TOGETHER WE WILL END AIDS
GETTING TO ZERO
Low- and middle-income countries are on track to reach 15 million people with antiretroviral treatment by 2015.

Source: UNAIDS, 2012
Cumulative life-years gained from antiretroviral drugs, 1996–2011
54% of all people eligible were receiving antiretroviral therapy in low- and middle-income countries in 2011.

- **Sub-Saharan Africa**: 56%
- **Caribbean**: 67%
- **Latin America**: 70%
- **Middle East and North Africa**: 13%
- **Eastern Europe and Central Asia**: 23%
- **Asia**: 44%
- **Oceania**: 76%

Legend:
- ○ Number of people eligible for antiretroviral therapy.
- ● Percentage receiving ART in 2011.

Source: UNAIDS, 2012
## New HIV infections among children, 2009–2011

### Rapid decline
Will reach the target if the 2009–2011 decline of more than 30% continues through 2015.

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>31%</td>
</tr>
<tr>
<td>Ghana</td>
<td>31%</td>
</tr>
<tr>
<td>Kenya</td>
<td>43%</td>
</tr>
<tr>
<td>Namibia</td>
<td>60%</td>
</tr>
<tr>
<td>South Africa</td>
<td>49%</td>
</tr>
<tr>
<td>Swaziland</td>
<td>39%</td>
</tr>
<tr>
<td>Zambia</td>
<td>55%</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>45%</td>
</tr>
</tbody>
</table>

### Moderate decline
Can reach the target if the decline in 2009–2011 of 20–30% is accelerated.

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>22%</td>
</tr>
<tr>
<td>Burundi</td>
<td>30%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>24%</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>20%</td>
</tr>
<tr>
<td>Lesotho</td>
<td>21%</td>
</tr>
<tr>
<td>Malawi</td>
<td>26%</td>
</tr>
<tr>
<td>Uganda</td>
<td>24%</td>
</tr>
</tbody>
</table>

### Slow or no decline
In danger of not reaching the target, with a decline in 2009–2011 of less than 20%.

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>0%</td>
</tr>
<tr>
<td>Chad</td>
<td>4%</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>–</td>
</tr>
<tr>
<td>Mozambique</td>
<td>5%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2%</td>
</tr>
<tr>
<td>United Republic of Tanzania</td>
<td>19%</td>
</tr>
<tr>
<td>India</td>
<td>–</td>
</tr>
</tbody>
</table>

**Note:** The baseline year for the Global Plan is 2009. Some countries had already made important progress in reducing the number of new HIV infections among children in the years before 2009, notably Botswana which by 2009 already had 92% coverage of antiretroviral regimens among pregnant women and a transmission rate of 5% (see table pp122–123). In countries with high coverage, further declines are much harder to achieve.
Low- and middle-income countries are on track to eliminate new HIV infections among children (0–14 years).

Source: UNAIDS, 2012
Coverage with antiretroviral regimens among pregnant women living with HIV, low- and middle-income countries, 2005-2011

Coverage in 2010 and onwards cannot be compared with previous years as it does not include single-dose nevirapine, which WHO no longer recommends.
Maternal access to antiretrovirals needs to be consistent, to boost coverage during breastfeeding

Percentage of eligible mother-child pairs receiving effective prophylaxis to prevent new HIV infections among children, low- and middle-income countries, 2011

- 61% During pregnancy and delivery
- 29% During breastfeeding

Source: UNAIDS, 2012
The world is **NOT on track** to halve adult HIV infections
New adult HIV infections are declining, particularly in Africa

Estimated ranges and mid-points for:
- Sub-Saharan Africa
- Asia
- Latin America
- Caribbean
- Oceania

Source: UNAIDS, 2012
New adult HIV infections are rising in Eastern Europe and Central Asia, and in the Middle East and North Africa

Source: UNAIDS, 2012
Selected HIV prevention technologies shown to be effective in reducing HIV transmission in randomized controlled trials

