HIV TREATMENT

GLOBAL UPDATE ON HIV TREATMENT 2013:

RESULTS, IMPACT AND OPPORTUNITIES

WHO report

in partnership with UNICEF and UNAIDS

JUNE 2013

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ACRONYMS AND ABBREVIATIONS

3TC	lamivudine
AIDS	acquired immune deficiency syndrome
ART	antiretroviral therapy
ARV	antiretroviral
AZT	zidovudine
d4T	stavudine
EFV	efavirenz
eMTCT	elimination of mother-to-child transmission (of HIV)
FTC	emtricitabine
HBV	hepatitis B virus
HCV	hepatitis C virus
HIV	human immunodeficiency virus
LPV/r	lopinavir/ritonavir
NNRTI	non-nucleoside reverse-transcriptase inhibitor
NVP	nevirapine
PMTCT	prevention of the mother-to-child transmission of HIV
QALY	quality-adjusted life year
TB	tuberculosis
TDF	tenofovir disproxil fumarate
UNAIDS	Joint United Nations Programme on HIV/AIDS
WHO	World Health Organization

EXECUTIVE SUMMARY

The massive global expansion of access to HIV treatment has transformed not only the HIV epidemic but the entire public health landscape, demonstrating that the right to health can be realized even in the most trying of circumstances.

This publication reports on the progress being made in the global scale-up in the use of antiretroviral (ARV) medicines in low- and middle-income countries, the challenges that are being overcome or that await solutions and the opportunities for building on the achievements of the past decade.[1]

Chapter 1 provides new data on the latest developments in the global treatment effort, highlighting positive trends as well as aspects that require improvement. It also discusses the key recommendations of the 2013 WHO *Consolidated Guidelines on the Use of Antiretroviral Drugs for Treating and Preventing HIV Infection*, which are designed to take advantage of the multiple benefits of antiretroviral therapy (ART) for treating and preventing HIV infection. Chapter 2 summarizes the impact of the scale-up in reducing AIDS-related mortality and new HIV infections. Chapter 3 examines the sequence of steps in the continuum of care from HIV diagnosis to successful provision of ART services and outlines key supportive innovations. Finally, Chapter 4 discusses the implications and anticipated impact of the new 2013 WHO ARV guidelines.

Promising results

The remarkable increase in access to life-saving ART continued in 2012. Fully 1.6 million more people were receiving ART in low- and middle-income countries at the end of 2012, compared with a year earlier – the largest annual increase ever – with the greatest contribution coming from the WHO African Region. The 300 000 people who were receiving ART in low- and middle-income countries in 2002 increased to 9.7 million in 2012.

In the WHO African Region, which continues to bear the brunt of the HIV epidemic, more than 7.5 million people were receiving treatment at the end of 2012 compared to 50 000 people a decade earlier. There has been progress in every region, including in ones that had been lagging behind. The pace of this global scale-up of treatment is being maintained even in the midst of economic crisis.

These accomplishments reflect the political commitment, community mobilization, technical innovation, domestic and international funding and other forms of support that have catalysed the global scaling up of ART.

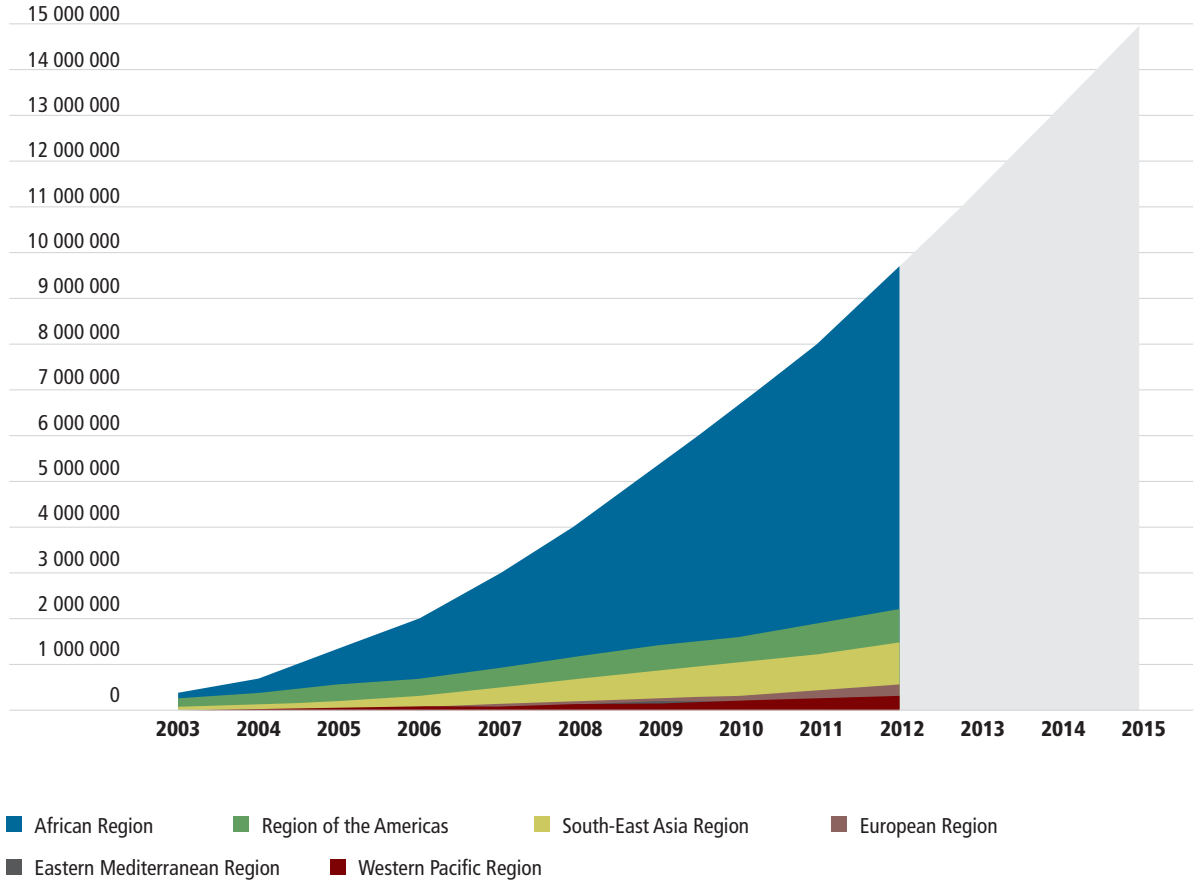
Nevertheless, substantial additional effort is needed to enable 15 million people to access ART in 2015, the target agreed to by United Nations Member States in June 2011 at the General Assembly High-Level Meeting on AIDS in New York. The 9.7 million people receiving ART in 2012 represented 65% of that 15 million target, up from 54% at the end of 2011 (Fig. 1).

