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# HIV/AIDS among African Americans

Revised August 2008

In the United States, the HIV/AIDS epidemic is a health crisis for African Americans. At all stages of HIV/AIDS—from infection with HIV to death with AIDS—blacks (including African Americans) are disproportionately affected compared with members of other races and ethnicities [1, 2].

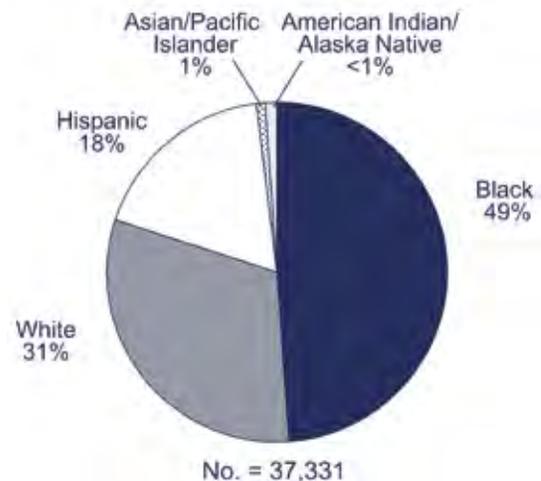
## STATISTICS

### HIV/AIDS in 2005

- According to the 2000 census, blacks make up approximately 13% of the US population. However, in 2005, blacks accounted for 18,121 (49%) of the estimated 37,331 new HIV/AIDS diagnoses in the 33 states with long-term, confidential name-based HIV reporting [2].\*
- Of all black men living with HIV/AIDS, the primary transmission category was sexual contact with other men, followed by injection drug use and high-risk heterosexual contact [2].
- Of all black women living with HIV/AIDS, the primary transmission category was high-risk heterosexual contact, followed by injection drug use [2].
- Of the estimated 141 infants perinatally infected with HIV, 91 (65%) were black (CDC, HIV/AIDS Reporting System, unpublished data, December 2006).
- Of the estimated 18,849 people under the age of 25 whose diagnosis of HIV/AIDS was made during 2001–2004 in the 33 states with HIV reporting, 11,554 (61%) were black [3].

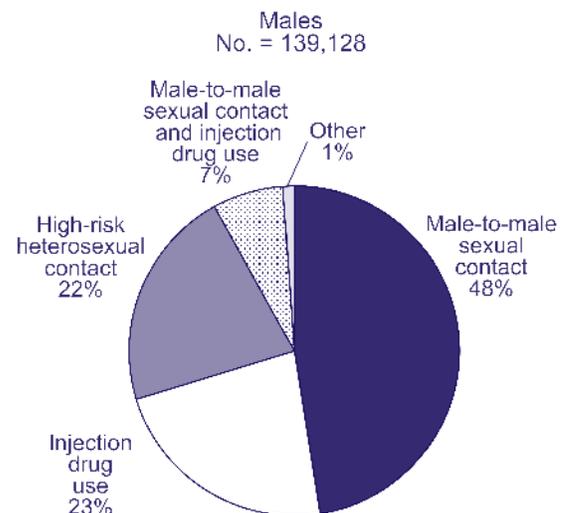
\*See the box (before the References section) labeled Understanding HIV and AIDS Data for a list of the 33 states.

### Race/ethnicity of persons (including children) with HIV/AIDS diagnosed during 2005



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

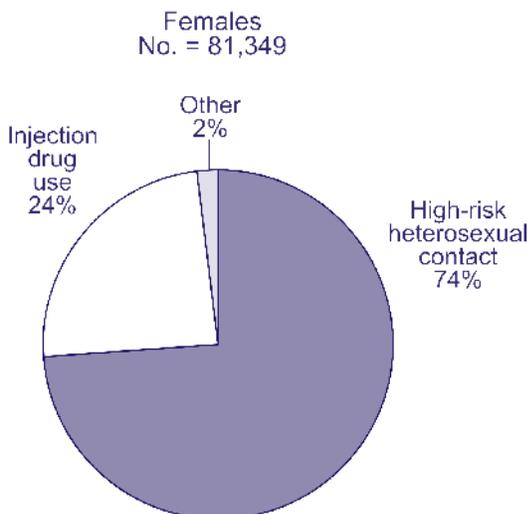
### Transmission categories for black adults and adolescents living with HIV/AIDS at the end of 2005



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

# HIV/AIDS AMONG AFRICAN AMERICANS

## Transmission categories for black adults and adolescents living with HIV/AIDS at the end of 2005 (cont.)



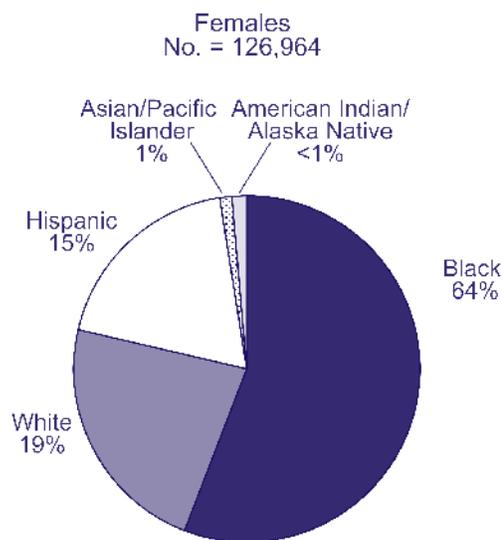
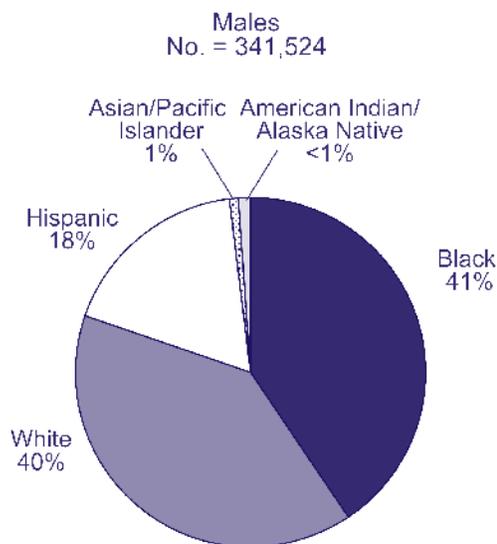
Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

## AIDS in 2005

- Blacks accounted for 20,187 (50%) of the estimated 40,608 AIDS cases diagnosed in the 50 states and the District of Columbia [2].
- The rate of AIDS diagnoses for black adults and adolescents was 10 times the rate for whites and nearly 3 times the rate for Hispanics. The rate of AIDS diagnoses for black women was nearly 23 times the rate for white women. The rate of AIDS diagnoses for black men was 8 times the rate for white men [2].
- The 185,988 blacks living with AIDS in the 50 states and the District of Columbia accounted for 44% of the 421,873 people in those areas living with AIDS [2].
- Of the 68 US children (younger than 13 years of age) who had a new AIDS diagnosis, 46 were black [2].
- Since the beginning of the epidemic, blacks have accounted for 397,548 (42%) of the estimated 952,629 AIDS cases diagnosed in the 50 states and the District of Columbia [2].
- From the beginning of the epidemic through December 2005, an estimated 211,559 blacks with AIDS died [2].

- Of persons whose diagnosis of AIDS had been made during 1997–2004, a smaller proportion of blacks (66%) were alive after 9 years compared with American Indians and Alaska Natives (67%), Hispanics (74%), whites (75%), and Asians and Pacific Islanders (81%) [2].

## Race/ethnicity of adults and adolescents living with HIV/AIDS, 2005



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

## RISK FACTORS AND BARRIERS TO PREVENTION

Race and ethnicity, by themselves, are not risk factors for HIV infection. Even though HIV testing rates are higher for blacks than for members of other races and ethnicities [4], rates of undetected or late diagnosis of HIV infection are high for black men who have sex with men (MSM) [5].

Blacks are also more likely to face challenges associated with risk factors for HIV infection, including the following.

### Sexual Risk Factors

Black women are most likely to be infected with HIV as a result of sex with men who are infected with HIV [2]. They may not be aware of their male partners' possible risk factors for HIV infection, such as unprotected sex with multiple partners, bisexuality, or injection drug use [6, 7]. Sexual contact is also the main risk factor for black men. Male-to-male sexual contact was the primary risk factor for 48% of black men with HIV/AIDS at the end of 2005, and high-risk heterosexual contact was the primary risk factor for 22% [2].

### Substance Use

Injection drug use is the second leading cause of HIV infection both for black men and women [2]. In addition to being at risk from sharing needles, casual and chronic substance users are more likely to engage in high-risk behaviors, such as unprotected sex, when they are under the influence of drugs or alcohol [8]. Drug use can also affect treatment success. A recent study of HIV-infected women found that women who used drugs, compared with women who did not, were less likely to take their antiretroviral medicines exactly as prescribed [9].

### Lack of Awareness of HIV Serostatus

Not knowing one's HIV serostatus is risky for black men and women. In a recent study of

MSM in 5 cities participating in CDC's National HIV Behavioral Surveillance System, 46% of the black MSM were HIV-positive, compared with 21% of the white MSM and 17% of the Hispanic MSM. The study also showed that of participating black MSM who tested positive for HIV, 67% were unaware of their infection; of participating Hispanic MSM who tested positive for HIV, 48% were unaware of their infection; of participating white MSM who tested positive for HIV, 18% were unaware of their infection; and of participating multiracial/other MSM who tested positive for HIV, 50% were unaware of their infection [10]. Persons who are infected with HIV but don't know it cannot benefit from life-saving therapies or protect their partners from becoming infected with HIV.

### Sexually Transmitted Diseases

The highest rates of sexually transmitted diseases (STDs) are those for blacks. In 2005, blacks were about 18 times as likely as whites to have gonorrhea and about 5 times as likely to have syphilis [11]. Partly because of physical changes caused by STDs, including genital lesions that can serve as an entry point for HIV, the presence of certain STDs can increase one's chances of contracting HIV infection 3- to 5-fold. Similarly, a person who has both HIV infection and certain STDs has a greater chance of spreading HIV to others [12]. A recent CDC literature review showed that high rates of HIV infection for black MSM may be partly attributable to a high prevalence of STDs that facilitate HIV transmission [5].

### Homophobia and Concealment of Homosexual Behavior

Homophobia and stigma can cause some black MSM to identify themselves as heterosexual or not to disclose their sexual orientation [13, 14]. Indeed, black MSM are more likely than other MSM not to identify themselves as gay [5]. The absence of self-identification or the absence of disclosure presents challenges to prevention

programs. However, data suggest that these men are not at greater risk for HIV infection than are black MSM who identify themselves as gay [14, 15]. The findings of these studies do not mean that black MSM who do not identify themselves as gay or who do not disclose their sexual orientation do not engage in risky behaviors, but the findings do suggest that these men are not engaging in higher levels of risky behavior than are other black MSM.

## Socioeconomic Issues

Socioeconomic issues and other social and structural influences affect the rates of HIV infection among blacks [16]. In 1999, nearly 1 in 4 blacks were living in poverty [17]. Studies have found an association between higher AIDS incidence and lower income [18]. The socioeconomic problems associated with poverty, including limited access to high-quality health care, housing, and HIV prevention education, may directly or indirectly increase the risk factors for HIV infection.

## PREVENTION

CDC estimates that 56,300 new HIV infections occurred in the United States in 2006 [19]. Populations of minority races and ethnicities are disproportionately affected by the HIV epidemic. To reduce further the incidence of HIV, CDC announced the Advancing HIV Prevention (AHP) initiative in 2003 ([http://www.cdc.gov/hiv/topics/prev\\_prog/AHP/default.htm](http://www.cdc.gov/hiv/topics/prev_prog/AHP/default.htm)). This initiative comprises 4 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 HIV-infected persons and their partners, and further decreasing perinatal HIV transmission.

CDC has also established the African American HIV/AIDS Work Group to focus on the urgent issue of HIV/AIDS in African Americans. The work group developed a comprehensive response to guide CDC's efforts to increase and strengthen

HIV/AIDS prevention and intervention activities directed toward African Americans. Already, CDC is engaged in a wide range of activities to involve community leaders in the African American community and to decrease the incidence of HIV/AIDS in blacks.

For example, CDC

- Funds demonstration projects evaluating rapid HIV testing in historically black colleges and universities as well as projects to improve the effectiveness of HIV testing among black women and MSM.
- Conducts epidemiologic research focused on blacks, including
  - Brothers y Hermanos, a study of black and Latino MSM conducted in Los Angeles, New York, and Philadelphia that aims to identify and understand risk-promoting and risk-reducing sexual behaviors
  - Women's Study, a study of black and Hispanic women in the southeastern United States that examines relationship dynamics and the cultural, psychosocial, and behavioral factors associated with HIV infection.
- Addresses, through the Minority AIDS Initiative (<http://www.cdc.gov/programs/hiv08.htm>), the health disparities experienced in the communities of minority races and ethnicities at high risk for HIV infection. Funds are used to address the high-priority HIV prevention needs in such communities, including funding community-based organizations (CBOs) to provide services to African Americans. Examples of the programs that CBOs carry out are
  - A program in Washington, DC, that provides information to, and conducts HIV prevention activities for, MSM who do not identify themselves as homosexual. The activities include a telephone help line; Internet resources; and a program in barbershops that includes risk-reduction

workshops, condom distribution, and training barbers to be peer educators.

- A program in Chicago that provides social support to help difficult-to-reach African American men reduce high-risk behaviors. This program also provides women at high risk for HIV infection with culturally appropriate, gender-specific prevention and risk-reduction messages.
- A program in South Carolina that is focused on changing the behaviors of adolescents to reduce their risk of contracting HIV infection and other STDs.
- Creates social marketing campaigns, including those focused on HIV testing, perinatal HIV transmission, and the reduction of HIV transmission to partners.
- Disseminates scientifically based interventions, including
  - SISTA (Sisters Informing Sisters About Topics on AIDS), a social-skills training intervention in which peer facilitators help African American women at highest risk reduce their risky sexual behaviors.
  - Many Men, Many Voices (3MV), an STD/HIV prevention intervention for gay men of color that addresses cultural and social norms, sexual relationship dynamics, and the social influences of racism and homophobia.
  - POL (Popular Opinion Leader), which identifies, enlists, and trains key opinion leaders to encourage safer sexual norms and behaviors within their social networks. POL has been adapted for African American MSM and shown to be effective in that population.
  - Healthy Relationships, a small-group intervention for men and women living with HIV/AIDS.
  - WILLOW (Women Involved in Life Learning from Other Women), to be disseminated in 2007, is a small-group,

skills-training intervention for women living with HIV. WILLOW enhances awareness of the risky behaviors associated with HIV transmission, discredits myths regarding HIV prevention for people living with HIV, teaches communication skills in negotiating safer sex, and reinforces the benefits of consistent condom use. WILLOW also teaches women how to recognize healthy and unhealthy relationships, discusses the effect of abusive partners on safer sex, and provides information about local shelters for women in abusive relationships.

