



Bureau of HIV/AIDS

Florida Annual Report 2007

Acquired Immune Deficiency Syndrome/ Human Immunodeficiency Virus

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Florida, Annual Report, 2007

Acquired Immune Deficiency Syndrome/Human Immunodeficiency Virus

In 2006, Florida ranked second among states in the number of reported acquired immune deficiency syndrome (AIDS) cases. New York reported 5,495 (14%), followed by Florida with 4,932 cases (13%), then California with 3,960 cases (10%), and Texas with 2,998 cases (8%). Florida ranked fifth among the 38 states that reported human immunodeficiency virus (HIV) cases in 2006. California, reported 6,581 cases (13%), followed by Illinois with 6,241 cases (12%), then New York with 5,326 cases (11%) and Pennsylvania 4,269 cases (8%).

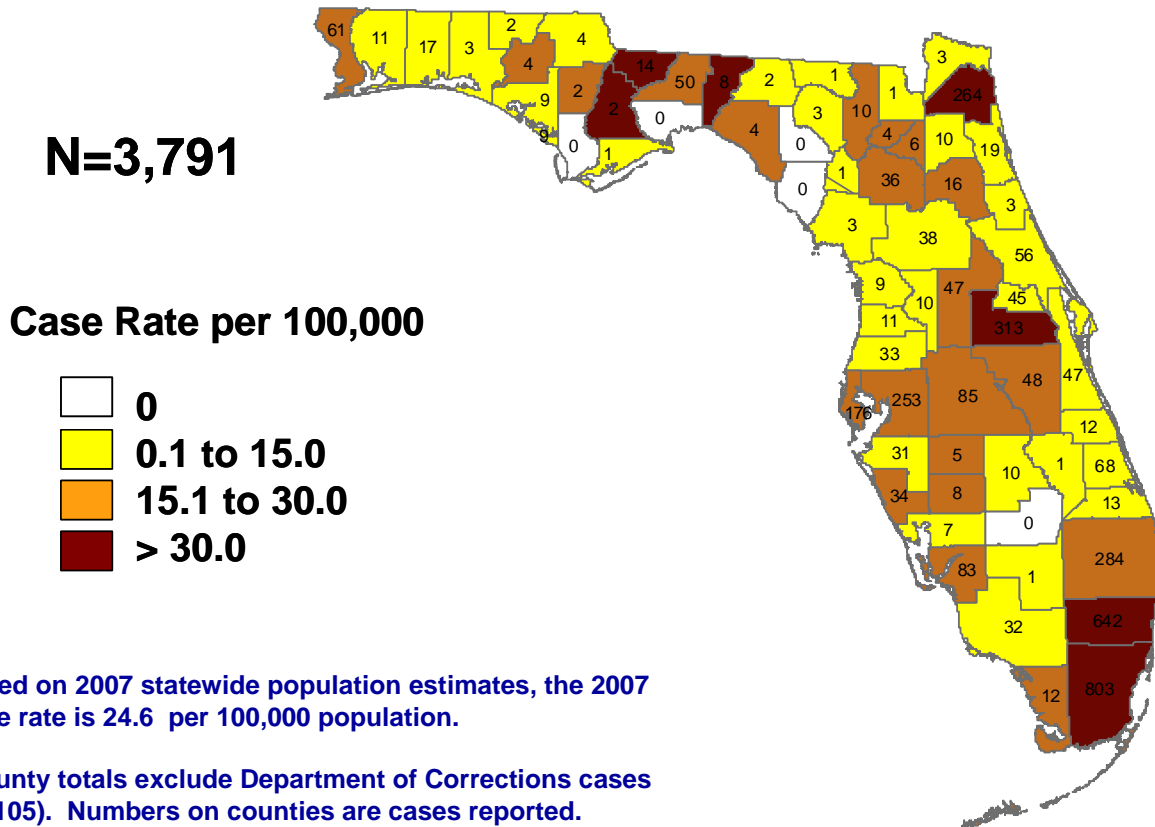
In 2007, Florida reported a higher percentage of AIDS cases among heterosexuals (26%) than the United States reported in 2006 (14%) (Note: US data not available for 2007). Florida also reported a lower percentage of AIDS cases among men who had sex with men (MSM) and injection drug users (IDU) than the United States. MSM/IDU cases accounted for 5% of total reported cases in Florida and 7% in the United States. A slightly higher proportion of cases with no identified risk (NIR) were reported in Florida (13%) than in the United States as a whole (11%). Florida reported a slightly higher percentage of AIDS cases among blacks (54%) compared with the United States (49%). Florida also reported a higher percentage of cases among women (32%) compared with the United States (19%).

Similar to reported AIDS cases in 2007, Florida reported a higher percentage of HIV heterosexual cases (32%) compared to reported cases in the United States (20%). Florida reported a lower percentage of IDU than the United States. MSM/IDU cases accounted for (3%) of total reported cases in Florida and (4%) in the United States. United States reported a slightly higher percentage of cases with NIR compared with the Florida, 25% versus 22%. The state reported a lower percentage of HIV cases among blacks (45%) compared with the United States (49%). Florida also reported a slightly higher percentage of cases among women (30%) compared with the United States (27%).

In 2007, at least one AIDS case was reported in all but five counties (Figure 1). Although the AIDS epidemic is widespread throughout Florida, the majority of cases were reported from the seven most populous counties: Broward, Duval, Hillsborough, Miami-Dade, Orange, Palm Beach, and Pinellas. These seven counties reported a combined total of 2,735 cases, or 72% of Florida's total reported cases in 2007. The greatest numbers of AIDS cases were reported from three counties located in the southeastern part of the state, Broward, Miami-Dade, and Orange. These three counties reported a combined total of 1,758 cases in 2007, or 46% of the statewide total.