The overall progress, however, masks some important disparities in access to ART. In most regions, including the WHO African Region, men eligible for ART appear to be less likely to be receiving it than women. Further, the treatment gains are not reaching enough children, adolescents and key populations who face high risk of HIV infection (including sex workers, people who inject drugs, men who have sex with men and transgender people).

The number of children younger than 15 years receiving ART in low- and middle-income countries increased from 566 000 in 2011 to 630 000 in 2012, but the increase was substantially less than for adults. In 2012, over 900 000 pregnant women living with HIV received ARV prophylaxis or treatment for PMTCT

1. At the time this report was prepared (June 2013), country-level HIV programme data for 2012 were available for most but not all countries, and estimates of the number of people eligible for ART were available only for the 22 countries prioritized in the Global Plan. The report therefore focuses on presenting and analysing data on expanding services that are based on programme reports from countries that have submitted data and limits the discussion of service coverage at the end of 2012 to the 22 priority countries in the *Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive*. References to global and regional coverage estimates are limited to 2011, using 2011 eligibility estimates generated by 2012 country models.

Fig. 1. Actual and projected numbers of people receiving antiretroviral therapy in low-and middle-income countries, and by WHO Region, 2003–2015



Source: 2013 Global AIDS Response Progress Reporting (WHO/UNICEF/UNAIDS).

(excluding single-dose nevirapine which WHO no longer recommends) – one third more than in 2009. However, many women living with HIV who need ART are missing opportunities to start treatment during pregnancy, including in some countries that have a high burden of HIV infection.

Based on current trends in the scaling up of ART programmes, countries can be grouped into three broad categories.[1] In the first group are countries – including some with a high burden of HIV infection – that already are providing treatment to at least 80% of the people who are eligible for it[2] along with several other countries that are poised to emulate them. A second group includes countries that have made considerable progress in scaling up treatment but that need to boost the pace and scope of their efforts significantly if they are to reach the 80% coverage target in 2015. Finally, a third group of countries is far short of the global target and is struggling with serious structural weaknesses in health and governance systems. These countries need major support to boost their treatment efforts.

Regardless of the current status of countries in scaling up ART, renewed efforts are needed everywhere in order to achieve the maximum treatment and prevention benefits.

1. The categorization is based on a linear projection of changes in the number of people receiving and eligible for ART until the end of 2015, based on the most recent year with available data for both ART provision and eligibility, i.e. the year 2012 for the 22 countries included in the Global Plan.

2. Based on the 2010 WHO treatment eligibility criteria: CD4 count ≤350 cells/mm^3.

An increasingly powerful impact

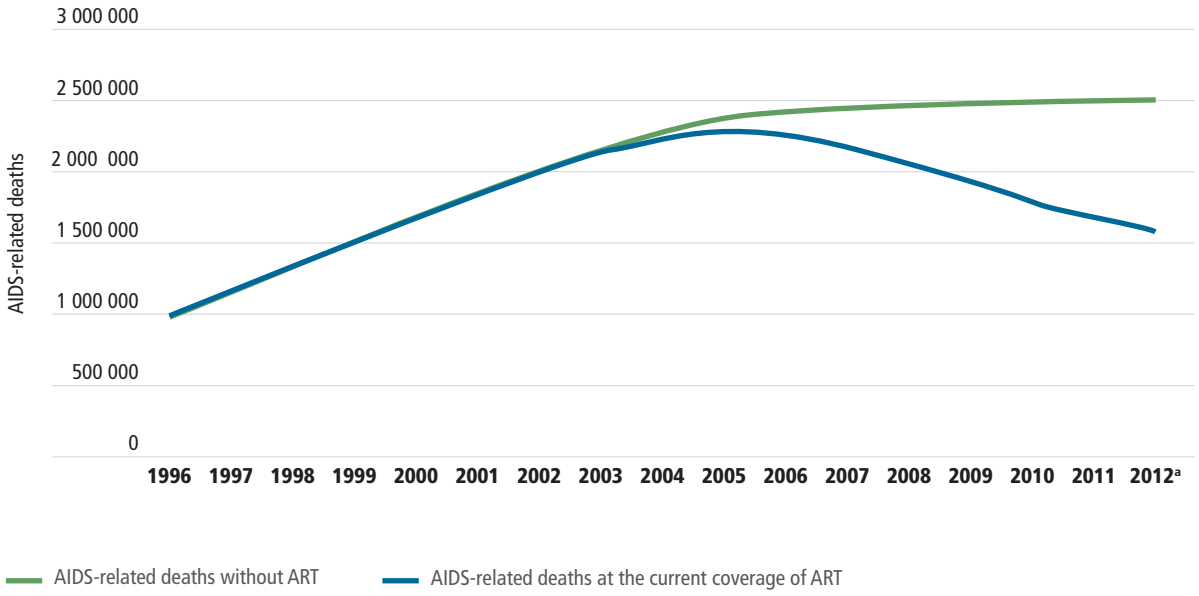
Expanding access to ART is changing the global HIV epidemic in momentous ways. AIDS-related mortality rates are declining rapidly. The scaling up of ART averted an estimated 4.2 million deaths in low- and middle-income countries in 2002–2012 (Fig. 2). Joint TB and HIV interventions saved the lives of more than 400 000 people in 2011 alone (eight times more than in 2005).

