

CDC has been involved in the fight against HIV and AIDS from the epidemic's earliest days. Initially, CDC's contribution was the detective work that characterizes epidemiology and surveillance, as CDC scientists observed a link among a cluster of rare cancers that heralded the ominous presence of the virus in the United States and around the world. Today, those surveillance efforts continue to document the epidemic's path by monitoring not only AIDS case rates but also, wherever possible, the extent of HIV infection and its impact on specific populations at heightened risk, such as inmates in correctional facilities.

CDC has also emphasized two other features of public health that are critical to controlling the epidemic: prevention and community involvement. HIV prevention has helped slow the rate of new HIV infections in the United States from over 150,000 per year in the mid-1980s to 40,000 today. Perinatal transmission from HIV-infected women to their children has been reduced from 1,000 to 2,000 infants in the early 1990s to several hundred today. CDC's 5-year strategic plan to guide HIV prevention builds on these types of successes, but recognizes that profound challenges remain, both here and abroad. For example, since up to a third of the estimated 850,000 to 950,000 people in the United States who are infected with HIV are unaware of their condition, an important goal is to increase the number of people who are aware of their serostatus so that they can receive early and effective treatment and prevent inadvertent transmission to their partners.

CDC ADVANCING HIV PREVENTION INITIATIVE

WHAT IS THE PUBLIC HEALTH ISSUE?

CDC's HIV prevention activities over the past two decades have focused on helping uninfected persons at high-risk for acquiring HIV change and maintain behaviors to keep them uninfected. Despite the success of these efforts in reducing HIV incidence in the late 1980s and early 1990s, the number of new HIV infections is estimated to have remained stable around 40,000 per year since the early 1990s, and the number of persons living with HIV continues to increase. In April 2003, CDC announced a new initiative, "Advancing HIV Prevention (AHP): New Strategies for a Changing Epidemic," aimed at reducing the number of new infections caused by HIV each year in the United States. The new initiative expands on current HIV prevention strategies and models other approaches that have proven effective in preventing infectious diseases. The initiative has four key strategies: making HIV testing a routine part of medical care; implementing new models for diagnosing HIV infections outside medical settings; preventing new infections by working with persons diagnosed with HIV and their partners; and further decreasing perinatal HIV transmission.

Keeping people from becoming infected with HIV, whether through working with HIV-positive or HIV-negative persons, remains CDC's primary HIV prevention mission. To this end, CDC will continue to support activities—primarily health education/risk reduction activities—that focus on high-risk HIV-negative persons, both directly and through indirect funding provided to community-based organizations (CBOs) through state and local health departments.

WHAT HAS CDC ACCOMPLISHED?

CDC has taken steps to implement this new initiative. It has described the new initiative in a series of "Dear Colleague" letters to all of its grantee partners; discussed the new initiative at conferences and other meetings with prevention partners and with stakeholders; issued interim technical guidance on the four strategies; and incorporated the initiative strategies in the new program announcements for state and local health departments and directly funded CBOs.

Example of Program in Action

To support the four AHP strategies, CDC funded seven types of 2-year demonstration projects to show the feasibility of and provide detailed information about the following: routine HIV testing in medical settings with high seroprevalence; rapid HIV testing to improve partner participation in partner counseling and referral services; rapid HIV testing to improve diagnosis of HIV among incarcerated persons in short-stay correctional facilities; social network strategies for reaching persons at high-risk in communities of color; rapid HIV testing in nontraditional medical settings; prevention case management to reduce risk-taking behaviors among people living with HIV who have comorbidities; and HIV prevention in medical settings by integrating prevention messages into medical clinic visit. CDC also is working with health departments and CBOs to ensure they have the skills and resources to incorporate rapid HIV testing. CDC and OraQuick manufacturer, OraSure Technologies, have conducted 20 regional rapid HIV test training sessions for health departments and CBOs that plan to conduct rapid HIV testing. Additional sessions and audio conferences are planned in 2004. In 2003, about 250,000 OraQuick Rapid HIV-1 Antibody test kits were purchased by CDC and distributed to 50 sites around the country.

