HIV/AIDS Epidemiology Partnership 6

Hernando, Hillsborough and Manatee Counties

Excluding Dept. of Corrections

Florida Department of Health
HIV/AIDS and Hepatitis Section
Annual data trends as of 12/31/2013
Living (Prevalence) data as of 06/30/2013

Created: 01/02/14
Revision: 02/11/14

HIV and AIDS Case Data

- HIV Infection reporting represents newly reported HIV cases, regardless of AIDS status at time of report.
- HIV infection cases classified as Stage 3 (AIDS) became reportable in Florida in 1981.
- HIV infection cases (without an AIDS diagnosis) became reportable in Florida on July 1, 1997.
- AIDS cases and HIV infection cases by year of report are NOT mutually exclusive and CANNOT be added together.
- Frozen databases of year-end data are generated at the end of each calendar year. These are the same data used for Florida CHARTS and all grant-related data where annual data are included.
- HIV prevalence data are prepared later in the year, when most of the "expected" death data are complete, usually in July.

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HIV and AIDS Case Data (con't)

- Adult cases represent ages 13 and older, pediatric cases are those under the age of 13. For data by year, the age is by age of diagnosis. For living data, the age is by current age at the end of the most recent calendar year, regardless of age at diagnosis.
- Unless otherwise noted, whites are non-Hispanic and blacks are non-Hispanic.
- Unless otherwise noted. Area and county data will exclude DOC cases.

Cumulative HIV (not AIDS) and AIDS Cases, Reported through 2013, Partnership 6

Persons Living with HIV/AIDS through 2012 as of 06/30/2013 6,968	Cumulative AIDS Cases (1981-2013)		
	Adults (Age 13+)	Pediatrics (Age <13)	Total
	9,102	101	9,203
	Cumulative HIV Cases (not AIDS) 07/1997-12/2013		
	Adults (Age 13+)	Pediatrics (Age <13)	Total
	3,559	43	3,602
Total HIV/AIDS Cases	Adult (Age 13+)	Pediatrics (Age <13)	Total
	12,661	144	12,805

ADULTS	Males	Females	Total	M:F Ratio
Cumulative AIDS Cases	6,899	2,203	9,102	3.1 : 1
Cumulative HIV Cases	2,514	1,045	3,559	2.4 : 1

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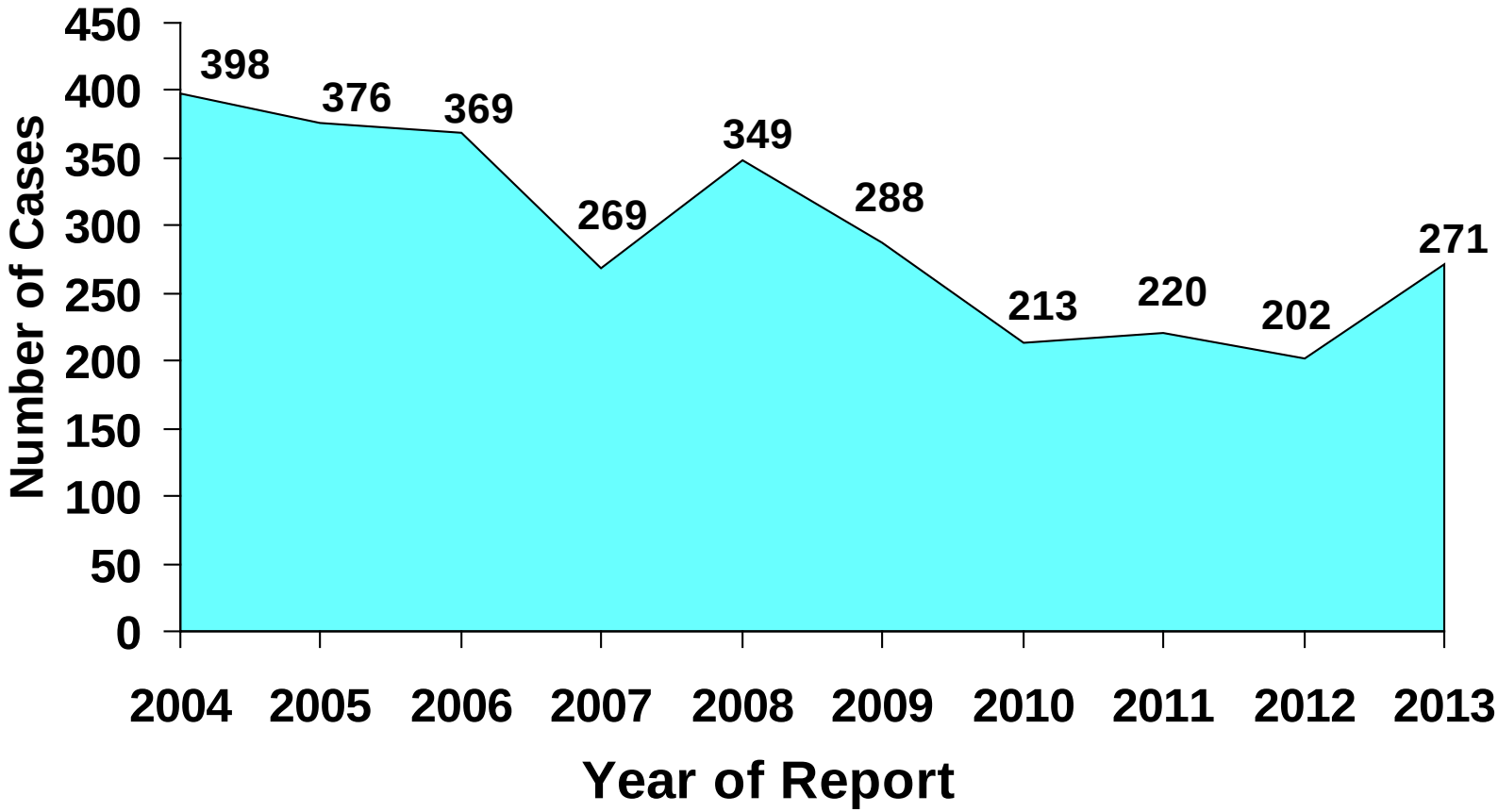
AIDS Cases and Rates*, by Year of Report, 2004-2013, Partnership 6

