

### The Global HIV/AIDS Epidemic

November 2005

The HIV/AIDS epidemic has already claimed more than 25 million lives and another 40 million people are currently estimated to be living with HIV/AIDS worldwide.<sup>1</sup> HIV/AIDS cases have been reported in all regions of the world, but most people living with HIV/AIDS (95%) reside in low-and middle-income countries, where most new HIV infections and AIDS-related deaths occur.<sup>1</sup> The nations of sub-Saharan Africa have been hardest hit; there is also increasing concern about the next wave of the epidemic, emerging in parts of Eastern Europe and Asia.<sup>2,3</sup> HIV is the leading cause of death worldwide (among those ages 15–59).<sup>4</sup> The epidemic is considered a threat to the economic well-being, social, and political stability of many nations.<sup>5</sup>

#### Current Global Snapshot<sup>1</sup>

- There are an estimated 40.3 million people living with HIV/AIDS worldwide, a greater number than ever before and twice the number in 1995.
- During 2005, an estimated 4.9 million people became newly infected with HIV, including approximately 700,000 children (<15 years old).
- 3.1 million people died of AIDS in 2005.
- Worldwide, most people living with HIV are unaware that they are infected.

#### Impact by Region

The major route of HIV transmission worldwide is heterosexual sex, although risk factors vary within and across populations. In many regions of the world, men who have sex with men, injection drug users, and sex workers account for significant proportions of infections.<sup>1</sup> Several regions and countries have been particularly hard-hit by the HIV/AIDS pandemic (See Figure 1). Even in the United States, where HIV incidence has been level for more than a decade, there are increasing numbers of people living with HIV/AIDS, not everyone has access to care, and HIV/AIDS prevalence is high among some sub-populations.<sup>1,6,7</sup>

The most affected regions around the world are:<sup>1</sup>

- **Sub-Saharan Africa.** Sub-Saharan Africa has been hardest hit and is home to 64% (25.8 million) of people living with HIV/AIDS but only 11–12% of the world's population.<sup>8</sup> Most nations in this region have generalized HIV/AIDS epidemics—that is, the national HIV prevalence rate is greater than 1%.<sup>9</sup> In several nations in the region, more than 1 in 5 adults is already estimated to be HIV positive. South Africa has the highest number of people living with HIV/AIDS in the world (5.7–6.2 million<sup>10</sup>). Swaziland has the highest prevalence rate in the world (more than 40% among pregnant women). There do appear to be declines in adult prevalence in some countries in the region.
- **Latin America & The Caribbean.** More than 2 million people are estimated to be living with HIV/AIDS in Latin America and the Caribbean combined, 230,000 of whom were newly infected with HIV in 2005. Eleven countries in this region have generalized epidemics, with Haiti's adult prevalence rate being the highest. The HIV/AIDS adult prevalence rate in the Caribbean (1.6%) is second only to sub-Saharan Africa.
- **Eastern Europe & Central Asia.** An estimated 1.6 million people are living with HIV/AIDS in this region, which has one of the fastest growing HIV/AIDS epidemics in the world. It is

Figure 1: HIV Prevalence & Incidence by Region<sup>1</sup>

Region	Total No. (%) Living with HIV/AIDS end of 2005	Newly Infected in 2005	Adult Prevalence Rate
<b>Global Total</b>	<b>40.3 million (100%)</b>	<b>4.9 million</b>	<b>1.1%</b>
Sub-Saharan Africa	25.8 million (64.0%)	3.2 million	7.2%
South/South-East Asia	7.4 million (18.4%)	990,000	0.7%
Latin America	1.8 million (4.5%)	200,000	0.6%
Eastern Europe/Central Asia	1.6 million (4.0%)	270,000	0.9%
North America	1.2 million (3.0%)	43,000	0.7%
East Asia	870,000 (2.2%)	140,000	0.1%
Western/Central Europe	720,000 (1.8%)	22,000	0.3%
North Africa/Middle East	510,000 (1.3%)	67,000	0.2%
Caribbean	300,000 (.7%)	30,000	1.6%
Oceania	74,000 (.2%)	8,200	0.5%

heavily concentrated among young people. Driven initially by injection drug use and increasingly heterosexual transmission, HIV prevalence has risen sharply over the last several years. The Russian Federation has the largest number of people living with HIV/AIDS in the region and is considered part of the epidemic's "next" or "second" wave.<sup>3</sup>

- **Asia.** An estimated 8.3 million people are living with HIV/AIDS across South/South-East Asia and East Asia. There are increasing concerns about the spread of the epidemic in this region, particularly in China and India, the two most populous nations in the world. Like Russia, they are considered part of the epidemic's "next wave" and despite having relatively low prevalence rates today, the epidemic could expand significantly over the next decade without increased intervention. India already has the second highest number of people estimated to be living with HIV/AIDS in the world (5.1 million<sup>11</sup>).