WHAT ARE THE NEXT STEPS?

In 2004, CDC will continue to support a series of demonstration projects to provide information on the initiative's four strategies. These demonstration projects will study methods to improve the science base in specific areas related to the initiative, such as single encounter prevention messages, behavioral interventions for HIV-positive persons who are racial/ethnic minorities, and increasing the demand for testing in high-risk groups; and develop and disseminate standard procedures for use by all health departments, CBOs, and private-sector providers. CDC will also continue to support many of the surveys and evaluations begun in 2003 to develop baselines and monitor progress in implementing the new initiative.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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CDC ROLE IN THE PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF

WHAT IS THE PUBLIC HEALTH ISSUE?

- According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), of the 40 million adults and children who were living with HIV/AIDS at the end of 2003, 95% lived in developing countries. In 2003, an estimated 5 million people were newly infected with HIV, and more than 3 million died of AIDS.
- The World Health Organization (WHO) estimates that 6 million people worldwide are in immediate need of AIDS treatment.

WHAT HAS CDC ACCOMPLISHED?

In 2003, President Bush announced the Emergency Plan for AIDS Relief (PEPFAR), a 5-year, \$15 billion initiative to turn the tide in combatting the global HIV/AIDS pandemic. This commitment of resources will help the most afflicted countries in Africa and the Caribbean wage and win the war against HIV/AIDS, thus extending and saving lives. Specifically, the initiative is intended to prevent 7 million new infections, treat 2 million HIV-infected people, and care for 10 million HIV-infected individuals and AIDS orphans. This initiative focuses a significant amount of these resources on the most afflicted countries in Africa and the Caribbean: Botswana, Cote d'Ivoire, Ethiopia, Guyana, Haiti, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, and Zambia.

CDC's Global AIDS Program (GAP) works collaboratively with other U.S. government agencies, including the U.S. Agency for International Development (USAID); international health and economic organizations such as WHO, UNAIDS, the United Nations Children's Fund, and the World Bank; nongovernmental organizations; and host country governments to achieve the PEPFAR goals.

Example of Program in Action

In Uganda, CDC collaborates with the AIDS Support Organization, the Uganda Ministry of Health, District Health Officials, and USAID on the Home-Based AIDS Care Project (HBAC) of Uganda. The project was developed to study how people living in rural, resource-limited settings, can best access quality, comprehensive HIV care and treatment that includes antiretroviral therapy. This project provides voluntary testing and counseling; HIV prevention education; tuberculosis screening and treatment; safe water; provision of cotrimoxazole (an antibiotic to prevent infections); and treatment and adherence support for those who are HIV-infected. Trained field officers bring these critical services into the homes of project participants, who otherwise might not have access.

This ground-breaking project recognizes the importance of focusing on simple, evidence-based care for people living in rural, resource-limited settings. The project has shown that safe water and cotrimoxazole have reduced mortality among persons with HIV and have reduced malaria and diarrhea among family members. Operational research and pilot programs are often needed before full-scale implementation, and this pioneering project provides critical information for PEPFAR as AIDS care in Africa and the Caribbean is expanded.

WHAT ARE THE NEXT STEPS?

CDC will continue to collaborate with other U.S. government agencies and other partners worldwide to provide technical assistance to reach the PEPFAR goals of preventing 7 million infections, treating 2 million HIV-infected people, and providing care for 10 million HIV-infected individuals and AIDS orphans.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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COMPREHENSIVE HIV PREVENTION

WHAT IS THE PUBLIC HEALTH ISSUE?

- In the United States, an estimated 850,000 to 950,000 people are infected with HIV, roughly half of whom remain undiagnosed, untreated, or both. HIV prevention has helped slow the rate of new HIV infection in the United States, but the rate of new infections is still unacceptably high, at about 40,000 annually.
- Male-to-male sexual contact is the predominant mode of HIV exposure. In 2002, men accounted for 74% of all new AIDS diagnoses among adults in the United States.
- Of the 71,996 female adults and adolescents living with HIV/AIDS in the 30 areas with confidential name-based HIV infection reporting, 72% had been exposed through heterosexual contact, and 26% through injection drug use.
- Communities of color are disproportionately affected by HIV. More than 61% of the estimated 384,906 people now living with AIDS are African American and Hispanic/Latino.