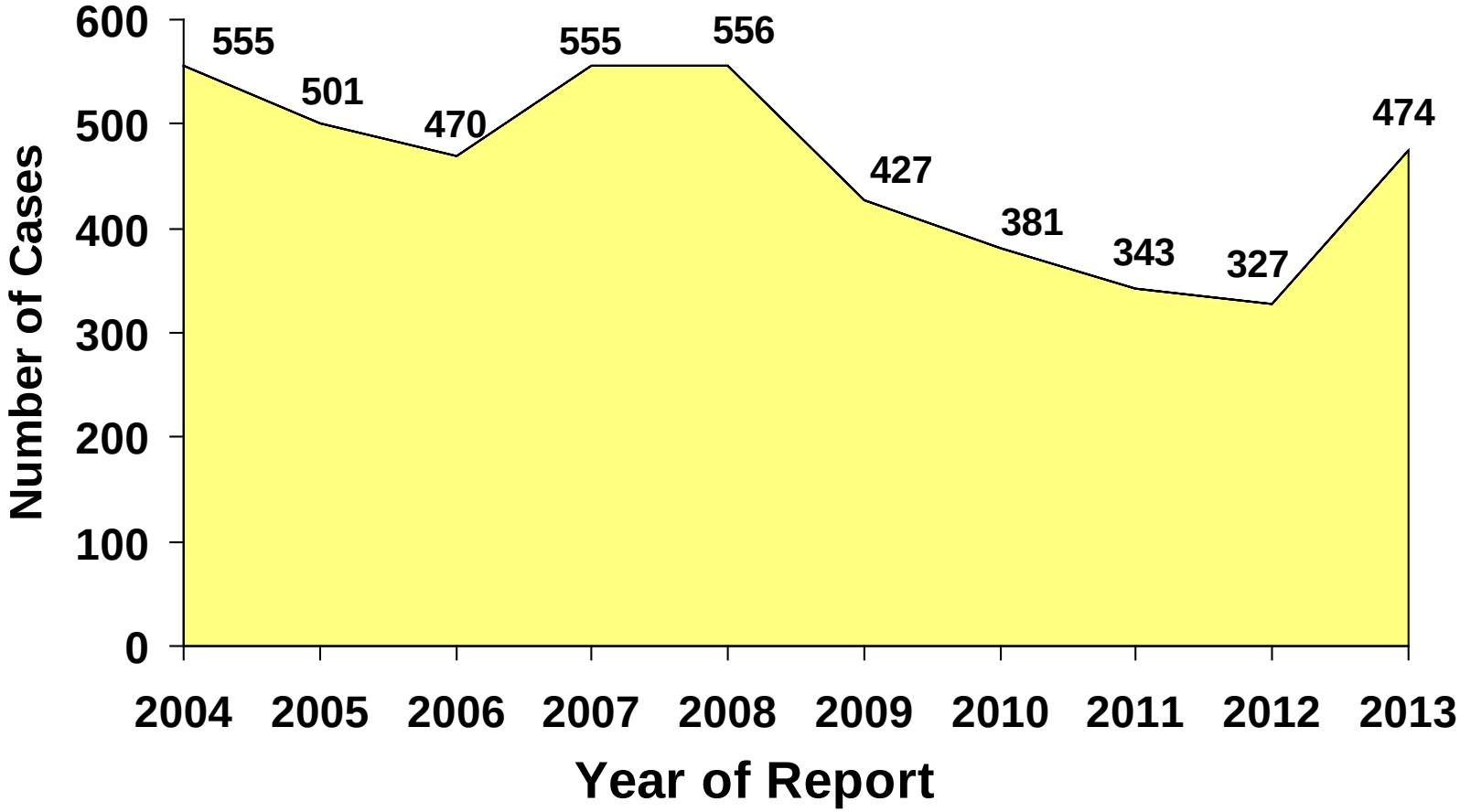


Year	Rate
04	25.5
05	23.4
06	22.3
07	16.0
08	20.5
09	16.8
10	12.3
11	12.6
12	11.5
13	15.3

Enhanced laboratory reporting (ELR) laws in 2006 and the expansion of ELR in 2007 led to an artificial peak in newly reported cases of AIDS in 2008. This was followed by a general decline in reported cases through 2012. Another surge in the expansion of ELR in 2012 was followed by another increase in newly reported cases of AIDS in 2013. These trends were observed across most race/sex/risk groups throughout the state.

***Source: Population estimates are provided by Florida CHARTS as of 02/05/2014. Rates are expressed as per 100,000 population.**

HIV Infection Cases and Rates*, by Year of Report, 2004-2013, Partnership 6

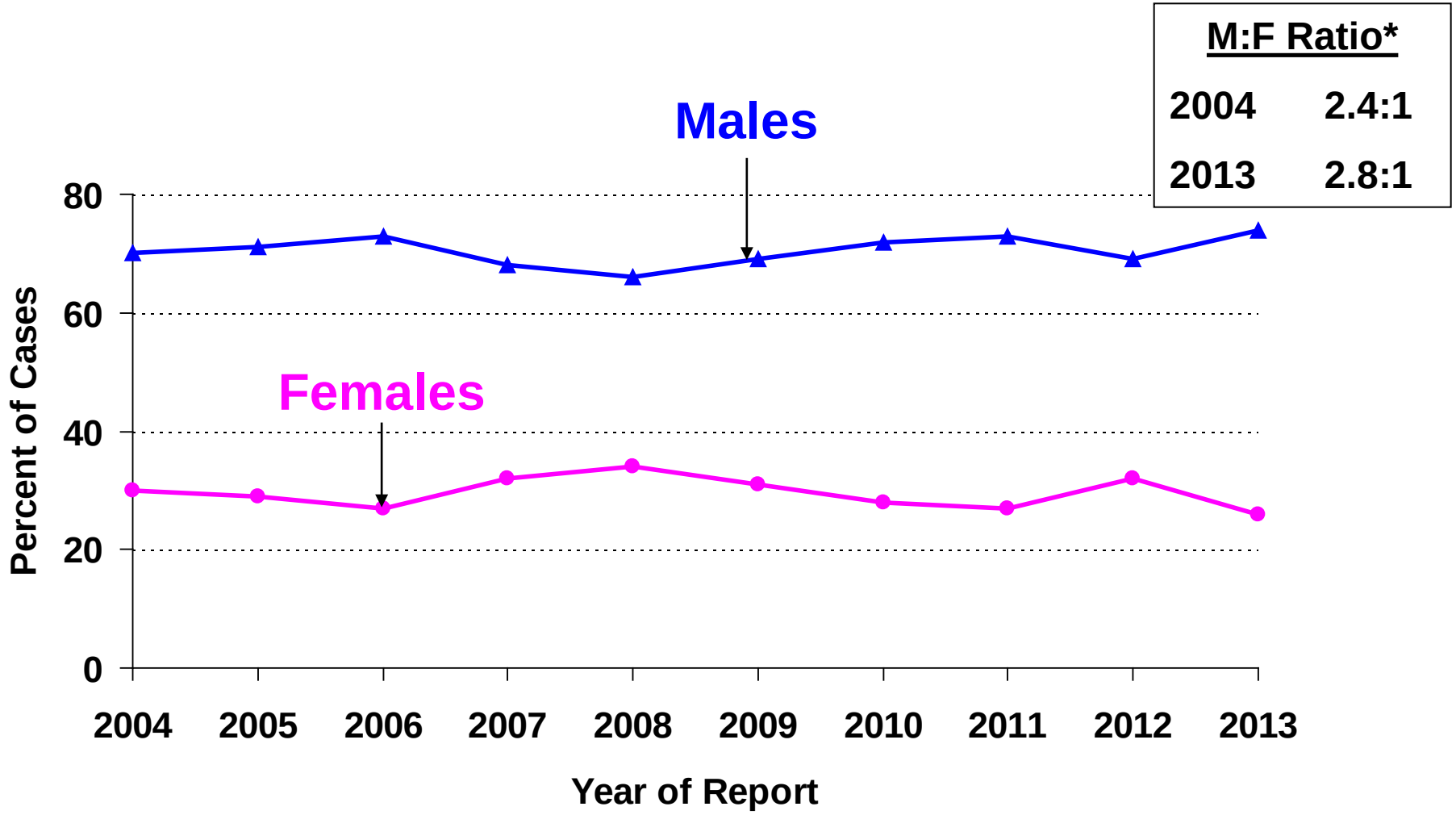


Year	Rate
04	35.5
05	31.1
06	28.4
07	32.9
08	32.7
09	24.9
10	22.1
11	19.7
12	18.6
13	26.7

Note: Enhanced laboratory reporting (ELR) laws in 2006 and the expansion of ELR in 2007 led to an artificial peak in newly reported cases of HIV infection in 2008. This was followed by a general decline in reported cases through 2012. Another surge in the expansion of ELR in 2012 was followed by another increase in newly reported cases of HIV infection in 2013. These trends were observed across most race/sex/risk groups throughout the state.

