

HIV-related illness and death have had a devastating effect on MSM.

Trends among MSM

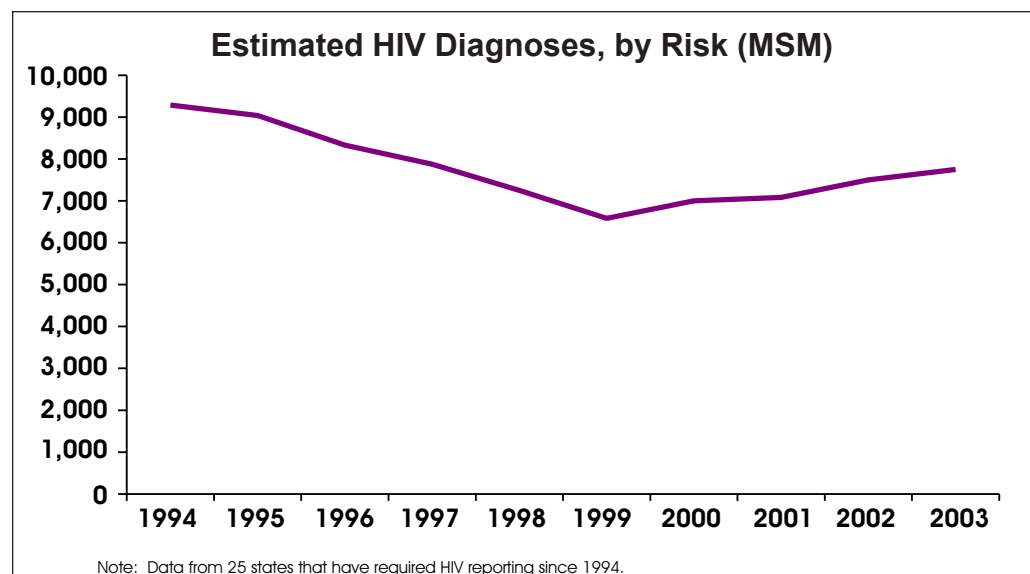
HIV-related illness and death have had a devastating effect on MSM. Despite dramatic decreases in AIDS incidence in this population, MSM continue to account for the largest number of people for whom AIDS is diagnosed each year. Research suggests that some MSM are less concerned now than in the past about becoming infected and may be inclined to take more risks. This trend is backed up by reported increases in other STDs among MSM in several large US cities and elsewhere.

AIDS

MSM accounted for nearly half (42%) of all estimated AIDS cases in men and women (including adolescents) diagnosed in 2003. In that year alone, 17,969 AIDS cases in MSM were diagnosed, compared with 6,353 cases in men who acquired their infection through injection drug use, 5,133 through sex with women, and 1,877 through having sex with men and injecting drugs.

HIV

Data from the 25 states with long-standing HIV reporting show that estimated new HIV diagnoses in MSM declined from 1994 through 1999 and then began to rise. The increase since 1999 may be the result of more people being tested, or it may represent new infections. More data are needed to help explain this increase.



How Are They Affected?

Data reported in 2003 from 41 areas with confidential HIV reporting indicate that MSM still represent the largest proportion of new HIV cases among men for which risk is known (46%), compared with IDUs (11%), men who have sex with women (9%), and MSM who inject drugs (3%).

Data from the 2004 National HIV Behavioral Surveillance (NHBS) system among young MSM surveyed in 5 US cities show that

- ▲ prevalence (number living with HIV at a given point in time) and incidence (number of new infections over a period of time) of HIV are high
- ▲ many HIV-infected MSM, especially younger and black MSM, are unaware of their infection
- ▲ among MSM with unrecognized infection
 - nearly half probably became infected during the past year
 - many had not recently been tested because they feared positive test results

These findings suggest that the HIV epidemic among MSM is continuing well into the third decade and underscore the need to increase testing and improve primary prevention practices for MSM.

Examples of CDC Programs and Research for MSM

Programs for MSM face the challenge of cultural barriers, including stigma, especially in communities where black, Hispanic, and other men of color live.

Interventions found to be effective for MSM include

- ▲ small-group lectures on HIV transmission
- ▲ training on negotiating condom use and communicating about safer sex
- ▲ training popular MSM opinion leaders to promote safer sex

One of CDC's HIV Prevention Strategic Plan objectives for this population is to increase among MSM the proportion who consistently engage in behaviors that reduce risk for HIV acquisition or transmission.

CDC activities that address these objectives include

- ▲ **Strategies to Address Sexually Transmitted Diseases and HIV Transmission among MSM.** In July 2005, CDC held a meeting to consult with leaders of gay men's organizations. The key questions addressed related to how gay organizations and CDC could increase awareness of and actions in response to increasing rates of syphilis and HIV transmission.
- ▲ **Joint Internal CDC Workgroup.** This group developed a Nine-Point MSM Plan, which focuses on prevention strategies for reaching MSM.
- ▲ **Behavioral Surveillance.** National HIV Behavioral Surveillance (NHBS) assesses HIV risk behaviors and trends in behaviors among MSM in 25 metropolitan areas.

Programs

CDC provides 40 awards to directly funded CBOs that focus primarily on MSM and provides indirect funding through state, territorial, and local health departments to organizations serving MSM. Of these 40 awards, 68% focus on blacks; 23%, Hispanics; 2%, Asians and Pacific Islanders; and 7%, whites. In terms of age groups, 28% focus on adults; 65%, youth; 3%, elderly people; and 4% are not reported.

One of CDC's HIV Prevention Strategic Plan objectives for this population is to increase among MSM the proportion who consistently engage in behaviors that reduce risk for HIV acquisition or transmission.

Research

Brothers y Hermanos

This 4-year study will examine psychological, social, cultural, and environmental factors associated with HIV risk behavior among black and Hispanic MSM in 3 US cities. The results should shed light on how these factors differ between men who become infected with HIV and those who remain free of infection.

Development of prevention messages for MSM

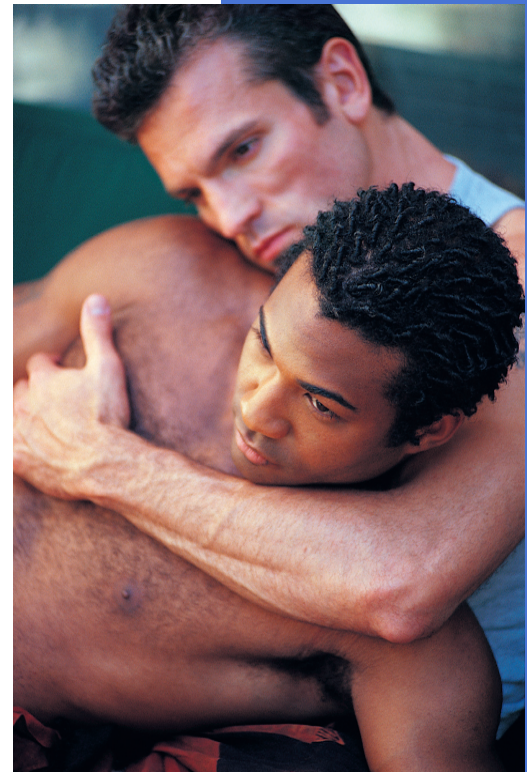
Two research activities have focused on the design of prevention messages for MSM. The first studies assessed attitudes toward potential HIV risk-reduction practices, knowledge of scientific developments, and potential effectiveness of prevention measures focused on risk perceptions and behavioral intentions. The second studies evaluate message effectiveness and different methods for communicating the relative risk of specific sexual practices, appeals to protect oneself compared with appeals to protect one's partner, and variations in the directness of visual materials and language.