WHAT HAS CDC ACCOMPLISHED?

Prevention remains the best strategy for reducing the human and economic toll from HIV/AIDS. CDC efforts are designed to decrease by 50% the number of new HIV infections in the United States by addressing changes in the epidemic and incorporating the latest scientific research into program interventions. CDC's goals include decreasing the number of people at high risk for HIV infection and strengthening the capacity nationwide to monitor the epidemic and implement and evaluate programs. HIV prevention hinges on a comprehensive strategy of tracking the epidemic, researching prevention, and helping communities implement programs at the local level. CDC monitors HIV and AIDS nationally and publishes annual reports that provide national information about the epidemic. CDC also conducts surveys of HIV-related behaviors to inform and target prevention programs and supports biomedical and behavioral research regarding HIV prevention. Finally, CDC supports local communities in their HIV prevention efforts with both funding and technical assistance.

CDC announced a new initiative, "Advancing HIV Prevention: New Strategies for a Changing Epidemic," aimed at reducing the number of new infections caused by HIV each year in the United States. The new initiative expands on current HIV prevention strategies and models other approaches that have proven effective in preventing infectious diseases.

Example of Program in Action

The Family Health Centers of San Diego is the largest comprehensive provider of HIV-related services in San Diego County, California. For more than 13 years, the centers have targeted services to medically underserved communities. Currently, the centers collaborate with local healthcare agencies to provide a comprehensive network of HIV prevention, testing, and referral services to communities of color at risk for HIV. CDC funds the centers' services in three program announcements targeting gay men of color, persons at high risk for HIV, and young men of color who have sex with men.

WHAT ARE THE NEXT STEPS?

CDC will continue to focus prevention efforts on populations at highest risk for HIV infection, especially communities of color. Key strategies include making voluntary HIV testing more routine, creating new models for diagnosing HIV infections, and providing prevention services for persons living with HIV and their partners. CDC will continue to support primary prevention and behavioral risk-reduction programs for persons at high risk for acquiring HIV through programs funded through state and local health departments and through directly-funded community-based organizations program

CORRECTIONAL HEALTH

WHAT IS THE PUBLIC HEALTH ISSUE?

U.S. prisons held more than 2 million people on any given day in 2002. Annually, around 600,000 inmates are discharged from prisons, and about 8 to 9 million inmates are released into the community. Correctional facilities house individuals who are disproportionately affected by high rates of infectious diseases and adverse social conditions. Prevalence rates for HIV/AIDS are significantly higher among inmates and releasees than in the total U.S. population. At the end of 2001, the rate of confirmed AIDS in state and federal prisons (0.49%) was more than three times higher than in the total U.S. population (0.14%). Studies have shown that in some facilities, between 14% and 25% of inmates are infected with tuberculosis (TB). Rates of sexually transmitted diseases range from 5% to 35%. About 80% of inmates have a history of substance use or abuse. Most facilities lack comprehensive discharge planning to link releasees with community-based providers for healthcare, substance abuse treatment, and other services.

WHAT HAS CDC ACCOMPLISHED?

CDC promotes a community approach to improve the health of inmates using the collaborative efforts of correctional institutions, public health, and community-based healthcare and social service organizations. CDC and the Health Resources and Services Administration (HRSA) have jointly funded seven state/city health departments to design and implement innovative demonstration projects for HIV prevention and care among inmates in prisons and/or juvenile detention centers. CDC has also prepared guidance to help develop and implement TB control programs in correctional settings. In addition, CDC has awarded small grants to more than 20 public health departments to work collaboratively with prisons and juvenile detention facilities in their communities to screen inmates upon intake for syphilis, gonorrhea, chlamydia, TB, and HIV.

