Order Code IB10050

AIDS in Africa

Updated March 9, 2006

Nicolas Cook
Foreign Affairs, Defense, and Trade Division

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
09 MAR 2006	**N/A**	**-**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
AIDS in Africa	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Congressional Research Service The Library of Congress 101 Independence Ave SE Washington, DC 20540-7500**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release, distribution unlimited

13. SUPPLEMENTARY NOTES
The original document contains color images.

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**	**SAR**	**19**	

CONTENTS

AIDS in Africa

SUMMARY

Sub-Saharan Africa ("Africa" hereafter) has been more severely affected by AIDS than any other part of the world. In 2005, the United Nations reports, there were about 25.8 million HIV-positive adults and children in the region, which has about 11.3% of the world's population but over 64% of the worldwide total of infected persons. The overall adult rate of infection in Africa is 7.2%, compared with 1.1% worldwide. Nine southern Africa countries have infection rates above 10%. Ten African countries with the largest infected populations account for over 50% of infected adults worldwide. By the end of 2005, an estimated 27.5 million Africans had died of AIDS since 1982, including 2.4 million in 2005. AIDS has surpassed malaria as the leading cause of death in Africa, and it kills many times more Africans than war. In Africa, 57% of those infected are women.

Experts attribute the severity of Africa's AIDS epidemic to the region's poverty, women's relative lack of empowerment, high rates of male worker migration, and other factors. Health systems are ill-equipped for prevention, diagnosis, and treatment.

AIDS' severe social and economic consequences are depriving Africa of skilled workers and teachers, and reducing life expectancy by decades in some countries. There are an estimated 12.3 million African AIDS orphans. They face increased risk of malnutrition and reduced prospects for education. AIDS is blamed for declines in farm production in some countries and is seen as a major contributor to hunger and famine.

Donor governments, non-governmental organizations, and African governments have responded by supporting programs aimed at preventing and reducing the number of new infections and by trying to abate damage done by AIDS to families, societies, and economies. The adequacy of this response is the subject of much debate.

An estimated 500,000 Africa AIDS patients were being treated with antiretroviral drugs in mid-2005, up from 150,000 in mid-2004, but an estimated total of 4.7 million persons were in need of such therapy. U.S. and other initiatives are expected to sharply expand access to treatment in the near future. Advocates see this goal as an affordable means of reducing the impact of the pandemic. Skeptics question whether drugs can be made widely accessible without costly health infrastructure improvements.

U.S. concern over AIDS in Africa grew in the 1980s, as the epidemic's severity became apparent. Legislation enacted in the 106th and the 107th Congresses increased funding for worldwide AIDS programs. P.L. 108-25, signed into law on May 27, 2003, authorized $15 billion over five years for international AIDS programs. President Bush announced his Emergency Plan for AIDS Relief (PEPFAR) in his 2003 State of the Union message. Twelve of 15 PEPFAR "focus countries" are in Africa. Under the FY2007 budget request, the 12 countries would receive a 61% boost in AIDS-related aid, to $1.99 billion, under the State Department's Global HIV/AIDS Initiative account. Nonetheless, activists and others urge that more be done, given the scale of the African pandemic.

MOST RECENT DEVELOPMENTS

In February, the State Department released the second annual President's Emergency Plan for AIDS Relief (PEPFAR) report to Congress. It highlighted increases in diverse U.S.-backed HIV prevention and care efforts, support for increased antiretroviral drug treatment, and a continuing rise in U.S. international AIDS spending. It also spotlighted the PEPFAR New Partners Initiative, launched by the President on World AIDS Day in December 2005. The Initiative is described as an effort to identify and provide U.S. competitive grant-based support to "new partners," including faith-based and community health care organizations that are active in the developing world but lack experience in working with the U.S. government. The Global Partners Forum, a forum of non-governmental and international public organizations and governments that seek to ensure that global commitments for HIV-affected children are implemented, met in London in February. The meeting focused on enhancing child-focused HIV protection, prevention, treatment, and care capacities globally. The Global Steering Committee, a new international effort to provide universal AIDS treatment access by 2010, was launched in Washington on January 10, 2006. The effort, spurred by recent U.N. General Assembly requests and G8 commitments, is intended as an attempt to overcome key challenges to global AIDS responses, such as sustainable financing and health care delivery system constraints, the need for development and distribution of low-cost drugs and tests, and AIDS-related stigma and social discrimination.

At the 14th International Conference on AIDS and Sexually Transmitted Infections in Africa (ICASA), held in Nigeria in December 2005, UNAIDS director Dr. Peter Piot said that AIDS remains an uncontained, "acute threat to future generations" and called for "urgent and sustained action" to increase access to HIV prevention and treatment services in Africa. At ICASA, World Health Organization head Jim Yong Kim praised the use of public health approaches in scaling-up access to AIDS drugs. He endorsed the use of simple, fixed-dose drug regimens; drug distribution and use monitoring by nurses and community workers using simple clinical tools; and the participation of HIV-affected persons and communities in AIDS program design and delivery. The Assistance for Orphans and Other Vulnerable Children in Developing Countries Act of 2005 (P.L. 109-95) was signed into law in November 2005. At a September 2005 London conference, the United States pledged $600 million of $3.7 billion in total pledges by governments to the Global Fund in 2006 and 2007. This amount would fund renewals of existing Global Fund grants but not new ones. International AIDS issues are further covered in CRS Report RS21181, *HIV/AIDS International Programs: Appropriations, FY2003-FY2006* and CRS Report RL31712, *The Global Fund to Fight AIDS, Tuberculosis, and Malaria: Background and Current Issues*.

BACKGROUND AND ANALYSIS

Sub-Saharan Africa ("Africa" hereafter) has been far more severely affected by AIDS than any other world region. In December 2005, UNAIDS (the Joint United Nations Program on HIV/AIDS) reported that in 2005, there were about 25.8 million HIV-positive adults and children in Africa, including 3.2 million newly infected during the year. Africa has about 11.3% of the world's population but more than 64% of the global HIV-positive population. The infection rate among adults averaged an estimated 7.2% in Africa in 2005, compared with about 1.1% worldwide. Based on aggregate estimates, about 27.5 million Africans have

died of AIDS since 1982 at the start of the epidemic, including about 2.4 million or more in 2005. UNAIDS has projected that between 2000 and 2020, 55 million Africans will likely have lost their lives to AIDS, which has surpassed malaria as the leading cause of death in Africa and kills many times more people than Africa's armed conflicts.