CDC also supports research to create new interventions for African Americans and to test interventions that have proven successful with other populations for use with African Americans. Additionally, CDC funds agencies through ADAPT (Adopting and Demonstrating the Adaptation of Prevention Techniques) to adapt and evaluate effective interventions for use in communities of color. In addition, CDC

- Provides intramural training for researchers of minority races and ethnicities through a program called Research Fellowships on HIV Prevention in Communities of Color.
- Established the extramural Minority HIV/AIDS Research Initiative (MARI) in 2002 to create partnerships between CDC epidemiologists and researchers who are members of minority races and ethnicities and who work in communities of color. MARI funds epidemiologic and preventive studies of HIV in communities of color and encourages the career development of young investigators. CDC invests \$2 million per year in the program and since 2003 has funded 13 junior investigators at 12 sites across the country [20].

## Understanding HIV and AIDS Data

**AIDS surveillance:** Through a uniform system, CDC receives reports of AIDS cases from all US states and dependent areas. Since the beginning of the epidemic, these data have been used to monitor trends because they are representative of all areas. The data are statistically adjusted for reporting delays and for the redistribution of cases initially reported without risk factors. As treatment has become more available, trends in new AIDS diagnoses no longer accurately represent trends in new HIV infections; these data now represent persons who are tested late in the course of HIV infection, who have limited access to care, or in whom treatment has failed.

**HIV surveillance:** Monitoring trends in the HIV epidemic today requires the collection of information on HIV cases that have not progressed to AIDS. Areas with requirements for confidential name-based HIV infection reporting use the same uniform system for data collection on HIV cases as for AIDS cases. A total of 33 states (Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New York, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming) have collected these data for at least 5 years, providing sufficient data to monitor HIV trends.

**HIV/AIDS:** This term is used to refer to 3 categories of diagnoses collectively: (1) a diagnosis of HIV infection (not AIDS), (2) a diagnosis of HIV infection and a later diagnosis of AIDS, (3) concurrent diagnoses of HIV infection and AIDS.

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## For more information . . .

### **CDC HIV/AIDS**

<http://www.cdc.gov/hiv>  
*CDC HIV/AIDS resources*

### **CDC-INFO**

1-800-232-4636  
*Information about personal risk and where to get an HIV test*

### **CDC National HIV Testing Resources**

<http://www.hivtest.org>  
*Location of HIV testing sites*

### **CDC National Prevention Information Network (NPIN)**

1-800-458-5231  
<http://www.cdcpin.org>  
*CDC resources, technical assistance, and publications*

### **AIDSinfo**

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*Resources on HIV/AIDS treatment and clinical trials*



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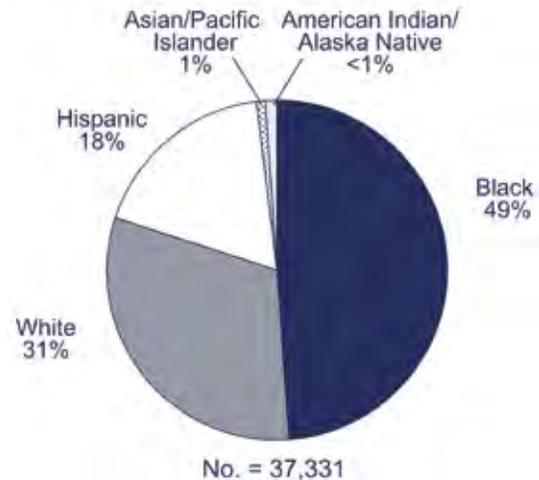
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# HIV/AIDS among American Indians and Alaska Natives

HIV/AIDS is a growing problem among American Indians and Alaska Natives.

Even though the numbers of HIV and AIDS diagnoses for American Indians and Alaska Natives represent less than 1% of the total number of HIV/AIDS cases reported to CDC's HIV/AIDS Reporting System, when population size is taken into account, American Indians and Alaska Natives in 2005 ranked 3rd in rates of HIV/AIDS diagnosis, after blacks (including African Americans) and Hispanics [1]. American Indians and Alaska Natives make up 1.5% (4.1 million people) of the total US population [2]. The rate of AIDS diagnosis for this group has been higher than that for whites since 1995.

## Race/ethnicity of persons (including children) with HIV/AIDS diagnosed during 2005



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

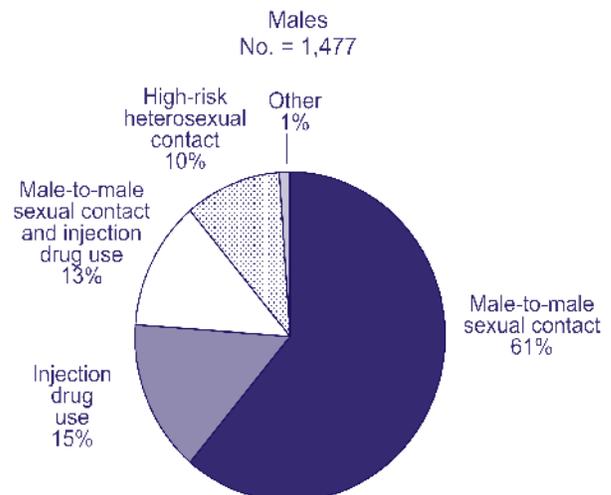
## STATISTICS

### HIV/AIDS in 2005

(The following bullets refer to the 33 states with long-term, confidential name-based HIV reporting. See the box, before the References section, for a list of the 33 states.)

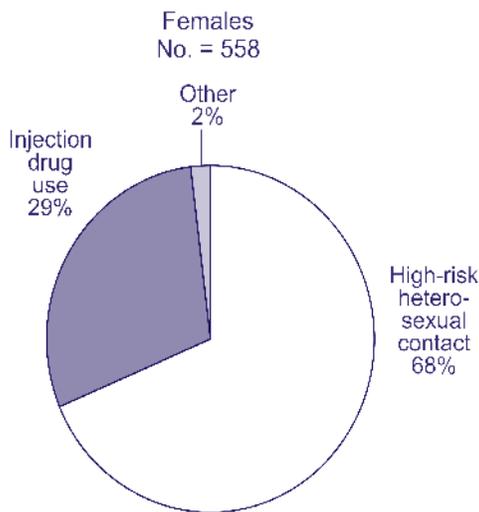
- HIV/AIDS was diagnosed for an estimated 195 American Indians and Alaska Natives (adults, adolescents, and children), representing 0.5% of the total number of HIV/AIDS diagnoses reported for that year [1].
- The rate (per 100,000 persons) of HIV/AIDS diagnosis for American Indians and Alaska Natives was 10.4, compared with 71.3 for blacks, 27.8 for Hispanics, 8.8 for whites, and 7.4 for Asians and Pacific Islanders.
- Women accounted for 29% of the HIV/AIDS diagnoses among American Indians and Alaska Natives [1].

### Transmission categories for American Indian and Alaska Native adults and adolescents living with HIV/AIDS at the end of 2005



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

## Transmission categories for American Indian and Alaska Native adults and adolescents living with HIV/AIDS at the end of 2005 (cont.)



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

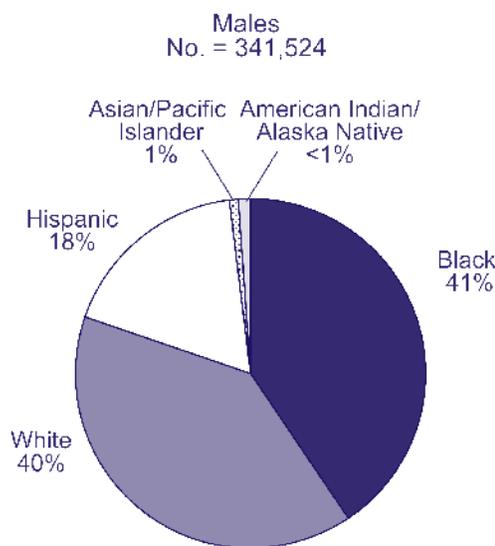
## AIDS in 2005

(See the box, before the References section for explanation of AIDS data.)

- The estimated rate (per 100,000) of AIDS diagnosis for American Indian and Alaska Native adults and adolescents was 9.3, the 3rd highest after the rates for black adults and adolescents (68.7) and Hispanic adults and adolescents (24.0). The estimated AIDS diagnosis rate was 6.9 for white adults and adolescents and 4.3 for Asian and Pacific Islander adults and adolescents [1].
- AIDS was diagnosed for an estimated 182 American Indians and Alaska Natives, representing approximately 0.4% of all AIDS diagnoses in 2005 [1]. These data include persons whose HIV infection had been diagnosed earlier.
- An estimated 1,581 American Indians and Alaska Natives were living with AIDS [1].
- An estimated 81 American Indians and Alaska Natives with AIDS died in 2005, representing approximately 0.5% of all deaths of persons with AIDS for that year [1].

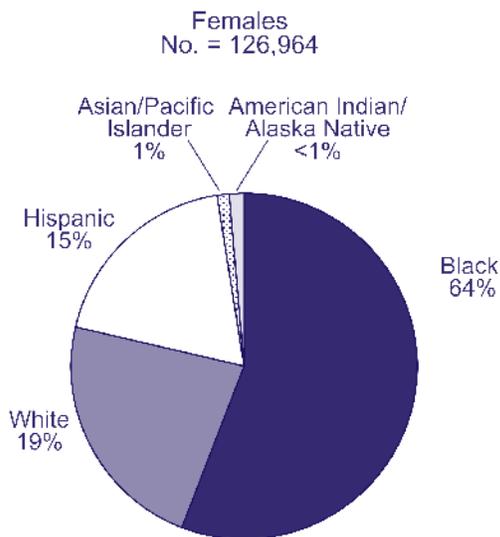
- From the beginning of the epidemic through 2005, AIDS was diagnosed for an estimated 3,238 American Indians and Alaska Natives [1].
- From the beginning of the epidemic through 2005, an estimated 1,657 American Indians and Alaska Natives with AIDS had died [1]. In comparison, 235,879 whites, 211,559 blacks, 77,125 Hispanics, and 3,383 Asians and Pacific Islanders with AIDS had died.
- Of persons who had received a diagnosis of AIDS during 1997–2004, American Indians and Alaska Natives had survived for a shorter time than had Asians and Pacific Islanders, whites, or Hispanics. After 9 years, 67% of American Indians and Alaska Natives were alive, compared with 66% of blacks, 74% of Hispanics, 75% of whites, and 81% of Asians and Pacific Islanders [1].
- From the beginning of the epidemic through 2005, AIDS had been diagnosed for an estimated 32 American Indian and Alaska Native children (younger than 13 years) [1].

## Race/ethnicity of adults and adolescents living with HIV/AIDS, 2005



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting. Because of rounding, percentages may not add to 100.

## Race/ethnicity of adults and adolescents living with HIV/AIDS, 2005 (cont.)



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting. Because of rounding, percentages may not add to 100.

## RISK FACTORS AND BARRIERS TO PREVENTION

Race and ethnicity are not, by themselves, risk factors for HIV infection. However, American Indians and Alaska Natives are likely to face challenges associated with risk for HIV infection, including the following.

### Sexual Risk Factors

The presence of a sexually transmitted disease can increase the chance of contracting or spreading HIV [3]. High rates of *Chlamydia trachomatis* infection, gonorrhea, and syphilis among American Indians and Alaska Natives suggest that the sexual behaviors that facilitate the spread of HIV are relatively common among American Indians and Alaska Natives. According to 2005 surveillance data by race/ethnicity, the 2nd highest rates of gonorrhea and *Chlamydia trachomatis* infection were those for American Indians and Alaska Natives. The 3rd highest rate of syphilis was that for American Indians and Alaska Natives [4, 5].

## Substance Use

Persons who use illicit drugs (casually or habitually) or who abuse alcohol are more likely to engage in risky behaviors, such as unprotected sex, when they are under the influence of drugs or alcohol [6]. Results of the 2005 National Survey on Drug Use and Health indicate that the rate of current illicit drug use was higher among American Indians and Alaska Natives (12.8%) than among persons of other races or ethnicities [7].

## Cultural Diversity

To be effective, HIV/AIDS prevention interventions must be tailored to specific audiences. The American Indian and Alaska Native population makes up 562 federally recognized tribes plus at least 50 state-recognized tribes [8]. Because each tribe has its own culture, beliefs, and practices and these tribes may be subdivided into language groups, it can be challenging to create programs for each group. Therefore, prevention programs that can be adapted to individual tribal cultures and beliefs are critically important. Current programs emphasize traditional teachings and the importance of the community.

## Socioeconomic Issues

Issues related to poverty (for example, lower levels of education and poorer access to health care) may directly or indirectly increase the risk for HIV infection [9]. Socioeconomic factors, such as poverty, coexist with epidemiologic risk factors for HIV infection in American Indian and Alaska Native communities. During 2002–2004, approximately one quarter (24.3%) of American Indians and Alaska Natives—about twice the national average (12.4%)—were living in poverty [10]. The proportion of the American Indian and Alaska Native population with a high school diploma (66%) in 1990 was less than the national average (75%) [11].

Life expectancy for American Indians and Alaska Natives is shorter than that for persons of other races/ethnicities in the United States; the rates of many diseases, including diabetes, tuberculosis, and alcoholism, are higher; and access to health care is poorer [12, 13].

These indicators demonstrate the vulnerability of American Indians and Alaska Natives to additional health stress, including HIV infection.

## HIV Testing Issues

Access to HIV testing and issues concerning confidentiality are important for many American Indians and Alaska Natives. For example, at the time of AIDS diagnosis, more American Indians and Alaska Natives, compared with persons of other races/ethnicities, resided in rural areas [14]. Those who live in rural areas may be less likely to be tested for HIV because of limited access to testing. Also, American Indians and Alaska Natives may be less likely to seek testing because of concerns about confidentiality in close-knit communities, where someone who seeks testing is likely to encounter a friend, a relative, or an acquaintance at the local health care facility.