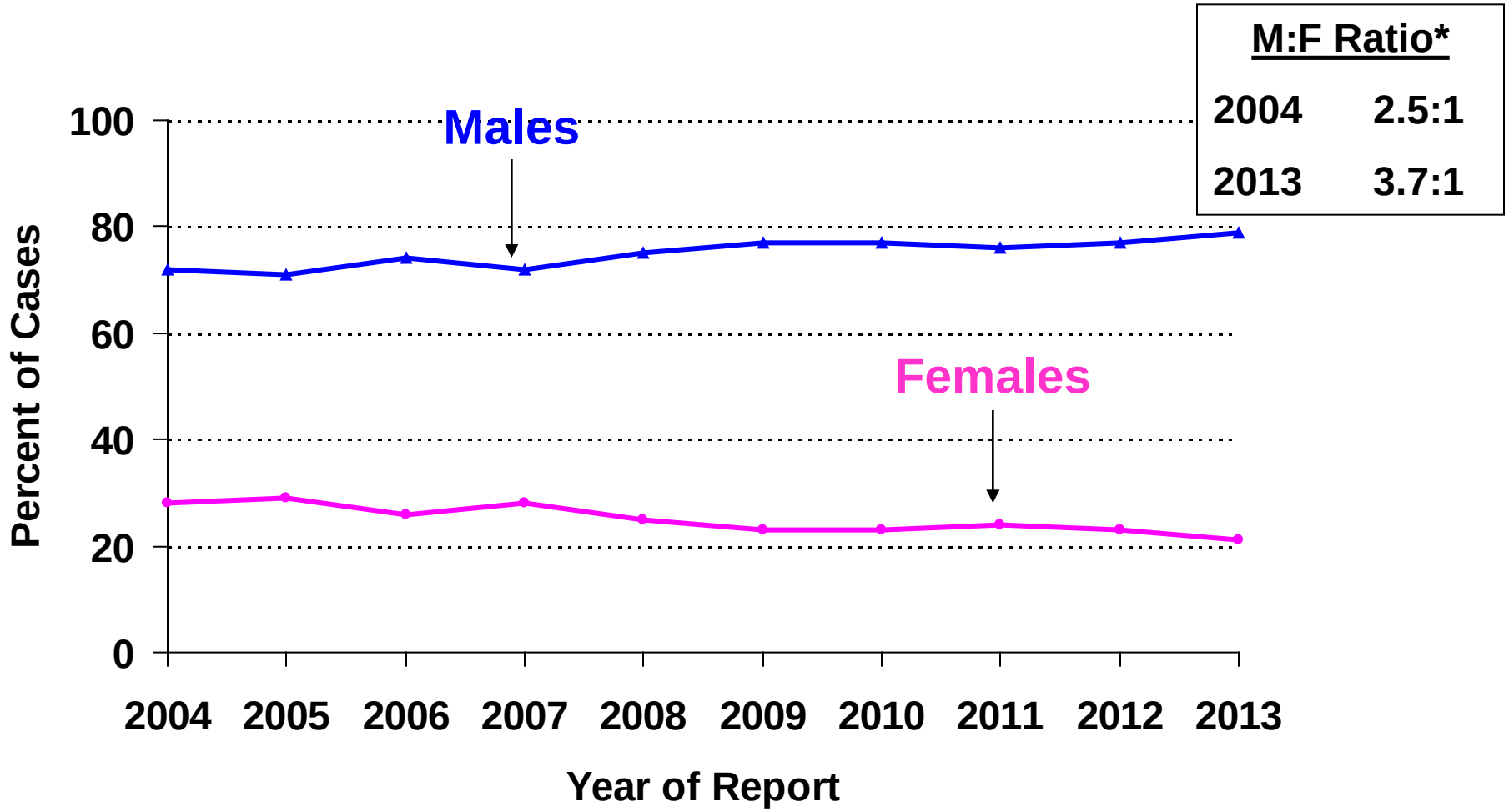
***Source: Population estimates are provided by Florida CHARTS as of 02/05/2014. Rates are expressed as per 100,000 population.**

Adult AIDS Cases, by Sex and Year of Report, 2004-2013, Partnership 6



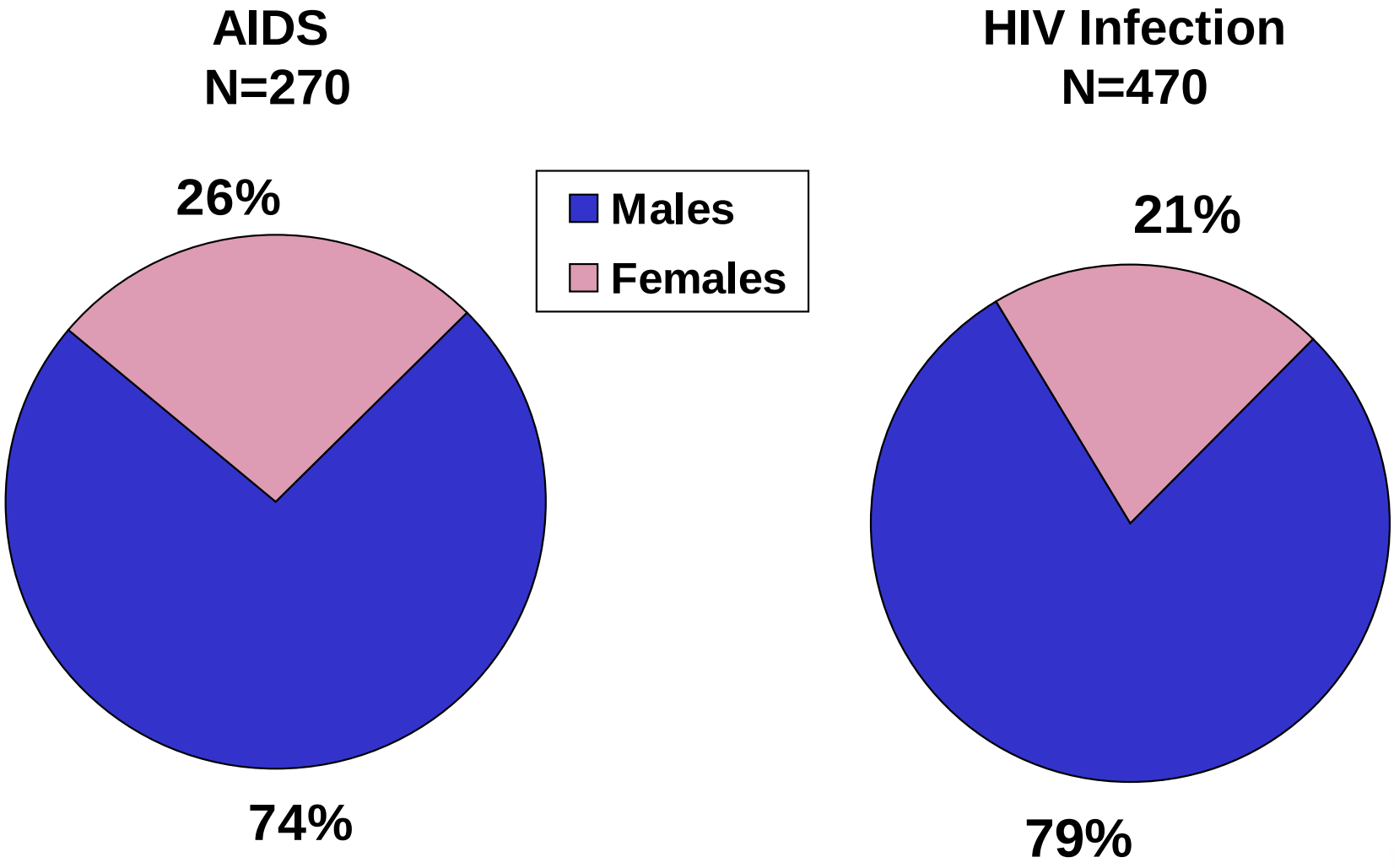
Note: AIDS cases tend to represent HIV transmission that occurred many years ago. The relative increases in males cases reflect the changing face of the AIDS epidemic over time. *The male-to-female ratio is the number of cases among males divided by the number of cases among females.

Adult HIV Infection Cases, by Sex and Year of Report, 2004-2013, Partnership 6



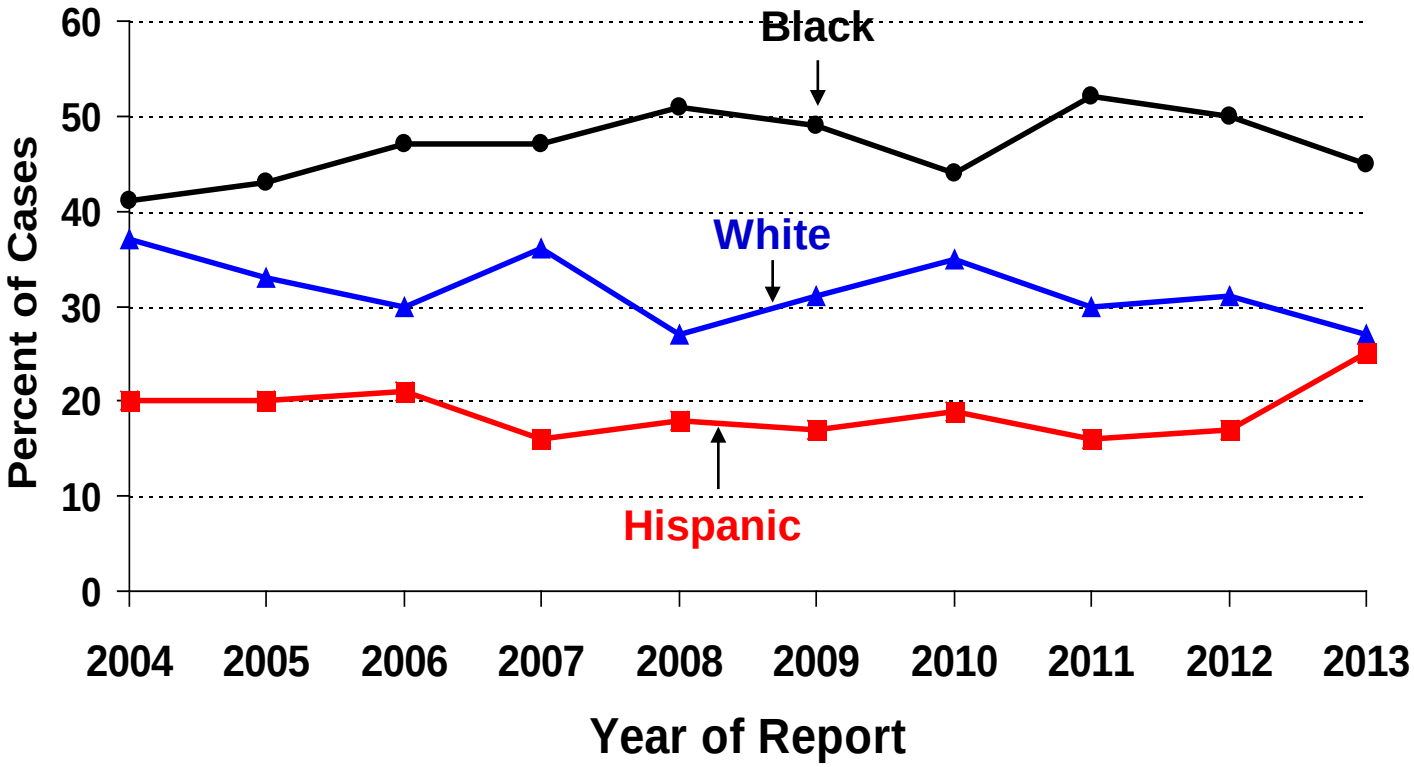
Note: Recent trends in HIV transmission are best described by the HIV case data. The relative increases in male HIV Infection Cases might be attributed to proportional increases in HIV transmission among men who have sex with men (MSM), which may influence future AIDS trends. *The male-to-female ratio is the number of cases among males divided by the number of cases among females.