Table 1. African Adult HIV Infection Rates (%), End of 2003

Swaziland	38.8	Tanzania	8.8	Chad	4.8	Eritrea	2.7
Botswana	37.3	Gabon	8.1	Ethiopia	4.4	Sudan	2.3
Lesotho	28.9	Cote d'Ivoire	7	Burkina Faso	4.2	Benin	1.9
Zimbabwe	24.6	Cameroon	6.9	Dem. Rep. of Congo	4.2	Mali	1.9
South Africa	21.5	Kenya	6.7	Togo	4.1	Madagascar	1.7
Namibia	21.3	Burundi	6	Uganda	4.1	Gambia	1.2
Zambia	16.5	Liberia	5.9	Angola	3.9	Niger	1.2
Malawi	14.2	Nigeria	5.4	Guinea	3.2	Senegal	0.8
Cent. Afr. Rep.	13.5	Rwanda	5.1	Ghana	3.1	Mauritania	0.6
Mozambique	12.2	Congo	4.9	Djibouti	2.9		

Source: UNAIDS, *Report on the Global AIDS Epidemic*, July 2004 [biannual country-specific HIV prevalence report]. Data were lacking for Cape Verde, Comoros, Equatorial Guinea, Guinea-Bissau, Mauritius, Sierra Leone, and Somalia.

Characteristics of the African Epidemic

● **Transmission.** HIV, the human immunodeficiency virus that causes AIDS, is spread in Africa primarily by heterosexual contact, according to most experts, though some believe that the role of unsafe medical practices in the spread of HIV may have been underestimated. Medical HIV transmission prevention is a component of the President's Emergency Plan for AIDS Relief (PEPFAR).

● **Women.** According to UNAIDS, about 13.5 million HIV-positive women live in Africa. They comprise an about 57% of infected adults in Africa, compared with 46% globally, and about 77% of HIV-positive females globally. Young women are notably at risk. In 2005, about 4.6% of African women aged 15 to 24 were HIV-positive, compared with 1.7% of young men. These figures had dropped from 6.9% and 2.2%, respectively, in 2004.

● **Prevalence Trends.** UNAIDS reports that Africa's adult HIV infection rate, or prevalence, has stabilized in recent years, as both the total adult and infected populations increase. Stabilization means that numbers dying approximate the numbers of newly infected. HIV has become endemic in many countries and at a minimum will affect several future generations. There have been declines in Uganda, Kenya, and localized areas in some countries, but prevalence is increasing in southern Africa (apart from Zimbabwe where declines are reported); remains unchanged in West and Central Africa; and is unchanged or increasing in several East and Horn of Africa countries, though there is much local variation.

● **Highest Rates.** Southern Africa, where nine countries have adult infection rates above 10% (**Table 1)**, is the most severely affected region. With 1.68% of the world's population, these countries account for nearly 30% of infected people worldwide and 45%

of those in Africa. However, populous Nigeria in West Africa, with an estimated 5.4% adult infection rate, has an estimated 3.6 million infected people, the largest number in Africa apart from South Africa, where between 5.3 and 5.6 million [UNAIDS and South African government estimates] are infected — the largest such population in the world.

● **Children.** Africa's AIDS epidemic has a proportionally much greater effect on children in Africa than in other world regions. According to UNAIDS, over 600,000 African infants become infected yearly with HIV through mother-to-child transmission, either at birth or through breast-feeding. Most die before the age of two. Nonetheless, an estimated 1.9 million African children under age 14 were living with AIDS in late 2003.

● **Orphans.** In 2003, there were about 12.3 million AIDS orphans (children 17 and under who had lost one or both parents to HIV) in Africa, comprising 28.3% of all orphans. By 2010, their number is forecast to rise to 18.4 million, or 36.8% of all orphans.[1] Because of AIDS-related social stigma, HIV-positive orphans are at high risk for malnourishment, abuse, and denial of education. UNICEF has recommended that the capacity of families and communities to protect and care for orphans be strengthened, that social and state protection services be provided for orphans and vulnerable children (OVCs), and that public education about HIV-affected children be increased. In October 2005, Human Rights Watch alleged in a report that African governments have largely not addressed the myriad barriers to education faced by AIDS- affected OVCs. The Assistance for Orphans and Other Vulnerable Children in Developing Countries Act of 2005 (P.L. 109-95) became law in November 2005. It authorizes U.S. assistance for basic care for orphans and vulnerable children in developing countries, including aid for community-based care, school food programs, education and employment training, psycho-social support, protection of inheritance rights, and AIDS care.

Explaining the African Epidemic

AIDS experts attribute Africa's AIDS epidemic to a variety of economic and social factors, but place primary blame on the region's poverty, which has deprived Africa of effective systems of health information, health education, and health care. As a result, Africans suffer from high rates of untreated sexually-transmitted infections other than AIDS, increasing their susceptibility to HIV. African health systems often have limited capabilities for AIDS prevention work, and HIV counseling and testing are difficult for many Africans to obtain. Until very recently, AIDS treatment was generally available only to elites.

Poverty forces large numbers of African men to migrate long distances in search of work, and while away from home they may have multiple sex partners, increasing their risk of infection. Some of these partners may be women who engage in commercial or "transactional" sex because of poverty, and they are also highly vulnerable to infection. Migrant workers may carry the infection back to their wives when they return home. Long-distance truck and public transport drivers are also seen as key agents in the spread of HIV.

---

[1] UNAIDS/UNICEF/U.S. Agency for International Development, *Children on the Brink*, July 2004. Estimates vary; in November 2003, UNICEF predicted that 20 million children would be orphaned by AIDS by 2010 and that in a dozen countries orphans from all causes would make up 15% to over 25% of children under 15; see *Africa's Orphaned Generations*.

Some behavior patterns in Africa may also be affecting the epidemic. According to UNAIDS officials and publications, one factor contributing to higher rates of infection among young women than in young men is the infection of girls by older men. While older men are more likely than young men to be HIV-positive, girls in impoverished contexts often view relationships with older men as vital opportunities for achieving financial, material, and social security. According to surveys, in many African countries, large numbers of young women lack comprehensive knowledge of HIV transmission. Many believe that female infection rates generally would be far lower if women's rights were more widely respected in Africa, if women exercised more political and socio-economic power. An August 2003 Human Rights Watch study reported that domestic violence made women in Uganda more vulnerable to HIV infection, in part by depriving them of the power to negotiate condom use. Others see a need for greater support for fidelity campaigns primarily aimed at African men.

Social and Economic Consequences

AIDS is having severe negative social and economic consequences in Africa, and these effects are expected to continue for many years, as suggested by a January 2000 Central Intelligence Agency National Intelligence Estimate on the infectious disease threats:

> At least some of the hardest-hit countries, initially in Africa and later in other regions, will face a demographic catastrophe as HIV/AIDS and associated diseases reduce human life expectancy dramatically and kill up to a quarter of their populations over the period of this Estimate. This will further impoverish the poor, and often the middle class, and produce a huge and impoverished orphan cohort unable to cope and vulnerable to exploitation and radicalization (CIA, *The Global Infectious Disease Threat and Its Implications for the United States,* [http://www.cia.gov/]).