Improved access to ART is resulting in major increases in life expectancy. In South Africa, for example, data from ART programmes in three provinces show that the life expectancy of adults receiving ART is about 80% of the normal life expectancy, provided they do not start treatment late.

The preventive impact of ART is increasingly evident, including in concentrated HIV epidemics and especially when ART is combined with classical prevention efforts. A recent study in rural South Africa, for example, found that the incidence of HIV infection fell by 17% for every 10% increase in the number of people receiving ART.

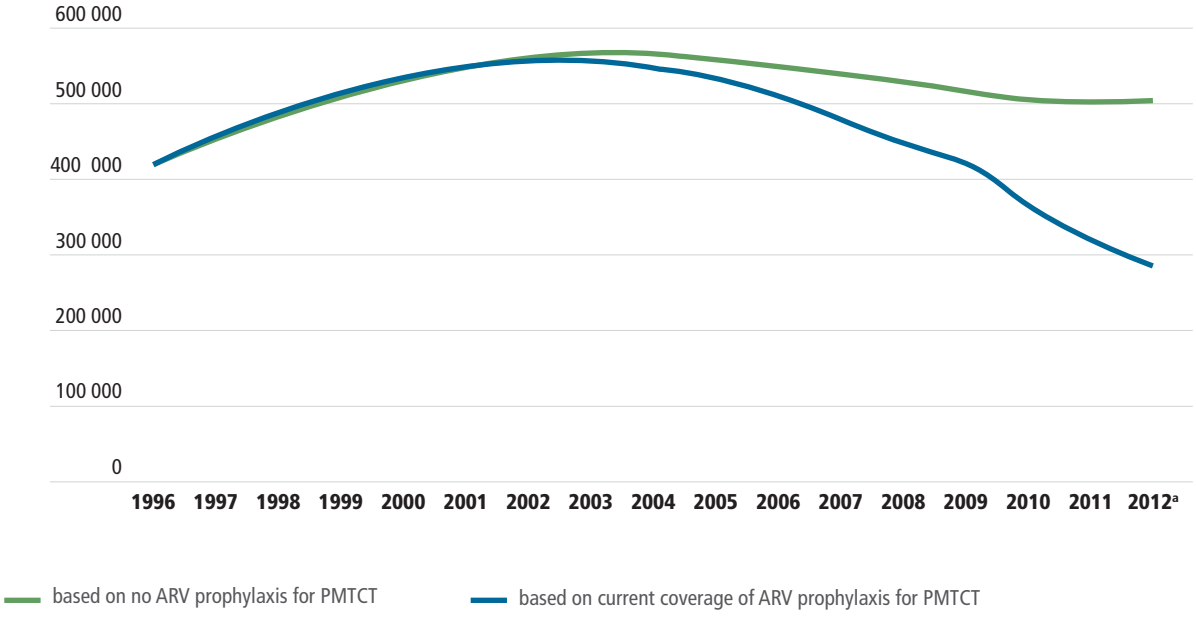
The scaling up of ART is also contributing significantly to the ongoing drop in annual new HIV infections around the world, including among children. Expanding programmes for PMTCT and the use of more effective ARV regimens helped prevent more than 800 000 children from becoming newly infected between 2005 and the end of 2012. In the 21 African priority countries in the Global Plan, which account for about 90% of all pregnant women living with HIV and new infections among children globally, mother-to-child transmission rates declined overall from an estimated 26% [24-30%] in 2009 to 17% [15-20%] in 2012.

Fig. 2. Annual number of people dying from AIDS-related causes in low- and middle-income countries globally compared with a scenario of no antiretroviral therapy, 1996–2012



[a] The data points for 2012 are projected based on the scaling up of programmes in 2009–2011 and do not represent official estimates of the number of annual AIDS-related deaths.

Fig. 3. Number of children acquiring HIV infection in low- and middle-income countries, 1996–2012



[a] The data points for 2012 are projected based on the scaling up of programmes in 2009–2011 and do not represent official estimates of the number of annual child infections.

Maximizing the benefits of ART

Programme coverage is improving in all regions, but significant numbers of adults and children still drop out of care at various points along the treatment cascade, from HIV diagnosis to long-term retention in care. Maximizing the multiple benefits of ART requires improving the uptake of HIV testing and counselling, linking people to care, enabling them to initiate ART early and supporting adherence and retention in care.

In many countries surveyed in sub-Saharan Africa more than half the people estimated to be living with HIV are not aware of their HIV status. In some countries, significant proportions of pregnant women living with HIV either remain undiagnosed or, if diagnosed, do not start on ARV medicines for their own health and to prevent the mother-to-child transmission of HIV. Other studies in sub-Saharan Africa show that close to half the people who test HIV-positive are lost between testing and being assessed for eligibility, and 32% of the people considered eligible for ART are lost between being assessed for eligibility and initiating ART. Numerous efforts are underway to reduce such attrition.

Expanding HIV testing and counselling

HIV testing is the critical first step in linking people living with HIV to the treatment cascade, and it also provides an important opportunity to reinforce HIV prevention. Testing uptake increased impressively in every region, with 118 million people in 124 low-and middle-income countries receiving HIV testing and counselling in 2012.