Example of Program in Action

The San Francisco Department of Public Health (SFDPH) provides healthcare services to inmates in the San Francisco County jail system. As part of the CDC/HRSA corrections demonstration project, SFDPH partners with the community-based organization Continuum, to provide discharge planning and transitional case management services for HIV-infected individuals being discharged from the prisons. These services include housing, medical treatment, and basic community survival skills, such as money management education. In addition, SFDPH is piloting a project to provide hepatitis prevention education services and hepatitis B vaccine to high-risk inmates in the prison.

WHAT ARE THE NEXT STEPS?

CDC is developing a website to serve as a resource for those working in correctional health; creating a manual and pocket guide series to help correctional health leaders and practitioners learn more about interventions in prisons; supporting and expanding local coalitions that use discharge planning and case management to link inmates to care and services that focus on areas with high rates of HIV/AIDS or syphilis; and sponsoring forums to facilitate collaboration between public health and correctional agencies.

ELIMINATING PERINATAL HIV TRANSMISSION

WHAT IS THE PUBLIC HEALTH ISSUE?

Perinatal HIV transmission occurs when the virus is passed from mother to child during pregnancy, labor or delivery, or through breast-feeding. Perinatal transmission accounts for 91% of all AIDS cases reported among U.S. children, and an estimated 17,000 HIV infections have occurred among children since the epidemic began. Women of color and their children have been disproportionately affected. Of the 3,748 children reported with perinatally-acquired AIDS in 2002, 3,200 (85%) were African American and Latino/Hispanic.

WHAT HAS CDC ACCOMPLISHED?

There have been dramatic reductions in perinatal HIV transmission rates and perinatal AIDS cases in the United States in the past decade. During the early 1990s, an estimated 1,000 to 2,000 infants were born with HIV infection each year. In 2002, an estimated 90 cases of perinatally acquired AIDS cases were diagnosed in the United States. These declines reflect the success of widespread implementation of the Public Health Service recommendations for routine counseling and voluntary HIV testing of pregnant women, the use of zidovudine (AZT, also called ZDV) by HIV-positive women during pregnancy and delivery; for treatment of the infant after birth; and the use of antiretroviral therapies for the pregnant woman's own care. Recently, some of the decline in perinatal AIDS may also be credited to improved treatments, which delay the onset of AIDS symptoms in HIV-positive children.

Decreasing perinatal HIV transmission is one of four key strategies included in CDC's new initiative, "Advancing HIV Prevention: New Strategies for a Changing Epidemic," announced in the *Morbidity and Mortality Weekly Report* on April 17, 2003. CDC plans to work with partners to promote routine, voluntary prenatal testing, with right of refusal; develop guidance for using rapid tests during labor and delivery or post partum; provide training in conducting prenatal testing; and monitor integration of routine prenatal testing into medical practice. CDC recommends that clinicians routinely screen all pregnant women for HIV infection, using an "opt-out" approach, and that jurisdictions with statutory barriers to such routine prenatal screening consider revising them. CDC is focusing its prevention efforts in the states and cities that account for the highest number of perinatal HIV cases. Activities include educating providers about offering counseling and voluntary testing to all pregnant women, outreach to increase the use of prenatal care among high-risk women; case management for HIV-positive pregnant women to ensure they have access to appropriate care; support for public information campaigns; and support of testing at delivery for women with unknown HIV status.

Example of Program in Action

CDC is funding targeted perinatal prevention programs in 16 high HIV prevalence states (CA, CT, DE, DC, FL, GA, IL, LA, MD, MA, NJ, NY, PA, PR, SC, and TX). Several of these states (LA, NJ, and CT) have developed programs to offer rapid testing around the time of labor and delivery to women whose HIV status is unknown when they are in labor. These projects demonstrate the feasibility of carrying out rapid HIV testing in busy inner city hospitals and offering rapid antiretroviral interventions to prevent perinatal transmission.

WHAT ARE THE NEXT STEPS?

