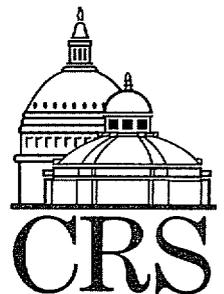

CRS Issue Brief

AIDS in Africa

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



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AIDS in Africa

SUMMARY

Sub-Saharan Africa has been far more severely affected by AIDS than any other part of the world. The UN reports that 23.3 million adults and children are infected with the HIV virus in Africa, which has about 10% of the world's population but nearly 70% of the worldwide total of infected people. The overall rate of infection among adults in sub-Saharan Africa is about 8%, compared with a 1.1% infection rate worldwide. In some countries of southern Africa 20% to 26% of adults are infected. An estimated 13.7 million Africans have lost their lives to AIDS, including 2.2 million who died in 1998. 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. Sub-Saharan Africa is the only region of the world where women are infected at a higher rate than men, and young women suffer a particularly high rate of infection.

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; and poverty forces 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 disease has created 7.8 million "AIDS

orphans," who face increased risk of malnutrition and reduced prospects for education. AIDS is being blamed for declines in agricultural output in Zimbabwe and Kenya.

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. A third possible response – 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 it would reduce damage to African economies and keep parents alive. They believe that ways can be found to reduce the cost of AIDS medications. Skeptics argue that treatment would require not only expensive drugs but also 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. Congress earmarked funds for a worldwide campaign against the disease in 1987. According to the U.S. Agency for International Development, the U.S. has been the global leader in the international response to AIDS since 1986. The Administration launched an AIDS initiative in July 1999, and spending on AIDS in Africa is projected to reach \$169 million in FY2000.

Many are urging that more be done, and bills have been introduced to support a wide range of Africa AIDS initiatives. Nonetheless, some observers argue that competing budget priorities work against a massive U.S. Africa AIDS program.

MOST RECENT DEVELOPMENTS

During March and April 2000, bills dealing with AIDS in Africa and worldwide continued to be introduced (see **Legislation** section). The Washington Post reported on April 19 that President Thabo Mbeki of South Africa had sent a letter to President Clinton and other heads of state asserting that Africa would not copy foreign approaches to dealing with AIDS and defending dissident scientists who maintain that AIDS is not caused by the HIV virus. The letter, dated April 3, has not been made public. On April 17, the World Bank's Development Committee pledged increased spending to combat AIDS. Bank President James Wolfensohn said he had told African clients that with respect to AIDS, "if you have programs, we will fund them. No sensible project will be stopped for lack of funding." On April 5, the United Nations AIDS program and the World Health Organization recommended that Africans infected with HIV be treated with an antibiotic known by the trade name Bactrim to help prevent fatal opportunistic infections. Preliminary studies indicate that the drug could reduce the AIDS death rate at a cost of between \$8 and \$17 per year per patient.

BACKGROUND AND ANALYSIS

Sub-Saharan Africa has been far more severely affected by AIDS than any other part of the world. According to December 1999 United Nations data, some 23.3 million adults and children are infected with the HIV virus in the region, which has about 10% of the world's population but nearly 70% of the worldwide total of infected people. The overall rate of infection among adults in sub-Saharan Africa is about 8%, compared with a 1.1% infection rate worldwide. An estimated 13.7 million Africans have lost their lives to AIDS, including 2.2 million who died in 1998. 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.

Leading Causes of Death in Sub-Saharan Africa, 1998

	<i>% of Deaths</i>
HIV/AIDS	19.0
Malaria	10.0
Lower respiratory infections	8.2
Diarrheal diseases	7.6
Perinatal conditions	5.5
Cerebrovascular disease	4.7
Heart disease	2.9
Tuberculosis	2.2
Traffic accidents	1.8
Chronic obstructive pulmonary disease	1.1

Source: World Health Organization, World Health Report, 1999.

Resource Note. Most of the AIDS statistics in this Issue Brief are from publications of UNAIDS, the Joint United Nations Program on HIV/AIDS, sponsored by several U.N. organizations, including the World Health Organization, the World Bank, and UNICEF. Key sources include UNAIDS, *AIDS Epidemic Update: December 1999* and *Children Orphaned by AIDS: Front-line Responses from Eastern and Southern Africa*, issued on December 1, 1999.

