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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].

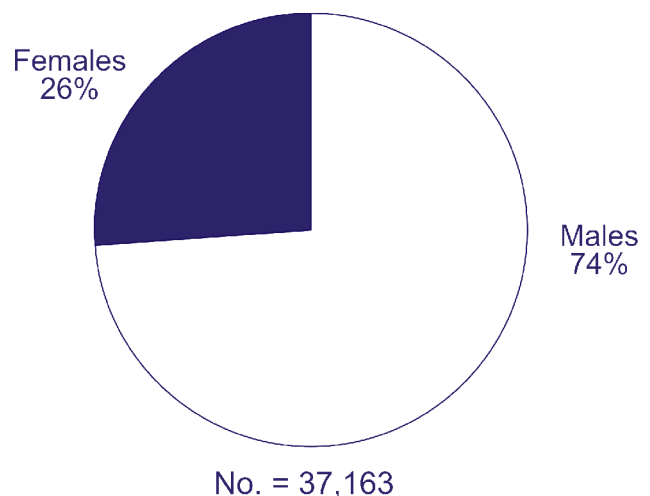
STATISTICS

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].

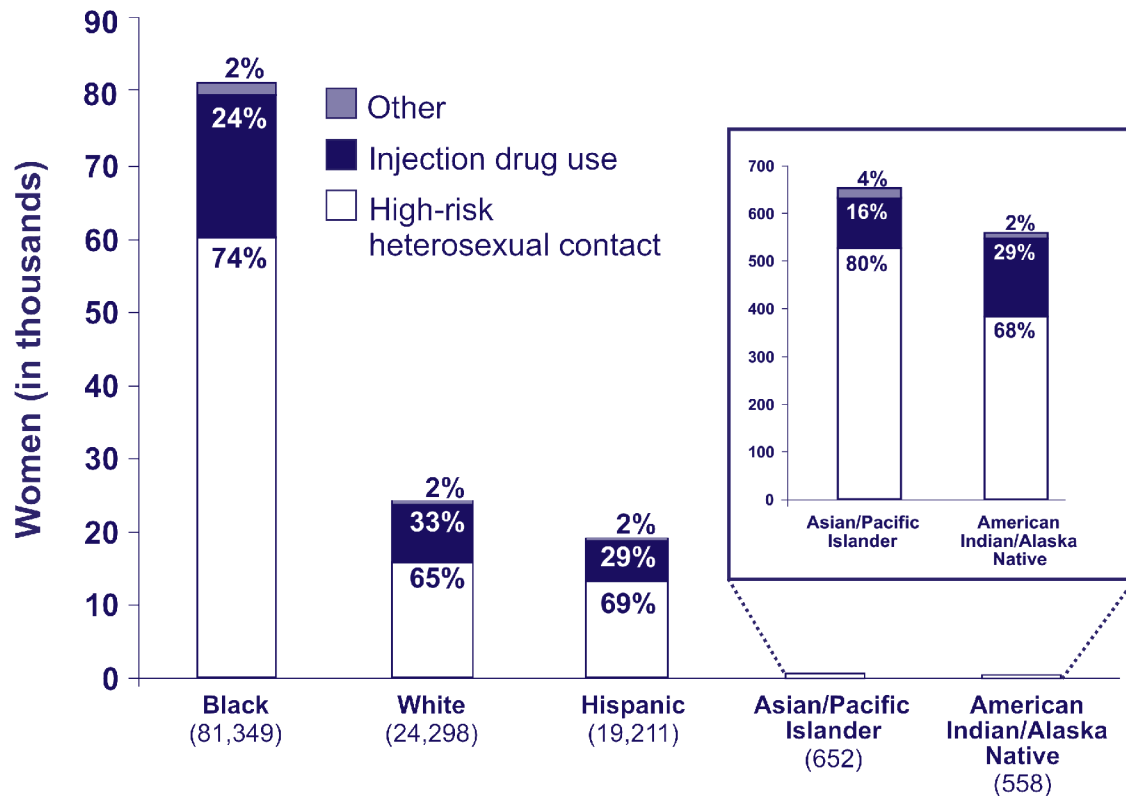
Sex of adults and adolescents with HIV/AIDS diagnosed during 2005



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.

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



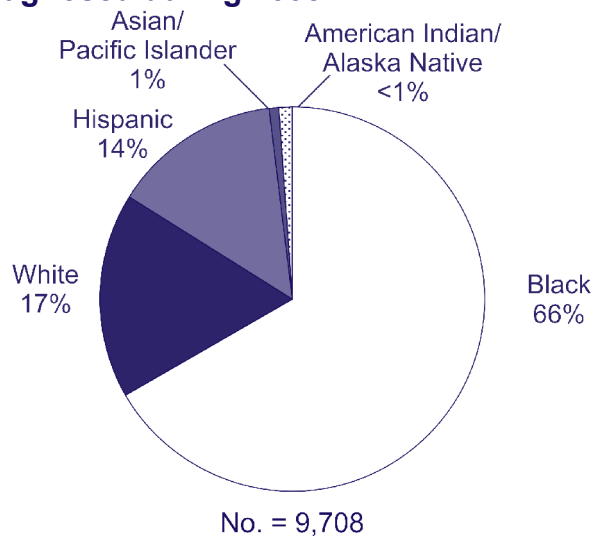
Note. Based on data from 33 states with long-term, confidential name-based HIV reporting.

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].

HIV/AIDS AMONG WOMEN

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. (%) [*]	2004 No. (%) [*]
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. (%) [*]	2004 No. (%) [*]
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. 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 [26].

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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Information about personal risk and where to get an HIV test

CDC National HIV Testing Resources

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Location of HIV testing sites

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CDC resources, technical assistance, and publications

AIDSinfo

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Resources on HIV/AIDS treatment and clinical trials