During 1997–2000, 50.5% of American Indians and Alaska Natives who responded to the Behavioral Risk Factor Surveillance System survey reported that they had never been tested for HIV. This percentage was higher in the southwestern United States, where 58.1% of the American Indians and Alaska Natives reported never having been tested [15].

## Data Limitations

Current data regarding HIV infection and AIDS among American Indians and Alaska Natives have limitations.

- **Incomplete surveillance data.** Not all states with large American Indian and Alaska Native populations have been conducting HIV surveillance. For example, California began

HIV surveillance only during the past few years and thus is not included in these data.

- **Racial misclassification and underreporting.** Even though the numbers of diagnoses for American Indians and Alaska Natives are relatively low, these numbers may be affected by racial misclassification. Studies in Alaska and Los Angeles have shown that the degree of misclassification differs geographically. In Alaska, 3% of American Indians and Alaska Natives with HIV/AIDS were misclassified as being of another race; in Los Angeles, 56% of American Indians and Alaska Natives with AIDS were racially misclassified [16, 17].

## PREVENTION

CDC estimates that 56,300 new HIV infections occurred in the United States in 2006 [18]. Persons of minority races/ethnicities are disproportionately affected by the HIV epidemic. To reduce further the incidence of HIV infection, CDC announced Advancing HIV Prevention (AHP) in 2003 ([http://www.cdc.gov/hiv/topics/prev\\_prog/AHP/AHP-Overview.htm](http://www.cdc.gov/hiv/topics/prev_prog/AHP/AHP-Overview.htm).) This initiative comprises 4 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 HIV-infected persons and their partners, and further decreasing perinatal HIV transmission.

Through AHP, CDC conducted demonstration projects in American Indian and Alaska Native communities to examine ways to make voluntary HIV testing a routine part of medical care and to implement new models for diagnosing HIV infections outside medical settings. Preliminary data show that through these projects, over 2,000 American Indians and Alaska Natives were tested for HIV. Demonstration projects were conducted at the following sites:

- Salt Lake City, Utah, where a community-based organization (CBO) partnered with the Indian Walk-In Center to offer routine

testing—including rapid testing at some sites—to 5 tribal entities and 11 reservations.

- Phoenix, Arizona, where a CBO conducted routine HIV testing in nontraditional settings (e.g., health fairs, powwows) through local outreach.
- Sault Ste. Marie, Michigan, where the Sault Ste. Marie Tribe and the Chippewa Indian Sault Tribe Health Center conducted routine HIV testing for clients aged 17 to 49. Rapid testing was conducted simultaneously at 1 main health center and 4 satellite clinics as well as an urgent care clinic.

CDC, through the Minority AIDS Initiative, supports efforts to reduce the health disparities experienced in communities of persons of minority races/ethnicities who are at high risk for HIV. These funds are used to address high-priority HIV prevention needs in such communities. The following are some CDC-funded prevention programs that state and local health departments and CBOs provide for American Indians and Alaska Natives.

- Helping tribes develop or expand HIV prevention services and improve services for persons infected with, or affected by, HIV/AIDS
- Building and strengthening the capacity of tribal organizations and urban Indian health centers throughout the United States to develop effective HIV prevention through intertribal networking and collaboration
- Providing HIV prevention education in rural Alaska Native communities and implementing an evidence-based intervention, Community PROMISE, in the Yukon-Kuskokwim delta and Maniilaq regions.

## Understanding HIV and AIDS Data

**AIDS surveillance:** Through a uniform system, CDC receives reports of AIDS cases from all US states and territories. Since the beginning of the epidemic, these data have been used to monitor trends because they are representative of all areas. The data are statistically adjusted for reporting delays and for the redistribution of cases initially reported without risk factors. As treatment has become more available, trends in new AIDS diagnoses no longer accurately represent trends in new HIV infections; these data now represent persons who are tested late in the course of HIV infection, who have limited access to care, or in whom treatment has failed.

**HIV surveillance:** Monitoring trends in the HIV epidemic today requires collecting information on HIV cases that have not progressed to AIDS. Areas with confidential name-based HIV infection reporting requirements use the same uniform system for data collection on HIV cases as for AIDS cases. A total of 33 states (Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming) have collected these data for at least 5 years, providing sufficient data to monitor HIV trends and to estimate risk behaviors for HIV infection.

**HIV/AIDS:** This term is used to refer to 3 categories of diagnoses collectively: (1) a diagnosis of HIV infection (not AIDS), (2) a diagnosis of HIV infection and a later diagnosis of AIDS, and (3) concurrent diagnoses of HIV infection and AIDS.

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**For more information . . .**

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Revised August 2008

# HIV/AIDS among **Asians and Pacific Islanders**

In recent years, the number of AIDS diagnoses among Asians and Pacific Islanders has increased steadily. Although Asians and Pacific Islanders account for approximately 1% of the total number of HIV/AIDS cases in the 33 states with long-term, confidential name-based HIV reporting, the Asian and Pacific Islander population in the United States is growing [1].

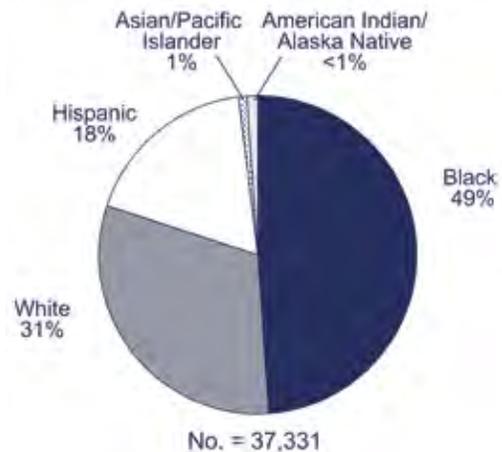
## STATISTICS

### HIV/AIDS in 2005

(The following bullets are based on data from the 33 states with long-term, confidential name-based HIV reporting. For a list of the 33 states, see the box, before the References section.)

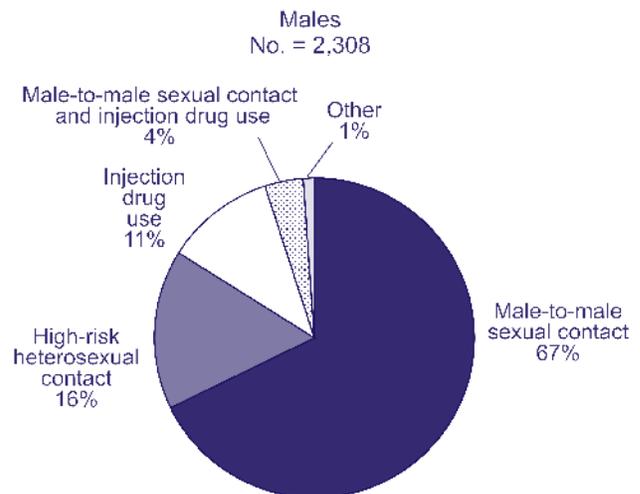
- An estimated 417 Asians and Pacific Islanders were given a diagnosis of HIV/AIDS, representing 1.1% of the 37,331 cases diagnosed that year [2].
- Of the 475,220 persons living with HIV/AIDS, 2,996 (0.6%) were Asians and Pacific Islanders [2].
- Of those given a diagnosis, 78% were men, 21% were women, and 1% were children (under 13 years of age) [2].
- The numbers of HIV/AIDS cases may be larger than reported because of underreporting or misclassification of Asians and Pacific Islanders.

### Race/ethnicity of persons (including children) with HIV/AIDS diagnosed during 2005



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

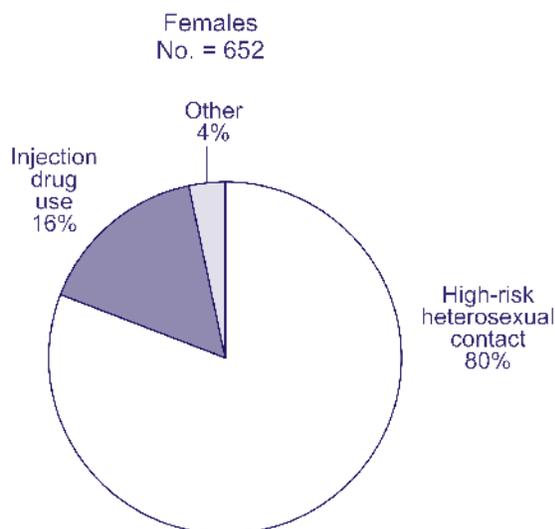
### Transmission categories for Asian and Pacific Islander adults and adolescents living with HIV/AIDS, 2005



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

# HIV/AIDS AMONG ASIANS AND PACIFIC ISLANDERS

## Transmission categories for Asians and Pacific Islander adults and adolescents living with HIV/AIDS, 2005 (cont.)



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

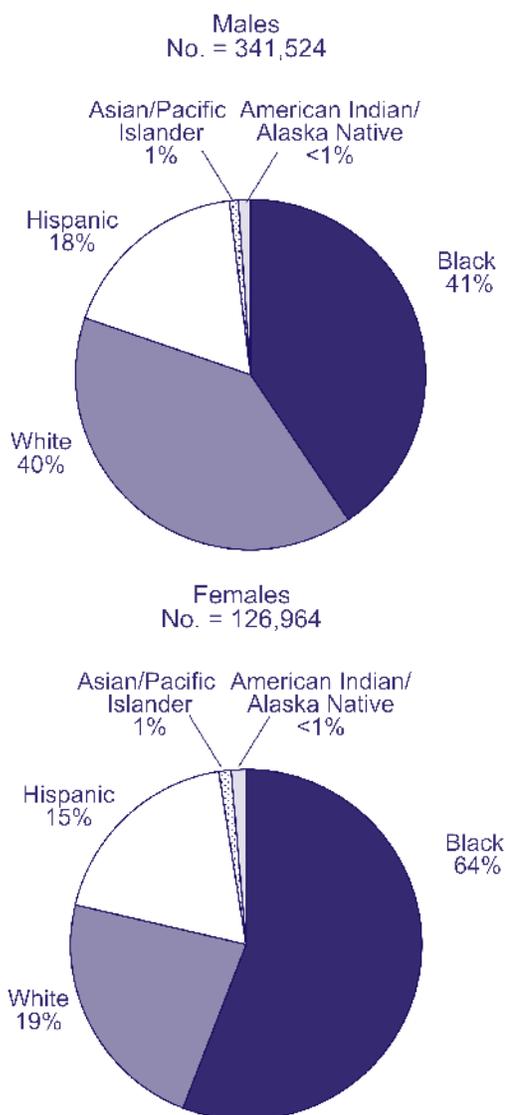
## AIDS in 2005

(For information about AIDS surveillance, see the box, before the References section.)

- Of the estimated 483 Asians and Pacific Islanders who received an AIDS diagnosis in 2005, 389 (81%) were men, and 92 (19%) were women. One Asian and Pacific Islander child (under 13 years of age) received a diagnosis of AIDS [2].
- The rate of AIDS diagnosis, by race/ethnicity, was lowest for Asians and Pacific Islanders (3.6 per 100,000 population), compared with 54.1 per 100,000 for blacks (including African Americans), 18.0 per 100,000 for Hispanics, 7.4 for American Indians and Alaska Natives, and 5.9 per 100,000 for whites [2].
- An estimated 4,276 Asians and Pacific Islanders were living with AIDS, representing 1% of the 421,873 people known to be living with AIDS in the 50 states and the District of Columbia [2].
- From the beginning of the epidemic through 2005, an estimated 7,659 Asians and Pacific Islanders were given a diagnosis of AIDS [2].

- An estimated 97 Asians and Pacific Islanders with AIDS died in 2005. From the beginning of the epidemic through 2005, an estimated 3,383 Asians and Pacific Islanders with AIDS died, representing less than 1% of the 530,756 persons in the 50 states and the District of Columbia who died with AIDS [2].
- Of persons given a diagnosis of AIDS during 1997–2004, 81% of Asians and Pacific Islanders were alive 9 years after diagnosis, compared with 75% of whites, 74% of Hispanics, 67% of American Indians and Alaska Natives, and 66% of blacks [2].

## Race/ethnicity of adults and adolescents living with HIV/AIDS, 2005



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

## RISK FACTORS AND BARRIERS TO PREVENTION

Although the proportion of diagnoses of HIV infection and AIDS for Asian and Pacific Islander adults and adolescents remains small relative to other racial/ethnic groups, no evidence indicates significantly lower levels of risk behaviors among this group [3, 4]. Asians and Pacific Islanders are likely to face challenges associated with the risk for HIV infection, especially in some regions of the country and for some specific ethnicities within the broader Asian and Pacific Islander group.

### Sexual Risk Factors

Most of the Asians and Pacific Islanders who are infected with HIV are men who have sex with men (MSM) [2]. A cause for concern is research that points to rising levels of risk behaviors among Asian and Pacific Islander MSM in certain areas of the country, for example, indications that an HIV epidemic is emerging among young Asian and Pacific Islander MSM in San Francisco [5].

The findings of other studies support this concern. In a San Francisco study of 503 Asian and Pacific Islander MSM aged 18–29 years, the overall HIV prevalence was nearly 3%. This prevalence varied significantly by ethnicity, ranging from 0% for Vietnamese MSM to 13.6% for Thai MSM. Being of Thai ethnicity, having been born in the United States, being older, or having ever attended a circuit party or special MSM social event was associated with HIV infection. Of these 503 men, 48% reported having had unprotected anal intercourse during the past 6 months [6]. Another study conducted in San Francisco showed that the rates of unprotected anal intercourse and sexually transmitted diseases among young Asian and Pacific Islander MSM during 1999–2002 surpassed the rates for white MSM [7].

High-risk heterosexual contact is the primary way Asian and Pacific Islander women become infected with HIV [2]. In focus groups, Asian and Pacific

Islander women noted cultural taboos against discussing sexual topics and power differentials between genders as reasons for difficulty in getting their partners to use condoms. Domestic violence is also a concern, as is lack of knowledge about HIV/AIDS and lack of culturally and linguistically appropriate HIV prevention programs and materials [8].

### Substance Use

The use of methamphetamines and other drugs has been shown to be an important factor associated with unprotected anal intercourse among Asian and Pacific Islander MSM. According to a study of Filipino American methamphetamine users in the San Francisco Bay Area, methamphetamine use was strongly associated with behavioral risk factors for HIV infection, including infrequent condom use, commercial sex activity, and low rates of HIV testing [9]. In a study of young Asian and Pacific Islander MSM, more than half used “party drugs,” including MDMA (3,4-methylenedioxymethamphetamine, or “ecstasy”), inhaled nitrates, hallucinogens, crack, and amphetamines. The use of drugs or alcohol was associated with unprotected anal intercourse [10].