Project Mix

Project Mix tests a behavioral intervention to reduce sexual risk associated with substance use among MSM who use alcohol and other noninjection drugs. The activities and discussions aim to help the men reduce sexual risk behavior and substance use. Participant groups are diverse in terms of HIV status, race and ethnicity, sexual orientation identification, socioeconomic status, substance use of choice, and pattern of substance use. The intervention is being tested in 4 US cities.

Rapid HIV Testing at Minority Gay Pride Events

In 2004, CDC and collaborating state and local health departments assessed the feasibility of rapid HIV testing at 5 minority gay pride events in 4 US cities. Rapid HIV testing at these events was determined to be feasible, accepted by clients and staff, and effective at identifying persons with previously undiagnosed HIV infection. During the summer and fall of 2005, CDC will provide funds to set up rapid testing programs at approximately 4 minority gay pride or similar events for minority populations.



Trends among IDUs

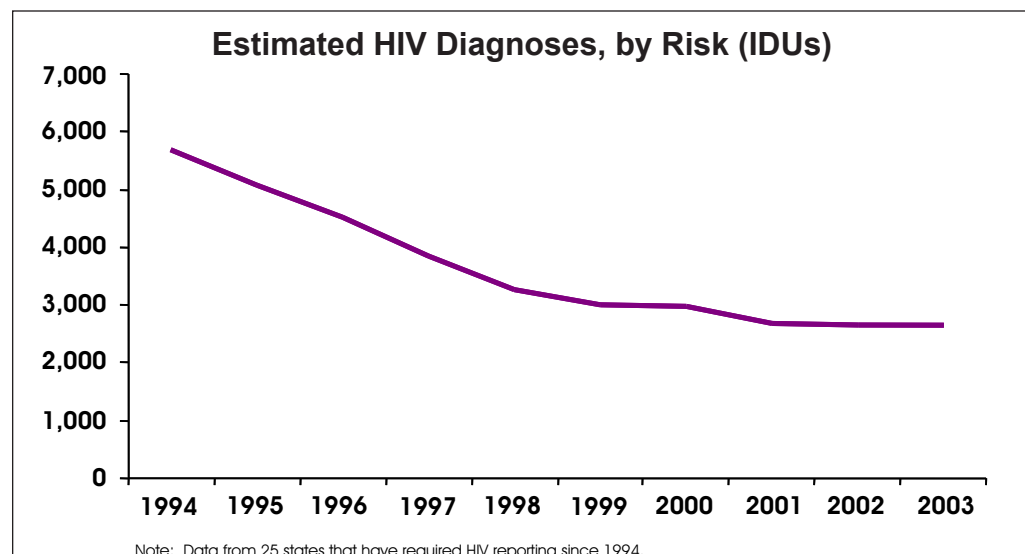
Drug injection was identified as a risk factor for HIV/AIDS early in the epidemic. HIV is transmitted among IDUs who share injection drug equipment or have unprotected sex with an infected partner.

AIDS

Since the beginning of the epidemic, injection drug use has directly or indirectly accounted for more than one third (38%) of estimated AIDS cases diagnosed in the United States. This association appears to be continuing. Of all new cases of AIDS diagnosed in 2003, nearly one quarter (22%) were in IDUs.

Racial and ethnic minority populations are most heavily affected. In 2003, injection drug use alone accounted for 25% of all AIDS cases diagnosed in black men and women and 24% of all AIDS cases diagnosed in Hispanic men and women, compared with only 16% in white men and women.

Among women, injection drug use accounts for a larger proportion of AIDS cases than it does among men. Since the epidemic began, 58% of all AIDS cases in women have been attributed to injection drug use or sex with partners who inject drugs, compared with 34% in men.



Since the beginning of the epidemic, injection drug use has directly or indirectly accounted for more than one-third (36%) of AIDS cases in the United States.

How Are They Affected?

HIV

The good news is that new HIV diagnoses seem to be declining overall among IDUs, with a 53% decrease in estimated new HIV diagnoses from 1994 through 2003 in the 25 states with long-standing HIV reporting.

In 2003, data reported from 41 areas with confidential HIV infection reporting showed that among IDUs, blacks accounted for 40% of HIV infections, compared with Hispanics, 33%, and whites, 25%.

Specific Populations

Examples of CDC Programs and Research for IDUs

Preventing the spread of HIV through injection drug use requires several approaches, including programs to prevent initiation of drug use, substance abuse treatment programs, education about HIV prevention, and access to sterile needles and syringes for those who are unwilling or unable to stop injecting.

Interventions found to be effective for IDUs include

- ▲ skills building for heterosexual women receiving methadone treatment
- ▲ problem-solving therapy models for incarcerated male adolescent IDUs
- ▲ training to reduce sexual and drug-related HIV risk behaviors for IDUs receiving treatment for substance abuse

One of CDC's HIV Prevention Strategic Plan objectives for this population is to increase among IDUs the proportion who abstain from drug use or, for those who do not abstain, increase the proportion who use a clean, sterile syringe for each injection to reduce risk for HIV acquisition or transmission.

CDC activities that address these objectives include

- ▲ **Behavioral Surveillance.** National HIV Behavioral Surveillance (NHBS) assesses HIV risk behaviors and trends in behaviors among IDUs in 25 metropolitan areas.
- ▲ **REP (Replicating Effective Programs).** These “prevention in a box” projects take interventions proven effective with specific populations, including IDUs, and package them into kits for use by local HIV prevention agencies. Examples of interventions that have proven effective in reducing HIV risk behaviors among IDUs include Holistic Health Recovery, Street Smart, and Safety Counts.

Programs

CDC provides 4 awards to directly funded CBOs that focus primarily on IDUs. Of these 4 awards, 25% focus on blacks; 25%, Hispanics; 25%, whites; and 25%, American Indians and Alaska Natives. In terms of age groups, 100% focus on adults.

One of CDC's HIV Prevention Strategic Plan objectives for this population is to increase among IDUs the proportion who abstain from drug use or, for those who do not abstain, increase the proportion who use a clean, sterile syringe for each injection to reduce risk for HIV acquisition or transmission.

How Are They Affected?

Research

INSPIRE (Interventions for HIV-Seropositive IDUs—Research and Evaluation)

CDC and the Health Resources and Services Administration jointly funded INSPIRE in late 1999 as a 5-year study to link prevention and treatment in each of 4 cities (Baltimore, Miami, New York, and San Francisco). The intervention consists of 10 sessions that focus on building cognitive-behavioral skills and encouraging participants to mentor their peers. The results from this study are pending. A description of the study design, methods, and baseline data was published in the *Journal of Acquired Immune Deficiency Syndromes* in 2004.

