Order Code IB10050

CRS Issue Brief for Congress
Received through the CRS Web

AIDS in Africa

Updated March 8, 2002

Raymond W. Copson
Foreign Affairs, Defense, and Trade Division

CONTENTS

AIDS in Africa

SUMMARY

Sub-Saharan Africa has been far more severely affected by AIDS than any other part of the world. The United Nations reports that 28.1 million adults and children are infected with the HIV virus in the region, which has about 10% of the world's population but more than 70% of the worldwide total of infected people. The overall rate of infection among adults in sub-Saharan Africa is about 8.4%, compared with a 1.2% infection rate worldwide. Sixteen countries, mostly in eastern and southern Africa, have HIV infection rates of more than 10%, and the rate has reached 35.8% in Botswana. An estimated 19.3 million Africans have lost their lives to AIDS, including 2.3 million who died in 2001. AIDS has surpassed malaria as the leading cause of death in Africa, and it kills many times more Africans than war. In Africa, HIV is spread primarily by heterosexual contact, and sub-Saharan Africa is the only region where women are infected at a higher rate than men.

Experts relate the severity of the African AIDS epidemic to the region's poverty. Health systems are ill-equipped for prevention, diagnosis, and treatment. Poverty forces many men to become migrant workers in urban areas, where they may have multiple sex partners. Poverty leads many women to become commercial sex workers, vastly increasing their risk of infection. Cultural and behavior patterns, such as low rates of male circumcision, may also play a role.

AIDS is having severe social and economic consequences, depriving Africa of skilled workers and teachers, while reducing life expectancy by decades in some countries. The cumulative total of African children orphaned by AIDS since the epidemic began is 12.1 million. Currently 6.5 million AIDS orphans are living in Africa, facing increased risk of malnutrition and reduced prospects for education. AIDS is being blamed for declines in agricultural production in some countries.

Donor governments, non-governmental organizations, and African governments have responded primarily by attempting to reduce the number of new HIV infections, and by trying ameliorate the damage done by AIDS to families, societies, and economies. The adequacy of this response is the subject of much debate. Spending from all sources on HIV/-AIDS in sub-Saharan Africa was estimated at $500 million for FY2000.

Treatment of AIDS sufferers with medicines that can result in long-term survival has not been widely used in Africa. Advocates of treatment argue that in view of recent drug price reductions, treatment is an affordable means of reducing AIDS damage to African economies, reinforcing prevention programs, and keeping parents alive. Skeptics argue that treatment is still too expensive to be an option for most Africans and would require donors to fund costly improvements in Africa's health infrastructure.

U.S. concern over AIDS in Africa grew during the 1980s, as the severity of the epidemic became apparent. According to the U.S. Agency for International Development, the United States has been the global leader in the international response to AIDS since 1986. Legislation enacted in the 106th and the 107th Congresses increased funding for worldwide HIV/AIDS programs, and the Administration has requested a further increase for FY2003. The United States has also pledged $500 million to the new Global Fund to Fight AIDS, Tuberculosis, and Malaria. Nonetheless, critics find the U.S. response inadequate in view of the scale of the African pandemic.

MOST RECENT DEVELOPMENTS

The Bush Administration's proposed FY2003 budget, released in February 2002, includes $500 million in Development Assistance for HIV/AIDS programs, as well as $40 million through other programs administered by the U.S. Agency for International Development (USAID); $143.8 million for international HIV/AIDS programs of the Centers for Disease Control and Prevention; $200 million in contributions to the Global Fund to Fight HIV/AIDS, Tuberculosis, and Malaria; and $2 million in Foreign Military Financing to complement the Defense Department's AIDS prevention education program for African armed forces. At a Senate Foreign Relations Committee hearing on the worldwide AIDS pandemic on February 13, Secretary of Health and Human Services Tommy Thompson testified that the total U.S. commitment to the Global Fund to Fight AIDS, Tuberculosis, and Malaria had reached $500 million.

The Africa Subcommittee of the Senate Foreign Relations Committee held a hearing on HIV/AIDS on February 14. Dr. E. Anne Peterson, Assistant Administrator for Global Health at the U.S. Agency for International Development, testified that preventing new infections remained the most urgent priority. Peterson added that USAID would be launching four treatment sites in Africa in 2002 to provide "critically needed answers" to the challenges of providing antiretroviral therapy. Harvard Professor Jeffrey Sachs, coordinator of a recent World Health Organization study on macroeconomics and health, argued that with "concerted financial support" treatment could be provided on "a greatly enlarged scale."

BACKGROUND AND ANALYSIS

Sub-Saharan Africa has been far more severely affected by AIDS than any other part of the world. According to a December 1, 2001 report issued by the Joint United Nations Program on HIV/AIDS (UNAIDS), some 28.1 million adults and children are infected with the HIV virus in the region, which has about 10% of the world's population but 70% of the worldwide total of infected people. The overall rate of infection among adults is about 8.4%, compared with 1.2% worldwide. UNAIDS projects that half or more of all 15 year-olds will eventually die of AIDS in some of the worst-affected countries, such as Zambia, South Africa, and Botswana, unless the risk of contracting the disease is sharply reduced. An estimated 19.3 million Africans have lost their lives to AIDS, including an estimated 2.3 million who died in 2001. UNAIDS estimates that 3.4 million new HIV infections occurred in 2001, down from the estimated 3.8 million new infections in 2000. Experts are cautious in suggesting that this decline might represent some success in prevention efforts, particularly since the adult infection rates continue to increase in a number of countries, including Nigeria, Africa's most populous nation. Moreover, they point out that 3.4 million new infections still represents a very fast and highly destructive rate of spread. AIDS has surpassed malaria as the leading cause of death in sub-Saharan Africa, and it kills many times more people than Africa's armed conflicts.

