

Report on the global AIDS epidemic



This Report was first published on a flash drive distributed at the XVII International AIDS Conference held in Mexico City August 2008; the same first electronic edition was posted with an errata sheet at www.unaids.org. This first print edition which incorporates all corrections to the first electronic edition, and is also the current version on UNAIDS website, should be regarded as definitive.

UNAIDS/08.25E / JC1510E (English original, August 2008)

© Joint United Nations Programme on HIV/AIDS (UNAIDS) 2008.

All rights reserved. Publications produced by UNAIDS can be obtained from the UNAIDS Content Management Team. Requests for permission to reproduce or translate UNAIDS publications—whether for sale or for noncommercial distribution—should also be addressed to the Content Management Team at the address below, or by fax, at +41 22 791 4835, or e-mail: publicationpermissions@unaids.org.

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.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by UNAIDS in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

UNAIDS does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

Cover photo: UNAIDS / N. Lieber

WHO Library Cataloguing-in-Publication Data

Report on the global HIV/AIDS epidemic 2008.

"UNAIDS/08.25E / JC1510E".

1.HIV infections – epidemiology. 2.HIV infections – therapy. 3.Acquired immunodeficiency syndrome – epidemiology. 4.Acquired immunodeficiency syndrome – prevention and control. I.UNAIDS.

ISBN 978 92 9 173711 6

(NLM classification: WC 503.4)

UNAIDS
20 avenue Appia
CH-1211 Geneva 27
Switzerland















T (+41) 22 791 36 66
F (+41) 22 791 48 35

unaids@unaids.org
www.unaids.org

2008 Report on the global AIDS epidemic



Table of contents

	Figures	
	Acknowledgements	
	Foreword	
	Chapter 1: The global HIV challenge: assessing progress, identifying obstacles, renewing commitment	11
	Chapter 2: Status of the global HIV epidemic	29
	Chapter 3: Addressing societal causes of HIV risk and vulnerability	63
	Chapter 4: Preventing new HIV infections: the key to reversing the epidemic	95
	Chapter 5: Treatment and care: unprecedented progress, remaining challenges	129
	Chapter 6: Mitigating the epidemic's impact on households, communities, and societies	159
	Chapter 7: Where do we go from here? Sustaining an effective, robust HIV response for the long-term	187
	Annex I: HIV and AIDS estimates and data, 2007 and 2001	211
	Annex II: Country Progress Indicators	235
	References	325
	Photo credits	356

Figures

CHAPTER 1

1.1	Selected events in the global response to the epidemic
Table 1	National indicators for the implementation of the <i>Declaration of Commitment on HIV/AIDS</i>
1.2	Percentage of UN Member States reporting by region, 2004–2008
1.3	Percentage of countries with monitoring and evaluation components in place, 2005 and 2007
1.4	Global trends in monitoring and evaluation system strengthening, 2005 and 2007

CHAPTER 2

2.1	Selected events in tracking the epidemic
2.2	A global view of HIV infection. 33 million people [30–36 million] living with HIV, 2007
Table 2	Analysis of trends among 15–24-year-olds in high-prevalence countries (all countries with national prevalence that exceeded 3% and four additional countries in Africa with notable prevalence levels): HIV prevalence among pregnant women (2000–2007) in sentinel surveillance systems, and selected sexual behaviours among women and men (1990–2007) from national surveys
2.3	Estimated number of people living with HIV and adult HIV prevalence. Global HIV epidemic, 1990–2007, and, HIV epidemic in sub-Saharan Africa, 1990–2007
2.4	Percent of adults (15+) living with HIV who are female, 1990–2007
2.5	Children living with HIV globally, 1990–2007
2.6	New HIV infections among children, 1990–2007
2.7	Child deaths due to AIDS, 1990–2007
2.8	HIV prevalence (%) in adults (15–49) in Africa, 2007
2.9	HIV prevalence (%) among pregnant women attending antenatal clinics in sub-Saharan Africa, 1997–2007
2.10	HIV prevalence (%) among 15–24 years old, by sex, selected countries, 2005–2007
2.11	Life expectancy at birth, selected regions, 1950–1955 to 2005–2010
2.12	Changes in population structure: Ghana and Lesotho
2.13	HIV prevalence (%) in adults (15–49) in Asia, 2007
2.14	HIV prevalence among injecting drug users, men having sex with men, and female sex workers in Pakistan, 2004–2007
2.15	Projected total number of HIV infections in various population groups, in Jakarta, Indonesia, 2000–2020
2.16	HIV prevalence (%) in adults (15–49) in Eastern Europe and Central Asia, 2007
2.17	HIV prevalence (%) in adults (15–49) in the Caribbean, 2007
2.18	HIV prevalence (%) in adults (15–49) in Latin America, 2007
2.19	HIV prevalence (%) in adults (15–49) in North America, Western and Central Europe, 2007
2.20	HIV infections newly diagnosed in injecting drug users and men who have sex with men, by country, and year of report, 2002–2006
2.21	HIV prevalence (%) in adults (15–49) in Middle East and North Africa, 2007
2.22	HIV prevalence (%) in adults (15–49) in Oceania, 2007
2.23	Annual diagnoses of HIV infection and AIDS in Australia, 1981–2006