Analysis of county-specific AIDS case rates per 100,000 population for 2007, for counties with 20 or more reported AIDS cases in 2007, indicate that Broward County ranked the highest with a rate of 43.5, followed, Miami-Dade (39.2), Duval (35.6), and Orange (34.5) Counties.

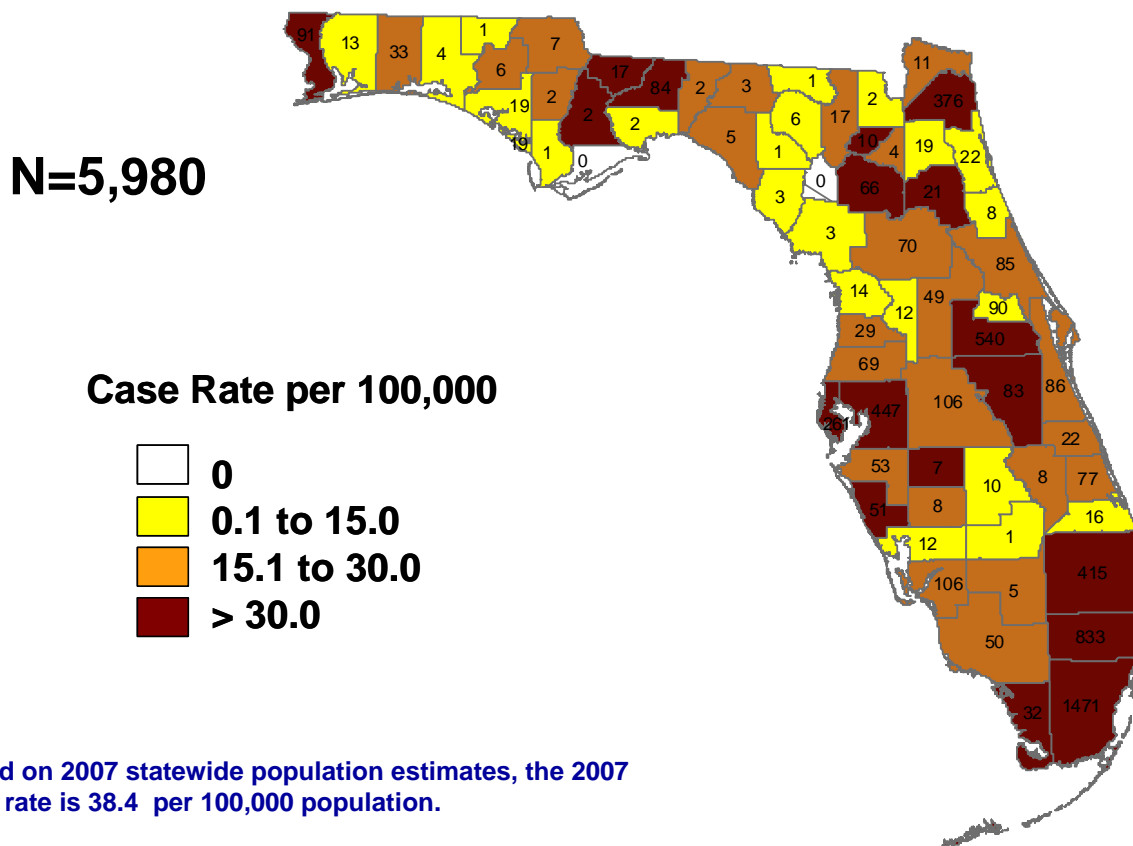
Figure 1. AIDS cases and rates per 100,000 population, by county of residence, Florida, 2007 (excluding Department of Corrections).



In 2007, at least one HIV case was reported in all but two counties (Figure 2). The majority of HIV cases were also reported from the same seven counties. These seven counties reported a combined total of 4,343 cases, or 73% of Florida's total reported cases in 2007. The greatest numbers of HIV cases were reported from Miami-Dade, Broward, and Orange Counties. These three counties reported a combined total of 2,844 cases in 2007, or 47% of the statewide total.

Analysis of county-specific data for 2007 indicate that Miami-Dade County ranked the highest with 25% of the HIV cases, followed by Broward (14%), Orange (9%), Hillsborough (7%) and Palm Beach (7%).

Figure 2. HIV cases, by county of residence, Florida, 2007 (excluding Department of Corrections).