Adult AIDS and HIV Infection Cases by Sex, Reported in 2013, Partnership 6



Note: Partnership 6's Adult Population is: 48% Male and 52% Female.

Adult AIDS Cases by Race/Ethnicity and Year of Report, 2004-2013, Partnership 6



Factors Affecting Disparities

-Late diagnosis of HIV.

-Access to/acceptance of care.

-Delayed prevention messages.

-Stigma.

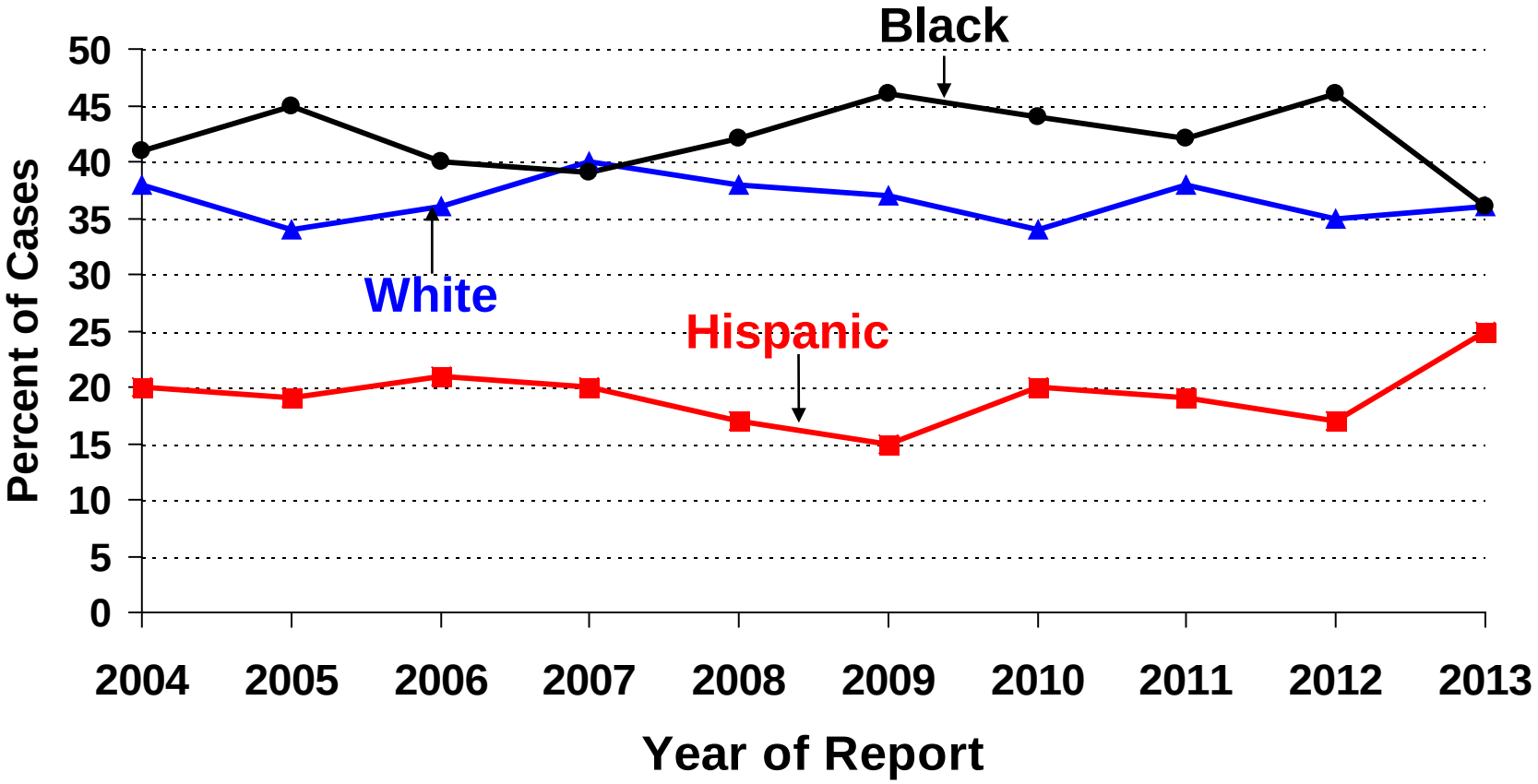
-Non-HIV STD's in the community.

-Prevalence of injection drug use.

-Complex matrix of factors related to socioeconomic status

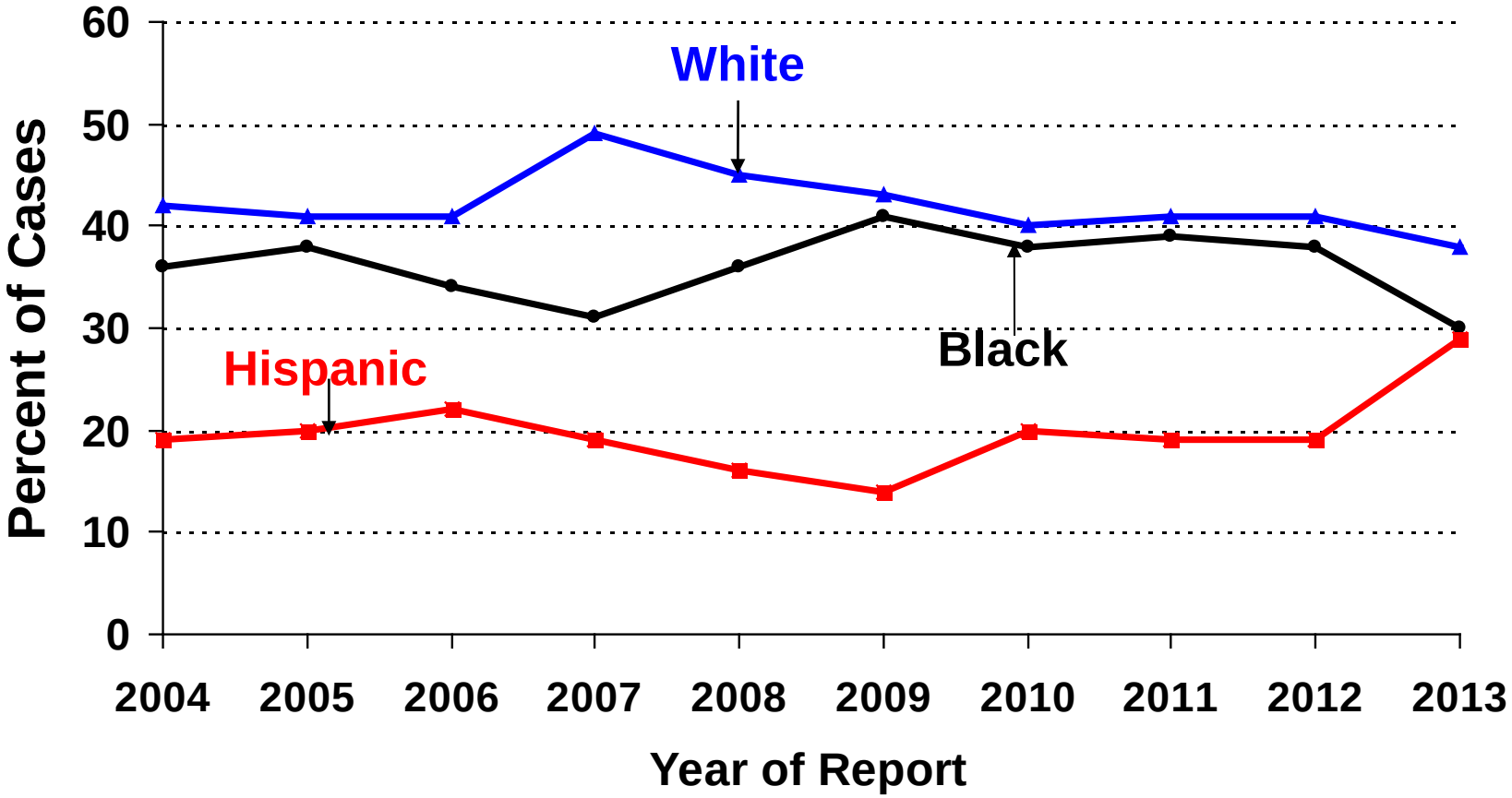
Note: In 2013, blacks accounted for 44% of adult AIDS cases, but only 13% of the population. From 2004 to 2013, the proportion of AIDS cases among blacks and Hispanics increased by 4 and 5 percentage points respectively, while the proportion of AIDS cases among whites decreased by 10 percentage points. Numerous disparities can affect the increases of HIV disease in a given population. Other races represent less than 4% of the cases and are not included.