Characteristics of the African Epidemic

In addition to its severity, the sub-Saharan AIDS epidemic is defined by a number of other unusual characteristics.

- HIV, the human immunodeficiency virus that causes AIDS, is spread in Africa primarily by heterosexual contact.

- Sub-Saharan Africa is the only region in which women are infected with HIV at a higher rate than men. According to UNAIDS, women make up an estimated 55% of the HIV-positive adult population in sub-Saharan Africa, as compared with 47% worldwide.

- Young women are particularly at risk. A U.N. study found girls aged 15-19 to be infected at a rate of 15% to 23%, while infection rates among boys of the same age were 3% to 4%.

- Eastern and southern Africa have been far more severely affected than West Africa, but infection rates in a number of West African countries are starting to escalate. In some southern African countries, 20% or more of the adult population is infected with HIV, and the rate has reached 35.8% in Botswana. On March 20, 2001, the South African government released statistics showing that 4.7 million South Africans, including 24.5% of adults, were infected in 2000 – up from 22.4% in 1999. In West Africa, Senegal, with an active AIDS policy, had an adult infection rate below 2% in 1999, but the infection rate exceeds 10% in nearby Ivory Coast. Adult infection rates in four other West African countries, including Nigeria, have passed the 5% mark.

- The African AIDS epidemic is having a much greater impact on children than is the case in other parts of the world. An estimated 600,000 African infants become infected with HIV each year through mother-to-child transmission, either at birth or through breast-feeding. (White House, *Report on the Presidential Mission on Children Orphaned by AIDS in Sub-Saharan Africa: Findings and Plan of Action.* Washington, July 19, 1999, p. 14.) These children have a short life expectancy, and the number of infected children currently alive in Africa is estimated at 1 million (UNAIDS).

- A cumulative total of 12.1 million African "AIDS orphans" have lost either their mother or both parents to AIDS since the epidemic began, according to UNAIDS. A report by the U.S. Agency for International Development (USAID) puts the number of such orphans currently living in 26 African countries at 6.5 million, and projects that by 2010, there will be 15 million African AIDS orphans, including 2.7 million in Nigeria, 2.5 million in Ethiopia, and 1.8 million in South Africa. (*Children on the Brink*, 2000 update.) Because of the stigma attached to the AIDS disease, AIDS orphans run a greater risk of being malnourished, abused, and denied an education.

Explaining the African Epidemic

AIDS experts emphasize a variety of economic and social factors in explaining Africa's AIDS epidemic, placing primary blame on the region's poverty. Poverty has deprived Africa, for example, of effective systems of health information, health education, and health care. Thus, Africans suffer from a high rate of untreated sexually-transmitted infections (STIs) other than AIDS, and these increase susceptibility to HIV. African health care systems are typically unable to provide AIDS counseling, which could help slow the spread of the disease, and even HIV testing is difficult for many Africans to obtain. AIDS treatment is generally available only to the elite.

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 have become commercial sex workers because of poverty, and they too are highly vulnerable to infection. Migrant workers may carry the infection back to their wives when they return home. Long distance truck drivers, and drivers of "taxis," who transport Africans long distances by car, are probably also key agents in spreading HIV.

Some behavior patterns in Africa may also be affecting the epidemic. In explaining the fact that young women are infected at a higher rate than young men, Peter Piot, the Executive Director UNAIDS, has commented that "the unavoidable conclusion is that girls are getting infected not by boys but by older men," who are more likely than young men to carry the disease. (UNAIDS press release, September 14, 1999.) A researcher in a UNAIDS project studying the differential rate of infection added that "Young (women's) lives are being cut short through sex which is all too often forced, coerced, or 'bought' with sugar-daddy gifts." Many believe that the infection rate among women generally would be far lower if women's rights were more widely respected in Africa and if women exercised more power in political and economic affairs. (For more on these issues, see Helen Epstein, "AIDS: the Lesson of Uganda," *New York Review of Books*, July 5, 2001.)