The best way to prevent perinatal HIV transmission is to first prevent HIV infection in women. CDC is working through these targeted perinatal prevention programs to ensure that all HIV-positive and at-risk pregnant women have access to and use prenatal care. Further, CDC is working to ensure that these women are provided the opportunity to learn their HIV status early in their pregnancy and, if infected, to be offered anti-retroviral interventions to prevent transmission and protect their own health. Achieving this goal will require CDC to continue to work towards linking high-risk women with appropriate healthcare and to offer universal HIV screening as a routine part of prenatal care.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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HIV/AIDS SURVEILLANCE

WHAT IS THE PUBLIC HEALTH ISSUE?

HIV/AIDS surveillance is the tool CDC and state and local health departments use to track the epidemic. Surveillance provides demographic, laboratory, clinical, and behavioral risk data used to identify populations at greatest risk for HIV infection. These data also help CDC to estimate the size and scope of the epidemic at the national level.

- Through 2002, 859,000 persons in the United States had been reported having AIDS; an estimated 501,669 persons had died.
- During 2002, 43,950 AIDS cases were reported from 39 states and territories; 35,147 HIV cases among persons who had not yet developed AIDS were reported from 39 states and territories with confidential named-based HIV infection reporting.
- Women account for an increasing proportion of the epidemic. In 2002, 32% of reported HIV infections and 26% of AIDS cases were among women.
- There are racial/ethnic disparities among persons with HIV and AIDS. In 2002, 64% of men diagnosed with AIDS were African American and Hispanic/Latino. Among women, 81% were African American and Hispanic/Latino.

WHAT HAS CDC ACCOMPLISHED?

CDC gathers, compares, and publishes data from several sources to evaluate the status of the HIV epidemic. These sources include case reports of HIV and AIDS, special surveys of infected and high-risk populations, mortality data from the national vital statistics systems, and surveys of the general population. Every state requires reporting of the number of people diagnosed with and the number who die from AIDS each year. This information is critical to identify those in need of services and care, allocate prevention and treatment resources, and track the course of the epidemic over time. However, AIDS cases alone are not indicative of recent trends in the epidemic. All states and the District of Columbia have regulations in place to receive reports about newly diagnosed HIV-positive persons. HIV reporting has become a critical factor to capture HIV disease case counts which would encompass all HIV infections including those which have progressed to AIDS. CDC's 2002 *HIV/AIDS Surveillance Report* has been revised to present data on persons with HIV infection, including those in whom HIV infection has progressed to AIDS. Surveillance data on HIV infection provides a more complete picture of the epidemic and the need for prevention and care services than that provided by AIDS data alone. Such comprehensive information is also needed to allocate resources and evaluate program effectiveness.

Example of Program in Action

CDC has taken several steps towards creating a national population-based surveillance system to provide estimates of HIV incidence through the serologic testing algorithm for recent HIV seroconversion. Five areas were funded in 2002 to pilot this method, and 19 additional areas were funded in 2003. In 2004, CDC added 10 new HIV Incidence sites and has 33 areas funded for incidence surveillance. The monitoring of HIV incidence will be critical in evaluating progress toward CDC's goal of reducing the number of new HIV infections in the United States from 40,000 to 20,000 per year by 2005.

WHAT ARE THE NEXT STEPS?

CDC will continue to monitor the HIV/AIDS epidemic by working to enhance and expand existing surveillance programs and surveys. Efforts will include continued assistance to states with the implementation of HIV reporting and interpretation of data; expansion of surveys to gather information about the characteristics and behaviors of those who are HIV positive or are at high-risk of infection; and development of systems to better measure HIV incidence and prevalence.

HIV AND STD PREVENTION FOR MEN WHO HAVE SEX WITH MEN

WHAT IS THE PUBLIC HEALTH ISSUE?

Despite significant declines in HIV infection rates since the early years of the epidemic, men who have sex with men (MSM) continue to be the population at highest risk for HIV and many sexually transmitted disease (STD) infections. The HIV epidemic, which began primarily among white gay men, is now dramatically affecting African-American and Hispanic/Latino MSM. Although there have been significant reductions in high-risk behaviors among MSM, motivating individuals to maintain long-term behavior change is required. In addition, recent outbreaks of STDs, including syphilis, have occurred among MSM in urban areas, signifying the presence of unsafe behaviors that make this population vulnerable to continued STD and HIV transmission. Prevention efforts must be expanded to reach MSM of all races, be sustained over time, and be initiated anew for each generation.