<table>
<thead>
<tr>
<th>STUDY</th>
<th>EFFECT SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antiretroviral therapy in an HIV-positive partner</td>
<td>96% (73-99)</td>
</tr>
<tr>
<td>HPTN 052/Africa, Asia, Americas</td>
<td></td>
</tr>
<tr>
<td>Pre-exposure prophylaxis (oral emtricitabine/tenofovir; tenofovir)</td>
<td>75% (55-87)</td>
</tr>
<tr>
<td>for heterosexual discordant couples</td>
<td></td>
</tr>
<tr>
<td>Partners PrEP/Uganda, Kenya</td>
<td>67% (44-81)</td>
</tr>
<tr>
<td>Pre-exposure prophylaxis (oral emtricitabine/tenofovir; tenofovir)</td>
<td></td>
</tr>
<tr>
<td>for heterosexual men and women TDF2/Botswana</td>
<td>63% (22-83)</td>
</tr>
<tr>
<td>Pre-exposure prophylaxis (oral emtricitabine/tenofovir; tenofovir)</td>
<td></td>
</tr>
<tr>
<td>for men who have sex with men IPrEX/Americas, Thailand, South Africa</td>
<td>44% (15-63)</td>
</tr>
<tr>
<td>Microbicide (1% tenofovir vaginal gel)</td>
<td>39% (6-60)</td>
</tr>
<tr>
<td>CAPRISA 004/ South Africa</td>
<td></td>
</tr>
<tr>
<td>HIV vaccine RV144/Thailand</td>
<td>31% (1-51)</td>
</tr>
</tbody>
</table>

Source: Adapted from Karim SS, Karim QA. Lancet, 2011.
TRANSFORMING SOCIETIES
Community support keeps people on treatment

**CLINIC-BASED TREATMENT**

70% still receiving treatment after two years
Sub-Saharan Africa: people receiving ART from specialist clinics

**COMMUNITY TREATMENT MODEL**

98% still receiving treatment after two years
Mozambique: self-initiated community model

Percentage of countries reporting non-discrimination laws or regulations for specific populations

- **80%** General non-discrimination
- **78%** Women
- **22%** Men who have sex with men
- **15%** Transgender people

I am gay: 5 things I fear

~80
Nearly 80 countries have laws that criminalize same-sex sexual relations²

19%
of men who have sex with men are afraid to walk in their own community³

21%
of men who have sex with men report being blackmailed³

42%
of men who have sex with men reported receiving an HIV test and knowing the result in the past 12 months⁵

I am scared of the police.

I am worried to walk around my neighborhood.

My gay friend was put in jail.

I am not able to get condoms and lubricants.

I am afraid to go openly gay.

I decided to get married so nobody thinks I’m gay.

I worry about getting an HIV test.

I don’t want to go to my local clinic for an HIV test.

I might lose my job.

The nurse was really rude to me.

My doctor won’t treat me well.

I don’t know where to get condoms discreetly.

I might not get treatment.

5%
of men who have sex with men are denied health care based on their sexuality³
Men who have sex with men are at higher risk of HIV infection¹

<10%
Fewer than 10% of men who have sex with men have access to HIV prevention services²
Condom use by men who have sex with men is low⁵

18%
of men who have sex with men are afraid to seek health care services³

It shouldn’t be like this...

