

### The Global HIV/AIDS Epidemic

June 2007

The HIV/AIDS epidemic has already claimed more than 25 million lives and another 39.5 million people are currently estimated to be living with HIV/AIDS worldwide.<sup>1,2</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>1,3</sup> The nations of sub-Saharan Africa have been hardest hit, followed by the Caribbean; there is also concern about the epidemic in parts of Eastern Europe and Asia.<sup>4,5</sup> HIV is the leading cause of death worldwide (among those aged 15–59).<sup>6,7</sup> It is considered a threat to the economic well-being, social, and political stability of many nations.<sup>8,9</sup>

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

- There are an estimated 39.5 million people living with HIV/AIDS worldwide, 2.6 million more than in 2004 and twice the number in 1995.<sup>9</sup> The number of people living with HIV/AIDS has increased in every region.
- During 2006, an estimated 4.3 million people became newly infected with HIV, including 530,000 children.<sup>3</sup>
- 2.9 million people died of AIDS-related illnesses in 2006, and deaths have been rising.
- Worldwide, most people living with HIV are unaware that they are infected.<sup>9</sup>

#### 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>1,10,11</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 almost two-thirds (62.5%) of people living with HIV/AIDS, or 24.7 million people, but only about 11% of the world's population.<sup>12</sup> The region is also home to most (91%) of the 2.3 million children living with HIV/AIDS globally.<sup>3</sup> Almost all nations in this region have generalized HIV/AIDS epidemics—that is, their national HIV prevalence rate is greater than 1%.<sup>9,13</sup> In several, more than 10% of adults are already estimated to be HIV positive.<sup>9</sup> South Africa has an estimated 5.5 million people living with HIV/AIDS, one of the highest in the world, and almost one in five South African adults are HIV positive.<sup>9</sup> Swaziland has the highest prevalence rate in the world (33%). There is evidence that the epidemic may be slowing or stabilizing in eastern and western African countries, but there are signs of growing epidemics in a few countries.<sup>14</sup>
- **Latin America & the Caribbean.** Nearly 2 million people are estimated to be living with HIV/AIDS in Latin America and the Caribbean combined, 167,000 of whom were newly infected with HIV in 2006. Ten countries in the region have generalized epidemics.<sup>9</sup> The Caribbean has been especially hard hit, with an adult prevalence rate (1.2%) second only to sub-Saharan Africa.

- **Eastern Europe & Central Asia.** An estimated 1.7 million people are living with HIV/AIDS in this region, which has the fastest growing epidemic in the world and one that is 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.

Figure 1: HIV Prevalence & Incidence by Region<sup>1,3</sup>

Region	Total No. (%) Living with HIV/AIDS, end of 2006	Newly Infected in 2006	Adult (aged 15-49) Prevalence Rate, 2006
<b>Global Total</b>	<b>39.5 million (100%)</b>	<b>4.3 million</b>	<b>1.0%</b>
Sub-Saharan Africa	24.7 million (62.5%)	2.8 million	5.9%
South/South-East Asia	7.8 million (19.7%)	860,000	0.6%
Eastern Europe/Central Asia	1.7 million (4.3%)	270,000	0.9%
Latin America	1.7 million (4.3%)	140,000	0.5%
North America	1.4 million (3.5%)	43,000	0.8%
East Asia	750,000 (1.9%)	100,000	0.1%
Western/Central Europe	740,000 (1.9%)	22,000	0.3%
Middle East/North Africa	460,000 (1.2%)	68,000	0.2%
Caribbean	250,000 (0.6%)	27,000	1.2%
Oceania	81,000 (0.2%)	7,100	0.4%

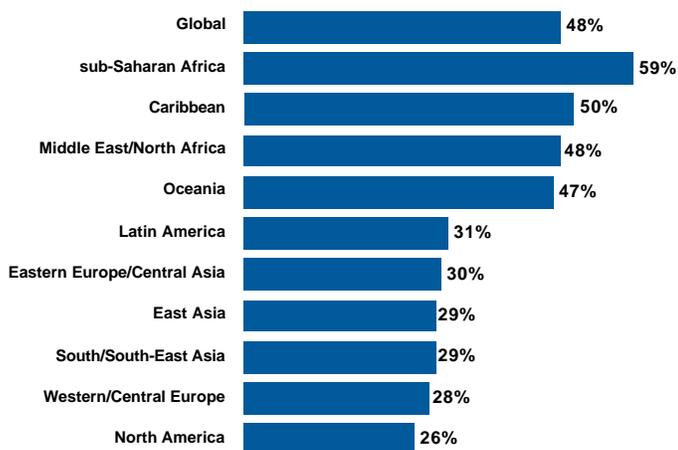
- **Asia.** An estimated 8.6 million people are living with HIV/AIDS across South/South-East Asia and East Asia. South/South-East Asia has the highest new infection rates in the region. The region is also home to the two most populous nations in the world – China and India – and despite having relatively low prevalence rates today, even small increases translate into large numbers of people. India already has the highest number of people estimated to be living with HIV/AIDS in the world (5.7 million).<sup>9</sup>