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, rather than primarily by contact among gay males or through intravenous drug use.
- 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 35% in the Caribbean, the next highest-ranking region, and 20% in North America.
- 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%.
- To date, 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 Botswana, Namibia, Zambia, and Zimbabwe, all southern African countries, an estimated 20% to 26% of adults are infected with HIV, and 13% of adults in South Africa were infected at the end of 1997. In Senegal, a West African country, the 1997 adult infection rate was 2%. However, adult infection rates now exceed 10% in Ivory Coast and Burkina Faso, two other West African states, and the infection rate is increasing in populous Nigeria as well.
- 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.)
- An estimated 7.8 million African children have lost either their mother or both parents to AIDS, and thus are regarded by UNAIDS as "AIDS orphans." South Africa is expected to have one million AIDS orphans by 2004, and in some of Africa's worst-affected cities, orphans already comprise 15% of all children. (World Bank, *Intensifying Action Against HIV/AIDS in Africa*. See also, U.S. Agency for International Development (USAID), *Children on the Brink*, 1997.) In its January 17, 2000 issue, *Newsweek* projected that there will be 10.4 million African AIDS orphans by the end of 2000. UNAIDS reports that AIDS orphans, suspected of carrying the disease, generally run a greater risk of being malnourished and of being denied an education.

Explaining the African Epidemic

AIDS experts offer a number of explanations for the severity of the AIDS epidemic in Africa and for its unusual characteristics. Some experts believe that the explanation may be partly medical: AIDS in Africa is generally caused by a virus known to specialists as HIV I-Subtype C, which may spread more easily through heterosexual contact than Subtype B, common in the United States. If this is the case, then the entire sexually active population is more vulnerable to infection than in countries where Subtype B is dominant.

Most analysts, however, emphasize a variety of economic and social factors to explain 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 are believed to open the way to infection by 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 been forced to become commercial sex workers because of poverty, and they too are highly vulnerable to infection. Migrant workers can become a conduit for spreading the disease from urban to rural areas; when they return home, they commonly infect their wives. Long distance truck drivers and drivers of "taxis," who transport Africans long distances by car, are also believed to be key agents in spreading AIDS

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

Adult HIV Infection Rates, end of 1997 (%)

Zimbabwe	25.84
Botswana	25.10
Namibia	19.94
Zambia	19.07
Swaziland	18.50
Malawi	14.92
Mozambique	14.17
South Africa	12.91
Rwanda	12.75
Kenya	11.64
Cent. Af. Republic	10.77
Djibouti	10.30
Cote d'Ivoire	10.06
Uganda	9.51
Tanzania	9.42
Ethiopia	9.31
Togo	8.52
Lesotho	8.35
Burundi	8.30
Congo Brazzaville	7.78
Burkina Faso	7.17
Cameroon	4.89
Congo Kinshasa	4.35
Gabon	4.25
Nigeria	4.12
Liberia	3.65
Sierra Leone	3.17
Eritrea	3.17
Chad	2.72
Ghana	2.38
Guinea Bissau	2.25
Gambia	2.24
Angola	2.12
Guinea	2.09
Benin	2.06
Senegal	1.77
Mali	1.67
Equatorial Guinea	1.21
Sudan	.99
Mauritania	.52
Somalia	.25
Madagascar	.12

Source: UNAIDS Epidemiological Fact Sheets

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 Carol Ezzell, “Care for a Dying Continent,” *Scientific American*, May 2000.) Other cultural factors may also be playing a role in the African epidemic. Male circumcision, for example, is reportedly more common in West Africa than in eastern and southern Africa, and some scientists are beginning to suspect that this helps to explain the comparatively lower rate of infection in West Africa. (*Boston Globe*, November 5, 1999; *Sunday Times*, London, March 26, 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. In September 1999, the United Nations convened a major conference on AIDS in Africa in Lusaka, the capital of Zambia, but none of the 15 invited African heads of state attended. Even the host-country president, Frederick Chiluba, claimed a conflict and sent his vice president to read his opening remarks.