DUIT (Drug Users Intervention Trial)

CDC supports and collaborates on a behavioral intervention trial that has been found effective for lowering the risk for HIV and hepatitis C infections in IDUs in Baltimore, Chicago, Los Angeles, New York, and Seattle.



Since 1985 the proportion of AIDS cases diagnosed among women has more than tripled, from 8% in 1985 to 27% in 2003.

Trends among Heterosexual Adults

Historically, the HIV/AIDS epidemic has affected more men than women, but women are being increasingly affected. Since 1985 the proportion of estimated AIDS cases diagnosed among women has more than tripled, from 8% in 1985 to 27% in 2003.

AIDS

The epidemic has increased most dramatically among women of color. Although black and Hispanic women together represent about one fourth of all US women, they account for more than three fourths of estimated AIDS cases diagnosed to date among US women. In 2003, black and Hispanic women represented an even greater proportion (83%) of diagnosed cases in women.

Despite continuing decreases in HIV/AIDS-related deaths in men and women, HIV/AIDS remains the fifth leading cause of death in the United States for men and women aged 35–44 years and one of the top 10 leading causes of death for men and women aged 20–54. For blacks in these age groups, HIV/AIDS ranks even higher as a cause of death.

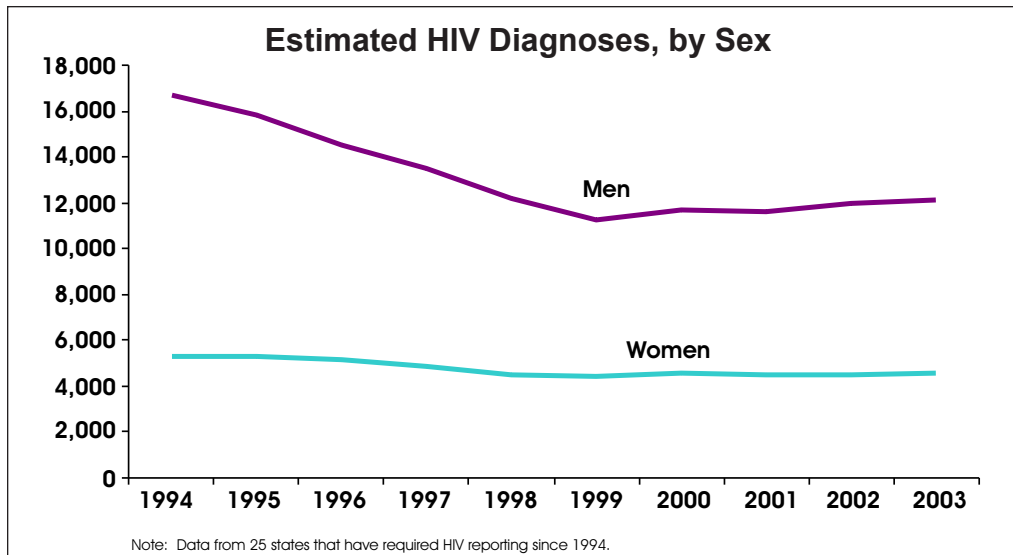
HIV

Although each year more men than women become infected with HIV, this gap is slowly closing. Data from the 25 states with long-standing HIV reporting show that new HIV diagnoses in men declined 27% from 1994 through 2003.

Transmission routes differ by gender. Data from 2003 show that

- ▲ among men, HIV transmission is estimated to occur 63% through sexual contact with men, 14% through injection drug use, and 17% through sexual contact with women.
- ▲ among women, HIV transmission is estimated to occur 79% through sexual contact with men (many of whom are IDUs or also have sexual contact with men) and 19% through injection drug use.

How Are They Affected?



Specific Populations

Examples of CDC Programs and Research for Heterosexual Adults

Research has shown that women, as well as men, benefit from HIV prevention programs. Women benefit from programs aimed at increasing their awareness of their own risk, assertiveness in sexual situations, and coping skills.

In its funding of prevention programs for women, CDC emphasizes

- ▲ prevention and treatment services for young women and women of color
- ▲ better integrated prevention and treatment services for all women
- ▲ recognition of the intersection of drug use and sexual HIV transmission, especially among women who trade sex for drugs or money
- ▲ research on effective female-controlled prevention methods for women who are unwilling or unable to negotiate condom use with a male partner
- ▲ programs with a proven record of effectiveness for changing risky behaviors and sustaining those changes over time

Interventions found to be effective include

- ▲ teaching young heterosexual black women about assertiveness, negotiation, and condom use
- ▲ teaching male and female low-income, urban patients at high risk about expectations of outcome, skills, and the belief that one's words and actions will be effective at preventing HIV transmission
- ▲ showing videos on assertiveness, negotiation, and planning skills to promote abstinence and safer behaviors among single, inner-city pregnant women

One of CDC's HIV Prevention Strategic Plan objectives for this population is to increase among at-risk sexually active women and at-risk heterosexual men the proportions who consistently engage in behaviors that reduce risk for HIV acquisition or transmission.

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How Are They Affected?

CDC activities and strategies that address these objectives include

- ▲ **The Revised Recommendations for HIV Screening of Pregnant Women**
- ▲ **Behavioral Surveillance.** National HIV Behavioral Surveillance (NHBS) will assess HIV risk behaviors and trends in behaviors among high-risk heterosexuals in 25 metropolitan areas. Currently, NHBS sites are conducting pilot studies to determine the best definition of high-risk heterosexual and places to recruit this population for the behavioral surveys.

Programs

CDC provides 22 awards to directly funded CBOs that focus primarily on women. Of these 22 awards, 54% focus on blacks; 41%, Hispanics; and 4%, whites. In terms of age groups, 45% focus on adults; 45%, youth; and 10% are not reported.

Using Social Network Strategies for Reaching Persons at High Risk for HIV Infection in Communities of Color

In October 2003, funding was awarded to 9 CBOs in 7 cities to demonstrate the feasibility of using social network strategies to reach persons at high risk for HIV infection and provide them HIV counseling, testing, and referral services. As of September 2004, the 133 enlisted recruiters had referred 814 persons from their social, sexual, or drug-using networks to get tested for HIV. For the 46 (6%) who received positive test results, this was the first time they learned that they were HIV-infected.

Research

Safe City Project

The Safe City Project, which began in October 2001, was designed to develop and evaluate a video-based prevention intervention for patients in STD clinics. The primary goals are to assess whether showing a brief 23-minute educational video to male and female patients in the waiting room can reduce risky sexual behaviors and new STDs for these patients. After 3 months, researchers will compare levels of high-risk sexual behavior between the 900 patients who saw the video and another 900 who did not. After 1 year, they will compare number of new STDs diagnosed for each group.

Trends among People of Color

People of color are disproportionately affected by the HIV/AIDS epidemic. In the early 1980s, most AIDS cases occurred in whites. However, cases in blacks increased steadily, and by 1996 more cases occurred in blacks than in any other racial or ethnic population. AIDS cases have also increased in Hispanics, Asians, Pacific Islanders, American Indians, and Alaska Natives.