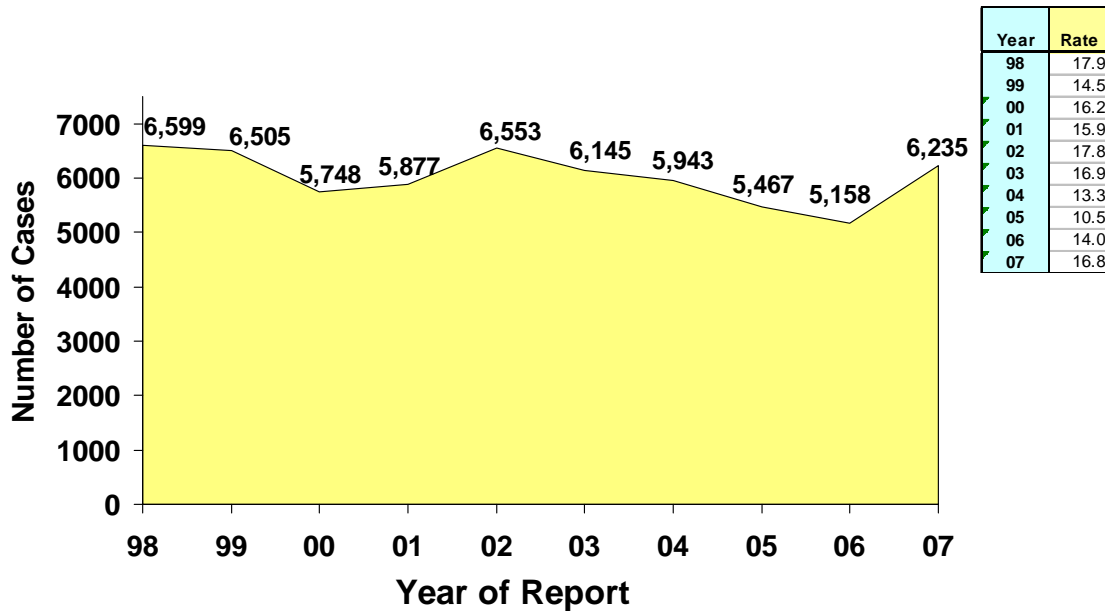


Based on 2007 statewide population estimates, the 2007 state rate is 38.4 per 100,000 population.

*County totals exclude Department of Corrections cases (N=255). This map does not reflect HIV incidence. Numbers on counties are cases reported.

Generally, HIV cases remained fairly stable with an increase in 2002 due to increased HIV testing statewide as part of the "Get to Know Your Status" campaign. Since that time, newly reported HIV cases have decreased each year (Figure 3). Note: enhanced reporting laws were implemented in Nov. 2006, leading to an artificial peak in HIV cases in 2007.

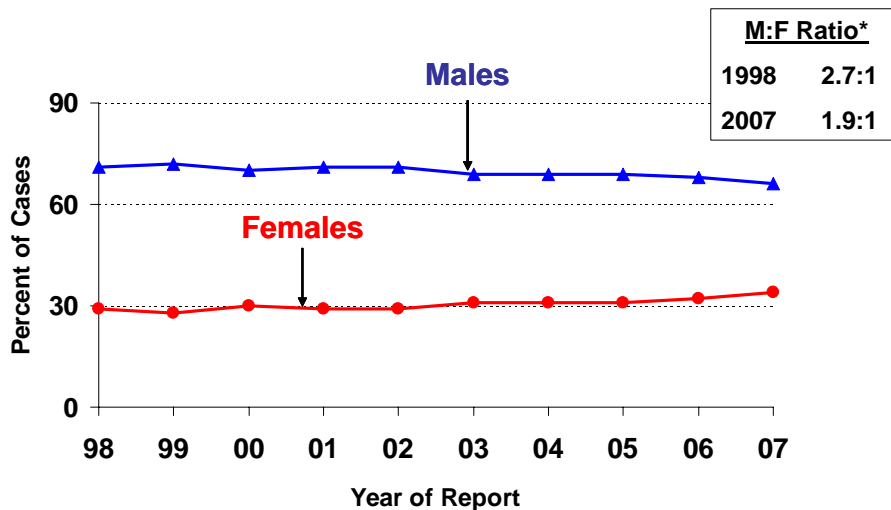
Figure 3. HIV case rates per 100,000 population*, by year of report, Florida, 1998-2007.



Comment: Generally, HIV cases remained fairly stable with an increase in 2002 due to increased HIV testing statewide as part of the “Get to Know Your Status” campaign. Since that time, newly reported HIV cases have decreased each year. **Note: enhanced reporting laws were implemented in Nov. 2006, leading to an artificial peak in HIV cases in 2007.**

In 1998, 29% of the AIDS cases reported in Florida were female (Figure 4). Over the past ten years, the proportion of AIDS cases among women has increased steadily. This has resulted in a decline of the male-to-female ratio, from 2.7:1 in 1998 to 1.9:1 in 2007. In 2007, the case rate per 100,000 population was 33.5 among adult males and 16.2 among adult females, indicating that AIDS cases in this period were still more likely to be reported among males than females in Florida.

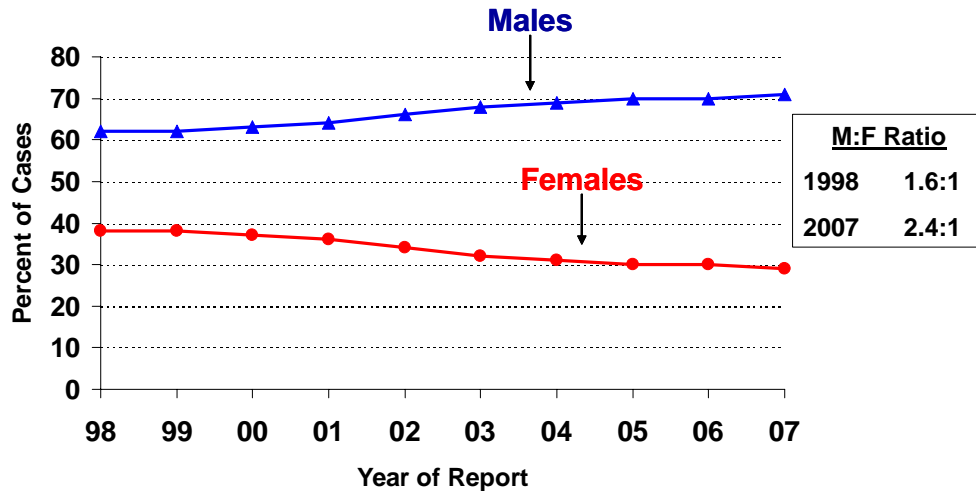
Figure 4. Percent of adult AIDS cases by sex and year of report, Florida, 1998 – 2007.