President Daniel arap Moi of Kenya, where 13.5% of adults are infected and 760,000 have died from AIDS, did not endorse the use of condoms as a preventive until December 1999. (*Africa News Service*, December 23, 1999.) South Africa has a large AIDS program launched by the former president, Nelson Mandela, but some critics question whether the current president, Thabo Mbeki, is treating the disease with sufficient urgency. President Mbeki’s stance is particularly worrisome to many AIDS experts because he is an influential leader not only in heavily-infected southern Africa but also among developing countries generally. Mbeki has challenged the safety and effectiveness of AIDS medications useful in preventing mother-to-child transmission of the disease. In March 2000, it was reported that he had been consulting with an American physician and a professor of African history who do not believe that AIDS is caused by HIV. (*New York Times*, March 19, 2000.) In April 2000, Mbeki ordered the appointment of a 20-member commission, including skeptics of the link between HIV and AIDS, to study the disease. According to press reports, \$6.2 million of South Africa’s \$17 million AIDS budget was unspent during 1999.

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 Central Intelligence Agency *National Intelligence Estimate* report 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>].)

Report estimates 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*.)

USAID estimates that Kenya's GNP will be 14.4% smaller in 2005 than it would have been without AIDS. The disease is expected to hinder growth prospects in South Africa, Tanzania, Namibia, and other countries in eastern and southern Africa as well. (*Report on the Presidential Mission on Children Orphaned by AIDS*.)

In the most severely affected countries, sharp drops in life expectancy are occurring, and these will reverse major gains achieved in recent decades. UNAIDS reports that life expectancy at birth in southern Africa, which stood at 44 years in the early 1950s, reached 59 in the early 1990s, but will fall to 45 by 2015. (*AIDS Epidemic Update: December 1999*.) The Kenyan minister of public health said on December 10, 1999 that life expectancy in his country had already dropped from 60 years to 45.

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, particularly since rural clinics in some countries are reportedly short-staffed because of AIDS.

The economic consequences of the disruption of rural life can be severe. For example, sharp declines in the production of maize, cotton, and other crops in Zimbabwe have been

blamed on widespread illness and death from AIDS among peasant farmers and among workers at small commercial farms. (*Washington Post*, December 12, 1999.) A decline in agricultural activity in Kenya has also been attributed to AIDS.

AIDS is also being blamed for shortages of skilled workers and teachers in several countries. Although unemployment is generally high in Africa, such trained personnel are not readily replaced. Teachers are reportedly dying more rapidly than replacements can be found in parts of western Kenya. In Ivory Coast, five teachers reportedly die from AIDS during each week of the school year. According to USAID, the Ministry of Education in Zambia found that 1,300 teachers had died in 1999, mostly from AIDS, and that only 700 new teachers were trained. AIDS is believed responsible for high rates of absenteeism and labor turnover in eastern and southern Africa, and the resulting increased costs are believed to be discouraging new investment. The disease is also 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. 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 the infection rate in the South Africa army is 40% according to one insurance company survey (*Mail and Guardian* (Johannesburg), October 19, 1999), and other estimates are higher. Infection rates among the seven armies currently embroiled in the conflict in the DRC have been estimated at 50% to 80%. (*Report on the Presidential Mission on Children Orphaned by AIDS*.) The ability of such armies to conduct effective operations and behave professionally is a source of concern to analysts. Domestic political stability could also be threatened in African countries if the security forces become unable to perform their duties due to AIDS. (For more on this issue, see the CIA Estimate, noted above.)

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 and the lack of effective health care infrastructure. However, 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.

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. 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 – USAID reports that it has shipped more than 2 billion condoms

to Africa since 1986 – and on providing instruction in condom use. Some recent pilot projects have had success in reducing mother-to-child transmission by administering the anti-HIV drug AZT, or a less expensive medicine, nevirapine, during birth and early childhood. HIV testing has also received support on grounds that people will exercise greater care in their sexual conduct if they are aware of their HIV status. In December 1999, for example, the government of Norway announced that it would help Uganda establish voluntary HIV testing centers in every district of the country. USAID is currently supporting HIV testing centers in 10 African countries.