### Low HIV Testing Rates

HIV testing is an important consideration for Asians and Pacific Islanders. Testing rates are lower for Asians and Pacific Islanders as a group, despite their risk factors for HIV infection. Data from an HIV testing survey in Seattle indicated that of the Asians and Pacific Islanders surveyed, 90% perceived themselves at some risk for HIV infection, yet only 47% had been tested during the past year [11]. Also, CDC’s Behavioral Risk Factor Surveillance System found that Asians and Pacific Islanders are significantly less likely than members of other races/ethnicities to report having been tested for HIV [12].

Low HIV testing rates also affect the stage of HIV disease at which diagnosis is made. CDC surveillance shows that for many Asians and

Pacific Islanders, the diagnosis of HIV infection is made late in the course of disease. In 2004, 44% of Asians and Pacific Islanders received an AIDS diagnosis within 1 year after their HIV infection was diagnosed. This is in comparison to 37% of whites, 40% of blacks, 41% of American Indians/Alaska Natives, and 43% of Hispanics [2]. Increasing the number of Asians and Pacific islanders who are tested will allow those who are infected to begin health-sustaining treatment and can help to reduce further transmission of the virus.

A study that showed an increase in testing (from 63% to 71%) between its first and fourth years (1999 to 2002) found that recent testing was most significantly and consistently associated with knowledge of testing sites to which respondents felt comfortable going [13]. This finding points to the importance of culturally and linguistically relevant health services.

## **Cultural and Socioeconomic Diversity**

Among Asians and Pacific Islanders, there are many nationalities—Chinese, Filipinos, Koreans, Hawaiians, Indians, Japanese, Samoans, Vietnamese, and others—and more than 100 languages and dialects. The subgroups differ in language, culture, and history. Because many Asians and Pacific Islanders living in the United States are foreign-born, they may experience cultural and language barriers to receiving public health messages. Additionally, many health surveys are administered only in English and perhaps Spanish, a situation that may cause miscommunication or exclude Asians and Pacific Islanders who do not speak English.

As a group, Asians and Pacific Islanders represent both extremes of socioeconomic and health issues. For example, although more than a million Asian Americans live at or below the federal poverty level (\$20,650 for a family of 4 living in the 48 contiguous states or the District of Columbia), Asian American women have the longest life

expectancy of any racial or ethnic group. Tailoring prevention interventions to meet the needs of this culturally and socioeconomically diverse population remains challenging [14, 15].

## **Data Limitations**

The low number of HIV cases among Asians and Pacific Islanders may not reflect the true burden of the epidemic on this population. Not all states with large Asian and Pacific Islander populations have been conducting HIV surveillance long enough to be included in CDC's surveillance. For example, California, where a large proportion of Asians and Pacific Islanders live, began HIV surveillance only during the past few years; thus, its HIV data are not included in CDC surveillance reports.

Additionally, race/ethnicity misclassification in medical records may contribute to the underreporting of HIV/AIDS among Asians and Pacific Islanders [12].

## **Limited Use of Services**

Because of language and cultural barriers, lack of access to care, and other issues, many Asians and Pacific Islanders underuse health care and prevention services. A study of the use of HIV services by 653 Asians and Pacific Islanders showed that a relatively high proportion had advanced disease and used hospital-based services. Few of them, however, used HIV case management services, housing assistance, substance use treatment, or health education services [16].

## **PREVENTION**

CDC estimates that 56,300 new HIV infections occurred in the United States in 2006 [17]. Populations of minority races/ethnicities are disproportionately affected by the HIV epidemic. In the United States, Asians and Pacific Islanders are emerging as a group that is at risk for HIV infection.

To reduce the incidence of HIV, CDC released *Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings* in 2006. These recommendations advise routine HIV screening of adults, adolescents, and pregnant women in health care settings in the United States. They also address the need to reduce barriers to HIV testing. In 2003, CDC announced an initiative, Advancing HIV Prevention ([http://www.cdc.gov/hiv/topics/prev\\_prog/AHP](http://www.cdc.gov/hiv/topics/prev_prog/AHP)). This initiative comprises 4 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 HIV-infected persons and their partners, and further decreasing perinatal HIV transmission.

CDC, through the Minority AIDS Initiative (<http://www.cdc.gov/programs/hiv08.htm>) supports efforts to reduce the health disparities experienced in communities of persons of minority races/ethnicities who are at high risk for HIV infection. CDC provides funds to community-based organizations that focus primarily on Asians and Pacific Islanders and provides indirect funding through state, territorial, and local health departments to organizations serving this population. An example of CDC-funded projects focused on the Asian and Pacific Islander population include an organization in New York City that provides client services, education, training, and technical assistance to Asian and Pacific Islander MSM who are at high risk, female and transgender sex workers, and female sex partners of men who are HIV-positive or at high risk for HIV infection.

## Understanding HIV and AIDS Data

**AIDS surveillance:** Through a uniform system, CDC receives reports of AIDS cases from all US states and dependent areas. Since the beginning of the epidemic, these data have been used to monitor trends. The data are statistically adjusted for reporting delays and for the redistribution of cases initially reported without risk factors. As treatment has become more available, trends in new AIDS diagnoses no longer accurately represent trends in new HIV infections; these data now represent persons who are tested late in the course of HIV infection, who have limited access to care, or in whom treatment has failed.

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### For more information . . .

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# HIV/AIDS among Hispanics/Latinos

CDC HIV/AIDS FACTS

UPDATED OCTOBER 2008

The HIV/AIDS epidemic is a serious threat to the Hispanic/Latino community. Hispanics/Latinos comprise 15% of the US population, but accounted for 17% of all new HIV infections occurring in the United States in 2006. During the same year, the rate of new HIV infections among Hispanics/Latinos was three times that of whites. In 2005, HIV/AIDS was the fourth leading cause of death among Hispanic/Latino men and women aged 35–44 [1].

## THE NUMBERS

### HIV/AIDS in 2006

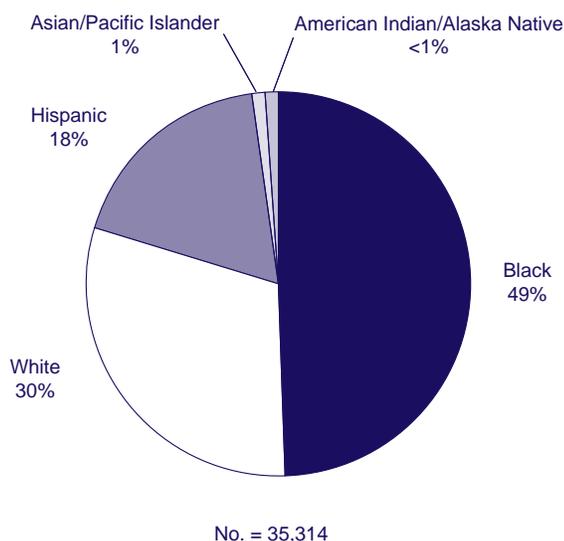
- Hispanics/Latinos accounted for 18% of the 35,314 new HIV/AIDS diagnoses in 33 states with long-term, confidential name based HIV reporting [2].
- Hispanics/Latinos accounted for 17% of the 491,727 persons (including children) living with HIV/AIDS in the 33 states [2].
- For Hispanic/Latino men living with HIV/AIDS, the most common methods of HIV transmission were (in order) sexual contact with other men, injection drug use, and high-

risk heterosexual contact. For Hispanic/Latina women living with HIV/AIDS, the most common methods of transmission were high-risk heterosexual contact and injection drug use [2].

### AIDS in 2006

- Hispanics/Latinos accounted for 19% of new AIDS diagnoses and 19% of all people living with AIDS in the 50 states and the District of Columbia [2].
- Of the rates of AIDS diagnoses for adults and adolescents in all racial and ethnic groups, the second highest (after the rate for blacks) was the rate for Hispanics/Latinos [2].
- Hispanics/Latinos accounted for 16% of the estimated 982,498 AIDS cases diagnosed in the 50 states and the District of Columbia since the beginning of the epidemic [2].
- By the end of 2006, an estimated 80,690 Hispanics/Latinos with AIDS in the 50 states and the District of Columbia had died [2].

### Race/ethnicity of persons (including children) with HIV/AIDS diagnosed during 2006



Based on data from 33 states with long-term, confidential name-based HIV reporting.

## PREVENTION CHALLENGES

A number of cultural, socioeconomic, and health-related factors contribute to the HIV epidemic and prevention challenges in the US Hispanic/Latino community.

- **Behavioral risk factors** for HIV infection differ by country of birth. For example, data suggest that Hispanics/Latinos born in Puerto Rico are more likely than other Hispanics/Latinos to contract HIV as a result of injection drug use or high-risk heterosexual contact. By contrast, sexual contact with other men is the primary cause of HIV infections among Hispanic/Latino men born in Central or South America, Cuba, Mexico, or the United States [2].
- Hispanic/Latina women and Hispanic/Latino men are most likely to be infected with HIV as a result of **sex with men** [2]. Therefore, prevention program staff need to address issues specific to the Hispanics/Latinos to whom a particular program is directed: for example, condom usage (men and women) or the balance of power within relationships (especially women).



1-800-CDC-INFO (232-4636)  
In English, en Español  
24 Hours/Day  
cdcinfo@cdc.gov  
<http://www.cdc.gov/hiv>



## REFERENCES

1. CDC. WISQARS [Web-based Injury Statistics Query and Reporting System] leading causes of death reports, 2005. <http://webapp.cdc.gov/sasweb/ncipc/leadcaus10.html>.
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- **Injection drug use** continues to be a risk factor for Hispanics/Latinos, particularly those living in Puerto Rico [2]. Both casual and chronic substance users are more likely to engage in risky sexual behaviors, such as unprotected sex, when they are under the influence of drugs or alcohol.
- The rates of **sexually transmitted diseases**, which can increase the chances of contracting HIV, are higher for Hispanics/Latinos. In 2006, the rate of chlamydial infection for Hispanics/Latinos was about 3 times the rate for whites (not Hispanic/Latino), and the rates of gonorrhea and syphilis for Hispanics/Latinos were about twice the rates for whites [3].
- Certain **cultural beliefs** can affect one's risk for HIV infection. For example, among men, *machismo* has positive implications for HIV prevention, such as strength and protection of the family; however, proving masculinity through power and dominance can lead both straight and gay Hispanic/Latino men to engage in risky sexual behavior.
- Greater **acculturation into the US culture** has both negative (engaging in behaviors that increase the risk for HIV infection) and positive (communicating with partners about practicing safer sex) effects on the health behaviors of Hispanics/Latinos.
- More than 1 in 5 (21.9%) Hispanics/Latinos live in **poverty** [4]. Problems associated with poverty, including unemployment, a lack of formal education, inadequate health insurance, and limited access to high-quality health care, can increase the risk for HIV infection.
- The **migration patterns, social structure, language barriers, and lack of regular health care** among transient Hispanic/Latino immigrants can affect awareness and hinder access to HIV/AIDS prevention and care.



## HIV/AIDS RESOURCES

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Resources on HIV/AIDS treatment and clinical trials

## WHAT CDC IS DOING

To reduce the incidence of HIV infection, CDC released *Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings* in 2006. These new recommendations advise routine HIV screening for adults, adolescents, and pregnant women in health care settings in the United States. CDC also

- Conducts epidemiologic and behavioral research focused on Hispanics/Latinos
- Supports efforts to reduce the health disparities experienced in the communities of minority races and ethnicities at high risk for HIV infection
- Provides effective, scientifically based interventions to organizations serving Hispanics/Latinos and is tailoring other effective behavioral interventions to Hispanics/Latinos who are at high risk for HIV infection
- Builds the capacity of programs that serve Hispanics/Latinos through partnerships with national, regional, and nongovernmental organizations

In 2006, CDC provided 56 awards to community-based organizations in the United States and Puerto Rico that focus primarily on Hispanics/Latinos. CDC also provides funding through state, territorial, and local health departments to organizations serving this population. In addition, CDC provides training for researchers of minority races/ethnicities and in 2002 established the Minority HIV/AIDS Research Initiative (MARI) to create partnerships between CDC epidemiologists and researchers who are members of minority races and ethnicities and who work in communities of color. CDC invests \$2 million per year in the program and since 2003 has funded 13 junior investigators at 12 sites across the country.

For more information on HIV/AIDS and Hispanics/Latinos, visit <http://www.cdc.gov/hiv/hispanics>. For more information on the 33 states with long-term, confidential name-based HIV reporting, visit <http://www.cdc.gov/hiv/topics/surveillance>.



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# HIV/AIDS among Men Who Have Sex with Men

In the United States, HIV infection and AIDS have had a tremendous effect on men who have sex with men (MSM). MSM accounted for 71% of all HIV infections among male adults and adolescents in 2005 (based on data from 33 states with long-term, confidential name-based HIV reporting), even though only about 5% to 7% of male adults and adolescents in the United States identify themselves as MSM [1, 2].

The number of HIV diagnoses for MSM decreased during the 1980s and 1990s, but recent surveillance data show an increase in HIV diagnoses for this group [3, 4]. Additionally, racial disparities exist with regard to HIV diagnoses within the MSM population. A recent study, conducted in 5 large US cities, found that HIV prevalence among black MSM (46%) was more than twice that among white MSM (21%) [5].

The recent overall increase in HIV diagnoses for MSM, coupled with racial disparities, strongly points to a continued need for appropriate prevention and education services tailored for specific subgroups of MSM, especially those who are members of minority races/ethnicities.

## STATISTICS

### HIV/AIDS in 2005

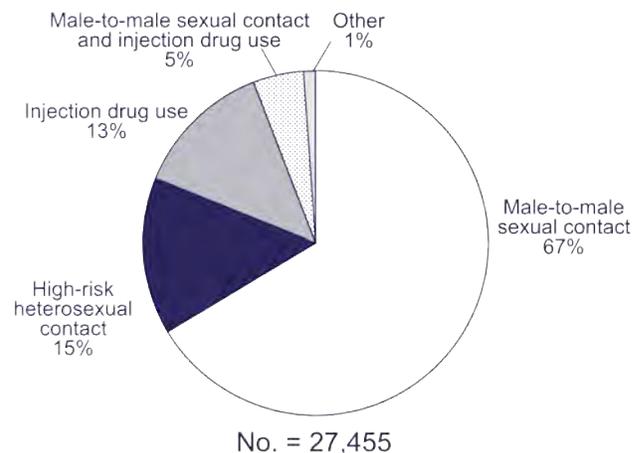
(The following bullets refer to the 33 states with long-term, confidential name-based HIV reporting. See the box, before the References section, for a list of the 33 states.)