High coverage of provider-initiated testing and counselling has been achieved in antenatal care and TB clinics (but not in other clinical services), especially in countries with a high burden of HIV infection. Community-based HIV testing and counselling services, including for key populations, and integrating HIV testing with other disease campaigns are proving effective as strategies for effective increasing testing uptake.

However, large proportions of people remain unaware of their serostatus. In all regions, men are less likely than women to take an HIV test, and coverage of HIV testing and counselling is especially low among adolescents and key populations. Structural, operational, logistical

and social barriers – including stigma, discrimination, and punitive laws and policies – continue to hinder access to testing for key populations. Although the early diagnosis of HIV in infants is improving in many countries, in 2011 only 35% [29–41%] of infants born to mothers living with HIV received an HIV test within the first two months of life.

As a consequence, in all regions, large numbers of people test and present late for HIV treatment, usually once their health is failing, which diminishes the benefits of ART.

Linking patients from testing to care

Too many patients are being "lost" between taking an HIV test and starting ART. Several approaches for overcoming this challenge are showing promise, including supportive counselling, providing co-trimoxazole prophylaxis free of charge, ensuring shorter waiting times at clinics and using point-of-care CD4 testing.

Antiretroviral therapy initiation, retention and adherence

Initiating ART early is vital for successful treatment. The median CD4 count when ART is initiated is rising in all regions but is still too low, and about 1 in 4 people in low-income settings initiate ART late, with CD4 counts <100 cells/mm^3.

Once people start ART, the retention rates are initially high and then gradually decline. Data reported in 2013 for 18 countries with cohorts of at least 2000 people on ART indicate that the average retention rates decreased from about 86% at 12 months to 82% at 24 months and 72% at 60 months. Studies confirm that decentralizing ART services improves retention in care, including for children, and various forms of adherence support are also proving effective, including treatment support networks and community adherence clubs, using mobile-phone text reminders, diary cards and food rations.

The goal of ART is to achieve and sustain viral suppression among the people receiving ART. Recent studies show that very good outcomes can be achieved, even in poorly resourced settings. In a large study in Rwanda, for example, 86% of the people receiving ART had viral suppression 18 months after starting ART; in Senegal, about 80% of the people receiving ART were achieving viral suppression after five years. Sustaining such achievements will take special efforts, particularly as there are indications that as ART continues to be scaled up the rates of drug resistance may increase. Systems for monitoring early warning indicators and conducting surveillance of HIV drug resistance must be in place to detect these patterns in a timely manner.

Implications of the 2013 WHO antiretroviral guidelines

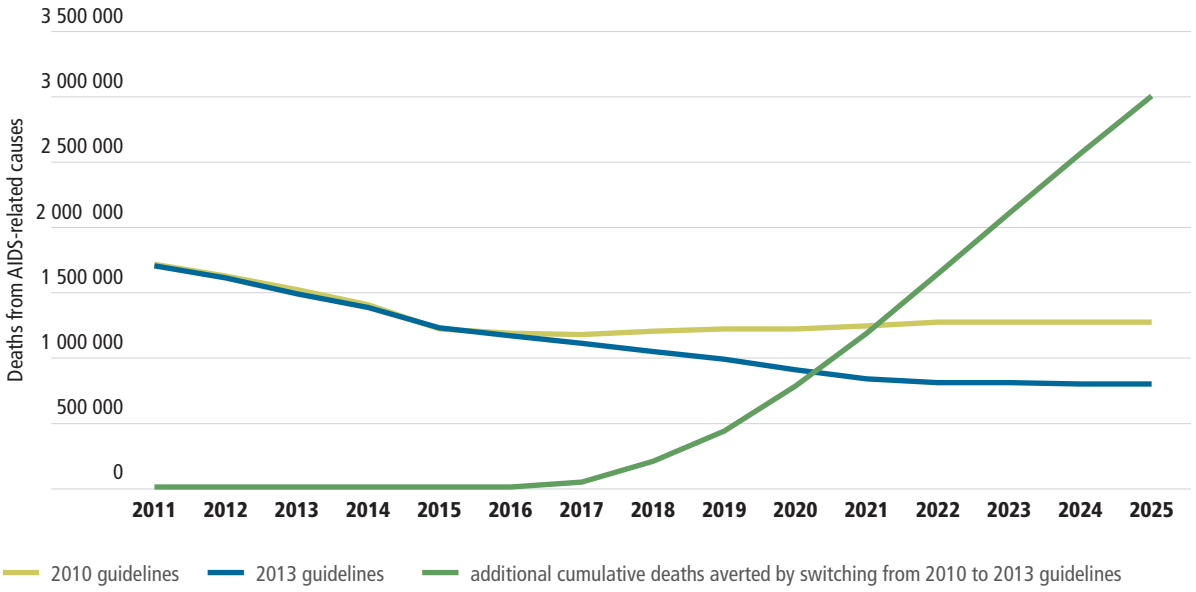
Current trends in the global scaling up of ART give great cause for optimism. Nevertheless, further improvements are both necessary and possible. To take full advantage of the enormous impact of providing ART for preventing people from dying and from becoming newly infected with HIV, WHO has revised its ARV guidelines to recommend earlier initiation of ART and immediate ART in certain circumstances. The 2013 ARV guidelines recommend initiating ART earlier – at CD4 count ≤500 cells/mm^3 – and immediately initiating ART for serodiscordant couples, pregnant women living with HIV, people with TB and HIV, people with HIV and hepatitis B, and children living with HIV who are younger than five years, irrespective of CD cell count.

If fully implemented, the 2013 WHO ARV guidelines could avert at least an additional 3.0 million deaths and prevent close to an additional 3.5 million new infections between 2012 and 2025 in low- and middle-income countries, compared with continuing with the 2010 treatment guidelines (Fig. 4 and 5).