The estimate predicted that AIDS would generate increased political instability and slow democratic development. The World Bank (*Intensifying Action Against HIV/AIDS in Africa*, September 1999) has reached similar conclusions with respect to Africa's economic future:

> The illness and impending death of up to 25% of all adults in some countries will have an enormous impact on national productivity and earnings. Labor productivity is likely to drop, the benefits of education will be lost, and resources that would have been used for investments will be used for health care, orphan care, and funerals. Savings rates will decline, and the loss of human capital will affect production and the quality of life for years to come.

In the most severely affected countries, sharp drops in life expectancy are occurring, reversing major gains achieved in recent decades. According to UNAIDS, average life expectancy in Africa is now 47 years due to AIDS, whereas it would have been 62 years in its absence. A March 2004 U.S. Census Bureau report predicted absolute population declines by 2010 in South Africa, Botswana, and three other African countries due to AIDS.

Rural Livelihoods. Studies show that AIDS has devastating effects on rural families. The father is often the first to fall ill, and when this occurs, farm tools and animals may be sold to pay for his care, frequently leading to rapid impoverishment of often already poor families. Should the mother also become ill, children may be forced to shoulder responsibility for the full time care of their parents, farmsteads, and often of themselves,

despite their frequently limited knowledge about how to carry out farm and domestic work. Many also become orphans. In 2001, the U.N. Food and Agriculture Organization reported that AIDS had killed about 7 million agricultural workers in 25 hard-hit countries in Africa and would likely cause 16 million more to die by 2020. In 10 of the most affected countries, labor force losses of between 10% to 26% were forecast. (FAO, *HIV/AIDS, Food Security, and Rural Livelihoods*, 2001). Some experts attribute serious food shortages in southern Africa in 2002 and 2003 to AIDS-related production losses (e.g., see FAO, HIV/AIDS and the Food Crisis in Sub-Saharan Africa, ARC/04/INF/8, March 2004). In February 2003, in separate testimony before the Senate Foreign Relations Committee and the House International Relations Committee, World Food Program (WFP) Executive Director James Morris said that AIDS was a central cause of the famine. In June 2004, Morris said that southern Africa was in a "death spiral" due to the effects of the AIDS pandemic, including the loss of human capacity and the devastation of rural areas, with resulting negative consequences for food security (WFP press release). The FAO supports many programs to alleviate the diverse threats that AIDS poses to agricultural production and food security; see [http://www.fao.org/hivaids].

Workforce Depletion. AIDS is blamed, in part, for increasing shortages of skilled workers and teachers in several countries and is claiming many African lives at middle and upper levels of public and private sector management. Although unemployment is generally high in Africa, trained personnel are not readily replaced. Dr. Peter Piot, UNAIDS Executive Director, told a June 2, 2005, special U.N. General Assembly meeting on AIDS that by 2006, 11 African countries will have lost 10% of their workforce to the disease. A May 2002 World Bank study, *Education and HIV/AIDS: A Window of Hope*, reported that over 30% of teachers are HIV positive in parts of Malawi and Uganda, 20% in Zambia, and 12% in South Africa. Reports from diverse sources have since continued to mirror such findings.

Security. AIDS may have serious security consequences for much of Africa, since HIV infection rates in many militaries are reportedly high. Domestic political stability could also be threatened in African countries if the security forces become unable to perform their duties due to AIDS. Peacekeeping is also at risk, because South African soldiers are expected to play an important peacekeeping role in Africa in the years ahead. The infection rate in South Africa has been estimated at 23%, with higher rates reported for units based in heavily infected KwaZulu-Natal province (for a recent study, see Laurie Garrett, *HIV and National Security: Where are the Links*, Council on Foreign Relations, 2005).

Responses to the AIDS Epidemic

Donor governments, non-governmental organizations (NGOs) working in Africa, and African governments have responded to the AIDS epidemic primarily by attempting to reduce the number of new HIV infections through prevention programs, and to some degree, by trying to ameliorate the damage done by AIDS to families, societies, and economies. A third response, treatment of AIDS sufferers with antiretroviral drugs (ARVs) that can result in long-term survival, has not been widely used in Africa until recently; but treatment programs are expanding. (See below, **AIDS Treatment Issues**).

Anti-AIDS programs and projects typically provide information on how HIV is spread and on how it can be avoided through the media, posters, lectures, and skits. Some success

has been claimed for these efforts in persuading youth to delay the age of "sexual debut" and to remain faithful to a single partner. The Bush Administration advocates an expansion of prevention programs focusing on abstinence until marriage and marital faithfulness as effective means of slowing the spread of HIV, although some critics maintain that this may be unrealistic in social environments characterized by poverty and lack of education. Some also question whether such approaches can benefit poor married women in Africa, who have little power to refuse the sexual demands of their husbands, whether infected or not — or, in some cases, to control their extra-marital activities. They are also often unable to refuse spousal decisions to take more than one wife, given that polygamous marriage is common and deeply embedded in many African societies. In January 2006, First Lady Laura Bush defended abstinence approaches, saying that she had "always been a little bit irritated by criticism of abstinence, because abstinence is absolutely, 100 percent effective in fighting a sexually transmittable disease." She added that "In many countries where girls feel obligated to comply with the wishes of men, girls need to know that abstinence is a choice"(Deborah Orin, "Laura Defends Sex Abstinence," *New York Post*, January 16, 2006).

Donor-sponsored voluntary counseling and testing (VCT) programs, where available, enable African men and women to learn their HIV status. In Botswana, HIV tests are now offered as a routine part of medical visits, and many experts are urging that this be done continent-wide. AIDS awareness programs are found in many African schools and, increasingly, in the workplace, where employers are recognizing their interest in reducing infection rates among their employees. Many projects seek to make condoms readily available and to provide instruction in condom use. Several projects have had success in reducing mother-to-child transmission by administering the anti-HIV drug AZT or nevirapine, before and during birth, and during infant nursing. Nevirapine, however, has been the subject of controversy. In December 2004, the Associated Press reported that important reporting flaws, including non-disclosure of bad drug reactions, had been found in a study of nevirapine conducted in Uganda under U.S. National Institutes of Health (NIH) sponsorship. The allegations sparked criticism in Africa, including from the South Africa's ruling Africa National Congress, which in December 2004 charged that top U.S. officials had "entered into a conspiracy with a pharmaceutical company to tell lies and promote the sales of nevirapine in Africa..." In response, NIH asserted in a statement that "single-dose nevirapine is a safe and effective drug for preventing mother to infant transmission of HIV." It termed as "absolutely false" any implication of thousands of adverse reactions in the Uganda study. AIDS activists and others worried that the controversy would discourage use of the drug, often the only available means of preventing mother to child transmission (MTCT) of HIV. A later National Academies' Institute of Medicine assessment found that the Uganda study was valid and that nevirapine should continue to be used for MTCT.