Adult HIV Infection Rates, end of 1999 (%)

Botswana	35.80
Swaziland	25.25
Zimbabwe	25.06
Lesotho	23.57
South Africa	19.94
Namibia	19.54
Zambia	19.95
Malawi	15.96
Kenya	13.95
Cent. Af. Republic	13.84
Mozambique	13.22
Djibouti	11.75
Burundi	11.32
Rwanda	11.21
Cote d'Ivoire	10.76
Ethiopia	10.63
Uganda	8.30
Tanzania	8.09
Cameroon	7.73
Burkina Faso	6.44
Congo Brazzaville	6.43
Togo	5.98
Congo Kinshasa	5.07
Nigeria	5.06
Gabon	4.16
Ghana	3.60
Sierra Leone	2.99
Eritrea	2.87
Liberia	2.80
Angola	2.78
Chad	2.69
Guinea Bissau	2.50
Benin	2.45
Mali	2.03
Gambia	1.95
Senegal	1.77
Guinea	1.54
Sudan	.99
Mauritania	.52
Equatorial Guinea	.51
Somalia	NA
Madagascar	.15

Source: UNAIDS, Report on the Global HIV/AIDS Epidemic, June 2000

The breakdown in social order and social norms caused by armed conflict could also be contributing to the African epidemic. Conflict, which has afflicted many sub-Saharan countries for years, is typically accompanied by numerous incidents of violence against women, including rape, carried out by soldiers and guerrillas. Such men are also more likely to resort to commercial sex workers than those living in a settled environment.

Some observers believe that the spread of AIDS in Africa could have been slowed if African leaders had been more engaged and outspoken in the struggle against the disease. President Yoweri Museveni of Uganda, in particular, has won wide recognition for leading a successful campaign against AIDS in his country. But many other African leaders have said or done comparatively little about the epidemic.

President Daniel arap Moi of Kenya, where 13.9% of adults are infected and nearly a million people have died from AIDS, did not endorse the use of condoms as a preventive until December 1999. (Africa News Service, December 23, 1999.) In South Africa, many critics maintain that the current president, Thabo Mbeki, and his government are not treating the disease with sufficient urgency. In April 2000, President Mbeki wrote 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. The press reported in September that Mbeki, using outdated and inaccurate statistics obtained from the Internet, had concluded that HIV/AIDS was not a leading cause of death in South Africa and had written to the Minister of Health seeking a review of health expenditure priorities.

Later in the month, the South African government attempted to delay publication of a South African Medical Research Council report, which found that AIDS is indeed the leading cause of death, accounting for 40% of mortality among South Africans aged 15 to 49. The Council predicted that South Africa's death toll from AIDS would reach a cumulative total of between 5 and 7 million by 2010, when 780,000 people would be dying annually from the disease. Life expectancy would fall from 54 years at present to 41 by the end of the decade, according to the Council.

In August 2001, the South African Treatment Action Campaign (TAC) launched a suit against the South African government, demanding a comprehensive program to prevent mother-to-child transmission (MTCT) of HIV. TAC maintains that current MTCT trials involving 18 pilot projects providing the antiretroviral drug Nevirapine to HIV-positive pregnant women are inadequate and that 20,000 babies could be saved by a nationwide program. The German firm Boerhringer-Ingelheim offers Nevirapine drug free in Africa for MTCT programs. South African officials maintain that safety precautions require testing of Nevirapine and MTCT prevention procedures before launching a nationwide program. The Pretoria high court ruled in favor of the TAC in December 2001, giving the government until March 31, 2002, to present a plan for a comprehensive MTCT program, including counseling, testing, and treatment. The government, however, has announced that it will appeal the decision.

Social and Economic Consequences

AIDS is having severe social and economic consequences in Africa, and these negative effects are expected to continue for many years. A January 2000 Central Intelligence Agency National Intelligence Estimate on the infectious disease threat, made public in an unclassified version, forecasts grave problems over the next 20 years.

> At least some of the hardest-hit countries, initially in sub-Saharan 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.odci.gov], "Publications and Reports".)

The estimate predicted increased political instability and slower democratic development as a result of AIDS. According to the World Bank,

> 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. (World Bank, *Intensifying Action Against HIV/AIDS in Africa*.)

In the most severely affected countries, sharp drops in life expectancy are occurring, and these will reverse major gains achieved in recent decades. At AIDS2000, the July 2000 international AIDS conference held in Durban, South Africa, Karen Stanecki of the U.S. Census Bureau reported that AIDS had cut life expectancy in Botswana from 71 years to 39 and in Zimbabwe from 70 years to 38. Stanecki predicted that South Africa, Zimbabwe, and Botswana will begin to experience negative population growth in 2003, and that by 2010, life expectancy at birth will have fallen to about 30 years throughout southern Africa.

According to many reports, AIDS has devastating effects on rural families. The father is typically the first to fall ill, and when this occurs, farm tools and animals may be sold to pay for his care. As he grows weaker, he will become unable to farm at all; nor will his wife be able to farm, since she will be devoting her time to nursing him. The family will be unable to pay school fees, and in any event, children will likely be kept out of school to perform added chores at home. Should the mother also become ill, children may be forced to shoulder responsibility for the full time care of their parents. The economic consequences of the disruption of rural life can be severe, and reduced food production in some areas due to AIDS has been reported.

AIDS is also being blamed for shortages of skilled workers and teachers in several countries. An October 2001 report from Zambia, for example, indicated that AIDS was killing about 1,000 teachers annually, nearly equal to half of the 2,200 new teachers who complete their training each year. Although unemployment is generally high in Africa, trained personnel are not readily replaced. AIDS is claiming many lives at middle and upper levels of management in both business and government.

