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## HIV/AIDS update 2005: Stop AIDS- keep the promise



- Trends in epidemiology
- Focus on prevention
- Progress in scaling up ART

An update established in the frame of the  
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## Table of contents

Executive Summary.....	4
1. Introduction.....	5
2. Trends in epidemiology.....	6
3. Focus on prevention.....	7
4. Progress in scaling up antiretroviral treatment.....	9
References and Resources.....	12

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## List of Abbreviations

<b>ARI</b>	Acute respiratory tract infection
<b>ARV</b>	Antiretroviral Drugs
<b>ART</b>	Antiretroviral Therapy
<b>CBH</b>	Community based health
<b>CBO</b>	Community based organisation
<b>CBR</b>	Community based rehabilitation
<b>CDD</b>	Community driven development
<b>CIDA</b>	Canadian International Development Agency
<b>DFID</b>	Department for International Development, UK
<b>FGM</b>	Female genital mutilation
<b>GFATM</b>	Global Fund to Fight AIDS, TB and Malaria
<b>GIPA</b>	Greater involvement of people living with HIV and AIDS
<b>GTZ</b>	Deutsche Gesellschaft für Technische Zusammenarbeit
<b>ICASO</b>	International Council of AIDS Service Organisations
<b>IMCI</b>	Integrated management of childhood illnesses
<b>INGO</b>	International non-governmental organisation
<b>ITDG<sup>1</sup></b>	The Intermediate Technology Development Group
<b>LQAS</b>	Lot quality assurance sampling
<b>MAP</b>	World Bank's Multi-Country HIV/AIDS Programme for Africa
<b>MDG</b>	Millennium development goal
<b>MNPI</b>	Maternal and neonatal program effort index
<b>PDQ</b>	Partnership defined quality
<b>PEPFAR</b>	US government's President's Emergency Plan for AIDS Relief
<b>PLWHA</b>	People living with HIV or AIDS
<b>RBA</b>	Rights-based approach
<b>SCF</b>	Save the Children Fund
<b>SDC</b>	Swiss Agency for Development and Co-operation
<b>SGBV</b>	Sexual and gender based violence
<b>STI</b>	Swiss Tropical Institute
<b>TB</b>	Tuberculosis
<b>TBA</b>	Traditional birth attendant
<b>3x5</b>	WHO Three by Five initiative
<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS
<b>UNGASS</b>	United Nations General Assembly Special Session dedicated to HIV/AIDS
<b>UNICEF</b>	United Nations Children's Fund
<b>UNDP</b>	United Nations Development Programme
<b>UNFPA</b>	United Nations Population Fund
<b>USAID</b>	United States Agency for International Development
<b>WHO</b>	The World Health Organisation

## Executive Summary

According to the UN 2005 AIDS epidemic update, in 2005 there were an additional five million new infections and more than 3 million people died of AIDS-related illnesses. The number of women living with HIV has increased to 17.5 million. With an estimated 40.3 million people living with HIV in 2005, the global epidemic has reached its highest level. While the epidemic is progressing fastest in Eastern Europe, Central and East Asia, Sub-Saharan Africa still remains the hardest hit region. Encouragingly, three countries, Zimbabwe, Kenya and Uganda have seen decreasing prevalence rates – a success which is directly attributed to effective prevention efforts. “Stop AIDS. Keep the Promise.” is the theme of the 2005 World AIDS day to convene to leaders to keep up commitments in the fight against HIV/AIDS as today it is becoming increasingly clear that neither the 3 by 5 Initiative nor the Millennium Development Goal on HIV/AIDS will be met. Though the mobilisation of funds has greatly accelerated, it remains insufficient. Other remaining challenges are many: The HIV/AIDS response needs to be better integrated in the overall development efforts. Prevention needs up scaling and intensification especially to groups with high risk behaviour as access to effective prevention services remains grossly inadequate in countries most in need. Adequate prevention could avert until the year 2010 more than half of the expected new infections. To this end, at the global level, a new call for stronger prevention efforts has been supported by a UNAIDS position paper. Though the development of new prevention strategies, such as microbicides or vaccines, is progressing steadily, there is yet no major breakthrough and efforts need to continue. Female condoms will most likely soon become much cheaper in developing countries, implying a need for a new focus for their adequate dissemination. Major challenges remain the financial sustainability, weak coordination and health systems and paediatric treatment. Though the number of people on ART globally more than doubled from 2003 to approximately one million in June 2005, in Sub Saharan Africa 95% of those in need remain without access.