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.)

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

CDC [<http://www.cdc.gov/nchstp/od/nchstp.html>]
 European Union: [<http://europa.eu.int/comm/development/aids/>]
 International Association of Physicians in AIDS Care: [<http://www.iapac.org/>]
 Journal of the American Medical Association HIV/AIDS Information Center:
 [<http://www.ama-assn.org/special/hiv/>]
 UNAIDS: [<http://www.us.unaids.org/>]
 USAID: [http://www.info.usaid.gov/pop_health/aids/aidshome.htm]
 World Bank: [<http://www.worldbank.org/aids/>].

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 has been cut in half – to approximately 9.5% – by an active AIDS awareness program that openly advocates the use of condoms. Despite these success stories, however, available evidence indicates that the epidemic is deepening in most of the region. Even the head of the Ugandan AIDS program is worried that Ugandans are letting down their guard with respect to the disease, (*Africa News Service*, December 10, 1999). In the West African nation of Nigeria, Africa's most populous country with 111 million people, the rate of adult HIV infection has increased from 4.5% in 1995 to 5.4% in 1999, adding to a large pool of infected people who could be a source of a much more rapid increase in coming years.

Experts note 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. Some advocate, for example, awareness campaigns that include intensive, interpersonal communication strategies targeted at those most likely to acquire or transmit HIV.

A World Bank report, among other proposals, recommends that the Bank create teams of well-known African elders, former statesmen, friends of Africa, and celebrities who would visit afflicted countries to help mobilize civil society against the epidemic. (*Intensifying Action Against HIV/AIDS in Africa: Responding to a Development Crisis.*) 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 STIs, which 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. The U.S. Ambassador to Botswana, Robert Krueger, recently pointed out that “Botswana has perhaps the highest degree of HIV/AIDS infection in the world and 44 per cent of all its people who are affected receive their death stroke by contracting tuberculosis.” (*Africa News Service*, November 3, 1999. Krueger was speaking at the opening of a U.S.-funded TB laboratory in Botswana.) 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.

AIDS experts strongly believe that more funding needs to be devoted to fighting the epidemic. The July 1999 White House report on children orphaned by AIDS stated that \$150 million per year was then being spent on combating AIDS in Africa from all sources, including donor spending and spending by African governments. Approximately half of this amount was being contributed by USAID, and the great bulk of the rest was coming from other donors. According to UNAIDS, in 1996-1997, only Botswana, Kenya, Malawi, and Uganda were spending more than \$1 million of their own resources on AIDS. The White House report urged that spending from all sources be doubled by 2001.

AIDS Treatment Issues

Access for poor Africans to costly combinations of AIDS medications or “antiretrovirals” 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. 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. Varying figures – some as high as \$20,000 – have been published as estimates of the annual cost of combination drug therapies in Africa (*Washington Post* editorial, January 6, 1999). Yet other estimates are considerably lower. In October 1999, the cost of combination therapy in South Africa was estimated at \$334 per month (*The Christian Century*, October 20, 1999), or \$4,000 per year. UNAIDS reports that Brazil treated 75,000 victims with antiretrovirals in 1999 at a cost of \$300 million – or, again, \$4,000 per person. Variations in treatment cost estimates may reflect differences in the prices of drugs chosen for the combination therapy and the degree to which other costs, such as physician visits and specialized laboratory tests, are included.

Even at \$4,000 per year per person, however, combination therapy would be far beyond the means of most victims and governments in sub-Saharan Africa, where GNP per capita averages \$308 per year. (World Bank 1997 data, excluding South Africa. With South Africa included, the figure would be \$503.) According to the World Bank, no sub-Saharan country spent more than \$400 per person per year on health during 1990-1995, the latest period for which data are available. (*African Development Indicators, 1998/1999.*)

As long as combination drug therapy continues to cost several thousand dollars per year per patient, the total cost of treating a significant portion of Africa's more than 23 million HIV-infected people would be many billions of dollars per year. Skeptics of the possibility of administering combination drug therapy widely in Africa argue that meeting such costs would require assistance from developed countries at an unprecedented level – one which their taxpayers would be unlikely to accept. They also note that early diagnosis and regular monitoring are required if the combination drugs are to be used effectively. This would be difficult for most African health infrastructure systems to achieve without additional foreign assistance.