Comment: AIDS cases tend to represent HIV transmission that occurred many years ago. The relative increases in female cases reflect the changing face of the AIDS epidemic over time.
 *The male-to-female ratio is the number or percent of cases among males divided by the number or percent of female cases.

In 1998, 38% of the HIV cases reported in Florida were female (Figure 5). The proportion of HIV cases among women has decreased steadily over the past ten years. The result is an increase of the male-to-female ratio, from 1.6:1 in 1998 to 2.4:1 in 2007. This increase in the male-to-female ratio differs from the pattern seen for the ratio for AIDS cases during the same time period.

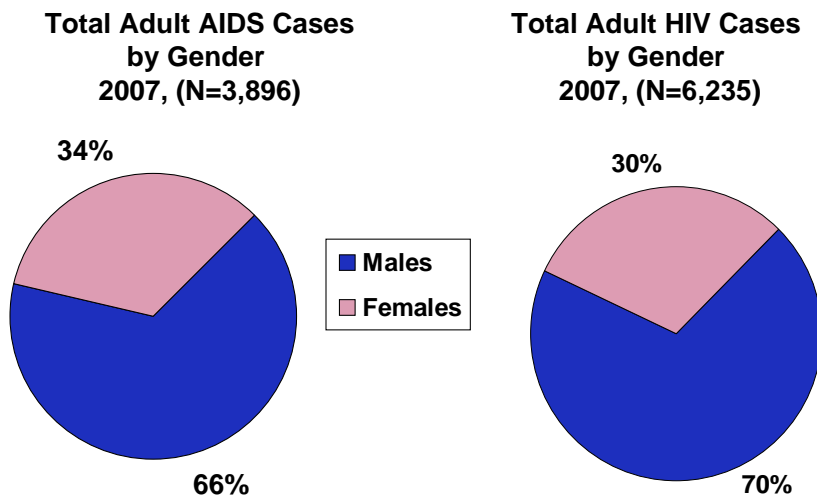
Figure 5. Percent of adult HIV cases by sex and year of report, Florida, 1998–2007.



Comment: The trend for HIV cases by sex is the opposite of that for AIDS cases. Recent trends in HIV transmission are best described by the HIV case data. The relative increases in male HIV cases might be attributed to proportional increases in HIV transmission among men who have sex with men (MSM), which may influence future AIDS trends. There is additional evidence to support this MSM hypothesis, which we will now examine more closely.

In 2007, a total of 2,571 adult males and 1,317 adult females were reported with AIDS, representing 66% and 34% of cases, respectively (Figure 6). Also in 2007, a total of 3,608 adult males and 1,579 adult females were reported with HIV infection, representing 70% and 30% of cases, respectively.

Figure 6. Percentage of adult AIDS cases by sex, Florida, compared with percentage of adult HIV cases by sex, Florida, 2007.

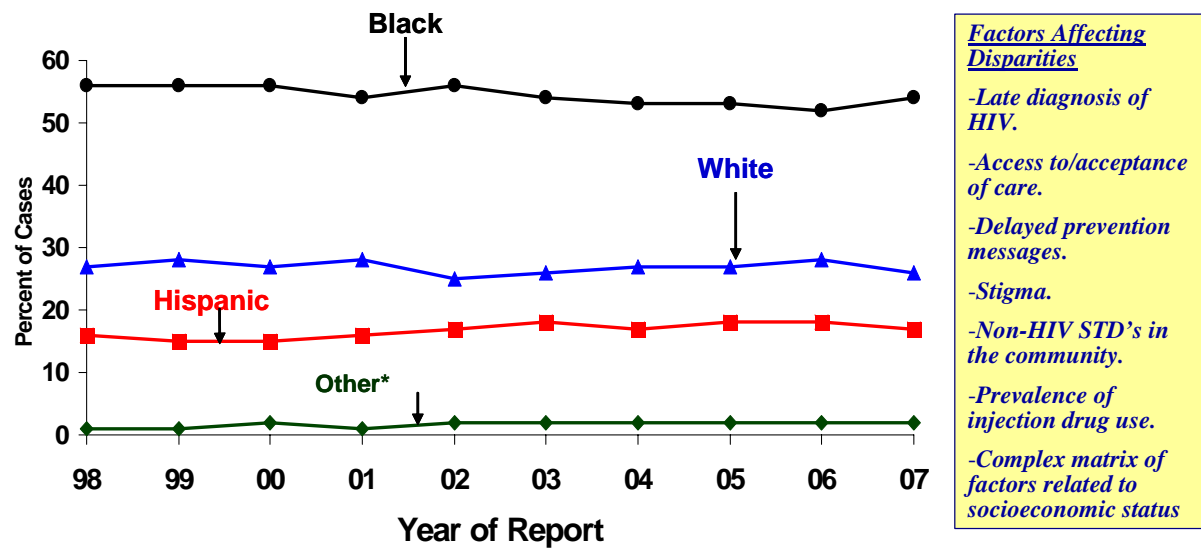


Comment: Florida's Adult Population is: 49% Male and 51% Female, therefore male cases are disproportionately impacted.