AIDS

Although blacks represent a small proportion (13%) of the US population, they accounted for a large proportion of the estimated cumulative AIDS cases (40%) and AIDS deaths (37%) through 2003. Likewise, Hispanics represent about 12% of the US population, but they accounted for an estimated 19% of AIDS cases and 18% of AIDS deaths through 2003.

In terms of risk groups for black men for whom AIDS was diagnosed in 2003, MSM represent 46%; IDUs, 25%; and heterosexuals, 23%. Of risk groups for Hispanic men with AIDS, MSM represent 53%; IDUs, 23%; and heterosexuals, 17%.

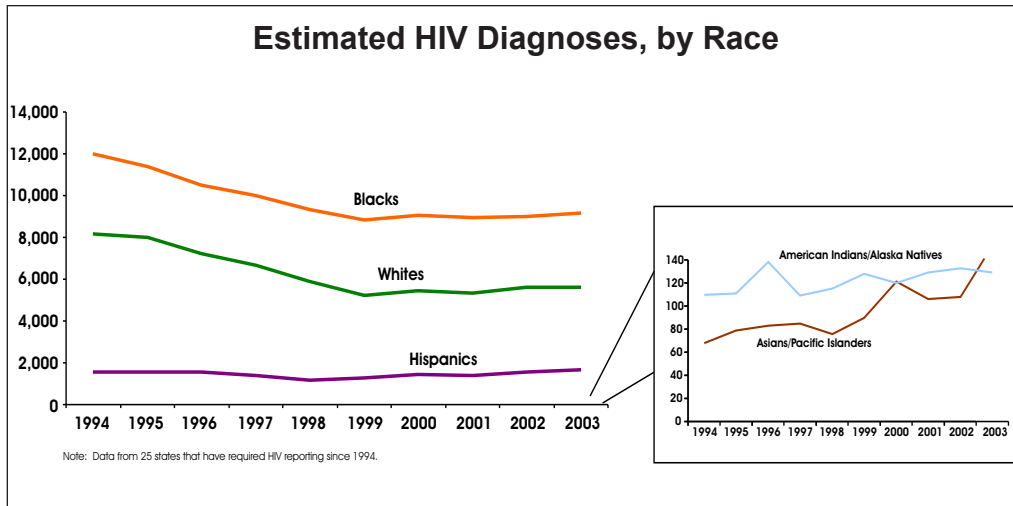
Among black women for whom AIDS was diagnosed in 2003, injection drug use accounted for an estimated 25% of all cases and heterosexual contact for 72%. Among Hispanic women with AIDS, heterosexual contact accounted for an estimated 71% of cases and injection drug use for 27%.

HIV

The disparity between black and white people continues. Data from the 25 states with long-standing HIV reporting from 1994 through 2003 indicate that an estimated 55% of people with a new diagnosis of HIV were black (and not Hispanic), compared with 35% who were white (and not Hispanic). New HIV diagnoses from 1994 through 2003 declined more sharply among whites (31%) than among blacks (24%). Of the roughly 1 million people estimated to be living with HIV at the end of 2003, 46% were black.

People of color are disproportionately affected by the HIV/AIDS epidemic.

How Are They Affected?



Specific Populations

Examples of CDC Programs and Research for People of Color

CDC is committed to working with communities of color to ensure that those who have been disproportionately affected by HIV/AIDS have access to early testing, treatment, and prevention services and programs that work.

Interventions found to be effective for people of color include

- ▲ using culturally appropriate videos to teach small groups of sexually active black and Hispanic men and women about condom use, negotiation skills, and safer sex
- ▲ teaching health care providers how to work with young black and Hispanic MSM and heterosexuals in prevention activities
- ▲ providing risk-reduction activities; access to HIV counseling, testing, and referral services; and prevention information to black youth
- ▲ training black youth as peer educators in their communities
- ▲ offering HIV counseling and testing services and outreach activities to black churches and offering outreach, discharge planning, community case management, and education services to correctional institutions

The CDC HIV Prevention Strategic Plan's overarching national goal focuses on eliminating racial and ethnic disparities in new HIV infections.

CDC activities that address this goal include

- ▲ **Supplemental Funding for Community-based Strategies to Increase HIV Testing of Persons at High Risk in Communities of Color.** These funds support a social network model to increase HIV counseling and testing among high-risk minority communities.
- ▲ **Research Fellowship on HIV Prevention in Communities of Color.** This program supports the training of scientists researching sociocultural, structural, psychological, and behavioral factors in minority health and HIV.
- ▲ **MARI (Minority HIV/AIDS Research Initiative).** This capacity-building initiative funds investigators working on HIV/AIDS research gaps in black and Hispanic communities.

The CDC HIV Prevention Strategic Plan's overarching national goal focuses on eliminating racial and ethnic disparities in new HIV infections.

How Are They Affected?

Programs

CDC provides more than \$300 million to help communities build and sustain sound, innovative HIV prevention programs. In addition, the Minority AIDS Initiative provides funding to state and local health departments for HIV prevention resources for minority populations at high risk. CDC provides 179 awards to directly funded CBOs that focus primarily on people of color. Of these 179 awards, 59% focus on blacks; 25%, Hispanics; 13%, Asians and Pacific Islanders; and 1% American Indians and Alaska Natives. In terms of age groups, 69% focus on adults; 25%, youth; and 6%, elderly people.

Using Social Network Strategies for Reaching Persons at High Risk for HIV Infection in Communities of Color

In October 2003, funding was awarded to 9 CBOs in 7 cities to demonstrate the feasibility of using social network strategies to reach persons at high risk for HIV infection and provide them HIV counseling, testing, and referral services. As of September 2004, the 133 enlisted recruiters had referred 814 persons from their social, sexual, or drug-using networks to get tested for HIV. For the 46 (6%) who had positive HIV test results, this was the first time they learned that they were HIV-infected.

Research

Project START

Conducted at 4 sites from 1998 through 2003, this HIV and STD prevention project is for young men being released from prison. At 24 weeks after release, men who received an enhanced intervention (before and after release) were significantly less likely to report having had unprotected sex during their most recent sexual encounter (59%) than were men who received a 1-session intervention (69%) before release.

Brothers y Hermanos

This 4-year study will examine psychological, social, cultural, and environmental factors associated with HIV risk behavior among black and Hispanic MSM in 3 US cities. The results should shed light on how these factors differ between men who become infected with HIV and those who remain free of infection.



The HIV/AIDS epidemic has taken a heavy toll on young people in the United States.