Measuring stigma

<table>
<thead>
<tr>
<th>COUNTRY OR REGION*</th>
<th>Belarus</th>
<th>China</th>
<th>El Salvador</th>
<th>Myanmar</th>
<th>Paraguay</th>
<th>Poland</th>
<th>Rwanda</th>
<th>United Kingdom</th>
<th>Zambia urban</th>
<th>Zambia rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>% EXPERIENCING STIGMA IN FAMILY AND COMMUNITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluded from family events</td>
<td>7</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>17</td>
<td>11</td>
<td>22</td>
<td>...</td>
<td>28</td>
<td>27</td>
</tr>
<tr>
<td>Gossiped about</td>
<td>67</td>
<td>39</td>
<td>48</td>
<td>45</td>
<td>56</td>
<td>55</td>
<td>42</td>
<td>63</td>
<td>72</td>
<td>80</td>
</tr>
<tr>
<td>% EXPERIENCING VIOLENCE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbally insulted</td>
<td>42</td>
<td>30</td>
<td>31</td>
<td>18</td>
<td>26</td>
<td>...</td>
<td>53</td>
<td>40</td>
<td>52</td>
<td>51</td>
</tr>
<tr>
<td>Physically assaulted or physically harassed</td>
<td>14</td>
<td>6</td>
<td>7</td>
<td>10</td>
<td>9</td>
<td>25</td>
<td>20</td>
<td>22</td>
<td>17</td>
<td>33</td>
</tr>
<tr>
<td>% EXPERIENCING STIGMA AND DISCRIMINATION IN THE WORKPLACE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment opportunity refused</td>
<td>17</td>
<td>14</td>
<td>8</td>
<td>15</td>
<td>8</td>
<td>11</td>
<td>37</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Loss of job or income</td>
<td>28</td>
<td>...</td>
<td>19</td>
<td>...</td>
<td>12</td>
<td>17</td>
<td>65</td>
<td>...</td>
<td>36</td>
<td>39</td>
</tr>
<tr>
<td>% EXPERIENCING INTERNALIZED STIGMA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel ashamed or have low self-esteem</td>
<td>36</td>
<td>75</td>
<td>...</td>
<td>81</td>
<td>43</td>
<td>38</td>
<td>22</td>
<td>63</td>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td>Feel suicidal</td>
<td>7</td>
<td>...</td>
<td>17</td>
<td>25</td>
<td>22</td>
<td>19</td>
<td>14</td>
<td>25</td>
<td>8</td>
<td>22</td>
</tr>
</tbody>
</table>

*These countries represent a cross-regional snap-shot of information collected using the People Living with HIV Stigma Index.
HIV prevalence (%) among people 15–24 years old, by sex, selected countries, 2008–2011

Source: Demographic and Health Surveys and other national population-based surveys with HIV testing.
Women need funded HIV strategies

Globally, women represent 49% of all adults living with HIV

- 19% of countries do not have a multisectoral HIV strategy that includes women.
- 41% of countries have included women in their HIV strategies and have earmarked a budget accordingly.
- 59% of countries did not have a multisectoral HIV strategy, including women, with an earmarked budget. Some 40% had included women as a sector in their HIV strategies but had not earmarked a budget. The other 19% had neither an HIV strategy nor an earmarked budget.

Every minute a young woman acquires HIV infection

Women living with HIV are more likely to experience violations of their sexual and reproductive rights

HIV is the leading cause of death for women of reproductive age

Fewer than 30% of all young women have comprehensive, correct knowledge of HIV

Only 1 female condom for every 36 women in sub-Saharan Africa

Young women (15-24 years) are twice as likely as young men to acquire HIV infection

Young people meet to CrowdOutAIDS

Young volunteers hosted CrowdOutAIDS open forums around the world to ensure that recommendations for a new UNAIDS strategy on HIV and young people reflected the diverse perspectives of young people, especially where Internet penetration is low.

GETTING VALUE FOR MONEY
Morocco experience shows that resources should be invested for populations at higher risk

The Global Fund has increased allocations for prevention and treatment for key populations at higher risk.