Realizing these benefits could require a 10% increase in total annual investment in the global HIV response in the coming years, which is "very cost effective" according to global criteria. These resource needs are projected to level off over time before declining after 2025, a trend that reflects the accumulated prevention benefits of expanding the provision of ART. Greater access to ART will reduce new HIV infections and thereby eventually reduce the number of people eligible for ART.

The demonstrated benefits of ART in terms of averted deaths and prevented infections exceed many of the expectations that helped launch the global scaling up of ART a decade ago. The 2013 WHO ARV guidelines are designed to extend these benefits more widely and will increase the potential number of people eligible for ART to an estimated 25.9 million (9.2 million more people than were eligible under the previous 2010 WHO treatment guidelines). These changes underscore the need to intensify efforts globally to expand access to ART.

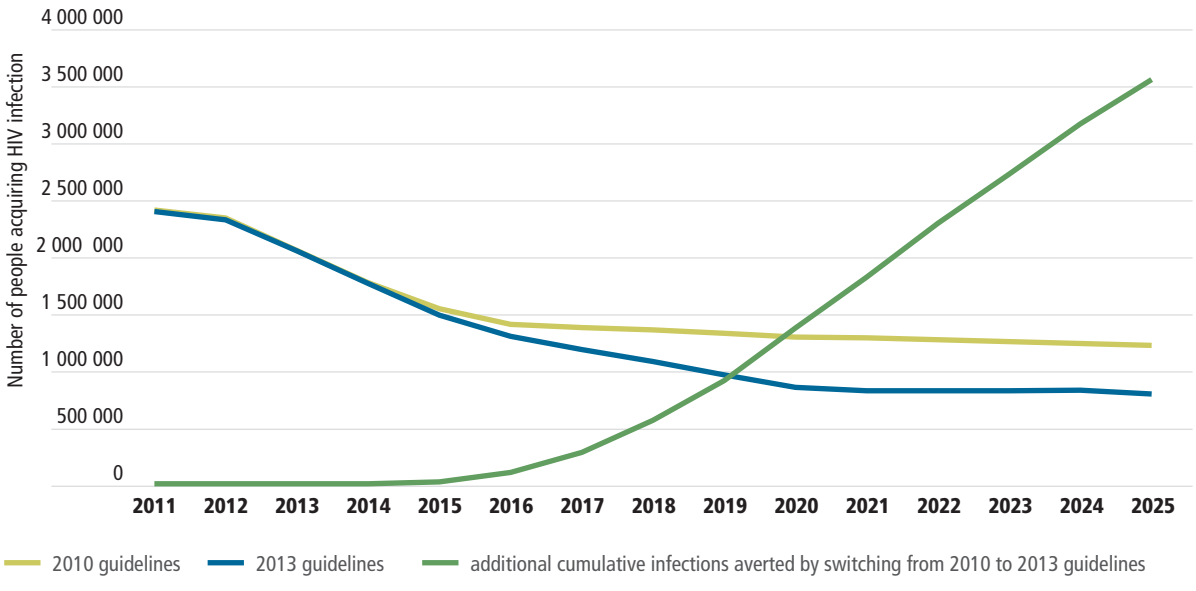
Fig. 4. Projected annual number of people dying from AIDS-related causes in low- and middle-income countries based on the 2010 WHO treatment guidelines and the 2013 WHO ARV guidelines and cumulative deaths averted by switching from 2010 to 2013 guidelines, 2011–2025



Source: special analysis conducted by Futures Institute, 2013.

Maintaining 80% coverage under the WHO 2010 treatment guidelines involves initiating ART at CD4 ≤350 cells/mm³ or clinical stages III or IV; maintaining 80% coverage under the WHO 2013 ARV guidelines involves initiating ART at CD4 ≤500 cells/mm³, and for serodiscordant couples, pregnant women living with HIV and children living with HIV younger than five years, irrespective of CD4 count.

Fig. 5. Projected annual number of people acquiring HIV infection in low- and middle-income countries based on the 2010 WHO treatment guidelines and on the 2013 WHO ARV guidelines and cumulative number of people avoiding HIV infection by switching from 2010 to 2013 guidelines, 2011–2025



Source: special analysis conducted by Futures Institute, 2013.

1. PROGRESS TOWARDS GLOBAL TARGETS

KEY POINTS

More people than ever received life-saving antiretroviral medicines in 2012

The number of people accessing antiretroviral therapy (ART) globally continues to climb rapidly, and the target of reaching 15 million people with this life-saving treatment is within grasp.

- The number of people receiving HIV treatment has tripled in five years – and reached 9.7 million in low- and middle-income countries in 2012. That total represents 65% of the global target of 15 million people set for 2015, up from 54% at the end of 2011.
- There were about 1.6 million more people on ART at the end of 2012 compared to end-2011, the largest-ever increase in a single year. The remarkable pace of scaling up ART is continuing despite the ongoing global economic crisis.
- If this substantial effort is sustained, the world can reach the global target of 15 million people receiving ART by the end of 2015.
- Most countries with a high burden of HIV infection are potentially on track to achieve universal access (defined as 80% ART coverage, based on the 2010 WHO criteria for treatment eligibility). However, some countries urgently need major support to boost their scaling up of treatment.
- Access to ART has increased in every region. The WHO African Region is leading the scale-up effort and is home to 4 of 5 people who started ART in 2012. The WHO European Region and Eastern Mediterranean Region have seen substantial rates of increase but remain the regions with the lowest estimated treatment coverage among low- and middle-income countries.

The scaling up of antiretroviral (ARV) medicines provided to prevent the mother-to-child transmission (PMTCT) of HIV is progressing well.