- In the 33 states with long-term, confidential name-based HIV reporting, an estimated 19,620 MSM (18,296 MSM and 1,324 MSM

who inject drugs) received a diagnosis of HIV/AIDS, accounting for 71% of male adults and adolescents and 53% of all people receiving an HIV/AIDS diagnosis that year [1].

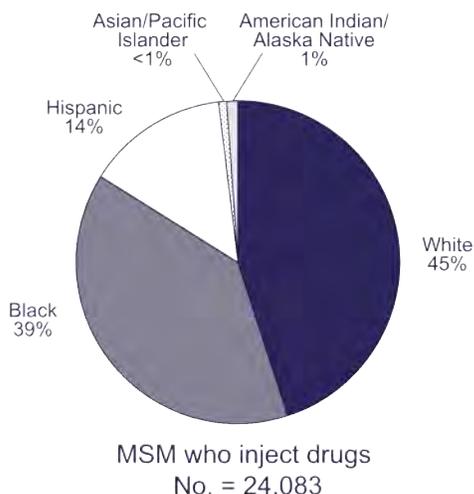
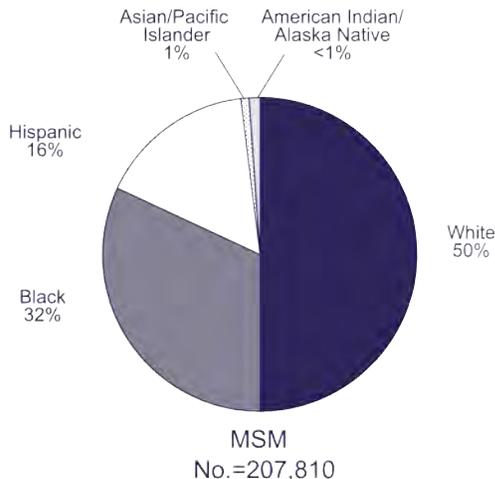
- The number of HIV/AIDS diagnoses among MSM (including MSM who inject drugs) increased 11% from 2001 through 2005 [1]. It is not known whether this increase is due to an increase in the testing of persons with risk factors, which results in more HIV diagnoses, or due to an increase in cases of HIV infection
- An estimated 231,893 MSM (207,810 MSM and 24,083 MSM who inject drugs) were living with HIV/AIDS [1].

### Transmission categories of male adults and adolescents with HIV/AIDS diagnosed during 2005



*Note.* Based on data from 33 states with long-term, confidential name-based HIV reporting. Because of rounding, percentages may not equal 100.

## Race/ethnicity of MSM living with HIV/AIDS, 2005



Note. Based on 33 states with long-term, confidential name-based HIV reporting.

## AIDS in 2005

(See the box, before the References section, for AIDS definition. The following data are from 50 states and the District of Columbia.)

- Since the beginning of the epidemic, an estimated 517,992 MSM (452,111 MSM and 65,881 MSM who inject drugs) had received a diagnosis of AIDS, accounting for 68% of male adults and adolescents who received a diagnosis of AIDS and 54% of all people who received a diagnosis of AIDS [1].
- Since the beginning of the epidemic, an estimated 300,669 MSM (260,749 MSM and 39,920 MSM who inject drugs) with AIDS had died, accounting for 68% of male adults and adolescents with AIDS who had died and 57% of all people with AIDS who had died [1].
- At the end of 2005, an estimated 217,323 MSM (191,362 MSM and 25,961 MSM who inject drugs) were living with AIDS, representing 67% of male adults and adolescents living with AIDS and 52% of all people living with AIDS [1].

## RISK FACTORS AND BARRIERS TO PREVENTION

### Sexual Risk Factors

Sexual risk factors account for most HIV infections in MSM. These factors include unprotected sex and sexually transmitted diseases (STDs).

- Having anal sex without a condom continues to be a significant threat to the health of MSM [6]. Unprotected anal sex (barebacking) with casual partners is an increasing concern. Not all the reasons for an apparent increase in unprotected anal intercourse are known, but research points to the following factors: optimism about improved HIV treatment, substance use, complex sexual decision making, seeking sex partners on the Internet, and failure to practice safer sex [7]. Some of these men may be serosorting, or only having sex (or unprotected sex) with a partner whose HIV serostatus, they believe, is the same as their own. Although serosorting between MSM who have tested HIV-positive is likely

to prevent new HIV transmission to persons who are not infected, the effectiveness of serosorting between men who have tested HIV-negative has not been established. Serosorting with condom use may further reduce the risk of HIV transmission. However, for men with casual partners, serosorting alone is likely to be less effective than always using condoms because some men do not know or disclose their HIV serostatus [8].

- STDs, which increase the risk for HIV infection, remain an important health issue for MSM. According to the Gonococcal Isolate Surveillance Project, the proportion of gonorrhea-positive test results among MSM increased from 4% in 1988 to 20.2% in 2004 [9]. Rates of syphilis among MSM have increased in some urban areas, including Chicago, New York, San Francisco, and Seattle [10–12]. In the 9 US cities participating in the MSM Prevalence Monitoring Project, the rates of STDs and HIV positivity varied by race and ethnicity but tended to be highest among black and Hispanic MSM [9]. In addition to increasing susceptibility to HIV, STDs are markers for high-risk sexual practices, through which HIV infection can be transmitted [13].

## Unknown HIV Serostatus

Approximately 25% of people in the United States who are infected with HIV do not know they are infected [14].

- Through its National HIV Behavioral Surveillance system, CDC found that 25% of the MSM surveyed in 5 large US cities were infected with HIV and 48% of those infected were unaware of their infections [5].
- In a recent CDC study of young MSM, 77% of those who tested HIV-positive mistakenly believed that they were not infected [15]. Young black MSM in this study were more likely to be unaware of their infection—approximately 9 of 10 young black MSM compared with 6 of 10 young white MSM. Of

the men who tested positive, most (74%) had previously tested negative for HIV infection, and 59% believed that they were at low or very low risk.

Research has shown that many people who learn that they are infected with HIV alter their behaviors to reduce their risk of transmitting the virus [16, 17]. Therefore, increasing the proportion of people who know their HIV serostatus can help decrease HIV transmission.

## Substance Use

The use of alcohol and illegal drugs continues to be prevalent among some MSM and is linked to risk factors for HIV infection and other STDs [18]. Substance use can increase the risk for HIV transmission through the tendency toward risky sexual behaviors while under the influence and through sharing needles or other injection equipment. Reports of increased use of the stimulant drug methamphetamine are also a concern because methamphetamine use has been associated both with risky sexual behaviors for HIV infection and other STDs and with the sharing of injection equipment when the drug is injected [19]. Methamphetamine and other “party” drugs (such as ecstasy, ketamine, and GHB [gamma hydroxybutyrate]) may be used to decrease social inhibitions and enhance sexual experiences [20]. These drugs, along with alcohol and nitrate inhalants (“poppers”), have been strongly associated with risky sexual practices among MSM [21].

## Complacency about Risk

More than 25 years into the HIV epidemic, there is evidence of an underestimation of risk, of difficulty in maintaining safer sex practices, and of a need to sustain prevention efforts for all gay and bisexual men.

- The success of highly active antiretroviral therapy (HAART) may have had the unintended consequence of increasing the risk behaviors of some MSM.

- Some research suggests that the perceptions of the negative aspects of HIV infection have been minimized since the introduction of HAART, which has led to a false understanding of what living with HIV means and thus to an increase in risky sexual behaviors [22, 23]. For example, some MSM may mistakenly believe that they or their partners are not infectious when they take antiretroviral medication or when they have low or undetectable viral loads [24].
- Optimism about HIV treatments is associated with a greater willingness to have unprotected anal intercourse [25–27].
- Long-term efforts to practice safer sex present a significant challenge. A 4-city study indicates that years of exposure to prevention messages and long-term efforts to practice safer sex may play a role in the decision of HIV-positive MSM to engage in unprotected anal intercourse [23, 28].
- The rates of risky behaviors are higher among young MSM than among older MSM [28, 29]. Not having seen firsthand the toll of AIDS in the early years of the epidemic, young MSM may be less motivated to practice safer sex.

## MSM Who Are HIV-positive

HAART has enabled HIV-infected MSM to live longer. However, HAART's success means there are more MSM living with HIV who have the potential to transmit the virus to their sex partners. This emphasizes the importance of focusing prevention efforts on those who are living with HIV.

Although many MSM reduce their risk behaviors after learning that they have HIV, most remain sexually active [17]. Most HIV-infected MSM believe that they have a personal responsibility to protect others from HIV, but some engage in risky sexual behaviors that may result in others' contracting HIV [30–32]. Interventions to reduce the risk for transmission, some of which were tested with MSM, are available for persons living with HIV [33, 34].

## The Internet

During the past decade, the Internet has created new opportunities for MSM to meet sex partners [35]. Internet users can anonymously find partners with similar sexual interests without having to leave their residence or having to risk face-to-face rejection if the behaviors they seek are not consistent with safer sex [36]. The Internet may also normalize certain risky behaviors by making others aware of these behaviors and creating new connections between those who engage in them. At the same time, however, the Internet has the potential to be a powerful tool for use with HIV prevention interventions.

## Social Discrimination and Cultural Issues

MSM are members of all communities, all races and ethnicities, and all strata of society. To reduce the rate of HIV infection, prevention efforts must be designed with respect for the many differences among MSM and with recognition of the discrimination against MSM and other persons infected with HIV in many parts of the country.

- Social and economic factors, including racism, homophobia, poverty, and lack of access to health care are barriers to HIV prevention services, particularly for MSM of minority races or ethnicities. Black and Hispanic men are more likely than white men to be given a diagnosis of HIV infection in the late stages of infection, often when they already have AIDS, suggesting that they are not accessing testing or health care services through which HIV infection could be diagnosed at an earlier stage [37].
- The stigma associated with homosexuality may inhibit some men from identifying themselves as gay or bisexual, even though they have sex with other men [38, 39]. Some men who have sex with men and with women don't identify themselves as gay or bisexual [40]. Research among black men has shown that even if these men do not identify themselves as gay or bisexual, they do not engage in risky behavior more often than the men who do

identify themselves as gay or bisexual [41]. This research suggests that elevated rates of STDs and undetected or late diagnosis of HIV infection may contribute to higher rates of HIV infection among black MSM.

- Black and Hispanic MSM are less likely than white MSM to live in gay-identified neighborhoods [42]. Therefore, prevention programs directed to gay-identified neighborhoods may not reach these MSM.
- For Hispanic MSM, unique cultural factors may discourage openness about homosexuality: *machismo*, the high value placed on masculinity; *simpatia*, the importance of smooth, nonconfrontational relationships; and *familismo*, the importance of a close relationship with one's family [43, 44].
- Although Asians/Pacific Islanders and American Indians/Alaska Natives accounted for less than 2% of the AIDS cases in MSM reported nationally during 1989–1998, these groups accounted for noteworthy proportions of cases in certain metropolitan areas [38]. Also, HIV infection among American Indians and Alaska Natives may be underestimated because not all surveillance systems recognize American Indian or Alaska Native as a race/ethnicity [45].

## Combinations of Risk Factors

There is growing recognition that combinations of individual, sociocultural, and biomedical factors affect HIV risk behavior among MSM [46]. Childhood sexual abuse, substance use, depression, and partner violence have been shown to increase the practice of risky sexual behaviors. Further research has shown that the combined effects of these problems may be greater than their individual effects [47]. Therefore, MSM with more than 1 of these problems may have additional risk factors for HIV infection. The expansion and wider awareness of this type of research, which shows the additive effect of various psychosocial problems, will result in more precise prevention efforts.

## Differences within the MSM Population

Even though MSM constitute a group at risk for HIV, not all MSM are at risk for HIV. Analyzing the context within which individuals of the larger MSM community live and socialize may be a promising method for developing and focusing HIV interventions. A recent large-scale HIV vaccine efficacy trial looked at combinations of demographic characteristics and risk behaviors to help identify MSM at greatest risk [48]. This study of more than 5,000 HIV-negative MSM found that older men with large numbers of sex partners, young men who used “party” drugs, and older men who used nitrate inhalants were most likely to contract HIV.

The appreciation of differences within the MSM community will aid in the development of successful HIV prevention interventions.

## PREVENTION

To reduce the incidence of HIV, CDC released the *Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings* (<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>) in 2006. These recommendations include the routine HIV screening of adults, adolescents, and pregnant women in health care settings in the United States. They also include reducing barriers to HIV testing. In 2003, CDC announced Advancing HIV Prevention ([http://www.cdc.gov/hiv/topics/prev\\_prog/AHP](http://www.cdc.gov/hiv/topics/prev_prog/AHP)). This initiative comprises 4 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 HIV-infected persons and their partners, and further decreasing perinatal HIV transmission.

Given that a large number of HIV-infected MSM are unaware of their infection, HIV testing is an important strategy for this population. Many of

these men have previously tested HIV-negative, so CDC recommends that all sexually active MSM be tested for HIV at least once a year [49]. MSM who engage in high-risk behaviors (e.g., unprotected anal sex with casual partners) should be tested more frequently.

MSM as a group continues to be the population most affected by HIV infection and AIDS. However, research shows that HIV prevention efforts can reduce sexual risk factors: one review found that among men who received an HIV prevention intervention, the proportion who engaged in unprotected sex decreased, on average, 26% [50].