WHAT HAS CDC ACCOMPLISHED?

The rise in HIV and STD infection rates among African-American and Hispanic/Latino MSM can be attributed to various factors: difficulties in consistently practicing safer sex; incorrect assumptions about a partner's infection status; lesser concern of infection with available antiretroviral treatments; and a lack of direct experience with HIV or STDs. Effective HIV and STD prevention approaches should address audiences in terms appropriate for their age and relevant to their culture and lifestyle. Research indicates that interactive programs led by peer leaders are very effective in improving communications skills and enhancing self-esteem among MSM participants. CDC has prioritized prevention for MSM in its *HIV Prevention Strategic Plan*, with the goal of significantly reducing the disease toll among high-risk populations. CDC is also conducting a four project epidemiologic study of risk behaviors of African-American and Hispanic/Latino MSM to improve understanding of risk influences.

Example of Program in Action

Bienestar Human Service's *Sabores Program* provides outreach, prevention case management, individual and group level interventions, and HIV counseling, testing and referral to Hispanic/Latino young men who have sex with men (YMSM) in East Los Angeles and Pomona, California. In the first year of the program, over 1,500 YMSM were contacted during outreach, provided risk reduction information, and referred for other prevention services. Group level interventions were provided to 144 YMSM with 61 YMSM receiving prevention case management services, and over 1,000 YMSM attending informational events. Participants in the program have reported a decrease in high-risk behavior, greater social connectiveness, and a decrease in depression.

WHAT ARE THE NEXT STEPS?

Social, behavioral, and healthcare services need to be supported and expanded. Evaluation and close collaboration with CDC's community-based and health department partners are key in improving these services. Further, additional behavioral research studies to better measure HIV and STD risk is needed to understand contemporary risk influences and respond with new interventions for gay men, especially YMSM.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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HIV PREVENTION FAITH INITIATIVE

WHAT IS THE PUBLIC HEALTH ISSUE?

The faith community plays an essential role in shaping the public's knowledge, attitudes, beliefs, and behaviors. Partnering with faith-based organizations is a key component to a comprehensive HIV prevention strategy in building awareness, mobilizing communities, and reducing HIV-associated stigma. Since 1987, CDC has made a concerted effort to bring faith and religious partners into the CDC portfolio of HIV prevention partners.

WHAT HAS CDC ACCOMPLISHED?

Since 1987, CDC has seen an increased interest in HIV prevention among faith-based organizations. In 1999, CDC funded five faith-based direct service programs; four capacity-building programs to provide technical assistance and training to faith-based organizations; and one divinity school to establish an HIV and substance abuse prevention curriculum and training program for faith leaders serving disproportionately affected communities. Since that time, CDC has increased funding to faith-based organizations. CDC funds 23 faith-based organizations to conduct direct HIV prevention service programs and four faith-based capacity-building providers. Secular-based programs have also been funded in the capacity development of faith-based organizations.

Example of Program in Action

The Health Education Leadership Project (HELP), a project of the Interdenominational Theological Center, in Atlanta, incorporates seven strategies aimed at developing capacity-building for faith leaders. The project includes a National Faith Leader's Training Institute, a 2-day intensive capacity-building program which trains faith leaders to address issues of HIV and substance abuse prevention affecting congregations and outreach ministries. HELP has also developed a curriculum, *Affirming A Future With Hope, HIV Substance Abuse Prevention for African-American Communities of Faith*, to teach faith leaders techniques to address theological and ethical issues and to implement a comprehensive instructional program that addresses HIV prevention through the use of faith-based narratives, spiritual principles, and individual experience.

WHAT ARE THE NEXT STEPS?

CDC intends to continue to provide financial assistance to those faith-based organizations that successfully compete for funding and will continue to collaborate with key leaders in the faith-based community. The primary goal is to develop a comprehensive strategy to engage faith-based and community-based organizations—particularly those serving disproportionately affected racial and ethnic communities—into HIV prevention and health promotion, stigma reduction, intervention development, and counseling and testing programs.