Source: Report commissioned by UNAIDS: Evidence of re-allocation of funds to basic HIV program activities in GFATM grants; 2012.
South African provincial HIV spending does not match the numbers of people living with HIV

People living with HIV (PLHIV)

HIV spending per province in 2009

Source: South Africa National AIDS Spending Assessment 2009.
Prices of first-line and second-line antiretroviral regimens for adults in low-income countries, 2008–2011


EFV: efavirenz;
FTC: emtricitabine;
TDF: tenofovir disoproxil fumarate;
NVP: nevirapine;
3TC: lamivudine;
ZDV: zidovudine;
d4T: stavudine;
ABC: abacavir;
ddi: didanosine;
LPV/r: lopinavir with a ritonavir boost.
Successful country initiatives to cut the costs of antiretroviral drugs

**UKRAINE**

**ACTION** Successful advocacy efforts of civil society and development partners

**SAVINGS** US$ 190 per treatment regimen for the most frequently used regimen (zidovudine + lamivudine + efavirenz) between 2008 and 2011

**UGANDA** (TASO project)

**ACTION** Ring-fenced antiretroviral funds for antiretroviral medicines
- Regularly monitored antiretroviral market prices
- Promptly switched to approved generics

**SAVINGS** US$ 1.3 million between 2006 and 2007

**SWAZILAND**

**ACTION** Revised antiretroviral tender process, included ceiling prices, supplier performance data and more reliable quantification methods

**SAVINGS** US$ 12 million between January 2010 and March 2012

**BRAZIL**

**ACTION** Implemented a compulsory licence for the manufacture of efavirenz

**SAVINGS** US$ 95 million between 2007 and 2011

**NIGERIA**

**ACTION** Coordinated with the implementing partners of the United States President’s Emergency Plan for AIDS Relief for planning, purchase, shipping and distribution of antiretroviral drugs
- Transferred antiretroviral drugs between them to avoid stock-outs, costly emergency orders and waste due to expired drugs

**SAVINGS** US$ 2.8 million in drug costs between May 2010 and November 2011

**SOUTH AFRICA**

**ACTION** Introduced new tender process to increase competition among suppliers
- Pooled procurement across provinces to achieve economies of scale
- Improved price transparency

**SAVINGS** US$ 640 million between 2011 and 2012

---

Note: At an exchange rate of 7.40 ZAR/USD, the savings amounted to R 4.7 billion.
Integration saves money: integrated versus non-integrated HIV counselling and testing, average costs, selected countries

Notes: An example of stand-alone counselling and testing is separate HIV clinics. Integrated counselling and testing includes other health services such as sexual and reproductive health, family planning or primary health care. Kenya (2002): average unit costs of stand-alone counselling and testing sites compared with integrated counselling and testing in three primary health care clinics. Kenya (2008): stand-alone versus integrated in health centres in nine sites. India (2007): stand-alone versus integrated in one clinic offering reproductive health services and counselling and testing. Uganda (2009): one stop versus same structure in hospital setting (all hospital counselling and testing clients).

Reduction in the annual cost of antiretroviral therapy, per person, selected countries, 2006 to 2010–2011

*PEPFAR is the United States President’s Emergency Plan for AIDS Relief. CHAI is the Clinton Health Access Initiative.

Sources: Menzies NA et al. AIDS, 2011; Bollinger L, Adesina A. UNAIDS, 2011; CHAI data, Clinton Health Access Initiative, in press.
Facility-level and total treatment costs per person per year in Zambia, 2009

Note: Total treatment costs include facility-level costs, finance and accounting, Human Resources management, procurement, quality assurance, inventory and supply control, data analysis, insurance, IT and telecommunication, laboratory support and community liaison.

Proportion of total HIV resources spent on programme management by region, 2007–2009

Note: UNGASS 2010 data (or last year available). Programme management includes planning, coordinating and managing programmes, such as administering the disbursement of funds, drug supply, monitoring and evaluation, information and communication technology and infrastructure.
Proportion of people living with HIV employed before and after starting antiretroviral therapy in KwaZulu-Natal, South Africa.
The costs of inaction

3-year delay = 5 million new HIV infections

3-year delay = 3 million AIDS deaths

Projected antiretroviral therapy programme costs and benefits for 2011–2020 for people receiving treatment supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria, as of 2011.