CDC offers effective interventions for MSM (<http://www.effectiveinterventions.org>). These interventions can be tailored to various audiences, such as African American or Hispanic MSM. For example,

- Many Men, Many Voices, which is a group STD/HIV prevention intervention for gay men of color and men who have sex with other men but do not identify themselves as gay or bisexual
- Mpowerment, which comprises HIV prevention, safer sex, and risk-reduction messages in a community-building format for young MSM
- Popular Opinion Leader, which involves identifying, enlisting, and training key opinion leaders to encourage safer sex as the norm in the social networks of MSM
- Healthy Relationships, which helps develop the skills and self-efficacy of MSM and other people living with HIV/AIDS
- Peers Reaching Out and Modeling Intervention Strategies (PROMISE), which uses peer advocates (including men who do not identify themselves as gay) to help people adopt practices to reduce or eliminate risk factors for HIV infection

In 2006, CDC provided 54 awards to community-based organizations that focus primarily on MSM. CDC also provides funding through state, territorial, and local health departments. Of these 54 awards, 63% focus on African Americans, 43% on Hispanics, 13% on Asians and Pacific Islanders, and 20% on whites (the percentages do not add to 100% because some of the organizations focus on more than one racial/ethnic group). For example,

- An organization in Jefferson County, Alabama, that provides a range of services, including individual counseling, community and street outreach, and interventions for African American men and Spanish-speaking men
- An organization in New York City that provides HIV/AIDS-related services, education, and research to Asian and Pacific Islander communities
- An organization offering HIV/AIDS services throughout Los Angeles and San Bernadino counties and San Diego that is committed to enhancing the health and well-being of the Latino community and other underserved communities through community education, prevention, mobilization, advocacy, and direct social services.

## Understanding HIV and AIDS Data

**AIDS surveillance:** Through a uniform system, CDC receives reports of AIDS cases from all US states and dependent areas. Since the beginning of the epidemic, these data have been used to monitor trends. The data are statistically adjusted for reporting delays and for the redistribution of cases initially reported without risk factors. As treatment has become more available, trends in new AIDS diagnoses no longer accurately represent trends in new HIV infections; these data now represent persons who are tested late in the course of HIV infection, who have limited access to care, or in whom treatment has failed.

**HIV surveillance:** Monitoring trends in the HIV epidemic today requires collecting information on HIV cases that have not progressed to AIDS. Areas with confidential name-based HIV infection reporting requirements use the same uniform system for data collection on HIV cases as for AIDS cases. A total of 33 states (Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming) have collected these data for at least 5 years, providing sufficient data to monitor HIV trends and to estimate risk behaviors for HIV infection.

**HIV/AIDS:** This term is used to refer to 3 categories of diagnoses collectively: (1) a diagnosis of HIV infection (not AIDS), (2) a diagnosis of HIV infection and a later diagnosis of AIDS, and (3) concurrent diagnoses of HIV infection and AIDS.

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**CDC HIV/AIDS**  
<http://www.cdc.gov/hiv>  
*CDC HIV/AIDS resources*

**CDC-INFO**  
1-800-232-4636  
*Information about personal risk and where to get an HIV test*

**CDC National HIV Testing Resources**  
<http://www.hivtest.org>  
*Location of HIV testing sites*

**CDC National Prevention Information Network (NPIN)**  
1-800-458-5231  
<http://www.cdcpin.org>  
*CDC resources, technical assistance, and publications*

**AIDSinfo**  
1-800-448-0440  
<http://www.aidsinfo.nih.gov>  
*Resources on HIV/AIDS treatment and clinical trials*

# HIV/AIDS among Persons Aged 50 and Older

CDC HIV/AIDS FACTS

FEBRUARY 2008

The number of persons aged 50 years and older living with HIV/AIDS has been increasing in recent years. This increase is partly due to highly active antiretroviral therapy (HAART), which has made it possible for many HIV-infected persons to live longer, and partly due to newly diagnosed infections in persons over the age of 50. As the US population continues to age, it is important to be aware of specific challenges faced by older Americans and to ensure that they get information and services to help protect them from infection.

## THE NUMBERS

In 2005, persons aged 50 and over accounted for

- 15% of new HIV/AIDS diagnoses [1]\*
- 24% of persons living with HIV/AIDS (increased from 17% in 2001)[1]\*
- 19% of all AIDS diagnoses [1]
- 29% of persons living with AIDS [1]
- 35% of all deaths of persons with AIDS [1].

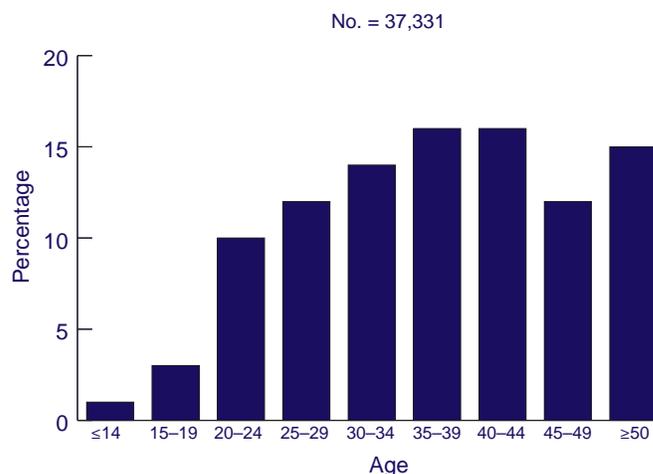
The rates of HIV/AIDS among persons 50 and older were 12 times as high among blacks (51.7/100,000) and 5 times as high among Hispanics (21.4/100,000) compared with whites (4.2/100,000) [2].

## PREVENTION CHALLENGES

Persons over the age of 50 may have many of the same risk factors for HIV infection that younger persons have.

\* Based on data from 33 states with long-term, confidential name-based HIV reporting.

Estimated Numbers of Cases of HIV/AIDS, by Age—2005



Based on data from 33 states with long-term, confidential name-based HIV reporting.

- Many older persons are sexually active but may not be practicing safer sex to reduce their risk for HIV infection [3]. Older women may be especially at risk because age-related vaginal thinning and dryness can cause tears in the vaginal area [4].
- Some older persons inject drugs or smoke crack cocaine, which can put them at risk for HIV infection. HIV transmission through injection drug use accounts for more than 16% of AIDS cases among persons aged 50 and older [5].
- Some older persons, compared with those who are younger, may be less knowledgeable about HIV/AIDS and therefore less likely to protect themselves. Many do not perceive themselves as at risk for HIV, do not use condoms, and do not get tested for HIV [6, 7].
- Older persons of minority races/ethnicities may face discrimination and stigma that can lead to later testing, diagnosis, and reluctance to seek services [8].



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## HIV/AIDS RESOURCES

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### CDC National Prevention Information Network (NPIN)

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*Resources on HIV/AIDS treatment and clinical trials*

- Health care professionals may underestimate their older patients' risk for HIV/AIDS and thus may miss opportunities to deliver prevention messages, offer HIV testing, or make an early diagnosis that could help their patients get early care [3].
- Physicians may miss a diagnosis of AIDS because some symptoms can mimic those of normal aging, for example, fatigue, weight loss, and mental confusion. Early diagnosis, which typically leads to the prescription of HAART and to other medical and social services, can improve a person's chances of living a longer and healthier life.
- The stigma of HIV/AIDS may be more severe among older persons, leading them to hide their diagnosis from family and friends. Failure to disclose HIV infection may limit or preclude potential emotional and practical support.

## WHAT CDC IS DOING

CDC recommends routine HIV screening for adults and adolescents, including pregnant women, in health care settings in the United States and recommends reducing barriers to HIV testing [9]. The recommendations specify routine testing for persons up to age 64. (Persons aged 64 and over should be counseled to receive HIV testing if they have risk factors for HIV infection.) Routine testing is intended not only to identify persons who are unaware that they are HIV infected but also to remove the stigma of being tested. Making testing routine for older persons can help open a discussion about risk behavior between a physician and an older person.

Prevention strategies should be developed for older persons who are potentially at risk for HIV infection: education to increase awareness and knowledge, skills training to help them negotiate risk-reduction behaviors, and messages that are age-appropriate and culturally sensitive. Intervention strategies to help older women negotiate safer sexual behavior are especially important.

A recent review of HIV/AIDS behavioral interventions for persons 50 and older recommended simultaneous multilevel approaches, including building on our current understanding of behavior change and HIV prevention successes with younger populations while considering important intervention principles gathered from work with older populations in other health areas.

For more information on HIV/AIDS among persons aged 50 and older, including additional references and links, visit <http://www.cdc.gov/hiv/topics/older>.



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Revised August 2008

# HIV/AIDS among Women

Early in the epidemic, HIV infection and AIDS were diagnosed for relatively few women and female adolescents (although we know now that many women were infected with HIV through injection drug use but that their infections were not diagnosed) [1]. Today, women account for more than one quarter of all new HIV/AIDS diagnoses. Women of color are especially affected by HIV infection and AIDS. In 2004 (the most recent year for which data are available), HIV infection was

- the leading cause of death for black women (including African American women) aged 25–34 years
- the 3rd leading cause of death for black women aged 35–44 years
- the 4th leading cause of death for black women aged 45–54 years
- the 4th leading cause of death for Hispanic women aged 35–44.

In the same year, HIV infection was the 5th leading cause of death among all women aged 35–44 years and the 6th leading cause of death among all women aged 25–34 years. The only diseases causing more deaths of women were cancer and heart disease [2].

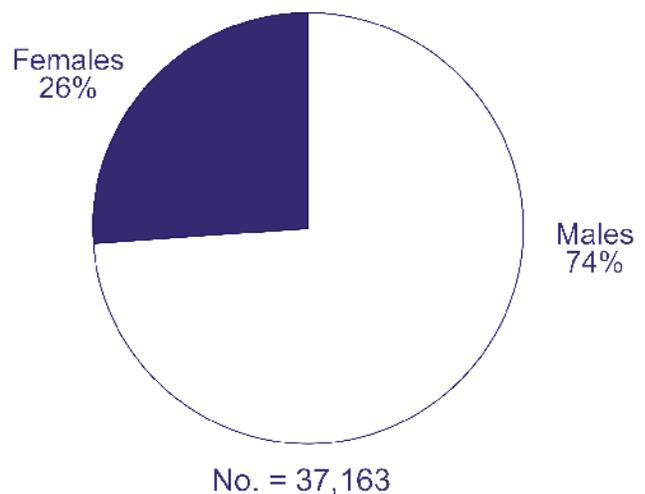
## STATISTICS

**HIV/AIDS in 2005** (The following bullets, except for the last one, are based on data from 33 states with long-term, confidential name-based HIV reporting.\*)

- HIV/AIDS was diagnosed for an estimated 9,708 women [3].

- High-risk heterosexual contact was the source of 80% of these newly diagnosed infections [3].
- Women accounted for 26% of the estimated 37,163 diagnoses for adults and adolescents [3].
- Of the 126,964 women living with HIV/AIDS, 64% were black, 19% were white, 15% were Hispanic, 1% were Asian or Pacific Islander, and less than 1% were American Indian or Alaska Native [3].
- The number of HIV/AIDS diagnoses among female adults or adolescents decreased from 11,941 in 2001 to 9,708 in 2005 [3].
- According to a recent CDC study of more than 19,500 patients with HIV in 10 US cities, women were slightly less likely than men to receive prescriptions for the most effective treatments for HIV infection [4].

### Sex of adults and adolescents with HIV/AIDS diagnosed during 2005

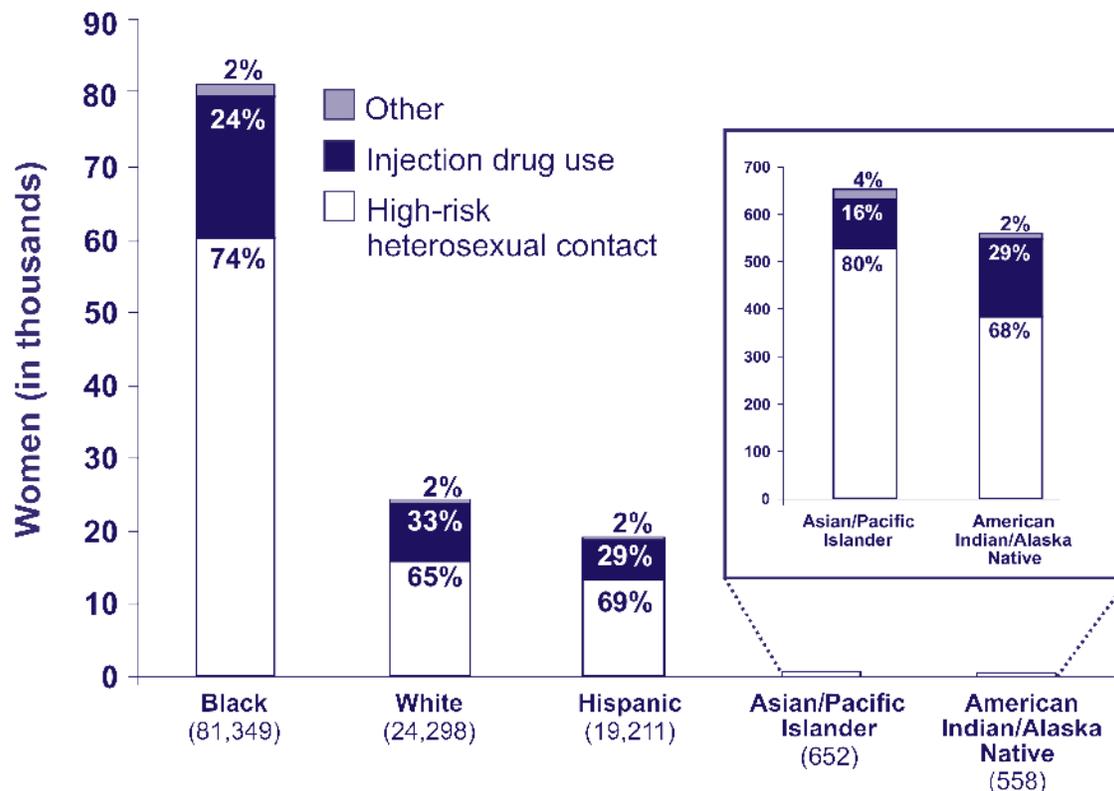


*Note.* Based on data from 33 states with long-term, confidential name-based HIV reporting.

\*For a list of the 33 states, please refer to the box before the References.