Adult HIV Infection Cases by Race/Ethnicity and Year of Report, 2004-2013, Partnership 6



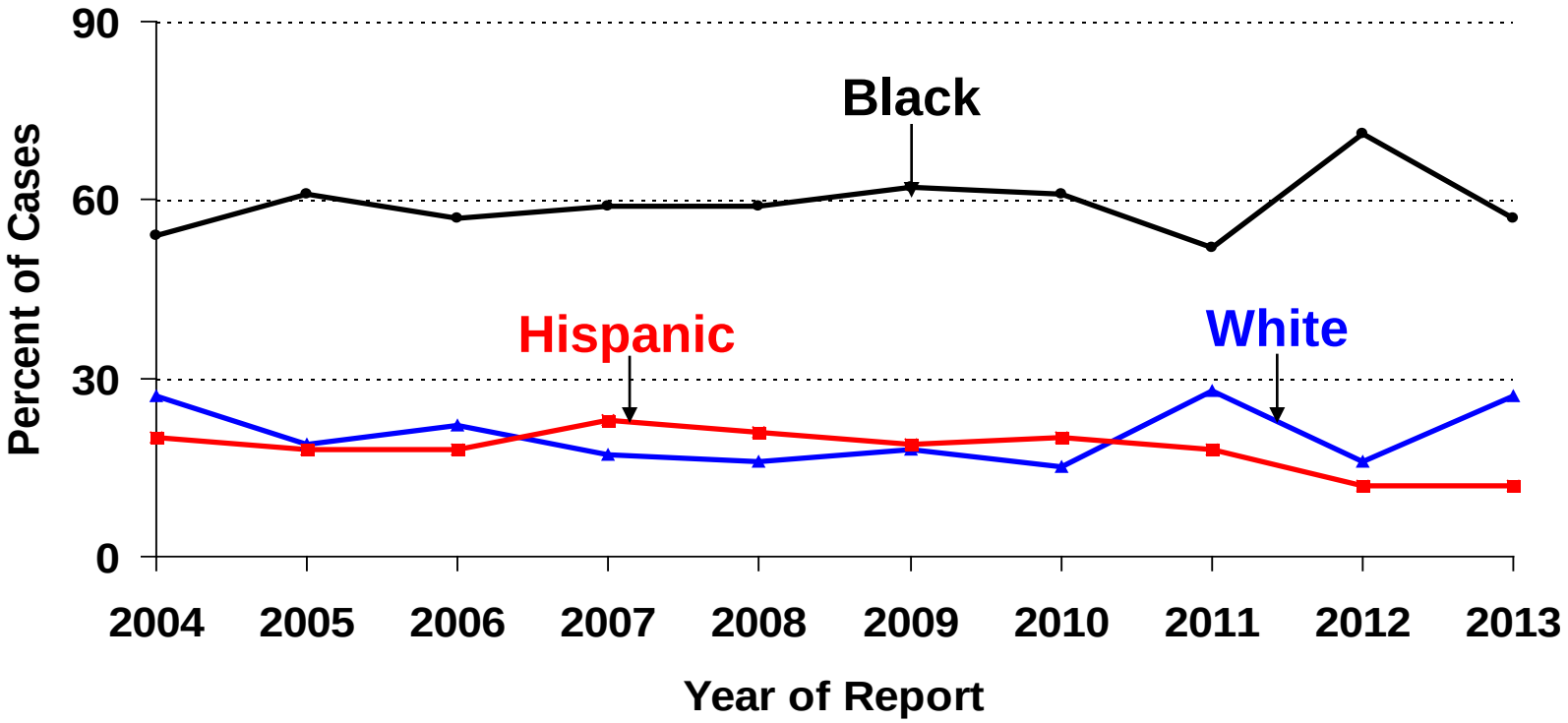
Note: HIV case reporting reflects more recent trends in the epidemic with respect to the distribution of cases by race/ethnicity. From 2004 to 2013, the proportion of HIV infection cases among blacks and whites decreased by 5 and 2 percentage points respectively. In contrast, the proportion of HIV cases among Hispanics increased by 5 percentage points over the same time period. Other races represent less than 3% of the cases and are not included.

Adult Male HIV Infection Cases by Race/Ethnicity and Year of Report, 2004-2013, Partnership 6



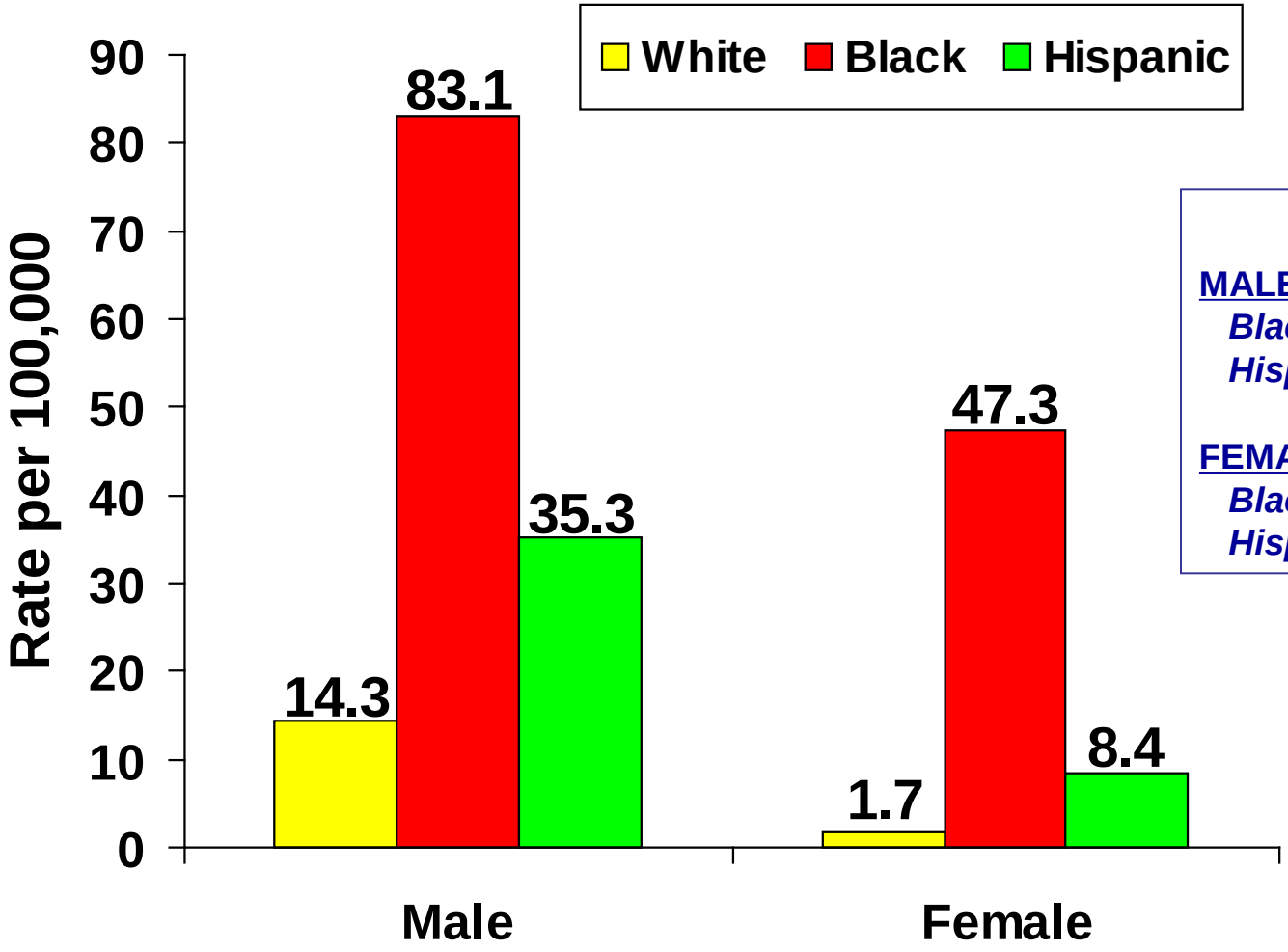
Note: The proportion of male HIV infection cases increased by 10 percentage points among Hispanic males from 2004 to 2013. In contrast, the proportion of male HIV infection cases decreased among white and black males by 4 and 6 percentage points respectively. Whites represented most (> 40%) of the male HIV infection cases for most of the years. Other races represent less than 3% of the cases and are not included.