Trends among Youth

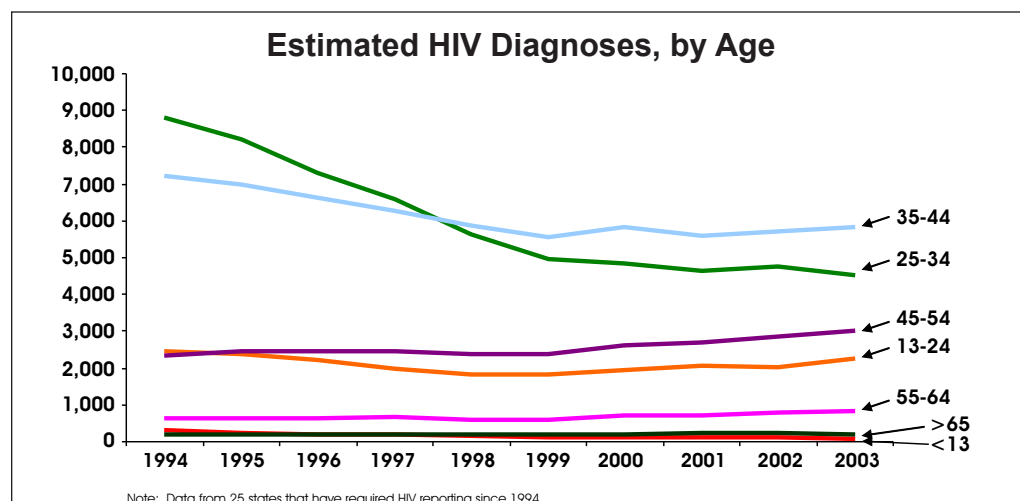
The HIV/AIDS epidemic has taken a heavy toll on young people in the United States. Because it is presumed that young people with HIV were infected fairly recently, scientists believe that HIV infections among youth may indicate trends in the overall HIV/AIDS epidemic. Trends in STDs other than HIV among young persons serve as indicators of risk behaviors for HIV.

AIDS

From the beginning of the epidemic through 2003, an estimated 9,789 young people (aged 15–24 years) with AIDS have died. Fortunately, since the late 1980s (from 1989 through 2003), deaths from AIDS have declined 71% for people in this age group. However, the challenges of addressing disparities in care, preventing secondary transmission of HIV, and meeting the social and medical needs of persons living with HIV or AIDS are especially critical for youth, considering their long-term needs.

HIV

Data from the 25 states with long-standing HIV reporting show that among people aged 25–34 years, the estimated number of new diagnoses from 1994 through 2003 declined by a remarkable 49%. However, in youth aged 13–24, new HIV diagnoses remained stable during this time period.



How Are They Affected?

Young women and young black men and women are being increasingly affected by HIV. In 2003, data reported from 41 areas with confidential HIV reporting showed that young women account for nearly half (40%) of HIV infections in those aged 13–24 years. Black youth have been most heavily affected, accounting for 55% of all HIV infections reported among those aged 13–24 in areas with confidential HIV reporting.

Young MSM, especially those of color, are also at high risk for HIV infection. The CDC Young Men's Survey showed that from 1994 through 1998, 14% of black MSM and 7% of Hispanic MSM aged 15–22 years were HIV-infected.



Examples of CDC Programs and Research for Youth

Prevention research has identified many interventions that help young people adopt healthier behaviors. Parents have been shown to be powerful resources. CDC's primary message for youth is abstinence.

Interventions CDC has found effective with youth include

- ▲ holding small-group discussions among young MSM about reducing unsafe sexual behaviors, training others to conduct informal outreach, and conducting a publicity campaign
- ▲ teaching runaway youth safer behaviors through role-playing and problem-solving exercises to help them identify triggers and decrease harmful behavior
- ▲ teaching students to postpone sex and reduce unsafe sexual and drug-using behaviors

One of CDC's HIV Prevention Strategic Plan objectives for this population is to increase among adolescents the proportion who consistently engage in behaviors that reduce risk for HIV acquisition or transmission.

CDC activities that address this goal include

- ▲ **HIV Prevention Projects for Community-based Organizations Targeting Young Men of Color Who Have Sex with Men.** These programs create, put into place, and sustain services to help prevent HIV in young MSM of color, their sex partners, and transgendered youth.
- ▲ **Pregnancy in Perinatally Infected Youth.** This study looks at teenagers who had acquired HIV from their mothers and are now pregnant and having their own children.
- ▲ **REP (Replicating Effective Programs).** This "prevention in a box" project takes interventions proven effective with specific populations and packages them into kits for use by local HIV prevention agencies. Of 10 interventions, 3 serve youth only and 2 others include youth in their populations served.
- ▲ **School-based HIV Prevention.** These programs support 48 state education agencies, 18 large city education agencies, 7 territorial agencies, and 37 national nongovernment organizations to help set up school health programs that provide

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How Are They Affected?

young people with skills and information to avoid or reduce behaviors that put them at risk for HIV infection. In 2003, 88% of all high school students reported receiving HIV prevention education.

Programs

CDC provides 36 awards to directly funded CBOS that focus primarily on youth and provides indirect funding through state, territorial, and local health departments to organizations serving youth. Of these 36 awards, 75% focus on blacks; 19%, Hispanics; 3%, Asians and Pacific Islanders; and 3%, whites.

Parents Matter!

This community-based intervention promotes effective parenting and parent-child communication to reduce sexual risk. Although parents are in a unique position to provide early and continuous HIV prevention messages, many lack the information, skills, comfort, or confidence to do so.

Partnership for Adolescent Wellness Study (PAWS)

PAWS is a formative research study of black youth (aged 12–17 years) whose mothers use crack cocaine. Conducted in 2 cities in North Carolina, the study explores what influences HIV-related risk behaviors of these young people.

Research

CITY (Community Intervention Trials for Youth)

CITY evaluated approaches for encouraging young men who engage in HIV-risk behaviors, especially racial and ethnic minorities aged 15–25, to change these behaviors.

YMS (Young Men's Survey)

This study, conducted in 2 phases (1994–1998 and 1998–2000), measured HIV infection (and hepatitis and syphilis) and related risk behaviors of young MSM.

YWS (Young Women's Survey)

This survey, conducted in 1999, examined sexual behaviors and HIV risk behaviors of young black women at clinics in New York City and Dallas.

Trends among Pregnant Women and their Infants

HIV transmission from mother to child (also called perinatal transmission) can occur during pregnancy, labor, delivery, or breast-feeding. Mother-to-child HIV transmission accounts for over 90% of all AIDS cases in US children.

During the early to mid 1990s, 6,000 to 7,000 HIV-infected women gave birth each year. An estimated 1 in 4 of these newborns acquired the mother's HIV infection. Had this transmission rate continued, an estimated 1,750 HIV-infected infants would have been born in the United States each year, and lifetime medical costs for these infants may have reached \$282 million. Fortunately, this trend was successfully interrupted. With current estimates being 280 to 370 perinatal infections each year and costs per individual \$185,000, lifetime costs are closer to \$60 million.

This decline in the number of HIV-infected infants occurred after the 1994 and 1995 US Public Health Service recommendations for preventing mother-to-child HIV transmission.