AIDS may have serious security consequences for much of Africa, since HIV infection rates in many armies are extremely 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. South African soldiers have been widely expected to play an important peacekeeping role in the Democratic Republic of the Congo (DRC, formerly Zaire) and perhaps other countries in coming months and years, but estimates of the infection rate in the South Africa army run from 17% to 40%, with higher rates reported for units based in heavily infected KwaZulu-Natal province. A December 2001 General Accounting Office (GAO) report raised questions about the ability of the United Nations to promote AIDS awareness and reduce risky behaviors in U.N. peacekeeping forces. (GAO Report GAO-02-194, *U.N. Peacekeeping: United Nations Faces Challenges in Responding to the Impact of HIV/AIDS on Peacekeeping Operations*.) The report also noted that the U.N. faced difficulties in providing HIV/AIDS assistance to civilians affected by conflict.

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, and to some degree, by trying ameliorate the damage done by AIDS to families, societies, and economies. A third possible response – treatment of AIDS sufferers with medicines that can result in long-term survival – has not been widely used in Africa, largely due to cost, although some treatment is now being offered at private clinics or through programs offered by a few large employers. Demands for large-scale treatment are mounting in Africa, and are drawing support from outside the continent among AIDS activists and others concerned for the region's future. An effective vaccine could offer a permanent solution to the African AIDS crisis, but progress in vaccine development has been slow. (For more information on the international response to the epidemic, see CRS Report RL30883, *Africa: Scaling Up the Response to the HIV/AIDS Pandemic.*)

Efforts to reduce the number of AIDS infections have focused on increasing AIDS awareness among Africans. Programs and projects aimed at combating the disease typically provide information on how the disease is spread – and on how it can be avoided – through the media, posters, lectures, and skits. Donor-sponsored voluntary counseling and testing (VCT) programs, where available, enable African men and women to learn their HIV status. Those testing positive are typically referred to support groups and advised on ways to protect others from contracting the disease; while the majority testing negative are counseled on behavior changes that will keep them HIV-free. USAID is currently supporting VCT centers in 10 African countries. AIDS awareness programs can be found in many African schools and increasingly in the workplace, where employers are recognizing their interest in reducing the infection rate among their employees. Many projects aim at making condoms readily available and on providing instruction in condom use. USAID is a major provider of condoms in Africa. Pilot projects have had success in reducing mother-to-child transmission by administering the anti-HIV drug AZT or Nevirapine, during birth and early childhood.

Church groups and humanitarian organizations have helped Africa deal with the consequences of AIDS by setting up programs to provide care and education to orphans. The Farm Orphan Support Trust in Zimbabwe tries to keep sibling orphans together and in a family living situation; the Salvation Army sponsors a pilot, community-based, orphan support

program in Zambia, providing education and health care to vulnerable children. (*Report on the Presidential Mission on Children Orphaned by AIDS*.) A United Nations study has found that community-based organizations, sometimes with the support of NGOs, have emerged to supply additional labor, home care for the sick, house repair, and other services to AIDS-afflicted families. (UNAIDS, *A Review of Household and Community Responses to the HIV/AIDS Epidemic in Rural Areas of Sub-Saharan Africa*, 1999.)

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 vaccine research and a variety of AIDS programs undertaken 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.

USAID estimates that in FY2000, all donors and lending agencies, together with African governments, spent approximately $500 million in combating AIDS, but donors have committed to scaling up the response. On July 23, 2000, leaders at the G-8 world economic summit in Okinawa pledged to reduce the number of young people infected by the HIV virus by 25%. The World Health Organization estimated that this pledge, and G-8 pledges to attack malaria and tuberculosis as well, would cost at least $5 billion per year for 5 years. The World Bank, on September 12, 2000, made an initial commitment of $500 million to a Multi-Country HIV/AIDS Program (MAP) for Africa. The MAP, designed to be both flexible and rapidly disbursing, according to the Bank, will help fund HIV/AIDS prevention, care, and treatment programs in countries that have developed a strategic approach to combating the epidemic and that met certain other conditions. Nonetheless, on December 9, 2001, Peter Piot, executive director of the Joint United Nations Program on HIV/AIDS (UNAIDS), told an international AIDS conference in Burkina Faso that assistance to fight HIV/AIDS in sub-Saharan Africa should be increased "many-fold," and that the region requires $4.6 billion per year to confront the pandemic.

Global Fund

African heads of state, meeting in Abuja, Nigeria, issued a statement on April 27, 2001, declaring AIDS a continental emergency, pledging to spend 15% of their annual budgets on health and urging donors to create a $5 billion to $10 billion Global AIDS Fund. U.N. Secretary General Kofi Annan subsequently asked for the creation of an international "war chest" of $7 billion to $10 billion per year, primarily to fight HIV/AIDS but also to combat tuberculosis and malaria.

On May 11, 2001, President Bush, speaking at the White House in an appearance with Annan and Nigeria's President Olusegun Obasanjo, announced that the United States would make a "founding contribution" of $200 million. The G-8 summit of industrialized nations, held in Genoa, July 20-22, endorsed the proposed fund and affirmed that members were committed to making it operational by the end of 2001. Secretary General Annan appointed Dr. Chrispus Kiyonga, former Minister of Health in Uganda, to chair a transitional working group charged with negotiating the terms for establishing the Fund. The transitional working

group included over 40 representatives of governments, non-governmental organizations, U.N. agencies, foundations, and the private sector.