Adult Female HIV Infection Cases by Race/Ethnicity and Year of Report, 2004-2013, Partnership 6



Note: HIV case disparities are more evident among women than men. For the past ten years, black women represented 50% or more of the cases each year. From 2004 to 2013, the proportion of white and Hispanic female HIV cases fluctuated over time, oftentimes, crossing paths. The proportion of black female HIV infection cases increased by 3 percentage points during this same time period. In contrast, the proportion of HIV cases among Hispanic females decreased by 8 percentage points, while the proportion of HIV cases among white females remained the same. Other races represent less than 4% of the cases and are not included.

Adult AIDS Case Rates* by Sex and Race/Ethnicity, Reported in 2013, Partnership 6



Rate Ratios:

MALES

Black:White, 5.8:1

Hispanic:White, 2.5:1

FEMALES

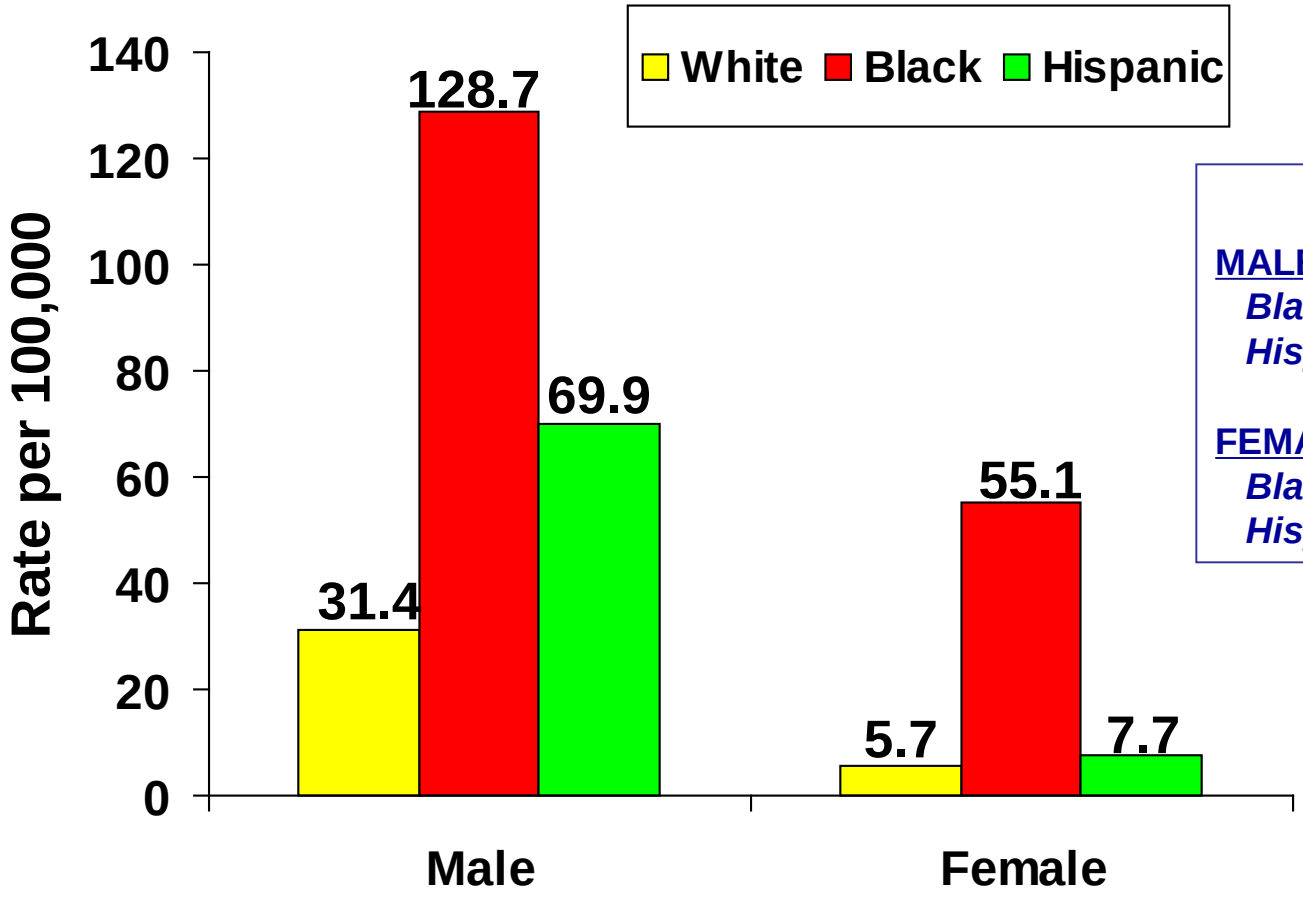
Black:White, 27.8:1

Hispanic:White, 4.9:1

Note: Among black males, the AIDS case rate is nearly 6 times higher than the rate among white males. Among black females, the AIDS case rate is nearly 28-fold greater than the rate among white females. Hispanic male and female rates are higher than the rates among their white counterparts.

***2013 Partnership 6 population estimates are provided by Florida CHARTS as of 02/05/2014.**

Adult HIV Infection Case Rates* by Sex and Race/Ethnicity, Reported in 2013, Partnership 6



Rate Ratios:

MALES

Black:White, 4.1:1

Hispanic:White, 2.2:1

FEMALES

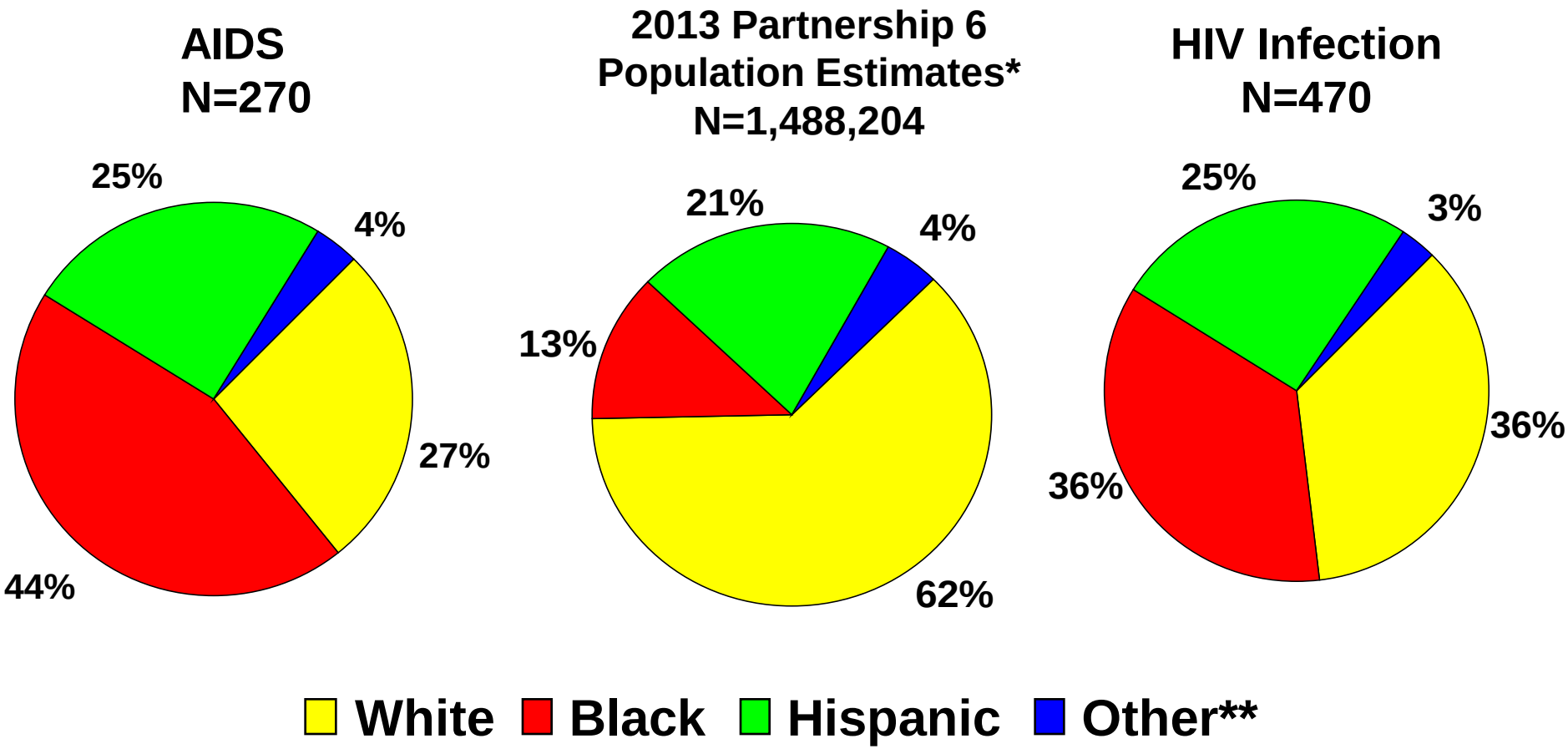
Black:White, 9.7:1

Hispanic:White, 1.4:1

Note: Among black males, the HIV infection case rate is 4 times higher than the rate among white males. Among black females, the HIV case rate is nearly 10 times higher than the rate among white females. Among Hispanic males and females, the HIV infection case rate is higher than the rate among their white counterparts.

***Source: Population estimates are provided by Florida CHARTS as of 02/05/2014.**

Adult AIDS and HIV Cases Reported in 2013 and Population Data, by Race/Ethnicity, Partnership 6

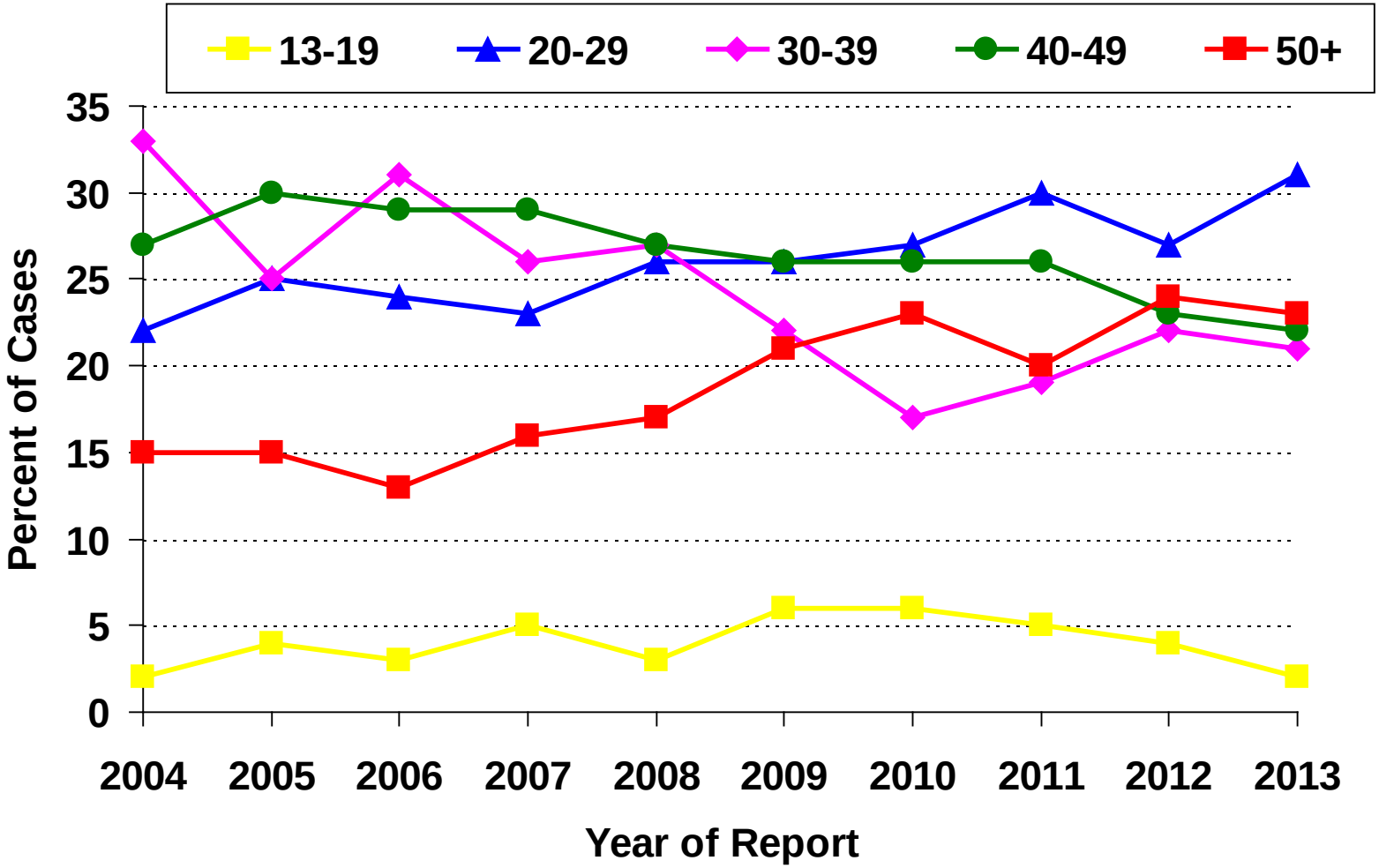


Note: In this snapshot for 2013, blacks are over-represented among the AIDS and HIV infection cases, accounting for 44% of adult AIDS cases and 36% of adult HIV infection cases, but only 13% of the adult population. A group is disproportionately impacted to the extent that the percentage of cases exceeds the percentage of the population.

***Source: Population estimates are provided by Florida CHARTS as of 02/05/2014.**

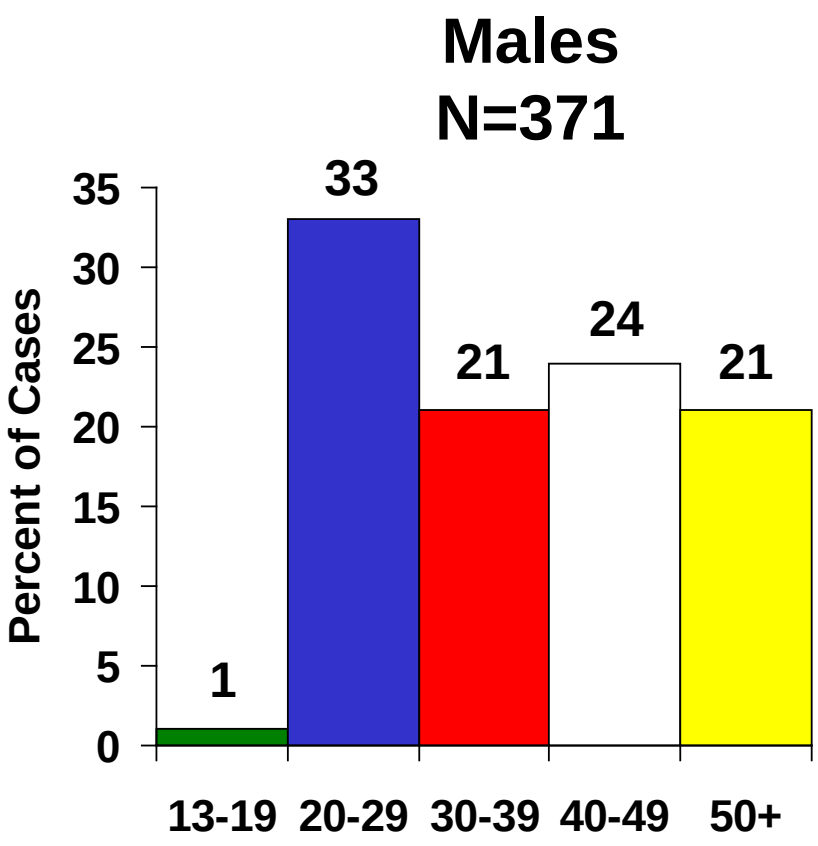
****Other includes Asian/Pacific Islanders, Native Alaskans/American Indians and mixed races.**

