, 40(2): 168–174.
26. Supervie, V., Halima, Y. and Blower, S. (2010). Assessing the impact of mass rape on the incidence of HIV in conflict-affected countries. *AIDS*, 24: 2841–2847.
27. De Santis, J.P. (2009). HIV infection risk factors among male-to-female transgender persons: a review of the literature. *Journal of the Association of Nurses in AIDS Care*, 20(5): 362–372.
28. Hillis, S.D., et al. (2001). Adverse childhood experience and sexual risk behaviours in women: a retrospective cohort study. *Family Planning Perspectives*, 33: 206–211.
29. Ibid.
30. Boily, M.C., et al. (2009). Heterosexual risk of HIV-1 infection per sexual act? *The Lancet*, 9(2):118–129.
31. Osinde, M.O. et al. (2011). Intimate partner violence among women with HIV infection in rural Uganda: critical implications for policy and practice. *BMC Women's Health*, 11: 50.
32. UNICEF, CDC and Kenya National Bureau of Statistics (2012). *Violence against Children in Kenya: Findings from a 2010 National Survey*.
33. UNAIDS (2012). *Mid-term Review of the UNAIDS Agenda for Accelerated Country Action for Women, Girls, Gender Equality and HIV*. UNAIDS/PCB(31)/12.20.

8. ELIMINATE HIV-RELATED STIGMA, DISCRIMINATION, PUNITIVE LAWS AND PRACTICES

1. Karim, Q.A., et al. (2008). The influence of AIDS stigma and discrimination and social cohesion on HIV testing and willingness to disclose HIV in rural KwaZulu-Natal, South Africa. *Global Public Health*, 3(4): 351–365.
2. Brou, H., et al. (2007). When do HIV-infected women disclose their HIV status to their male partner and why? A study in a PMTCT programme, Abidjan. *PLoS Med*, 4(12): e342.
3. Bwirire, L.D., et al. (2008). Reasons for loss to follow-up among mothers registered in a prevention-of-mother-to-child transmission program in Rural Malawi. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 102(12): 1195–1200.
4. Estonian Network of People Living with HIV; Polish Network of People Living with HIV/AIDS; League of People Living with HIV/AIDS Moldova; Positive Living Association, Turkey; All Ukrainian Network of People Living with HIV/AIDS, Ukraine. *HIV-related stigma: Late testing, Late treatment*. 2011. <http://>

www.gnpplus.net/en/resources/human-rights-and-stigma/item/101-hiv-related-stigma-late-testing-late-treatment.

5. <http://reproductiverights.org/en/lbs-fs-vs-chile>.
6. African Gender and Media Initiative (2012). *Robbed of Choice: Forced and Coerced Sterilization Experiences of Women Living with HIV in Kenya* (Nairobi, Kenya: African Gender and Media Initiative).
7. <http://thinkafricapress.com/namibia/forced-sterilisation-hiv-positive-women>.
8. Global Commission on HIV and the Law (2012). *HIV and the Law: Risks, Rights & Health*. (New York: UNDP) <http://www.hivlawcommission.org/>
9. UNDP (2013). *Legal Protections against HIV-related Human Rights Violations: Experiences and Lessons Learned from National HIV Laws in Asia and the Pacific* (Bangkok: UNDP).
10. UNAIDS (2012). *Criminalisation of HIV Non-disclosure, Exposure and Transmission: Background and Current Landscape*, revised version (Geneva: UNAIDS). http://www.unaids.org/en/media/unaids/contentassets/documents/document/2012/BackgroundCurrentLandscapeCriminalisationHIV_Final.pdf
11. Ibid.
12. UNAIDS (2012). *Criminalisation of HIV Non-disclosure, Exposure and Transmission: Scientific, Medical, Legal and Human Rights Issues*, revised version. http://www.unaids.org/en/media/unaids/contentassets/documents/document/2012/KeyScientificMedicalLegalIssuesCriminalisationHIV_final.pdf.
13. UNAIDS (2013). *Ending Overly-broad Criminalisation of HIV Non-disclosure, Exposure and Transmission: Critical Scientific, Medical and Legal Considerations*. http://www.unaids.org/en/media/unaids/contentassets/documents/document/2013/05/20130530_Guidance_Ending_Criminalisation.pdf.
14. International Lesbian, Gay, Bisexual, Trans and Intersex Association (2013). *State-sponsored Homophobia 2013*. www.ilga.org.
15. amfAR and Johns Hopkins University (2011). *Achieving an AIDS-free Generation for Gay Men and Other MSM*. www.amfar.org.
16. Chiu, J. and Burriss, S. (2011). *Punitive Drug Laws and the Risk Environment for Injecting Drug Users: Understanding the Connections*. Global Commission on HIV and the Law Working Paper. <http://www.hivlawcommission.org/index.php/workingpapers?task=document.viewdoc&id=98>.
17. Méndez, J.E. (2013). Report of the Special Rapporteur on Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. Human Rights Council, 22nd Session. No. A/HRC/22/53.
18. Open Society Foundation (2012). *Laws and Policies Affecting Sex Work* (New York: Open Society Foundation).

19. amFAR and International AIDS Society (2012). *The Twin Epidemics of HIV and Drug Use: Innovative Strategies for Healthy Communities*. www.amfar.org.
20. South African Government (2010). Press statement, 17 May. <http://allafrica.com/stories/201305161216.html>.
21. Katz, I.T., et al. (in press). Impact of HIV-related stigma and serostatus disclosure on HIV treatment adherence: systematic review, meta-synthesis, and conceptual framework. *Journal of International AIDS Society*.
22. Stangl, A.L., et al. (in press). A systematic review of interventions to reduce HIV-related stigma and discrimination from 2002 to 2013: how far have we come? *Journal of the International AIDS Society*.
23. Global Fund to Fight AIDS, Tuberculosis and Malaria (2011). Making a Difference: the Global Fund Results Report 2011. <http://www.theglobalfund.org/en/library/publications/progressreports>.
24. http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/published_docs/periodicals_and_newsletters/gender_bulletin_mar11.pdf.
25. The Framework for Dialogue, <http://www.frameworkfordialogue.org/>

9. ELIMINATE HIV-RELATED RESTRICTIONS ON ENTRY, STAY AND RESIDENCE

1. http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/published_docs/periodicals_and_newsletters/gender_bulletin_mar11.pdf

10. STRENGTHEN HIV INTEGRATION

1. Legido-Quigley, H, et al. (2013). Integrating tuberculosis and HIV services in low- and middle-income countries: A systematic review. *Tropical Medicine & International Health*, 8(2): 199–211.
2. Uyei, J., et al. (2011). Integrated delivery of HIV and tuberculosis services in sub-Saharan Africa: a systematic review. *Lancet Infectious Diseases*, 11: 855–867.
3. Tudor Car, L., et al. (2011). Integrating prevention of mother-to-child HIV transmission (PMTCT) programmes with other health services for preventing HIV infection and improving HIV outcomes in developing countries. *Cochrane Database of Systematic Reviews*, 6.
4. Suthar, A.B. et al. (2013). Integrating antiretroviral therapy into antenatal care and maternal and child health settings: A systematic review and meta-analysis. *Bulletin of the World Health Organization*, 91: 46–56.
5. Rabkin, M. Melaku, Z., Bruce, K., Reja, A., Koler, A., Tadesse, Y., Kamiru, H.N., Sibanyoni, L.T. and El-Sadr, W. (2012). Strengthening health systems for chronic care: Leveraging HIV programs to support diabetes services in Ethiopia and Swaziland. *Journal of Tropical Medicine*, 137460. DOI: 10.1155/2012/137460.

6. Gounder, C.R. and Chaisson, R.E. (2012). A diagonal approach to building primary healthcare systems in resource-limited settings: Women-centred integration of HIV/AIDS, tuberculosis, malaria, MCH and NCD initiatives. *Tropical Medicine & International Health*, 17(12): 1426–1431.
7. Topp, S.M., et al. (2010). Strengthening health systems at facility-level: Feasibility of integrating antiretroviral therapy into primary health care services in Lusaka, Zambia. *PLoS ONE*, 5(7): e11522. DOI: 10.1371/journal.pone.0011522
8. Sweeney, S., et al. (2012). Costs and efficiency of integrating HIV/AIDS services with other health services: A systematic review of evidence and experience. *Sexually Transmitted Infections*, 88: 85–99. DOI: 10.1136/sextrans-2011-050199.
9. Quantitative data refer to GARPR data (2012), whereas country examples were derived from MTR reports (2013).
10. Beyrer, C., Baral, S., Kerrigan, D., El-Bassel, N., Bekker, L. et al. (2011). Expanding the space: Inclusion of most-at-risk populations in HIV prevention, treatment, and care services. *Journal of Acquired Immune Deficiency Syndromes*, 57: S96–S99.
11. Garcia J. et al. (2013). Persistent household food insecurity, HIV, and maternal stress in peri-urban Ghana. *BMC Public Health*, 13: 215.
12. Stroeken, K., Remes, P., De Koker, P., Michielsen, K., Van Vossle, A. and Temmerman, M. (2012). HIV among out-of-school youth in Eastern and Southern Africa: A review. *AIDS Care*, 24(2): 186–94. DOI: 10.1080/09540121.2011.596519.
13. Kohler, H.P. and Thornton, R.L. (2011). Conditional cash transfers and HIV/AIDS prevention: Unconditionally promising? *World Bank Economic Review*. DOI: 10.1093/wber/lhr041.
14. Baird, S., et al. (2010). The short-term impacts of a schooling conditional cash transfer program on the sexual behavior of young women. *Health Economics*, 19(1): 55–68.
15. Baird S.J. et al. (2012). Effect of a cash transfer programme for schooling on prevalence of HIV and herpes simplex type 2 in Malawi: A cluster randomised trial. *Lancet*, 379: 1320–1329.
16. Beyrer, C. et al. (2011). Expanding the space: Inclusion of most-at-risk populations in HIV prevention, treatment, and care services. *Journal of Acquired Immune Deficiency Syndromes*, 57(Suppl. 2): S96–S99.

ANNEXES

Introduction	A2
Epidemiology	A4
Estimated HIV prevalence - adult (ages 15-49)	
People living with HIV (all ages)	
People living with HIV (ages 15+)	
Estimated new HIV infections (all ages)	
Estimated new HIV infections (ages 15+)	
Percentage of young people aged 15 to 24 who are living with HIV	
Estimated AIDS deaths	
Reduce sexual transmission of HIV by 50% by 2015	A46
HIV testing, multiple sexual partnerships and condom use	
Sex workers – population size estimation	
Percentage of sex workers reporting the use of a condom with their most recent client	
Percentage of sex workers who are living with HIV	
Men who have sex with men – population size estimation	
Percentage of men reporting the use of a condom the last time they had anal sex with a male partner	
Percentage of men who have sex with men who are living with HIV	
Halve the transmission of HIV among people who inject drugs by 2015	A54
People who inject drugs – population size estimation	
Number of syringes distributed per person who injects drugs per year by needle and syringe programmes	
Percentage of people who inject drugs who report the use of a condom at last sexual intercourse	
Percentage of people who inject drugs who reported using sterile injecting equipment the last time they injected	
Percentage of people who inject drugs who are living with HIV	
Eliminate HIV infections among children and reduce maternal deaths	A62
Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth	
New HIV infections among children	
Preventing mother-to-child transmission of HIV	
Reach 15 million people living with HIV with lifesaving antiretroviral treatment by 2015	A78
Twelve-month retention on antiretroviral therapy	
Estimated number of adults receiving and needing antiretroviral therapy, and coverage	
Estimated children receiving and needing antiretroviral therapy, and coverage	
Projected number of people eligible for antiretroviral therapy according to 2013 antiretroviral guidelines, low- and middle-income countries	
Halve tuberculosis deaths among people living with HIV by 2015	A102
Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV	
HIV-positive tuberculosis patients on antiretroviral therapy	
Estimated number of TB-related deaths among people living with HIV in Africa, in TB/HIV high burden countries	
Close the global AIDS resource gap	A110
Domestic HIV spending from domestic public sources (US\$)	
Domestic HIV spending from international sources (US\$)	
Total domestic HIV spending from domestic public and international sources (US\$)	
Eliminate gender inequalities and gender-based abuse and violence and increase the capacity of women and girls to protect themselves from HIV	A126
Young people's knowledge about HIV prevention	
Proportion of ever-married or partnered women aged 15-49 who experienced physical or sexual violence from a male intimate partner in the past 12 months	
Number of HIV infected female adults	
Eliminate HIV-related restrictions on entry, stay and residence	A136
HIV-specific restrictions on entry, stay, or residence	
Strengthen HIV integration	A140
Health facilities provide HIV services integrated with other health services	
Current school attendance among young people aged 10-14	

INTRODUCTION

The data presented in the following tables were compiled by UNAIDS through two sources:

- Global AIDS Response Progress Reporting (GARPR), an online tool in which countries submit their most recent data on global indicators, and
- Modelled HIV estimates, created in standard modelling software by national epidemiological teams.

In their GARPR reports, countries provided extensive information on progress towards core HIV indicators. With the exception of modest adaptations to two indicators, core indicators remained the same for the latest round of reporting, permitting identification of trends at global, regional and country levels. While the full National Commitments and Policies Instrument, an extensive survey of governmental and non-governmental informants regarding HIV-related policies, human rights issues and service provision, was not included in 2013 GARPR, a short questionnaire about policies was included. A full description of the indicators used in GARPR and the process of compiling those data can be found at <http://goo.gl/KYeUPt>.

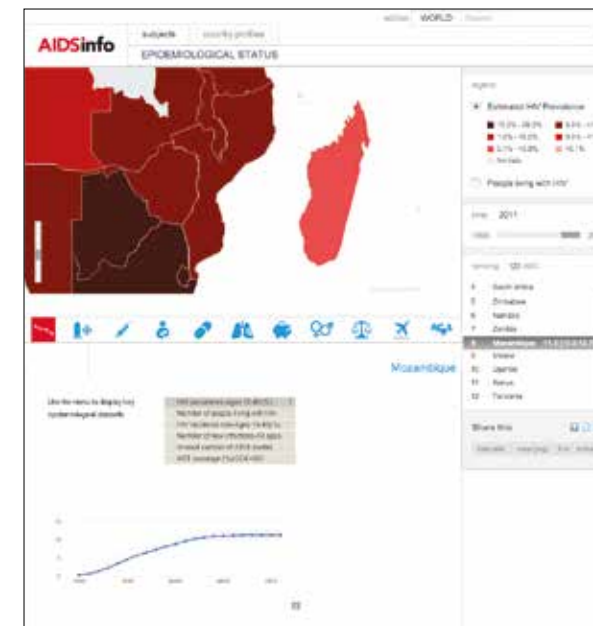
The modelled HIV estimates are identified as estimates in the following tables. The estimates are calculated using the Spectrum computer package. National files are developed in countries and submitted to UNAIDS for review. The results are approved by national representatives. For countries that do not create modelled estimates, draft files are created based on published or otherwise available information and the estimates are not presented in the tables. Regional totals are calculated using all files and are not limited to country-submitted files. The estimates are also limited to ranges if the country has very limited data to inform the model. Estimates for children in concentrated epidemics are imprecise and thus excluded from the tables.

For more information on the Spectrum computer package used for the estimates please visit www.futuresinstitute.org. For more information on the assumptions and process of developing the HIV-related parameters used in Spectrum please visit www.epidem.org.

The analysis of the data set in the Global Report 2013 is based on the data portrayed in this data annex. The data is also made available in different visual formats on <http://aidsinfo.unaids.org>. This allows the data to be used for effective communication in reaching the targets at global and country levels.

For those interested in further analysis and disaggregation of data over longer time periods, the full data-set is made available through www.aidsinfoonline.org.

<http://aidsinfo.unaids.org>



www.aidsinfoonline.org



EPIDEMIOLOGY

Estimated HIV prevalence - adult (ages 15-49)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	1.3	1.2	1.5	1.0	0.9	1.1
Bahamas	3.5	3.4	3.5	3.3	3.2	3.5
Barbados	0.7	0.6	0.9	0.9	0.8	1.1
Cuba	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Dominican Republic	1.3	1.1	1.5	0.7	0.6	0.8
Haiti	2.9	2.6	3.2	2.1	1.9	2.3
Jamaica	2.4	2.0	2.7	1.7	1.4	2.0
Trinidad and Tobago	1.3	1.1	1.4	1.6	1.4	1.7
East Asia	<0.1	<0.1	0.1	0.1	0.1	0.1
China ¹	...	...	...	<0.1	<0.1	0.1
Democratic People's Republic of Korea	...	...	...	...	...	...
Japan	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...
Republic of Korea	...	...	...	...	...	...
Eastern Europe and Central Asia	0.5	0.4	0.6	0.7	0.6	0.9
Armenia	0.1	<0.1	0.2	0.2	0.1	0.3
Azerbaijan	<0.1	<0.1	0.1	0.2	0.1	0.2
Belarus	0.1	0.1	0.2	0.4	0.4	0.5
Georgia	<0.1	<0.1	<0.1	0.3	0.2	0.4
Kazakhstan	...	...	...	...	...	...
Kyrgyzstan	<0.1	<0.1	<0.1	0.3	0.2	0.4
Republic of Moldova	0.5	0.4	0.6	0.7	0.6	0.9
Russian Federation	...	...	...	...	...	...
Tajikistan	<0.1	<0.1	0.1	0.3	0.2	0.6
Ukraine	0.9	0.7	1.0	0.9	0.7	1.0
Uzbekistan	0.3	0.2	0.3	0.1	0.1	0.2
Latin America	0.5	0.4	0.5	0.4	0.3	0.5
Argentina	0.4	0.3	0.5	0.4	0.3	0.5
Belize	1.8	1.6	1.9	1.4	1.3	1.6

EPIDEMIOLOGY

Estimated HIV prevalence - adult (ages 15-49)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Bolivia (Plurinational State of)	0.4	0.3	0.6	0.3	0.1	0.4
Brazil	...	0.4	0.5	...	0.4	0.5
Chile	0.4	0.2	0.6	0.4	0.2	0.6
Colombia	0.6	0.5	0.8	0.5	0.4	0.7
Costa Rica	0.2	0.2	0.2	0.3	0.3	0.3
Ecuador	0.6	0.3	0.9	0.6	0.4	1.1
El Salvador	0.8	0.6	1.2	0.6	0.4	1.2
Guatemala	0.8	0.5	1.3	0.7	0.4	1.5
Guyana	0.7	0.4	1.1	1.3	0.8	2.1
Honduras	1.2	1.0	1.5	0.5	0.4	0.7
Mexico	0.3	0.3	0.4	0.2	0.2	0.3
Nicaragua	<0.1	<0.1	<0.1	0.3	0.2	0.4
Panama	1.2	1.0	1.5	0.7	0.5	1.0
Paraguay	0.1	<0.1	0.4	0.3	0.2	0.6
Peru	0.6	0.4	0.8	0.4	0.2	1.3
Suriname	1.2	1.0	1.4	1.1	1.0	1.2
Uruguay	0.5	0.3	0.7	0.7	0.5	1.0
Venezuela (Bolivarian Republic of)	0.6	0.4	0.9	0.6	0.4	0.9
Middle East and North Africa	0.1	0.1	0.1	0.1	0.1	0.2
Algeria	...	...	...	...	...	...
Djibouti	2.3	1.8	2.8	1.2	1.0	1.5
Egypt	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Iran (Islamic Republic of)	<0.1	<0.1	<0.1	0.2	0.1	0.2
Lebanon	...	...	...	...	...	...
Morocco	<0.1	<0.1	<0.1	0.1	0.1	0.2
Oman	...	...	...	...	...	...
Somalia	0.7	0.4	1.1	0.5	0.4	0.8
Sudan	...	...	...	...	...	...

EPIDEMIOLOGY

Estimated HIV prevalence - adult (ages 15-49)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Tunisia	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Yemen	<0.1	<0.1	<0.1	0.1	<0.1	0.3
North America	0.5	0.4	0.7	0.5	0.4	0.8
Canada	...	...	...	...	...	...
United States of America	...	...	...	...	...	...
Oceania	0.2	0.2	0.3	0.2	0.2	0.3
Australia	...	...	...	...	...	...
Fiji	<0.1	<0.1	0.2	0.2	0.2	0.2
New Zealand	...	...	...	...	...	...
Papua New Guinea	0.7	0.5	1.0	0.5	0.4	0.7
South and South-East Asia	0.4	0.3	0.4	0.3	0.2	0.4
Afghanistan	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bangladesh	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bhutan	<0.1	<0.1	0.1	0.2	0.1	0.6
Cambodia	1.5	1.1	2.6	0.8	0.5	1.5
India ¹	0.4	0.3	0.5	0.3	0.2	0.3
Indonesia	<0.1	<0.1	0.2	0.4	0.3	0.7
Lao People's Democratic Republic	0.1	<0.1	0.2	0.3	0.2	0.3
Malaysia	0.4	0.3	0.6	0.4	0.3	0.6
Maldives	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Myanmar	0.8	0.7	0.9	0.6	0.5	0.6
Nepal	0.4	0.4	0.5	0.3	0.2	0.4
Pakistan	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
Philippines	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Singapore	...	...	...	...	...	...
Sri Lanka	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thailand	1.8	1.7	1.9	1.1	1.0	1.2
Viet Nam	0.3	<0.1	0.6	0.4	0.1	0.8

EPIDEMIOLOGY

Estimated HIV prevalence - adult (ages 15-49)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Sub-Saharan Africa	5.8	5.5	6.3	4.7	4.4	5.0
Angola	1.8	1.3	2.6	2.3	1.9	2.8
Benin	1.6	1.4	1.8	1.1	1.0	1.3
Botswana	28.1	26.7	29.6	23.0	21.8	24.4
Burkina Faso	2.2	1.9	2.6	1.0	0.8	1.1
Burundi	2.9	2.4	3.4	1.3	1.0	1.5
Cameroon	5.2	4.9	5.6	4.5	4.1	4.9
Cape Verde	0.5	0.4	0.6	0.2	0.2	0.4
Central African Republic	...	...	...	...	...	...
Chad	3.8	3.3	4.4	2.7	2.3	3.4
Comoros	...	...	...	...	...	...
Congo	4.7	4.3	5.3	2.8	2.5	3.0
Côte d'Ivoire	6.4	5.9	7.2	3.2	2.8	3.8
Democratic Republic of the Congo	1.5	1.4	1.7	1.1	1.0	1.2
Equatorial Guinea	3.6	2.0	6.6	6.2	3.4	9.7
Eritrea	2.0	1.5	2.7	0.7	0.5	0.9
Ethiopia	3.6	3.3	3.9	1.3	1.2	1.5
Gabon	6.1	5.4	6.9	4.0	3.5	4.8
Gambia	1.0	0.7	1.3	1.3	0.9	1.7
Ghana	2.3	2.0	2.6	1.4	1.2	1.6
Guinea	1.3	1.1	1.5	1.7	1.4	2.0
Guinea-Bissau	2.8	2.1	3.8	3.9	2.9	5.3
Kenya	8.5	8.2	8.8	6.1	5.9	6.3
Lesotho	23.4	21.9	24.9	23.1	21.7	24.7
Liberia	2.3	1.9	2.6	0.9	0.7	1.1
Madagascar	0.7	0.5	0.8	0.5	0.4	0.6
Malawi	15.5	14.8	16.4	10.8	10.2	11.4
Mali	1.6	1.3	2.0	0.9	0.7	1.2
Mauritania	0.6	0.5	0.8	0.4	0.3	0.6

EPIDEMIOLOGY

Estimated HIV prevalence - adult (ages 15-49)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Mauritius	1.0	0.9	1.0	1.2	1.2	1.3
Mozambique	9.0	8.1	10.2	11.1	9.9	12.9
Namibia	15.0	13.0	17.1	13.3	11.4	15.2
Niger	1.0	0.9	1.2	0.5	0.4	0.6
Nigeria	3.5	3.0	4.0	3.1	2.8	3.5
Rwanda	4.4	4.0	4.9	2.9	2.6	3.2
Sao Tome and Principe	1.1	0.7	1.5	1.0	0.8	1.4
Senegal	0.5	0.4	0.6	0.5	0.4	0.6
Sierra Leone	1.0	0.7	1.4	1.5	1.0	2.1
South Africa	15.3	14.7	15.8	17.9	17.3	18.4
South Sudan	3.1	1.4	5.2	2.7	1.8	4.0
Swaziland	24.8	23.2	26.6	26.5	24.6	28.3
Togo	4.5	3.9	5.4	2.9	2.5	3.5
Uganda	6.8	5.9	7.8	7.2	6.4	8.4
United Republic of Tanzania	7.5	6.7	8.3	5.1	4.6	5.7
Zambia	15.1	14.2	16.0	12.7	11.9	13.7
Zimbabwe	24.3	23.0	25.6	14.7	13.8	15.6
Western and Central Europe	0.2	0.2	0.2	0.2	0.2	0.2
Austria	...	...	...	...	...	...
Belgium	...	...	...	...	...	...
Bulgaria	...	...	...	...	...	...
Croatia	...	...	...	...	...	...
Czech Republic	...	...	...	...	...	...
Denmark	...	...	...	...	...	...
Estonia	...	...	...	...	...	...
Finland	...	...	...	...	...	...
France	...	...	...	...	...	...
Germany	...	...	...	...	...	...
Greece	...	...	...	...	...	...

EPIDEMIOLOGY

Estimated HIV prevalence - adult (ages 15-49)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland
GLOBAL	0.8	0.7	0.9	0.8	0.7	0.9

¹ Estimates for China and India are based on 2011 national estimates.

EPIDEMIOLOGY

People living with HIV (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	280 000	250 000	310 000	250 000	220 000	280 000
Bahamas	5 900	5 800	6 100	7 000	6 700	7 400
Barbados	1 100	<1 000	1 400	1 500	1 300	1 800
Cuba	2 800	2 100	4 000	4 700	3 400	8 200
Dominican Republic	64 000	55 000	74 000	45 000	39 000	52 000
Haiti	160 000	140 000	180 000	150 000	130 000	160 000
Jamaica	34 000	28 000	40 000	28 000	23 000	34 000
Trinidad and Tobago	10 000	9 200	12 000	14 000	13 000	15 000
East Asia	370 000	270 000	530 000	880 000	650 000	1 200 000
China ¹	...	...	...	780 000	620 000	940 000
Democratic People's Republic of Korea	...	...	...	...	...	...
Japan	...	5 400	8 000	...	7 100	11 000
Mongolia	...	...	...	...	...	...
Republic of Korea	...	5 500	8 900	...	12 000	20 000
Eastern Europe and Central Asia	860 000	700 000	1 100 000	1 300 000	1 000 000	1 700 000
Armenia	1 700	<1 000	3 500	3 500	2 300	5 300
Azerbaijan	3 600	2 500	5 800	10 000	8 000	14 000
Belarus	7 200	5 700	9 600	23 000	21 000	26 000
Georgia	1 500	1 100	2 200	6 600	5 200	9 500
Kazakhstan	...	...	...	...	...	...
Kyrgyzstan	1 000	<1 000	1 800	8 700	6 000	13 000
Republic of Moldova	14 000	11 000	18 000	19 000	15 000	23 000
Russian Federation	...	...	...	...	...	...
Tajikistan	1 400	<500	4 000	12 000	6 900	24 000
Ukraine	230 000	200 000	260 000	230 000	190 000	270 000
Uzbekistan	37 000	23 000	51 000	30 000	23 000	40 000
Latin America	1 300 000	1 100 000	1 500 000	1 500 000	1 200 000	1 900 000
Argentina	78 000	59 000	97 000	98 000	80 000	120 000
Belize	2 500	2 200	2 800	3 100	2 800	3 400

EPIDEMIOLOGY

People living with HIV (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Bolivia (Plurinational State of)	18 000	13 000	27 000	16 000	8 500	24 000
Brazil	...	430 000	520 000	...	530 000	660 000
Chile	33 000	16 000	50 000	39 000	25 000	61 000
Colombia	140 000	100 000	180 000	150 000	110 000	190 000
Costa Rica	5 200	4 900	5 500	9 800	8 800	11 000
Ecuador	40 000	22 000	60 000	52 000	36 000	99 000
El Salvador	26 000	19 000	38 000	25 000	16 000	45 000
Guatemala	49 000	31 000	76 000	58 000	36 000	130 000
Guyana	3 300	2 000	5 200	7 200	4 300	12 000
Honduras	43 000	36 000	52 000	26 000	21 000	33 000
Mexico	190 000	160 000	230 000	170 000	150 000	210 000
Nicaragua	1 300	<1 000	2 500	9 600	6 600	15 000
Panama	21 000	17 000	26 000	17 000	12 000	22 000
Paraguay	3 600	2 300	11 000	13 000	7 400	24 000
Peru	94 000	67 000	130 000	76 000	36 000	230 000
Suriname	3 500	2 800	4 100	4 000	3 600	4 400
Uruguay	8 400	5 800	12 000	13 000	9 800	19 000
Venezuela (Bolivarian Republic of)	84 000	56 000	130 000	110 000	74 000	160 000
Middle East and North Africa	150 000	100 000	230 000	260 000	200 000	380 000
Algeria	...	...	...	...	...	...
Djibouti	9 700	7 600	12 000	7 700	6 200	9 400
Egypt	2 000	1 300	3 400	6 500	4 300	10 000
Iran (Islamic Republic of)	15 000	7 000	29 000	71 000	53 000	100 000
Lebanon	...	...	...	...	...	...
Morocco	8 700	6 200	11 000	30 000	22 000	40 000
Oman	...	<500	1 300	...	2 800	5 700
Somalia	29 000	16 000	44 000	31 000	21 000	47 000
Sudan	...	...	...	...	...	...