Church groups and humanitarian organizations have helped Africa deal with the consequences of AIDS by setting up care and education programs for orphans. Public-private partnerships have also become an important vehicle for responding to the African AIDS pandemic. The Bill and Melinda Gates Foundation has been a major supporter of AIDS vaccine research and diverse AIDS programs pursued in cooperation with African governments and donors. The Rockefeller Foundation, working with UNAIDS and others, has sponsored programs to improve AIDS care in Africa, and both Bristol-Myers Squibb and Merck and Company, together with the Gates Foundation and the Harvard AIDS Institute, have undertaken programs with the Botswana government aimed at improving the country's health infrastructure and providing AIDS treatment to all who need it. In Uganda, Pfizer and

the Pfizer Foundation fund Uganda's AIDS Support Organization and the Infectious Diseases Institute. It has trained 250 AIDS specialists annually, many slated to work in rural areas. In January, the Swiss drug firm Roche said it plans to help African firms produce generic versions of its WHO-endorsed ARV, Saquinavir, under its Technology Transfer Initiative.

The Global Fund to Fight AIDS, Tuberculosis, and Malaria, created in January 2002, commits about 60% of its grant funds to Africa, and about 60% of its grants worldwide go toward fighting AIDS. For further information, see CRS Report RL31712, *The Global Fund to Fight AIDS, Tuberculosis, and Malaria: Background and Current Issues*. Despite these responses, UNAIDS maintains that significant AIDS funding gaps remain. According to a recent study, $14.9 billion will be needed in 2006 to fight HIV/AIDS in low- and middle-income countries globally in 2006, whereas $8.9 billion is likely to be provided. The funding gap is projected to rise in future years, according to a June 2005 UNAIDS report.

Leadership Reaction in South Africa and Elsewhere

Many observers believe that the spread of AIDS in Africa could have been slowed if African leaders had been more engaged and outspoken at earlier stages of the epidemic. President Thabo Mbeki of South Africa has come in for particular criticism on this score. In April 2000, he wrote to then-President Clinton and other heads of state defending dissident scientists who maintain that AIDS is not caused by the HIV virus. In March 2001, Mbeki rejected appeals that the national assembly declare the AIDS pandemic a national emergency. Under mounting domestic and international pressure, the South African government seemed to modify its position significantly when the government announced after an April 2002 cabinet meeting that it would triple the national AIDS budget. When an ARV drug treatment program had not been launched by March 2003, however, the South African Treatment Action Campaign (TAC) launched a civil disobedience campaign. In August 2003, the South African cabinet instructed the health ministry to develop a plan to provide antiretroviral therapy nationwide, but by March 2004, TAC was threatening a lawsuit unless the program was actually begun. Finally, in April 2004, the government began offering treatment at five hospitals in populous, highly urban Gauteng province. In its 2006 National Budget Review, the government reported that 112,000 patients were "enrolled" for ARV therapy by December 2005 but did not specify the number in publicly funded programs. Estimates of total numbers in treatment and proportions under public and private care vary widely. In February 2005, TAC estimated that about 38% of 70,000 patients under ARV therapy were in public programs; the remainder were receiving private care. Another activist group, the International Treatment Preparedness Coalition, reported in November 2005 that of 150,000 persons receiving treatment in August 2005, 50%-53% were in public programs. In December 2005, UNAIDS reported that nearly 900,000 South Africans, or at least 85% of those in need of ARV therapy, were not yet receiving it by mid-2005.

The delays in South Africa's response to the pandemic have been costly, many experts believe. South African Health Department data have shown HIV infection rates continuing to rise. About 29.5% of pregnant women in South Africa were found to be HIV positive in 2004, up from 27.9% in 2003 and 26.5% in 2002. The Health Department estimates that there were 5.6 million HIV-positive South Africans in 2004. A September 2004 report by the Bureau of Market Research at the University of South Africa predicted that AIDS-related deaths would exceed 500,000 yearly from 2007 to 2011. A lower rate of growth in infections may reportedly be under way; a November 2005 South African Human Sciences Research

Council data release stated that South Africa's AIDS epidemic may be "levelling off." Some critics of the government have accused it of being "AIDS denialists" and of curtailing the rate of scaling up access to ARVs because of some officials' reported doubts about ARV use. South Africa's Health Minister Manto Tshabalala Msimang has repeatedly questioned the effectiveness of ARV drugs and has asserted that healthy diets and special foods, such as raw garlic and lemon peel, can offer protection from the disease (*Mail and Guardian Online*, May 5, 2005). Former President Nelson Mandela, seeking to combat the stigma associated with AIDS, announced in January 2005, that his son, Makgatho, had died of AIDS.

In the rest of Africa, many heads of state, including the presidents of Uganda, Botswana, Nigeria, and several other countries, are taking major roles in fighting the epidemic. Several regional AIDS initiatives have been launched. For example, in August 2003, the Southern African Development Community (SADC) agreed to an AIDS strategic framework, including the creation of a regional fund to fight the disease. The New Partnership for Africa's Development (NEPAD), in partnership with the African Union, UNAIDS, and other multinational entities, has formulated a range of strategies for countering AIDS, though the products of these efforts appear to be limited at present.

Uganda's president, Yoweri Museveni, has long been recognized for leading a successful prevention campaign against AIDS in Uganda, where the ABC (Abstinence, Be Faithful, or Use Condoms) transmission prevention program has won wide praise. A Senate Foreign Relations Africa Subcommittee hearing in May 2003, focused on "Fighting AIDS in Uganda: What Went Right." Dr. Anne Peterson, Assistant Administrator for Global Health at the U.S. Agency for International Development (USAID), testified that the "Uganda success story is about prevention." She said that successes had been recorded in promoting abstinence and faithfulness to partners, while increased condom use in recent years had also contributed to prevalence declines. Sophia Mukasa Monico, a member of the Global Health Council and a former AIDS worker in Uganda, testified that all three program elements are necessary for prevention to work but noted that the Ugandan epidemic was still "raging"and that much work to counter it remained to be done.