The recommendations include

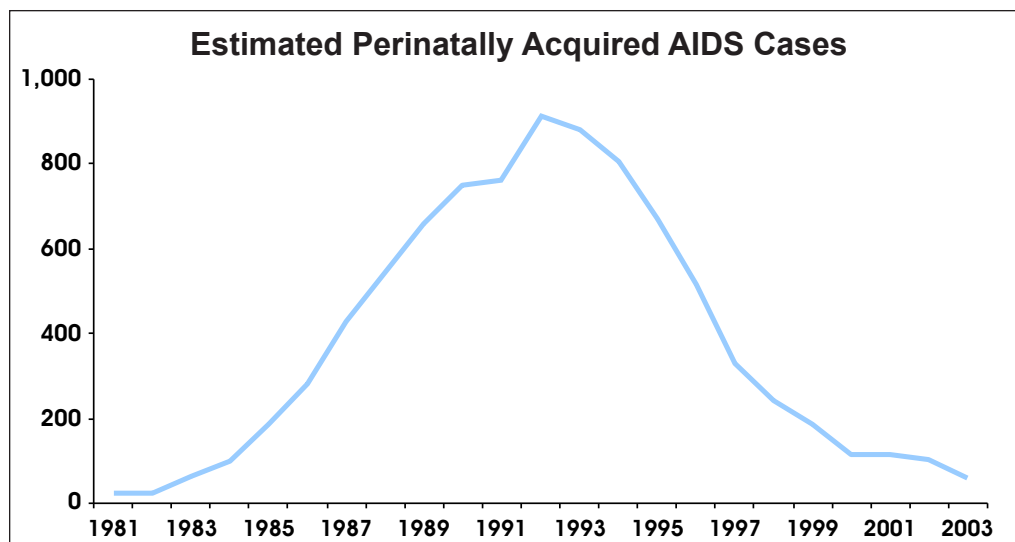
- ▲ routinely offering counseling and voluntary HIV testing to pregnant women
- ▲ offering zidovudine (also called ZDV or AZT) treatment to HIV-infected women during pregnancy and delivery
- ▲ treating the infant with zidovudine after birth

Most pregnant women voluntarily accept HIV testing if it is offered by their health care provider. Testing rates are higher in areas with voluntary opt-out policies (in which testing is routine unless a woman chooses to not be tested) and mandatory testing of newborns.

Between 1992 and 2003, estimated cases of perinatally acquired AIDS declined 94% in the United States, from 912 cases to 58 cases.

Between 1992 and 2003, estimated cases of perinatally acquired AIDS declined 94% in the United States.

How Are They Affected?



However, children of color—especially black children—continue to be disproportionately affected by AIDS. Although only 16% of US children are black, 67% of US children with a diagnosis of perinatally acquired AIDS in 2003 were black.

HIV exposure risks for mothers of children with AIDS have changed over time. In the early 1980s, most women were exposed to HIV through injection drug use and a smaller proportion through sex with men. However, during the 1990s, these proportions reversed; the mother's exposure through sex with men now plays a larger role than the mother's injection drug use.

Examples of CDC Programs and Research for Pregnant Women and their Infants

Efforts to prevent mother-to-child HIV transmission must focus on preventing new HIV infections in women; providing timely prenatal care and HIV testing during pregnancy (including rapid HIV testing during labor); and making sure all HIV-infected pregnant women receive care, prevention case management, and treatment.

One of CDC's HIV Prevention Strategic Plan objectives is to increase the proportion of pregnant women who are tested for HIV and, if infected, choose to take medication to interrupt mother-to-child transmission of HIV. One of the goals of CDC's recently launched initiative, Advancing HIV Prevention, is to further decrease mother-to-child transmission of HIV.

Program

Perinatal Elimination Efforts

Since 1999, Congress has provided \$10 million a year to reduce mother-to-child transmission of HIV in the United States. CDC distributes these funds to

- ▲ 10 state and city jurisdictions for enhanced perinatal surveillance
- ▲ 16 state prevention programs serving pregnant women at high risk for HIV
- ▲ 5 national health care provider organizations to develop training materials for health care providers and educational materials for pregnant women

Research

EPS (Enhanced Perinatal Surveillance)

EPS is one of CDC's activities to further reduce mother-to-child transmission of HIV in areas with high levels of HIV. EPS is an extension of routine surveillance activities. Its goals are to

- ▲ monitor
 - o adherence to US Public Health Service recommendations for HIV counseling and voluntary testing of pregnant women
 - o use of medication regimens recommended by the US Public Health Service to prevent mother-to-child transmission of HIV
 - o effect of the recommendations on trends of HIV disease in children

One of CDC's HIV Prevention Strategic Plan objectives is to increase the proportion of pregnant women who are tested for HIV and, if infected, choose to take medication to interrupt mother-to-child HIV transmission.

How Are They Affected?

- ▲ establish a surveillance system that collects data to help states respond to certain requirements of the Ryan White CARE Act
- ▲ assist in timely evaluation of efforts to prevent mother-to-child transmission of HIV

EPS data from 24 sites from 1999 through 2001 show that 1 in 8 (12%) HIV-infected women did not receive prenatal care, and 1 in 10 (10%) did not get tested for HIV before giving birth.

MIRIAD (Mother Infant Rapid Intervention at Delivery)

The MIRIAD project has shown that rapid HIV testing during labor for women whose HIV status is unknown is acceptable, effective, and feasible. CDC has a national plan for rapid HIV testing of pregnant women. CDC published a model protocol for hospitals, updates the protocol as new rapid HIV tests become licensed, and funds regional trainings for several US hospitals.

LEGACY (Longitudinal Epidemiologic Study to Gain Insight into HIV and AIDS in Children and Youth)

LEGACY is a new study of HIV-infected children and adolescents, from birth through 24 years, who are receiving care from a pediatrician or specialist in adolescent medicine. The study is being conducted at approximately 20 sites throughout the United States. The study will monitor trends in

- ▲ illness and death in HIV-infected children and adolescents, including how their disease is progressing, how well their immune system is working, any long-term complications from the disease or its treatment, and how long they are living
- ▲ use of antiretroviral drugs and any side effects or viral resistance from long-term treatment with these drugs
- ▲ factors that may be related to the risk for secondary transmission of HIV from young people



Trends among Correctional Facility Inmates

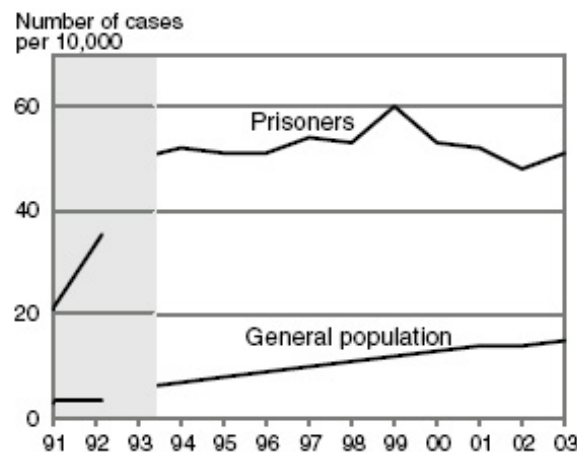
Rates of HIV and AIDS are high among correctional facility inmates; similarly, rates of incarceration are high among HIV-infected people. Many inmates (12% according to a 2002 Supplement to HIV/AIDS Surveillance study) receive their diagnosis of HIV while incarcerated.

AIDS

The rate of confirmed AIDS cases for state and federal inmates (48/10,000) is more than 3 times the rate for the general US population (14/10,000). In 2002, the prevalence of AIDS was 0.5% for inmates in state prisons and 0.4% for inmates in federal prisons. About 20% of inmates known to be HIV-infected also had a diagnosis of AIDS.