# HIV/AIDS AMONG WOMEN

## Transmission categories and race/ethnicity of women living with HIV/AIDS at the end of 2005



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

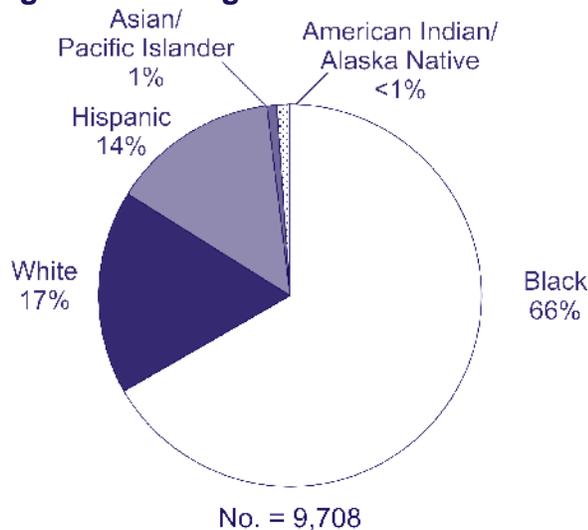
### AIDS in 2005

- Of 40,608 AIDS diagnoses in the 50 states and the District of Columbia, 10,774 (27%) were for women [3].
- The rate of AIDS diagnosis for black women (45.5/100,000 women) was approximately 23 times the rate for white women (2.0/100,000) and 4 times the rate for Hispanic women (11.2/100,000) [3].
- An estimated 95,959 women were living with AIDS, representing 23% of the estimated 421,873 people living with AIDS in the 50 states and the District of Columbia [3].
- An estimated 4,128 women with AIDS died, representing 25% of the 16,316 persons with AIDS who died in the 50 states and the District of Columbia [3].
- From the beginning of the epidemic (1981) through 2005, women accounted for 181,802

diagnoses, a number that represents 19% of the 952,629 AIDS diagnoses in the 50 states and the District of Columbia during this period [3].

- From the beginning of the epidemic through 2005, an estimated 85,844 women with AIDS died, accounting for 16% of the 530,756 persons with AIDS who died in the 50 states and the District of Columbia [3].
- Women with AIDS made up an increasing part of the epidemic. In 1992, women accounted for an estimated 14% of adults and adolescents living with AIDS in the 50 states and the District of Columbia [5]. By the end of 2005, this proportion had grown to 23% [3].
- Data from the 2005 census show that together, African American and Hispanic women represent 24% of all US women [6]. However, women in these 2 groups accounted for 82% (8,807/10,774) of the estimated total of AIDS diagnoses for women in 2005 [3].

## Race/ethnicity of women with HIV/AIDS diagnosed during 2005



Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

## RISK FACTORS AND BARRIERS TO PREVENTION

### Younger Age

For women of all races and ethnicities, the largest number of HIV/AIDS diagnoses during recent years was for women aged 15–39. From 2001 through 2004, the number of HIV/AIDS diagnoses for women aged 15–39 decreased for white, black, and Hispanic women. There was an increase in the number of HIV/AIDS diagnoses during this period for Asian and Pacific Islander women and for American Indian and Alaska Native women aged 15–39 [7].

	Diagnosis of HIV/AIDS in females aged 15-39 years	
	2001 No. (%) <sup>*</sup>	2004 No. (%) <sup>*</sup>
White	1,218 (63)	996 (56)
Black	5,229 (62)	4,091 (58)
Hispanic	1,192 (60)	819 (57)

	Diagnosis of HIV/AIDS in females aged 15-39 years	
	2001 No. (%) <sup>*</sup>	2004 No. (%) <sup>*</sup>
Asian/Pacific Islander	31 (55)	62 (66)
American Indian/Alaska Native	23 (52)	39 (68)

\* Percent (%) of women age 15-39 in corresponding subgroup.

### Lack of Recognition of Partner's Risk Factors

Some women may be unaware of their male partner's risk factors for HIV infection (such as unprotected sex with multiple partners, sex with men, or injection drug use) [8]. Men who engage in sex both with men and women can acquire HIV from a male partner and then transmit the virus to female partners. In a 2003 report of a study of HIV-infected people (5,156 men and 3,139 women), 34% of black men who have sex with men (MSM), 26% of Hispanic MSM, and 13% of white MSM reported having had sex with women [9]. However, these women may not have known of their male partner's bisexual activity: only 14% of white women, 6% of black women, and 6% of Hispanic women in this study acknowledged having a bisexual partner. In another CDC survey, 65% of the young men who had ever had sex with men also reported sex with women [10]. Women who have sex only with women and who have no other risk factors, such as injection drug use, are at very low risk for HIV infection (CDC, unpublished data, 2006).

### High-Risk Heterosexual Risk Factors

Most women are infected with HIV through high-risk heterosexual contact [3]. Black and Hispanic women account for 81% of the women living with HIV/AIDS in 2005 who acquired HIV through high-risk heterosexual contact [3]. Lack of HIV knowledge, lower perception of risk,

drug or alcohol use, and different interpretations of safer sex may contribute to this disproportion [11]. Relationship dynamics also play a role. For example, some women may not insist on condom use because they fear that their partner will physically abuse them or leave them [12]. Such sexual inequality is a major issue in relationships between young women and older men. In a CDC study of urban high schools, more than one third of black and Hispanic women had their first sexual encounter with a male who was older (3 or more years) [13]. These young women, compared with peers whose partners had been approximately their own age, had been younger at first sexual intercourse, less likely to have used a condom during first and most recently reported intercourse, or less likely to have used condoms consistently.

### **Biologic Vulnerability and Sexually Transmitted Diseases**

A woman is significantly more likely than a man to contract HIV infection during vaginal intercourse [14, 15]. Additionally, the presence of some sexually transmitted diseases greatly increases the likelihood of acquiring or transmitting HIV infection [16]. The rates of gonorrhea and syphilis are higher among women of color than among white women. These higher rates are especially marked at younger ages (15–24 years) [17].

### **Substance Use**

An estimated 1 in 5 new HIV diagnoses for women are related to injection drug use [3]. Sharing injection equipment contaminated with HIV is not the only risk associated with substance use. Women who use crack cocaine or other noninjection drugs may also be at high risk for the sexual transmission of HIV if they sell or trade sex for drugs [18]. Also, both casual and chronic substance users are more likely to engage in high-risk behaviors, such as unprotected sex, when they are under the influence of drugs or alcohol [19].

### **Socioeconomic Issues**

Nearly 1 in 4 African Americans and 1 in 5 Hispanics live in poverty [20]. Socioeconomic problems associated with poverty, including limited access to high-quality health care; the exchange of sex for drugs, money, or to meet other needs; and higher levels of substance use can directly or indirectly increase HIV risk factors [21]. A study of HIV transmission among black women in North Carolina found that women with a diagnosis of HIV infection were significantly more likely than women who were not infected to be unemployed; to have had more sex partners; to use crack/cocaine; to exchange sex for money, shelter, or drugs; or to receive public assistance [22].

### **Racial/Ethnic Differences**

The rates of HIV diagnosis and the risk factors for HIV infection differ for women of various races or ethnicities—a situation that must be considered when creating prevention programs. For example, even though the annual estimated rate of HIV diagnosis for black women decreased significantly—from 82.7 per 100,000 population in 2001 to 60.2 per 100,000 population in 2005—it remained 20 times the rate for white women [3, 23]. Overall, the rates of HIV diagnosis are much higher for black and Hispanic women than for white, Asian and Pacific Islander, or American Indian and Alaska Native women. The rates for black women are higher than the rates for all men except for black men [3, 24, 25].

### **Multiple Risk Factors**

Some women infected with HIV report more than 1 risk factor, highlighting the overlap in risk factors such as inequality in relationships, socioeconomic stresses, substance abuse, and psychological issues. For example, in the North Carolina study of HIV infection in black women, the participants most commonly reported that their reasons for risky behavior were financial dependence on male partners, feeling invincible, low self-esteem coupled with the need to feel loved by a male figure, and alcohol and drug use [22].

### PREVENTION

CDC estimates that 56,300 new HIV infections occurred in the United States in 2006 [26]. Populations of minority races/ethnicities are disproportionately affected by the HIV epidemic. To further reduce the incidence of HIV infection, CDC announced a new initiative, Advancing HIV Prevention, in 2003. This initiative comprises 4 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 HIV-infected persons and their partners, and further decreasing perinatal HIV transmission.

In the United States, women, particularly women of color, are at risk for HIV infection. CDC, through the Department of Health and Human Services Minority AIDS Initiative, explores ways to reduce disparities in communities made up of persons of minority races/ethnicities who are at high risk for HIV infection. CDC is also conducting demonstration projects in which women's social networks are used to reach high-risk persons in communities of color; CDC is also conducting outreach and testing for partners of HIV-infected men. Additionally, CDC recognizes the importance of further incorporating culture- and gender-relevant material into current interventions [27].

CDC funds prevention programs in state and local health departments and community-based organizations. The following are examples.

- In Illinois, Access Community Health Network, which is the largest network of community health centers in the nation, receives funding to implement counseling, testing, and referral (CTR) in Chicago communities with the highest rates of HIV diagnosis and funding to implement SISTA (Sisters Informing Sisters about Topics on AIDS), a social-skills training program aimed at reducing HIV sexual risk behavior among

African American women at high risk for HIV infection.

- In Massachusetts, CAB Health & Recovery Services, Inc., receives funding for HIV risk-reduction counseling and prevention case management and for Women RISE (Risk Identification, Strategies, and Empowerment), an HIV prevention services program that engages women and their partners who are at very high risk for HIV infection, who are homeless and living in family shelters, or who are identified through street outreach.
- In California, the Orange County Bar Foundation adapts SISTA for Latinas aged 18–24 years.
- In Florida, the Center for Multicultural Wellness & Prevention, Inc., addresses, through SISTA and CTR, the health issues that affect African American and Haitian women.
- In New York, the Community Healthcare Network provides prevention services through counseling, comprehensive risk counseling and referral, and RAPP (Real AIDS Prevention Project) interventions to African American and Hispanic women.

CDC also funds research on interventions to reduce HIV-related risk behaviors or their outcomes. For example, the Women and Infants Demonstration Projects were focused on low-income, inner-city sexually active women to measure injection drug use, sexual behaviors, and rates of HIV testing, as well as sexually transmitted diseases and pregnancy. The demonstration projects increased condom use and resulted in the RAPP intervention package, which is available, along with training and technical assistance, from CDC.

CDC is actively involved in the promising area of microbicides—creams or gels that can be applied vaginally before sexual contact to prevent HIV transmission. The development of a safe, easy-to-use microbicide would be a milestone in the worldwide fight against HIV/AIDS. CDC is

supporting the search for an effective microbicide agent through several lines of research, including

- conducting laboratory and animal studies that can help evaluate the safety and the efficacy of microbicides before they are studied in humans.
- supporting clinical trials to assess the safety of microbicides in humans in the United States, Asia, and Africa. Current human clinical studies include a phase I safety trial of UC-781, which is being conducted among women in the United States and Thailand.

To reduce mother-to-child HIV transmission in the United States, CDC has distributed approximately \$10 million annually since 1999 to several national organizations and a number of states with high HIV/AIDS rates. These funds support perinatal HIV prevention programs, enhanced surveillance for HIV-infected mothers and babies, education, and capacity building among health care providers and public health practitioners.

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## Understanding HIV and AIDS Data

**AIDS surveillance:** Through a uniform system, CDC receives reports of AIDS cases from all US states and dependent areas. Since the beginning of the epidemic, these data have been used to monitor trends because they are representative of all areas. The data are statistically adjusted for reporting delays and for the redistribution of cases initially reported without risk factors. As treatment has become more available, trends in new AIDS diagnoses no longer accurately represent trends in new HIV infections; these data now represent persons who are tested late in the course of HIV infection, who have limited access to care, or in whom treatment has failed.

**HIV surveillance:** Monitoring trends in the HIV epidemic today requires the collection of information on HIV cases that have not progressed to AIDS. Areas with requirements for confidential name-based HIV infection reporting use the same uniform system for data collection on HIV cases as for AIDS cases. A total of 33 states (Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming) have collected these data for at least 5 years, providing sufficient data to monitor HIV trends.

**HIV/AIDS:** This term is used to refer to 3 categories of diagnoses collectively: (1) a diagnosis of HIV infection (not AIDS), (2) a diagnosis of HIV infection and a later diagnosis of AIDS, (3) concurrent diagnoses of HIV infection and AIDS.

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**June 2006**

# HIV/AIDS among Women Who Have Sex with Women

To date, there are no confirmed cases of female-to-female sexual transmission of HIV in the United States database (K. McDavid, CDC, oral communication, March 2005). However, case reports of female-to-female transmission of HIV and the well-documented risk of female-to-male transmission [1] indicate that vaginal secretions and menstrual blood are potentially infectious and that mucous membrane (for example, oral, vaginal) exposure to these secretions has the potential to lead to HIV infection.

## STATISTICS

The following information comes from CDC unpublished data.

- Through December 2004, a total of 246,461 women were reported as HIV infected. Of these, 7,381 were reported to have had sex with women; however, most had other risk factors (such as injection drug use, sex with men who are infected or who have risk factors for infection, or, more rarely, receipt of blood or blood products).
- Of the 534 (of 7,381) women who were reported to have had sex only with women, 91% also had another risk factor—typically, injection drug use.
- HIV-infected women whose only initially reported risk factor is sex with women are given high priority for follow-up investigation. As of December 2004, none of these investigations had confirmed female-to-female HIV transmission, either because other risk

factors were later identified or because some women declined to be interviewed.

- A study of more than 1 million female blood donors found no HIV-infected women whose only risk factor was sex with women. Despite the absence of confirmed cases of female-to-female transmission of HIV, the findings do not negate the possibility. Information on whether a woman had sex with women is missing in more than 60% of the 246,461 case reports—possibly because the physician did not ask or the woman did not volunteer the information.

## RISK FACTORS AND BARRIERS TO PREVENTION

Surveys of behavioral risk factors have been conducted in groups of women who have sex with women (WSW). These surveys generally have been of WSW samples that differ in criteria for participation, location for recruitment, and definition of WSW. As a result, the findings of these surveys cannot be generalized to all WSW. The findings have, however, suggested that some WSW have other behavioral risk factors, such as injection drug use and unprotected vaginal sex with men who have sex with men (MSM) or men who inject drugs.

## PREVENTION

Although there are no confirmed cases of female-to-female transmission of HIV, female sexual contact should be considered a possible means of

transmission among WSW. These women need to know

- **their own and their partner's HIV serostatus.** This knowledge can help women who are not infected to change their behaviors and thus reduce their risk of becoming infected. For women who are infected, this knowledge can help them get early treatment and avoid infecting others.
- **the risk for exposure through a mucous membrane.** Potentially, HIV can be transmitted through the exposure of a mucous membrane (in the mouth, for example), especially if the tissue is cut or torn, to vaginal secretions and menstrual blood. The potential for transmission is greater during early and late-stage HIV infection, when the amount of virus in the blood is expected to be highest.
- **the potential benefits of using condoms.** Condoms should be used consistently and correctly during every sexual contact with men

or when using sex toys. Sex toys should not be shared. No barrier methods for use during oral sex have been evaluated as effective by the Food and Drug Administration. However, natural rubber latex sheets, dental dams, condoms that have been cut and spread open, or plastic wrap may offer some protection from contact with body fluids during oral sex and thus may reduce the possibility of HIV transmission.