EPIDEMIOLOGY

People living with HIV (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Tunisia	<500	<500	1 100	2 300	1 400	3 800
Yemen	4 100	2 000	7 500	19 000	8 900	47 000
North America	970 000	800 000	1 200 000	1 300 000	980 000	1 900 000
Canada	...	36 000	51 000	...	59 000	85 000
United States of America	...	750 000	1 200 000	...	920 000	1 800 000
Oceania	37 000	30 000	45 000	51 000	43 000	59 000
Australia	...	10 000	15 000	...	18 000	27 000
Fiji	<500	<500	<1 000	<1 000	<1 000	1 200
New Zealand	...	1 300	1 900	...	2 200	3 600
Papua New Guinea	22 000	15 000	32 000	25 000	20 000	31 000
South and South-East Asia	3 700 000	2 900 000	4 600 000	3 900 000	2 900 000	5 200 000
Afghanistan	1 600	<1 000	5 300	4 300	1 600	14 000
Bangladesh	4 000	<500	6 900	8 000	3 100	82 000
Bhutan	<500	<500	<500	1 100	<1 000	2 700
Cambodia	110 000	77 000	190 000	76 000	59 000	120 000
India ¹	2 400 000	1 900 000	2 800 000	2 100 000	1 700 000	2 600 000
Indonesia	83 000	<100	260 000	610 000	390 000	940 000
Lao People's Democratic Republic	3 300	2 500	6 600	12 000	10 000	13 000
Malaysia	54 000	38 000	80 000	82 000	60 000	110 000
Maldives	<100	<100	<100	<100	<100	<100
Myanmar	220 000	190 000	250 000	200 000	170 000	220 000
Nepal	50 000	41 000	63 000	49 000	39 000	65 000
Pakistan	10 000	6 500	19 000	87 000	50 000	160 000
Philippines	5 400	3 200	11 000	15 000	11 000	23 000
Singapore	...	2 200	3 900	...	3 000	4 700
Sri Lanka	1 900	1 200	3 500	3 000	2 000	5 000
Thailand	660 000	610 000	700 000	440 000	400 000	480 000
Viet Nam	160 000	41 000	320 000	260 000	70 000	490 000

EPIDEMIOLOGY

People living with HIV (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Sub-Saharan Africa	21 700 000	20 200 000	23 500 000	25 000 000	23 500 000	26 600 000
Angola	130 000	96 000	190 000	250 000	210 000	300 000
Benin	62 000	55 000	70 000	72 000	64 000	80 000
Botswana	300 000	280 000	320 000	340 000	320 000	360 000
Burkina Faso	180 000	160 000	210 000	110 000	99 000	130 000
Burundi	130 000	110 000	150 000	89 000	75 000	110 000
Cameroon	480 000	450 000	530 000	600 000	550 000	660 000
Cape Verde	1 300	<1 000	1 400	<1 000	<1 000	1 200
Central African Republic	...	...	...	...	...	...
Chad	190 000	160 000	220 000	210 000	180 000	270 000
Comoros	...	...	...	...	...	...
Congo	92 000	84 000	100 000	74 000	68 000	81 000
Côte d'Ivoire	630 000	570 000	710 000	450 000	390 000	530 000
Democratic Republic of the Congo	440 000	400 000	490 000	480 000	440 000	530 000
Equatorial Guinea	12 000	6 700	22 000	31 000	17 000	49 000
Eritrea	30 000	21 000	41 000	18 000	14 000	24 000
Ethiopia	1 300 000	1 200 000	1 400 000	760 000	690 000	840 000
Gabon	42 000	37 000	48 000	41 000	36 000	48 000
Gambia	7 200	5 400	9 600	14 000	11 000	19 000
Ghana	270 000	230 000	310 000	240 000	200 000	270 000
Guinea	64 000	52 000	77 000	120 000	97 000	140 000
Guinea-Bissau	21 000	15 000	28 000	41 000	32 000	55 000
Kenya	1 600 000	1 500 000	1 700 000	1 600 000	1 600 000	1 700 000
Lesotho	280 000	260 000	300 000	360 000	340 000	380 000
Liberia	33 000	28 000	39 000	22 000	19 000	26 000
Madagascar	55 000	44 000	67 000	59 000	49 000	69 000
Malawi	1 100 000	1 000 000	1 100 000	1 100 000	1 100 000	1 200 000
Mali	110 000	87 000	140 000	100 000	79 000	120 000
Mauritania	9 100	7 000	12 000	10 000	7 700	15 000

EPIDEMIOLOGY

People living with HIV (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Mauritius	7 300	6 700	8 200	11 000	9 600	12 000
Mozambique	850 000	760 000	970 000	1 600 000	1 400 000	1 800 000
Namibia	170 000	150 000	200 000	220 000	190 000	250 000
Niger	57 000	48 000	69 000	46 000	39 000	56 000
Nigeria	2 600 000	2 200 000	3 000 000	3 400 000	3 100 000	3 800 000
Rwanda	240 000	220 000	270 000	210 000	190 000	230 000
Sao Tome and Principe	<1 000	<1 000	1 300	1 400	1 000	1 900
Senegal	27 000	23 000	32 000	43 000	35 000	52 000
Sierra Leone	27 000	19 000	37 000	58 000	42 000	82 000
South Africa	4 300 000	4 100 000	4 700 000	6 100 000	5 800 000	6 400 000
South Sudan	120 000	55 000	210 000	150 000	100 000	230 000
Swaziland	150 000	140 000	160 000	210 000	200 000	230 000
Togo	130 000	110 000	160 000	130 000	110 000	150 000
Uganda	1 000 000	910 000	1 200 000	1 500 000	1 400 000	1 800 000
United Republic of Tanzania	1 500 000	1 400 000	1 700 000	1 500 000	1 300 000	1 600 000
Zambia	940 000	880 000	1 000 000	1 100 000	1 000 000	1 200 000
Zimbabwe	1 800 000	1 700 000	2 000 000	1 400 000	1 300 000	1 500 000
Western and Central Europe	590 000	550 000	620 000	860 000	800 000	930 000
Austria	...	3 800	7 000	...	13 000	25 000
Belgium	...	6 600	11 000	...	16 000	26 000
Bulgaria	...	1 100	2 200	...	2 400	5 800
Croatia	...	<500	<1 000	...	<1 000	1 600
Czech Republic	...	1 100	1 400	...	1 800	2 300
Denmark	...	3 000	4 000	...	5 500	7 500
Estonia	...	3 500	5 300	...	7 200	11 000
Finland	...	1 500	2 000	...	2 600	3 600
France	...	98 000	130 000	...	120 000	180 000
Germany	...	36 000	44 000	...	62 000	78 000
Greece	...	7 300	9 200	...	9 300	13 000

EPIDEMIOLOGY

People living with HIV (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Hungary	...	2 000	3 200	...	2 600	4 800
Iceland	...	<500	<500	...	<500	<1 000
Ireland	...	3 600	6 100	...	6 300	10 000
Israel	...	4 200	7 300	...	6 700	11 000
Italy	...	84 000	120 000	...	110 000	140 000
Latvia	...	3 500	6 100	...	6 100	12 000
Lithuania	...	<1 000	<1 000	...	<1 000	1 800
Luxembourg	...	<500	<1 000	...	<1 000	1 100
Malta	...	<200	<500	...	<500	<500
Netherlands	...	14 000	24 000	...	20 000	34 000
Norway	...	2 400	4 300	...	3 600	6 300
Poland	...	16 000	29 000	...	25 000	46 000
Portugal	...	26 000	45 000	...	38 000	62 000
Romania	...	12 000	20 000	...	14 000	21 000
Serbia	...	<500	3 800	...	2 200	5 500
Slovakia	...	<200	<500	...	<500	<1 000
Slovenia	...	<200	<500	...	<500	<1 000
Spain	...	110 000	140 000	...	140 000	170 000
Sweden	...	5 400	10 000	...	7 200	13 000
Switzerland	...	11 000	17 000	...	16 000	27 000
Turkey	...	1 300	2 300	...	3 900	8 000
United Kingdom of Great Britain and Northern Ireland	...	37 000	56 000	...	76 000	120 000
GLOBAL	30 000 000	27 200 000	33 100 000	35 300 000	32 200 000	38 800 000

¹ Estimates for China and India are based on 2011 national estimates.

EPIDEMIOLOGY

People living with HIV (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	250 000	230 000	280 000	230 000	210 000	260 000
Bahamas	5 900	5 700	6 000	6 900	6 600	7 300
Barbados	1 100	<1 000	1 400	1 500	1 300	1 700
Cuba	2 700	2 100	4 000	4 700	3 300	8 100
Dominican Republic	61 000	53 000	70 000	42 000	37 000	49 000
Haiti	140 000	120 000	160 000	130 000	120 000	150 000
Jamaica	33 000	28 000	39 000	28 000	23 000	33 000
Trinidad and Tobago	10 000	9 000	11 000	14 000	13 000	15 000
East Asia	370 000	270 000	520 000	880 000	650 000	1 200 000
China ¹	...	...	...	...	...	...
Democratic People's Republic of Korea	...	...	...	...	...	...
Japan	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...
Republic of Korea	...	...	...	...	...	...
Eastern Europe and Central Asia	850 000	690 000	1 000 000	1 300 000	990 000	1 600 000
Armenia	1 700	<1 000	3 500	3 500	2 300	5 300
Azerbaijan	3 600	2 500	5 800	10 000	7 900	14 000
Belarus	7 200	5 700	9 500	23 000	21 000	25 000
Georgia	1 500	1 100	2 200	6 600	5 200	9 400
Kazakhstan	...	...	...	...	...	...
Kyrgyzstan	<1 000	<1 000	1 700	8 700	5 900	13 000
Republic of Moldova	14 000	11 000	18 000	19 000	15 000	23 000
Russian Federation	...	...	...	...	...	...
Tajikistan	1 300	<500	3 800	11 000	6 500	23 000
Ukraine	230 000	200 000	260 000	230 000	190 000	260 000
Uzbekistan	36 000	22 000	50 000	27 000	21 000	38 000
Latin America	1 300 000	1 100 000	1 500 000	1 400 000	1 200 000	1 800 000
Argentina	77 000	58 000	96 000	95 000	77 000	110 000
Belize	2 400	2 100	2 600	2 800	2 600	3 100

EPIDEMIOLOGY

People living with HIV (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Bolivia (Plurinational State of)	18 000	13 000	26 000	15 000	7 700	23 000
Brazil	...	420 000	510 000	...	520 000	650 000
Chile	33 000	16 000	49 000	39 000	25 000	61 000
Colombia	140 000	100 000	180 000	140 000	100 000	190 000
Costa Rica	5 000	4 700	5 300	9 400	8 500	10 000
Ecuador	39 000	21 000	58 000	51 000	36 000	98 000
El Salvador	25 000	18 000	36 000	24 000	16 000	43 000
Guatemala	46 000	29 000	72 000	53 000	33 000	120 000
Guyana	3 100	1 900	4 900	7 000	4 100	11 000
Honduras	39 000	32 000	47 000	23 000	19 000	30 000
Mexico	190 000	150 000	230 000	170 000	150 000	210 000
Nicaragua	1 300	<1 000	2 400	9 500	6 500	15 000
Panama	20 000	16 000	25 000	16 000	12 000	21 000
Paraguay	3 500	2 200	11 000	13 000	7 200	24 000
Peru	89 000	64 000	120 000	72 000	34 000	230 000
Suriname	3 300	2 700	3 900	3 800	3 400	4 300
Uruguay	8 300	5 800	12 000	13 000	9 600	19 000
Venezuela (Bolivarian Republic of)	80 000	53 000	120 000	100 000	72 000	160 000
Middle East and North Africa	130 000	93 000	210 000	250 000	180 000	350 000
Algeria	...	...	...	...	...	...
Djibouti	9 200	7 200	11 000	6 500	5 200	8 000
Egypt	1 900	1 200	3 300	6 300	4 100	9 900
Iran (Islamic Republic of)	15 000	7 000	29 000	70 000	52 000	100 000
Lebanon	...	...	...	...	...	...
Morocco	8 300	5 900	11 000	29 000	22 000	39 000
Oman	...	...	...	...	...	...
Somalia	25 000	15 000	40 000	26 000	17 000	40 000
Sudan	...	...	...	...	...	...

EPIDEMIOLOGY

People living with HIV (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Tunisia	<500	<500	1 100	2 300	1 300	3 700
Yemen	3 800	1 900	7 200	18 000	8 300	44 000
North America	970 000	800 000	1 200 000	1 300 000	980 000	1 900 000
Canada	...	...	...	...	...	...
United States of America	...	...	...	...	...	...
Oceania	35 000	29 000	43 000	48 000	40 000	55 000
Australia	...	...	...	...	...	...
Fiji	<500	<500	<1 000	<1 000	<1 000	1 100
New Zealand	...	...	...	...	...	...
Papua New Guinea	21 000	14 000	29 000	22 000	18 000	28 000
South and South-East Asia	3 600 000	2 800 000	4 500 000	3 700 000	2 700 000	4 900 000
Afghanistan	1 500	<1 000	5 000	4 000	1 500	13 000
Bangladesh	3 900	<500	6 700	7 600	3 000	80 000
Bhutan	<500	<500	<500	1 000	<500	2 600
Cambodia	100 000	74 000	180 000	71 000	51 000	130 000
India ¹	2 300 000	1 900 000	2 700 000	1 900 000	1 600 000	2 400 000
Indonesia	82 000	<100	260 000	590 000	380 000	910 000
Lao People's Democratic Republic	3 200	2 400	6 000	11 000	9 300	12 000
Malaysia	53 000	38 000	79 000	81 000	59 000	110 000
Maldives	<100	<100	<100	<100	<100	<100
Myanmar	220 000	190 000	250 000	190 000	160 000	210 000
Nepal	49 000	40 000	61 000	45 000	36 000	60 000
Pakistan	9 800	6 400	19 000	85 000	48 000	160 000
Philippines	5 100	3 000	10 000	14 000	11 000	22 000
Singapore	...	...	...	...	...	...
Sri Lanka	1 800	1 100	3 500	2 900	1 900	4 800
Thailand	650 000	610 000	690 000	430 000	390 000	470 000
Viet Nam	160 000	41 000	310 000	250 000	68 000	480 000

EPIDEMIOLOGY

People living with HIV (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Sub-Saharan Africa	19 400 000	18 000 000	21 000 000	22 100 000	20 700 000	23 400 000
Angola	110 000	85 000	170 000	220 000	180 000	270 000
Benin	56 000	49 000	63 000	62 000	56 000	70 000
Botswana	290 000	270 000	310 000	330 000	310 000	350 000
Burkina Faso	140 000	120 000	160 000	94 000	81 000	110 000
Burundi	100 000	86 000	120 000	72 000	60 000	88 000
Cameroon	450 000	410 000	490 000	540 000	500 000	590 000
Cape Verde	1 100	<1 000	1 200	<1 000	<1 000	1 100
Central African Republic	...	...	...	...	...	...
Chad	170 000	140 000	190 000	180 000	150 000	220 000
Comoros	...	...	...	...	...	...
Congo	77 000	70 000	86 000	61 000	56 000	67 000
Côte d'Ivoire	570 000	510 000	650 000	390 000	340 000	450 000
Democratic Republic of the Congo	370 000	340 000	410 000	390 000	360 000	430 000
Equatorial Guinea	11 000	6 000	20 000	28 000	15 000	43 000
Eritrea	26 000	19 000	35 000	15 000	12 000	20 000
Ethiopia	1 100 000	1 000 000	1 200 000	590 000	540 000	660 000
Gabon	40 000	35 000	45 000	37 000	33 000	44 000
Gambia	6 600	4 900	8 800	13 000	9 400	17 000
Ghana	240 000	210 000	280 000	210 000	180 000	240 000
Guinea	58 000	48 000	71 000	100 000	86 000	130 000
Guinea-Bissau	19 000	14 000	26 000	35 000	27 000	48 000
Kenya	1 400 000	1 300 000	1 500 000	1 400 000	1 400 000	1 500 000
Lesotho	250 000	240 000	280 000	320 000	300 000	340 000
Liberia	31 000	26 000	36 000	18 000	15 000	22 000
Madagascar	48 000	39 000	59 000	50 000	41 000	60 000
Malawi	910 000	860 000	980 000	950 000	900 000	1 000 000
Mali	94 000	77 000	120 000	84 000	66 000	100 000
Mauritania	8 200	6 300	11 000	8 700	6 300	12 000

EPIDEMIOLOGY

People living with HIV (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Mauritius	7 300	6 700	8 100	10 000	9 500	12 000
Mozambique	780 000	700 000	900 000	1 400 000	1 200 000	1 600 000
Namibia	160 000	140 000	180 000	200 000	180 000	230 000
Niger	51 000	43 000	62 000	36 000	30 000	45 000
Nigeria	2 400 000	2 000 000	2 800 000	3 000 000	2 700 000	3 300 000
Rwanda	200 000	180 000	220 000	180 000	160 000	200 000
Sao Tome and Principe	<1 000	<1 000	1 200	1 200	<1 000	1 500
Senegal	24 000	20 000	29 000	37 000	30 000	44 000
Sierra Leone	25 000	18 000	35 000	52 000	37 000	74 000
South Africa	4 100 000	3 900 000	4 400 000	5 700 000	5 500 000	6 000 000
South Sudan	110 000	52 000	190 000	140 000	88 000	200 000
Swaziland	130 000	120 000	140 000	190 000	180 000	200 000
Togo	120 000	100 000	140 000	110 000	95 000	130 000
Uganda	830 000	730 000	950 000	1 400 000	1 200 000	1 600 000
United Republic of Tanzania	1 300 000	1 200 000	1 400 000	1 200 000	1 100 000	1 400 000
Zambia	800 000	750 000	860 000	950 000	900 000	1 000 000
Zimbabwe	1 600 000	1 600 000	1 700 000	1 200 000	1 100 000	1 300 000
Western and Central Europe	590 000	550 000	620 000	860 000	800 000	920 000
Austria	...	...	...	...	...	...
Belgium	...	...	...	...	...	...
Bulgaria	...	...	...	...	...	...
Croatia	...	...	...	...	...	...
Czech Republic	...	...	...	...	...	...
Denmark	...	...	...	...	...	...
Estonia	...	...	...	...	...	...
Finland	...	...	...	...	...	...
France	...	...	...	...	...	...
Germany	...	...	...	...	...	...
Greece	...	...	...	...	...	...

EPIDEMIOLOGY

People living with HIV (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland
GLOBAL	27 500 000	24 900 000	30 300 000	32 100 000	29 100 000	35 300 000

¹ Estimates for China and India are based on 2011 national estimates.

EPIDEMIOLOGY

Estimated new HIV infections (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	25 000	22 000	28 000	12 000	9 400	14 000
Bahamas	<1 000	<1 000	<1 000	<500	<500	<500
Barbados	<200	<200	<200	<100	<100	<100
Cuba	...	...	...	<500	<200	1 000
Dominican Republic	5 900	5 000	7 100	<500	<200	<1 000
Haiti	14 000	12 000	16 000	8 500	6 900	11 000
Jamaica	2 900	2 300	3 600	1 400	<1 000	2 000
Trinidad and Tobago	1 300	1 200	1 600	<1 000	<1 000	<1 000
East Asia	68 000	50 000	96 000	81 000	34 000	160 000
China ¹	...	...	...	...	...	...
Democratic People's Republic of Korea	...	...	...	...	...	...
Japan	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...
Republic of Korea	...	...	...	...	...	...
Eastern Europe and Central Asia	140 000	110 000	180 000	130 000	89 000	190 000
Armenia	<500	<200	1 200	<500	<200	<1 000
Azerbaijan	...	...	...	<1 000	<500	1 600
Belarus	2 000	1 500	2 600	1 600	<1 000	2 400
Georgia	<500	<500	<1 000	<1 000	<1 000	1 400
Kazakhstan	...	...	...	...	...	...
Kyrgyzstan	<500	<200	<500	1 700	<1 000	2 600
Republic of Moldova	1 700	1 200	3 900	1 800	1 400	2 500
Russian Federation	...	...	...	...	...	...
Tajikistan	<1 000	<500	3 000	2 100	<1 000	5 500
Ukraine	35 000	30 000	40 000	11 000	7 500	15 000
Uzbekistan	...	...	...	2 300	1 300	3 800
Latin America	97 000	78 000	120 000	86 000	57 000	150 000
Argentina	...	...	...	4 200	2 800	6 200
Belize	<500	<500	<500	<200	<100	<200

EPIDEMIOLOGY

Estimated new HIV infections (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Bolivia (Plurinational State of)	2 300	1 600	3 500	1 100	<200	1 900
Brazil	...	...	...	34 000	27 000	45 000
Chile	...	...	...	2 300	1 100	6 200
Colombia	11 000	7 700	15 000	9 000	5 600	14 000
Costa Rica	...	...	...	<1 000	<500	<1 000
Ecuador	...	...	...	4 200	2 400	14 000
El Salvador	...	...	...	1 100	<500	3 700
Guatemala	...	...	...	3 000	1 000	15 000
Guyana	...	...	...	<500	<200	<1 000
Honduras	...	...	...	<1 000	<1 000	1 700
Mexico	10 000	7 400	14 000	9 300	6 200	14 000
Nicaragua	<500	<200	<500	1 500	<1 000	2 600
Panama	...	...	...	<1 000	<500	1 000
Paraguay	...	...	...	1 600	<1 000	3 800
Peru	...	...	...	4 600	1 000	28 000
Suriname	<500	<500	<500	<500	<200	<500
Uruguay	...	...	...	...	...	...
Venezuela (Bolivarian Republic of)	...	...	...	6 600	3 300	12 000
Middle East and North Africa	21 000	16 000	30 000	32 000	22 000	47 000
Algeria	...	...	...	...	...	...
Djibouti	1 700	1 400	2 200	<500	<200	<1 000
Egypt	...	...	...	<1 000	<1 000	1 700
Iran (Islamic Republic of)	...	...	...	11 000	7 400	20 000
Lebanon	...	...	...	...	...	...
Morocco	...	...	...	3 400	2 200	5 100
Oman	...	...	...	...	...	...
Somalia	...	...	...	3 300	1 800	5 900
Sudan	...	...	...	...	...	...

EPIDEMIOLOGY

Estimated new HIV infections (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Tunisia	...	...	...	<500	<200	<1 000
Yemen	...	...	...	3 500	1 400	6 800
North America	46 000	33 000	63 000	48 000	15 000	100 000
Canada	...	...	...	...	...	...
United States of America	...	...	...	...	...	...
Oceania	4 300	3 500	5 400	2 100	1 500	2 700
Australia	...	...	...	...	...	...
Fiji	...	...	...	<200	<200	<200
New Zealand	...	...	...	<200	<100	<500
Papua New Guinea	3 500	2 600	4 600	<1 000	<500	1 200
South and South-East Asia	400 000	310 000	520 000	270 000	160 000	440 000
Afghanistan	...	...	...	<1 000	<200	2 400
Bangladesh	<1 000	<100	3 500	<1 000	<500	19 000
Bhutan	...	...	...	<200	<100	<1 000
Cambodia	6 000	3 200	14 000	1 400	<1 000	2 900
India ¹	260 000	220 000	310 000	130 000	80 000	230 000
Indonesia	29 000	<100	68 000	76 000	47 000	150 000
Lao People's Democratic Republic	...	...	...	1 000	<1 000	1 200
Malaysia	6 200	4 200	9 500	7 400	4 800	11 000
Maldives	...	...	...	<100	<100	<100
Myanmar	25 000	20 000	30 000	7 100	5 700	8 900
Nepal	9 500	7 100	13 000	1 200	<1 000	2 700
Pakistan	2 300	1 500	4 100	19 000	8 700	39 000
Philippines	<1 000	<500	1 600	1 800	1 100	4 000
Singapore	...	...	...	<200	<100	<500
Sri Lanka	<500	<200	<1 000	<500	<200	<1 000
Thailand	24 000	21 000	38 000	8 800	5 500	24 000
Viet Nam	31 000	11 000	57 000	13 000	2 300	28 000

EPIDEMIOLOGY

Estimated new HIV infections (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Sub-Saharan Africa	2 600 000	2 400 000	2 800 000	1 600 000	1 400 000	1 800 000
Angola	19 000	14 000	26 000	28 000	21 000	36 000
Benin	7 400	6 500	8 500	4 100	3 200	5 200
Botswana	27 000	25 000	30 000	12 000	11 000	15 000
Burkina Faso	8 400	6 700	10 000	5 800	3 800	8 300
Burundi	5 600	4 500	7 100	4 600	2 400	7 500
Cameroon	62 000	56 000	70 000	45 000	38 000	53 000
Cape Verde	...	...	...	<100	<100	<100
Central African Republic	...	...	...	...	...	...
Chad	23 000	19 000	31 000	16 000	12 000	21 000
Comoros	...	...	...	...	...	...
Congo	8 900	8 000	10 000	4 700	3 800	5 800
Côte d'Ivoire	58 000	49 000	70 000	30 000	22 000	39 000
Democratic Republic of the Congo	51 000	47 000	57 000	34 000	30 000	40 000
Equatorial Guinea	...	...	...	2 600	1 200	4 500
Eritrea	1 900	1 200	3 100	<500	<500	<1 000
Ethiopia	130 000	110 000	140 000	20 000	14 000	29 000
Gabon	5 900	5 000	6 800	1 000	<500	2 100
Gambia	1 500	1 200	2 100	<1 000	<500	1 300
Ghana	28 000	24 000	32 000	8 000	4 500	12 000
Guinea	...	...	...	10 000	7 000	14 000
Guinea-Bissau	4 200	3 200	5 500	3 600	2 300	5 700
Kenya	140 000	130 000	150 000	98 000	91 000	110 000
Lesotho	33 000	30 000	36 000	26 000	23 000	30 000
Liberia	4 300	3 500	5 100	<500	<200	<500
Madagascar	...	...	...	3 900	2 600	5 900
Malawi	110 000	100 000	120 000	66 000	58 000	76 000
Mali	11 000	8 700	15 000	4 200	1 600	7 300
Mauritania	...	...	...	<500	<200	<1 000

EPIDEMIOLOGY

Estimated new HIV infections (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Mauritius	...	...	...	<1 000	<1 000	1 100
Mozambique	160 000	150 000	190 000	120 000	97 000	150 000
Namibia	23 000	20 000	27 000	10 000	8 000	13 000
Niger	7 800	6 500	9 600	1 100	<1 000	1 800
Nigeria	400 000	350 000	470 000	260 000	210 000	310 000
Rwanda	17 000	15 000	20 000	7 800	5 800	11 000
Sao Tome and Principe	<500	<200	<500	<100	<100	<100
Senegal	4 700	3 900	5 700	2 000	1 300	3 000
Sierra Leone	6 100	4 500	8 200	3 100	1 200	6 900
South Africa	640 000	600 000	700 000	370 000	340 000	420 000
South Sudan	...	...	...	15 000	7 500	23 000
Swaziland	17 000	16 000	19 000	12 000	9 800	14 000
Togo	18 000	15 000	21 000	4 800	2 800	7 500
Uganda	94 000	82 000	110 000	140 000	110 000	170 000
United Republic of Tanzania	130 000	120 000	150 000	83 000	69 000	100 000
Zambia	100 000	95 000	110 000	56 000	49 000	64 000
Zimbabwe	130 000	120 000	150 000	69 000	59 000	79 000
Western and Central Europe	...	...	...	29 000	25 000	35 000
Austria	...	...	...	...	...	...
Belgium	...	...	...	...	...	...
Bulgaria	...	...	...	...	...	...
Croatia	...	...	...	...	...	...
Czech Republic	...	...	...	...	...	...
Denmark	...	...	...	...	...	...
Estonia	...	...	...	...	...	...
Finland	...	...	...	...	...	...
France	...	...	...	...	...	...
Germany	...	...	...	...	...	...
Greece	...	...	...	...	...	...

EPIDEMIOLOGY

Estimated new HIV infections (all ages)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
GLOBAL	3 400 000	3 100 000	3 700 000	2 300 000	1 900 000	2 700 000

¹ Estimates for China and India are based on 2011 national estimates.