The Global Fund, which describes itself as an "independent, public-private partnership," convened its first Board of Directors meeting in Geneva, Switzerland, where the Fund will be headquartered, on January 28-29. The Board solicited the first round of grant proposals from "country partners," which are to be teams made up of government, non-governmental organizations, and the private sector, and the first grants are expected to be made in April. Pledges to the Fund totaled more than $1.9 billion as of January 31, 2002.

As noted above, Health and Human Services Secretary Thompson has said that the U.S. commitment to the Global Fund to date totals $500 million, and additional U.S. pledges are expected in the future as the Fund operations expand. To date, Congress has made available a total of $300 million for contributions to the Global Fund (see CRS Report RS21114, *HIV/AIDS: Appropriations for Worldwide Programs in FY2001 and FY2002*), and the Administration has requested an additional $200 million for FY2003. This amount would come equally from the Foreign Operations Appropriations and from the appropriations funding the Department of Health and Human Services. Should Congress approve this request, it will have made available $500 million for the Fund.

Further information on the response to AIDS in Africa may be found at the following web sites:

CDC: [http://www.cdc.gov/nchstp/od/nchstp.html]
European Union: [http://europa.eu.int/comm/development/aids/]
The Global Fund to Fight AIDS, Tuberculosis, and Malaria:
[http://www.globalfundatm.org]
International AIDS Vaccine Initiative: [http://www.iavi.org]
International Association of Physicians in AIDS Care: [http://www.iapac.org/]
Kaiser Daily HIV/AIDS Report: [http://report.kff.org/aidshiv/]
UNAIDS: [http://www.unaids.org/]
USAID: [http://www.usaid.gov/], click on "Population, Health, and Nutrition."
World Bank: [http://www.worldbank.org/], click on "Topics."

Effectiveness of the Response

The response to AIDS in Africa has had some successes, most notably in Senegal, mentioned above, and in Uganda, where the rate of infection among pregnant women in urban areas has fallen for eight consecutive years – from 29.5% in 1992 to 11.25% in 2000 (UNAIDS, *AIDS Epidemic Update, December 2001)*. The Uganda government sponsors an active AIDS awareness program that openly advocates the use of condoms. HIV prevalence among young urban women in Zambia has also reportedly fallen, and UNAIDS indicates that urban sexual behavior patterns may be changing in ways that combat the spread of HIV. Despite some success stories, however, available evidence indicates that the epidemic is deepening in most of Africa.

The December 2000 UNAIDS update on the AIDS epidemic estimated that there had been 3.8 million new HIV infections in Africa in 2000 as compared to 4 million in 1999, and suggested that the decrease could in part reflect the success of prevention programs in some

countries. The December 2001 update recorded a further decline, to 3.4 million new infections in 2001. The 2000 report also noted, however, that the decline in new infections could result partly from the fact that many of the most vulnerable, sexually active people had already been infected in prior years. In any event, citing populous Nigeria, where HIV infection is believed to be spreading, the report warned that the epidemic could still take off in countries with comparatively low infection rates. Some also note that 3.4 million new infections, though fewer than in preceding years, still represent an extraordinarily rapid spread of a highly destructive disease.

Experts point out that there are a number of 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 AIDS amelioration as essential components of the response to the epidemic. Indeed, there is strong support for an intensification of awareness and amelioration efforts, as well as adaptations to make such efforts more effective. With respect to amelioration, UNAIDS has recommended that donors find ways to strengthen those indigenous support institutions that are already helping AIDS victims and their families. (*A Review of Household and Community Responses.)* There is also support for a stronger focus on treatment of non-HIV sexually-transmitted infections, which studies show can dramatically lower the rate of HIV transmission.

The lives of infected people could be significantly prolonged and improved, some maintain, if more were done to identify and treat the opportunistic infections, particularly tuberculosis, that typically accompany AIDS. Millions of Africans suffer dual infections of HIV and TB, and the combined infection dramatically shortens life. Tuberculosis can be cured by treatment with a combination of medications over several months, even in HIV-infected patients. However, according to the World Health Organization, Africans often delay seeking treatment for TB or do not complete the course of medication (*Global Tuberculosis Control: WHO Report 1999,* Key Findings), contributing to the high incidence of death among those with dual infections. Pfizer Corporation has signed an agreement with South Africa to donate the anti-fungal Diflucan (fluconazole) for treating AIDS-related opportunistic infections, including cryptococcal meningitis, a dangerous brain inflammation. On December 1, 2001, Pfizer announced that it would sign memoranda of understanding on donating fluconazole with six other African countries. UNAIDS and the World Health organization recommended on April 5, 2000, that Africans infected with HIV be treated with an antibiotic/sulfa drug combination known by the trade name Bactrim 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.