# 1. Introduction

**“Stop AIDS. Keep the Promise.” is the theme of the 2005 World AIDS day.**

**The mobilisation of funds for the fight against HIV/AIDS remains insufficient, but has greatly accelerated.**

**Remaining challenges are many. The HIV/AIDS response needs to be better integrated in the overall development efforts.**

This year’s theme of the World AIDS day is “Stop AIDS. Keep the Promise.” This theme appeals to all of us involved in the fight against AIDS to ensure our continued commitment and dedication in the delivery of HIV prevention, services and care. Increased commitment and urgent action is still a priority. At the same time knowledge and experience on how to overcome obstacles to prevention, treatment, and support for affected households has been increasing continuously. Countries like Brazil and Uganda have shown that simultaneous expansion of prevention and treatment, accompanied by strong leadership and sustained investment in health systems, makes it possible to reverse the spread of HIV. In recent years, HIV/AIDS has moved much higher up on the international agenda. An estimated 6.1 billion US\$ were available in 2004 for HIV/AIDS programmes in low- and middle income countries, 20 times more than the amounts spent in 1996. UNAIDS estimates that this figure will be close to 8 billion US\$ in 2005 and 10 billion US\$ in 2007. The Global Fund has committed more than 1.7 billion US\$ in additional resources for AIDS. Switzerland has so far contributed 16.3 million US\$ to the fund.

Initiatives such as “3 by 5”<sup>2</sup> have shown that **targets can help to turn debates into practice**. At the same time, affected low- and middle- income countries have also substantially increased their AIDS-related expenditures, domestic spending on AIDS in 2007 is projected to be at least 20 per cent higher than in 2004. However, this trend is mainly due to increased public expenditure in treatment and care.

At the same time, many **challenges** remain. A Global Task Team was formed in 2005 by leaders from donor and developing country governments, civil society, UN agencies and other multilateral and international institutions to develop a set of recommendations on improving the institutional architecture of the response to HIV and AIDS. A particular focus was on how the multilateral system could streamline, simplify and further harmonize procedures and practices to improve the effectiveness of country-led responses.

HIV/AIDS has still not been integrated sufficiently into development policies and poverty reduction strategies. The implementation of fully comprehensive AIDS strategies and the link to the implementation at the local and community level has a long way to go, just like the scaling up of promising local projects into broad-based comprehensive programmes with sufficient coverage to influence the course of the epidemic.

<sup>2</sup> “3 by 5” is the global target to provide three million people living with HIV/AIDS in low- and middle-income countries with life-prolonging antiretroviral treatment (ART) by the end of 2005, an initiative led by the World Health Organisation.

## 2. Trends in epidemiology

Overall trends in HIV transmission continue to increase.

Uganda, Kenya and Zimbabwe have experienced decreasing infection rates.

Eastern Europe, Central Asia and East Asia have seen the steepest increases in HIV infections worldwide

The epidemics in Asia are fuelled mainly by a combination of injecting drug use and commercial sex.

According to the UN 2005 AIDS epidemic update, overall trends in HIV transmission are still increasing. There were an additional five million new infections in 2005, more than 3 million people died of AIDS-related illnesses and close to 5 million people were newly infected with the virus this year. The number of women living with HIV has increased to 17.5 million. With an estimated 40.3 million people living with HIV in 2005, the global epidemic has reached its highest level.