EPIDEMIOLOGY

Estimated new HIV infections (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	22 000	19 000	24 000	11 000	9 100	14 000
Bahamas	<1 000	<1 000	<1 000	<500	<500	<500
Barbados	<200	<200	<200	<100	<100	<100
Cuba	...	...	...	<500	<200	<1 000
Dominican Republic	5 200	4 400	6 300	<500	<200	<1 000
Haiti	11 000	9 700	13 000	8 200	6 600	10 000
Jamaica	2 700	2 100	3 300	1 400	<1 000	1 900
Trinidad and Tobago	1 300	1 200	1 500	<500	<500	<1 000
East Asia	67 000	49 000	95 000	80 000	34 000	150 000
China ¹	...	...	...	...	...	...
Democratic People's Republic of Korea	...	...	...	...	...	...
Japan	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...
Republic of Korea	...	...	...	...	...	...
Eastern Europe and Central Asia	140 000	110 000	170 000	130 000	89 000	190 000
Armenia	<500	<200	1 200	<500	<200	<1 000
Azerbaijan	...	...	...	<1 000	<500	1 600
Belarus	2 000	1 500	2 600	1 600	<1 000	2 400
Georgia	<500	<500	<1 000	<1 000	<1 000	1 400
Kazakhstan	...	...	...	...	...	...
Kyrgyzstan	<500	<200	<500	1 700	<1 000	2 600
Republic of Moldova	1 600	1 200	3 900	1 800	1 400	2 400
Russian Federation	...	...	...	...	...	...
Tajikistan	<1 000	<500	3 100	2 000	<1 000	5 200
Ukraine	34 000	29 000	39 000	11 000	7 400	15 000
Uzbekistan	...	...	...	2 300	1 300	3 800
Latin America	90 000	72 000	110 000	84 000	56 000	150 000
Argentina	...	...	...	4 200	2 800	6 100
Belize	<500	<500	<500	<200	<100	<200

EPIDEMIOLOGY

Estimated new HIV infections (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Bolivia (Plurinational State of)	2 200	1 400	3 300	1 000	<100	1 800
Brazil	...	...	...	...	...	...
Chile	...	...	...	2 300	1 100	6 200
Colombia	9 900	7 100	14 000	8 700	5 400	13 000
Costa Rica	...	...	...	<1 000	<500	<1 000
Ecuador	...	...	...	4 200	2 400	13 000
El Salvador	...	...	...	1 000	<500	3 400
Guatemala	...	...	...	2 500	<1 000	13 000
Guyana	...	...	...	<500	<200	<1 000
Honduras	...	...	...	<1 000	<1 000	1 500
Mexico	9 800	6 900	13 000	9 200	6 100	14 000
Nicaragua	<500	<200	<500	1 500	<1 000	2 600
Panama	...	...	...	<1 000	<500	1 000
Paraguay	...	...	...	1 500	<1 000	3 700
Peru	...	...	...	4 500	1 000	27 000
Suriname	<500	<500	<500	<500	<200	<500
Uruguay	...	...	...	...	...	...
Venezuela (Bolivarian Republic of)	...	...	...	6 300	3 200	12 000
Middle East and North Africa	18 000	14 000	25 000	29 000	20 000	43 000
Algeria	...	...	...	...	...	...
Djibouti	1 600	1 200	2 000	<200	<200	<500
Egypt	...	...	...	<1 000	<1 000	1 600
Iran (Islamic Republic of)	...	...	...	11 000	7 300	19 000
Lebanon	...	...	...	...	...	...
Morocco	...	...	...	3 400	2 200	5 000
Oman	...	...	...	...	...	...
Somalia	...	...	...	2 600	1 300	4 700
Sudan	...	...	...	...	...	...

EPIDEMIOLOGY

Estimated new HIV infections (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Tunisia	...	...	...	<500	<200	<1 000
Yemen	...	...	...	3 200	1 300	6 000
North America	46 000	33 000	63 000	48 000	15 000	100 000
Canada	...	...	...	...	...	...
United States of America	...	...	...	...	...	...
Oceania	3 900	3 100	4 800	1 800	1 200	2 400
Australia	...	...	...	...	...	...
Fiji	...	...	...	<200	<200	<200
New Zealand	...	...	...	...	...	...
Papua New Guinea	3 000	2 200	4 100	<500	<500	<1 000
South and South-East Asia	370 000	280 000	480 000	250 000	140 000	410 000
Afghanistan	...	...	...	<1000	<200	2 200
Bangladesh	<500	<100	3 400	<1 000	<500	18 000
Bhutan	...	...	...	<200	<100	<1 000
Cambodia	4 900	2 500	12 000	1 200	<100	<100
India ¹	240 000	190 000	280 000	120 000	70 000	210 000
Indonesia	29 000	<100	67 000	72 000	44 000	140 000
Lao People's Democratic Republic	...	...	...	<1 000	<1 000	1 100
Malaysia	6 100	4 100	9 400	7 300	4 700	11 000
Maldives	...	...	...	<100	<100	<100
Myanmar	24 000	19 000	29 000	6 400	5 000	8 000
Nepal	8 900	6 600	12 000	<1 000	<500	2 000
Pakistan	2 200	1 500	4 000	18 000	8 400	38 000
Philippines	<1 000	<500	1 500	1 700	1 100	3 900
Singapore	...	...	...	...	...	...
Sri Lanka	<500	<200	<1 000	<500	<200	<1 000
Thailand	23 000	20 000	36 000	8 700	5 400	23 000
Viet Nam	30 000	11 000	55 000	13 000	2 200	27 000

EPIDEMIOLOGY

Estimated new HIV infections (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Sub-Saharan Africa	2 100 000	1 900 000	2 200 000	1 400 000	1 200 000	1 500 000
Angola	16 000	12 000	21 000	23 000	17 000	30 000
Benin	5 900	5 100	6 900	3 400	2 500	4 300
Botswana	24 000	22 000	26 000	12 000	10 000	14 000
Burkina Faso	3 800	2 600	5 400	4 500	2 800	6 600
Burundi	2 000	1 100	2 900	3 300	1 600	5 900
Cameroon	53 000	47 000	60 000	39 000	33 000	46 000
Cape Verde	...	...	...	<100	<100	<100
Central African Republic	...	...	...	...	...	...
Chad	18 000	14 000	24 000	12 000	8 200	16 000
Comoros	...	...	...	...	...	...
Congo	6 600	5 900	7 600	3 400	2 700	4 300
Côte d'Ivoire	46 000	37 000	56 000	25 000	19 000	33 000
Democratic Republic of the Congo	38 000	34 000	42 000	24 000	21 000	28 000
Equatorial Guinea	...	...	...	2 000	<1 000	3 500
Eritrea	1 200	<1 000	2 500	<500	<200	<1 000
Ethiopia	87 000	74 000	100 000	11 000	4 800	18 000
Gabon	5 200	4 300	6 000	<1 000	<500	1 700
Gambia	1 300	1 000	1 800	<1 000	<500	1 200
Ghana	23 000	19 000	27 000	7 100	4 000	11 000
Guinea	...	...	...	8 500	5 400	12 000
Guinea-Bissau	3 600	2 700	4 700	2 800	1 700	4 500
Kenya	97 000	90 000	110 000	85 000	80 000	96 000
Lesotho	27 000	24 000	30 000	23 000	20 000	26 000
Liberia	3 600	2 900	4 400	<100	<100	<100
Madagascar	...	...	...	2 900	1 800	4 500
Malawi	83 000	78 000	91 000	55 000	49 000	63 000
Mali	8 200	6 000	11 000	3 000	<1 000	5 500
Mauritania	...	...	...	<200	<100	<500

EPIDEMIOLOGY

Estimated new HIV infections (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Mauritius	...	...	...	<1 000	<1 000	1 100
Mozambique	140 000	130 000	160 000	100 000	85 000	130 000
Namibia	20 000	18 000	23 000	9 700	74 00	12 000
Niger	6 200	5 100	7 600	<200	<100	<500
Nigeria	350 000	290 000	400 000	200 000	160 000	250 000
Rwanda	11 000	8 800	13 000	6 900	5 100	9 300
Sao Tome and Principe	<500	<200	<500	<100	<100	<100
Senegal	4 000	3 300	4 800	1 300	<1 000	2 100
Sierra Leone	5 500	4 100	7 400	2 800	1 000	6 100
South Africa	560 000	530 000	620 000	350 000	320 000	390 000
South Sudan	...	...	...	12 000	6 000	19 000
Swaziland	14 000	13 000	15 000	10 000	8 400	12 000
Togo	15 000	12 000	18 000	4 100	2 300	6 500
Uganda	69 000	59 000	81 000	120 000	100 000	150 000
United Republic of Tanzania	91 000	80 000	100 000	69 000	58 000	85 000
Zambia	75 000	70 000	81 000	46 000	41 000	54 000
Zimbabwe	97 000	87 000	110 000	59 000	51 000	69 000
Western and Central Europe	...	...	...	29 000	25 000	34 000
Austria	...	...	...	...	...	...
Belgium	...	...	...	...	...	...
Bulgaria	...	...	...	...	...	...
Croatia	...	...	...	...	...	...
Czech Republic	...	...	...	...	...	...
Denmark	...	...	...	...	...	...
Estonia	...	...	...	...	...	...
Finland	...	...	...	...	...	...
France	...	...	...	...	...	...
Germany	...	...	...	...	...	...
Greece	...	...	...	...	...	...

EPIDEMIOLOGY

Estimated new HIV infections (ages 15+)

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland
GLOBAL	2 800 000	2 600 000	3 100 000	2 000 000	1 700 000	2 400 000

¹ Estimates for China and India are based on 2011 national estimates.

EPIDEMIOLOGY

Percentage of young people aged 15 to 24 who are living with HIV¹, 2012

	Females			Males		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	0.5	0.4	0.6	0.3	0.3	0.4
Bahamas	1.8	1.4	2.2	1.3	1.0	1.6
Barbados	0.2	0.2	0.3	0.4	0.3	0.5
Cuba	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dominican Republic	0.2	0.1	0.3	0.1	<0.1	0.2
Haiti	0.9	0.8	1.1	0.6	0.4	0.8
Jamaica	0.5	0.4	0.6	0.9	0.5	1.5
Trinidad and Tobago	0.9	0.7	1.2	0.6	0.5	0.7
East Asia	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
China ²	...	...	...	...	...	...
Democratic People's Republic of Korea	...	...	...	...	...	...
Japan	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...
Republic of Korea	...	...	...	...	...	...
Eastern Europe and Central Asia	0.2	0.1	0.3	0.3	0.2	0.4
Armenia	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Azerbaijan	<0.1	<0.1	<0.1	0.2	0.1	0.3
Belarus	0.2	0.1	0.3	0.3	0.2	0.4
Georgia	0.1	<0.1	0.2	0.3	0.2	0.5
Kazakhstan	...	...	...	...	...	...
Kyrgyzstan	<0.1	<0.1	<0.1	0.2	<0.1	0.2
Republic of Moldova	0.2	0.1	0.3	0.2	0.1	0.2
Russian Federation	...	...	...	...	...	...
Tajikistan	0.1	<0.1	0.3	0.1	<0.1	0.3
Ukraine	0.5	0.3	0.7	0.4	0.3	0.5
Uzbekistan	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Latin America	0.1	<0.1	0.2	0.2	0.1	0.4
Argentina	0.1	<0.1	0.2	0.2	0.1	0.3
Belize	0.6	0.5	0.7	0.5	0.3	0.8

EPIDEMIOLOGY

Percentage of young people aged 15 to 24 who are living with HIV¹, 2012

	Females			Males		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Bolivia (Plurinational State of)	<0.1	<0.1	0.2	0.1	<0.1	0.3
Brazil	...	0.1	0.1	...	0.2	0.4
Chile	<0.1	<0.1	0.1	0.2	0.1	0.6
Colombia	0.2	0.1	0.3	0.3	0.2	0.5
Costa Rica	0.2	0.1	0.2	0.1	0.1	0.2
Ecuador	0.2	0.1	0.5	0.4	0.2	1.3
El Salvador	0.2	0.1	0.5	0.3	0.1	0.8
Guatemala	0.2	0.1	0.8	0.3	0.1	1.1
Guyana	0.8	0.4	1.5	0.5	0.2	1.1
Honduras	0.2	0.1	0.2	0.2	0.2	0.4
Mexico	<0.1	<0.1	<0.1	0.1	<0.1	0.2
Nicaragua	0.2	0.1	0.3	0.3	0.2	0.5
Panama	0.3	0.2	0.4	0.4	0.2	0.6
Paraguay	0.3	0.1	0.6	0.2	<0.1	0.5
Peru	0.2	<0.1	0.6	0.2	<0.1	1.1
Suriname	0.7	0.5	0.9	0.4	0.3	0.7
Uruguay	0.2	0.1	0.4	0.5	0.3	0.9
Venezuela (Bolivarian Republic of)	0.3	0.1	0.4	0.3	0.2	0.6
Middle East and North Africa	<0.1	<0.1	0.1	<0.1	<0.1	0.2
Algeria	...	...	...	...	...	...
Djibouti	0.3	0.2	0.5	0.2	0.1	0.2
Egypt	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Iran (Islamic Republic of)	<0.1	<0.1	0.2	0.1	<0.1	0.2
Lebanon	...	...	...	...	...	...
Morocco	<0.1	<0.1	0.1	0.1	<0.1	0.2
Oman	...	...	...	...	...	...
Somalia	0.2	0.1	0.4	0.2	<0.1	0.3
Sudan	...	...	...	...	...	...

EPIDEMIOLOGY

Percentage of young people aged 15 to 24 who are living with HIV¹, 2012

	Females			Males		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Tunisia	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Yemen	0.1	<0.1	0.3	0.1	<0.1	0.3
North America	0.1	<0.1	0.2	0.3	0.1	0.5
Canada	...	...	...	...	...	...
United States of America	...	...	...	...	...	...
Oceania	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Australia	...	...	...	...	...	...
Fiji	0.1	<0.1	0.2	0.1	<0.1	0.2
New Zealand	...	...	...	...	...	...
Papua New Guinea	0.1	<0.1	0.2	<0.1	<0.1	0.1
South and South-East Asia	0.1	<0.1	0.2	0.1	<0.1	0.2
Afghanistan	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bangladesh	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Bhutan	<0.1	<0.1	0.2	0.1	<0.1	0.4
Cambodia	0.2	0.1	0.3	0.2	0.1	0.2
India ²	0.1	<0.1	0.2	0.1	<0.1	0.2
Indonesia	0.5	0.3	0.8	0.4	0.2	0.8
Lao People's Democratic Republic	0.2	0.2	0.3	0.2	0.1	0.3
Malaysia	<0.1	<0.1	<0.1	0.1	<0.1	0.2
Maldives	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Myanmar	0.1	<0.1	0.1	<0.1	<0.1	0.2
Nepal	<0.1	<0.1	0.1	<0.1	<0.1	0.2
Pakistan	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Philippines	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Singapore	...	...	...	...	...	...
Sri Lanka	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thailand	0.3	0.2	0.4	0.3	0.2	0.6
Viet Nam	0.1	<0.1	0.2	0.2	<0.1	0.6

EPIDEMIOLOGY

Percentage of young people aged 15 to 24 who are living with HIV¹, 2012

	Females			Males		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Sub-Saharan Africa	2.5	2.3	3.0	1.2	0.9	1.6
Angola	1.2	0.9	1.5	0.6	0.4	0.9
Benin	0.4	0.3	0.5	0.2	0.2	0.3
Botswana	6.7	5.8	8.4	3.7	2.3	5.5
Burkina Faso	0.5	0.4	0.6	0.4	0.3	0.5
Burundi	0.6	0.4	0.8	0.4	0.3	0.6
Cameroon	1.8	1.6	2.3	1.0	0.6	1.4
Cape Verde	<0.1	<0.1	0.2	<0.1	<0.1	0.1
Central African Republic	...	...	...	...	...	...
Chad	1.1	0.8	1.5	0.6	0.4	0.9
Comoros	...	...	...	...	...	...
Congo	1.3	1.1	1.6	0.8	0.6	1.1
Côte d'Ivoire	1.2	1.0	1.6	0.7	0.5	1.0
Democratic Republic of the Congo	0.8	0.7	1.0	0.4	0.3	0.6
Equatorial Guinea	3.1	1.6	5.5	1.6	0.7	3.1
Eritrea	0.2	0.1	0.3	0.2	0.1	0.3
Ethiopia	0.5	0.3	0.6	0.3	0.2	0.3
Gabon	1.6	1.1	2.6	0.4	0.2	0.6
Gambia	0.5	0.3	0.8	0.2	0.1	0.5
Ghana	0.5	0.4	0.6	0.3	0.2	0.4
Guinea	0.8	0.6	1.1	0.4	0.2	0.6
Guinea-Bissau	1.7	1.1	2.6	0.9	0.5	1.5
Kenya	3.6	3.0	4.6	1.8	1.5	2.3
Lesotho	10.7	9.4	13.0	5.8	3.8	8.4
Liberia	0.1	<0.1	0.2	<0.1	<0.1	0.1
Madagascar	0.3	0.2	0.4	0.3	0.2	0.4
Malawi	4.5	4.0	5.4	2.7	2.0	3.7
Mali	0.3	0.2	0.5	0.2	<0.1	0.3
Mauritania	0.2	0.1	0.4	0.1	<0.1	0.2
Mauritius	0.3	0.2	0.3	0.3	0.2	0.5

EPIDEMIOLOGY

Percentage of young people aged 15 to 24 who are living with HIV¹, 2012

	Females			Males		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Mozambique	6.6	5.7	8.1	2.8	2.1	3.8
Namibia	4.1	3.2	5.5	2.2	1.4	3.4
Niger	0.1	<0.1	0.2	<0.1	<0.1	0.1
Nigeria	1.3	1.1	1.6	0.7	0.4	1.0
Rwanda	1.3	1.2	1.6	1.0	0.8	1.2
Sao Tome and Principe	0.4	0.3	0.7	0.3	0.1	0.6
Senegal	0.3	0.2	0.4	0.1	<0.1	0.2
Sierra Leone	1.0	0.6	1.7	0.3	0.1	0.5
South Africa	13.9	12.9	16.8	3.9	2.5	5.7
South Sudan	1.2	0.7	2.0	0.6	0.3	1.2
Swaziland	20.0	17.2	24.5	10.3	6.7	14.7
Togo	0.9	0.7	1.3	0.5	0.3	0.8
Uganda	4.0	3.4	4.9	2.3	1.6	3.2
United Republic of Tanzania	3.6	3.1	4.6	1.8	1.3	2.6
Zambia	4.6	4.1	5.6	3.5	2.5	4.9
Zimbabwe	6.3	5.6	7.5	3.9	2.9	5.2
Western and Central Europe	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Austria	...	...	...	...	...	...
Belgium	...	...	...	...	...	...
Bulgaria	...	...	...	...	...	...
Croatia	...	...	...	...	...	...
Czech Republic	...	...	...	...	...	...
Denmark	...	...	...	...	...	...
Estonia	...	...	...	...	...	...
Finland	...	...	...	...	...	...
France	...	...	...	...	...	...
Germany	...	...	...	...	...	...
Greece	...	...	...	...	...	...
Hungary	...	...	...	...	...	...

EPIDEMIOLOGY

Percentage of young people aged 15 to 24 who are living with HIV¹, 2012

	Females			Males		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland
GLOBAL	0.5	0.4	0.6	0.3	0.2	0.4

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/844>

² Estimates for China and India are based on 2011 national estimates.

EPIDEMIOLOGY

Estimated AIDS deaths

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	24 000	21 000	27 000	11 000	9 400	14 000
Bahamas	<500	<500	<500	<500	<500	<500
Barbados	<100	<100	<100	<100	<100	<100
Cuba	<500	<200	<500	<100	<100	<100
Dominican Republic	4 600	3 900	5 500	1 900	1 400	2 600
Haiti	15 000	14 000	17 000	7 500	6 200	8 900
Jamaica	2 700	2 300	3 400	1 300	<1 000	1 800
Trinidad and Tobago	<1 000	<500	<1 000	<500	<500	<1 000
East Asia	18 000	12 000	35 000	41 000	25 000	64 000
China ¹	...	...	...	...	...	...
Democratic People's Republic of Korea	...	...	...	...	...	...
Japan	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...
Republic of Korea	...	...	...	...	...	...
Eastern Europe and Central Asia	36 000	26 000	47 000	91 000	66 000	120 000
Armenia	<100	<100	<200	<500	<200	<500
Azerbaijan	<200	<100	<200	<1 000	<500	<1 000
Belarus	<500	<200	<500	1 200	1 000	1 500
Georgia	<100	<100	<100	<200	<200	<500
Kazakhstan	...	...	...	...	...	...
Kyrgyzstan	<100	<100	<200	<500	<200	<1 000
Republic of Moldova	<1 000	<1 000	<1 000	1 300	<1 000	1 800
Russian Federation	...	...	...	...	...	...
Tajikistan	<100	<100	<200	<1 000	<500	<1 000
Ukraine	8 600	6 900	10 000	18 000	15 000	22 000
Uzbekistan	1 800	<1 000	2 900	2 400	1 700	3 500
Latin America	82 000	63 000	100 000	52 000	35 000	75 000
Argentina	2 900	1 700	4 300	3 700	2 200	5 300
Belize	<200	<100	<200	<200	<100	<200

EPIDEMIOLOGY

Estimated AIDS deaths

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Bolivia (Plurinational State of)	<1 000	<1 000	1 700	1 300	<1 000	2 000
Brazil	...	18 000	27 000	...	11 000	19 000
Chile	...	...	...	...	...	...
Colombia	8 700	6 400	12 000	6 500	3 800	10 000
Costa Rica	<200	<200	<200	<500	<500	<500
Ecuador	2 800	1 100	4 700	2 700	1 600	4 400
El Salvador	1 600	1 100	2 400	<1 000	<500	2 100
Guatemala	2 000	1 100	3 200	3 400	1 800	7 100
Guyana	<200	<100	<500	<100	<100	<500
Honduras	3 600	3 000	4 400	1 700	1 300	2 200
Mexico	...	...	...	...	...	...
Nicaragua	<100	<100	<200	<200	<100	<500
Panama	1 700	1 300	2 100	<1 000	<500	<1 000
Paraguay	<500	<200	<1 000	<500	<100	<1 000
Peru	9 300	4 900	15 000	4 100	1 700	10 000
Suriname	<500	<200	<500	<200	<200	<200
Uruguay	...	...	...	...	...	...
Venezuela (Bolivarian Republic of)	6 800	4 100	11 000	3 800	1 400	7 900
Middle East and North Africa	8 300	4 600	14 000	17 000	12 000	26 000
Algeria	...	...	...	...	...	...
Djibouti	<1 000	<500	<1 000	<1 000	<1 000	1 000
Egypt	<200	<100	<500	<500	<200	<1 000
Iran (Islamic Republic of)	<500	<200	1 200	4 600	3 200	6 400
Lebanon	...	...	...	...	...	...
Morocco	<500	<500	<500	1 200	<1 000	1 800
Oman	...	...	...	...	...	...
Somalia	2 000	<1 000	3 300	2 500	1 700	3 900
Sudan	...	...	...	...	...	...

EPIDEMIOLOGY

Estimated AIDS deaths

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Tunisia	<100	<100	<100	<100	<100	<200
Yemen	<500	<100	<500	<1 000	<500	2 400
North America	19 000	15 000	24 000	20 000	16 000	27 000
Canada	...	...	...	...	...	...
United States of America	...	...	...	...	...	...
Oceania	1 500	<1 000	2 200	1 200	<1 000	1 800
Australia	...	...	...	...	...	...
Fiji	<100	<100	<100	<100	<100	<100
New Zealand	...	...	...	...	...	...
Papua New Guinea	1 300	<1 000	2 000	<1 000	<1 000	1 600
South and South-East Asia	220 000	160 000	320 000	220 000	150 000	310 000
Afghanistan	<200	<100	<500	<500	<100	<1 000
Bangladesh	<200	<100	<1 000	<500	<200	2 300
Bhutan	<100	<100	<100	<100	<100	<200
Cambodia	6 000	4 500	9 500	2 700	1 900	4 700
India ¹	130 000	99 000	210 000	140 000	100 000	170 000
Indonesia	1 300	<100	41 000	27 000	16 000	42 000
Lao People's Democratic Republic	<100	<100	<500	<500	<500	<1 000
Malaysia	4 200	3 000	6 000	5 200	3 100	8 000
Maldives	<100	<100	<100	<100	<100	<100
Myanmar	9 800	8 500	11 000	12 000	9 700	14 000
Nepal	1 600	1 200	2 200	4 100	3 100	5 600
Pakistan	<500	<500	<1 000	3 500	2 100	6 600
Philippines	<500	<200	<1 000	<500	<200	<1 000
Singapore	...	...	...	...	...	...
Sri Lanka	<100	<100	<200	<200	<200	<500
Thailand	61 000	54 000	67 000	21 000	18 000	24 000
Viet Nam	5 500	<1 000	12 000	12 000	2 500	24 000

EPIDEMIOLOGY

Estimated AIDS deaths

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Sub-Saharan Africa	1 500 000	1 400 000	1 700 000	1 200 000	1 100 000	1 300 000
Angola	8 400	6 200	13 000	13 000	9 200	17 000
Benin	4 100	3 400	4 900	3 100	2 500	3 900
Botswana	21 000	19 000	23 000	5 700	5 000	6 800
Burkina Faso	19 000	17 000	23 000	5 500	4 100	7 100
Burundi	13 000	11 000	16 000	4 800	3 600	6 300
Cameroon	29 000	26 000	33 000	35 000	30 000	40 000
Cape Verde	<200	<100	<200	<100	<100	<100
Central African Republic	...	...	...	...	...	...
Chad	14 000	11 000	16 000	14 000	12 000	19 000
Comoros	...	...	...	...	...	...
Congo	9 000	8 000	10 000	5 200	4 500	5 900
Côte d'Ivoire	46 000	40 000	55 000	31 000	26 000	38 000
Democratic Republic of the Congo	31 000	28 000	36 000	32 000	29 000	36 000
Equatorial Guinea	<1 000	<500	1 300	1 400	<500	2 900
Eritrea	2 700	1 400	3 800	1 200	<1 000	1 900
Ethiopia	100 000	89 000	110 000	47 000	40 000	56 000
Gabon	2 400	2 000	2 800	2 300	1 900	2 900
Gambia	<500	<500	<500	<1 000	<500	<1 000
Ghana	19 000	16 000	24 000	12 000	8 900	15 000
Guinea	3 300	2 500	4 500	5 100	3 700	6 800
Guinea-Bissau	<1 000	<1 000	1 300	2 300	1 600	3 100
Kenya	130 000	120 000	140 000	57 000	51 000	65 000
Lesotho	16 000	15 000	18 000	15 000	14 000	17 000
Liberia	2 000	1 600	2 500	1 700	1 300	2 100
Madagascar	4 600	3 800	5 700	6 200	5 300	7 200
Malawi	86 000	81 000	95 000	46 000	40 000	52 000
Mali	7 800	5 500	10 000	4 900	3 300	6 800
Mauritania	<500	<500	<1 000	<1 000	<1 000	1 100

EPIDEMIOLOGY

Estimated AIDS deaths

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Mauritius	<500	<500	<1 000	<1 000	<1 000	<1 000
Mozambique	39 000	35 000	46 000	77 000	65 000	93 000
Namibia	9 300	7 900	11 000	5 000	3 400	7 100
Niger	3 200	2 600	3 900	3 400	2 600	4 300
Nigeria	150 000	120 000	200 000	240 000	210 000	280 000
Rwanda	23 000	21 000	26 000	5 600	4 200	7 500
Sao Tome and Principe	<100	<100	<100	<100	<100	<200
Senegal	1 300	1 100	1 600	1 900	1 400	2 500
Sierra Leone	1 100	<1 000	1 700	3 300	2 200	5 100
South Africa	200 000	190 000	230 000	240 000	220 000	270 000
South Sudan	6 900	1 900	17 000	13 000	8 400	20 000
Swaziland	7 700	6 900	8 700	5 500	4 800	6 300
Togo	7 900	6 500	9 800	7 200	5 500	9 500
Uganda	110 000	94 000	120 000	63 000	52 000	81 000
United Republic of Tanzania	120 000	100 000	130 000	80 000	69 000	94 000
Zambia	77 000	72 000	84 000	30 000	26 000	36 000
Zimbabwe	160 000	150 000	170 000	39 000	34 000	45 000
Western and Central Europe	8 100	7 300	8 700	7 600	6 900	8 300
Austria	...	...	...	...	...	...
Belgium	...	...	...	...	...	...
Bulgaria	...	...	...	...	...	...
Croatia	...	...	...	...	...	...
Czech Republic	...	...	...	...	...	...
Denmark	...	...	...	...	...	...
Estonia	...	...	...	...	...	...
Finland	...	...	...	...	...	...
France	...	...	...	...	...	...
Germany	...	...	...	...	...	...
Greece	...	...	...	...	...	...

EPIDEMIOLOGY

Estimated AIDS deaths

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland
GLOBAL	1 900 000	1 700 000	2 200 000	1 600 000	1 400 000	1 900 000

¹ Estimates for China and India are based on 2011 national estimates.