AIDS Treatment Issues

Access for poor Africans to costly combinations of AIDS medications or "antiretrovirals" (ARVs) is perhaps the most contentious issue surrounding the response to the African epidemic today. Administered in a treatment regimen known as HAART – highly active antiretroviral therapy – these drugs can return AIDS victims to normal life and lead to long-term survival rather than early death. Such treatment has proven highly effective in developed countries, including the United States, where AIDS, which had been the eighth

leading cause of death in 1996 no longer ranked among the 15 leading causes by 1998. (U.S. Department of Health and Human Services Press Release, October 5, 1999.)

Advocates of making HAART widely available in Africa argue that the therapy would keep parents alive, slowing the growth in the number of AIDS orphans; and keep workers, teachers, civil servants, and managers alive as well, thus reducing the economic impact of the epidemic. Moreover, proponents argue, treatment will strengthen prevention efforts, since the possibility of treatment will create strong incentives for participation in VCT programs. Someone who enters treatment and is receiving regular medical attention, many believe, will be more likely to behave in ways that minimize the risk of spreading HIV. Some also see a moral obligation to try to save lives when the medications for doing so exist.

The high cost of HAART treatments, however, has been regarded as the principal obstacle to offering the therapy on a large scale in Africa, where most victims are poor and lack health insurance. The cost of administering HAART was once estimated at between $10,000 and $15,000 per person per year. On May 11, 2000, five major pharmaceutical companies announced that they were willing to negotiate sharp reductions in the price of AIDS drugs sold in Africa. UNAIDS launched a program in cooperation with the pharmaceutical companies to boost treatment access and, in June 2001, reported that 10 African countries had reached agreement with manufacturers. The agreements significantly reduced prices in exchange for health infrastructure improvements to assure that ARVs are administered safely. Patented AIDS medications are now reportedly becoming available in several African countries, at prices ranging from a few hundred dollars to just over $1000 per patient per year, for a three-drug treatment comparable to that available in developed countries. Private clinics in some African cities are now offering HAART, and Uganda as well as Cote d'Ivoire are providing treatment in publicly-funded programs to several hundred patients. Nonetheless, Harvard expert Dr. Howard Hiatt estimated in December 2001 that no more than 25,000 Africans were receiving treatment. ("Learn from Haiti," *New York Times*, December 6, 2001). A Nigerian program to treat 15,000 AIDS patients with generic antiretrovirals imported from India has been delayed, reportedly due to organizational problems.

Harvard University faculty released a "consensus statement" on April 4, 2001, maintaining that objections to widespread treatment of HIV-infected people in low-income countries with antiretroviral drugs were not valid. The statement called for an initial effort to treat at least one million AIDS patients in Africa within 3 years.

The degree to which Africa's poorly developed health infrastructure prevents the wider availability of HAART is controversial. 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 the continent. 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 worldwide.

AIDS activists also advocate "parallel imports" of drugs and "compulsory licensing" by African governments to lower the price of patented medications. Through parallel importing, patented pharmaceuticals could be purchased from the cheapest source, rather than from the

manufacturer; while under "compulsory licensing," an African government could order a local firm to produce a drug and pay a negotiated royalty to the patent holder.

Although both parallel imports and compulsory licensing are permitted under Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS agreement) of the World Trade Organization agreement for countries facing national emergencies, U.S. officials once strongly opposed such measures on grounds that they could lead to infringements of intellectual property rights. Advocates for the pharmaceutical companies argued that parallel importing and compulsory licensing could reduce profits, and that this would hinder the ability of manufacturers to conduct research on new drugs, including drugs that might be even more effective against HIV. A third view has been that some combination of subsidization, price reduction, and local manufacturing might be found that would make the drugs much more widely available while maintaining drug company revenues through the sheer volume of African sales.

On May 10, 2000, President Clinton issued an executive order stating that the United States would not seek to prevent sub-Saharan countries from promoting access to HIV/AIDS pharmaceuticals or medical technologies consistent with the World Trade Organization's TRIPS agreement. On February 22, 2001, an official of the U.S. Trade Representative's office said the Bush Administration was not considering any change in current "flexible policy" on this issue. On November 14, 2001, a ministerial level meeting of the World Trade Organization in Doha, Qatar, approved a declaration stating that the TRIPS agreement 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 poor countries should be permitted to import generic copies of patented drugs was left for further study.

Although the Doha declaration drew broad praise, some AIDS activists criticized it for not permitting generic imports – cheap copies of patented medications. Some in the pharmaceutical industry, on the other hand, expressed concern that the declaration was too permissive and might eventually open the way to such imports. Others, however, argued that the declaration would have little practical impact, since most AIDS drugs are not actually patented in many of the countries most heavily affected by the epidemic. From this perspective, poverty rather than patents is the principal 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.)

The United Nations convened a General Assembly Special Session (UNGASS) on HIV/AIDS on June 25-27 in New York. Much of the debate at the session centered on the issue of whether large-scale treatment with anti-retroviral drugs could be provided in Africa. The Special Session concluded with passage of a resolution emphasizing the need for "widespread and effective prevention," but "recognizing that care, support, and treatment can contribute to effective prevention."

U.S. Policy

A 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. (Barton Gellman, "The Global Response to AIDS in Africa: World Shunned Signs of Coming Plague." *Washington Post*, July 5, 2000). Nonetheless, U.S. concern did begin to mount during the 1980s, as the severity of the epidemic became apparent. In 1987, in acting on the FY1988 foreign operations appropriations legislation, 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.