INVESTING SUSTAINABLY
Resources available for HIV in low- and middle-income countries, 2002–2011
HIV investment needed in low- and middle-income countries

**2015**
- **24.0** US$ billion
- **GAP 7.2** US$ billion

**2020**
- **21.5** US$ billion
- **GAP 4.7** US$ billion

Source: UNAIDS, May 2012.
HIV expenditure by national income level

- Brazil, Russian Federation, India, China and South Africa
- Other upper-middle-income countries
- Other lower-middle-income countries
- Low-income countries

Years: 2005 to 2011

Expenditure in US$ billions

Source: UNAIDS
International assistance disbursed to low- and middle-income countries for HIV in 2011

- United States President’s Emergency Plan for AIDS Relief (PEPFAR) (48%)
- European governments (21%)
- Other OECD-DAC governments (2%)
- Global Fund to Fight AIDS, Tuberculosis and Malaria (18%)
- Other multilateral agencies (4%)
- Philanthropics (6%)
- Brazil, Russian Federation, India, China and South Africa and non-OECD DAC governments (<1%)
Domestic share of total investment in health and AIDS in Africa, 2010

Share of care and treatment expenditure originating from international assistance, African countries, 2009–2011

Source: Global AIDS Response Progress Reporting country reports (most recent available).
Net official development assistance as a percentage of gross national income, OECD-DAC members, 2011

Share of 2011 gross national income

Sweden
Norway
Luxembourg
Denmark
Netherlands
United Kingdom
Belgium
Finland
Ireland
France
Switzerland
Germany
Australia
Canada
Portugal
Spain
New Zealand
Austria
United States
Italy
Japan
Republic of Korea
Greece
DAC total

Target

0% 0.7%

Official development assistance allocated to HIV (%)

United States
Ireland
United Kingdom
Denmark
Netherlands
Sweden
France
Canada
Norway
Austria
Germany
Luxembourg
Australia
Belgium
Japan
Finland
New Zealand
Republic of Korea
Spain
Switzerland
Italy
Portugal
Greece
DAC total

0% 15%

Sources: OECD; UNAIDS/Kaiser Family Foundation
International assistance (US$) per person living with HIV, 2011
Scenarios for additional domestic public HIV investment in low- and middle-income countries, 2015 and 2020

![Chart showing HIV allocation according to burden of disease, health allocation, 15% of national budget, and economic growth for 2015 and 2020.](chart)

- **2015**:
  - HIV allocation: 1.0 billion
  - Health allocation: 0.7 billion
  - Economic growth: 0.6 billion
- **2020**:
  - HIV allocation: 0.9 billion
  - Health allocation: 0.9 billion
  - Economic growth: 2.1 billion
Domestic health expenditure does not always match the burden of disease

**HIGHER-PREVALENCE COUNTRIES**
- Burden of HIV disease as a % of the total disease burden: 16%
- Domestic HIV investment as a % of the domestic health budget: 0%

**LOWER-PREVALENCE COUNTRIES**
- Burden of HIV disease as a % of the total disease burden: 16%
- Domestic HIV investment as a % of the domestic health budget: 0%

### Potential of new global health funding mechanisms

<table>
<thead>
<tr>
<th>Potential international revenue source</th>
<th>Probable revenue</th>
<th>Possible amount available for HIV</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tax on financial transactions</strong></td>
<td>US$ 150 billion</td>
<td>US$ 3.75 billion</td>
<td>50% for development, of which 5% for HIV</td>
</tr>
<tr>
<td><strong>Currency transaction levy for development</strong></td>
<td>US$ 35 billion</td>
<td>US$ 1.75 billion</td>
<td>5% for HIV</td>
</tr>
<tr>
<td><strong>Expansion of airline levy and MASSIVEGOOD</strong></td>
<td>US$ 1 billion</td>
<td>US$ 1 billion</td>
<td>100% for HIV</td>
</tr>
</tbody>
</table>

Source: Leading Group; Interviews; McKinsey analysis.