REDUCE SEXUAL TRANSMISSION OF HIV BY 50% BY 2015
HIV testing, multiple sexual partnerships and condom use

	Year, Source	Population receiving an HIV test and receiving test results in the last 12 months ¹		Percentage of adults 15-49 who report having more than one sexual partner in the past 12 months ²		Percentage of adults 15-49 who had more than one sexual partner in the past 12 months who reported use of a condom during last intercourse ³	
		Females	Males	Females	Males	Females	Males
Caribbean							
Dominican Republic	2007, DHS	20.5	18.6	3.0	24.3	34.9	45.0
Haiti	2012, DHS	20.6	13.4	1.3	23.0	43.2	43.3
Eastern Europe and Central Asia							
Armenia	2010, DHS	1.9	0.5	0	15.2	...	72.3
Azerbaijan	2006, DHS	...	...	0	6.1	...	26.0
Republic of Moldova	2005, DHS	11.9	10.1	1.3	11.3	27.4	71.5
Ukraine	2007, DHS	12.3	7.2	2.3	12.9	48.0	46.4
Latin America							
Bolivia (Plurinational State of)	2008, DHS	...	1.9	...	12.0	...	35.2
Colombia	2010, DHS	8.9	...	3.9	...	33.7	...
Guyana	2009, DHS	27.0	21.6	1.3	9.9	47.9	65.4
Honduras	2005-06, DHS	...	...	0.7	...	26.5	...
South and South-East Asia							
Cambodia	2010, DHS	8.0	6.1	0	1.5	...	39.5
India	2005-06, NFHS	1.2	1.4	0.1	1.3	11.8	22.7
Nepal	2011, DHS	2.9	7.5	0.1	3.8	...	26.5
Timor-Leste	2009, DHS	...	...	0	1.4	...	19.1
Viet Nam	2005, PAIS	2.0	2.6	...	...	...	...
Sub-Saharan Africa							
Benin	2012, DHS	14.6	5.2	1.3	21.2	29.9	22.1
Burkina Faso	2010, DHS	11.2	8.4	0.6	16.6	62.3	26.5
Burundi	2010, DHS	18.7	11.7	0.3	3.1	14.3	14.3
Cameroon	2011, MICS	22.3	20.4	...	...	37.3	43.0
Cape Verde	2012, AIS	47.3	27.9	5.0	34.4	51.1	73.2
Congo	2009, AIS	8.5	7.1	6.8	28.4	29.0	27.9
Côte d'Ivoire	2005, AIS	3.7	3.2	3.6	23.7	40.7	37.5
Democratic Republic of the Congo	2007, DHS	4.1	3.8	3.0	16.8	8.5	15.9

REDUCE SEXUAL TRANSMISSION OF HIV BY 50% BY 2015
HIV testing, multiple sexual partnerships and condom use

	Year, Source	Population receiving an HIV test and receiving test results in the last 12 months ¹		Percentage of adults 15-49 who report having more than one sexual partner in the past 12 months ²		Percentage of adults 15-49 who had more than one sexual partner in the past 12 months who reported use of a condom during last intercourse ³	
		Females	Males	Females	Males	Females	Males
Eritrea	2012, DHS	41.5	41.7	56.4	41.3	2.3	18.2
Ethiopia	2011, DHS	20.0	20.7	0.4	3.5	47.1	15.5
Kenya	2008-09, DHS	29.3	22.8	1.2	9.3	31.8	37.0
Gabon	2012, DHS	10.1	29.0	...	...	44.0	51.1
Ghana	2008, DHS	6.8	4.1	1.0	11.3	18.1	26.2
Guinea	2005, DHS	1.1	2.9	2.0	24.7	19.7	24.4
Lesotho	2009, DHS	42.0	24.0	6.4	21.9	38.5	52.3
Liberia	2007, DHS	1.6	2.3	5.8	18.0	13.5	22.3
Madagascar	2008-09, DHS	4.2	3.6	2.1	15.5	7.6	7.4
Malawi	2010, DHS	...	31.3	0.7	9.2	27.3	24.5
Mali	2006, DHS	3.1	2.7	1.2	15.2	8.1	12.2
Mozambique	2011, DHS	25.9	14.2	2.8	29.5	30.6	25.5
Namibia	2006, DHS	28.6	17.6	1.7	11.2	65.7	74.4
Niger	2006, DHS	0.9	1.6	0.7	12.3	7.6	6.6
Nigeria	2008, DHS	6.6	6.5	1.0	9.9	22.9	33.1
Rwanda	2010-11, DHS	38.6	37.7	0.6	3.9	28.9	27.5
Sao Tome and Principe	2008-09, DHS	31.4	22.8	1.0	16.5	...	32.9
Senegal	2010-11, DHS	13.6	9.0	0.5	8.4	22.3	20.7
Sierra Leone	2008, DHS	4.1	3.4	3.5	15.7	6.8	15.2
Swaziland	2006-07, DHS	21.9	8.9	1.6	13.6	55.0	55.8
United Republic of Tanzania	2010, DHS	29.5	25.0	3.5	20.7	27.2	23.6
Uganda	2006, DHS	12.0	10.4	1.8	20.5	23.9	20.4
Zambia	2007, DHS	18.5	11.7	1.2	14.4	33.1	28.0
Zimbabwe	2010-11, DHS	33.6	20.5	1.1	10.6	48.0	33.1
Western and Central Europe							
Albania	2008-09, DHS	0.2	0.6	0.1	5.4	...	36.9
Bosnia and Herzegovina	2012, MICS	...	...	...	...	17.1	43.5

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/843>.

² For the indicator definition, go to <http://www.indicatorregistry.org/node/661>.

³ For the indicator definition, go to <http://www.indicatorregistry.org/node/842>.

REDUCE SEXUAL TRANSMISSION OF HIV BY 50% BY 2015

Sex workers – population size estimation

	Population size estimate	Year when estimation was performed
Caribbean		
Jamaica	14 957	2011
Eastern Europe and Central Asia		
Armenia	6 200	2010
Azerbaijan	25 054	2011
Belarus	50 000	2012
Kazakhstan	20 270	2012
Kyrgyzstan	[5 900–8 100]	2010
Republic of Moldova	14 768	2011
Tajikistan	12 500	2009
Latin America		
Argentina	72 000	2012
Belize	[346–595]	2012
El Salvador	13 292	2011
Guatemala	21 845	2011
Nicaragua	11 543	2012
Panama	[5 000–10 000]	2012
Paraguay	1 252	2011
Peru	35 560	2010
Middle East and North Africa		
Djibouti	2 865	2012
Egypt	24 000	2011
Morocco	66 000	2010
Tunisia	25 000	2012
Oceania		
Australia	25 000	2011
Fiji	857	2012
South and South-East Asia		
Bangladesh	[63 600–74 300]	2009
Malaysia	60 000	2010
Myanmar	43 432	2012

	Population size estimate	Year when estimation was performed
Nepal	26 878	2011
Pakistan	136 000	2009
Sri Lanka	41 000	2010
Thailand	123 530	2012
Viet Nam	65 166	2011
Sub-Saharan Africa		
Benin	12 789	2012
Cape Verde	1 096	2011
Chad	1 171	2009
Comoros	200	2012
Equatorial Guinea	5 791	2012
Gambia	3 100	2009
Ghana	51 937	2011
Guinea	4 796	2012
Guinea-Bissau	3 138	2012
Kenya	133 675 [76 654–208 711]	2012
Liberia	1 822	2011
Mauritius	9 000	2012
Niger	27 471	2012
Nigeria	459 887	2012
Rwanda	12 278	2012
Senegal	4 200	2012
Togo	8 000	2009
Western and Central Europe		
Serbia	3 901	2011

Note: UNAIDS did not request sources or methods for key population size estimates. We present these data as reflective of the reporting countries' commitments to estimate population size. UNAIDS cannot vouch for the accuracy of these estimates. Any secondary use of these data should be conducted with very careful consideration.

REDUCE SEXUAL TRANSMISSION OF HIV BY 50% BY 2015

Percentage of sex workers reporting the use of a condom with their most recent client¹

	2009	2012
Caribbean		
Cuba	56	70
Dominican Republic	81	85
Haiti	90	90
Jamaica	97	91
East Asia		
Mongolia	90	80
Eastern Europe and Central Asia		
Belarus	70	85
Kazakhstan	96	97
Kyrgyzstan	94	88
Tajikistan	84	71
Latin America		
Argentina	99	96
Colombia	...	98
El Salvador	...	97
Guatemala	96	99
Guyana	61	94
Honduras	80	79
Nicaragua	74	96
Panama	76	99
Middle East and North Africa		
Morocco	54	50
Tunisia	52	55
Oceania		
Papua New Guinea	50	80
South and South-East Asia		
Afghanistan	58	51

	2009	2012
Indonesia	68	58
Lao People's Democratic Republic	94	92
Malaysia	61	84
Pakistan	38	35
Viet Nam	78	83
Sub-Saharan Africa		
Benin	25	85
Burkina Faso	99	98
Burundi	82	91
Cameroon	73	73
Côte d'Ivoire	97	93
Democratic Republic of the Congo	62	32
Eritrea	45	71
Gabon	76	58
Guinea	65	77
Guinea-Bissau	93	93
Niger	85	95
Senegal	97	94
Togo	88	91
Western and Central Europe		
Bosnia and Herzegovina	76	88
Estonia	94	98
Montenegro	72	78
Romania	98	89
Serbia	91	91
The former Yugoslav Republic of Macedonia	78	89

Note: Data presented in this annex are only those data included in the trend analyses in the text, i.e., from countries reporting a minimum of 3 unique data points since 2007. All reported country data are available at AIDSinfo Online Database (www.aidsinfoonline.org).

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/663>.

REDUCE SEXUAL TRANSMISSION OF HIV BY 50% BY 2015

Percentage of sex workers who are living with HIV¹

	2009	2012
Caribbean		
Cuba	0.3	1.0
Dominican Republic	4.8	3.7
Haiti	5.3	8.4
Jamaica	4.9	4.6
Eastern Europe and Central Asia		
Azerbaijan	1.7	0.2
Belarus	6.4	0.7
Kazakhstan	1.3	1.2
Kyrgyzstan	1.6	3.5
Tajikistan	2.8	3.7
Latin America		
Argentina	5.4	5.4
Bolivia (Plurinational State of)	0.4	0.6
Brazil	5.2	4.9
Chile	0.7	0.3
Guyana	16.6	16.6
Honduras	2.3	2.8
Paraguay	1.8	2.0
Middle East and North Africa		
Tunisia	0.4	0.6
Oceania		
Papua New Guinea	5.9	17.8
South and South-East Asia		
Afghanistan	0	0.3

Note: Data presented in this annex are only those data included in the trend analyses in the text, i.e., from countries reporting a minimum of 3 unique data points since 2007. All reported country data are available at AIDSinfo Online Database (www.aidsinfoonline.org).

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/847>.

	2009	2012
Indonesia	10.2	9.0
Lao People's Democratic Republic	0.5	1.0
Malaysia	10.5	4.2
Myanmar	18.1	7.1
Pakistan	2.3	2.4
Viet Nam	3.2	2.7
Sub-Saharan Africa		
Benin	24.7	21.0
Burkina Faso	8.9	16.4
Burundi	39.8	26.5
Cameroon	35.5	36.8
Chad	20.0	20.0
Côte d'Ivoire	35.5	28.7
Eritrea	7.8	6.0
Guinea	32.7	16.7
Guinea-Bissau	39.6	39.0
Niger	35.6	17.3
Senegal	19.8	18.5
Togo	29.3	13.1
Western and Central Europe		
Bosnia and Herzegovina	0	0.5
Estonia	7.7	6.2
Lithuania	0	0.3
Montenegro	0.8	0
Serbia	2.2	2.0

REDUCE SEXUAL TRANSMISSION OF HIV BY 50% BY 2015

Men who have sex with men – population size estimation

	Population size estimate	Year when estimation was performed
Caribbean		
Jamaica	38 138	2011
Eastern Europe and Central Asia		
Armenia	6 600	2010
Azerbaijan	6 572	2011
Belarus	55 000	2012
Kazakhstan	31 940	2012
Republic of Moldova	22 285	2011
Latin America		
Argentina	300 000	2012
El Salvador	19 688	2011
Guatemala	109 152	2011
Nicaragua	40 956	2012
Panama	[30 335–43 336]	2012
Paraguay	24 159	2011
Peru	435 426	2010
Middle East and North Africa		
Egypt	48 000	2011
Morocco	44 000	2010
Tunisia	28 000	2012
North America		
Canada	369 532 [312 681–426 384]	2011
South and South-East Asia		
Bangladesh	[21 833–110 581]	2010

Note: UNAIDS did not request sources or methods for key population size estimates. We present these data as reflective of the reporting countries' commitments to estimate population size. UNAIDS cannot vouch for the accuracy of these estimates. Any secondary use of these data should be conducted with very careful consideration.

	Population size estimate	Year when estimation was performed
Nepal	256 600	2011
Sri Lanka	31 000	2010
Thailand	550 571	2012
Viet Nam	285 388	2011
Sub-Saharan Africa		
Benin	1 382	2012
Comoros	66	2012
Gambia	150	2009
Ghana	30 583	2011
Guinea	613	2012
Guinea-Bissau	7 048	2012
Kenya	13 000	2012
Liberia	711	2011
Mauritius	9 000	2012
Niger	10 205	2012
Nigeria	25 476	2012
Senegal	1 840	2012
Seychelles	266	2011
Togo	751	2011
Western and Central Europe		
Serbia	55 447	2011
United Kingdom of Great Britain and Northern Ireland	424 200	2011

REDUCE SEXUAL TRANSMISSION OF HIV BY 50% BY 2015

Percentage of men reporting the use of a condom the last time they had anal sex with a male partner¹

	2009	2012
Caribbean		
Cuba	52	59
Dominican Republic	66	40
Haiti	73	73
Jamaica	73	77
East Asia		
Mongolia	78	70
Eastern Europe and Central Asia		
Belarus	61	63
Georgia	62	73
Kazakhstan	76	86
Latin America		
Brazil	48	60
Costa Rica	65	56
El Salvador	55	57
Guatemala	78	61
Honduras	47	71
Nicaragua	36	51
Panama	86	48
Paraguay	63	74
Middle East and North Africa		
Egypt	13	20
Tunisia	40	29
Oceania		
Papua New Guinea	51	63

Note: Data presented in this annex are only those data included in the trend analyses in the text, i.e., from countries reporting a minimum of 3 unique data points since 2007. All reported country data are available at AIDSinfo Online Database (www.aidsinfoonline.org).

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/664>.

REDUCE SEXUAL TRANSMISSION OF HIV BY 50% BY 2015

Percentage of men who have sex with men who are living with HIV¹

	2009	2012
Caribbean		
Cuba	0.7	7.4
Dominican Republic	10.7	7.1
Jamaica	31.8	37.6
East Asia		
Mongolia	1.8	10.7
Eastern Europe and Central Asia		
Belarus	2.7	1.3
Georgia	3.6	13.0
Kazakhstan	0.3	0.6
Latin America		
Argentina	11.8	15.7
Brazil	12.6	10.5
Costa Rica	12.7	10.9
El Salvador	9.8	10.2
Guatemala	7.6	13.3
Guyana	19.4	19.4
Honduras	6.6	6.8
Nicaragua	4.2	6.6
Peru	10.1	12.4
Middle East and North Africa		
Egypt	5.6	4.1

Note: Data presented in this annex are only those data included in the trend analyses in the text, i.e., from countries reporting a minimum of 3 unique data points since 2007. All reported country data are available at AIDSinfo Online Database (www.aidsinfoonline.org).

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/850>.

	2009	2012
Lebanon	1.0	1.2
Tunisia	4.8	10.1
South and South-East Asia		
Indonesia	5.2	8.5
Lao People's Democratic Republic	5.6	18.2
Malaysia	3.9	12.6
Thailand	13.5	7.1
Viet Nam	16.7	16.7
Sub-Saharan Africa		
Côte d'Ivoire	24.5	18.8
South Africa	13.2	9.9
Western and Central Europe		
Bosnia and Herzegovina	0.7	1.2
Bulgaria	3.3	0.6
Latvia	4.0	7.8
Lithuania	0	2.6
Romania	4.4	5.0
Serbia	6.1	4.4
The former Yugoslav Republic of Macedonia	2.8	0.5

HALVE THE TRANSMISSION OF HIV AMONG PEOPLE WHO INJECT DRUGS BY 2015

People who inject drugs – population size estimation

	Population size estimate	Year when estimation was performed
Eastern Europe and Central Asia		
Armenia	12 700	2010
Azerbaijan	71 283	2011
Belarus	75 000	2012
Kazakhstan	116 840	2012
Republic of Moldova	31 562	2011
Tajikistan	25 000	2009
Latin America		
Mexico	164 157	2011
Middle East and North Africa		
Egypt	100 000	2011
Morocco	5 000	2012
Tunisia	9 000	2012
North America		
Canada	112 930 [89 432–135 591]	2011
South and South-East Asia		
Bangladesh	[21 800–23 800]	2009
Nepal	31 308	2011
Pakistan	914 000	2009

	Population size estimate	Year when estimation was performed
Sri Lanka	1 200	2012
Thailand	40 300	2011
Viet Nam	217 432	2011
Sub-Saharan Africa		
Benin	35	2012
Cape Verde	15	2011
Kenya	18 327	2012
Liberia	457	2011
Madagascar	14 445	2011
Mauritius	10 000	2011
Niger	670	2012
Nigeria	11 692	2012
Senegal	1 324	2011
Seychelles	345	2011
Togo	390	2011
Western and Central Europe		
Romania	19 265	2011
Serbia	30 383	2011
United Kingdom of Great Britain and Northern Ireland	547 500	2011

Note: UNAIDS did not request sources or methods for key population size estimates. We present these data as reflective of the reporting countries' commitments to estimate population size. UNAIDS cannot vouch for the accuracy of these estimates. Any secondary use of these data should be conducted with very careful consideration.

HALVE THE TRANSMISSION OF HIV AMONG PEOPLE WHO INJECT DRUGS BY 2015

Number of syringes distributed per person who injects drugs per year by needle and syringe programmes¹

	2010	2011	2012
East Asia			
China	...	180	193
Eastern Europe and Central Asia			
Armenia	16	28	28
Azerbaijan	...	49	37
Belarus	47	48	21
Georgia	27	22	23
Kazakhstan	176	154	190
Kyrgyzstan	...	151	253
Republic of Moldova	66	58	60
Tajikistan	104	88	199
Ukraine	62	75	...
Uzbekistan	...	173	124
Latin America			
Mexico	3	7	12
Middle East and North Africa			
Iran (Islamic Republic of)	...	30	74
Morocco	...	13	45
Tunisia	...	15	9
Oceania			
Australia	...	203	203
New Zealand	...	277	...
South and South-East Asia			
Afghanistan	35	80	119
Bangladesh	214	264	237
Cambodia	44	120	35
India	228	387	163
Indonesia	10	7	22
Lao People's Democratic Republic	...	...	182
Malaysia	17	116	94
Myanmar	92	118	116

HALVE THE TRANSMISSION OF HIV AMONG PEOPLE WHO INJECT DRUGS BY 2015

Number of syringes distributed per person who injects drugs per year by needle and syringe programmes¹

	2010	2011	2012
Nepal	57	71	36
Pakistan	...	42	98
Thailand	...	10	12
Viet Nam	141	140	180
Sub-Saharan Africa			
Madagascar	...	543	632
Mauritius	52	31	28
Senegal	...	10	6
Western and Central Europe			
Albania	...	90	...
Bosnia and Herzegovina	51	26	51
Bulgaria	...	34	34
Cyprus	...	<1	...
Czech Republic	...	202	...
Estonia	...	153	...
Finland	...	202	...
Greece	...	7	56
Hungary	66	114	74
Latvia	17	19	...
Lithuania	...	32	...
Luxembourg	...	124	...
Malta	...	302	...
Norway	...	254	...
Poland	...	78	47
Romania	55	49	52
Serbia	26	69	38
Sweden	...	214	...
Switzerland	...	88	...
The former Yugoslav Republic of Macedonia	49	23	28

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/851>.

HALVE THE TRANSMISSION OF HIV AMONG PEOPLE WHO INJECT DRUGS BY 2015

Percentage of people who inject drugs who report the use of a condom at last sexual intercourse¹

	2009	2012
Eastern Europe and Central Asia		
Belarus	59	53
Georgia	78	34
Kazakhstan	46	51
Kyrgyzstan	53	49
Republic of Moldova	36	23
Tajikistan	28	52
Uzbekistan	26	43
Latin America		
Brazil	70	41
Mexico	28	58
Paraguay	22	45
Middle East and North Africa		
Iran (Islamic Republic of)	33	15
Morocco	13	31
Tunisia	35	19
North America		
Canada	39	36
Oceania		
Australia	27	19

Note: Data presented in this annex are only those data included in the trend analyses in the text, i.e., from countries reporting a minimum of 3 unique data points since 2007. All reported country data are available at AIDSinfo Online Database (www.aidsinfoonline.org).

¹For the indicator definition, go to <http://www.indicatorregistry.org/node/852>.

HALVE THE TRANSMISSION OF HIV AMONG PEOPLE WHO INJECT DRUGS BY 2015

Percentage of people who inject drugs who reported using sterile injecting equipment the last time they injected¹

	2009	2012
Eastern Europe and Central Asia		
Belarus	87	89
Georgia	48	83
Kazakhstan	63	58
Republic of Moldova	99	100
Tajikistan	63	94
Uzbekistan	82	80
Latin America		
Brazil	54	54
Mexico	40	41
Paraguay	71	92
Middle East and North Africa		
Iran (Islamic Republic of)	74	92
Morocco	7	67
Tunisia	78	88
Oceania		
Australia	80	79
South and South-East Asia		
Afghanistan	94	78
Bangladesh	32	36

Note: Data presented in this annex are only those data included in the trend analyses in the text, i.e., from countries reporting a minimum of 3 unique data points since 2007. All reported country data are available at AIDSinfo Online Database (www.aidsinfoonline.org).

¹For the indicator definition, go to <http://www.indicatorregistry.org/node/853>.

	2009	2012
South and South-East Asia		
Afghanistan	35	23
Bangladesh	43	45
Indonesia	36	52
Malaysia	28	27
Nepal	51	47
Pakistan	31	23
Thailand	42	49
Viet Nam	52	49
Sub-Saharan Africa		
Benin	30	53
Mauritius	31	25
Western and Central Europe		
Bosnia and Herzegovina	30	31
Bulgaria	38	59
Estonia	66	36
Romania	17	56
Serbia	29	31
Sweden	7	8
Switzerland	50	48
The former Yugoslav Republic of Macedonia	51	54

	2009	2012
Indonesia	88	87
Malaysia	83	98
Nepal	99	95
Pakistan	77	66
Thailand	63	80
Viet Nam	95	96
Sub-Saharan Africa		
Benin	31	71
Mauritius	72	89
Western and Central Europe		
Albania	82	75
Bosnia and Herzegovina	87	92
Lithuania	98	77
Montenegro	24	95
Romania	85	16
Serbia	80	85
Sweden	58	65
The former Yugoslav Republic of Macedonia	73	92

HALVE THE TRANSMISSION OF HIV AMONG PEOPLE WHO INJECT DRUGS BY 2015

Percentage of people who inject drugs who are living with HIV¹

	2009	2012		2009	2012
Eastern Europe and Central Asia			Malaysia	22.1	18.9
Belarus	13.7	17.1	Myanmar	36.3	18.0
Georgia	2.2	3.0	Nepal	20.7	6.3
Kazakhstan	2.9	4.0	Pakistan	20.8	27.2
Kyrgyzstan	14.3	14.6	Thailand	38.7	25.2
Republic of Moldova	16.4	7.9	Viet Nam	18.4	11.6
Tajikistan	17.6	13.5	Sub-Saharan Africa		
Latin America			Mauritius	47.1	51.6
Brazil	5.9	5.9	Western and Central Europe		
Mexico	5.0	5.8	Albania	0	0.5
Middle East and North Africa			Bosnia and Herzegovina	0.4	0.3
Iran (Islamic Republic of)	14.3	13.6	Bulgaria	6.8	7.0
Morocco	2.1	11.4	Estonia	62.5	52.4
Tunisia	3.1	3.0	Latvia	22.6	11.2
North America			Lithuania	8.0	4.6
Canada	12.7	10.9	Luxembourg	1.8	2.4
Oceania			Montenegro	0	0.3
Australia	1.5	1.2	Romania	1.1	6.9
New Zealand	0.3	0.4	Serbia	4.8	1.7
South and South-East Asia			Switzerland	10.9	7.3
Afghanistan	7.1	4.4	The former Yugoslav Republic of Macedonia	0.8	0
Bangladesh	1.6	1.1	United Kingdom of Great Britain and Northern Ireland	1.6	1.0
Indonesia	52.4	36.4			

Note: Data presented in this annex are only those data included in the trend analyses in the text, i.e., from countries reporting a minimum of 3 unique data points since 2007. All reported country data are available at AIDSinfo Online Database (www.aidsinfoonline.org).

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/855>.

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth^{1,2}

	2012		2012
Caribbean		El Salvador	11
Antigua and Barbuda	14	Guatemala	14
Bahamas	90	Guyana	39
Dominican Republic	44	Honduras	39
Haiti	70	Nicaragua	55
Saint Lucia	50	Panama	35
Saint Vincent and the Grenadines	74	Paraguay	43
Trinidad and Tobago	27	Peru	17
East Asia		Uruguay	100
China	34	Venezuela (Bolivarian Republic of)	26
Mongolia	100	Middle East and North Africa	
Eastern Europe and Central Asia		Algeria	100
Armenia	54	Djibouti	28
Azerbaijan	97	Egypt	100
Belarus	78	Iran (Islamic Republic of)	46
Georgia	100	Lebanon	9
Kazakhstan	98	Morocco	47
Kyrgyzstan	15	Oman	52
Republic of Moldova	95	Tunisia	7
Uzbekistan	45	United Arab Emirates	100
Latin America		Yemen	20
Argentina	70	Oceania	
Brazil	21	Australia	100
Chile	97	Fiji	71
Colombia	68	Micronesia (Federated States of)	0
Costa Rica	100	New Zealand	100
Ecuador	90	Papua New Guinea	31

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth^{1,2}

	2012		2012
Samoa	1	Guinea	0
South and South-East Asia		Kenya	39
Cambodia	33	Liberia	93
Lao People's Democratic Republic	7	Madagascar	0
Malaysia	100	Malawi	4
Myanmar	7	Mali	19
Pakistan	0	Mauritius	18
Philippines	3	Mozambique	35
Sri Lanka	40	Namibia	62
Thailand	77	Rwanda	75
Viet Nam	24	Senegal	10
Sub-Saharan Africa		Sierra Leone	3
Angola	9	Togo	13
Benin	26	United Republic of Tanzania	32
Botswana	39	Zambia	74
Burkina Faso	40	Zimbabwe	36
Burundi	8	Western and Central Europe	
Cameroon	46	Albania	0
Cape Verde	63	Bosnia and Herzegovina	100
Chad	3	Bulgaria	100
Comoros	0	Poland	100
Congo	8	Romania	96
Côte d'Ivoire	15	Serbia	100
Democratic Republic of the Congo	3	Slovakia	100
Ethiopia	19	Spain	100
Gabon	47		
Ghana	16		

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/857>.

² Based on data reported by countries in the Global AIDS Response Progress Report, 2013.