USAID states that it has been the global leader in the international response to AIDS since 1986, not only by supporting multilateral efforts but also by directly sponsoring regional and bilateral programs aimed at combating the disease. (USAID, *Leading the Way: USAID Responds to HIV/AIDS*, September 2001). The Agency has sponsored AIDS education programs; trained AIDS educators, counselors, and clinicians; supported condom distribution; and sponsored AIDS research. USAID claims several successes in Africa, such as helping to reduce HIV prevalence among young Ugandans and to prevent 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 reports that it spent a total of $51 million on fighting AIDS in Africa in FY1998 and $63 million in FY1999 (*Leading the Way*, 121). In addition, some spending by the Department of Health and Human Services was going toward HIV surveillance in Africa and other Africa AIDS-related efforts.

As the severity of the epidemic continued to deepen in recent years, 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, Vice President Gore proposed $100 million in additional spending for a global LIFE (Leadership and Investment in Fighting an Epidemic) AIDS initiative to begin in FY2000, 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 and that 200 former volunteers would be sent to Africa through the Crisis Corps to work in AIDS care and prevention. Fifty new volunteers would work exclusively on AIDS-related projects in eastern and southern Africa.

Table 1, which compares HIV/AIDS spending in FY2000 with projected spending in FY2001, indicates that spending through the prevention programs of the Centers for Disease Control (CDC) of the Department of Health and Human Services has increased significantly. In addition, the Defense Department has undertaken an HIV/AIDS education program with African armed forces (see CRS Report RL30761, *HIV-1/AIDS and Military Manpower Policy)*, while the Department of Labor (DoL) has launched a program to support AIDS education in the African workplace. USAID is targeting three heavily affected African countries – Kenya, Uganda, and Zambia – for a rapid scale up in HIV/AIDS activities intended to show measurable results in one to two years. Ten African countries have been

identified for "intensive focus" to reduce prevalence rates as well as mother-to-child transmission and to increase support services for people living with or affected by AIDS within 3 to 5 years. USAID will maintain basic programs, including technical assistance, training, and provision of commodities in eight other African countries. The General Accounting Office released a report in March 2001 calling on USAID to develop better measures for evaluating the effectiveness of its HIV/AIDS programs in Africa. (GAO Report GAO-01-449, *U.S. Agency for International Development Fights AIDS in Africa, but Better Data Needed to Measure Impact.*) In its response, USAID indicated that it had improved monitoring and evaluation and was using standardized indicators that it had published in a handbook for use in the field.

Table 1. U.S. Spending on Fighting AIDS in Africa
($ millions)

	FY2000	**FY2001**
USAID	109	144
CDC	34	77
DoD	0	5
DoL	0	3
Total	**143**	**229**

Bush Administration

The Bush Administration has continued to support increases in HIV/AIDS spending for Africa, and the President has appointed a cabinet level task force, co-chaired by Secretary of State Colin Powell and Secretary of Health and Human Services Tommy Thompson, to develop and coordinate HIV/AIDS policy. An interagency policy coordinating committee headquartered at the White House has been established to back up the task force. Moreover, as noted above, President Bush made the "founding Pledge" of $200 million to the global fund and promised that additional resources would follow "as soon as we learn where our support can be most effective." In February 2002, Secretary Thompson said that the total U.S. commitment to the Global Fund had reached $500 million.

Many support a larger U.S. contribution to the Global Fund, and bills currently before Congress would provide considerably more than has been pledged. (See for example, H.R. 2069, described in the **Legislation** section, or S. 1936 listed under **Legislative Action**.) Others argue, however, that the Administration has taken the first steps in what could turn out to be a major long-term commitment. At the same time, some concern has been expressed about the Administration's focus on the Fund, as observers worry that it might divert attention and support from the bilateral programs of USAID and the CDC, which many regard as more effective than other organizations and agencies in coping with the African pandemic. In response, some argue that by supporting the Fund, the United States sets an example that helps to "leverage" contributions from other donors, thus creating a new resource to fight the AIDS pandemic.

On June 25, 2001, Secretary of State Powell told the United Nations General Assembly Special Session on HIV/AIDS, that the global response to the pandemic had been "woefully inadequate" to date. Noting the U.S. support for the Global Fund, however, Powell affirmed that "more will come from the United States as we learn where our support can be most effective." The Secretary of State, also noting U.S. bilateral HIV/AIDS programs and vaccine research, called for an integrated approach, emphasizing prevention but also including treatment, orphan care, affordable drugs, and health infrastructure.