In February 2005, Johns Hopkins and Columbia University researchers released a study of Rakai, Uganda reporting that a local HIV prevalence decline was due to condom use and the deaths of infected people (see Maria Wawer, R. Gray, et al., "Declines in HIV Prevalence in Uganda: Not as Simple as ABC," *12th Conference on Retroviruses and Opportunistic Infections*, Boston). Abstinence and monogamy appeared not to be increasing. Some saw this as evidence that sexual behavior change programs were less important than expected. Others argued that behavior had likely changed substantially prior to the study. In July 2005, First Lady Laura Bush, speaking in South Africa during a trip to Africa that included visits with AIDS patients and orphans, said that the Uganda-developed ABC model was "successful" and added that "ABC stands for Abstinence, Be faithful, and correct and consistent use of Condoms." Conflicting reports appeared in late summer 2005 regarding a shortage of condoms in Uganda for preventing HIV. Some AIDS activists and others blamed the alleged shortage on an emphasis on abstinence in U.S.-funded AIDS prevention programs and a change in policy by Ugandan government officials, who denied a shortage existed. A U.S. official attributed the problem to a shipment of defective condoms.

AIDS Antiretroviral Treatment Issues

Access by the poor to antiretroviral drugs (ARVs) has been perhaps the most contentious issue surrounding the response to Africa's AIDS epidemic. ARVs are used in a treatment regime generally dubbed Antiretroviral Therapy (ART). Three or more ARVs are often used in combination to halt the genetic replication of the HIV virus at different stages in its life cycle, a treatment regime known as Highly Active ART (HAART). ART can enable AIDS victims to live relatively normal lives and permit long-term survival rather than early death. ARVs have proven highly effective in developed countries, including the United States, where AIDS, the eighth-ranked cause of death in 1996, was no longer among the top 15 causes by 1998, according to the U.S. Health and Human Services Department.

The high cost of ARVs has proved a key obstacle to large scaling-up of access to ART in Africa, where most patients are poor and lack health insurance. Once estimated at between $10,000 and $15,000 per person per year, ART costs have dropped dramatically in recent years. In May 2000, five major pharmaceutical companies agreed to negotiate sharp reductions in the price of AIDS drugs sold in Africa. UNAIDS launched a program in cooperation with pharmaceutical firms to boost treatment access. In June 2001, it reported that 10 African countries had reached agreement with drug makers that would significantly reduce prices in exchange for health infrastructure improvements to assure that ARVs are administered safely. Initiatives to expand ARV availability continued, and treatment became a major focus of Global Fund and the President's Emergency Plan for AIDS Relief (PEPFAR; see below) programs. In December 2003, the WHO formally launched its $5.5 billion "3 by 5" plan to treat 3 million AIDS patients in poor countries by 2005, with resources from the Global Fund and donors. Leaders of the G8, concluding their summit in Scotland in July 2005, promised "a package for HIV prevention, treatment, and care," with the goal of providing "universal access to treatment for all those who need it by 2010."

In October 2003, former President Bill Clinton announced that his Clinton Foundation HIV/AIDS Initiative (CHAI) had organized a program to provide generic three-drug ARV treatment in Africa and the Caribbean for about $.38 per day per AIDS patient using drugs manufactured in India and South Africa with backing from private donors and some donor governments, among other sources. In April 2004, the Clinton Foundation announced an agreement with UNICEF, the World Bank, and the Global Fund to expand the program to more than 100 developing countries. In April 2005, CHAI announced a pediatric AIDS program intended to put 10,000 HIV-positive children on ARV therapy in at least 10 countries in 2005, doubling the number of children in treatment. On January 12, 2006, former President Bill Clinton announced that CHAI had negotiated new agreements to lower prices of WHO-evaluated HIV tests by 50% and those of two antiretroviral drugs by 30%. These will be made available to the CHAI Procurement Consortium, a group of countries eligible to make purchases under CHAI agreements. It includes 50 developing countries. CHAI also helps countries to implement large-scale, integrated care, treatment, and prevention programs. Partner governments take the lead; CHAI provides technical aid, mobilizes human and financial resources, and promotes sharing of best practices.

As a result of ARV scaling up efforts, UNAIDS/WHO reported that an estimated 500,000 or 11% of a total of 4.7 million Africans needing ART were receiving it in June 2005, up from 150,000 a year earlier. In December 2005, however, they reported that progress in expanding treatment and care in Africa had been uneven in the past year. They

reported that one third or more of those needing ART were receiving it in countries including Botswana and Uganda, and 10% to 20% were being treated in Cameroon, Côte d'Ivoire, Kenya, Malawi, and Zambia, but that there was "extensive unmet need" in most of Africa. In countries like Ethiopia, Ghana, Lesotho, Mozambique, Nigeria, Tanzania, and Zimbabwe 90%-plus of those needing ARVs could not access them. Dr. Jim Yong Kim, head of the WHO AIDS programs, said in February 2005 that the 3 by 5 campaign was struggling to attain its goal ("Global AIDS Effort Still Short of Goal," *Boston Globe*, February 23, 2005). In Africa, Botswana and Uganda would likely meet their targets, but South Africa and Nigeria were lagging. South Africa's Health Minister, Tshabalala-Msimang, said in May that some were trying to "scapegoat" South Africa for the failure of 3 by 5 and that South Africa could not do a blanket rollout of ARV drugs because patients had to be closely monitored due to side effects produced by ARVs. She added that she would continue to inform patients that they had three options: improve their nutrition, take micronutrients, or enroll in an ARV program (*Mail and Guardian Online*, May 5, 2005).

Whether African countries are ready to "absorb" (effectively use) sharp increases in treatment funding has been another issue. AIDS activists believe that millions of Africans could quickly be given access to AIDS drugs. Others maintain that African supply channels cannot make the drugs consistently available to millions of patients and that regular monitoring of patients by medical personnel is not possible in much of Africa. Monitoring is necessary, they maintain, to deal with side effects and to adjust medications if drug resistance emerges. Many fear that if the drugs are taken irregularly, resistant HIV strains will emerge that could cause untreatable infections globally, although African patients reportedly follow their AIDS therapy regimens equally or more consistently than many American patients. The creation of once-daily combined ARV tablets is widely seen as a likely way to facilitate access to and adherence to ARV therapy, notably in impoverished settings. In January 2006, the multinational drug firms Gilead and Bristol-Myers Squibb announced that they had jointly developed such a tablet for certain drugs. For some, the correct response to weaknesses in Africa's basic health care systems is to devote resources to strengthening those systems. News reports indicate that scaling up of treatment is often stymied by African government administrative inefficiencies and by donor limitations on what their funds may be used to purchase.