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

New HIV infections among children

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	3 500	3 000	4 000	<500	<500	<1 000
Bahamas
Barbados
Cuba
Dominican Republic
Haiti	2 500	2 100	2 900	<500	<500	<1 000
Jamaica
Trinidad and Tobago
East Asia	1 000	<1 000	1 500	1 500	<1 000	3 300
China ¹
Democratic People's Republic of Korea
Japan
Mongolia
Republic of Korea
Eastern Europe and Central Asia	3 700	2 900	4 700	<1 000	<500	1 200
Armenia
Azerbaijan
Belarus
Georgia
Kazakhstan
Kyrgyzstan
Republic of Moldova
Russian Federation
Tajikistan
Ukraine
Uzbekistan
Latin America	7 400	6 000	9 000	2 000	<1 000	4 600
Argentina
Belize

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

New HIV infections among children

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Bolivia (Plurinational State of)
Brazil
Chile
Colombia
Costa Rica
Ecuador
El Salvador
Guatemala
Guyana
Honduras
Mexico
Nicaragua
Panama
Paraguay
Peru
Suriname
Uruguay
Venezuela (Bolivarian Republic of)
Middle East and North Africa	2 600	1 700	4 200	3 000	2 000	4 600
Algeria
Djibouti	<200	<200	<500	<200	<100	<200
Egypt
Iran (Islamic Republic of)
Lebanon
Morocco
Oman
Somalia
Sudan

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

New HIV infections among children

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Tunisia
Yemen
North America	<200	<200	<500	<200	<200	<500
Canada
United States of America
Oceania	<500	<500	< 1 000	<500	<200	<500
Australia
Fiji
New Zealand
Papua New Guinea	<500	<500	<1 000	<500	<200	<500
South and South-East Asia	30 000	26 000	42 000	21 000	16 000	32 000
Afghanistan
Bangladesh
Bhutan
Cambodia
India ¹
Indonesia
Lao People's Democratic Republic
Malaysia
Maldives
Myanmar
Nepal
Pakistan
Philippines
Singapore
Sri Lanka
Thailand
Viet Nam

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

New HIV infections among children

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Sub-Saharan Africa	500 000	460 000	560 000	230 000	200 000	280 000
Angola	3 600	2 600	5 300	5 100	4 000	6 600
Benin	1 500	1 300	1 800	<1 000	<1 000	<1 000
Botswana	3 200	2 900	3 500	<500	<500	<1 000
Burkina Faso	4 600	3 800	5 500	1 300	<1 000	1 800
Burundi	3 600	3 000	4 500	1 300	<1 000	1 800
Cameroon	9 700	8 500	11 000	5 800	4 600	7 100
Cape Verde	...	...	...	...	...	...
Central African Republic	...	...	...	...	...	...
Chad	5 200	4 300	6 200	4 100	3 200	5 500
Comoros	...	...	...	...	...	...
Congo	2 300	2 000	2 600	1 300	1 100	1 500
Côte d'Ivoire	13 000	11 000	15 000	4 700	3 400	6 400
Democratic Republic of the Congo	14 000	12 000	16 000	11 000	9 300	12 000
Equatorial Guinea	...	...	...	...	...	...
Eritrea	<1 000	<500	<1 000	<200	<100	<500
Ethiopia	39 000	33 000	45 000	9 500	7 300	12 000
Gabon	<1 000	<1 000	<1 000	<500	<200	<500
Gambia	...	...	...	...	...	...
Ghana	5 200	4 400	6 200	<1 000	<1 000	1 500
Guinea	...	...	...	...	...	...
Guinea-Bissau	<1 000	<500	<1 000	<1 000	<1 000	1 200
Kenya	40 000	35 000	45 000	13 000	10 000	17 000
Lesotho	6 100	5 500	6 600	3 700	3 100	4 300
Liberia	<1 000	<1 000	<1 000	<500	<200	<500
Madagascar	...	...	...	...	...	...
Malawi	28 000	25 000	31 000	11 000	8 200	14 000
Mali	...	...	...	...	...	...
Mauritania	...	...	...	...	...	...

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

New HIV infections among children

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Mauritius	...	...	...	...	...	...
Mozambique	21 000	19 000	25 000	14 000	11 000	20 000
Namibia	3 100	2 600	3 700	<1 000	<1 000	1 200
Niger	...	...	...	...	...	...
Nigeria	58 000	48 000	70 000	59 000	49 000	70 000
Rwanda	6 400	5 600	7 300	<1 000	<500	1 500
Sao Tome and Principe	...	...	...	...	...	...
Senegal	...	...	...	...	...	...
Sierra Leone	<1 000	<500	<1 000	<500	<500	<1 000
South Africa	75 000	67 000	82 000	21 000	19 000	32 000
South Sudan	...	...	...	...	...	...
Swaziland	3 600	3 200	3 900	1 600	1 300	2 000
Togo	3 000	2 400	3 600	<1 000	<500	1 200
Uganda	25 000	21 000	30 000	15 000	10 000	22 000
United Republic of Tanzania	42 000	37 000	48 000	14 000	8 600	21 000
Zambia	27 000	24 000	30 000	9 400	8 300	11 000
Zimbabwe	37 000	34 000	41 000	9 300	7 000	12 000
Western and Central Europe	...	...	...	<200	<100	<200
Austria	...	...	...	...	...	...
Belgium	...	...	...	...	...	...
Bulgaria	...	...	...	...	...	...
Croatia	...	...	...	...	...	...
Czech Republic	...	...	...	...	...	...
Denmark	...	...	...	...	...	...
Estonia	...	...	...	...	...	...
Finland	...	...	...	...	...	...
France	...	...	...	...	...	...
Germany	...	...	...	...	...	...
Greece	...	...	...	...	...	...

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

New HIV infections among children

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland
GLOBAL	550 000	500 000	620 000	260 000	230 000	320 000

¹ Estimates for China and India are based on 2011 national estimates.

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

Preventing mother-to-child transmission of HIV¹, 2012

	Number of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child transmission ²	Estimated number of pregnant women living with HIV needing antiretrovirals for preventing mother-to-child-transmission			Estimated percentage of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child-transmission		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	6 913	6 700	5 700	7 700	>95	89	>95
Bahamas	87	...	...	...	...	...	...
Barbados	24	...	...	...	...	...	...
Cuba	106	...	...	...	...	...	...
Dominican Republic	1 300	...	...	...	...	...	...
Haiti	4 889	5 000	4 200	5 700	>95	85	>95
Jamaica	295	...	...	...	...	...	...
Trinidad and Tobago	212	...	...	...	...	...	...
East Asia	2 361	9 000	5 900	14 000	26	17	42
China ³	...	...	...	...	...	...	...
Democratic People's Republic of Korea	...	...	...	...	...	...	...
Japan	...	...	...	...	...	...	...
Mongolia	5	...	...	...	...	...	...
Republic of Korea	...	...	...	...	...	...	...
Eastern Europe and Central Asia	19 619	12 000	8 800	17 000	>95	>95	>95
Armenia	13	...	...	...	...	...	...
Azerbaijan	35	...	...	...	...	...	...
Belarus	203	...	...	...	...	...	...
Georgia	24	...	...	...	...	...	...
Kazakhstan	302	...	...	...	...	...	...
Kyrgyzstan	111	...	...	...	...	...	...
Republic of Moldova	141	...	...	...	...	...	...
Russian Federation	...	...	...	...	...	...	...
Tajikistan	62	...	...	...	...	...	...
Ukraine	5 220	...	...	...	...	...	...

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

Preventing mother-to-child transmission of HIV¹, 2012

	Number of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child transmission ²	Estimated number of pregnant women living with HIV needing antiretrovirals for preventing mother-to-child-transmission			Estimated percentage of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child-transmission		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Uzbekistan	508	...	...	...	...	...	...
Latin America	14 810	18 000	13 000	26 000	83	61	>95
Argentina	1 612	...	...	...	...	...	...
Belize	40	...	...	...	...	...	...
Bolivia (Plurinational State of)	163	...	...	...	...	...	...
Brazil	...	...	...	...	...	...	...
Chile	157	...	...	...	...	...	...
Colombia	854	...	...	...	...	...	...
Costa Rica	37	...	...	...	...	...	...
Ecuador	550	...	...	...	...	...	...
El Salvador	166	...	...	...	...	...	...
Guatemala	252	...	...	...	...	...	...
Guyana	152	...	...	...	...	...	...
Honduras	238	...	...	...	...	...	...
Mexico	773	...	...	...	...	...	...
Nicaragua	141	...	...	...	...	...	...
Panama	187	...	...	...	...	...	...
Paraguay	215	...	...	...	...	...	...
Peru	696	...	...	...	...	...	...
Suriname	107	...	...	...	...	...	...
Uruguay	139	...	...	...	...	...	...
Venezuela (Bolivarian Republic of)	690	...	...	...	...	...	...
Middle East and North Africa	710	8 400	5 900	13 000	8	6	13
Algeria	121	...	...	...	...	...	...
Djibouti	63	<500	<500	<500	20	15	26

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

Preventing mother-to-child transmission of HIV¹, 2012

	Number of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child transmission ²	Estimated number of pregnant women living with HIV needing antiretrovirals for preventing mother-to-child-transmission			Estimated percentage of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child-transmission		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Egypt	9	...	...	...	...	...	...
Iran (Islamic Republic of)	115	...	...	...	...	...	...
Lebanon	5	...	...	...	...	...	...
Morocco	195	...	...	...	...	...	...
Oman	22	...	...	...	...	...	...
Somalia	57	...	...	...	...	...	...
Sudan	90	...	...	...	...	...	...
Tunisia	9	...	...	...	...	...	...
Yemen	20	...	...	...	...	...	...
North America	...	6 400	3 600	11 000	>95	55	>95
Canada	...	...	...	...	...	...	...
United States of America	...	...	...	...	...	...	...
Oceania	496	1 000	<1 000	1 300	49	38	63
Australia	...	...	...	...	...	...	...
Fiji	14	...	...	...	...	...	...
New Zealand	...	...	...	...	...	...	...
Papua New Guinea	328	<1 000	<1 000	1 100	39	29	51
South and South-East Asia	11 820	66 000	52 000	92 000	18	14	25
Afghanistan	7	...	...	...	...	...	...
Bangladesh	16	...	...	...	...	...	...
Bhutan	9	...	...	...	...	...	...
Cambodia	1 058	...	...	...	...	...	...
India ³	...	...	...	...	...	...	...
Indonesia	1 048	...	...	...	...	...	...

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

Preventing mother-to-child transmission of HIV¹, 2012

	Number of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child transmission ²	Estimated number of pregnant women living with HIV needing antiretrovirals for preventing mother-to-child-transmission			Estimated percentage of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child-transmission		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Lao People's Democratic Republic	49	...	...	...	...	...	...
Malaysia	342	...	...	...	...	...	...
Maldives	...	...	...	...	...	...	...
Myanmar	2 890	...	...	...	...	...	...
Nepal	110	...	...	...	...	...	...
Pakistan	55	...	...	...	...	...	...
Philippines	19	...	...	...	...	...	...
Singapore	...	...	...	...	...	...	...
Sri Lanka	5	...	...	...	...	...	...
Thailand	4 918	...	...	...	...	...	...
Viet Nam	1 294	...	...	...	...	...	...
Sub-Saharan Africa	861 036	1 400 000	1 200 000	1 500 000	64	58	70
Angola	2 656	15 000	12 000	19 000	17	14	22
Benin	1 349	3 400	2 900	4 000	40	34	47
Botswana	12 207	13 000	11 000	14 000	>95	86	>95
Burkina Faso	3 582	5 400	4 400	6 700	66	53	81
Burundi	2 742	5 100	3 900	6 500	54	41	69
Cameroon	17 362	27 000	23 000	31 000	64	56	73
Cape Verde	244	...	...	...	...	...	...
Central African Republic	...	...	...	...	...	...	...
Chad	1 680	12 000	10 000	16 000	14	11	18
Comoros	3	...	...	...	...	...	...
Congo	579	3 100	2 700	3 500	19	17	22
Côte d'Ivoire	13 294	20 000	16 000	24 000	68	55	84
Democratic Republic of the Congo	4 176	32 000	28 000	37 000	13	11	15

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

Preventing mother-to-child transmission of HIV¹, 2012

	Number of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child transmission ²	Estimated number of pregnant women living with HIV needing antiretrovirals for preventing mother-to-child-transmission			Estimated percentage of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child-transmission		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Equatorial Guinea	340	...	...	...	...	...	...
Eritrea	291	<1 000	<500	<1 000	46	34	69
Ethiopia	15 828	38 000	32 000	46 000	41	35	49
Gabon	1 064	1 500	1 300	1 900	70	57	87
Gambia	1 068	...	...	...	...	...	...
Ghana	8 957	9 500	7 800	11 000	95	77	>95
Guinea	2 755	6 300	5 000	8 000	44	34	55
Guinea-Bissau	738	2 200	1 600	3 100	33	25	46
Kenya	45 397	86 000	76 000	97 000	53	47	60
Lesotho	9 153	16 000	14 000	17 000	58	52	64
Liberia	850	<1 000	<1 000	1 300	87	69	>95
Madagascar	77	...	...	...	...	...	...
Malawi	40 770	68 000	61 000	75 000	60	54	67
Mali	3 339	...	...	...	...	...	...
Mauritania	554	...	...	...	...	...	...
Mauritius	95	...	...	...	...	...	...
Mozambique	80 779	94 000	81 000	110 000	86	74	>95
Namibia	7 619	8 100	6 700	9 700	94	78	>95
Niger	707	...	...	...	...	...	...
Nigeria	33 323	200 000	170 000	230 000	17	15	19
Rwanda	9 057	10 000	9 000	12 000	87	75	>95
Sao Tome and Principe	36	...	...	...	...	...	...
Senegal	1 000	...	...	...	...	...	...
Sierra Leone	3 018	3 200	2 300	4 800	93	67	>95
South Africa	234 952	280 000	260 000	310 000	83	75	90

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

Preventing mother-to-child transmission of HIV¹, 2012

	Number of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child transmission ²	Estimated number of pregnant women living with HIV needing antiretrovirals for preventing mother-to-child-transmission			Estimated percentage of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child-transmission		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
South Sudan	1 002	7 500	4 600	12 000	13	8	21
Swaziland	10 167	12 000	11 000	13 000	83	75	92
Togo	4 411	5 100	4 200	6 300	86	70	>95
Uganda	73 870	100 000	88 000	120 000	72	62	86
United Republic of Tanzania	73 955	97 000	83 000	110 000	77	66	89
Zambia	76 963	79 000	71 000	88 000	>95	87	>95
Zimbabwe	55 849	68 000	60 000	76 000	82	72	91
Western and Central Europe	...	4 800	4 000	5 800	>95	81	>95
Austria	...	...	...	...	...	...	...
Belgium	...	...	...	...	...	...	...
Bulgaria	...	...	...	...	...	...	...
Croatia	...	...	...	...	...	...	...
Czech Republic	...	...	...	...	...	...	...
Denmark	...	...	...	...	...	...	...
Estonia	...	...	...	...	...	...	...
Finland	...	...	...	...	...	...	...
France	...	...	...	...	...	...	...
Germany	...	...	...	...	...	...	...
Greece	...	...	...	...	...	...	...
Hungary	...	...	...	...	...	...	...
Iceland	...	...	...	...	...	...	...
Ireland	...	...	...	...	...	...	...
Israel	...	...	...	...	...	...	...
Italy	...	...	...	...	...	...	...

ELIMINATE HIV INFECTIONS AMONG CHILDREN AND REDUCE MATERNAL DEATHS

Preventing mother-to-child transmission of HIV¹, 2012

	Number of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child transmission ²	Estimated number of pregnant women living with HIV needing antiretrovirals for preventing mother-to-child-transmission			Estimated percentage of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child-transmission		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland
Low- and middle-income countries	928 883	1 500 000	1 300 000	1 600 000	62	57	70

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/856>. Indicator excludes women who received single-dose nevirapine.

² Number of women receiving antiretroviral medicines is based on national Spectrum files. For countries with no national Spectrum file, the values reported in the Global AIDS Response Progress Report are listed.

³ Estimates for China and India are based on 2011 national estimates.

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Twelve-month retention on antiretroviral therapy¹, 2012

	Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy	Total number of adults and children in the cohort or study who were initiated on antiretroviral therapy
Caribbean		
Antigua and Barbuda	92	269
Bahamas	53	93
Barbados	83	119
Cuba	95	1 497
Haiti	75	6 532
Jamaica	74	665
Saint Kitts and Nevis	33	6
Saint Lucia	81	21
Saint Vincent and the Grenadines	75	32
Trinidad and Tobago	92	477
East Asia		
China	86	46 170
Mongolia	88	17
Eastern Europe and Central Asia		
Armenia	84	106
Azerbaijan	70	345
Belarus	79	1 136
Georgia	86	435
Kazakhstan	81	852
Kyrgyzstan	73	229
Republic of Moldova	82	530
Tajikistan	74	395
Ukraine	84	6 555
Uzbekistan	90	1 624
Latin America		
Bolivia (Plurinational State of)	67	264
Brazil	80	41 663
Chile	97	343

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Twelve-month retention on antiretroviral therapy¹, 2012

	Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy	Total number of adults and children in the cohort or study who were initiated on antiretroviral therapy
Colombia	53	22 912
Ecuador	85	10 630
El Salvador	87	1 163
Guatemala	82	1 966
Guyana	81	545
Honduras	89	1 077
Mexico	92	16 971
Nicaragua	74	562
Paraguay	87	721
Suriname	67	277
Uruguay	72	523
Venezuela (Bolivarian Republic of)	94	43 032
Middle East and North Africa		
Algeria	89	706
Bahrain	100	22
Djibouti	93	93
Egypt	93	251
Iran (Islamic Republic Of)	83	1 106
Lebanon	85	89
Morocco	91	575
Oman	78	120
Somalia	74	239
Sudan	64	673
Tunisia	92	47
Yemen	80	94
Oceania		
Fiji	89	18
New Zealand	100	210
Palau	100	3

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Twelve-month retention on antiretroviral therapy¹, 2012

	Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy	Total number of adults and children in the cohort or study who were initiated on antiretroviral therapy
Papua New Guinea	83	1 006
Solomon Islands	100	1
South and South-East Asia		
Afghanistan	100	30
Bangladesh	91	534
Brunei Darussalam	83	6
Cambodia	87	3 677
Indonesia	66	6 085
Lao People's Democratic Republic	86	524
Malaysia	96	3 236
Maldives	86	7
Philippines	87	107
Sri Lanka	76	80
Thailand	82	20 733
Viet Nam	83	7 015
Sub-Saharan Africa		
Botswana	86	14 927
Burundi	91	4 614
Cameroon	61	3 360
Cape Verde	96	904
Chad	68	10 546
Comoros	80	5
Côte d'Ivoire	60	16 077
Democratic Republic of the Congo	79	836
Equatorial Guinea	61	500
Ethiopia	83	6 943
Gambia	86	1 278
Ghana	95	73 339
Guinea	72	1 184

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Twelve-month retention on antiretroviral therapy¹, 2012

	Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy	Total number of adults and children in the cohort or study who were initiated on antiretroviral therapy
Guinea-Bissau	72	1 922
Kenya	92	47 564
Lesotho	72	18 875
Madagascar	73	116
Malawi	79	114 122
Mali	64	14 678
Mauritania	89	208
Mauritius	72	462
Mozambique	74	2 210
Namibia	83	17 485
Niger	75	2 268
Nigeria	78	111 418
Sao Tome and Principe	77	56
Seychelles	81	104
Sierra Leone	70	...
South Sudan	71	...
Swaziland	89	14 496
Togo	82	6 509
Zambia	80	144 854
Zimbabwe	85	8 044
Western and Central Europe		
Bosnia and Herzegovina	100	22
Bulgaria	71	93
Lithuania	95	291
Montenegro	80	5
Romania	91	553
Slovakia	92	153
The former Yugoslav Republic of Macedonia	93	45

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/860>.

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated number of adults receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of adults on ART ³	Estimated number of adults needing antiretroviral therapy based on WHO 2010 guidelines ²			Estimated ART coverage based on WHO 2010 guidelines ²		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	80 190	120 000	110 000	130 000	72	67	78
Bahamas	921	3 700	3 600	3 900	74	72	77
Barbados	1 004	<1 000	<1 000	1 100	>95	>95	>95
Cuba	8 074	3 900	2 900	5 800	>95	>95	>95
Dominican Republic	21 138	27 000	25 000	30 000	78	72	86
Haiti	40 964	65 000	61 000	71 000	63	58	68
Jamaica	10 014	15 000	13 000	17 000	68	60	77
Trinidad and Tobago	5 407	7 500	7 200	7 800	72	69	75
East Asia	151 572	350 000	290 000	440 000	47	39	60
China ⁴	151 519	...	...	...	...	...	...
Democratic People's Republic of Korea	...	...	...	...	...	...	...
Japan	...	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...	...
Republic of Korea	...	...	...	...	...	...	...
Eastern Europe and Central Asia	176 760	510 000	430 000	580 000	35	30	41
Armenia	436	1 300	<1 000	1 800	34	25	48
Azerbaijan	885	3 800	3 000	4 800	24	19	31
Belarus	4 120	9 400	8 700	10 000	44	40	48
Georgia	1 598	2 300	1 900	3 100	71	60	>95
Kazakhstan	2 338	...	...	...	...	...	...
Kyrgyzstan	457	2 200	1 600	3 300	20	14	30
Republic of Moldova	2 012	7 200	6 100	8 700	28	24	34
Russian Federation	...	...	...	...	...	...	...
Tajikistan	895	3 400	2 200	5 500	27	18	44
Ukraine	38 082	100 000	89 000	110 000	39	35	45
Uzbekistan	3 491	11 000	9 200	15 000	31	25	39
Latin America	619 104	790 000	700 000	920 000	75	67	87
Argentina	47 725	59 000	52 000	66 000	81	71	90

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated number of adults receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of adults on ART ³	Estimated number of adults needing antiretroviral therapy based on WHO 2010 guidelines ²			Estimated ART coverage based on WHO 2010 guidelines ²		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Belize	1 166	1 600	1 500	1 700	73	68	77
Bolivia (Plurinational State of)	2 278	6 300	4 300	9 100	36	25	52
Brazil	307 025	...	320 000	370 000	...	81	93
Chile	18 898	22 000	17 000	29 000	86	67	>95
Colombia	33 148	60 000	52 000	82 000	51	41	65
Costa Rica	3 631	5 100	4 800	5 500	76	71	82
Ecuador	9 080	21 000	16 000	32 000	42	32	63
El Salvador	6 308	13 000	10 000	19 000	50	38	72
Guatemala	14 112	27 000	19 000	44 000	53	39	89
Guyana	3 516	3 800	2 400	5 400	93	58	>95
Honduras	8 187	14 000	12 000	16 000	60	53	70
Mexico	82 000	100 000	91 000	110 000	82	74	91
Nicaragua	2 086	2 900	2 100	4 200	72	52	>95
Panama	5 668	9 200	7 500	11 000	76	62	93
Paraguay	3 606	5 000	3 400	7 600	72	49	>95
Peru	27 007	36 000	23 000	74 000	60	39	>95
Suriname	1 288	2 000	1 900	2 100	65	62	70
Uruguay	3 928	6 100	5 000	7 700	64	52	81
Venezuela (Bolivarian Republic of)	42 060	59 000	46 000	79 000	72	56	>95
Middle East and North Africa	19 424	92 000	70 000	130 000	22	17	30
Algeria	3 134	...	...	...	...	...	...
Djibouti	1 442	4 100	3 400	4 800	35	29	42
Egypt	954	2 500	2 300	7 700	38	34	>95
Iran (Islamic Republic of)	3 417	27 000	21 000	36 000	13	10	17
Lebanon	536	...	...	...	...	...	...
Morocco	5 059	10 000	8 400	13 000	48	39	61
Oman	731	...	...	...	...	...	...

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated number of adults receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of adults on ART ³	Estimated number of adults needing antiretroviral therapy based on WHO 2010 guidelines ²			Estimated ART coverage based on WHO 2010 guidelines ²		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Somalia	1 407	9 500	6 800	14 000	15	10	22
Sudan	2 405	...	...	...	...	...	...
Tunisia	443	<1 000	<1 000	1 200	56	37	83
Yemen	703	4 600	2 500	12 000	15	8	42
North America	...	880 000	730 000	1 100 000	91	76	>95
Canada	...	...	...	...	...	...	...
United States of America	...	...	...	...	...	...	...
Oceania	11 169	28 000	24 000	31 000	>95	84	>95
Australia	...	...	...	...	...	...	...
Fiji	127	<500	<500	<500	42	35	52
New Zealand	...	...	...	...	...	...	...
Papua New Guinea	11 042	13 000	11 000	15 000	84	73	>95
South and South-East Asia	1 028 036	1 800 000	1 500 000	2 300 000	52	42	65
Afghanistan	150	1 200	<1 000	3 500	9	4	26
Bangladesh	783	2 900	1 300	17 000	27	12	>95
Bhutan	33	<500	<200	<1 000	11	6	23
Cambodia	44 318	54 000	39 000	95 000	82	60	>95
India ⁴	570 620	1 000 000	880 000	1 100 000	51	44	57
Indonesia	29 960	170 000	120 000	240 000	18	12	25
Lao People's Democratic Republic	2 212	4 100	3 700	4 700	54	48	61
Malaysia	14 594	35 000	28 000	45 000	41	32	52
Maldives	5	<100	<100	<100	27	22	35
Myanmar	49 676	110 000	95 000	120 000	46	41	51
Nepal	7 168	22 000	19 000	27 000	33	28	40
Pakistan	2 996	21 000	13 000	36 000	14	9	25
Philippines	3 459	4 500	3 500	6 400	76	59	>95
Singapore	...	...	...	...	...	...	...
Sri Lanka	363	1 100	<1 000	1 700	35	27	54

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated number of adults receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of adults on ART ³	Estimated number of adults needing antiretroviral therapy based on WHO 2010 guidelines ²			Estimated ART coverage based on WHO 2010 guidelines ²		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Thailand	232 816	280 000	270 000	300 000	76	71	80
Viet Nam	68 883	120 000	40 000	220 000	58	19	>95
Sub-Saharan Africa	6 991 492	10 300 000	9 900 000	10 900 000	68	65	72
Angola	39 704	85 000	72 000	100 000	48	41	57
Benin	23 400	34 000	31 000	36 000	70	65	75
Botswana	201 822	200 000	190 000	210 000	>95	>95	>95
Burkina Faso	39 047	54 000	49 000	59 000	72	66	79
Burundi	27 098	40 000	36 000	46 000	67	60	76
Cameroon	117 791	240 000	230 000	260 000	49	46	52
Cape Verde	798	<1 000	<1 000	<1 000	>95	>95	>95
Central African Republic	...	...	...	...	...	...	...
Chad	35 014	82 000	73 000	98 000	43	38	51
Comoros	...	...	...	...	...	...	...
Congo	16 086	36 000	34 000	39 000	44	41	48
Côte d'Ivoire	104 750	190 000	180 000	210 000	55	50	61
Democratic Republic of the Congo	59 468	170 000	160 000	180 000	38	36	41
Equatorial Guinea	6 512	11 000	7 000	17 000	58	37	86
Eritrea	7 608	9 400	8 000	12 000	81	68	>95
Ethiopia	270 460	400 000	370 000	430 000	68	63	72
Gabon	14 152	22 000	20 000	24 000	67	62	73
Gambia	3 300	5 600	4 500	6 900	64	51	79
Ghana	66 366	110 000	96 000	120 000	62	56	69
Guinea	25 552	45 000	39 000	52 000	57	50	65
Guinea-Bissau	5 766	14 000	12 000	18 000	43	35	54
Kenya	548 588	680 000	630 000	680 000	81	75	80
Lesotho	87 352	150 000	140 000	160 000	59	56	61
Liberia	5 048	11 000	9 700	12 000	47	42	52
Madagascar	357	25 000	21 000	28 000	1	1	2

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated number of adults receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of adults on ART ³	Estimated number of adults needing antiretroviral therapy based on WHO 2010 guidelines ²			Estimated ART coverage based on WHO 2010 guidelines ²		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Malawi	368 690	480 000	470 000	500 000	76	73	79
Mali	26 839	46 000	40 000	52 000	58	51	66
Mauritania	1 830	4 500	3 600	5 700	41	33	52
Mauritius	1 517	4 200	3 900	4 800	36	33	40
Mozambique	282 687	590 000	540 000	650 000	48	44	53
Namibia	105 347	120 000	110 000	130 000	91	83	>95
Niger	11 137	20 000	18 000	24 000	55	47	64
Nigeria	459 465	1 300 000	1 200 000	1 400 000	36	33	39
Rwanda	107 021	110 000	110 000	120 000	94	89	>95
Sao Tome and Principe	285	<1 000	<500	<1 000	51	40	66
Senegal	13 485	20 000	18 000	23 000	67	59	75
Sierra Leone	7 802	22 000	18 000	30 000	35	28	47
South Africa	2 010 340	2 500 000	2 400 000	2 600 000	81	79	86
South Sudan	4 376	49 000	34 000	73 000	9	6	13
Swaziland	80 103	93 000	89 000	96 000	87	83	90
Togo	28 213	57 000	51 000	65 000	50	45	57
Uganda	403 089	580 000	530 000	640 000	70	64	78
United Republic of Tanzania	399 886	580 000	540 000	630 000	68	64	74
Zambia	446 841	520 000	500 000	540 000	86	83	91
Zimbabwe	518 801	610 000	590 000	640 000	85	81	88
Western and Central Europe	...	560 000	520 000	590 000	>95	94	>95
Austria	...	...	...	...	...	...	...
Belgium	...	...	...	...	...	...	...
Bulgaria	...	...	...	...	...	...	...
Croatia	...	...	...	...	...	...	...
Czech Republic	...	...	...	...	...	...	...
Denmark	...	...	...	...	...	...	...
Estonia	...	...	...	...	...	...	...

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated number of adults receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of adults on ART ³	Estimated number of adults needing antiretroviral therapy based on WHO 2010 guidelines ²			Estimated ART coverage based on WHO 2010 guidelines ²		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland
Low- and middle-income countries	9 090 394	14 000 000	13 100 000	15 200 000	64	60	69

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/859>.

² Based on national Spectrum files.

³ Based on Global AIDS Response Progress Reporting (GARPR) data.

⁴ Estimates for China and India are based on 2011 national estimates.