MINORITY AIDS INITIATIVE

WHAT IS THE PUBLIC HEALTH ISSUE?

- Communities of color have been disproportionately affected by the HIV/AIDS epidemic.
- Of the estimated 40,000 new HIV infections each year, nearly 70% occur among minorities.
- In 2002, minorities represented over 63% of persons living with AIDS.
- In 2002, African Americans accounted for 54% of all new diagnoses of HIV/AIDS.
- In 2002, an estimated 171,000 men who have sex with men (MSM) were living with AIDS, and 46% of those were MSM of color.

To be successful, HIV prevention must address the diverse communities affected by the HIV epidemic. Prevention efforts must focus on groups at greatest risk, particularly African-American and Hispanic/Latino youth. Programs must be relevant to the lives of the target population—appropriate to age, culture, community standards, and language. They must be designed with input from the affected community and delivered by organizations and people with credibility in that community.

WHAT HAS CDC ACCOMPLISHED?

Since 1999, CDC has received funding through the Minority AIDS Initiative (MAI) to enhance efforts to prevent the acquisition or transmission of HIV infections in racial and ethnic communities. With MAI, CDC supports community-based programs to prevent HIV, capacity building programs to assist community-based organizations (CBOs), and targeted education efforts to raise awareness of the importance of HIV testing. CDC also conducts supplemental surveillance to define the magnitude of the epidemic in racial and ethnic communities and research to develop and refine prevention programs.

Example of Program in Action

The Minority HIV/AIDS Research Initiative is a capacity-building initiative that funds investigators to conduct studies on gaps in HIV/AIDS research in African-American and Hispanic/Latino populations. In 2003, nine research projects were funding in the following states: California, Florida, Georgia, New York, Rhode Island, Pennsylvania, South Carolina, and Washington, D.C. Two research projects were funded in Jackson, Mississippi. Examples of research include access to HIV testing and treatment in the nonurban South; HIV knowledge and HIV testing activities among low-income heterosexual young adult African Americans; acceptance of HIV clinical trials by African Americans; HIV testing in primary care settings; and equal access to HIV vaccine trials by African Americans, Latinos, and whites.

WHAT ARE THE NEXT STEPS?

CDC continues to build the capacity of local communities to prevent HIV. In particular, CDC will continue to provide financial support and technical assistance to CBOs through programs addressing populations at high risk for HIV infection. CDC is also evaluating the MAI program to assess the impact of this effort and guide future HIV prevention efforts.

NATIONAL HIV BEHAVIORAL SURVEILLANCE

WHAT IS THE PUBLIC HEALTH ISSUE?

In order to reduce the annual number of new HIV infections in the United States, information is needed about risk behaviors among groups of persons at high-risk for HIV infection, trends in these behaviors over time, and exposure to and use of HIV prevention services. Such information can help explain trends in HIV incidence, prevalence, and new diagnoses. These data can also be used to evaluate prevention programs and direct future HIV prevention activities.

Historically, risk behaviors have been assessed through the use of cross-sectional surveys (the presence or absence of exposure and disease are assessed at the same point in time) or longitudinal cohorts studies (subjects are classified on the basis of exposure to a particular factor, and then followed over time). CDC has conducted several cross-sectional studies on at-risk persons; however, these studies have been limited in time and geography and, therefore, were unable to measure changes in HIV-related risk behaviors over time in the United States.

WHAT HAS CDC ACCOMPLISHED?

As of 2004, CDC will have funded 25 Metropolitan Statistical Areas (MSA) to implement a behavioral surveillance system for three groups at highest risk for acquiring HIV infection: men who have sex with men (MSM), injecting drug users (IDU), and high-risk heterosexuals (HRH). The 25 MSAs were selected based on high AIDS prevalence and include Atlanta, Baltimore, Boston, Chicago, Dallas, Denver, Detroit, Ft. Lauderdale, Houston, Las Vegas, Los Angeles, Miami, New Orleans, New York City, Newark, Norfolk, Philadelphia, Phoenix, San Diego, San Juan (Puerto Rico), St. Louis, San Francisco, Seattle, Suffolk/Nassau, and Washington, D.C.