HIV case reporting, implemented in July 1997, tends to indicate newer infections than are reflected by AIDS case data, although we do not know the proportion of diagnosed HIV cases that were recently acquired. HIV case reports augment AIDS case data and provide good information by age, sex and race/ethnicity on persons who have been tested confidentially. Overall, however, HIV infection data represent the minimum of HIV prevalence in Florida, which includes persons undiagnosed and unaware of their infection and is estimated at approximately 125,000 persons living with HIV infection.

Twenty-seven percent of the adult AIDS cases reported in Florida in 1998 were white, compared with 56% black and 16% Hispanic (Figure 7). Over the past ten years the proportion of AIDS cases among whites, blacks and Hispanics has remained fairly stable.

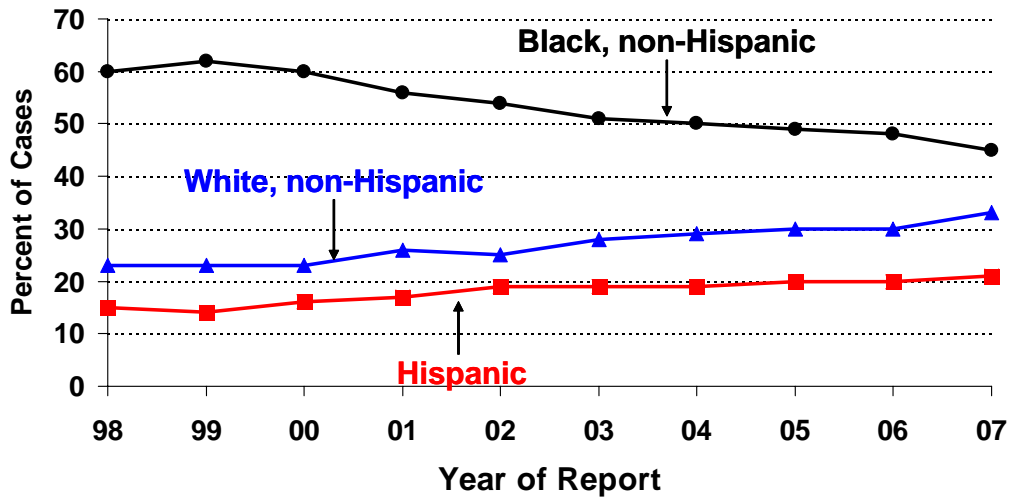
Figure 7. Percent of adult AIDS cases by race/ethnicity and year of report, Florida, 1998–2007.



Comment: In 2007, blacks accounted for 54% of reported AIDS cases, but only 15% of the population. Hispanic cases remain stable at 17% in 2007. Disparities are even more evident among women: Annually, more than 70% of female AIDS cases have been reported among black women since 1988. HIV case reporting, implemented in mid-1997, has shown a very similar distribution of cases by race/ethnicity and sex.
 *Other includes American Indian/Alaska Native, Asian/Pacific Islander, and Multi-racial.

Twenty-three percent of the adult HIV cases reported in Florida in 1998 were white, compared with 60% black (Figure 8). By 2007, the percentage of HIV cases increased for whites (33%) and decreased among blacks to 45%. The percentage of HIV cases among Hispanics has realized a slight steady increase since 2000.

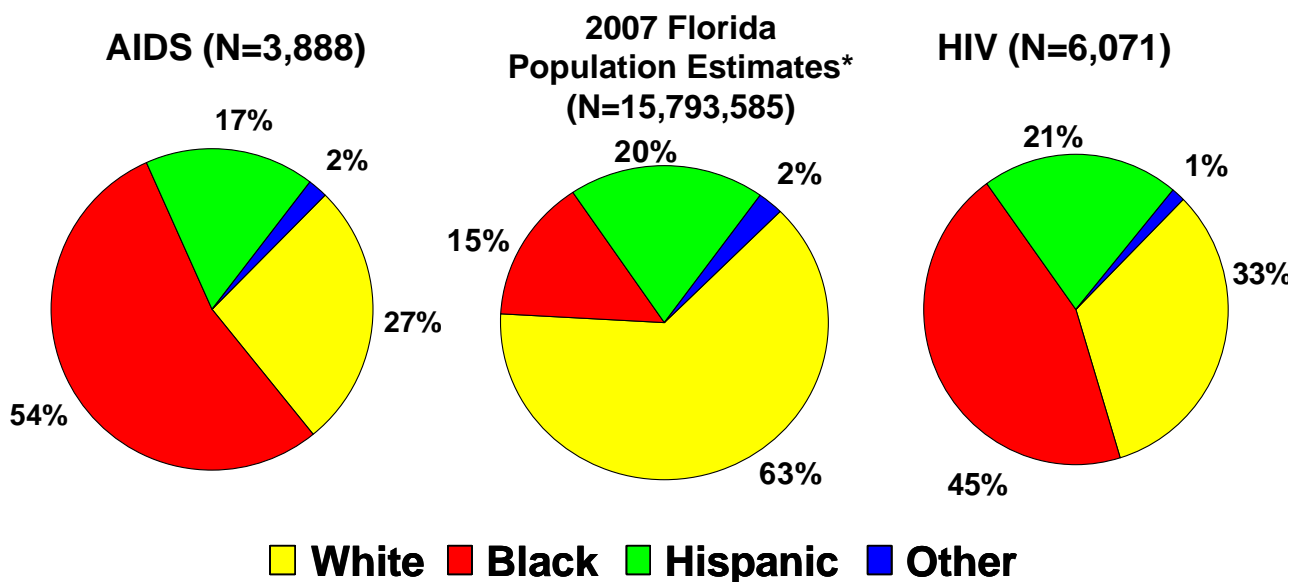
Figure 8. Percent of adult HIV cases by race/ethnicity and year of report, Florida, 1998–2007.