Fortunately, effective therapies have led to marked increases in the survival of inmates with AIDS. The number of AIDS-related deaths of inmates has been decreasing dramatically since it peaked in 1995; by 2002, the number of AIDS-related deaths in state prisons had declined 72%. In 2002, the reported number of AIDS-related deaths was 215 for state inmates and 17 for federal inmates. AIDS-related deaths accounted for 5% of all deaths in federal prisons.

People Living with AIDS, Inmates and General Population



Note: The shaded area covers the period prior to the 1993 expansion of the classification system for HIV infection and the case definition for AIDS. This expansion improved estimates of the number and the characteristics of persons with HIV disease but complicated interpretation of AIDS trends. The increase in reported AIDS cases in 1993 was largely the consequence of the added surveillance criteria.

Adapted from *Bureau of Justice Statistics Bulletin*, September 2005.

How Are They Affected?

HIV

At the end of 2002, 2.0% of state prison inmates and 1.1% of federal prison inmates were known to be HIV-infected. The total number of inmates known to be HIV-infected was 23,864. In 2002, the highest rates of HIV infection for inmates occurred in the Northeast, where 4.6% of the prison population was HIV-infected, followed by 2.2% in the South, 1.0% in the Midwest, and 0.7% in the West. In state prisons, a higher percentage of female (3.0%) than male (1.9%) inmates were HIV-infected.

Rates of HIV and AIDS are high among correctional facility inmates; similarly, rates of incarceration are high among HIV-infected people.

Examples of CDC Programs and Research for Correctional Facility Inmates

Trends in HIV and AIDS in correctional facilities affect not only inmates but the general public because many inmates (approximately 7.5 million per year) are released back into the community. However, most correctional facilities have inadequate or no discharge planning (plans for linking released inmates with community-based health care, substance abuse treatment, and other services). CDC uses a community approach to improve the health of inmates by collaborating with correctional facilities, public health agencies, and community health care and social service providers. Because approximately 80% of prisoners have a history of substance use, some HIV prevention programs for inmates focus on IDUs.

Program

CDC/HRSA Corrections Demonstration Project

CDC and the Health Resources and Services Administration (HRSA) jointly funded 7 states for this project. The project's purpose was to develop, set up, and evaluate models for innovative programs to provide continuity of care (follow-up care after release). Using outreach, HIV education, and HIV/AIDS counseling and testing, the project served inmates, especially racial and ethnic minorities, who were HIV-infected or at risk for HIV infection. The project encouraged collaborations between correctional facilities, public health agencies, CBOs, and health care providers. Evaluations will focus on whether health outcomes were improved by linking discharged inmates to services and keeping them in services.

Routine Rapid HIV Testing of Inmates in Short-stay Correctional Facilities

State health departments in Florida, Louisiana, New York, and Wisconsin have been funded to offer HIV rapid testing and prevention counseling as a standalone procedure to male and female inmates. All inmates are confidentially notified of their test results at the time of rapid testing. Inmates with preliminary positive HIV rapid test results are offered confirmatory HIV testing. Inmates with a positive confirmatory result are referred to appropriate care, treatment, and prevention services. From January 2004 through

How Are They Affected?

March 2005, a total of 16,676 rapid tests have been conducted. Of these, 256 (1.5%) were reactive. Of the 236 persons who consented to confirmatory HIV testing, 200 had confirmed positive test results; of these, 121 (61%) were newly identified infections. Routinely offering voluntary rapid HIV testing with other STD screening as a component of the medical evaluation may increase use. Provision of consistent, high-quality counseling and testing services could potentially build trust between inmates and staff and improve program acceptance and success. A comprehensive guidance document on implementing HIV rapid testing in jails will be developed after project activities have been completed.



Research

CDC Corrections Discharge Planning Study

CDC funded this study of discharge planning and continuity of care for HIV-infected releasees in 10 states. Questionnaires and follow-up phone interviews identified state-of-the-art practices and factors that help or hinder discharge planning and continuity of care. The findings indicated that

- ▲ discharge planning should be holistic and tailored to the individual
- ▲ continuity of medical care is most likely when releasees receive
 - medication at the time of release
 - a printed summary of their prison medical records
 - a medical appointment in the community
 - help applying for medical and cash benefits (eg, Medicaid, AIDS Drug Assistance Program)

Project START

Conducted at 4 sites from 1998 through 2003, this HIV/STD prevention project is for young men being released from prison. It compared sexual risk after a 1-session intervention (before release) to that after an enhanced intervention (before and after release). At 24 weeks after release, men who received the enhanced intervention were significantly less likely to report having had unprotected sex during their most recent sexual encounter (59%) than were men who received the 1-session intervention (69%).

Trends among People Worldwide

HIV and AIDS pose one of the greatest challenges to global public health. Worldwide in 2004, more than 3 million people died from AIDS. During that same year, an estimated 5 million people acquired HIV, bringing the number of people living with HIV to 39 million. Especially vulnerable are disadvantaged, marginalized, and unempowered populations such as commercial sex workers, IDUs, MSM, women and girls, and people living in poverty. Many people do not know that they carry the virus. Millions more know nothing or too little about HIV to protect themselves against it. Even those who do know about HIV prevention may not have the power to act on it, especially women and girls, who are often unable to say no to unprotected sex or to negotiate safer behaviors.

Sub-Saharan Africa

Approximately 25.4 million people are living with HIV/AIDS; an estimated 3.1 million were newly infected with HIV in 2004. HIV/AIDS is the leading cause of death in sub-Saharan Africa. In 2004 alone, AIDS killed 2.3 million African people. Without adequate treatment and care, most of those living with HIV will not survive the next decade.

Asia and the Pacific

Approximately 8.2 million people are living with HIV/AIDS; an estimated 1.2 million were newly infected in 2004. New infections increased 8% since 2002. The epidemic claimed over 540,000 lives in 2004. High HIV infection rates in the region are being discovered among IDUs, MSM, and sex workers.

Latin America and the Caribbean

Approximately 2.1 million people are living with HIV/AIDS; an estimated 293,000 were newly infected in 2004. Driving the spread of HIV are unequal socioeconomic development and a highly mobile population. The region, however, has made admirable progress in providing treatment and care.

HIV and AIDS pose one of the greatest challenges to global public health.

How Are They Affected?