**Sub-Saharan Africa** remains the most affected region, home to 25.8 million people living with HIV, almost one million more than in 2003. Two thirds of all people living with HIV are in sub-Saharan Africa, an estimated 2.4 million people died of HIV-related illnesses in 2005 and 3.2 million became newly infected with HIV. Six southern African countries have HIV infection levels of 20% or higher (Botswana, Lesotho, Namibia, South Africa, Swaziland and Zimbabwe). Everywhere in **East Africa**, HIV prevalence has remained stable in the past several years, with the exception of Uganda, Kenya and Zimbabwe. In Kenya, overall infection rates decreased from a peak of 10% in the late 1990s to 7% in 2003, in Zimbabwe from 26% in 2003 to 21% in 2004. Evidence suggests that these declines are due to changes in sexual behaviour. However, data on behaviour suggests also that the past declining prevalence trends in Uganda may not continue without a renewed focus on prevention. Mozambique has seen a rise from 14% in 2002 to just over 16% in 2004, Swaziland one from 34% in 2000 to 43% in 2004. In Zambia, urban residents compared with rural residents are twice as likely to be HIV-infected with the highest infection levels clustered in cities with major transport routes. Similarly, in Malawi, South Africa and Zimbabwe, HIV is spreading fastest where main transport links exist. Also in Madagascar HIV prevalence has risen sharply in recent years, reaching an estimated 1.8% in 2005. At the same time, just 12% of young men and 5% of young women said they used a condom the last time they had sex with a casual partner. Though **West and Central Africa** has historically been less severely affected than other parts of sub-Saharan Africa, epidemics vary in scale and intensity. Burkina Faso has some encouraging trends of dropping infection rates among certain population groups. In Senegal, though national HIV prevalence remains below 2%, higher rates are found in some regions. In the Republic of the Congo, HIV prevalence varies from 1% to 10% in different parts of the country. Nigeria is home to more people living with HIV than any other country, except South Africa and India and in one of its states infection levels rose from 4% in 1994 to 12% in 2003.

**Eastern Europe, Central Asia and East Asia** have seen the steepest increases in HIV infections worldwide; Central Asia for example experienced a 25% increase since 2003. Latest estimates in 2005 show some 8.3 million people live with HIV in the region including 1.1 million people who became newly infected in

**The Caribbean remains the Second most affected region, though some countries have seen declining prevalence rates.**

the past year. The epidemics are mainly fuelled by combinations of injecting drug use and commercial sex. In China for example, at least half of female drug users had at some stage also engaged in commercial sex. Yet only a handful of countries in the region are making serious-enough efforts to focus on prevention in this area on the scale required. As a result, many of the epidemics in Asia are in transition with an epidemic concentrated among the population with high risk behaviour now spilling over to the general population. This process is well-underway in Indonesia, Viet Nam and in parts of China.

**The Caribbean** is the second-most affected region in the world. AIDS is the leading cause of death among adults aged 15-44 years, in 2005 the death toll accounted to 20 000. There are substantial regional differences, HIV prevalence surpasses 1% in Barbados, Dominican Republic, Jamaica and Suriname, 2% in the Bahamas, Guyana and Trinidad and Tobago and exceeds 3% in Haiti. Overall, HIV prevalence in the Caribbean showed no change in 2005, compared with 2003. Countries which have seen declining prevalence rates over the past few years are Bahamas, Barbados, Bermuda, Dominican Republic and Haiti. Main driving force of the region's epidemics is heterosexual unprotected intercourse. Some developments give cause for guarded optimism. In Haiti, pregnant women testing HIV-positive reduced by half from 1993 to 2003-2004, a decline that appears to be associated with behavioural change.

In **Latin America** the number of people living with HIV has risen to an estimated 1.8 million. Argentina, Brazil and Colombia, primarily due to their large populations, are home to the biggest epidemics in this region. In nearly all the countries, the highest levels of HIV infection are being found among men who have sex with men, followed by high infection rates among female sex workers. The highest HIV prevalence is found in the smaller countries of Belize, Guatemala and Honduras where approximately 1% of adults or more are infected with HIV.