- In 2012, over 900 000 women globally were receiving ARV medicines for PMTCT, a third more that the number in 2009, the baseline year for the Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive.
- In the 21 African priority countries named in the *Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive*, 65% [55%-71%] of pregnant women living with HIV received ARV medicines for PMTCT in 2012, compared with 59% in 2011 and 49% in 2009.
- Based on current trends, one of the core targets of the Global Plan – providing ARV medicines to 90% of pregnant women living with HIV globally by the end of 2015 – appears to be within reach.

HIV treatment is still not reaching enough children and key populations.

- The number of children younger than 15 years receiving ART rose from 566 000 in 2011 to 630 000 in 2012, but the percentage increase was smaller than for adults (11% versus 21%).
- A huge effort is needed to reach the goal of providing ART to all children eligible for treatment by the end of 2015.

- Certain populations at higher risk of HIV infection are not benefiting equitably from ART, including people who inject drugs, men who have sex with men, transgender people and sex workers.
- Stigma, discrimination and punitive laws are denying these key populations the multiple benefits of ART.
- In some regions, including the WHO African Region, men eligible for ART are less likely than women to receive it.

The 2013 WHO *Consolidated Guidelines on the Use of Antiretroviral Drugs for Treating and Preventing HIV Infection* aim to boost the impact of ART by broadening the criteria for eligibility for ART.

- The new guidelines reflect evidence indicating the multiple treatment and preventive benefits of initiating ART earlier.
- The CD4 threshold for treatment of adults living with HIV is being raised to 500 cells/mm^3, and treatment regardless of CD4 count is recommended for all children living with HIV younger than 5 years, all pregnant women living with HIV, people living with HIV and coinfected with TB or hepatitis B and HIV-positive partners in serodiscordant relationships.
- Applied to the current reality, the new 2013 guidelines would increase the total current number of people eligible for ART in low- and middle-income countries globally from 16.7 million to 25.9 million people. However, the additional prevention benefit of ART means that the total number of people eligible for ART will peak in 2021 and will then decline significantly.

Scaling up antiretroviral therapy: moving to 15 million people receiving antiretroviral therapy – and beyond

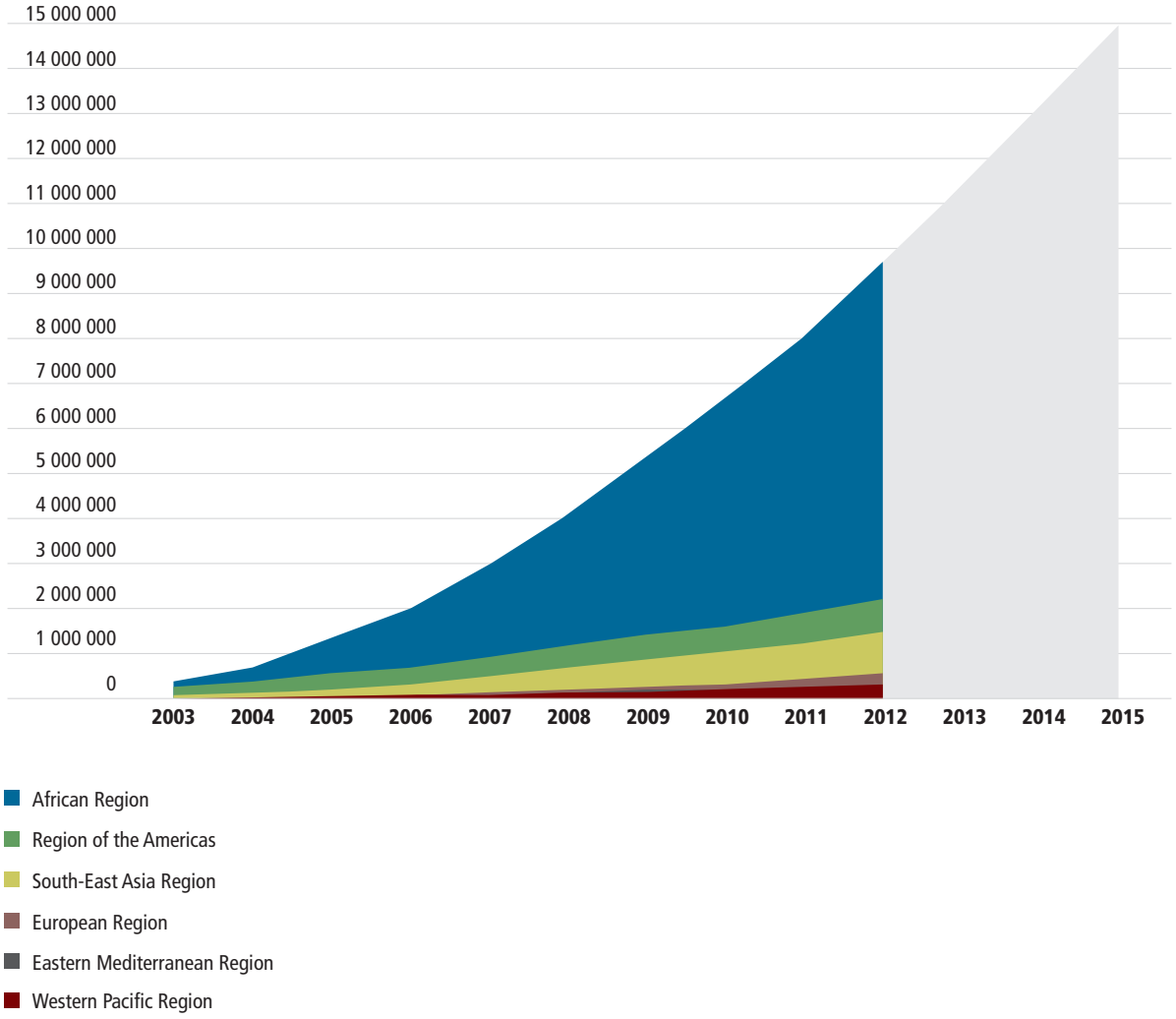
The scaling up of life-saving and infection-preventing HIV treatment across the world during the past decade constitutes one of the great public health achievements in recent decades. Its starting-point has been the fundamental principle that everyone has the right to health. The progress thus far demonstrates that this right can be realized, even in settings with extremely limited resources.