CHAPTER 3

3.1	Selected events related to social determinants of the HIV epidemic
3.2	Percentage of countries in regions reporting that women are addressed as a specific component of their multisectoral HIV strategy with a specific HIV budget for their activities
3.3	Percentage of countries (by region) reporting policies in place to ensure equal access to HIV prevention, treatment, care, and support for women and men
3.4	Index of policies related to women's vulnerability to HIV
3.5	Percentage of countries (by region) reporting programmes designed to change societal attitudes of stigmatization associated with HIV and/or using indicators for reduction of HIV-related stigma and discrimination
3.6	Percentage of countries (by region) reporting legal protections against discrimination and relevant mechanisms
3.7	Median percentage of population reached with HIV prevention services within the specified legal environment
3.8	HIV prevalence by wealth status: men

CHAPTER 4

4.1	Selected events related to HIV prevention
4.2	Namibia: HIV related knowledge and behaviour in the general population, 2000–2006
4.3	Comprehensive knowledge of HIV among young people (ages 15–24), 1999–2007
4.4	Comprehensive knowledge of HIV among young people, by type of question
4.5	Percentage of countries with AIDS education as part of the school curriculum
4.6	Percentage of young people who have first sex before age 15, by sex
4.7	Annual investment in preventive HIV vaccine research and development by source between 2000 and 2006
4.8	Country reporting on prevention services for populations most at risk, 2005 and 2007
4.9	Percentage of countries reporting laws, regulations or policies that present obstacles to effective HIV services for most-at-risk populations

- 4.10 Percentage of most-at-risk populations reached with HIV prevention programmes, 2005–2007
- 4.11 Percent change in condom use at last sex, among those with more than one partner in the last 12 months, by sex
- 4.12 Condom use at last sex, among those with more than one partner in the last 12 months, in three high-burden countries
- 4.13 Number and percentage of HIV-positive pregnant women receiving antiretroviral prophylaxis, 2004–2007
- 4.14 Percentage of HIV-positive pregnant women receiving antiretroviral prophylaxis, 2007

CHAPTER 5

- 5.1 Selected events related to the treatment of AIDS
- 5.2 Number of people receiving antiretrovirals drugs in low- and middle-income countries, 2002–2007
- 5.3 Estimated number of adult and child deaths due to AIDS globally, 1990–2007
- 5.4 Scale up of antiretroviral coverage over time, select group of generalized and concentrated epidemic countries, 2004 to 2007
- 5.5 Comparison of antiretroviral therapy coverage in 2007 between males and females (for countries with reported data on the number of people on treatment for both sexes separately)
- 5.6 Relationship between tuberculosis notification rate and HIV prevalence in Zimbabwe, 1990–2006
- 5.7 Percentage of incident tuberculosis cases in people living with HIV receiving both antiretroviral and anti-tuberculosis medications, 2007
- 5.8 Unmet need for dual treatment of incident tuberculosis cases in people living with HIV, by region, 2007
- 5.9 Treatment outcomes for HIV-positive and HIV-negative tuberculosis patients, 2005 cohort
- 5.10 HIV testing for tuberculosis patients, all countries, 2006
- 5.11 Percentage of countries reporting laws, regulations or policies that present obstacles to services for injecting drug users
- 5.12 Percentage of countries by income status reporting a policy of free services for antiretroviral treatment