### **3. Focus on prevention**

**Adequate prevention could avert until the year 2010 more than half of the expected new infections.**

It is estimated that adequate prevention could avert until the year 2010 more than half of the world wide expected 45 million new infections. Without effective prevention of new infections, there will never be enough resources, particularly in low-income countries, to cover the costs of antiretroviral treatment for all those in need. Evidence shows how intense prevention programmes have helped bring about decreases in HIV incidence, as it is the case among young people in Uganda and Tanzania, among sex workers and their clients in Thailand and India, and among injecting drug users in Spain and Brazil.

There has been progress in scaling up prevention - worldwide the number of young people who have received AIDS education has doubled since 2001. Progress has also been made with regard to implementing a comprehensive response in the **world of work**.

Access to effective prevention services remains grossly inadequate in countries most in need.

The proportion of firms in high-prevalence countries that have adopted HIV/AIDS policies has increased by 75 per cent in the past year.

Still, however, only one in five at risk have access to HIV prevention and up scaling prevention efforts is needed to reach the United Nations Millennium Development Goal of halting and beginning to reverse the spread of HIV by 2015. In 24 sub-Saharan countries (including Cameroon, Côte d'Ivoire, Kenya, Nigeria, Senegal and Uganda), two-thirds or more of young women lacked comprehensive knowledge of HIV transmission. Notably, many governments have failed to prioritize prevention initiatives that target populations at greatest risk of infection and they remain stigmatised. Worldwide targeted prevention services are reaching only:

- 16 per cent of sex workers
- 11 per cent of men who have sex with men
- 53 per cent of prisoners
- 20 per cent of street children
- 5 per cent of injecting drug users

While prevention in terms of awareness creation and behaviour change interventions is still insufficient, even greater is the gap in terms of **medical prevention**. Less than 0.4 per cent of adults in low- and middle-income countries receive voluntary counselling and testing services. Services to prevent mother-to-child transmission reach only 8 per cent of pregnant women – of which only 5 per cent live in Africa, where the absolute majority of all children born with HIV is living.

Despite progress, no major breakthrough can be reported about the development of new prevention strategies, such as microbicides or vaccines.

Other potential future prevention strategies are still at the stage of being developed or tested and studied. Five **microbicide** candidates are now being tested in large-scale clinical trials. The long struggle to get women to protect themselves against HIV received a major boost in early November 2005, when two global pharmaceutical companies (Merck & Co. Inc. and Bristol-Myers Squibb) signed agreements enabling researchers of the International Partnership for Microbicides (IPM), a non-profit group, to create a microbicide using their promising anti-AIDS compounds.

Also, there is today a scientific consensus that an **AIDS vaccine** is possible. The number of AIDS vaccine candidates in small-scale human trials has doubled (to more than 30 in 19 countries on six continents) since 2000 and the number of countries and agencies involved has significantly grown. HIV vaccine development is unusually challenging for reasons that relate to the virus itself, ethical considerations in the conduct of vaccine trials, and the socio-economic context" (UNAIDS). Today, scientists and experts refrain from giving a definite prognosis in terms of how many years it will likely take for an HIV vaccine to come on the market.

Compared to the nine billion male **condoms** that were distributed globally in the last year, only twelve million female condoms were made available during the same period, one of the main barriers being its higher price. In October 2005 the female condom manufacturer FHC announced that a second-generation female condom

Female condoms may soon become much cheaper in developing countries.

(FC2) would be made available to developing countries. Depending on the volume of condoms purchased, the FC2 could be sold for US \$0.22 per unit, three times less than the existing female condom. The Global Consultation on the Female Condom held in September 2005 served to review evidence of the female condom's effectiveness in preventing pregnancy and sexually transmitted infections (STIs) and to learn about countries' program experiences.

The consultation developed a *Plan of Action* for moving forward to accelerate access to and use of the female condom in developing countries<sup>3</sup>.

At the global level, a new call for stronger prevention efforts has been supported by a UNAIDS position paper.