When WHO issued its first ART guidelines for resource-limited countries in 2002 *(1)*, about 300 000 people in such settings were receiving HIV treatment, half of them in Brazil. Ten years later, at the end of 2012, about 9.7 million people were receiving ART in low- and middle-income countries (Fig. 1.1).

This rapid expansion of access to ART testifies to the impact of strong political commitment, the mobilization of substantial resources, the tailoring of health systems and service delivery models and the dedication of people around the world, including people living with HIV.

The 9.7 million people receiving ART at the end of 2012 represented 65% of the 15 million target adopted by 189 United Nations Member States in June 2011 at the General Assembly High-Level Meeting on AIDS in New York *(2)*, up from 54% in 2011.

Fig. 1.1. Actual and projected numbers of people receiving antiretroviral therapy in low- and middle-income countries, and by WHO Region, 2003–2015



Source: 2013 Global AIDS Response Progress Reporting (WHO/UNICEF/UNAIDS).

Globally, 1.6 million more people were receiving ART in 2012 compared with 2011, the largest increase ever in one year. If the pace at which ART provision is expanding continues to increase in the coming years, the target of reaching 15 million with ART by the end of 2015 will be within reach (Fig. 1.1).[1]

Importantly, the recent pace of scaling up ART has been sustained in the 22 countries with a high HIV burden that have also been prioritized in the Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive *(3)* (Table 1.1). Together, this enabled almost 1.4 million more people to be on ART by the end of 2012. In those countries, 63% [57–67%] of the people eligible for ART were receiving it in 2012, up from 54% [49–58%] in 2011.

1. Original data on progress in the AIDS response presented in this document are drawn from the "Global AIDS Response Progress Reporting (GARPR)" mechanism, which is described in detail in the methodological annex. Source data are provided by countries, and are jointly collected and validated by WHO, UNICEF and UNAIDS. Some limitations apply; these are highlighted in the annex.

Table 1.1. Antiretroviral therapy among adults and children in 22 selected countries with a high burden of HIV infection, 2011 and 2012

	Reported number of people receiving ART, 2011	Estimated number of people eligible for ART, 2011 [range]	Estimated ART coverage, 2011 [range][a]	Reported number of people receiving ART, 2012	Estimated number of people eligible for ART, 2012 [range]	Estimated ART coverage, 2012 [range][a]
Angola	35 529	110 000 [90 000–130 000]	32% [27–40%]	42 607	120 000 [97 000–140 000]	36% [30-44%]
Botswana	178 684	200 000 [190 000–210 000]	89% [86–93%]	204 298	210 000 [200 000–220 000]	>95% [93–>95%]
Burundi	26 402	49 000 [43 000–56 000]	54% [47–62%]	29 121	50 000 [44 000–57 000]	58% [51–67%]
Cameroon	105 653	270 000 [250 000–290 000]	40% [37–43%]	122 783	280 000 [260 000–300 000]	45% [41–48%]
Chad	32 832	100 000 [87 000–120 000]	33% [27–38%]	40 856	100 000 [89 000–120 000]	40% [33–46%]
Côte d'Ivoire	82 721	230 000 [200 000–250 000]	37% [33–41%]	110 370	230 000 [200 000–260 000]	49% [43–54%]
Democratic Republic of the Congo	53 554	220 000 [200 000–240 000]	25% [23–27%]	64 219	220 000 [200 000–240 000]	29% [27–32%]
Ethiopia	265 174	480 000 [440 000–530 000]	55% [50–60%]	288 137	480 000 [440 000–520 000]	60% [55–65%]
Ghana	54 589	120 000 [100 000–130 000]	47% [41–53%]	69 870	120 000 [110 000–140 000]	58% [51–65%]
India	543 000	1 100 000 [930 000–1 200 000]	50% [45–59%]	604 987	1 100 000 [950 000–1 300 000]	55% [48–64%]
Kenya	538 983	780 000 [740 000–830 000]	69% [65–73%]	604 027	830 000 [790 000–880 000]	73% [69–77%]
Lesotho	83 626	160 000 [150 000–170 000]	53% [50–55%]	92 747	170 000 [160 000–180 000]	56% [53–58%]
Malawi	322 209	550 000 [520 000–580 000]	59% [56–62%]	404 905	580 000 [550 000–610 000]	70% [67–74%]
Mozambique	273 561	650 000 [590 000–740 000]	42% [37–46%]	308 577	690 000 [620 000–780 000]	45% [40–49%]
Namibia	104 531	120 000 [110 000–130 000]	86% [78–>95%]	116 687	130 000 [120 000–140 000]	90% [82–>95%]
Nigeria	432 285	1 500 000 [1 400 000–1 700 000]	29% [26–32%]	491 021	1 500 000 [1 400 000–1 700 000]	32% [29–35%]
South Africa	1 702 060	2 400 000 [2 300 000–2 500 000]	71% [67–75%]	2 150 880	2 600 000 [2 500 000–2 700 000]	83% [79–87%]
Swaziland	72 402	98 000 [93 000–100 000]	74% [70–78%]	87 534	110 000 [100 000–110 000]	82% [78–87%]
Uganda	313 117	… [550 000–840 000][b]	… [37–57%][b]	438 542	… [540 000–840 000][b]	… [52–81%][b]
United Republic of Tanzania	277 070	690 000 [630 000–760 000]	40% [36–44%]	432 293	710 000 [650 000–780 000]	61% [55–66%]
Zambia	415 685	560 000 [530 000–590 000]	74% [70–78%]	480 925	590 000 [560 000–630 000]	81% [77–85%][b]
Zimbabwe	476 321	660 000 [630 000–700 000]	72% [68–76%]	565 675	720 000 [680 000–750 000]	79% [75–83%][b]
TOTAL	6 390 000	11 700 000 [11 000 000–13 000 000]	54% [49–58%]	7 750 000	12 300 000 [11 600 000–13 600 000]	63% [57–67%]

Note: some numbers do not add up because of rounding.