#### Impact on Women & Young People

- Women comprise an increasing proportion of people living with HIV/AIDS, rising from 41% of adults in 1997 to almost half (46%) as of the end of 2005.<sup>1,12</sup> Among young people living with HIV/AIDS, ages 15–24, women outnumber men. This trend is occurring in most regions of the world, and is particularly pronounced in sub-Saharan Africa, where women represent more than half (57%) of all adults living with HIV/AIDS (See Figure 2).<sup>1</sup> Gender inequalities in social and economic status and in access to prevention and care services increase women's vulnerability to HIV. Sexual violence may also increase women's risk and women, especially young women, are biologically more susceptible to HIV infection than men. The epidemic has multiple effects on women including: added responsibilities of caring for sick family members; loss of property if they become widowed and/or infected; and even, violence when their HIV status is discovered.
- Teens and young adults, particularly girls and young women, continue to be at the center of the epidemic. Young people, ages 15–24 account for approximately half of new adult HIV infections.<sup>13</sup> Most young people living with HIV/AIDS are girls including approximately three-quarters of HIV-positive young people in sub-Saharan Africa, and infection rates are several times higher among young women than young men in many countries.<sup>1</sup>

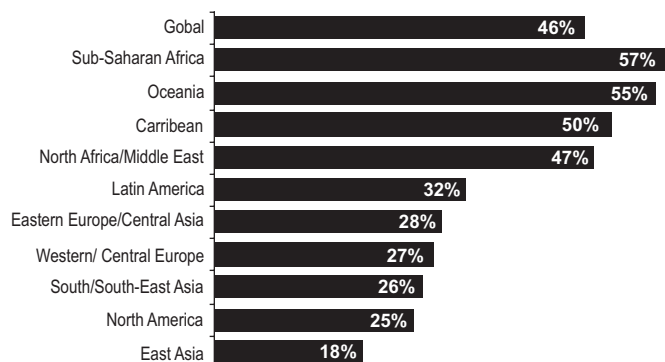
- In 2003, there were an estimated 15 million AIDS orphans (children who had lost one or both parents to the epidemic); most (12 million) lived in sub-Saharan Africa.<sup>14</sup>

## The Multi-Sectoral Impact of AIDS

The global HIV pandemic has had a profound, multi-sectoral impact on the structure of many nations, affecting their development and economic growth, communities, households, and individuals.<sup>5,15</sup>

- AIDS has been identified as a serious challenge to development. High prevalence countries are estimated to be losing 1–2% of their annual economic growth,<sup>14</sup> and the long-term economic effects may be much higher.<sup>4,5</sup> Because HIV/AIDS often hits working age populations hardest, the workforce of many nations has been affected, as skilled workers are lost to the epidemic. The loss of skilled workers in turn affects nations' ability to respond to the epidemic.<sup>5</sup>

**Figure 2: Women as Percent of Adults Living with HIV/AIDS by Region, End of 2005**



Source: UNAIDS, AIDS Epidemic Update, December 2005.

- The education sector is also threatened, as AIDS claims the lives of teachers and contributes to serious teacher shortages in several African countries. AIDS also weakens the education sector through its impact on school attendance and enrollment among children affected by HIV/AIDS.<sup>5,14</sup>
- Increasing demand for health care services is overwhelming the public health infrastructure in many developing countries. At the same time, many countries are losing large numbers of health care workers to AIDS. In some African countries, it is estimated that AIDS causes up to one half of all deaths among employees in the public health sector.<sup>5,14</sup>
- Many of the nations hardest hit by HIV/AIDS also suffer from malnutrition, food insecurity, and famine. These challenges are interrelated with HIV/AIDS, each intensifying and complicating the effects of the other.<sup>5,14</sup>
- The demographic effects of the epidemic are significant, as it alters the population structures of hard hit countries, affecting their growth and mortality rates and, ultimately, their age and sex distributions. Individuals die at prematurely young ages, during their most productive and reproductive years. One consequence of this is that there are fewer working age people to support children and the elderly. And, in some parts of world, there are disproportionately fewer women compared to men, due to HIV mortality.<sup>4,5,16</sup>
- One of the most striking demographic impacts of HIV/AIDS is on life expectancy, reversing steady gains made in many countries during the last century. By 2010, life expectancies in several highly-affected countries could drop to below 40 years, well below what they would have been without HIV/AIDS and even below levels they had reached in the pre-AIDS era.<sup>4,5,16</sup>