Advocates of helping to provide combination antiretroviral therapies in Africa maintain that the alternative is to see much of the continent sink into an economic and political decline that will require decades to reverse. They favor subsidies to make the drugs affordable as well as donor action to strengthen African health care systems so that drug therapies can be effectively administered. In addition, advocates of treating HIV-infected Africans argue that it should be possible for African governments and donor agencies to achieve sharp reductions in the cost of antiretrovirals for Africa, perhaps partly through negotiated agreements with drug manufacturers. The British pharmaceutical firm Glaxo Wellcome, a major producer of antiretrovirals, has already stated that it is committed to “differential pricing,” which would lower the cost of AIDS drugs in Africa.

Many 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 the World Trade Organization agreement for countries facing health emergencies, pharmaceutical manufacturers and U.S. officials have strongly opposed such measures on grounds that they could lead to infringements of intellectual property rights. (For a recent discussion, see “African AIDS Victims Losers of a Drug War: U.S. Policy Keeps Prices Prohibitive,” *Washington Post*, December 4, 1999.) Moreover, some argue, the profits of drug companies might be reduced by parallel importing and compulsory licensing, and 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 is 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.

U.S. Policy

U.S. concern over AIDS in Africa grew during the 1980s, as the severity of the epidemic became apparent. In 1987, in acting on the FY1998 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.

Appropriators in 1987 also commended USAID, together with the World Health Organization, for “timely efforts to begin an international attack on the AIDS pandemic.” And indeed, 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. (See various documents available on the Internet at the USAID world wide web site, particularly [http://www.info.usaid.gov/pop_health/aids/aidsaccomplish.htm].) 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 \$67 million on fighting AIDS in Africa in FY1998 and \$81 million in FY1999. USAID’s spending on the epidemic worldwide, including Africa, was \$121 million in FY1998 and \$135 million in FY1999. 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 AIDS initiative to begin in FY2000, with a heavy focus on Africa. The LIFE (Leadership and Investment in Fighting an Epidemic) initiative called for:

- \$35 million for AIDS surveillance and technical assistance for prevention, care, and support activities of the Centers for Disease Control,
- \$10 million for AIDS education in African militaries through the Department of Defense,
- \$45 million in additional AIDS for USAID under the Child Survival and Disease Programs fund (CSD), and
- a reprogramming of \$10 million in food assistance to help families and communities affected by AIDS.

Funds approved during the FY2000 appropriations process will support most of this initiative, although the \$10 million requested for AIDS education in African militaries was not appropriated. H.R. 3422, the Foreign Operations Appropriation bill which became part of the consolidated appropriations (P.L. 106-113), earmarks \$35 million under the Child Survival and Disease Programs Fund exclusively for AIDS programs worldwide, and lists AIDS programs among those that can be supported from general Child Survival Funds. According to the conference report on the consolidated appropriations (H.Rept. 106-479) "at least \$10,000,000 additionally is designated for children affected by the HIV/AIDS epidemic." The Health and Human Service Appropriation (H.R. 3424, also included in P.L. 106-113) provides \$35 million for international AIDS programs, and under current plans this money will be used by the Centers for Disease Control and will be available for Africa. Table 1 indicates projected U.S. spending on fighting AIDS in sub-Saharan African in FY2000.

Table 1. Projected FY2000 U.S. Spending on Fighting AIDS in Africa
(\$ millions)

U.S. Agency for International Development	133.82
Dept. of Health and Human Services	35.00
Total	168.82

Many observers of the African AIDS epidemic, although supporting the LIFE initiative, believe that U.S. spending should be sharply increased. Former House Member Ron Dellums, who now heads the Washington-based Constituency for Africa, advocates a \$1 billion program. He has given a number of speeches, particularly in African-American churches, to build political support for his proposal (*Boston Globe*, October 13, 1999). There have also been proposals for accelerated efforts to develop an AIDS vaccine and to pressure pharmaceutical companies to make AIDS medications widely available at affordable prices.