At the **policy level**, prevention had a stronger lobby in 2005 as compared to the year before. The UNGASS declaration of commitment in 2001 was a milestone to mark HIV prevention as the mainstay of the AIDS response. Now, to address concerns that expanded access to treatment could divert both resources and attention away from prevention, **UNAIDS** has recently led an initiative to intensify global prevention efforts and developed a **position paper** which emphasizes these opportunities. It underlines the new opportunities for HIV prevention today and puts special emphasis on a comprehensive set of principles as quality standards for prevention as well as essential policy and programmatic actions. With regard to integrating prevention and treatment, one recommendation is for example to use the same health clinics to offer both treatment and testing, and to train health workers who administer ART to also offer prevention<sup>4</sup>. Importantly, prevention efforts must be based on human rights principles and address the issue of gender inequality.

## 4. Progress in scaling up antiretroviral treatment

The number of people on ART more than doubled from 2003 to approximately one million in June 2005.

Over the past year, there has been substantial progress in terms of expanding access to antiretroviral treatment (ART) for people in need in low-income countries (see latest "3 by 5" progress report June 2005<sup>5</sup>). The number of people on ART more than doubled from 400 000 in December 2003 to approximately one million in June 2005. An estimated 250 000 to 350 000 deaths were averted this year because of expanded access to HIV treatment. 14 low- and middle-income countries have met the target of providing ART to at least half of the people in need and several- most of them middle-income countries- are moving towards providing universal access.<sup>6</sup> Uganda announced universal access to antiretroviral therapy with 64 024 people on treatment. This is more than the government target of 60 000 patients for treatment by the end of 2005. Treatment coverage in countries such as Argentina, Brazil, Chile and Cuba now exceeds 80%.

<sup>3</sup> [http://www.path.org/projects/womans\\_condom\\_gcfc2005.php](http://www.path.org/projects/womans_condom_gcfc2005.php)

<sup>4</sup> [http://www.unaids.org/NetTools/Misc/DocInfo.aspx?LANG=en&href=http://gva-doc-owl/WEBcontent/Documents/pub/Governance/PCB04/pcb\\_17\\_05\\_03\\_en.pdf](http://www.unaids.org/NetTools/Misc/DocInfo.aspx?LANG=en&href=http://gva-doc-owl/WEBcontent/Documents/pub/Governance/PCB04/pcb_17_05_03_en.pdf)

<sup>5</sup> <http://www.who.int/3by5/june2005execsummary.pdf>

<sup>6</sup> Argentina, Barbados, Botswana, Brasil, Chile, Costa Rica, Cuba, El Salvador, Mexico, Panama, Poland, Thailand, Uruguay, Venezuela.

Half a million of Africans are today on ARV, but 95% of those in need remain without access.

The governments of many of the most highly affected countries have risen to the challenge of “3 by 5”. Of a total of 49 focus countries, 40 have set national treatment targets, up from only four in December 2003. Thirty-four of these countries are developing, or have completed, national treatment scale-up plans, up from only three countries 18 months ago. Many have committed their own resources to scale-up and are rapidly expanding the number of HIV testing, treatment and care sites.

The current momentum in expanding treatment access in **sub-Saharan Africa**, where the burden of disease is greatest, is encouraging. Approximately 500 000 people in the region are receiving treatment, a three-fold increase in the last 12 months and overall, scale-up appears to be accelerating. However, 95% of those in need remain without access to treatment. Most African countries report that demand for treatment is outstripping their capacity to supply it, and stress their urgent need for increased resources and technical support in order to maintain their momentum in scaling up. Progress of individual countries in scaling up coverage for ART can be monitored in the “plusnews treatment map”<sup>7</sup>.

Though the majority of countries in **eastern Europe and central Asia** aim to provide universal access by the end of 2005, this does not include the two countries with the largest unmet treatment need, the Russian Federation and Ukraine. In **Latin America** and the **Caribbean**, on average two out of three people who need treatment are receiving it, but several countries are lagging behind. In north Africa and the Middle East, coverage remains low at about 5 per cent.

The 3by5 goal will most likely not be met.

Overall progress is unlikely to be fast enough to reach the target set by WHO and UNAIDS of treating three million people by the end of 2005 and progress varies considerably from country to country. The estimate of 1 million receiving treatment is less than the 1.6 million that was set as a milestone by June 2005.