Legislative Action

In August 2000, the Global AIDS and Tuberculosis Relief Act of 2000 (P.L. 106-264) became law. This legislation authorized funding for fiscal years 2001 and 2002 for a comprehensive, coordinated, worldwide HIV/AIDS effort under USAID, not less than 65% to be available through non-governmental organizations, including religious-affiliated organizations, not less than 20% to be available for a multi-donor strategy to address the support and education of orphans in sub-Saharan Africa, and not less than 8.3% for the prevention of mother to child transmission. In 2001, a number of bills were introduced with international or Africa-related HIV/AIDS related provisions. These include:

H.R. 684 (Millender-McDonald), to authorize assistance for mother-to-child HIV/AIDS transmission prevention efforts.
H.R. 933 (Waters), Affordable HIV/AIDS Medicines for Poor Countries Act.
H.R. 1185 (Lee), Global Access to HIV/AIDS Medicines Act of 2001.
H.R. 1269 (Crowley), Global Health Act of 2001.
H.R. 1567 (Lee), to encourage the provision of multilateral debt cancellation for countries eligible to be considered for assistance under the Heavily Indebted Poor Countries (HIPC) Initiative or heavily affected by HIV/AIDS, and for other purposes.
H.R. 1642 (Waters), Debt Cancellation for the New Millennium Act.
H.R. 1690 (Waters), Export-Import Bank HIV/AIDS Medicine Access Promotion Act.
H.R. 2104 (Eddie Bernice Johnson), to amend the Foreign Assistance Act of 1961 to authorize the provision of education and related services to law enforcement and military personnel of foreign countries to prevent and control HIV/AIDS and tuberculosis.
H.R. 2209 (Bereuter), World Bank AIDS Trust Fund Amendments Act of 2001.
H.R. 2839 (Millender-McDonald), Peace Corps HIV/AIDS Training Enhancement Appropriations Act for Fiscal Year 2002.
S. 463 (Feinstein), Global Access to AIDS Treatment Act of 2001.
S. 895 (Kerry), Vaccines for the New Millennium Act of 2001.
S. 1032 (Frist), International Infectious Diseases Control Act of 2001.
S. 1120 (Boxer), Global AIDS Research and Relief Act of 2001.
S. 1230 (Frist/Clinton), Global Leadership in Developing the Expanded Response Act, or the "GLIDER Act."
S. 1752 (Corzine), Microbicide Development Act of 2001.
S. 1936 (Durbin), Global Coordination of HIV/AIDS Response Act

Several bills that have been reported out of committee or received floor action are detailed below, under **Legislation.** For information on appropriations for HIV/AIDS programs in FY2002, see CRS Report RS21114, *HIV/AIDS: Appropriations for Worldwide Programs in FY2001 and FY2002*. Information on Africa's share of FY2002 appropriations in not yet available.

LEGISLATION

H.Con.Res. 102 (Leach)/S.Con.Res. 53 (Hagel)

Hunger to Harvest: A Decade of Support for Africa. States sense of Congress that within 90 days the President should submit a report setting forth a five-year strategy, and a ten year strategy, to reverse hunger and poverty in Africa; emphasis should be on health, among other objectives, including HIV/AIDS. Introduced in the House on April 4, 2001, and referred to the Committee on International Relations. Marked up on November 1 and passed under a suspension of the rules (400-9), December 5. Received in the Senate, December 6. Similar Senate bill introduced on June 21, 2001; referred to the Committee on Foreign Relations; reported July 12. Passed the Senate by unanimous consent, July 18, 2001.

H.R. 1646 (Hyde)

Department of State Authorization. Authorizes up to $1 million for HIV/AIDS research and mitigation strategies in a Border-Less World academic program of the Fulbright Academic exchange program; states the sense of Congress that U.S. officials should urge the United Nations to adopt an HIV/AIDS mitigation strategy as a component of U.N. peacekeeping operations; and that the Secretary of State should establish an international HIV/AIDS intervention, mitigation, and coordination task force. Introduced on May 4, 2001; referred to the Committee on International Relations. Marked up and ordered reported, May 2; report filed (H.Rept. 107-57). Passed the House, May 16. Received in the Senate and referred to the Committee on Foreign Relations, May 17, 2001.

H.R. 2069 (Hyde)

Global Access to HIV/AIDS Prevention, Awareness, Education, and Treatment Act of 2001. States the sense of Congress that the United States should provide additional funds for multilateral programs and efforts to combat HIV/AIDS, including programs that make available pharmaceuticals and diagnostics for HIV/AIDS therapy in sub-Saharan Africa; and that programs to help AIDS orphans as well as micro-enterprise programs for HIV/AIDS affected families should be expanded; amends the Foreign Assistance Act of 1961 (P.L. 87-195) to state that HIV/AIDS assistance should include prevention (including assistance through faith-based organizations), treatment, monitoring, and related activities; requires an annual report on USAID HIV/AIDS activities; authorizes $560 million for these activities in each of fiscal years 2002 and 2003; requires USAID to assist sub-Saharan and other developing countries to procure and distribute HIV/AIDS pharmaceuticals, including antiretrovirals, and authorizes $50 million for this purpose; states that the President shall establish an inter-agency task force to coordinate international HIV/AIDS activities; establishes a permanent Global Health Advisory Board to assist in the development and implementation of international health programs; authorizes $750 million in FY2002 for contributions to a global health fund or other multilateral efforts to prevent and treat HIV/AIDS. Introduced on June 6, 2001; referred to the Committee on International Relations. Amendment in the nature of a substitute marked up and approved by the House International Relations Committee, June 27, 2001. Reported (H.Rept. 107-137) July 12. Passed the House by a voice vote under a suspension or the rules, December 11. Received in the Senate and referred to the Committee on Foreign Relations, December 12, 2001.