Comment: In absolute numbers, from 1998-2007, HIV cases among blacks decreased by 31%, while increasing by 33% among whites and 27% among Hispanics. The decreases among blacks may correspond to some extent with recent targeted prevention, while the increases among whites may be associated with recent increases in HIV transmission among white and Hispanic MSM.

Blacks comprise only 15% of the adult population, but represent 54% of the AIDS cases and 45% of the HIV cases reported in 2007 (Figure 9). Hispanics comprise 20% of Florida’s adult population, and account for 17% of the AIDS cases and 21% of the HIV cases.

Figure 9. Percentage of adult AIDS cases by race/ethnicity, Florida, compared with percentage of adult HIV cases by race/ethnicity, Florida, 2007.



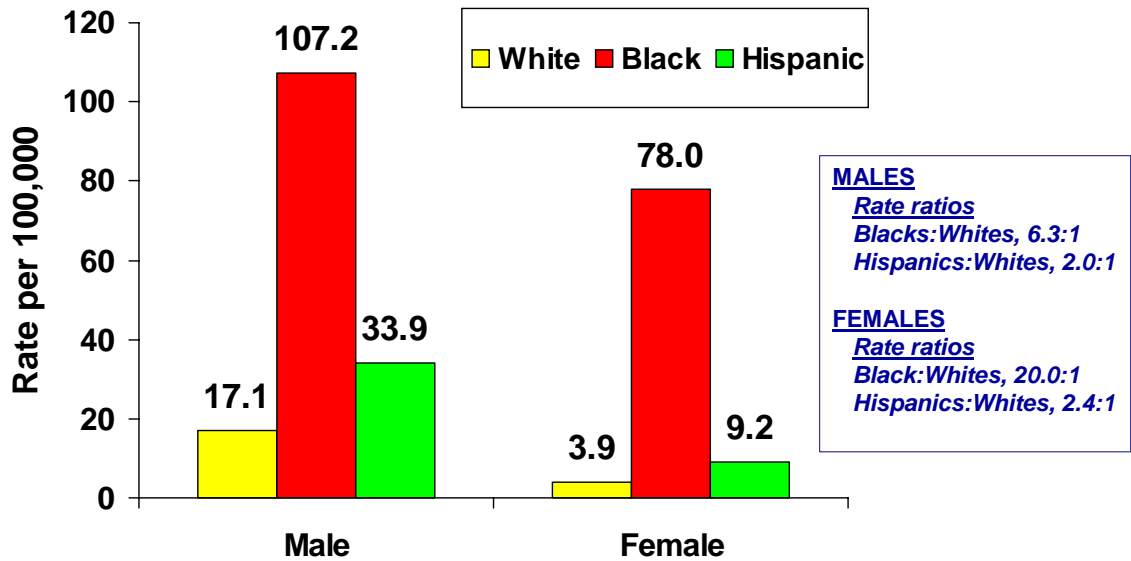
Comment: In 2007, blacks are over-represented among the AIDS and HIV cases, accounting for 54% of adult AIDS cases and 45% of adult HIV cases, but only 15% of the adult population. Hispanics represent 20% of the adult population and account for 17% of the adult AIDS cases and 21% of the adult HIV cases. A group is disproportionately impacted to the extent that the percentage of cases exceeds the percentage of population.

*Other includes Asian/Pacific Islanders, Native Alaskans/American Indians and mixed races.

*2007 Florida Population Estimates, Adults (Ages 13+), DOH, Office of Planning, Evaluation and Data Analysis

Black men and, to an even greater extent, black women are over-represented in the AIDS epidemic in terms of rates per 100,000 population (Figure 10). To a lesser extent, Hispanic males and females are also over-represented, when compared to the percentage of Hispanic population in Florida.

Figure 10. Adult AIDS cases and case rates per 100,000 population by sex and race/ethnicity, Florida, 2007.

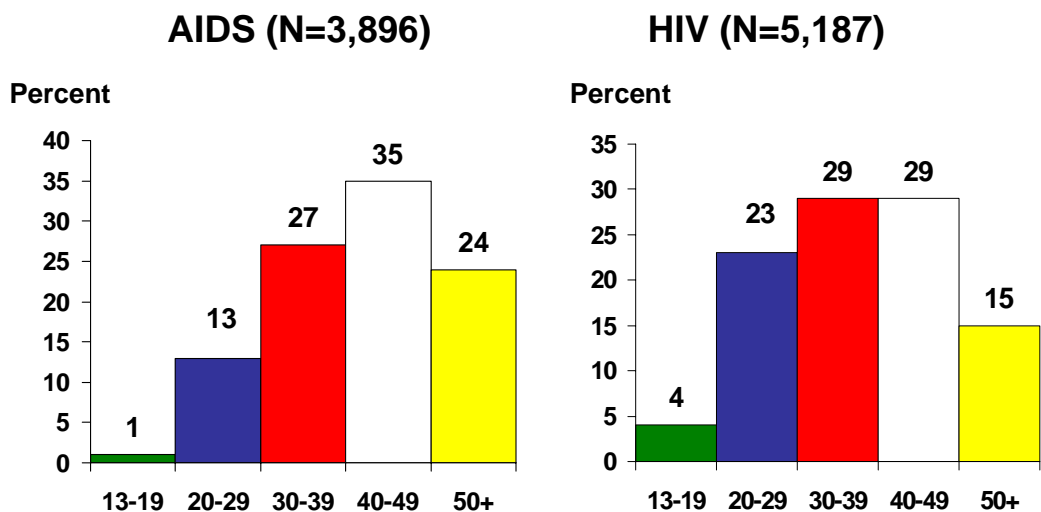


Comment: Among black males, the AIDS case rate for 2007 is 6 times higher than among white males. Among black females, the AIDS case rate is 20 times higher than among white females. Hispanic male rates are 2 times higher and Hispanic female rates are 2 times higher than the rates among their white counterparts.
 *2007 Florida Population Estimates, DOH, Office of Planning, Evaluation and Data Analysis for ages 13+.