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated children receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of children 0-14 years receiving ART ²	Estimated number of children needing antiretroviral therapy ³			Estimated antiretroviral therapy coverage among children ³		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	3 826	9 200	8 000	11 000	44	38	50
Bahamas	...	...	...	...	...	...	...
Barbados	...	...	...	...	...	...	...
Cuba	24	...	...	...	...	...	...
Dominican Republic	1 083	...	...	...	...	...	...
Haiti	2 265	6 700	5 700	7 800	34	29	40
Jamaica	454	...	...	...	...	...	...
Trinidad and Tobago	...	...	...	...	...	...	...
East Asia	2 085	6 400	4 700	8 800	33	24	46
China ⁴	...	...	...	...	...	...	...
Democratic People's Republic of Korea	...	...	...	...	...	...	...
Japan	...	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...	...
Republic of Korea	...	...	...	...	...	...	...
Eastern Europe and Central Asia	8 784	12 000	12 000	12 000	75	73	78
Armenia	13	...	...	...	...	...	...
Azerbaijan	22	...	...	...	...	...	...
Belarus	154	...	...	...	...	...	...
Georgia	42	...	...	...	...	...	...
Kazakhstan	296	...	...	...	...	...	...
Kyrgyzstan	...	...	...	...	...	...	...
Republic of Moldova	63	...	...	...	...	...	...
Russian Federation	...	...	...	...	...	...	...
Tajikistan	149	...	...	...	...	...	...
Ukraine	2 268	...	...	...	...	...	...
Uzbekistan	2 530	...	...	...	...	...	...

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated children receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of children 0-14 years receiving ART ²	Estimated number of children needing antiretroviral therapy ³			Estimated antiretroviral therapy coverage among children ³		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Latin America	22 661	30 000	25 000	39 000	75	62	>95
Argentina	3 000	...	...	...	...	...	...
Belize	95	...	...	...	...	...	...
Bolivia (Plurinational State of)	86	...	...	...	...	...	...
Brazil	6 150	...	...	...	...	...	...
Chile	173	...	...	...	...	...	...
Colombia	6 249	...	...	...	...	...	...
Costa Rica	61	...	...	...	...	...	...
Ecuador	550	...	...	...	...	...	...
El Salvador	335	...	...	...	...	...	...
Guatemala	1 024	...	...	...	...	...	...
Guyana	201	...	...	...	...	...	...
Honduras	783	...	...	...	...	...	...
Mexico	1 800	...	...	...	...	...	...
Nicaragua	104	...	...	...	...	...	...
Panama	256	...	...	...	...	...	...
Paraguay	181	...	...	...	...	...	...
Peru	495	...	...	...	...	...	...
Suriname	84	...	...	...	...	...	...
Uruguay	118	...	...	...	...	...	...
Venezuela (Bolivarian Republic of)	972	...	...	...	...	...	...
Middle East and North Africa	1 011	13 000	8 600	21 000	8	6	13
Algeria	262	...	...	...	...	...	...
Djibouti	40	<1 000	<1 000	<1 000	6	5	8
Egypt	42	...	...	...	...	...	...
Iran (Islamic Republic of)	141	...	...	...	...	...	...

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated children receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of children 0-14 years receiving ART ²	Estimated number of children needing antiretroviral therapy ³			Estimated antiretroviral therapy coverage among children ³		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Lebanon	4	...	...	...	...	...	...
Morocco	244	...	...	...	...	...	...
Oman	...	...	...	...	...	...	...
Somalia	43	...	...	...	...	...	...
Sudan	170	...	...	...	...	...	...
Tunisia	12	...	...	...	...	...	...
Yemen	53	...	...	...	...	...	...
North America	...	1 900	1 300	2 700	92	65	>95
Canada	...	...	...	...	...	...	...
United States of America	...	...	...	...	...	...	...
Oceania	729	1 800	1 400	2 400	40	31	51
Australia	...	...	...	...	...	...	...
Fiji	7	...	...	...	...	...	...
New Zealand	...	...	...	...	...	...	...
Papua New Guinea	722	1 800	1 400	2 300	39	30	51
South and South-East Asia	56 401	130 000	110 000	170 000	43	37	56
Afghanistan	8	...	...	...	...	...	...
Bangladesh	48	...	...	...	...	...	...
Bhutan	5	...	...	...	...	...	...
Cambodia	4 595	...	...	...	...	...	...
India ⁴	34 367	...	...	...	...	...	...
Indonesia	1 695	...	...	...	...	...	...
Lao People's Democratic Republic	163	...	...	...	...	...	...
Malaysia	490	...	...	...	...	...	...
Maldives	0	...	...	...	...	...	...
Myanmar	4 033	...	...	...	...	...	...

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated children receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of children 0-14 years receiving ART ²	Estimated number of children needing antiretroviral therapy ³			Estimated antiretroviral therapy coverage among children ³		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Nepal	551	...	...	...	...	...	...
Pakistan	139	...	...	...	...	...	...
Philippines	33	...	...	...	...	...	...
Singapore	...	...	...	...	...	...	...
Sri Lanka	24	...	...	...	...	...	...
Thailand	6 274	...	...	...	...	...	...
Viet Nam	3 828	...	...	...	...	...	...
Sub-Saharan Africa	551 065	1 700 000	1 600 000	1 900 000	32	30	36
Angola	2 903	19 000	15 000	24 000	15	12	19
Benin	2 635	5 300	4 500	6 200	49	42	58
Botswana	10 261	10 000	9 900	10 000	>95	>95	>95
Burkina Faso	1 878	12 000	9 700	14 000	59	49	72
Burundi	2 023	9 700	7 800	12 000	21	17	26
Cameroon	4 992	33 000	29 000	38 000	15	13	17
Cape Verde	66	...	...	...	...	...	...
Central African Republic	...	...	...	...	...	...	...
Chad	5 842	20 000	17 000	25 000	29	24	37
Comoros	1	...	...	...	...	...	...
Congo	1 148	7 500	6 600	8 500	15	14	17
Côte d'Ivoire	5 620	35 000	29 000	41 000	16	14	19
Democratic Republic of the Congo	4 751	53 000	47 000	61 000	9	8	10
Equatorial Guinea	...	2 100	<1 000	3 600	8	4	14
Eritrea	632	1 900	1 400	2 600	34	26	46
Ethiopia	17 677	78 000	71 000	96 000	23	20	28
Gabon	494	2 000	1 700	2 400	24	20	29
Gambia	271	...	...	...	...	...	...

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated children receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of children 0-14 years receiving ART ²	Estimated number of children needing antiretroviral therapy ³			Estimated antiretroviral therapy coverage among children ³		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Ghana	3 504	14 000	12 000	17 000	25	20	30
Guinea	1 114	8 300	6 800	10 000	13	11	17
Guinea-Bissau	335	3 300	2 500	4 400	11	8	14
Kenya	55 439	150 000	130 000	180 000	38	34	45
Lesotho	5 395	22 000	19 000	24 000	25	22	27
Liberia	430	2 100	1 800	2 500	20	17	24
Madagascar	14	...	...	...	...	...	...
Malawi	36 441	100 000	90 000	110 000	36	33	41
Mali	1 912	...	...	...	...	...	...
Mauritania	51	...	...	...	...	...	...
Mauritius	10	...	...	...	...	...	...
Mozambique	27 164	100 000	88 000	120 000	27	23	32
Namibia	11 340	13 000	12 000	15 000	88	79	>95
Niger	673	...	...	...	...	...	...
Nigeria	31 556	260 000	220 000	290 000	12	11	14
Rwanda	7 597	18 000	15 000	21 000	43	36	52
Sao Tome and Principe	11	...	...	...	...	...	...
Senegal	1 207	...	...	...	...	...	...
Sierra Leone	457	3 000	2 200	4 700	15	11	24
South Africa	140 541	220 000	210 000	250 000	63	57	69
South Sudan	553	11 000	7 200	17 000	5	3	8
Swaziland	7 431	14 000	12 000	15 000	54	49	59
Togo	2 098	8 800	7 200	11 000	24	19	30
Uganda	35 453	110 000	88 000	130 000	33	28	41
United Republic of Tanzania	32 407	130 000	110 000	150 000	26	22	30
Zambia	34 084	89 000	80 000	99 000	38	35	43
Zimbabwe	46 874	100 000	94 000	120 000	45	40	50

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated children receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of children 0-14 years receiving ART ²	Estimated number of children needing antiretroviral therapy ³			Estimated antiretroviral therapy coverage among children ³		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Western and Central Europe	...	<1 000	<1 000	<1 000	68	62	76
Austria
Belgium
Bulgaria
Croatia
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Serbia

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Estimated children receiving and needing antiretroviral therapy, and coverage¹, 2012

	Reported number of children 0-14 years receiving ART ²	Estimated number of children needing antiretroviral therapy ³			Estimated antiretroviral therapy coverage among children ³		
		estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland
Low- and middle-income countries	646 812	1 900 000	1 700 000	2 200 000	34	31	39

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/859>.

² Based on Global AIDS Response Progress Reporting (GARPR) data.

³ Based on national Spectrum files.

⁴ Estimates for China and India are based on 2011 national estimates.

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Projected number of people eligible for antiretroviral therapy according to 2013 antiretroviral guidelines, low- and middle-income countries¹

	2013		
	estimate	lower estimate	upper estimate
Caribbean			
Cuba			
Dominican Republic	41 000	37 000	45 000
Haiti	130 000	120 000	140 000
Jamaica	25 000	22 000	29 000
East Asia			
China			
Democratic People's Republic of Korea			
Mongolia	900	900	1 000
Eastern Europe and Central Asia			
China			
Democratic People Republic of Korea			
Mongolia	900	900	1.000
Caribbean			
Armenia	3 000	2 000	4 000
Azerbaijan	9 000	7 000	11 000
Belarus	16 000	15 000	18 000
Georgia	6 000	5 000	8 000
Kazakhstan			
Kyrgyzstan	8 000	6 000	11 000
Republic of Moldova	16 000	13 000	19 000
Russian Federation	820 000	650 000	1 000 000
Tajikistan	11 000	7 000	19 000
Ukraine	220 000	190 000	240 000
Uzbekistan	26 000	22 000	33 000
Latin America			
Argentina	91 000	81 000	100 000
Belize	3 000	3 000	3 000

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Projected number of people eligible for antiretroviral therapy according to 2013 antiretroviral guidelines, low- and middle-income countries¹

	2013		
	estimate	lower estimate	upper estimate
Bolivia (Plurinational State of)	13 000	9 000	19 000
Brazil			
Chile	36 000	27 000	47 000
Colombia	130 000	100 000	160 000
Costa Rica	9 000	8 000	9 000
Ecuador	47 000	36 000	74 000
El Salvador	23 000	17 000	35 000
Guatemala	49 000	36 000	89 000
Guyana	7 000	4 000	10 000
Honduras	22 000	19 000	26 000
Mexico	160 000	140 000	180 000
Nicaragua	9 000	7 000	13 000
Panama	15 000	12 000	19 000
Paraguay	13 000	8 000	20 000
Peru	64 000	40 000	150 000
Suriname	3 000	3 000	4 000
Uruguay	11 000	9 000	14 000
Venezuela (Bolivarian Republic of)	97 000	77 000	130 000
Middle East and North Africa			
Algeria			
Djibouti	6 000	5 000	7 000
Egypt	6 000	4 000	12 000
Iran (Islamic Republic of)	63 000	48 000	86 000
Lebanon			
Morocco	26 000	21 000	33 000
Somalia	27 000	19 000	40 000
Sudan	55 000	45 000	69 000
Tunisia	2 000	1 000	3 000
Yemen	18 000	9 000	45 000

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Projected number of people eligible for antiretroviral therapy according to 2013 antiretroviral guidelines, low- and middle-income countries¹

	2013		
	estimate	lower estimate	upper estimate
Oceania			
Fiji	700	600	900
Papua New Guinea	22 000	19 000	26 000
South and South-East Asia			
Afghanistan	4 000	2 000	11 000
Bangladesh	7 000	3 000	53 000
Bhutan	900	500	2 000
Cambodia	70 000	52 000	120 000
India	1 700 000	1 500 000	2 000 000
Indonesia	510 000	350 000	730 000
Lao People's Democratic Republic	8 000	7 000	9 000
Malaysia	69 000	54 000	87 000
Maldives	<100	<100	<100
Myanmar			
Nepal	41 000	34 000	51 000
Pakistan	83 000	52 000	150 000
Philippines	14 000	11 000	21 000
Sub-Saharan Africa			
Angola	230 000	190 000	270 000
Benin	65 000	60 000	71 000
Botswana	300 000	290 000	310 000
Burkina Faso	100 000	89 000	110 000
Burundi	77 000	68 000	88 000
Cameroon	520 000	480 000	560 000
Cape Verde			
Central African Republic	110 000	96 000	120 000
Chad	180 000	160 000	210 000
Comoros			
Congo	62 000	58 000	67 000

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Projected number of people eligible for antiretroviral therapy according to 2013 antiretroviral guidelines, low- and middle-income countries¹

	2013		
	estimate	lower estimate	upper estimate
Côte d'Ivoire	380 000	350 000	430 000
Democratic Republic of the Congo	420 000	390 000	450 000
Eritrea	16 000	13 000	20 000
Ethiopia	640 000	590 000	690 000
Gabon	35 000	32 000	39 000
Gambia	12 000	10 000	15 000
Ghana	200 000	180 000	220 000
Guinea	110 000	94 000	130 000
Guinea-Bissau	41 000	32 000	52 000
Kenya	1 300 000	1 300 000	1 400 000
Lesotho	280 000	270 000	290 000
Liberia	17 000	16 000	20 000
Madagascar	47 000	39 000	55 000
Malawi	950 000	910 000	1 000 000
Mali	88 000	74 000	100 000
Mauritania	8 000	7 000	11 000
Mauritius	9 000	8 000	10 000
Mozambique	1 300 000	1 200 000	1 500 000
Namibia	200 000	180 000	220 000
Niger	39 000	33 000	46 000
Nigeria	3 000 000	2 700 000	3 300 000
Rwanda	190 000	180 000	210 000
Sao Tome and Principe	1 000	900	2 000
Senegal	33 000	29 000	38 000
Sierra Leone	49 000	38 000	65 000
South Africa	5 100 000	4 900 000	5 400 000
South Sudan	140 000	93 000	210 000
Swaziland	170 000	170 000	180 000
Togo	100 000	93 000	120 000

REACH 15 MILLION PEOPLE LIVING WITH HIV WITH LIFESAVING ANTIRETROVIRAL TREATMENT BY 2015

Projected number of people eligible for antiretroviral therapy according to 2013 antiretroviral guidelines, low- and middle-income countries¹

	2013		
	estimate	lower estimate	upper estimate
Uganda	1 400 000	1 300 000	1 600 000
United Republic of Tanzania	1 200 000	1 100 000	1 300 000
Zambia	970 000	930 000	1 000 000
Zimbabwe	1 100 000	1 100 000	1 200 000
Western Europe and Central Europe			
Bulgaria	3 000	2 000	4 000
Latvia	5 000	4 000	7 000
Lithuania	900	700	1 000
Romania	14 000	13 000	16 000
Serbia			
Turkey	4 000	3 000	6 000
Low-and middle-income countries			
	28 600 000	26 500 000	30 900 000

Source: UNAIDS 2012 Estimates.

¹ The calculations assume the following individuals are eligible for antiretroviral therapy: all adults 15+ years with CD4 < 500/ml, all pregnant women living with HIV, all adults co-infected with HIV and tuberculosis, all HIV discordant couples, and all children living with HIV under five years.

HALVE TUBERCULOSIS DEATHS AMONG PEOPLE LIVING WITH HIV BY 2015

Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV²

	2012		2012
Caribbean		Costa Rica ¹	38
Antigua and Barbuda	100	Ecuador ¹	69
Bahamas	59	El Salvador	89
Barbados	67	Guatemala ¹	16
Cuba	94	Guyana	84
Dominican Republic	50	Honduras	51
Grenada ¹	0	Mexico	19
Haiti	29	Nicaragua ¹	58
Jamaica ¹	35	Panama ¹	97
Saint Lucia	100	Paraguay	50
Saint Vincent and the Grenadines	63	Suriname	53
Trinidad and Tobago	29	Uruguay	23
East Asia		Venezuela (Bolivarian Republic of)	43
China	47	Middle East and North Africa	
Mongolia	27	Algeria ¹	31
Eastern Europe and Central Asia		Bahrain	8
Armenia	100	Djibouti	15
Azerbaijan	45	Iran (Islamic Republic Of)	40
Belarus	55	Lebanon	7
Georgia	52	Morocco	61
Kazakhstan	20	Oman	100
Kyrgyzstan ¹	41	Qatar	100
Republic of Moldova	30	Somalia	6
Tajikistan	22	Sudan	1
Ukraine	92	Tunisia	8
Uzbekistan	23	Yemen ¹	10
Latin America		Oceania	
Belize	73	Fiji	100
Bolivia (Plurinational State of)	38	New Zealand ¹	100
Brazil	57	Papua New Guinea	30
Chile ¹	2	South and South-East Asia	
Colombia	30	Afghanistan	2

HALVE TUBERCULOSIS DEATHS AMONG PEOPLE LIVING WITH HIV BY 2015

Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV²

	2012		2012
Bangladesh	26	Ghana	37
Brunei Darussalam	100	Guinea	24
Cambodia	47	Kenya	59
India	20	Lesotho	42
Indonesia ¹	56	Liberia	15
Lao People's Democratic Republic ¹	56	Madagascar	3
Malaysia	19	Malawi	57
Maldives	0	Mali	35
Myanmar	22	Mauritania ¹	2
Nepal	20	Mauritius	64
Pakistan	1	Mozambique	19
Sri Lanka	65	Namibia	46
Thailand	30	Niger ¹	27
Viet Nam	24	Nigeria	24
Sub-Saharan Africa		Rwanda ¹	48
Angola	21	Sao Tome and Principe	100
Benin ¹	11	Senegal	33
Botswana	49	Seychelles	100
Burkina Faso	31	Sierra Leone	24
Burundi	24	South Africa	31
Cameroon	22	South Sudan	28
Cape Verde	62	Swaziland	29
Central African Republic	5	Togo	40
Chad	15	Uganda	28
Comoros	40	United Republic of Tanzania	34
Congo	4	Zambia	41
Côte d'Ivoire	30	Western and Central Europe	
Democratic Republic of the Congo	14	Romania	35
Equatorial Guinea ¹	62	Serbia	90
Ethiopia	35	Slovakia	0
Gabon	29	Turkey	106

Source: WHO Global TB database as of 23 July 2013, unless otherwise specified.

¹ Based on figures reported by countries through Global AIDS Response Progress Reporting (GARPR) 2013.

² For the indicator definition, go to <http://www.indicatorregistry.org/node/651>.

HALVE TUBERCULOSIS DEATHS AMONG PEOPLE LIVING WITH HIV BY 2015
HIV-positive tuberculosis patients on antiretroviral therapy

	2012
Caribbean	
Antigua and Barbuda	2
Bahamas	5
Barbados	1
Cuba	51
Dominica	0
Dominican Republic	268
Grenada ¹	0
Haiti	1 252
Jamaica ¹	14
Saint Kitts and Nevis	0
Saint Lucia	1
Saint Vincent and the Grenadines	6
Trinidad and Tobago	24
East Asia	
China	3 454
Mongolia	3
Eastern Europe and Central Asia	
Armenia	55
Azerbaijan	63
Belarus	153
Georgia	26
Kazakhstan	51
Kyrgyzstan ¹	118
Republic of Moldova	103
Tajikistan	78
Ukraine	4 433
Uzbekistan	103
Latin America	
Belize	19

	2012
Bolivia (Plurinational State of)	164
Brazil	9 049
Chile ¹	2
Colombia	474
Costa Rica ¹	24
Ecuador ¹	583
El Salvador	178
Guatemala ¹	243
Guyana	168
Honduras	192
Mexico	298
Nicaragua ¹	58
Panama ¹	224
Paraguay	121
Peru	847
Suriname	25
Uruguay	32
Venezuela (Bolivarian Republic of)	517
Middle East and North Africa	
Algeria ¹	110
Bahrain	1
Djibouti	83
Egypt	17
Iran (Islamic Republic of)	117
Iraq	1
Jordan	0
Kuwait	3
Lebanon	3
Morocco	357
Oman	14
Qatar	1

HALVE TUBERCULOSIS DEATHS AMONG PEOPLE LIVING WITH HIV BY 2015
HIV-positive tuberculosis patients on antiretroviral therapy

	2012
Somalia	51
Sudan	40
Syrian Arab Republic	5
Tunisia	14
United Arab Emirates ¹	12
Yemen ¹	16
Oceania	
Fiji	3
Kiribati	0
Marshall Islands	0
Micronesia (Federated States of)	0
New Zealand ¹	3
Palau	0
Papua New Guinea	325
Samoa	0
Solomon Islands	0
Tonga	0
Tuvalu	0
Vanuatu	0
South and South-East Asia	
Afghanistan	5
Bangladesh	63
Brunei Darussalam	2
Cambodia	1 268
India	25 790
Indonesia ²	4 209
Lao People's Democratic Republic ¹	263
Malaysia	434
Maldives	0
Myanmar	4 270
Nepal	217

	2012
Pakistan	22
Sri Lanka	11
Thailand	3 591
Timor-Leste	4
Viet Nam	2 232
Sub-Saharan Africa	
Angola	1 149
Benin ¹	113
Botswana	2 475
Burkina Faso	503
Burundi	588
Cameroon	4 261
Cape Verde	44
Central African Republic	290
Chad	626
Comoros	4
Congo	152
Côte d'Ivoire	2 396
Democratic Republic of the Congo	2 296
Equatorial Guinea ¹	123
Ethiopia	8 022
Gabon	559
Gambia	146
Ghana	1 033
Guinea	903
Guinea-Bissau	0
Kenya	26 487
Lesotho	4 171
Liberia	115
Madagascar	18
Malawi	9 144

HALVE TUBERCULOSIS DEATHS AMONG PEOPLE LIVING WITH HIV BY 2015

HIV-positive tuberculosis patients on antiretroviral therapy

	2012		2012
Mali	425	United Republic of Tanzania	10 993
Mauritania ¹	14	Zambia	14 471
Mauritius	9	Western and Central Europe	
Mozambique	15 391	Albania	7
Namibia	3 362	Andorra	0
Niger ²	516	Bulgaria	3
Nigeria	10 866	Estonia	28
Rwanda ¹	1 395	Greece ¹	28
Sao Tome and Principe	18	Iceland	0
Senegal	561	Latvia	65
Seychelles	3	Montenegro	0
Sierra Leone	931	Romania	205
South Africa	101 937	Serbia	6
South Sudan	147	Slovakia	0
Swaziland	3 762	Slovenia	0
Togo	476	The former Yugoslav Republic of Macedonia	0
Uganda	9 962	Turkey	35

Source: WHO Global TB database as of 23 July 2013, unless otherwise specified.

¹ Reported by countries through Global AIDS Response Progress Reporting (GARPR) 2013.

² TB and AIDS programme numbers had discrepancies. TB programme data was partial, hence, AIDS programme data was used.

HALVE TUBERCULOSIS DEATHS AMONG PEOPLE LIVING WITH HIV BY 2015

Estimated number of TB-related deaths among people living with HIV in Africa, in TB/HIV high burden countries, 2004 and 2012

	2004			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Angola	780	660	900	1 300	1 100	1 400
Botswana	3 000	2 600	3 700	930	740	1 100
Burkina Faso	1 300	1 100	1 500	470	400	540
Burundi	2 600	2 200	3 000	850	700	1 000
Cambodia	3 100	2 700	3 500	560	410	700
Cameroon	12 000	11 000	14 000	7 700	6 500	9 300
Central African Republic	8 700	7 600	10 000	2 400	2 000	2 900
Chad	1 900	1 700	2 300	1 400	1 200	1 700
Congo	1 300	1 000	1 500	1 000	820	1 200
Côte d'Ivoire	9 800	8 400	11 600	2 500	2 200	3 100
Democratic Republic of the Congo	6 700	5 600	8 500	6 300	5 500	8 100
Djibouti	230	190	260	150	120	170
Ethiopia	27 000	21 000	35 000	5 600	4 600	7 300
Ghana	2 600	2 400	3 200	540	490	630
Kenya	15 000	12 000	18 000	7 700	6 600	8 900
Lesotho	1 400	910	1 900	1 500	1 300	1 900
Malawi	14 000	12 000	16 000	3 500	3 100	4 300
Mali	610	520	730	360	310	420
Mozambique	34 000	28 000	41 000	45 000	35 000	53 000
Namibia	9 800	8 600	12 000	1 600	1 300	2 000
Nigeria	39 000	22 000	65 000	19 000	11 000	25 000
Rwanda	4 100	3 600	4 900	740	600	920
Sierra Leone	1 000	880	1 200	2 000	1 600	2 200
South Africa	99 000	88 000	120 000	88 000	75 000	100 000
Sudan	2 100	1 900	2 500	2 100	1 900	2 500
Swaziland	3 100	2 500	3 700	4 300	4 000	5 100
Togo	490	410	570	380	310	440
Uganda	25 000	21 000	29 000	9 200	8 000	12 000
United Republic of Tanzania	11 000	9 200	13 000	7 000	5 800	8 000
Zambia	11 000	9 700	13 000	7 600	6 200	8 900
Zimbabwe	36 000	30 000	40 000	18 000	15 000	20 000

Source: UNAIDS/WHO estimates 2013.

CLOSE THE GLOBAL AIDS RESOURCE GAP

Domestic HIV spending from domestic public sources (US\$)

	2010	2011	2012
Caribbean			
Antigua and Barbuda	300 777	326 796	297 612
Cuba	58 593 535	60 633 504	...
Dominica	223 664	223 664	...
Grenada	5 521	182 713	...
Haiti	1 608 233	1 608 233	...
Jamaica	3 848 958	...	...
Saint Vincent and the Grenadines	2 508 745	1 267 636	615 427
East Asia			
China	497 309 403	529 376 000	554 007 385
Democratic People's Republic of Korea	1 009 600	1 070 420	...
Mongolia	950 996	1 169 128	...
Eastern Europe and Central Asia			
Armenia	1 961 038	2 079 270	1 090 732
Azerbaijan	6 857 540	8 563 409	...
Belarus	13 246 041	9 668 805	...
Georgia	4 362 929	4 562 010	4 545 234
Kazakhstan	...	30 346 857	30 352 251
Kyrgyzstan	1 407 901	1 441 565	3 886 526
Republic of Moldova	4 617 721	5 125 529	2 381 845
Tajikistan	1 718 968	2 269 834	...
Ukraine	38 054 198	...	...
Uzbekistan	16 985 205	12 636 531	13 334 449
Latin America			
Belize	1 134 649	...	...
Bolivia (Plurinational State of)	...	2 276 663	...
Brazil	745 830 717	...	...
Chile	119 224 642	123 044 300	132 689 469
Colombia	86 962 224	102 516 422	...

CLOSE THE GLOBAL AIDS RESOURCE GAP

Domestic HIV spending from domestic public sources (US\$)

	2010	2011	2012
Costa Rica	24 765 744	...	...
Ecuador	24 270 868	...	...
El Salvador	37 297 450	...	41 243 741
Guatemala	28 765 245	...	25 324 612
Honduras	16 025 455	...	...
Nicaragua	9 682 304	...	...
Panama	15 702 066	...	...
Paraguay	2 677 348	2 507 935	...
Peru	15 445 506	...	...
Suriname	1 939 620	2 249 605	...
Venezuela (Bolivarian Republic of)	109 037 329	80 352 294	...
Middle East and North Africa			
Algeria	5 345 581	8 258 614	9 187 280
Djibouti	627 309	596 705	867 075
Jordan	1 000 000	1 000 000	...
Lebanon	1 570 000	1 570 000	...
Morocco	6 357 832	6 728 697	7 493 931
Syrian Arab Republic	...	620 000	...
Tunisia	110 040	117 400	...
Yemen	442 233	467 395	...
Oceania			
Fiji	419 594	467 602	...
Marshall Islands	200 027	120 246	235 704
Palau	394 323	394 323	...
Papua New Guinea	12 077 392	...	...
Samoa	161 694	172 845	...
Solomon Islands	150 032	151 749	...
Tuvalu	12 000	20 180	...
Vanuatu	36 510	36 482	...