Example of Program in Action

The objectives of the new National HIV Behavioral Surveillance System are to assess risk behaviors among persons at high-risk for HIV infections; assess HIV testing behaviors; evaluate exposure to, use, and impact of prevention services; and follow trends in these behaviors over time. The overall national strategy involves conducting alternating 12-month cycles of surveillance in high-risk populations at highest risk for acquiring HIV infection. Standardized questionnaires will be used to collect information about behavioral risks for HIV, testing, and exposure to and use of prevention services. To date, about 700 questionnaires have been completed in seven MSAs.

WHAT ARE THE NEXT STEPS?

Over the next year, CDC will implement and evaluate national behavioral surveillance in MSM and pilot alternative sampling methods for IDUs. CDC will also develop computer-assisted technologies such as the audio-computer assisted interview and the handheld-assisted personal interview, to enhance survey administration and to pilot a study for using the Internet as a venue for recruiting survey participants. In the future, studies in HRH will be piloted to determine the best method to conduct behavioral surveillance in this population, and CDC will explore new approaches for collecting behavioral data that can be used in low to medium morbidity areas. Data collection for the additional MSAs will begin in 2004.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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NEW BIOMEDICAL HIV INTERVENTIONS

WHAT IS THE PUBLIC HEALTH ISSUE?

In 2003, it was estimated that 4.2 million adults worldwide acquired HIV infection. In the United States, there is continuing HIV transmission, with increasing concentration among African Americans and Hispanics/Latinos, especially among women of color. These trends reinforce the importance of identifying effective new HIV prevention methods. A key effort is the development of new biomedical interventions, such as vaccines and microbicides, to prevent HIV infection.

The development of a safe and effective HIV vaccine would greatly decrease the incidence of HIV, and ultimately AIDS worldwide. However, there are many challenges to the development of an HIV vaccine. Since early vaccine candidates are unlikely to be as effective as vaccines for other infectious diseases and unlikely to be effective against all HIV strains, behavior change will remain important to prevent HIV infection. In addition, the development of safe and effective vaginal microbicides (chemical compounds that can be applied topically to inactivate HIV) will be a critical addition to HIV prevention. This is important for many women, especially in the developing world, because some male sex partners may be unwilling to use condoms consistently, if at all. In addition to vaccines and microbicides, other potential biomedical interventions, such as pre-exposure prophylaxis, are starting to emerge.

WHAT HAS CDC ACCOMPLISHED?

CDC staff has conducted laboratory, clinical, and behavioral studies related to vaccines and microbicides. Current activities in HIV vaccine research focus on a large-scale vaccine efficacy trial in Thailand and vaccine trial preparatory work in Thailand and Kenya. The results of the United States and Thailand trials of the vaccine, AIDSVAX, were announced in 2003. Although the results indicated that the vaccine was not effective in reducing the risk of HIV infection, the trial has provided critical information that will guide future research on vaccines against HIV. About 20 other vaccine candidates are being developed and evaluated for safety and immune response. Several promising microbicides have also been identified at CDC in laboratory studies. CDC has participated in evaluations of microbicide safety in Cote d'Ivoire and Thailand and plans to participate in an evaluation of microbicide efficacy in Botswana.

Example of Program in Action

CDC helped to evaluate AIDSVAX in the United States and Thailand. CDC has also helped to evaluate Caraguard™, a compound derived from seaweed, as a vaginally applied microbicide in safety and acceptability studies in women in Thailand. In addition, CDC is beginning an evaluation on the safety and efficacy of daily oral Tenofovir as a pre-exposure prophylaxis to prevent HIV transmission.

WHAT ARE THE NEXT STEPS?

CDC will continue to evaluate new tools and techniques, such as microbicides, vaccines, and oral prophylaxis, to prevent HIV transmission. Researchers are working with scientists worldwide to evaluate the safety and effectiveness of biomedical interventions that can prevent infection with HIV. Similarly, CDC works with organizations to develop linkages between communities and scientists relative to biomedical research and the development of effective interventions.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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