On January 10, 2000, Vice President Al Gore, chairing a session of the United Nations Security Council, announced a new U.S. initiative to combat AIDS overseas, particularly in Africa. The Vice President said that as part of its FY2001 budget, the Administration would request that Congress appropriate an additional \$100 million for AIDS education, prevention, and treatment in Africa, India, and other areas. This increase would bring total U.S. international AIDS spending to \$325 million, according to the Vice President. In addressing

the Security Council the same day, World Bank President James Wolfensohn said that according to Bank estimates, \$1 billion to \$2.3 billion was needed to fight AIDS in Africa, but at present, Africa was receiving \$160 million in official assistance from all sources for HIV/AIDS.

The \$100 million increase proposed by Vice President Gore is expected to be allocated as follows: \$54 million to the Child Survival and Disease Programs Fund of the U.S. Agency for International Development (USAID), \$26 million to the Centers for Disease Control and Prevention (CDC) of the Department of Health and Human Services (HHS); \$10 million for Department of Labor workplace prevention programs; and \$10 million for a Department of Defense program to slow the spread of AIDS in African militaries.

President Clinton's December 1, 1999 speech at the World Trade Organization summit in Seattle has been interpreted as heralding an easing of Administration policy with respect to intellectual property rights and AIDS pharmaceuticals. According to the President,

And today, the USTR, our trade representative, and the Department of Health and Human Services are announcing that they are committed to working together to make sure that our intellectual property policy is flexible enough to respond to legitimate public health crises.

Intellectual property protections are very important to a modern economy, but when HIV and AIDS epidemics are involved ... the United States will henceforward implement its health care and trade policies in a manner that ensures that the poorest countries won't have to go without medicine they so desperately need. I hope this will help South Africa and many other countries that we are committed to support in this regard.

LEGISLATION

H.R. 434 (Crane)

Africa Growth and Opportunity Act. Section 19 of the House-passed version states the sense of the Congress that addressing the HIV/AIDS crisis in sub-Saharan Africa should be a central component of U.S. Africa policy; that significant progress needs to be made in preventing and treating HIV/AIDS in order to sustain a mutually beneficial trade relationship; and that the AIDS crisis merits greatly expanded public, private, and joint public-private efforts, and appropriate legislation. Section 116 of the Senate-passed version includes sense of the Congress language supporting the development of new pharmaceuticals, vaccines, and therapies; prohibits the executive branch from using funds to seek revocation or change in any African law or policy on intellectual property grounds if the purpose of the law or policy promotes access to AIDS pharmaceuticals and provides adequate intellectual property protection; requires the President to instruct delegates to the proposed forum on trade and cooperation to promote a review of the AIDS epidemic and its consequences. Passed House, July 16, 1999; passed Senate November 3; Senate appointed conferees November 3, 1999.

H.R. 772 (Jackson)/S. 1636 (Feingold)

Human Rights, Opportunity, Partnership, and Empowerment for Africa Act or HOPE for Africa Act. Both bills add language to the Development Fund for Africa legislation to specifically mention HIV/AIDS (on the DFA, see CRS Issue Brief 95052, *Africa: U.S.*

Foreign Assistance Issues); Section 602 of the Senate version, on pharmaceuticals and intellectual property rights, is similar to Section 116 of the Senate-passed version of H.R. 434. H.R. 772 was introduced on February 23, 1999 and referred to the House Committees on International Relations, Banking, and Ways and Means; S. 1636 was introduced on September 24, 1999 and referred to the Committee on Finance.

H.R. 1095 (Leach)

Debt Relief for Poverty Reduction Act of 1999. As reported by the House Committee on Banking and Financial Services, Sec. 902 requires countries receiving debt relief to establish a Human Development Fund, which will receive all savings generated by debt relief and include monitorable poverty reduction goals, such as lowering the incidence of AIDS. Introduced March 11, 1999; referred to the House Committees on International Relations and on Banking and Financial Services. Reported by the Committee on Banking and Financial Services (H.Rept. 106-483), November 18, 1999.