CHAPTER 6

- 6.1 Selected events related to mitigating the impact of AIDS
- 6.2 Estimated number of children under 18 orphaned by AIDS in sub-Saharan Africa (1990–2007)
- 6.3 Ratio of school attendance among orphans to non-orphans in countries with HIV prevalence greater than 5%
- Table 6.1 Support to orphans and vulnerable children as reported by countries with adult HIV prevalence > 5% (2005 estimates)
- 6.4 Orphans due to AIDS in sub-Saharan Africa, 2006–2015
- Table 6.2 HIV-Related Labour Costs
- 6.5 Percentage of countries with sectors included in the national AIDS strategy and earmarked budgets

RESOURCE MOBILIZATION

- A Estimated total annual resources available for HIV, 2000–2007, and projected financial resources required by 2010 if current scale up continues (US\$ billion)
- B Spending in programs specifically directed to the populations most at risk for HIV as a percentage of total prevention spending by type of epidemic – public and international Funds, 2006
- C Per capita HIV expenditures from domestic public sources in low- and middle-income countries, 2004–2007
- D Public domestic expenditures, Malawi (US\$ millions)
- E Annual domestic spending: top 20 countries (US\$ 2.73 billion). UNGASS reports, latest data available (US\$ million)
- F HIV expenditures by finance sources and income level 2007, or latest data available
- G Resources available to HIV-related programmes by source and bilateral disbursements, 2006
- H Disbursements for HIV per US\$ 1 Million GDP, 2006
- I Annual resources available 2000–2007 and funding gap between projected financial resources if current scale up continues and a phased scale-up scenario to reach universal access between 2010 and 2015 (US\$ billion)

CHAPTER 7

- 7.1 Total annual resources available for AIDS, 1986–2007
- 7.2 Comparison of 2005 and 2007 percentage coverage of antiretroviral therapy for people with advanced HIV and percentage coverage of antiretroviral drugs for HIV positive pregnant women by region
- Table 7.1 Percent Coverage of Antiretrovirals for Prevention of Mother-to-Child Transmission Breakdown by Quartiles (N=113)
- Table 7.2 Percent Coverage of Antiretroviral Therapy for Adults and Children with Advanced HIV Breakdown by Quartiles (N=136)
- 7.3 Annual AIDS deaths comparing projected current rate of scale up and the phased scale-up strategy to reach universal access between 2010 and 2015
- 7.4 HIV spending on prevention, treatment, and care, Mexico, 1995–2005 (US\$ millions)
- 7.5 Resources needed in 2010 using a phased scale-up strategy towards universal access
- 7.6 Prevention, care and treatment expenditures from public and international funding sources—Mozambique, 2004–2006, US\$ millions
- 7.7 Countries reporting quality implementation of the national AIDS strategy
- 7.8 Country progress in improving the implementation quality of the "Three Ones": one national AIDS authority, one national strategic framework, and one national monitoring and evaluation system

Acknowledgements

The *2008 Report on the global AIDS epidemic* is a report from the Joint United Nations Programme on HIV/AIDS (UNAIDS). It includes contributions from the Office of the United Nations High Commissioner for Refugees (UNHCR), the United Nations Children's Fund (UNICEF), the World Food Programme (WFP), the United Nations Development Programme (UNDP), the United Nations Population Fund (UNFPA), the United Nations Office on Drugs and Crime (UNODC), the International Labour Organization (ILO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO), the World Bank, the Global Fund to Fight AIDS, Tuberculosis and Malaria, and the UNGASS Civil Society Steering Committee.

UNAIDS brings together in the AIDS response the efforts and resources of ten UN system organizations.