#### Impact on Women & Young People

- Today, women represent almost half (48%) of all adults living with HIV/AIDS, and the number of women living with the disease has increased globally and in all regions over time.<sup>1</sup> In sub-Saharan Africa, women represent more than half (59%) 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 aged 15–24 account for about 40% of new HIV infections among those 15 and over.<sup>1,3</sup> Among young people in sub-Saharan Africa, on average, three young women are infected for every young man.<sup>9</sup> A similar pattern is seen in the Caribbean where young women are more than twice as likely to be infected with HIV compared to young men in some countries.<sup>9</sup>

- In 2005, there were an estimated 15.2 million AIDS orphans (children who had lost one or both parents to the epidemic), most of whom (12 million) lived in sub-Saharan Africa.<sup>9</sup>

**Figure 2: Women as a Percent of Adults (aged 15 and over) Living with HIV/AIDS by Region, 2006<sup>1</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>6,8,9,15</sup>

- AIDS has been identified as a serious challenge to development, with both short and long-term economic effects.<sup>6,8,9</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>8,9</sup>
- 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>8,9</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>8,9</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>8,9</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>6,8,16</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>6,8,16</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 and Declaration of Commitment; The Global Fund to Fight AIDS, Tuberculosis and Malaria; The United Nation's Universal Access Campaign; 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 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:

- UNAIDS estimates that spending on HIV/AIDS rose from US\$300 million in 1996 to \$8.9 billion in 2006 and is projected to reach \$10 billion in 2007, but need is much higher. For 2006, UNAIDS estimates that \$15 billion was needed to effectively respond to the HIV/AIDS epidemic in low- and middle-income countries, rising to \$22 billion by 2008.<sup>5,9</sup>
- The lack of resources has limited the ability to bring prevention and treatment programs to scale and stem the tide of the epidemic in many hard hit nations. For example, only 11% of pregnant women with HIV received antiretrovirals for the prevention of mother-to-child transmission of HIV; HIV testing reached only 12% of men and 10% of women in high prevalence countries in Sub-Saharan Africa; and only 8% of injection drug users had access to HIV prevention services. In addition, while treatment coverage has certainly increased over time, only 28% of people with HIV/AIDS in need of antiretroviral therapy in low- and middle- income countries have such access.<sup>17</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 2006, major donor governments committed \$5.6 billion to global HIV/AIDS efforts in developing countries.<sup>18</sup> The U.S. is a key part of the global response, contributing the highest dollar amount to HIV/AIDS. In its fiscal year (FY) 2006, the U.S. federal funding commitment for global HIV/AIDS, as part of PEPFAR, totaled \$3.3 billion, including funding for prevention, care, treatment, and research and the Global Fund; in FY 2007, the U.S. commitment is \$4.6 billion, which includes \$724 million for the Global Fund.<sup>19</sup>

## References

- 1 UNAIDS, *2006 AIDS Epidemic Update*; December 2006.
- 2 UNAIDS, Personal Communication; 2006.
- 3 UNAIDS, *Core Slides: AIDS Epidemic Update*; December 2006.
- 4 UNAIDS, *The Changing HIV/AIDS Epidemic in Europe and Central Asia*; April 2004.
- 5 UNAIDS, *Global Facts and Figures*, Fact Sheet; December 2006.
- 6 WHO, *The World Health Report 2004—Changing History*; May 2004.
- 7 UN, *Declaration of Commitment on HIV/AIDS: Five Years Later. Report of the Secretary-General*. 06-28416 (E); March 2006.
- 8 UN Population Division, *Population, Development and HIV/AIDS with Particular Emphasis on Poverty: The Concise Report*; 2005.
- 9 UNAIDS, *2006 Report on the Global AIDS Epidemic*; May 2006.
- 10 CDC, *HIV/AIDS Surveillance Report 2004*, Vol. 16; 2005.
- 11 Teshale EH et al., "Estimated Number of HIV-infected Persons Eligible for and Receiving HIV Antiretroviral Therapy, 2003—United States," Abstract #167, *12<sup>th</sup> Conference on Retroviruses and Opportunistic Infections*; February 2005.
- 12 Population Reference Bureau, *2006 World Population Data Sheet*, 2006.
- 13 See, UNAIDS, *Understanding the Latest Estimates of the 2006 Report on the Global AIDS Epidemic*, Q & A; June 2007.
- 14 UNAIDS, *Sub-Saharan Africa*, Fact Sheet; December 2006.
- 15 The World Bank, [www.worldbank.org/aids](http://www.worldbank.org/aids).
- 16 U.S. Census Bureau, *The AIDS Pandemic at the 21<sup>st</sup> Century*; March 2004.
- 17 WHO/UNAIDS/UNICEF, *Towards Universal Access, Scaling Up Priority HIV/AIDS Interventions in the Health Sector*, Progress Report; April 2007.
- 18 Kaiser Family Foundation/UNAIDS/CSIS, *Financing the Response to AIDS in Low- and Middle-Income Countries: International Assistance from the G8, European Commission and Other Donor Governments, 2006*, Chartpack; June 2007.
- 19 The United States President's Emergency Plan for AIDS Relief: <http://www.pepfar.gov/press/80064.htm>.

Additional copies of this publication (#3030-09) are available on the Kaiser Family Foundation's website at [www.kff.org](http://www.kff.org).

The Kaiser Family Foundation is a non-profit, private operating foundation dedicated to providing information and analysis on health care issues to policymakers, the media, the health care community and the general public. The Foundation is not associated with Kaiser Permanente or Kaiser Industries.