Further, there are wide differences in prices, coverage and health costs of ART and though price negotiations on ARVs have led to regional agreements on price conditions, these are often difficult to be applied at the national level. Especially due to lack of generic competition, much-needed second-generation ARVs that would be needed in case of resistance or contraindication to using first-line treatment are up to 12 times more expensive than the most affordable WHO-recommended first-line generics. WHO itself describes ARV prices as an “increasingly serious public health hazard”.

Major challenges remain the financial sustainability, weak coordination

The challenges of expanding coverage beyond current levels and building sustainable systems to support it remain significant. Main **obstacles** to scaling up persist. As outlined in the latest 3by5 progress report these include concerns about financial sustainability and the need for more and better coordinated technical support; insufficient availability of simple dosing formulations and a lack of easy-to-administer, palatable drugs for children; weak procurement

<sup>7</sup> <http://www.plusnews.org/AIDS/treatment.asp>.

and health systems and paediatric treatment.

and supply management systems for medicines and diagnostics; and the need to implement service models that standardize and streamline health care delivery, build sustainable human resources capacity, and integrate HIV treatment and prevention with reproductive health and other disease control programmes at the different levels of the health system.

As highlighted, access to ART has not extended widely to **children**. An estimated 660'000 children, mainly in Sub Saharan Africa, are currently in need of ART and an estimated 4 million in need of cotrimoxazole prophylaxis. Treating a child on first-generation ARVs can be four times more expensive than treating an adult. In Malawi and Mozambique, for example, only around 5 per cent of those on treatment are children, whereas equitable access would require coverage of approximately 13 percent. There are few adapted and affordable paediatric formulations for the 2.2 million children living with HIV, and few diagnostic and monitoring tools suited to their needs. If left untreated, half of all infected babies die before the age of two. UNICEF and UNAIDS now launched the campaign "Unite for Children, Unite Against AIDS" to draw more attention to children as a "missing face" of AIDS. The objective of the campaign is to achieve progress with regard to prevention of mother-to-child transmission; paediatric treatment; prevention; as well as protection and support of children affected by AIDS. The campaign aims to provide by 2010 antiretroviral treatment and/or cotrimoxazole to 80 percent of children in need.

Another important obstacle to overcome is to **strengthen health and social assistance systems**. It is estimated that as many as 100,000 health and community workers must be trained to expand access to antiretroviral therapy throughout the world. This implies the need to maximize the use of community-based resources and expanding training programmes. To this end WHO has developed training modules such as the "Integrated Management of Adult and Adolescent Illness".

Importantly, progress in scaling up ART has to be **monitored** closely. Experiences to date provide many lessons learned and models for improving the response in all of the critical areas highlighted. An initiative aiming at the dissemination of applied research findings is the AIDS Bulletin, a quarterly newsletter on HIV/AIDS published by the Medical Research Council in South Africa with support from SDC via the "Research Matters" initiative.

(<http://www.mrc.ac.za/aids/aidsbulletins.htm>)

## References and Resources

Progress made in the implementation of the Declaration of Commitment on HIV/AIDS, Report of the Secretary-General, 2005

[http://www.unaids.org/en/events/un+special+session+on+hiv\\_aids/2005+general+assembly+high+level+meeting+on+hiv\\_aids.asp](http://www.unaids.org/en/events/un+special+session+on+hiv_aids/2005+general+assembly+high+level+meeting+on+hiv_aids.asp)

UNAIDS Policy Position Paper: Intensifying HIV prevention, 2005,

<http://www.unaids.org/en/default.asp>

WHO, “3by5” initiative

<http://www.unaids.org/en/treat3millionby2005initiative.asp>

WHO, “3by5” Progress Report June 2005

<http://www.who.int/3by5/publications/progressreport/en/index.html>

The “Three Ones”

<http://www.unaids.org/Unaid/EN/About+UNAIDS/What+is+UNAIDS/UNAIDS+at+country+level/The+Three+Ones.asp>

Global Task Team on improving AIDS coordination among donor

[http://www.unaids.org/images/gtt/GTT\\_Brochure.pdf](http://www.unaids.org/images/gtt/GTT_Brochure.pdf)