H.R. 2765 (Lee)

AIDS Marshall Plan Fund for Africa Act. Establishes the AIDS Marshall Plan Fund for Africa Corporation to provide assistance for HIV/AIDS research, prevention, and treatment activities in Africa. The corporation shall make grants to African governments and NGOs for HIV/AIDS projects and solicit contributions from private sources and foreign governments; an annual appropriation of \$200 million is authorized for FY2001 through FY2005. Introduced August 5, 1999; referred to the Committee on International Relations.

H.R. 3519 (Leach)/S. 2033 (Kerry)

World Bank AIDS Prevention Trust Fund Act. States that the Secretary of the Treasury should enter into negotiations with the World Bank or the International Development Association (IDA), the World Bank affiliate that makes low-interest loans to poor countries, and other interested parties for the establishment of a trust fund. The fund would accept contributions from the governments and the private sector, and use these contributions to address the AIDS epidemic in IDA-eligible countries. Authorizes a U.S. contribution to the trust fund of \$100 million per year through FY2005. Requires the Secretary of the Treasury to report within three years on the effectiveness of the fund. H.R. 3519 introduced January 4, 2000; referred to the Committee on Banking and Financial Services; hearing held March 8; committee consideration and markup, March 15; ordered to be reported, amended, March 15. S. 2033 introduced February 3, 2000; referred to the Committee on Foreign Relations.

H.R. 3812 (Pelosi)

Vaccines for the New Millennium Act of 2000. Amends Section 104(c)(3) of the Foreign Assistance Act of 1961 (P.L. 87-195) to state the expectation of Congress that USAID will set as an objective the universal protection of children from immunizable diseases by the end of 2009; authorizes an appropriation of not to exceed \$50 million in FY2001 and \$100 million in FY2002 for contributions to the Global Alliance for Vaccines and Immunizations, an international partnership to expand access to existing safe and cost-effective vaccines, and requires the President to report on the effectiveness of the alliance; in addition to amounts otherwise available, authorizes \$10 million in FY2001 and \$20 million in FY2002 for the U.S. contribution to the International AIDS Vaccine Initiative, which provides financing to industry in exchange for international access to any vaccine; provides additional tax credits to private sector firms to promote research on vaccines against HIV, malaria, tuberculosis, and other infectious diseases; provides a tax credit to promote sales of

lifesaving vaccines in developing countries; establishes the Lifesaving Vaccine Purchase Fund to authorize and advance appropriate from any unappropriated funds in the Treasury up to \$100 million per year for 10 years from the first appropriation for the purchase and distribution in developing countries of any newly developed vaccine against HIV, malaria, and tuberculosis, and other infectious diseases; states that the President should enter into negotiations with other governments on establishing an international vaccine purchase fund and report to Congress on the status of negotiations; establishes a 12-member Lifesaving Vaccine Advisory Commission to oversee and promote public private efforts, both national and international, to develop vaccines; states the sense of Congress that flexible and differential pricing for vaccines is a valid strategy to accelerate the introduction of vaccines in developing countries. Introduced March 1, 2000; referred to the Committees on Ways and Means, International Relations, and Commerce. See S. 2132, below.

H.R. 3826 (Crowley)/S. 2387 (Leahy)

Global Health Act of 2000. For FY2001, authorizes an additional \$1 billion over FY2000 spending for foreign assistance under the Population and Health program, with \$225 million to go toward the health and survival of children, \$100 million for the health and nutrition of pregnant women and mothers, \$200 million for voluntary family planning, \$275 million for combating HIV/AIDS, and \$200 million for the prevention and control of infectious diseases other than HIV/AIDS; states the sense of Congress that the President should coordinate among agencies to ensure funds are used effectively. H.R. 3826 introduced on March 2, 2000; referred to the Committee on International Relations. S. 2387 introduced on April 11; referred to the Committee on Foreign Relations.

H.R. 4140 (Millender-McDonald)

International HIV/AIDS Partnership Prevention Act of 2000. Amends Section 104(c) of the Foreign Assistance Act of 1961 (P.L. 87-195) to state that USAID shall undertake a comprehensive, coordinated effort to combat HIV/AIDS through effective partnerships with international organizations, donors, national and local governments, and nongovernmental organizations; authorizes \$150 million in FY2001, rising through \$25 million increments to \$250 million in FY2005, for testing, prevention, care, and other AIDS programs and initiatives, with \$10 million to be used annually for vaccine research. Introduced on March 30, 2000; referred to the Committee on International Relations.