CLOSE THE GLOBAL AIDS RESOURCE GAP

Domestic HIV spending from domestic public sources (US\$)

	2010	2011	2012
South and South-East Asia			
Afghanistan	200 000	...	24 250
Bangladesh	1 202 508	746 225	977 247
Cambodia	...	5 644 947	5 671 862
Indonesia	27 577 082	...	...
Lao People's Democratic Republic	827 689	827 689	...
Malaysia	31 383 249	36 668 151	54 416 987
Myanmar	2 596 875	3 944 294	...
Pakistan	4 768 321	...	...
Philippines	3 372 467	4 126 663	...
Sri Lanka	2 277 815	...	...
Thailand	200 251 009	267 932 277	...
Viet Nam	21 431 087	...	...
Sub-Saharan Africa			
Angola	15 877 187	21 462 786	...
Benin	6 937 649	7 796 210	11 467 748
Botswana	262 400 227	299 022 611	...
Burkina Faso	11 118 571	...	...
Burundi	1 774 303	2 034 615	1 358 187
Cameroon	14 395 254	...	...
Cape Verde	499 368	522 275	17 194
Central African Republic	1 873 217	1 887 321	...
Chad	3 862 235	2 766 010	6 212 969
Comoros	169 643	936 323	174 303
Congo	8 104 228	...	...
Democratic Republic of the Congo	2 759 539	...	...
Gabon	6 166 691	6 423 890	12 297 465
Ghana	8 087 144	14 854 634	...
Guinea	317 576	638 185	2 302 175

CLOSE THE GLOBAL AIDS RESOURCE GAP

Domestic HIV spending from domestic public sources (US\$)

	2010	2011	2012
Guinea-Bissau	611 774	...	...
Kenya	134 682 271	162 569 668	...
Liberia	83 100	190 000	...
Madagascar	4 473 518	6 479 528	4 144 594
Mali	6 502 189	...	...
Mauritania	698 854	3 720 945	616 666
Mauritius	4 894 627	...	...
Namibia	168 791 097	...	...
Niger	69 420	82 936	3 894 068
Nigeria	125 139 587	...	...
Sao Tome and Principe	7 803	112 650	...
Senegal	...	2 709 561	...
Seychelles	2 297 113	2 003 196	4 278 262
Togo	8 878 290	4 074 688	5 614 798
Zimbabwe	20 833 554	28 061 185	37 084 924
Western and Central Europe			
Bulgaria	4 252 150	6 668 195	...
Latvia	5 996 109	7 192 416	...
Lithuania	...	3 601 011	2 496 551
Romania	91 512 275	102 458 472	88 082 973
Serbia	...	...	9 071 059
The former Yugoslav Republic of Macedonia	2 366 290	...	...
Turkey	...	...	12 291 905

CLOSE THE GLOBAL AIDS RESOURCE GAP

Domestic HIV spending from international sources (US\$)

	Multilaterals								
	Bilaterals			UN Agencies			Global Fund		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Caribbean									
Antigua and Barbuda	820 914	246 310	...	6 866	6 866	3 509	233 300	37 290	21 542
Cuba	...	...	...	...	...	...	8 261 407	9 321 423	...
Grenada	49 936	6 361	...	1 178	34 666	...	14 839	11 355	...
Haiti	129 685 595	148 224 334	...	13 250 596	50 569 566	...	21 587 726	8 607 148	...
Jamaica	360 894	...	...	258 577	...	...	9 680 362	...	...
Saint Vincent and the Grenadines	1 332 973	733 063	...	33 512	...	8 765	116 050	82 558	92 267
East Asia									
China	14 787 060	13 690 093	3 319 375	5 675 752	2 935 759	602 155	40 436 517	27 664 861	64 216 671
Democratic People's Republic of Korea	...	...	...	5 000	75 000	...	...	...	...
Eastern Europe and Central Asia									
Armenia	...	...	...	126 671	188 352	126 960	2 885 885	3 227 460	3 561 135
Azerbaijan	...	...	...	171 014	152 855	...	616 197	5 416 440	...
Belarus	234 102	4 749	...	238 119	266 925	...	5 946 198	9 778 974	...
Georgia	1 070 223	2 125 481	1 112 293	212 468	401 494	307 243	5 300 330	5 146 960	8 783 691
Kazakhstan	...	...	...	...	338 007	120 714	...	5 151 157	6 961 187
Kyrgyzstan	319 578	319 578	...	1 753 560	905 000	1 371 130	5 836 715	2 152 922	6 759 253
Republic of Moldova	182 941	236 752	139 249	403 777	979 690	303 987	5 302 443	7 161 464	6 213 396
Tajikistan	2 564 546	2 751 455	...	537 086	743 891	...	9 825 871	8 815 922	...
Ukraine	3 384 197	...	...	1 758 678	...	...	26 858 256	...	...
Uzbekistan	165 236	...	...	468 000	468 000	848 538	6 045 177	6 045 177	9 923 281
Latin America									
Belize	529 130	...	...	280 346	...	...	...	...	...
Bolivia (Plurinational State of)	...	156 582	...	...	499 221	...	...	4 799 828	...
Brazil	...	...	...	7 468 124	...	...	...	...	...
Chile	57 283	...	...	411 244	...	...	...	...	...
Colombia	...	...	...	275 591	332 690	63 999	...	1 839 543	9 587 253
Costa Rica	311 345	...	...	338 411	...	...	...	...	...

	Multilaterals								
	Development Banks			Other multilaterals			Other international		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
...	664 499
...
...	48 982	...	22 028	2 727	...
...
...	472 073	...	...
...	718 655	...	...	...	...	720 147	...	34 434	...
...	25 418 125	15 706 811	...	...	...	8 483 235
...
...	19 891	72 194	85 353	530 992
...	591 500	423 000	...
...	58 522	145 031	...
...	249 945	847 976	861 115
...	9 133	188	...	1 041 864	375 555
...	1 517 507	551 780	...	400 000	350 000	...	...	...	1 382 380
...	214 054	141 112	53 783
...	586 650	720 935	...	...	...	...
...	183 024	...	...	1 693 574	...	...
...
...	603 420	...	...
...	1 519 416	...
...	1 699 227	...	...
...	383 172	439 387
...
...	504 393	...	...	1 024 748	...	...

CLOSE THE GLOBAL AIDS RESOURCE GAP

Domestic HIV spending from international sources (US\$)

Multilaterals

	Bilaterals			UN Agencies			Global Fund		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Ecuador	29 658	...	...	1 336 249	...	...	26 364	...	...
El Salvador	2 101 422	...	2 758 436	273 174	...	575 666	7 451 451	...	9 301 591
Guatemala	3 413 212	...	3 401 047	1 569 879	...	1 159 823	5 661 421	...	12 312 352
Honduras	5 065 130	...	...	1 344 386	...	...	8 010 681	...	...
Nicaragua	2 554 713	...	...	2 113 283	...	...	9 155 592	...	...
Paraguay	2 857 575	...	...	318 962	739 922	...	3 588 531	4 115 637	...
Peru	2 575 018	...	...	403 751	...	...	7 278 840	...	...
Suriname	2 547 077	1 253 125	...	73 872	67 700	...	1 485 037	1 009 894	...
Venezuela (Bolivarian Republic of)	...	...	...	626 411	133 327	...	...	...	...
Middle East and North Africa									
Algeria	289 363	548 057	180 195	180 699	319 371	609 511	...	...	...
Djibouti	1 059 733	123 916	143 655	1 971 916	1 597 164	1 137 495	1 358 827	1 975 708	1 574 418
Jordan	...	...	...	...	...	...	723 768	433 831	968 902
Morocco	46 215	50 836	56 618	881 906	742 118	826 517	4 811 881	4 190 951	4 667 574
Syrian Arab Republic	...	...	...	...	189 850	...	...	...	...
Tunisia	...	...	...	...	...	...	2 928 100	2 615 149	...
Yemen	...	...	...	923 775	461 636	...	...	351 385	...
Oceania									
Fiji	149 660	164 857	...	339 790	653 830	335 118	72 512	206 829	...
Kiribati	...	...	...	...	...	...	424 106	83 959	134 298
Marshall Islands	72 449	25 021	95 250	...	...	...	118 457	83 557	34 991
Micronesia (Federated States of)	265 491	290 594	296 349	68 898	...	...	115 772	86 810	96 236
Papua New Guinea	28 199 728	...	...	2 495 709	...	...	4 572 622	...	...
Samoa	...	...	...	95 536	29 583	...	82 661	102 625	...
Solomon Islands	393 993	439 782	...	44 612	17 436	...	...	...	...
Tuvalu	...	...	...	...	...	...	43 641	121 916	...
Vanuatu	898 503	1 397 372	...	38 888	28 769	...	177 211	328 393	175 692

Multilaterals

Development Banks			Other multilaterals			Other international		
2010	2011	2012	2010	2011	2012	2010	2011	2012
...	727 674	...	...	855 594	...	...
...	...	46 916	645 969	...	198 784	983 416	...	1 095 296
63 778	162 901	...	...	2 014 505	...	1 081 601
...	42 406	...	...	1 253 743	...	...
11 892	91 960	...	...	134 531	...	...
2 268	239 221	...
...	2 216 561	...	...
...	12 385	...
...
...	403	4 524	99 135
28 249	105 812	...	...	...
...
...	1 359 102	1 405 370	1 565 199
...
...	10 000	...
...	844 990	333 504	...
43 333	853 432	587 591	...	218 669	174 503	...
...	...	19 692	5 694	174 929	185 287	...	...	...
...
...	71 645	96 066	54 103	...	...	...
2 607 197	74 194	...	...	872 219	...	...
...	5 137	2 430	...
...	167 661	...	215 690	131 802	...
4 000	35 000	...
...	510 411	49 077	20 692	...	43 397	131 705

CLOSE THE GLOBAL AIDS RESOURCE GAP

Domestic HIV spending from international sources (US\$)

	Multilaterals								
	Bilaterals			UN Agencies			Global Fund		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
South and South-East Asia									
Afghanistan	90 499	1 456 111	...	849 942	1 172 183	27 092	1 774 255	1 645 560	1 829 829
Bangladesh	2 869 608	3 190 243	3 785 791	232 797	202 846	546 436	10 461 394	12 389 199	6 875 780
Cambodia		15 713 795	15 872 474		7 128 857	4 320 352		18 030 595	20 027 132
Indonesia	13 030 257	...	...	...	...	...	...	...	...
Lao People's Democratic Republic	1 206 336	1 841 772	...	972 646	934 476	...	4 357 227	7 562 540	...
Malaysia	...	...	...	561 880	307 629	...	...	2 232 176	1 725 292
Myanmar	...	...	...	...	...	...	...	...	...
Pakistan	2 312 562	...	...	3 996 848	...	...	388 442	...	...
Philippines	597 420	624 340	...	1 007 266	1 171 076	...	3 278 792	1 955 077	...
Sri Lanka	...	...	...	1 046 040	...	...	267 529	...	...
Thailand	7 071 757	8 103 688	...	1 473 326	1 488 538	...	26 021 888	35 359 954	...
Viet Nam	84 013 483	...	...	1 343 508	...	...	6 650 517	...	...
Sub-Saharan Africa									
Angola	4 057 292	9 014 036	...	3 879 748	894 705	...	8 199 031	263 478	...
Benin	119 433	3 967 181	2 970 320	3 228 966	3 071 804	1 727 806	2 368 720	11 669 947	12 766 641
Botswana	88 439 410	76 787 833	...	2 028 440	2 723 550	...	...	...	...
Burkina Faso	17 330 444	...	...	7 264 617	...	...	13 963 876	...	...
Burundi	...	8 500 000	8 500 000	...	544 314	1 032 781	...	14 145 538	11 365 873
Cameroon	8 679 422	...	...	3 562 002	...	...	17 134 894	...	...
Cape Verde	...	...	...	149 724	94 703	759	1 711 088	2 853 473	16 002
Central African Republic	747 766	420 561	...	8 055 827	7 063 516	...	3 979 986	6 189 238	...
Chad	2 897 656	144 184	311 178	2 142 046	3 036 244	3 209 744	1 705 808	8 225 860	5 247 126
Comoros	...	...	...	...	...	72 309	...	...	1 233 403
Congo	381 566	...	...	337 139	...	...	6 354 280	...	...
Democratic Republic of the Congo	24 298 279	...	...	16 480 566	...	...	30 107 409	...	...
Gabon	489 931	920 533	...	578 116	1 124 598	2 005 277	1 288 011	915 788	...
Ghana	7 835 285	20 922 460	...	3 384 797	5 488 229	...	27 525 703	23 226 584	...

	Multilaterals								
	Development Banks			Other multilaterals			Other international		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
	1 523 129	3 728 220	2 080 692	...	...	...	...	...	676 536
	...	1 690 130	...	...	...	2 577	348 682	428 488	206 672
	...	...	...	...	1 745 621	1 165 243	...	3 990 878	2 913 501
	...	...	...	28 193 858	...	...	...	...	...
	163 594	231 690	...	250 914	...	...	801 333	345 968	...

	...	...	...	...	...	...	37 904 167	42 349 184	...
	284 301	...	...	380 983	...	...	800 838	...	...
	...	...	...	...	24 881	...	119 242	96 768	...
	...	...	...	568 614	...	...	152 214	...	...
	54 915	120 790	...	...	...	...	1 304 782	1 357 422	...
	8 001 304	...	...	1 517 166	...	...	695 801	...	...
	...	126 898	...	2 051 653	1 327 135	...	...	388 500	...
	1 613 734	320 288	...	...	159 011	698 521	3 929 033	92 462	190 493
	...	...	...	297 015	331 272	...	9 904 538	11 551 282	...
	24 081	...	...	...	...	...	414 874	...	...
	...	...	...	...	...	...	39 908 205	218 971	...
	...	...	...	...	...	...	11 539 968	...	...
	...	...	...	...	...	...	185 032	124 985	...
	...	...	...	...	...	...	240 603	112 671	...
	661 033	...	82 871	522 711	4 631 043	...	...	30 944	829 603
	...	...	...	...	...	47 590	...	...	...
	807 570	...	...	...	...	...	487 802	...	...
	26 737 388	...	...	163 387	...	...	4 650 788	...	...
	...	643 284	...	...	...	...	...	...	...
	...	...	...	216 699	...	...	9 052 997	11 170 672	...

CLOSE THE GLOBAL AIDS RESOURCE GAP

Domestic HIV spending from international sources (US\$)

Multilaterals

	Bilaterals			UN Agencies			Global Fund		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Guinea	2 937 281	3 008 420	1 135 908	1 780 330	1 355 255	4 897 526	1 463 210	4 611 586	773 945
Guinea-Bissau	3 959 113	...	...	687 951	...	...	...	...	...
Kenya	554 075 845	554 497 335	...	...	7 620 359	...	15 266 186	20 864 464	...
Liberia	...	539 765	...	2 763 451	7 588 885	...	25 511 143	22 804 922	...
Madagascar	1 968 850	2 406 633	1 433 205	1 417 801	1 540 707	1 349 969	1 485 034	4 475 148	2 463 869
Mali	3 919 460	...	...	450 946	...	...	14 931 689	...	...
Mauritania	...	...	...	247 500	291 600	281 450	...	69 957	3 036 125
Mauritius	105 559	...	...	291 226	...	...	1 675 382	...	...
Namibia	93 028 647	...	...	7 860 111	...	...	9 324 333	...	...
Niger	2 475 111	2 660 802	3 581 728	581 263	5 987 007	3 869 274	9 493 223	5 824 701	2 926 358
Nigeria	284 908 865	...	...	18 410 698	...	...	65 899 650	...	...
Sao Tome and Principe	...	...	225 477	259 461	273 686	14 924	260 248	294 122	82 727
Senegal	...	4 446 971	...	...	375 212	...	...	14 800 499	...
Seychelles	...	...	...	17 581	53 040	170 405	...	...	...
Togo	1 605 831	1 713 886	4 794 200	1 506 109	1 499 068	1 535 628	6 937 675	10 670 960	3 476 107
Zimbabwe	49 772 291	77 692 280	91 023 382	17 972 300	27 240 021	5 446 365	66 042 408	26 233 338	107 083 627
Western and Central Europe									
Bulgaria	19 713	...	...	81 000	95 000	...	5 494 807	6 382 691	...
Latvia	...	...	...	146 569	25 228	...	...	...	...
Lithuania	...	...	...	...	...	...	...	...	...
Romania	...	...	...	660 616	716 706	20 000	1 417 679	...	...
Serbia	...	...	115 171	...	...	198 435	...	...	3 859 000
The former Yugoslav Republic of Macedonia	...	...	...	462 347	...	...	1 723 215	...	...

Multilaterals

Development Banks			Other multilaterals			Other international		
2010	2011	2012	2010	2011	2012	2010	2011	2012
...	...	88 996	...	...	878 754	4 925 974	5 163 845	1 711 334
...
...	22 034 292	...	...
...
...	21 246	...	...	15 391	...	66 330	10 935	179 741
8 018 577	109 648	...	...	2 585 546	...	...
...
...	202 511	...	...	89 241	...	...
...
...	2 689	284 548	231 782	14 301	32 525	1 329 766	1 083 592	...
1 505 746	45 762	...	...	156 616	...	...
43 656	118 046	...	...	...	...	34 585	82 365	...
...	186 494	...	...	...	...
24 104	3 827	13 174	...	11 983	...	200 240
...	1 015 344	1 091 481	3 463 112	637 841	90 042
30 000	16 724 223	32 791 644	84 770	13 577 964	12 073 887	23 967 887
...	44 937	...	...
...	25 990	70 621	...
...	68 390	...
1 771 480	4 577 421	...	56 078	203 467	...	89 902	179 530	671 044
...	36 920	...	...	78 501
...	171 120	...	...

CLOSE THE GLOBAL AIDS RESOURCE GAP

Total domestic HIV spending from domestic public and international sources (US\$)¹

	2010	2011	2012
Caribbean			
Antigua and Barbuda	1 361 858	617 262	987 161
Cuba	66 854 940	69 954 928	...
Dominica	223 664	223 664	...
Grenada	93 501	286 803	...
Haiti	166 132 144	209 009 280	...
Jamaica	14 620 864	...	...
Saint Vincent and the Grenadines	3 991 280	2 836 345	1 436 605
East Asia			
China	583 626 880	589 373 504	630 628 800
Democratic People's Republic of Korea	1 014 600	1 145 420	...
Mongolia	3 501 188	3 731 466	...
Eastern Europe and Central Asia			
Armenia	5 045 789	5 580 436	5 329 710
Azerbaijan	8 236 251	14 555 704	...
Belarus	19 722 982	19 864 484	...
Georgia	11 195 893	13 083 921	15 609 576
Kazakhstan	...	36 887 020	37 809 896
Kyrgyzstan	11 235 261	5 720 845	13 399 289
Republic of Moldova	10 720 936	13 644 548	9 092 261
Tajikistan	15 233 122	15 302 037	...
Ukraine	71 931 928	...	...
Uzbekistan	23 663 618	19 149 708	24 106 268
Latin America			
Belize	2 547 545	...	...
Bolivia (Plurinational State of)	...	9 251 710	...
Brazil	754 998 080	...	...
Chile	119 693 168	123 427 472	133 128 856
Colombia ¹	87 237 816	104 688 656	10 671 901
Costa Rica	26 944 640	...	...

CLOSE THE GLOBAL AIDS RESOURCE GAP

Total domestic HIV spending from domestic public and international sources (US\$)¹

	2010	2011	2012
Ecuador	27 246 408	...	...
El Salvador	48 752 880	...	59 224 233
Guatemala	41 650 940	...	43 279 436
Honduras	31 741 800	...	...
Nicaragua	23 744 276	...	...
Panama	17 229 700	...	...
Paraguay	9 444 684	7 602 715	...
Peru	27 919 674	...	...
Suriname	6 045 606	4 592 708	...
Venezuela (Bolivarian Republic of)	109 663 744	80 485 624	...
Middle East and North Africa			
Algeria	5 816 047	9 130 566	10 076 121
Djibouti	5 046 034	4 293 493	3 828 456
Jordan	1 723 768	1 433 832	968 902
Lebanon	2 420 000	2 420 000	...
Morocco	13 456 936	13 117 972	14 609 839
Syrian Arab Republic	...	809 850	...
Tunisia	3 038 140	2 742 549	...
Yemen	2 210 998	1 613 920	...
Oceania			
Fiji	2 096 989	2 255 212	335 118
Kiribati	429 800	258 888	339 277
Marshall Islands	390 933	228 824	365 945
Micronesia (Federated States of)	521 806	473 470	446 688
Palau	982 489	1 044 959	...
Papua New Guinea	50 899 064	...	...
Samoa	345 028	307 482	...
Solomon Islands	804 327	908 429	...
Tuvalu	59 641	177 096	...
Vanuatu	1 661 523	1 883 490	328 089

CLOSE THE GLOBAL AIDS RESOURCE GAP

Total domestic HIV spending from domestic public and international sources (US\$)¹

	2010	2011	2012
South and South-East Asia			
Afghanistan	4 437 825	8 002 074	4 638 399
Bangladesh	15 114 988	18 647 130	12 394 502
Cambodia	...	52 254 696	49 970 564
Indonesia	68 801 200	...	...
Lao People's Democratic Republic	8 579 739	11 744 135	...
Malaysia	31 945 130	39 207 956	56 142 280
Myanmar	40 501 040	46 293 476	...
Pakistan	12 932 295	...	...
Philippines	8 375 187	7 998 805	...
Sri Lanka	4 312 212	...	...
Thailand	236 177 680	314 362 656	...
Viet Nam	123 652 864	...	...
Sub-Saharan Africa			
Angola	34 064 912	33 477 540	...
Benin	18 197 534	27 076 904	29 821 530
Botswana	363 069 632	390 416 544	...
Burkina Faso	50 116 464	...	...
Burundi	41 682 508	25 443 438	22 256 840
Cameroon	55 311 540	...	...
Cape Verde	2 545 213	3 595 435	33 955
Central African Republic	14 897 398	15 673 308	...
Chad	11 791 489	18 834 284	15 893 491
Comoros	169 643	936 324	1 527 605
Congo	16 472 586	...	...
Democratic Republic of the Congo	105 197 360	...	...
Gabon	8 522 748	10 028 093	14 302 741
Ghana	56 102 624	75 662 576	...
Guinea	11 424 371	14 777 291	11 788 635
Guinea-Bissau	5 258 837	...	...
Kenya	726 058 624	745 551 808	...

CLOSE THE GLOBAL AIDS RESOURCE GAP

Total domestic HIV spending from domestic public and international sources (US\$)¹

	2010	2011	2012
Liberia	28 357 694	31 123 572	...
Madagascar	9 411 533	14 949 588	9 571 378
Malawi	65 560 000	77 390 000	...
Mali	36 518 056	...	...
Mauritania	946 354	4 082 502	3 934 241
Mauritius	7 258 547	...	...
Namibia	279 004 192	...	...
Niger	14 180 564	15 656 028	14 588 501
Nigeria	496 066 912	...	...
Sao Tome and Principe	605 751	880 869	323 128
Senegal	...	22 518 738	...
Seychelles	2 354 608	2 069 411	4 648 906
Togo	22 391 016	19 611 786	16 602 255
Zimbabwe	184 952 736	204 092 352	264 690 960
Western and Central Europe			
Bulgaria	9 892 606	13 145 886	...
Latvia	6 168 667	7 288 265	...
Lithuania	...	3 669 401	2 496 551
Romania	95 508 032	108 135 600	88 774 016
Serbia	...	...	13 359 087
The former Yugoslav Republic of Macedonia	4 722 972	...	...
Turkey	...	...	12 291 905

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/861>.

ELIMINATE GENDER INEQUALITIES AND GENDER-BASED ABUSE AND VIOLENCE AND INCREASE THE CAPACITY OF WOMEN AND GIRLS TO PROTECT THEMSELVES FROM HIV

Young people's knowledge about HIV prevention

Comprehensive correct knowledge about AIDS among young people aged 15-24 (2 ways to prevent AIDS and reject 3 misconceptions)¹ (%)

	Year, Source	Females	Males
Caribbean			
Dominican Republic	2007, DHS	40.8	33.7
Haiti	2005–06, DHS	33.9	40.1
Eastern Europe and Central Asia			
Armenia	2005, DHS	22.6	15.1
Azerbaijan	2006, DHS	4.8	5.3
Ukraine	2007, DHS	44.8	42.8
Latin America			
Bolivia (Plurinational State of)	2008, DHS	22.4	27.7
Belize	2011, MICS	42.9	0
Colombia	2010, DHS	24.1	0
Guyana	2009, DHS	54.1	46.6
Honduras	2005–06, DHS	29.7	0
Nicaragua	2001, DHS	22.2	0
Middle East and North Africa			
Egypt	2005, DHS	4.4	0
Jordan	2007, DHS	12.5	5.0
Morocco	2003–04, DHS	11.7	0
South and South-East Asia			
Cambodia	2010, DHS	44.4	43.7
India	2005–06, NFHS	19.9	36.1
Nepal	2011, DHS	25.8	33.9
Timor-Leste	2009, DHS	12.2	19.7
Viet Nam	2005, PAIS	42.3	50.3
Sub-Saharan Africa			
Benin	2006, DHS	8.4	14.2
Burkina Faso	2010, DHS	31.1	35.7
Burundi	2010, DHS	44.5	46.5

ELIMINATE GENDER INEQUALITIES AND GENDER-BASED ABUSE AND VIOLENCE AND INCREASE THE CAPACITY OF WOMEN AND GIRLS TO PROTECT THEMSELVES FROM HIV

Young people's knowledge about HIV prevention

Comprehensive correct knowledge about AIDS among young people aged 15-24 (2 ways to prevent AIDS and reject 3 misconceptions)¹ (%)

	Year, Source	Females	Males
Cameroon	2011, MICS	28.7	33.5
Cape Verde	2012, AIDS	90.1	88.9
Congo	2009, AIS	8.3	21.9
Democratic Republic of the Congo	2007, DHS	15.1	20.7
Eritrea	2012, DHS	24.7	33.8
Ethiopia	2011, DHS	23.9	34.2
Kenya	2008–09, DHS	46.6	55.3
Gabon	2012, DHS	28.8	36.1
Lesotho	2009, DHS	38.6	28.7
Madagascar	2008–09, DHS	22.5	26.0
Malawi	2010, DHS	41.8	44.7
Mozambique	2011, DHS	30.2	51.8
Namibia	2006, DHS	59.4	52.9
Niger	2006, DHS	13.4	15.9
Nigeria	2008, DHS	22.2	32.6
Rwanda	2010–11, DHS	52.0	46.1
Sao Tome and Principe	2008–09, DHS	42.6	43.4
Senegal	2010–11, DHS	29.4	30.7
Sierra Leone	2008, DHS	17.2	27.6
Swaziland	2006–07, DHS	52.1	52.3
United Republic of Tanzania	2010, DHS	48.2	42.7
Uganda	2006, DHS	31.9	38.2
Zambia	2007, DHS	34.0	36.9
Zimbabwe	2010–11, DHS	51.9	47.0
Western and Central Europe			
Albania	2008–09, DHS	35.9	22.0
Bosnia and Herzegovina	2012, MICS	47.5	47.3
Montenegro	2012, AIDS	22.0	22.3

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/658>.

ELIMINATE GENDER INEQUALITIES AND GENDER-BASED ABUSE AND VIOLENCE AND INCREASE THE CAPACITY OF WOMEN AND GIRLS TO PROTECT THEMSELVES FROM HIV

Proportion of ever-married or partnered women aged 15-49 who experienced physical or sexual violence from a male intimate partner in the past 12 months¹

	2012 ²		2012 ²
Caribbean		Timor-Leste	29
Dominican Republic	12	Sub-Saharan Africa	
Haiti	16	Angola	29
Jamaica	10	Burkina Faso	9
East Asia		Cameroon	51
Mongolia	10	Central African Republic	40
Eastern Europe and Central Asia		Chad	30
Azerbaijan	10	Côte d'Ivoire	31
Republic of Moldova	25	Democratic Republic of the Congo	59
Latin America		Gabon	45
Bolivia (Plurinational State of)	24	Ghana	19
El Salvador	8	Guinea	23
Guatemala	28	Guinea-Bissau	40
Honduras	15	Kenya	32
Mexico	17	Liberia	35
Nicaragua	22	Madagascar	9
Panama	15	Malawi	22
Peru	14	Mauritius	23
Middle East and North Africa		Nigeria	15
Morocco	15	Rwanda	44
Tunisia	16	Sao Tome and Principe	26
Oceania		Sierra Leone	10
Marshall Islands	25	Swaziland	8
Vanuatu	60	Togo	22
South and South-East Asia		United Republic of Tanzania	35
Bangladesh	22	Zimbabwe	27
Cambodia	10	Western and Central Europe	
Nepal	14	Czech Republic	11

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/863>.

² Latest reported.