## The Global Response

The past few years have brought greater attention by the international community to HIV/AIDS, leading to several important initiatives including: The United Nations General Assembly Special Session on HIV/AIDS; The Global Fund to Fight AIDS, Tuberculosis, and Malaria; The World Health Organization's "3x5 Initiative"; and the U.S. "President's Emergency Plan for AIDS Relief" (PEPFAR). Affected country governments and civil society also play critical and increasing roles in many national responses to the epidemic. Global funding for HIV/AIDS has also increased over time. Still, resources fall short of projected need and most people at risk for HIV and those living with HIV/AIDS do not have access to prevention, care, and treatment:

- In 2005, global spending on HIV/AIDS was estimated to reach \$8.3 billion, but need is much higher. For 2006, UNAIDS projects that \$15 billion will be needed to effectively respond to the HIV/AIDS epidemic in low- and middle-income countries; by 2008, this will rise to \$22 billion.<sup>17</sup>
- The lack of resources has limited many nations' ability to bring prevention and treatment programs to scale, and stem the tide of the epidemic. It is estimated that prevention programs reach fewer than one in five of those who need them and that only 15% of people with HIV/AIDS in need of antiretroviral therapy in low and middle income countries have such access.<sup>1,18</sup>
- Most funding for HIV/AIDS is expected to come from international donors, although affected country governments also have an important role to play. In 2004, major donor governments committed \$3.6 billion to global HIV/AIDS efforts in developing countries. The U.S. is a key part of the global response, contributing the highest dollar amount to HIV/AIDS.<sup>19</sup> In its fiscal year (FY) 2005, the U.S. federal funding commitment for global HIV/AIDS, as part of PEPFAR, is expected to total \$2.7 billion, including funding for prevention, care, treatment, and research. This also includes contributions to the Global Fund of \$347 million for FY 2005 and a carry-over of \$87.8 million from FY 2004.<sup>20</sup>

## References

- 1 UNAIDS, *AIDS Epidemic Update*, December 2005.
- 2 UNAIDS, *The Changing HIV/AIDS Epidemic in Europe and Central Asia*, April 2004.
- 3 See: CSIS Task Force on HIV/AIDS, *Second Wave States*: [http://www.csis.org/index.php?option=com\\_csis\\_prog&task=view&id=101](http://www.csis.org/index.php?option=com_csis_prog&task=view&id=101).
- 4 WHO, *The World Health Report 2004—Changing History*, May 2004.
- 5 UN Population Division, *Population, Development and HIV/AIDS with Particular Emphasis on Poverty: The Concise Report*, 2005.
- 6 CDC, *HIV/AIDS Surveillance Report 2004*, Vol. 16, 2005.
- 7 Teshale, E. et al., "Estimated Number of HIV-infected Persons Eligible for and Receiving HIV Antiretroviral Therapy, 2003—United States" Abstract #167, 12th Conference on Retroviruses and Opportunistic Infections February 22–25, 2005.
- 8 Population Reference Bureau, *2005 World Population Data Sheet*, 2005.
- 9 As estimated based on HIV prevalence among pregnant women attending antenatal clinics. See, UNAIDS, *Background on Methodology, Understanding the Latest Estimates of the Global AIDS Epidemic*, November 2005.
- 10 Republic of South Africa, Department of Health, *National HIV and Syphilis Antenatal Sero-Prevalence Survey in South Africa 2004*, 2005.
- 11 NACO: [www.nacoonline.org](http://www.nacoonline.org).
- 12 UNAIDS, *AIDS Epidemic Update*, December 2004.
- 13 UNAIDS, *Epidemiologic Slides*, 00003-E-1, December 2005.
- 14 UNAIDS, *2004 Report on the Global AIDS Epidemic*, July 2004.
- 15 The World Bank, [www.worldbank.org/aids](http://www.worldbank.org/aids).
- 16 U.S. Census Bureau, *The AIDS Pandemic at the 21st Century*, March 2004.
- 17 UNAIDS, *Resource Needs for an Expanded Response to AIDS in Low and Middle Income Countries*, PCB 17 Conference Paper, June 2005.
- 18 WHO, *Progress on Global Access to HIV Antiretroviral Therapy*, June 2005.
- 19 Kates, J. *Financing the Response to HIV/AIDS in Low and Middle Income Countries*, July 2005.
- 20 KFF, *Fact Sheet: U.S. Federal Funding for HIV/AIDS: The FY2006 Budget Request*, February 2005.

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