S. 2026 (Boxer)

Global AIDS Prevention Act of 2000. Amends Section 104(c) of the Foreign Assistance Act of 1961 (P.L. 87-195) to state that Congress expects USAID to make HIV/AIDS a priority and to undertake a comprehensive, coordinated effort, including primary prevention and education, voluntary testing and counseling, medications to prevent mother to child transmission, and care for those living with HIV/AIDS; authorizes \$2 billion over 5 years, starting with \$300 million in FY2001, for this purpose; states that not less than half of these funds be used in sub-Saharan Africa. Introduced February 2, 2000; referred to the Committee on Foreign Relations.

S. 2030 (Durbin)/H.R. 4039 (Jackson)

AIDS Orphans Relief Act of 2000. Adds a section to the Foreign Assistance Act of 1961 (P.L. 87-195) authorizing an annual appropriation of \$50 million to assist microcredit programs that serve the very poor, especially women, in communities heavily affected by AIDS; adds a section to the Agricultural Trade and Development Assistance Act of 1954

(P.L. 83-480) authorizing \$50 million annually in food assistance to address the nutritional needs of individuals in communities affected by AIDS, for assistance to households affected by AIDS, and to create or restore sustainable livelihood strategies in communities affected by AIDS. S. 2030 was introduced February 3, 2000; referred to the Committee on Foreign Relations. H.R. 4039 was introduced on March 21; referred to the Committees on International Relations and on Agriculture.

S. 2032 (Moynihan)/H.R. 4038 (Jackson)

Mother-to-Child HIV Prevention Act of 2000. Amends Section 104(c) of the Foreign Assistance Act of 1961 (P.L. 87-195) to require USAID to coordinate with international health agencies and local governments to expand programs to prevent mother-to-child transmission of AIDS; authorizes \$25 million per year through FY2005, for this purpose. S. 2032 introduced on February 3, 2000; referred to the Committee on Foreign Relations. H.R. 4038 introduced on March 21; referred to the Committee on International Relations.

S. 2132 (Kerry)

Vaccines for the New Millenium Act of 2000. Similar to H.R. 3812 but does not include the Lifesaving Vaccine Advisory Commission. Introduced in the Senate on March 1, 2000; referred to the Committee on Foreign Relations.

S. 2382 (Helms)

Technical Assistance, Trade Promotion, and Anti-Corruption Act of 2000. Subtitle D Amends Section 104(c) of the Foreign Assistance Act of 1961 (P.L. 87-195) to authorize \$300 million for FY2001 for the development and implementation, in cooperation with international agencies, of strategies to prevent mother-to-child transmission of HIV. The authorization is to be in addition to funds otherwise available, and a formula specifies among other provisions that not less than 65% shall be provided through non-governmental organizations. Authorizes \$50 million in addition to amounts otherwise available for an FY2001 contribution to the Global Alliance for Vaccines and Immunizations, an international partnership, and \$10 million for the International AIDS Vaccine Initiative, which provides financing for private sector vaccine research in exchange for assured poor-country access to any vaccine that is developed; requires the President to report on the effectiveness of the two programs and urges him to begin negotiations on a multilateral fund to buy and distribute vaccines for poor countries; authorizes \$100 million in FY2001 for the U.S. contribution to a World Bank Trust Fund, to be established through negotiations, for AIDS prevention and eradication; \$50 million in FY2001 for the U.S. contribution to a World Bank Trust Fund, to be established through negotiations, for the education of orphans in sub-Saharan Africa; requires the President to coordinate the development a multi-donor strategy for supporting and educating African AIDS orphans; ensures AIDS education for African armed forces through the U.S. Africa Crisis Response Initiative, which provides training to potential African peacekeeping troops. Reported to the Senate (S.Rept. 106-257) from the Committee on Foreign Relations on April 7, 2000; referred to the Committee on Banking on April 11.