Botswana's President Mogae told a November 2003 meeting, held in Washington by the Center for Strategic and International Studies, that the widely-praised treatment program in his country is being hampered by a "brain drain" of health personnel. Physicians, nurses, and technicians, often hired away by foreign governments, international organizations, and non-governmental organizations, or the general draw of developed country job markets. The health minister of Mozambique, which has launched a pilot ARV drug treatment program, said in May 2004 that the country was unable to launch a nationwide program because of serious shortages of staff and equipment. The Harvard-based Joint Learning Initiative on Human Resources for Health and Development issued a report in November 2004 finding that Africa had the lowest ratio of health workers to population of any region. At least one million new workers are needed, according to the report. In December 2004, Britain announced that it would provide $100 million to boost salaries of health workers in Malawi and increase the number of medical staff being trained.

AIDS activists have urged that African governments issue "compulsory licenses" to allow the manufacture or importation of inexpensive copies of patented AIDS drugs

("generic drugs"). In November 2001, a ministerial-level meeting of the World Trade Organization(WTO) in Doha, Qatar, approved a declaration stating that the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) should be implemented in a manner supportive of promoting access to medicines for all. The declaration affirmed the right of countries to issue compulsory licenses and gave the least-developed countries until 2016 to implement TRIPS. The question of whether countries manufacturing generic drugs, such as India or Thailand, should be permitted to export to poor countries was left for further negotiation through a committee known as the Council for TRIPS.

Although the Doha declaration drew broad praise, some AIDS activists criticized it for not permitting imports of generics. Some in the pharmaceutical industry, on the other hand, expressed concern that the declaration was too permissive and might reduce profits that, they argued, fund medical research. Others, however, maintained that the declaration would have little practical impact; in their view, poverty, rather than patents, is the key obstacle to drug access in Africa (see Amir Attaran and Lee Gillespie-White, "Do Patents for Anti-retroviral Drugs Constrain Access to AIDS Treatment in Africa?," *Journal of the American Medical Association*, October 17, 2001). In August 2003, the WTO reached agreement on a plan to allow poor countries to import generic copies of essential drugs, but the debate over access to ARVs in Africa seems likely to continue. In March 2005, India's parliament passed patent legislation expected to sharply raise prices in Africa and elsewhere for Indian-manufactured generic copies of newly discovered AIDS medications. Cheap generic copies of existing drugs can still be sold, although sellers will have to pay licensing fees to patent holders.

Effectiveness of the Response

The response to AIDS in Africa has had some successes, most notably in Uganda, where the rate of infection among pregnant women in urban areas fell from 29.5% in 1992 to 5% in 2001 (UNAIDS, *AIDS Epidemic Update, December 2002).* Uganda's infection rate has continued to drop; in 2003, adult prevalence nationwide was 4.1%, compared with 5.1% in 2001. HIV prevalence among young urban women in Zambia has also reportedly fallen, and UNAIDS indicates that sexual behavior patterns among young urbanites in some other countries may be changing in ways that combat the spread of HIV, although increases among populations continue in many African cities. South Africa has recorded a drop in infections among pregnant women under 20, and Senegal is credited with preventing an AIDS epidemic through an active, government-sponsored prevention program. Despite some success stories, however, the number of infected people in Africa continues to grow.

Experts contend that there are multiple social barriers to a more effective AIDS response in Africa, such as cultural norms that make it difficult for many government, religious, and community leaders to acknowledge or discuss sexual matters, including sex practices, prostitution, and the use of condoms. However, experts continue to advocate AIDS awareness and public education and outreach efforts as essential components of the response to the epidemic. Indeed, there is strong support for an intensification of such efforts, as well as adaptations to make them more effective.

The lives of HIV patients could be significantly prolonged and improved, some maintain, if more were done to identify and treat the opportunistic infections, notably tuberculosis (TB), that often accompany AIDS. Millions of Africans suffer dual HIV-TB infections, and their combined effects dramatically shorten life. TB can be cured by multi-

month, combined drug treatments, even in HIV-infected patients. However, according to the WHO, Africans often delay seeking treatment for TB or do not complete their drug regimens, contributing to high death rates among those with dual infections. UNAIDS and the WHO have recommended that Africans infected with HIV be treated with an antibiotic/sulfa drug combination known as cotrimoxazole in order to prevent opportunistic infections. Studies indicate that the drug could reduce AIDS death rates at a cost of between $8 and $17 per year per patient. The Pfizer Corporation donates the anti-fungal Diflucan (fluconazole), used to treat AIDS-related opportunistic infections (such as cryptococcal meningitis, a dangerous brain inflammation) to patients in 18 African countries through the Pfizer Diflucan Partnership Program (DPP). DPP is a public-private effort in collaboration with health ministries, local clinics, and non-governmental organizations. In partnership with the International Association for Physicians in AIDS Care, Pfizer also supports education and training for health care providers of diagnosis and management for opportunistic infection.

Further information on the response to AIDS in Africa and elsewhere may be found at the following websites.

— Centers for Disease Control (CDC): [http://www.cdc.gov/nchstp/od/nchstp.html]
— Global Fund to Fight AIDS, Tuberculosis & Malaria: [http://www.theglobalfund.org/en]
— International AIDS Vaccine Initiative: [http://www.iavi.org]
— International Association of Physicians in AIDS Care: [http://www.iapac.org]
— Kaiser Network: [http://www.kaisernetwork.org]; click “HIV Daily Reports”
— UNAIDS: [http://www.unaids.org/en/default.asp]
— USAID: [http://www.usaid.gov/our_work/global_health/aids/index.html]
— World Bank: [http://www.worldbank.org]; click “Topics >> AIDS”

U.S. Policy

U.S. concern over AIDS in Africa began to mount during the 1980s, as the severity of the epidemic became apparent. In 1987, in acting on the FY1988 foreign operations appropriations, Congress earmarked funds for fighting AIDS worldwide, and House appropriators noted that in Africa, AIDS had the potential for “undermining all development efforts” to date (H.Rept. 100-283). In subsequent years, Congress supported AIDS spending at or above levels requested by the executive branch, either through earmarks or report language. Nevertheless, a widely discussed July 2000 *Washington Post* article called into question the adequacy and timeliness of the early U.S. response to the HIV/AIDS threat in Africa (see Barton Gellman, “The Global Response to AIDS in Africa: World Shunned Signs of Coming Plague,” *Washington Post*, July 5, 2000, and Greg Behrman, *The Invisible People: How the U.S. Has Slept Through the Global AIDS Pandemic, the Greatest Humanitarian Catastrophe of Our Time*, New York: Free Press, 2004).