The **OFFICE OF THE UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES (UNHCR)** is mandated to lead and coordinate international action to protect refugees and other persons of concern. UNHCR strives to ensure that everyone can exercise the right to seek asylum and find safe refuge in another State. UNHCR is at the forefront of responding to HIV among conflict-affected and displaced populations. Refugees, asylum seekers and internally displaced persons are vulnerable to HIV infection as conflict and displacement expose them to poverty, family disintegration, social disruption and increased sexual violence. HIV prevention, care and treatment, including access to antiretroviral treatment, are central to the overall protection of refugees and other persons of concern to UNHCR.



For more than 60 years the **UNITED NATIONS CHILDREN'S FUND (UNICEF)** has been working with partners around the world to promote the recognition and fulfilment of children's human rights. This mandate was established in the Convention of the Rights of the Child, and is achieved through partnerships with governments, nongovernmental organizations and individuals in 162 countries, areas and territories. UNICEF brings to UNAIDS this extensive network and its ability for effective communication and advocacy. HIV is one of UNICEF's core priorities within its Medium-Term Strategic Plan 2006–2009. In line with the Plan, through the *Unite for Children, Unite against AIDS* campaign, and the UNAIDS Technical Division of Labour, UNICEF focuses its support to countries on "Four P" priority areas: prevention of mother-to-child transmission of HIV (PMTCT Plus); paediatric treatment; protection, care and support for children affected by HIV; and prevention among adolescents.



The **WORLD FOOD PROGRAMME (WFP)** is the world's largest humanitarian agency. It helps poor households affected by hunger and AIDS by using food aid and other resources to address prevention, care and support. WFP's food assistance helps keep parents alive longer, enables orphans and vulnerable children to stay in school, permits out-of-school youth to secure viable livelihoods and enables tuberculosis patients to complete their treatment. WFP works in partnership with governments, other United Nations agencies, nongovernmental organizations and communities and helps people—regardless of their HIV status—who lack adequate food to secure nutrition and food security.



The **UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)** the UN's global development network, advocates for change and connecting countries to knowledge, experience and resources to help people build a better life. Working on the ground in 166 countries, the organization supports national partners to address development challenges and achieve the Millennium Development Goals. Responding to AIDS is one of UNDP's priorities. As a cosponsor of UNAIDS, UNDP focuses on responding to the development and governance dimensions of the AIDS epidemic, protecting the rights of people living with HIV and vulnerable groups, and promoting gender equality.



Through strengthening the linkages between HIV and sexual and reproductive health the **UNITED NATIONS POPULATION FUND (UNFPA)**, focuses its response to AIDS in over 140 countries on HIV prevention among young people and women (including the most marginalized) and comprehensive male and female condom programming including in humanitarian concern and post-conflict settings. UNFPA further contributes through helping nations and communities meet the reproductive health rights and needs of women and adolescents living with HIV, promoting confidential voluntary HIV testing and counselling, supporting training and services which prevent HIV transmission from mother-to-child, and improving access to HIV information and education. UNFPA also provides demographic and sociocultural support and studies to guide programme and policy development.



The **UNITED NATIONS OFFICE ON DRUGS AND CRIME (UNODC)** is mandated to assist countries in their struggle against illicit drugs, crime and terrorism. With this area of expertise within the UN system, UNODC has been given the responsibility to lead the UNAIDS response to HIV among injecting drug users and in prison settings. UNODC is also responsible for facilitating the development of a UN response to HIV for people vulnerable to human trafficking. These marginalized populations are often subjected to discrimination and violation of their human rights. Only few have access to HIV prevention, treatment, care and support services. UNODC assists countries to provide injecting drug users, prisoners and people vulnerable to human trafficking with evidence-informed comprehensive HIV prevention, treatment and care services through support in developing effective legislation and policies and building capacity of national stakeholders including civil societies and community organizations to ensure optimum coverage of these population groups with HIV services.