As in previous years, the greatest proportion of AIDS cases reported in 2007 was among persons 40-49 years old (35%) (Figure 11). The 30-39 age group was second, with 27% of the reported AIDS cases. The 20-29 age group accounted for 13% of these cases, and the 50-and-older age group accounted for 24%. Persons reported with AIDS in the 40-49 age group account for 37% of the cases but only 16% of the total population.

Compared with AIDS cases, a greater proportion of HIV cases in 2007 were reported among those aged 30-39 (29%), those aged 20-29 (23%) and those aged 40-49 (29%). There was a lower proportion among those aged 13-19 (4%) and a higher proportion among those aged 20-29 years, but a lower proportion for those aged 50 and older (15%), all of which is consistent with earlier detection of HIV cases.

Figure 11. Age distribution of Florida's adult AIDS cases compared with the age distribution of Florida's adult HIV cases, 2007.



Comment: HIV cases tend to be younger than AIDS cases. HIV cases tend to reflect more recent transmission than AIDS cases, and thus present a more current picture of the epidemic. 15% of all new HIV cases were under the age of 25.

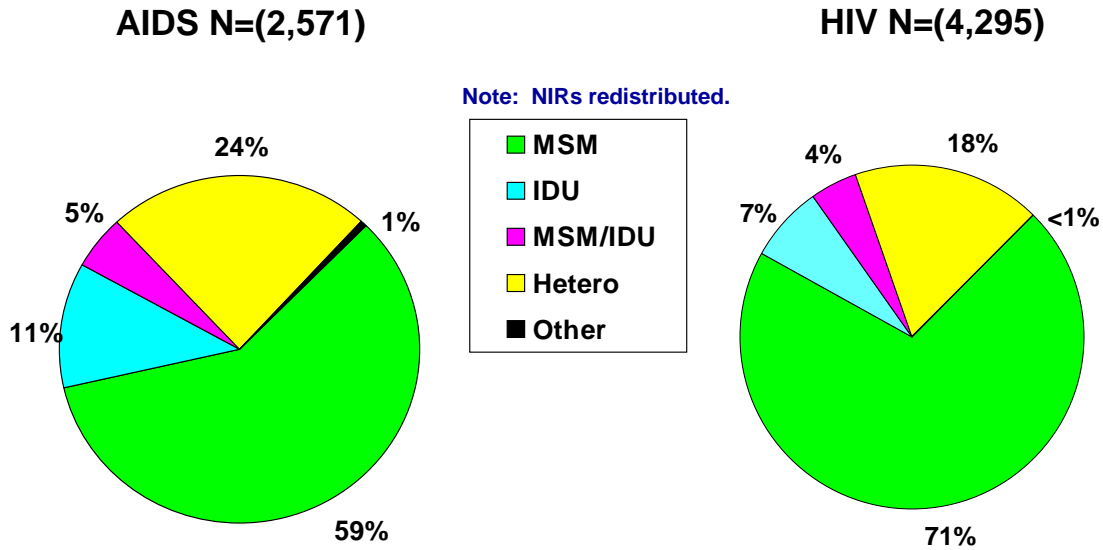
HIV/AIDS BY MODE OF EXPOSURE

The dynamics of the HIV epidemic are different in each population; so multiple data sets must be used to compile a representative epidemiologic profile for HIV prevention, planning, and targeting of resources and outreach. The following data represent HIV and AIDS cases by mode of exposure where cases reported with no identified risks (NIRs) have been redistributed into “known” risk categories, based on how people with no initially identified risk have been classified when a risk has become known.

Males

Among the male AIDS and HIV cases reported for 2007, MSM was the most common risk factor (59% and 71% respectively) followed by cases with a heterosexual risk (24% for AIDS and 18% for HIV) (Figure 12). People with an IDU risk are more common among AIDS cases (11%) than HIV cases (7%) as this has been a waning risk for HIV infection in Florida over the past 10 years.

Figure 12. Adult male AIDS and HIV cases by mode of exposure, Florida, 2007.