As the severity of the epidemic continued to deepen, many of those concerned for Africa’s future, both inside and outside government, came to feel that more should be done. On July 19, 1999, then-Vice President Al Gore proposed $100 million in additional spending for a global LIFE (Leadership and Investment in Fighting an Epidemic) AIDS initiative, with a heavy focus on Africa. Funds approved during the FY2000 appropriations process supported most of this initiative. On June 27, 2000, the Peace Corps announced that all volunteers serving in Africa would be trained as AIDS educators. USAID asserted in 2001

that its support of multilateral efforts and direct sponsorship of regional and bilateral programs had made it the global leader in the international response to AIDS since 1986, when it initiated AIDS prevention programs in developing countries (USAID, *Leading the Way: USAID Responds to HIV/AIDS*, September 2001). USAID had sponsored AIDS education programs; trained AIDS educators, counselors, and clinicians; supported condom distribution; and sponsored AIDS research. USAID claimed several successes in Africa. These included helping to reduce HIV prevalence among young Ugandans; preventing an outbreak of the epidemic in Senegal; reducing the frequency of sexually transmitted infections in several African countries; sharply increasing condom availability in Kenya and elsewhere; assisting children orphaned by AIDS; and sponsoring the development of useful new technologies, including the female condom. USAID reported having spent a total of $51 million on fighting AIDS in Africa in FY1998 and $63 million in FY1999 (*Leading the Way*, p. 121). In addition, some spending by the Health and Human Services Department supported HIV surveillance and other AIDS-related efforts in Africa.

Bush Administration

Combating the AIDS pandemic in Africa has been an important Bush Administration foreign assistance program goal. In May 2001, President Bush made the "founding pledge" of $200 million to the Global Fund, and in June 2002, he announced a $500 million International Mother and Child HIV Prevention Initiative to support efforts to prevent mother-to-child AIDS transmission. Eight African countries were named as beneficiaries. In his January 2003 State of the Union address, President Bush announced the launching of the President's Emergency Plan for AIDS Relief (PEPFAR), pledging $15 billion for fiscal years 2004 through 2008, including $10 billion in "new money," that is, spending in addition to then current levels. In February 2004, the State Department issued a report [http://www.state.gov/s/gac/rl/or/c11652.htm] providing details on the PEPFAR initiative, as well as plans to release initial PEPFAR funds for several "public-private partnership" treatment programs. PEPFAR aims to prevent 7 million new infections globally, provide ARV drugs for 2 million infected people, and provide care for 10 million infected people, including orphans. PEPFAR is resulting in major spending increases for HIV/AIDS prevention, care, and treatment in 15 "focus countries," 12 in Africa (Botswana, Cote d'Ivoire, Ethiopia, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, and Zambia). The new funds are being provided through the Global HIV/AIDS Initiative (GHAI), headquartered at the State Department. The GHAI is headed by the U.S. Global AIDS Coordinator, Randall Tobias, who coordinates not only the GHAI programs in focus countries but also the international AIDS programs of USAID and other agencies.

President Bush made AIDS a special focus of his five-day trip to Africa in July 2003. On July 8, in Senegal, the President told Africans, "we will join with you in turning the tide against AIDS in Africa." On July 10, speaking in Botswana, the President said that, "this is the deadliest enemy Africa has ever faced, and you will not face this epidemic alone." In September 2003, then Secretary of State Colin Powell told a U.N. General Assembly special session on AIDS that the epidemic was "more devastating than any terrorist attack" and that the United States would "remain at the forefront" of efforts to combat the epidemic. In January 2006, while visiting Nigeria, First Lady Laura Bush announced that in 2006 the United States would commit to Nigeria $163 million in PEPFAR funds for AIDS treatment and prevention.

Many AIDS activists and others have praised the President's initiatives, but critics maintain that PEPFAR started slowly and have urged increased appropriations. Some also see the program as too strongly unilateral and would like the United States to be acting in closer cooperation with other countries and donors, especially the Global Fund. Some question whether PEPFAR will do enough to strengthen African health care institutions and capabilities for coping with AIDS over the long term, or whether the funds will go primarily to U.S.-based organizations. U.N. Secretary General Kofi Annan, during an interview at the July 2004 international AIDS conference in Bangkok, urged U.S. contributions of $1 billion annually for the Global Fund. U.S. Global AIDS Coordinator Randall Tobias responded by stating that "It's not going to happen" (see CRS Report RL31712, *The Global Fund to Fight AIDS, Tuberculosis, and Malaria: Background and Current Issues*). Annan asked the United States to show the same leadership in the AIDS struggle that it had shown in the war on terrorism. U.S. State Department spokesman Richard Boucher rejected the implied criticism, saying that the Bush Administration had taken the AIDS crisis very seriously and that the $15 billion pledged to fight the epidemic over five years was an "enormous and significant amount." In a speech interrupted by protestors, Tobias told the conference that "At this point, perhaps the most critical mistake we can make is to allow this pandemic to divide us."

Senator Frist introduced S. 850 on April 19, 2005, that would authorize a Global Health Corps to send U.S. health volunteers abroad and expand the availability of health personnel, items, and related services. That same day, the National Academies' Institute of Medicine (IOM) released a report calling for a U.S. Global Health Service to mobilize health personnel to work in the 15 PEPFAR focus countries. An initial deployment of 150 key professionals would be paid full salary; others would receive $35,000 fellowships and student loan repayments up to $25,000. Some suggested that funds might better be spent training and retaining indigenous health personnel, particularly in Africa; others noted that training was a key part of the IOM proposal, which they praised as a dynamic response to the AIDS crisis.

Treatment. The *Financial Times* reported in April 2004 that the United States was withholding support from a program intended to treat 140,000 AIDS patients in Kenya with antiretrovirals because it would rely on a generic three-drug combination (FDC) pill. Many favor approval of FDCs, including copies of drugs made by different companies, on grounds that they are simpler to prescribe and need to be taken just once or twice a day. U.S. officials had expressed concerns that further study was needed to assure that their widespread or improper distribution did not contribute to the emergence of resistant HIV strains. The issue was submitted to a panel of experts instructed to report by mid-May 2004. Several members of Congress later wrote to President Bush asking that the United States join an international consensus that generics are safe and essential for AIDS treatment. In May 2004, then-Health and Human Services Secretary Tommy Thompson announced that the U.S. Food and Drug Administration (FDA) was instituting an expedited process that could lead to the approval of the use of FDCs in PEPFAR-funded programs. Many hailed the news as a step forward in making cheaper and more reliable antiretroviral therapy available in Africa, but critics said it placed an unnecessary hurdle in the way of distributing such pills. They maintained that the United States should have relied on the approval process of the World Health Organization, which had already cleared such pills. By June 2005, the FDA had reportedly cleared seven generic antiretrovirals manufactured in South Africa and India. However, the *Boston Globe* reported on June 20 that four African countries, Nigeria, Uganda, Ethiopia, and Tanzania, were refusing to accept generic FDA-approved drugs for use in U.S.-funded treatment programs. Instead, the countries sought approval of the drugs by WHO.