The **INTERNATIONAL LABOUR ORGANIZATION (ILO)** works to meet the aspirations of people in their working lives for opportunity and income; rights, voice and recognition; family stability and personal development; fairness and gender equality. The concept of decent work reflects the priorities of governments, workers and employers, who together provide the ILO with its unique tripartite identity. The ILO brings to the AIDS response direct access to the workplace, where AIDS policies and programmes help the achievement of universal access to prevention, treatment, care and support. By integrating AIDS in world of work structures, the ILO helps ensure protection against discrimination in labour laws, promotes comprehensive approaches to prevention through occupational safety and health mechanisms, and supports the livelihoods of those affected by AIDS through training provision, employment opportunities and social protection.



The distinctive mix of competencies in education, natural science, social and human sciences, culture and communication and information give the **UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)** an interdisciplinary, organizational and technical capacity suited to contributing to the achievement of universal access to comprehensive HIV prevention programmes, treatment, care and support. As the lead agency in the UNAIDS division for HIV transmission prevention with young people in educational institutions, UNESCO continues to promote comprehensive, scaled-up education sector responses to AIDS and deepened education sector engagement in national responses to AIDS. Its leadership of EDUCAIDS (the UNAIDS Global Initiative on Education and HIV and AIDS) and its coordination of the UNAIDS Inter-Agency Task Team (IATT) on Education are two mechanisms supporting strengthened strategic partnerships and cooperation among ministries of education, UNAIDS' cosponsors, bilateral agencies and civil society groups at global, regional and country levels to ensure maximum synergy and impact.



World Health Organization

The objective of the **WORLD HEALTH ORGANIZATION (WHO)** is the attainment by all peoples of the highest possible level of health. Its work in HIV is focused on the rapid scale up of treatment and care while accelerating prevention and strengthening health systems so that the health sector response to the epidemic is more effective and comprehensive. WHO defines and develops effective technical norms and guidelines, promotes partnership and provides strategic and technical support to Member States. The Organization also contributes to the global AIDS knowledge base by supporting surveillance, monitoring and evaluation, reviewing the evidence for interventions and promoting the integration of research into health service delivery.



The **WORLD BANK'S** mission is to fight poverty. It is one of the world's largest sources of funding and knowledge for developing countries. The World Bank's work on AIDS contributes to scaling up towards universal access to prevention, care and treatment through supporting efforts to strengthen national AIDS strategies and monitoring and evaluation, funding comprehensive AIDS programmes, and helping ensure that AIDS is part of the broader development agenda. By December 2007, the World Bank had committed more than US\$ 3.6 billion for AIDS programmes globally. Most of the resources have been provided on highly concessional terms including grants for the poorest countries. The World Bank works in partnership with governments, donor agencies, UNAIDS' cosponsors and the Secretariat, civil society and the private sector on comprehensive AIDS responses encompassing prevention, care, treatment and impact mitigation.

Foreword

The *2008 Report on the global AIDS epidemic* confirms that the world is, at last, making some real progress in its response to AIDS.

Governments are acting on their promises at the 2006 United Nations High Level Meeting on HIV/AIDS, to scale up towards universal access to HIV prevention, treatment, care, and support by 2010. As of 2008, a small number of countries are already providing universal access to antiretroviral treatment and to services to prevent mother-to-child transmission of HIV. Others are well on the way to doing so. In more and more countries, HIV infection levels are falling.

But this is only the beginning. Twenty-seven years into the epidemic, AIDS continues to challenge all of our efforts. Today, for every two people who start taking antiretroviral drugs, another five become newly infected. Unless we take urgent steps to intensify HIV prevention we will fail to sustain the gains of the past few years, and universal access will simply be a noble aspiration.

This 2008 global report is the most comprehensive ever, based on country inputs with unprecedented scope and detail. It contains valuable information about what works and why, as well as highlighting the key challenges we face in our quest to respond effectively to AIDS—now and in the decades to come.

AIDS is a supremely complex issue that demands an unparalleled response from all sectors of society, worldwide. But as this report shows, it is increasingly evident that—given the will and given the resources—we can do it.



Dr Peter Piot

A handwritten signature in blue ink, appearing to read 'P. Piot', written in a cursive style.

UNAIDS Executive Director and
Under-Secretary-General of the United Nations