Health care providers need to remember that sexual identity does not necessarily predict behavior and that some women who identify themselves as WSW or lesbian may be at risk for HIV infection through unprotected sex with men.

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### For more information . . .

#### **CDC HIV/AIDS**

<http://www.cdc.gov/hiv>  
*CDC HIV/AIDS resources*

#### **CDC-INFO**

1-800-232-4636  
*Information about personal risk and where to get an HIV test*

#### **CDC National HIV Testing Resources**

<http://www.hivtest.org>  
*Location of HIV testing sites*

#### **CDC National Prevention Information Network (NPIN)**

1-800-458-5231  
<http://www.cdcpin.org>  
*CDC resources, technical assistance, and publications*

#### **AIDSinfo**

1-800-448-0440  
<http://www.aidsinfo.nih.gov>  
*Resources on HIV/AIDS treatment and clinical trials*



1-800-CDC-INFO (232-4636)  
 In English, en Español  
 24 Hours/Day  
 cdcinfo@cdc.gov  
 http://www.cdc.gov/hiv

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# HIV/AIDS among Youth

Young people in the United States are at persistent risk for HIV infection. This risk is especially notable for youth of minority races and ethnicities. Continual HIV prevention outreach and education efforts, including programs on abstinence and on delaying the initiation of sex, are required as new generations replace the generations that benefited from earlier prevention strategies. Unless otherwise noted, this fact sheet defines youth, or young people, as persons who are 13–24 years of age.

## STATISTICS

### HIV/AIDS in 2004

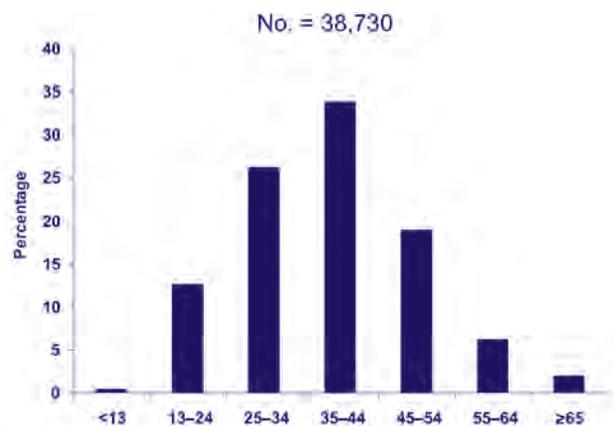
The following are based on data from the 35 areas with long-term, confidential name-based HIV reporting.\*

- An estimated 4,883 young people received a diagnosis of HIV infection or AIDS, representing about 13% of the persons given a diagnosis during that year [1].
- HIV infection progressed to AIDS more slowly among young people than among all persons with a diagnosis of HIV infection. The following are the proportions of persons in whom HIV infection did not progress to AIDS within 12 months after diagnosis of HIV infection:
  - 81% of persons aged 15–24
  - 70% of persons aged 13–14
  - 61% of all persons
- African Americans were disproportionately affected by HIV infection, accounting for 55% of

all HIV infections reported among persons aged 13–24 [2].

- Young men who have sex with men (MSM), especially those of minority races or ethnicities, were at high risk for HIV infection. In the 7 cities that participated in CDC’s Young Men’s Survey during 1994–1998, 14% of African American MSM and 7% of Hispanic MSM aged 15–22 were infected with HIV [3].
- During 2001–2004, in the 33 states with long-term, confidential name-based HIV reporting, 62% of the 17,824 persons 13–24 years of age given a diagnosis of HIV/AIDS were males, and 38% were females.

### Age of persons with HIV infection or AIDS diagnosed during 2004



Note. Based on data from 35 areas with long-term, confidential name-based HIV reporting.

### AIDS in 2004

- An estimated 2,174 young people received a diagnosis of AIDS (5.1% of the estimated total

\*See box on page 5 for a list of the 35 areas.

of 42,514 AIDS diagnoses), and 232 young people with AIDS died [1].

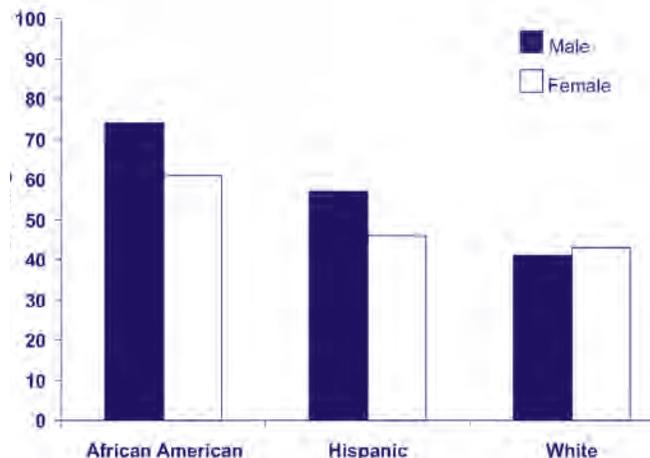
- An estimated 7,761 young people were living with AIDS, a 42% increase since 2000, when 5,457 young people were living with AIDS [1].
- Young people for whom AIDS was diagnosed during 1996–2004 lived longer than persons with AIDS in any other age group except those younger than 13 years. Nine years after receiving a diagnosis of AIDS, 76% of those aged 13–24 were alive, compared with
  - 81% of those younger than age 13
  - 74% of those aged 25–34
  - 70% of those aged 35–44
  - 63% of those aged 45–54
  - 53% of those aged 55 and older [1].
- Since the beginning of the epidemic, an estimated 40,059 young people in the United States had received a diagnosis of AIDS, and an estimated 10,129 young people with AIDS had died. They accounted for about 4% of the estimated total of 944,306 AIDS diagnoses and 2% of the 529,113 deaths of people with AIDS [1].

## RISK FACTORS AND BARRIERS TO PREVENTION

### Sexual Risk Factors

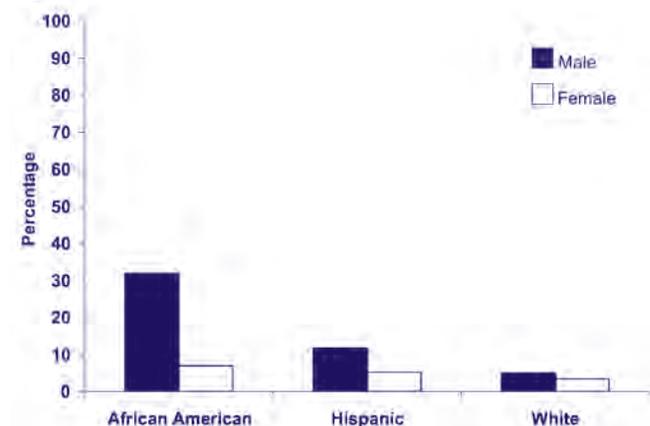
**Early age at sexual initiation.** According to CDC’s Youth Risk Behavioral Survey (YRBS), many young people begin having sexual intercourse at early ages: 47% of high school students have had sexual intercourse, and 7.4% of them reported first sexual intercourse before age 13 [4]. HIV/AIDS education needs to take place at correspondingly young ages, before young people engage in sexual behaviors that put them at risk for HIV infection.

### High school students reporting ever having had sexual intercourse, 2003



Source. CDC’s Youth Risk Behavioral Survey, 2003. (See reference 4.)

### High school students reporting sexual intercourse for the first time before age 13, 2003



Source. CDC’s Youth Risk Behavioral Survey, 2003. (See reference 4.)

**Heterosexual transmission.** Young women, especially those of minority races or ethnicities, are increasingly at risk for HIV infection through heterosexual contact. According to data from a CDC study of HIV prevalence among disadvantaged youth during the early to mid-1990s, the rate of HIV prevalence among young women aged 16–21 was 50% higher than the rate among young men in that age group [5]. African American women in this study were 7 times

as likely as white women and 8 times as likely as Hispanic women to be HIV-positive. Young women are at risk for sexually transmitted HIV for several reasons, including biologic vulnerability, lack of recognition of their partners' risk factors, inequality in relationships, and having sex with older men who are more likely to be infected with HIV.

**MSM.** Young MSM are at high risk for HIV infection, but their risk factors and the prevention barriers they face differ from those of persons who become infected through heterosexual contact. According to a CDC study of 5,589 MSM, 55% of young men (aged 15–22) did not let other people know they were sexually attracted to men [6]. MSM who do not disclose their sexual orientation are less likely to seek HIV testing, so if they become infected, they are less likely to know it. Further, because MSM who do not disclose their sexual orientation are likely to have 1 or more female sex partners, MSM who become infected may transmit the virus to women as well as to men. In a small study of African American MSM college students and nonstudents in North Carolina, the participants had sexual risk factors for HIV infection, and 20% had a female sex partner during the preceding 12 months [7].

**Sexually transmitted diseases (STDs).** The presence of an STD greatly increases a person's likelihood of acquiring or transmitting HIV [8]. Some of the highest STD rates in the country are those among young people, especially young people of minority races and ethnicities [9].

### **Substance Use**

Young people in the United States use alcohol, tobacco, and other drugs at high rates [10]. Both casual and chronic substance users are more likely to engage in high-risk behaviors, such as unprotected sex, when they are under the influence of drugs or alcohol [11]. Runaways and other homeless young people are at high risk for HIV infection if they are exchanging sex for drugs or money.

### **Lack of Awareness**

Research has shown that a large proportion of young people are not concerned about becoming infected with HIV [12]. Adolescents need accurate, age-appropriate information about HIV infection and AIDS, including how to talk with their parents or other trusted adults about HIV and AIDS, how to reduce or eliminate risk factors, how to talk with a potential partner about risk factors, where to get tested for HIV, how to use a condom correctly. Information should also include the concept that abstinence is the only 100% effective way to avoid infection.

### **Poverty and Out-of-School Youth**

Nearly 1 in 4 African Americans and 1 in 5 Hispanics live in poverty [13]. The socioeconomic problems associated with poverty, including lack of access to high-quality health care, can directly or indirectly increase the risk for HIV infection [14]. Young people who have dropped out of school are more likely to become sexually active at younger ages and to fail to use contraception [15].

### **The Coming of Age of HIV-Positive Children**

Many young people who contracted HIV through perinatal transmission are facing decisions about becoming sexually active. They will require ongoing counseling and prevention education to ensure that they do not transmit HIV.

## **PREVENTION**

CDC estimates that 56,300 new HIV infections occurred in the United States in 2006 [16]. Populations of minority races or ethnicities are disproportionately affected by the HIV epidemic. To reduce further the incidence of HIV, CDC announced a new initiative, Advancing HIV Prevention ([http://www.cdc.gov/hiv/topics/prev\\_prog/AHP](http://www.cdc.gov/hiv/topics/prev_prog/AHP)), in 2003. This initiative comprises 4 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 HIV-infected persons and their partners, and further decreasing perinatal HIV transmission.

Through the Minority AIDS Initiative (<http://www.cdc.gov/programs/hiv08.htm>), CDC explores ways to reduce health disparities in communities made up of persons of minority races or ethnicities who are at high risk for HIV. These funds are used to address the high-priority HIV prevention needs in such communities.

CDC provides 9 awards to community-based organizations (CBOs) that focus primarily on youth and provides indirect funding through state, territorial, and local health departments to organizations serving youth. Of these 9 awards, 5 are focused on African Americans, 3 on Hispanics, 1 on Asians and Pacific Islanders, and 1 on whites. The following are some CDC-tested prevention programs that state and local health departments and CBOs can provide for youth.

- Teens Linked to Care is focused on young people aged 13–29 who are living with HIV.
- Street Smart is an HIV/AIDS and STD prevention program for runaway and homeless youth.
- PROMISE (Peers Reaching Out and Modeling Intervention Strategies for HIV/AIDS Risk Reduction in their Community) is a community-level HIV prevention intervention that relies on role-model stories and peers from the community.
- Adult Identity Mentoring project, which encourages students to articulate personal goals and then teaches them the skills required to achieve those goals, can be effective in helping at-risk youth delay the initiation of sex [17].

CDC research has shown that early, clear parent-child communication regarding values and expectations about sex is an important step in helping adolescents delay sexual initiation and make responsible decisions about sexual behaviors

later in life. Parents are in a unique position to engage their children in conversations about HIV, STD, and teen pregnancy prevention because the conversations can be ongoing and timely [18].

Schools also can be important partners for reaching youth before high-risk behaviors are established, as evidenced by the YRBS finding that 88% of high school students in the United States reported having been taught about AIDS or HIV infection in school.

Overall, a multifaceted approach to HIV/AIDS prevention, which includes individual, peer,

### Understanding HIV and AIDS Data

**AIDS surveillance:** Through a uniform system, CDC receives reports of AIDS cases from all US states and territories. Since the beginning of the epidemic, these data have been used to monitor trends because they are representative of all areas. The data are statistically adjusted for reporting delays and for the redistribution of cases initially reported without risk factors. As treatment has become more available, trends in new AIDS diagnoses no longer accurately represent trends in new HIV infections; these data now represent persons who are tested late in the course of HIV infection, who have limited access to care, or in whom treatment has failed.

**HIV surveillance:** Monitoring trends in the HIV epidemic today requires collecting information on HIV cases that have not progressed to AIDS. Areas with confidential name-based HIV infection reporting requirements use the same uniform system for data collection on HIV cases as for AIDS cases. A total of 35 areas—the US Virgin Islands, Guam, and 33 states (Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New York, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming)—have collected these data for at least 5 years, providing sufficient data to monitor HIV trends and to estimate risk behaviors for HIV infection. Recently, 9 additional areas have begun confidential name-based HIV surveillance, and data from these areas will be included in coming years.

**HIV/AIDS:** This term includes persons with a diagnosis of HIV infection (not AIDS), a diagnosis of HIV infection and a later diagnosis of AIDS, or concurrent diagnoses of HIV infection and AIDS.

familial, school, church, and community programs, is necessary to reduce the incidence of HIV/AIDS in young people. For Guidelines for Effective School Health Education to Prevent the Spread of AIDS, visit <http://www.cdc.gov/HealthyYouth/sexualbehaviors/guidelines/guidelines.htm>.

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### For more information . . .

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