In March 2005, the Department of State released *Engendering Bold Leadership: The President's Emergency Plan for AIDS Relief*, the first annual report to Congress on the initiative. In an introductory letter to the report, Randall Tobias called PEPFAR "coordinated, accountable, and powerful." The report stated that 152,000 African patients were receiving AIDS treatment due to PEPFAR and that 119 million had been reached with mass media campaigns promoting abstinence and faithfulness, while 71 million had been reached with messages promoting other prevention measures, including the use of condoms. Critics have charged that funding for PEPFAR abstinence programs, notably in Africa, have increasingly replaced other HIV prevention measures and that the United States is today sending fewer condoms abroad than in 1990 (Center for Health and Gender Equity, *Prevention Funding Under* [PEPFAR]*: Law, Policy and Interpretation*, December 2005).

Spending. **Table 2** reports available information on recent U.S. spending levels on AIDS programs in Africa. Under the FY2007 budget request, the 12 countries would receive a 61% boost in AIDS-related aid, to $1.99 billion, under the State Department's Global HIV/AIDS Initiative account. Under the FY2006 request, GHAI assistance to the 12 focus countries in Africa would grow by 61% to just over $1.99 billion, or 68.9% of the total GHAI request. The Office of the Global AIDS Coordinator (OGAC) at the State Department administers the bulk of U.S. AIDS assistance to Africa. OGAC and the position of the U.S. Global AIDS Coordinator were created in accordance with P.L. 108-25, the United States Leadership Against Global HIV/AIDS, Tuberculosis, and Malaria Act of 2003, which authorized PEPFAR, announced by President Bush in his 2003 State of the Union address. PEPFAR was enacted, in part, to simplify the international AIDS budget, enhance transparency, and stress the President's interest in fighting AIDS and his backing for what the State Department reports is "the largest commitment ever by a single nation for an international health initiative" (see *Emergency Plan Basics*, [http://www.state.gov/s/gac/plan]. Prior to PEPFAR, the principal channels for HIV/AIDS assistance to Africa were USAID and the Global AIDS Program (GAP) of the Centers for Disease Control (CDC) in the Health and Human Services Department. Most USAID spending on AIDS in Africa is through the Child Survival and Health Programs Fund. Limited amounts are provided through other accounts, such as multi-functional Economic Support Fund, Peace Corps, and Migration and Refugee Assistance. The Department of Defense (DoD) has undertaken an HIV/AIDS Prevention Program, primarily with African armed forces and administered by the Naval Health Research Center in San Diego. It also focuses on education and creation of policy responses. As in other recent years, the Administration did not request funding for the program in FY2007. In FY2006 Congress continued to support it by appropriating $5.5 million (of which $3.2 million went to Africa). Foreign Military Financing (FMF) funds are also used to support this initiative. Department of Labor (DOL) program in the past supported AIDS education in the workplace in several African countries. (For details, see CRS Report RS21181, *HIV/AIDS International Programs: Appropriations, FY2003-FY2006*). Additional U.S. funds reach Africa indirectly through the AIDS programs of the United Nations (U.N.), the World Bank, and the Global Fund.

The scale of the response to the pandemic in Africa by the United States and other donors remains a subject of intense debate. The U.N. Special Envoy for HIV/AIDS in Africa, Stephen Lewis, has been a persistent critic, telling a September 2003 conference on AIDS in Africa that he was "enraged by the behavior of the rich powers" with respect to the epidemic. Many activist groups have made similar critiques. The singer Bono said he had a "good old row" with President Bush in a September 2003 meeting on the level of U.S.

funding for fighting the international AIDS epidemic. Nonetheless, as noted above, others have argued that Africa's ability to absorb increased AIDS funding is limited and that health infrastructure will have to be expanded before new funds can be spent effectively.

Table 2. U.S. Bilateral Spending on Fighting AIDS in Africa

($ millions)

	FY2005 Actual	FY2006 Estimate	FY2007 Request
USAID	81.44	78.48	78.48
CDC (GAP)	63.90	69.17	69.17
State (GHAI)	885.66	1238.65	1,994
DOD	4.1	3.2	-
FMF	1.98	1.98	1.60
Total	**1,037.08**	**1,391.48**	**2,143.25**

Legislative Action, 2000-2004

The Global AIDS and Tuberculosis Relief Act of 2000 (P.L. 106-264), enacted in August 2000, authorized funding for FY2001 and FY2002 for a comprehensive, coordinated, worldwide HIV/AIDS effort under USAID. In the 107th Congress, several bills were introduced with international or Africa-related AIDS-related provisions. A major international AIDS authorization bill, H.R. 2069, passed both chambers during the 107th Congress but did not go to conference. (For information on appropriations for HIV/AIDS programs, see CRS Report RS21114, *HIV/AIDS: Appropriations for Worldwide Programs in FY2001 and FY2002*). In May 2003, Congress approved and President Bush signed into law H.R. 1298/ P.L. 108-25, the U.S. Leadership Against HIV/AIDS, Tuberculosis, and Malaria Act of 2003. It authorized PEPFAR and $3 billion per year for FY2004 through FY2008 (a total of $15 billion) and created the office of the Global AIDS Coordinator at the State Department. Appropriations measures have supported a variety of programs helping Africa fight the pandemic; for further information, see CRS Report RS21181, *HIV/AIDS International Programs: Appropriations, FY2003-FY2006.*

Legislation in the 109th Congress

H.R. 1409 (Lee), the Assistance for Orphans and Other Vulnerable Children in Developing Countries Act of 2005, which was related to S. 350 (Lugar), was enacted as P.L. 109-95. H.R. 3057 (Kolbe), the FY2006 Foreign Operations FY2006 Appropriation, contains significant AIDS funding, was enacted as P.L. 109-102. H.R. 3010, the Health and Human Services FY2006 Appropriations bill, which also contains substantial funding for international HIV/AIDS, was enacted as P.L. 109-149. Bills introduced in the 109th Congress, with provisions related to the African AIDS pandemic, include the following: H.R. 155 (Millender-McDonald), Mother to Child Plus Appropriations Act for Fiscal Year 2005; H.R. 164 (Millender McDonald), International Pediatric HIV/AIDS Network Act of 2005; H.R. 2601 (Smith), Foreign Relations Authorization Act, Fiscal Years 2006 and 2007; S. 600 (Lugar), Foreign Affairs Authorization Act, Fiscal Years 2006 and 2007; S. 850 (Frist), Global Health Corps Act of 2005; and S. 2125 (Obama), Democratic Republic of the Congo Relief, Security, and Democracy Promotion Act of 2005.