Western Europe, North America, Australia, and New Zealand

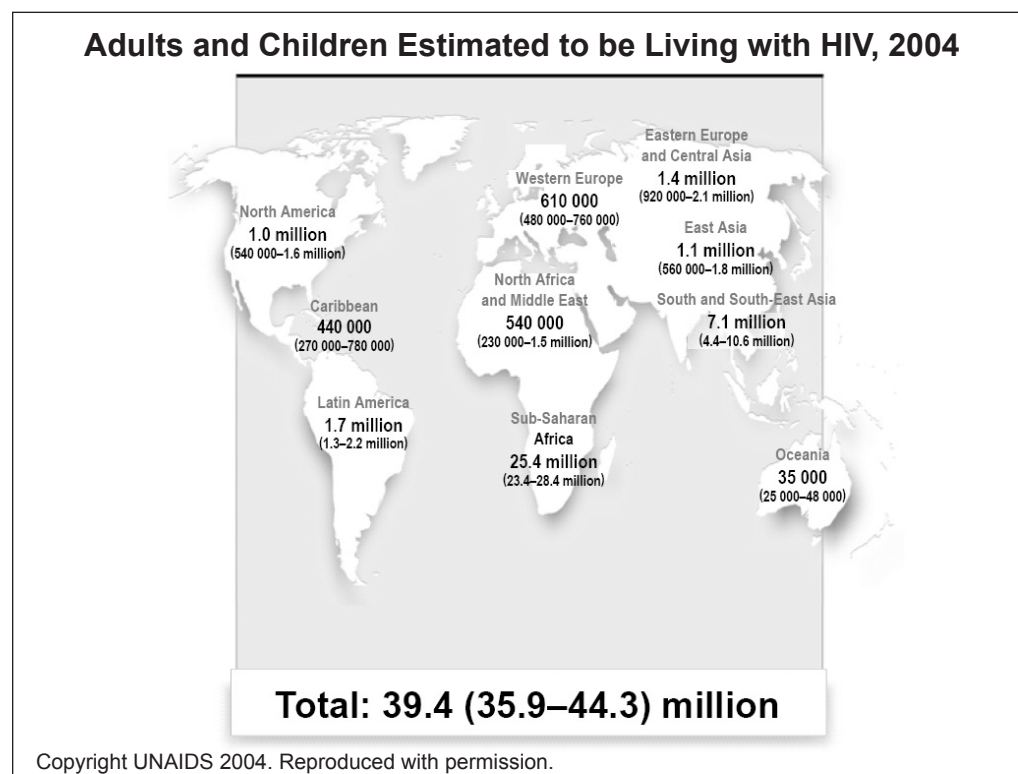
Approximately 1.6 million people are living with HIV/AIDS; an estimated 70,000 were newly infected in 2004. A larger epidemic threatens to develop in high-income countries. Unsafe sex and widespread injection drug use are propelling these epidemics, which are shifting more toward underprivileged communities.

Eastern Europe and Central Asia

Approximately 1.4 million people are living with HIV/AIDS; an estimated 210,000 were newly infected in 2004. Eastern Europe—especially the Russian Federation—continues to experience the fastest growing epidemic in the world. Because of high levels of other STDs and injection drug use among young people, the epidemic may grow considerably.

The Middle East and North Africa

Approximately 540,000 people are living with HIV/AIDS; an estimated 92,000 were newly infected in 2004. Poor surveillance systems in several countries hinder accurate assessment of and response to the epidemic.



Examples of CDC Programs and Research for People Worldwide

For many years, CDC has been working with others to fight HIV/AIDS around the world. The international goal of CDC's HIV Prevention Strategic Plan is to assist in reducing HIV transmission and improving HIV/AIDS care and support in partnership with resource-constrained countries.

Program

CDC's Global AIDS Program (GAP)

CDC'S Divisions of HIV/AIDS Prevention provide support and technical assistance for GAP. Under the direction of the US Global AIDS Coordinator's Office, CDC's Global AIDS Program (GAP) is a major partner in the effort to address the Emergency Plan for AIDS Relief, announced by President Bush in his 2003 State of the Union address. The goals of the Plan are to

- ▲ treat 2 million HIV-infected people
- ▲ prevent 7 million new HIV infections
- ▲ care for 10 million people (people living with HIV and children orphaned because of HIV) in 15 of the world's most affected countries

As of 2004, GAP has programs in 25 countries and 4 regional programs in Africa, Asia, Latin America, and the Caribbean. GAP provides assistance directly through its own staff and through partnerships with governments, communities, and other national and international groups.

GAP's mission is to

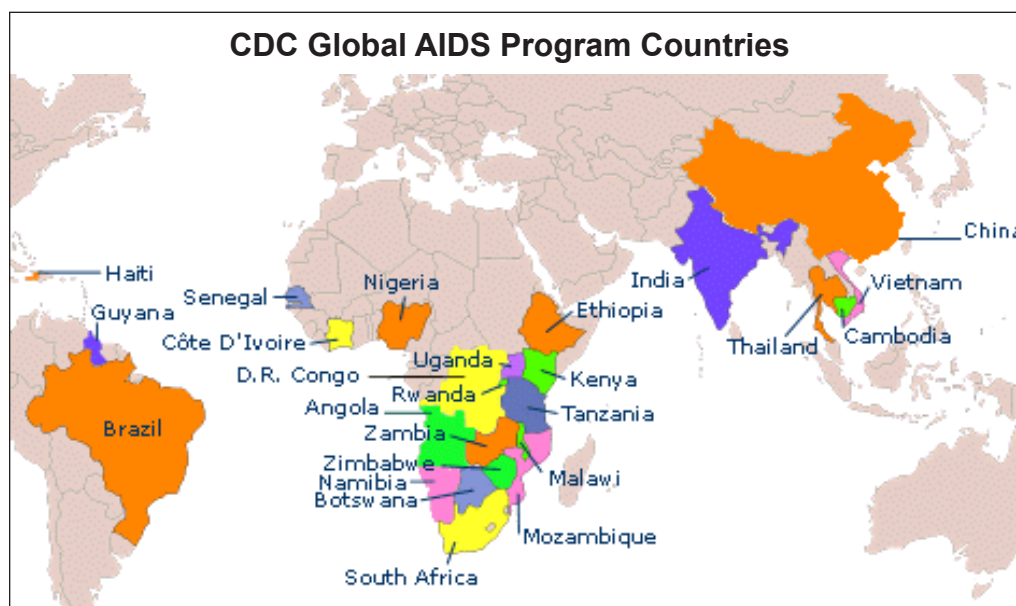
- ▲ prevent HIV infection
- ▲ improve care, support, and treatment for people living with HIV/AIDS
- ▲ strengthen the capacity of countries to address the global HIV/AIDS epidemic

The international goal of CDC's HIV Prevention Strategic Plan is to assist in reducing HIV transmission and improving HIV/AIDS care and support in partnership with resource-constrained countries.

How Are They Affected?

GAP's priority areas include

- ▲ providing support for HIV/AIDS surveillance systems
- ▲ enhancing voluntary counseling and testing programs and services
- ▲ strengthening laboratory capacities and systems
- ▲ providing care, support, and treatment for people living with HIV/AIDS
- ▲ reducing mother-to-child transmission of HIV
- ▲ training program staff



Research

The focus of CDC's international HIV research is developing and testing potential HIV vaccines and microbicides as well as looking for new ways to reduce mother-to-child HIV transmission. CDC is also involved in providing technical support for programs working with drugs for HIV treatment; these programs aim to improve care for people with HIV and to prevent HIV transmission from mother to child. CDC's international HIV/AIDS research is mostly conducted in GAP field stations with staff assigned to Botswana, Kenya, and Thailand. In addition, CDC is involved in collaborative research projects in Cameroon, Malawi, Russia, South Africa, Uganda, and Zimbabwe.