ELIMINATE GENDER INEQUALITIES AND GENDER-BASED ABUSE AND VIOLENCE AND INCREASE THE CAPACITY OF WOMEN AND GIRLS TO PROTECT THEMSELVES FROM HIV

Number of HIV infected female adults

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Caribbean	130 000	120 000	150 000	120 000	110 000	140 000
Bahamas	2 700	2 600	2 800	3 500	3 300	3 700
Barbados	<500	<500	<500	<500	<500	<500
Cuba	<500	<500	<500	<1 000	<1 000	1 500
Dominican Republic	31 000	27 000	35 000	22 000	19 000	26 000
Haiti	80 000	71 000	90 000	78 000	70 000	88 000
Jamaica	13 000	11 000	15 000	9 300	7 800	11 000
Trinidad and Tobago	5 200	4 600	5 800	7 300	6 800	8 000
East Asia	100 000	74 000	140 000	250 000	180 000	350 000
China ¹	...	...	...	...	...	...
Democratic People's Republic of Korea	...	...	...	...	...	...
Japan	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...
Republic of Korea	...	...	...	...	...	...
Eastern Europe and Central Asia	360 000	280 000	450 000	430 000	340 000	550 000
Armenia	<200	<100	<500	<1 000	<500	<1 000
Azerbaijan	<1 000	<500	<1 000	1 100	<1 000	1 500
Belarus	2 500	1 900	3 300	7 100	6 400	8 000
Georgia	<500	<500	<1 000	1 400	1 100	2 000
Kazakhstan	...	...	...	...	...	...
Kyrgyzstan	<500	<500	<1 000	1 600	1 100	2 300
Republic of Moldova	3 700	2 900	4 800	6 500	5 300	8 200
Russian Federation	...	...	...	...	...	...
Tajikistan	<500	<200	1 600	4 100	2 300	8 400
Ukraine	76 000	65 000	87 000	95 000	80 000	110 000
Uzbekistan	8 000	5 000	11 000	7 200	5 400	10 000
Latin America	370 000	330 000	440 000	430 000	350 000	550 000
Argentina	23 000	17 000	29 000	32 000	26 000	37 000
Belize	1 000	<1 000	1 100	1 300	1 200	1 500

ELIMINATE GENDER INEQUALITIES AND GENDER-BASED ABUSE AND VIOLENCE AND INCREASE THE CAPACITY OF WOMEN AND GIRLS TO PROTECT THEMSELVES FROM HIV

Number of HIV infected female adults

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Bolivia (Plurinational State of)	5 100	3 700	7 400	4 600	2 500	7 100
Brazil	...	130 000	170 000	...	160 000	190 000
Chile	4 100	1 800	6 900	5 400	3 600	8 100
Colombia	39 000	29 000	52 000	42 000	32 000	56 000
Costa Rica	2 400	2 300	2 600	4 000	3 600	4 500
Ecuador	7 800	4 200	12 000	12 000	8 300	21 000
El Salvador	8 800	6 400	13 000	9 000	5 900	16 000
Guatemala	19 000	12 000	30 000	20 000	12 000	44 000
Guyana	1 500	<1 000	2 400	3 600	2 100	5 700
Honduras	17 000	14 000	21 000	9 400	8 000	11 000
Mexico	39 000	32 000	47 000	38 000	32 000	46 000
Nicaragua	<500	<200	<1 000	2 900	2 000	4 400
Panama	5 800	4 800	7 100	5 000	3 700	6 600
Paraguay	1 200	<1 000	4 000	5 500	3 100	10 000
Peru	27 000	19 000	36 000	23 000	11 000	68 000
Suriname	1 600	1 300	1 900	2 000	1 800	2 200
Uruguay	1 700	1 200	2 600	2 700	2 100	4 000
Venezuela (Bolivarian Republic of)	26 000	17 000	40 000	38 000	27 000	56 000
Middle East and North Africa	62 000	41 000	110 000	100 000	74 000	150 000
Algeria	...	...	...	...	...	...
Djibouti	5 000	3 900	6 000	3 700	3 000	4 700
Egypt	<1 000	<500	1 100	1 400	<1 000	2 100
Iran (Islamic Republic of)	1 200	<1 000	2 300	19 000	13 000	30 000
Lebanon	...	...	...	...	...	...
Morocco	4 400	3 100	5 700	11 000	8 500	14 000
Oman	...	...	...	...	...	...
Somalia	12 000	7 000	19 000	13 000	8 600	20 000
Sudan	...	...	...	...	...	...

ELIMINATE GENDER INEQUALITIES AND GENDER-BASED ABUSE AND VIOLENCE AND INCREASE THE CAPACITY OF WOMEN AND GIRLS TO PROTECT THEMSELVES FROM HIV

Number of HIV infected female adults

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Tunisia	<500	<200	<1 000	<1 000	<500	1 100
Yemen	1 300	<1 000	2 400	7 700	3 600	19 000
North America	180 000	150 000	230 000	260 000	190 000	380 000
Canada	...	...	...	...	...	...
United States of America	...	...	...	...	...	...
Oceania	14 000	11 000	19 000	18 000	15 000	21 000
Australia	...	...	...	...	...	...
Fiji	<100	<100	<200	<500	<500	<500
New Zealand	...	...	...	...	...	...
Papua New Guinea	11 000	7 700	16 000	12 000	10 000	16 000
South and South-East Asia	1 200 000	960 000	1 500 000	1 400 000	1 100 000	1 800 000
Afghanistan	<1 000	<500	1 700	1 400	<1 000	4 600
Bangladesh	<1 000	<100	1 300	2 700	1 000	28 000
Bhutan	<100	<100	<100	<500	<200	<1 000
Cambodia	51 000	34 000	99 000	39 000	26 000	76 000
India ¹	800 000	660 000	930 000	750 000	610 000	940 000
Indonesia	25 000	<100	80 000	230 000	150 000	370 000
Lao People's Democratic Republic	1 400	1 100	2 700	4 900	4 200	5 600
Malaysia	4 800	3 400	7 300	12 000	8 500	16 000
Maldives	<100	<100	<100	<100	<100	<100
Myanmar	48 000	42 000	54 000	63 000	55 000	71 000
Nepal	14 000	12 000	18 000	14 000	12 000	19 000
Pakistan	2 400	1 600	4 800	24 000	14 000	44 000
Philippines	2 300	1 300	4 600	2 200	1 700	3 200
Singapore	...	...	...	...	...	...
Sri Lanka	<500	<500	<1 000	<1 000	<1 000	1 500
Thailand	210 000	190 000	230 000	200 000	180 000	210 000
Viet Nam	51 000	14 000	100 000	71 000	20 000	140 000

ELIMINATE GENDER INEQUALITIES AND GENDER-BASED ABUSE AND VIOLENCE AND INCREASE THE CAPACITY OF WOMEN AND GIRLS TO PROTECT THEMSELVES FROM HIV

Number of HIV infected female adults

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Sub-Saharan Africa	11 100 000	10 300 000	12 000 000	12 900 000	12 000 000	13 700 000
Angola	67 000	50 000	98 000	130 000	110 000	160 000
Benin	33 000	29 000	37 000	37 000	33 000	41 000
Botswana	160 000	150 000	170 000	180 000	170 000	190 000
Burkina Faso	84 000	72 000	98 000	55 000	47 000	64 000
Burundi	62 000	52 000	75 000	43 000	36 000	53 000
Cameroon	260 000	240 000	280 000	310 000	290 000	340 000
Cape Verde	<1 000	<500	<1 000	<500	<500	<1 000
Central African Republic	...	...	...	...	...	...
Chad	97 000	82 000	110 000	100 000	88 000	130 000
Comoros	...	...	...	...	...	...
Congo	44 000	40 000	50 000	36 000	32 000	39 000
Côte d'Ivoire	320 000	280 000	360 000	220 000	190 000	260 000
Democratic Republic of the Congo	210 000	190 000	240 000	230 000	210 000	260 000
Equatorial Guinea	6 100	3 300	11 000	16 000	8 500	24 000
Eritrea	16 000	11 000	21 000	8 800	7 000	12 000
Ethiopia	700 000	630 000	770 000	380 000	340 000	420 000
Gabon	28 000	24 000	32 000	25 000	22 000	30 000
Gambia	3 900	2 900	5 200	7 600	5 700	10 000
Ghana	140 000	120 000	160 000	120 000	100 000	140 000
Guinea	35 000	29 000	43 000	63 000	52 000	76 000
Guinea-Bissau	11 000	7 800	15 000	21 000	16 000	28 000
Kenya	790 000	750 000	840 000	820 000	790 000	860 000
Lesotho	150 000	140 000	160 000	190 000	180 000	200 000
Liberia	18 000	15 000	21 000	11 000	9 100	13 000
Madagascar	23 000	19 000	28 000	23 000	19 000	27 000
Malawi	530 000	490 000	560 000	560 000	520 000	590 000
Mali	56 000	45 000	70 000	50 000	40 000	62 000
Mauritania	4 800	3 600	6 400	5 000	3 700	7 200

ELIMINATE GENDER INEQUALITIES AND GENDER-BASED ABUSE AND VIOLENCE AND INCREASE THE CAPACITY OF WOMEN AND GIRLS TO PROTECT THEMSELVES FROM HIV

Number of HIV infected female adults

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Mauritius	2 000	1 800	2 300	2 800	2 500	3 200
Mozambique	450 000	400 000	520 000	810 000	730 000	930 000
Namibia	93 000	80 000	110 000	120 000	100 000	130 000
Niger	26 000	22 000	32 000	20 000	16 000	25 000
Nigeria	1 400 000	1 200 000	1 600 000	1 700 000	1 500 000	1 900 000
Rwanda	110 000	100 000	130 000	100 000	95 000	120 000
Sao Tome and Principe	<500	<500	<1 000	<1 000	<500	<1 000
Senegal	16 000	13 000	19 000	24 000	20 000	29 000
Sierra Leone	15 000	10 000	20 000	31 000	22 000	44 000
South Africa	2 400 000	2 200 000	2 600 000	3 400 000	3 200 000	3 600 000
South Sudan	65 000	29 000	110 000	78 000	51 000	120 000
Swaziland	77 000	71 000	83 000	110 000	100 000	120 000
Togo	69 000	59 000	83 000	65 000	56 000	76 000
Uganda	460 000	410 000	540 000	780 000	690 000	900 000
United Republic of Tanzania	740 000	670 000	830 000	730 000	660 000	810 000
Zambia	400 000	370 000	430 000	490 000	460 000	530 000
Zimbabwe	930 000	880 000	1 000 000	700 000	660 000	740 000
Western and Central Europe	140 000	120 000	150 000	210 000	190 000	230 000
Austria	...	...	...	...	...	...
Belgium	...	...	...	...	...	...
Bulgaria	...	...	...	...	...	...
Croatia	...	...	...	...	...	...
Czech Republic	...	...	...	...	...	...
Denmark	...	...	...	...	...	...
Estonia	...	...	...	...	...	...
Finland	...	...	...	...	...	...
France	...	...	...	...	...	...
Germany	...	...	...	...	...	...
Greece	...	...	...	...	...	...

ELIMINATE GENDER INEQUALITIES AND GENDER-BASED ABUSE AND VIOLENCE AND INCREASE THE CAPACITY OF WOMEN AND GIRLS TO PROTECT THEMSELVES FROM HIV

Number of HIV infected female adults

	2001			2012		
	estimate	lower estimate	upper estimate	estimate	lower estimate	upper estimate
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland
GLOBAL	13 700 000	12 500 000	15 000 000	16 100 000	14 800 000	17 400 000

¹ Estimates for China and India are based on 2011 national estimates.

ELIMINATE HIV-RELATED RESTRICTIONS ON ENTRY, STAY AND RESIDENCE

HIV-specific restrictions on entry, stay, or residence

	2009	2013
Caribbean		
Antigua and Barbuda	No	No
Barbados	No	No
Cuba	Yes	Yes
Dominica	No	No
Dominican Republic	Yes	Yes
Grenada	No	No
Haiti	No	No
Jamaica	No	No
Saint Kitts and Nevis	No	No
Saint Lucia	No	No
Trinidad and Tobago	No	No
East Asia		
China	No	No
Democratic People's Republic of Korea	Yes	Yes
Japan	No	No
Mongolia	Yes	No
Republic of Korea	Yes	No
Eastern Europe and Central Asia		
Armenia	Yes	No
Azerbaijan	No	No
Belarus	Yes	Yes
Georgia	No	No
Kazakhstan	No	No
Kyrgyzstan	No	No
Republic of Moldova	Yes	No
Russian Federation	Yes	Yes
Tajikistan	Yes	Yes
Turkmenistan	Yes	Yes
Ukraine	Yes	No
Uzbekistan	Yes	Yes

	2009	2013
Latin America		
Argentina	No	No
Belize	Yes	Yes
Brazil	No	No
Chile	No	No
Colombia	No	No
Costa Rica	No	No
Ecuador	Yes	No
El Salvador	No	No
Guatemala	No	No
Guyana	No	No
Mexico	No	No
Nicaragua	Yes	Yes
Panama	No	No
Paraguay	Yes	Yes
Peru	No	No
Uruguay	No	No
Venezuela (Bolivarian Republic of)	No	No
Middle East and North Africa		
Bahrain	Yes	Yes
Djibouti	No	No
Egypt	Yes	Yes
Iran (Islamic Republic of)	No	No
Iraq	Yes	Yes
Jordan	Yes	Yes
Kuwait	Yes	Yes
Lebanon	Yes	Yes
Libya	No	No
Morocco	No	No
Oman	Yes	Yes
Qatar	Yes	Yes

ELIMINATE HIV-RELATED RESTRICTIONS ON ENTRY, STAY AND RESIDENCE

HIV-specific restrictions on entry, stay, or residence

	2009	2013
Saudi Arabia	Yes	Yes
Somalia	No	No
Sudan	Yes	Yes
Syrian Arab Republic	Yes	Yes
Tunisia	No	No
United Arab Emirates	Yes	Yes
Yemen	Yes	Yes
North America		
Canada	No	No
United States of America	No	No
Oceania		
Australia	Yes	Yes
Fiji	Yes	No
Marshall Islands	Yes	Yes
Micronesia (Federated States of)	No	No
New Zealand	Yes	Yes
Papua New Guinea	Yes	Yes
Samoa	Yes	Yes
Solomon Islands	Yes	Yes
Tonga	Yes	Yes
Vanuatu	No	No
South and South-East Asia		
Bangladesh	No	No
Brunei Darussalam	Yes	Yes
Cambodia	No	No
India	Yes	No
Indonesia	No	No
Lao People's Democratic Republic	No	No
Malaysia	Yes	Yes
Maldives	No	No

	2009	2013
Myanmar	No	No
Nepal	No	No
Pakistan	No	No
Philippines	No	No
Singapore	Yes	Yes
Sri Lanka	No	No
Thailand	No	No
Viet Nam	No	No
Sub-Saharan Africa		
Benin	No	No
Botswana	No	No
Burkina Faso	No	No
Burundi	No	No
Cameroon	No	No
Central African Republic	No	No
Chad	No	No
Comoros	Yes	Yes
Congo	No	No
Côte d'Ivoire	No	No
Democratic Republic of the Congo	No	No
Ethiopia	No	No
Gabon	No	No
Gambia	No	No
Ghana	No	No
Guinea	No	No
Guinea-Bissau	No	No
Kenya	No	No
Lesotho	No	No
Liberia	No	No
Madagascar	No	No

ELIMINATE HIV-RELATED RESTRICTIONS ON ENTRY, STAY AND RESIDENCE

HIV-specific restrictions on entry, stay, or residence

	2009	2013
Malawi	No	No
Mali	No	No
Mauritania	No	No
Mauritius	Yes	Yes
Mozambique	No	No
Namibia	No	No
Nigeria	No	No
Rwanda	No	No
Senegal	No	No
Sierra Leone	No	No
South Africa	No	No
Swaziland	No	No
Togo	No	No
Uganda	No	No
United Republic of Tanzania	No	No
Zambia	No	No
Zimbabwe	No	No
Western and Central Europe		
Albania	No	No
Andorra	Yes	Yes
Austria	No	No
Belgium	No	No
Bosnia and Herzegovina	No	No
Bulgaria	No	No
Croatia	No	No
Cyprus	Yes	Yes
Czech Republic	No	No
Denmark	No	No
Estonia	No	No
Finland	No	No
France	No	No

	2009	2013
Greece	No	No
Hungary	No	No
Iceland	No	No
Ireland	No	No
Israel	Yes	Yes
Italy	No	No
Latvia	No	No
Liechtenstein	No	No
Lithuania	Yes	Yes
Luxembourg	No	No
Malta	No	No
Monaco	No	No
Montenegro	No	No
Netherlands	No	No
Norway	No	No
Poland	No	No
Portugal	No	No
Romania	No	No
San Marino	No	No
Serbia	No	No
Slovakia	Yes	Yes
Slovenia	No	No
Spain	No	No
Sweden	No	No
Switzerland	No	No
The former Yugoslav Republic of Macedonia	No	No
Turkey	No	No
United Kingdom of Great Britain and Northern Ireland	No	No

STRENGTHEN HIV INTEGRATION

Health facilities provide HIV services integrated with other health services

	ART and chronic non-communicable diseases	ART and general outpatient care	ART and tuberculosis
Caribbean			
Antigua and Barbuda	Few	Few	Many
Barbados	Few	Few	Few
Dominica	Few	Few	Few
Dominican Republic	Few	Few	Many
Grenada	Few	Few	Few
Haiti	Few	Few	Many
Jamaica	Few	Few	Few
Saint Lucia	Many	Many	Many
Trinidad and Tobago	None	None	Few
East Asia			
Japan	Many	Many	Many
Mongolia	None	None	Few
Eastern Europe and Central Asia			
Armenia	Many	Many	Many
Azerbaijan	None	Few	Few
Belarus	Many	Many	Many
Kazakhstan		None	Many
Kyrgyzstan	None	Few	Many
Republic of Moldova	Few	Few	Few
Tajikistan	None	Many	Many
Uzbekistan	Few	Few	Few
Latin America			
Argentina	Many	Few	Many
Belize	None	Many	Many
Bolivia (Plurinational State of)	Few	Few	Few
Brazil	None	None	Many
Chile	None	None	None
Costa Rica	None	None	None
El Salvador	Many	Many	Many
Guatemala	None	Few	Few

HIV counselling & testing and chronic non-communicable diseases	HIV counselling & testing and general outpatient care	HIV counselling & testing and tuberculosis	HIV counselling & testing with sexual & reproductive health	PMTCT with antenatal care/maternal & child health
Few	Many	Few	Few	Many
Many	Many	Few	Many	Few
Many	Many	Few	Many	Many
Many	Many	Many	Few	Many
Few	Few	Many	Many	Many
Few	Many	Many	Many	Many
Many	Many	Few	Few	Few
Few	Few	Few	Many	Many
None	Few	Few	None	Many
Many	Many	Many	Many	Many
None	None	Few	Few	Few
Many	Many	Many	Many	Many
None	Few	Few	Few	None
Many	Many	Many	Many	Many
Many	Many	Many	Many	Many
Few	Many	Few	Few	Many
None	Few	Many	Many	Many
Many	Many	Many	Many	Few
Many	Many	Few	Many	Many
None	Many	Many	Many	Many
None	Many	Many	Many	Many
None	Few	Few	None	None
Many	Many	Many	Many	Many
None	Many	Many	Many	Many

STRENGTHEN HIV INTEGRATION

Health facilities provide HIV services integrated with other health services

	ART and chronic non-communicable diseases	ART and general outpatient care	ART and tuberculosis
Guyana	Few	Few	Many
Honduras	None	None	Many
Mexico	Few	Few	Many
Nicaragua	Few	Few	Few
Panama	Few	Few	Many
Paraguay	None	None	Few
Peru	Few	Few	Few
Uruguay	None	Few	Few
Venezuela (Bolivarian Republic of)	Few	Few	Few

Middle East and North Africa

Algeria	Many	Many	Many
Bahrain	None	Few	Few
Djibouti	Many	Many	Many
Egypt	Few	Many	Few
Iraq	None	None	Many
Jordan	None	None	None
Libya	Few	Many	
Morocco			
Oman	Few	Few	Many
Qatar	None	Many	Many
Saudi Arabia	Few	Few	Many
Somalia	None	Few	None
Sudan	Few	None	Many
Tunisia	Many	Few	Many
United Arab Emirates	Many	None	Many

Oceania

Australia	Few	Many	Few
Fiji	Few	Few	Few
Marshall Islands	None	Few	Few
Micronesia (Federated States of)	None	None	None
New Zealand			Many
Palau	Many	Many	Many

	HIV counselling & testing and chronic non-communicable diseases	HIV counselling & testing and general outpatient care	HIV counselling & testing and tuberculosis	HIV counselling & testing with sexual & reproductive health	PMTCT with antenatal care/maternal & child health
Guyana	Few	Many	Many	Many	Many
Honduras	None	None	Many	Few	Many
Mexico	Few	Few	Many	Many	Many
Nicaragua	Few	Few	Many	Few	Many
Panama	Few	Few	Many	Few	Many
Paraguay	None	Few	Many	Many	Many
Peru	Few	Few	Few	Few	Few
Uruguay	Few	Few	Many	Many	Many
Venezuela (Bolivarian Republic of)	None	Few	Few	None	Few

Algeria	Many	Many	Many	Many	Many
Bahrain	None	Few	Few	Many	Few
Djibouti	Many	Many	Many	Many	Many
Egypt	Few	Many	Many	Many	Few
Iraq	Few	Few	None	Many	Many
Jordan	None	None	None	None	None
Libya	None	None	Few	Few	Few
Morocco		Few	Many	Many	Many
Oman	Few	Few	Many	Many	Many
Qatar	Many	Many	Many	Many	Many
Saudi Arabia	Few	Few	Many	Few	Few
Somalia	None	Few	Many	Few	Few
Sudan	None	None	Many	Many	Many
Tunisia	None	Few	Many	Few	Few
United Arab Emirates	Few	Few	Few	None	Many

Australia	Many	Many	Few	Many	Many
Fiji	None	Few	Many	Many	Few
Marshall Islands	None	Few	Few	Few	Few
Micronesia (Federated States of)	None	None	Many	Many	None
New Zealand			Many	Many	Many
Palau	Many	Many	Many	Many	Many

STRENGTHEN HIV INTEGRATION

Health facilities provide HIV services integrated with other health services

	ART and chronic non-communicable diseases	ART and general outpatient care	ART and tuberculosis	HIV counselling & testing and chronic non-communicable diseases	HIV counselling & testing and general outpatient care	HIV counselling & testing and tuberculosis	HIV counselling & testing with sexual & reproductive health	PMTCT with antenatal care/maternal & child health
Papua New Guinea	None	None	None	None	None	Few	Few	Few
South and South-East Asia								
Bangladesh	None	None	Few	None	Few	Few	Few	Few
Bhutan	Few	Many	Few	None	Many	Few	Many	Many
Brunei Darussalam	None	None	Few	None	Few	Few	Few	Few
Malaysia	Many	Many	Many	Many	Many	Many	Many	Many
Myanmar	Few	Few	Few	Few	Few	Few	Many	Many
Nepal	Few	Few	Few	Few	Few	Few	Few	Few
Pakistan	None	None	Few	None	Few	Few	Few	Few
Philippines	None	None	Many	None	Few	Many	Few	Few
Sri Lanka	None	None	Many	None	None	Few	Many	Few
Thailand	None	Few	Many	None	Few	Many	Many	Many
Viet Nam	None	Few	Many	Few	Many	Many	Few	Many
Sub-Saharan Africa								
Benin	Many	Many	Many	Many	Many	Many	Many	Many
Botswana	None	None	Few	Few	Many	Many	Many	Many
Burundi	Few	Few	Few	Few	Many	Many	Many	Few
Cameroon	Many	Many	Many	None	Many	Many	Many	Many
Cape Verde	Many	Many	Many	Many	Many	Many	Many	Many
Chad	Few	Few	Many	Few	Few	Few	Many	Many
Comoros	Few	Few	Many	Few	Many	Few	Many	Many
Democratic Republic of the Congo	None	Few	Few	Few	Few	Few	Few	Few
Equatorial Guinea	Few	Many	Few	Few	Few	Few	Few	Many
Eritrea	None	Few	Few	None	Many	Many	Few	Many
Ethiopia	Few	Few	Few	Many	Many	Many	Many	Many
Gabon	Few	Few	Few	Few	Few	Few	Few	Many
Gambia	Few	Few	Many	Many	Few	Many	Many	Many
Ghana	None	None	Many	None	Few	Many	Few	Many
Guinea	Few	Few	Many	Few	Few	Many	Many	Many
Guinea-Bissau	None	None	Many	None	Few	Few	Many	Many
Kenya	Few	Many	Many	Few	Many	Many	Many	Many
Lesotho	Many	Many	Many	Few	Many	Many	Many	Many

STRENGTHEN HIV INTEGRATION

Health facilities provide HIV services integrated with other health services

	ART and chronic non-communicable diseases	ART and general outpatient care	ART and tuberculosis	HIV counselling & testing and chronic non-communicable diseases	HIV counselling & testing and general outpatient care	HIV counselling & testing and tuberculosis	HIV counselling & testing with sexual & reproductive health	PMTCT with antenatal care/maternal & child health
Liberia	Many	Few	Many	Many	Many	Many	Many	Many
Madagascar	None	Few	Few	None	Many	Few	Many	Many
Malawi	None	Few	Many	None	Many	Many	Many	Many
Mauritania	None	Few	Few	None	Few	Few	Many	Few
Mauritius	None	None	Many	Few	None	Many	Many	Many
Mozambique	Few	Many	Many	Few	Many	Many	Many	Many
Namibia	None	None	Many	Many	Many	Many	Many	Many
Niger	Few	Many	Many	Few	Many	Many	Many	Many
Nigeria	Few	Few	Few	Few	Few	Many	Few	Few
Rwanda	Many	Many	Many	Many	Many	Many	Many	Many
Senegal	Few	Many	Many	Few	Many	Many	Many	Many
Seychelles	Few	Few	Many	Few	Few	Many	Many	Many
Sierra Leone	Many	Many	Many	Few	Many	Few	Many	Many
South Africa	Few	Few	Few	Few	Few	Few	Few	Few
Swaziland	Many	Many	Many	Many	Many	Few	Many	Many
Togo	Few	Few	Many	Few	Many	Many	Many	Many
Uganda	Many	Many	Many	Many	Many	Few	Many	Many
United Republic of Tanzania	Few	Many	Many	Few	Many	Many	Many	Many
Zambia	Many	Many	Many	Many	Many	Many	Many	Many
Zimbabwe	Few	Many	Many	Few	Many	Many	Many	Many
Western and Central Europe								
Ireland	Many	Many	Many	Few	Many	Many	Many	Many
Lithuania	Few	Few	Few	Many	Many	Few	Many	Few
Malta	None	None	Many	None	Many	Many	Many	Many
Montenegro	None	None		None	None	Few	Few	Few
Poland	Many	Many	None	None	Many	None	Few	Many
Romania	Many	Many	Many	Many	Many	Many	Many	Many
Serbia	Many	Many	Many	Few	Few	Few	Few	Few
Slovakia	None	None	Few	None	None	Few	Few	Many
Spain	Many	Many	Many	Many	Many	Many	Many	Many
United Kingdom of Great Britain and Northern Ireland	Few	None	Few	Few	None	Few	Many	Many

STRENGTHEN HIV INTEGRATION

Current school attendance among young people aged 10-14¹

	Orphans		Non-orphans	
	2009	2012	2009	2012
Caribbean				
Bahamas	100	...	100	...
Cuba	100	100	100	100
Dominican Republic	69	95	97	98
Haiti	77	92	89	96
Saint Kitts and Nevis	100	100	100	100
Saint Lucia	100	...	72	...
East Asia				
Mongolia	...	100	...	98
Latin America				
Belize	62	62	...	95
Costa Rica	...	95	...	93
Honduras	59	25	55	84
Peru	...	89	...	94
Suriname	...	86	...	97
Uruguay	...	100	...	...
Middle East and North Africa				
Iran (Islamic Republic of)	75	75	92	92
Oman	...	100	...	...
Somalia	...	25	...	29
Sudan	54	78	67	82
Oceania				
Papua New Guinea	75	...	87	...
Vanuatu	...	74	...	83
South and South-East Asia				
Cambodia	76	70	92	81
Indonesia	87	87	93	93
Thailand	96	...	96	...
Timor-Leste	...	66	...	87

STRENGTHEN HIV INTEGRATION

Current school attendance among young people aged 10-14¹

	Orphans		Non-orphans	
	2009	2012	2009	2012
Sub-Saharan Africa				
Angola	75	71	87	90
Benin	6	63	...	76
Botswana	...	98	...	...
Burkina Faso	56	61	49	55
Burundi	...	75	...	91
Cameroon	79	...	86	...
Central African Republic	65	70	67	79
Chad	54	67	46	57
Congo	82	...	93	96
Côte d'Ivoire	36	46	36	71
Democratic Republic of the Congo	63	63	81	85
Ethiopia	53	69	59	76
Gabon	81	96	96	98
Gambia	...	91	...	94
Ghana	67	67	88	88
Guinea-Bissau	...	78	...	72
Kenya	64	94	61	98
Lesotho	...	93	...	95
Madagascar	...	60	...	81
Malawi	89	91	91	93
Mali	42	54	48	62
Mauritania	51	...	71	...
Mozambique	79	66	87	79
Namibia	95	94	94	95
Niger	25	25	38	37
Nigeria	...	84	...	84
Rwanda	75	88	91	96
Sao Tome and Principe	...	100	...	90

STRENGTHEN HIV INTEGRATION

Current school attendance among young people aged 10-14¹

	Orphans		Non-orphans	
	2009	2012	2009	2012
Senegal	...	90	...	94
Seychelles	...	100	...	100
Sierra Leone	47	47	76	76
South Africa	98	98	99	99
Swaziland	90	97	93	99
Togo	92	77	96	89
Uganda	...	...	82	
United Republic of Tanzania	60	32	...	62
Zambia	81	...	88	...
Zimbabwe	...	88	...	95
Western and Central Europe				
Spain	99	...	...	...

¹ For the indicator definition, go to <http://www.indicatorregistry.org/node/864>.



20 Avenue Appia
CH-1211 Geneva 27
Switzerland

+41 22 791 3666
distribution@unaids.org

unaids.org