[a] The coverage estimate is based on the estimated unrounded number of people receiving and eligible for ART.
[b] Estimates of the number of the people eligible for ART are currently under review. Therefore, coverage can only be presented as a range.

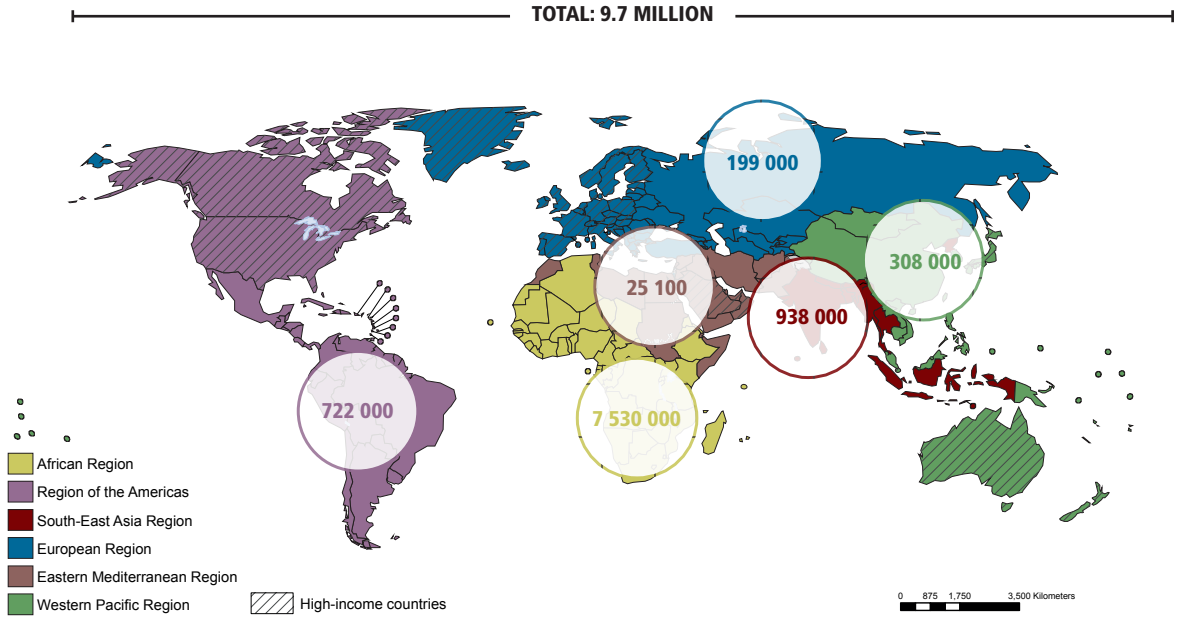
Source: 2013 Global AIDS Response Reporting (WHO/UNICEF/UNAIDS) and 2013 UNAIDS/WHO estimates.

Achieving the full impact of ART requires reaching the 2015 target and continuing further scale-up beyond 2015 (Chapters 2 and 4). The preventive effect of ART on onward HIV transmission has been confirmed in both clinical trials *(4)* and routine programme settings *(5)*, highlighting the prospect that rapidly scaling up effective combination HIV prevention,[1] including ART, could enable the world eventually to achieve an AIDS-free generation *(6)*.

Confirmation of the major, broader treatment and prevention benefits of ART has led to important revisions in the new 2013 WHO ARV guidelines *(7)*. The changes include recommending earlier initiation of ART for people diagnosed with HIV (at CD4 ≤500 cells/mm^3) and immediate ART for serodiscordant couples, pregnant women living with HIV and children living with HIV younger than five years. These recommendations increase the potential number of people eligible for ART to an estimated 25.9 million in 2013 – which amounts to 9.2 million more people than were eligible under the previous 2010 WHO ARV guidelines. These changes underscore the need to intensify efforts globally to expand access to ART.

Expanding effective treatment and prevention interventions would enable countries eventually to reach a "tipping point" beyond which the number of people starting HIV treatment exceeds the number of people acquiring HIV infection. This represents an important milestone in countries' HIV responses *(6)*. Several countries with high HIV prevalence appear to have passed such a "tipping point" already (for example, Botswana, Ghana, Haiti, Malawi, Namibia, Rwanda, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe), and several others are poised to follow their example (Burundi, Ethiopia, Gabon and Uganda).[2]

Fig. 1.2. Number of people receiving antiretroviral therapy in low- and middle-income countries, by WHO region, 2012



Source: 2013 Global AIDS Response Progress Reporting (WHO/UNICEF/UNAIDS).

1. Combination prevention simultaneously uses complementary behavioural, biomedical and structural prevention interventions. They include ART, voluntary medical male circumcision, consistent and correct use of male and female condoms, along with other proven behavioural and structural interventions.

2. Based on the number of new infections, using the 2011 Spectrum estimates, and the number of people on ART, according to the 2012 Global AIDS Response Progress Reporting (WHO/UNICEF/UNAIDS).