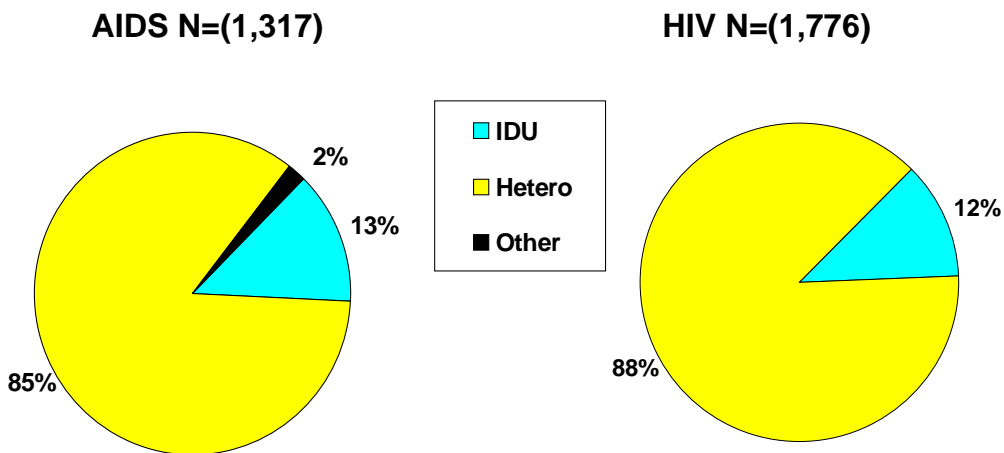


Comment: The recent increase among MSM is indicated by the higher percent of MSM among HIV cases compared to AIDS cases, as HIV cases tend to represent a more recent picture of the epidemic.

Females

Among the female AIDS and HIV cases reported for 2007, heterosexual contact was the highest risk followed by IDU (Figure 13).

Figure 13. Adult female AIDS and HIV cases by mode of exposure, Florida, 2007.



Comment: Among females, heterosexual is the dominant risk.

Prevalence Estimate of HIV/AIDS

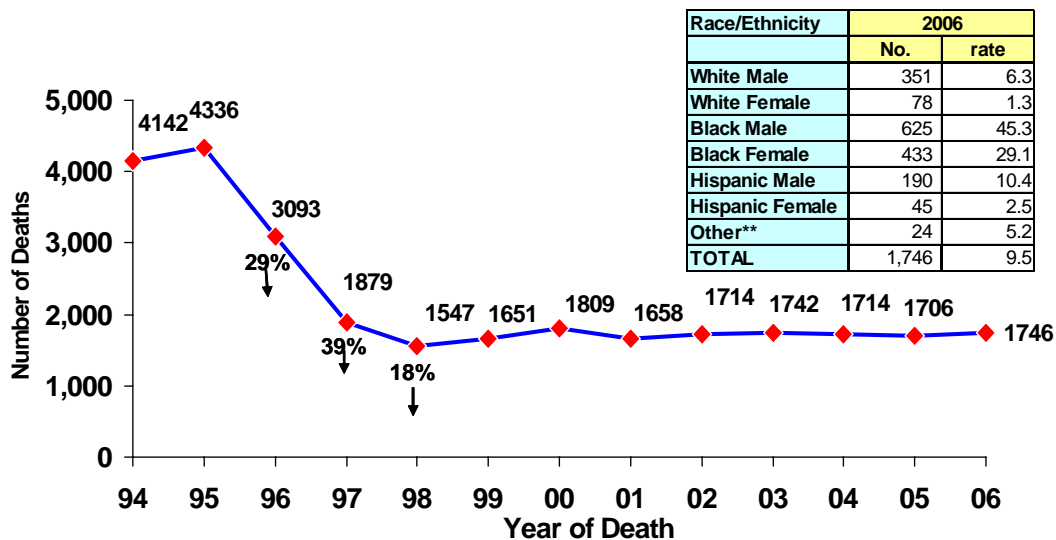
Assessment of the extent of the HIV epidemic is an important step in community planning for HIV prevention and HIV/AIDS patient care. The HIV prevalence estimate—the estimated number of persons living with HIV infection—includes those living with a diagnosis of HIV or AIDS and those who may be infected but who are unaware of their serostatus. Approximately 1,039,000–1,185,000 persons are living with HIV infection in the United States (2004). Florida has consistently reported 10–12% of the national AIDS morbidity and currently accounts for 11% of all persons living with AIDS in the U.S. The Department of Health now estimates that approximately 125,000 persons, or roughly 11.7% of the national total, are currently living with HIV infection in Florida as of the end of 2007.

Impact of HIV-related deaths

As of December 31, 2007 a total of 109,364 AIDS cases were known to have been reported in Florida. Some cases are lost to follow-up, so vital status is unknown. Of these cumulative cases, 60,288 (55%) were known to have died.

HIV/AIDS deaths decreased markedly from 1996-1998, associated with the advent of HAART in 1996. Deaths in 2006 were 60% lower than in the peak year, 1995. A leveling of the trend since 1998 may reflect factors such as viral resistance, late diagnosis of HIV, adherence problems, and lack of access to or acceptance of care (Figure 14). Racial/ethnic disparities are evident in the death rate data.

Figure 14. Resident HIV deaths, by year of death, Florida, 1994–2006.



Race/Ethnicity	2006	
	No.	rate
White Male	351	6.3
White Female	78	1.3
Black Male	625	45.3
Black Female	433	29.1
Hispanic Male	190	10.4
Hispanic Female	45	2.5
Other**	24	5.2
TOTAL	1,746	9.5

Rates are expressed as deaths per 100,000 population based on 2006 Population Estimates, DOH, Office of Planning, Evaluation and Data Analysis
 Comment: HIV/AIDS deaths decreased markedly from 1996-1998, associated with the advent of HAART in 1996. Deaths in 2006 were 60% lower than in the peak year, 1995. A leveling of the trend since 1998 may reflect factors such as viral resistance, late diagnosis of HIV, adherence problems, and lack of access to or acceptance of care. Racial/ethnic disparities are evident in the death rate data.
 Source: Office of Vital Statistics and Bureau of HIV/AIDS, death certificates coded to HIV/AIDS as underlying cause.