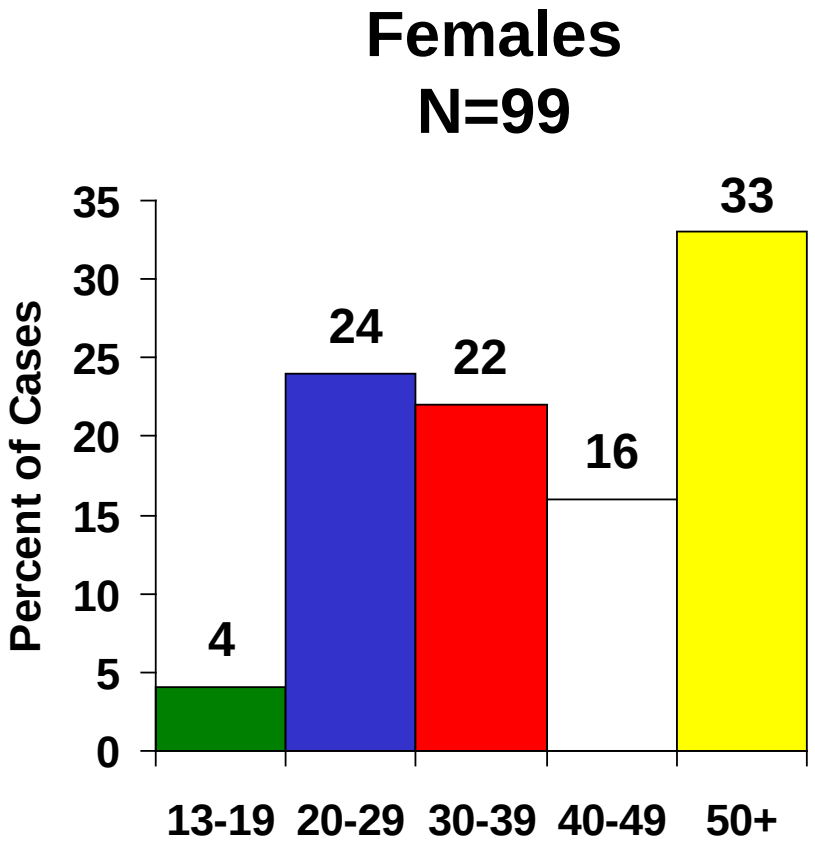
Adult HIV Infection Cases, by Age Group at Diagnosis, and Year of Report, 2004–2013, Partnership 6



Note: From 2004 to 2013, the proportion of adult HIV infection cases among those aged 20-29 and those aged 50 and older increased by 9 and 8 percentage points, respectively.

Adult HIV Infection Cases, by Sex and Age Group at Diagnosis, Reported in 2013, Partnership 6





Note: HIV infection cases tend to reflect more recent transmission than AIDS cases, and thus present a more current picture of the epidemic. With regard to the age group with the highest percent of HIV infection cases, recent estimates show that among males, 33% of HIV infection cases occur among those aged 20-29, whereas among females 33% of HIV infection cases occur among those aged 50 and older.

Definitions of Mode of Exposure Categories

- **MSM =** Men who have sex with men
- **IDU =** Injection Drug Use
- **MSM/IDU =** Men who have sex with men & Injection Drug Use
- **Heterosexual =** Heterosexual contact with person with HIV/AIDS or known HIV risk
- **OTHER** = includes hemophilia, transfusion, perinatal and other pediatric risks and other confirmed risks.
- **NIR =** Cases reported with No Identified Risk
- **Redistribution of NIRs =** This illustrates the effect of statistically assigning (redistributing) the NIRs to recognized exposure (risk) categories by applying the proportions of historically reclassified NIRs to the unresolved NIRs.

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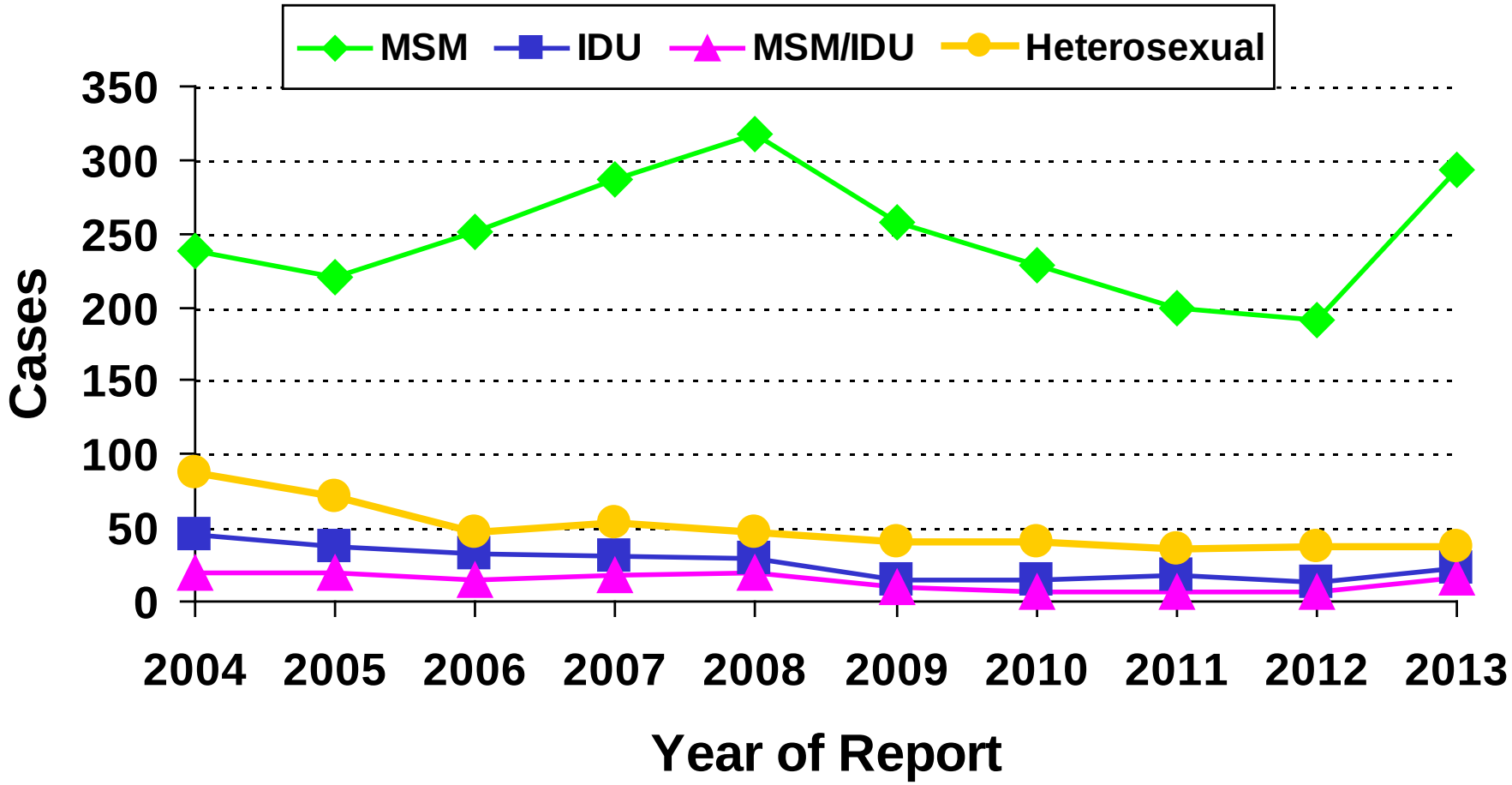
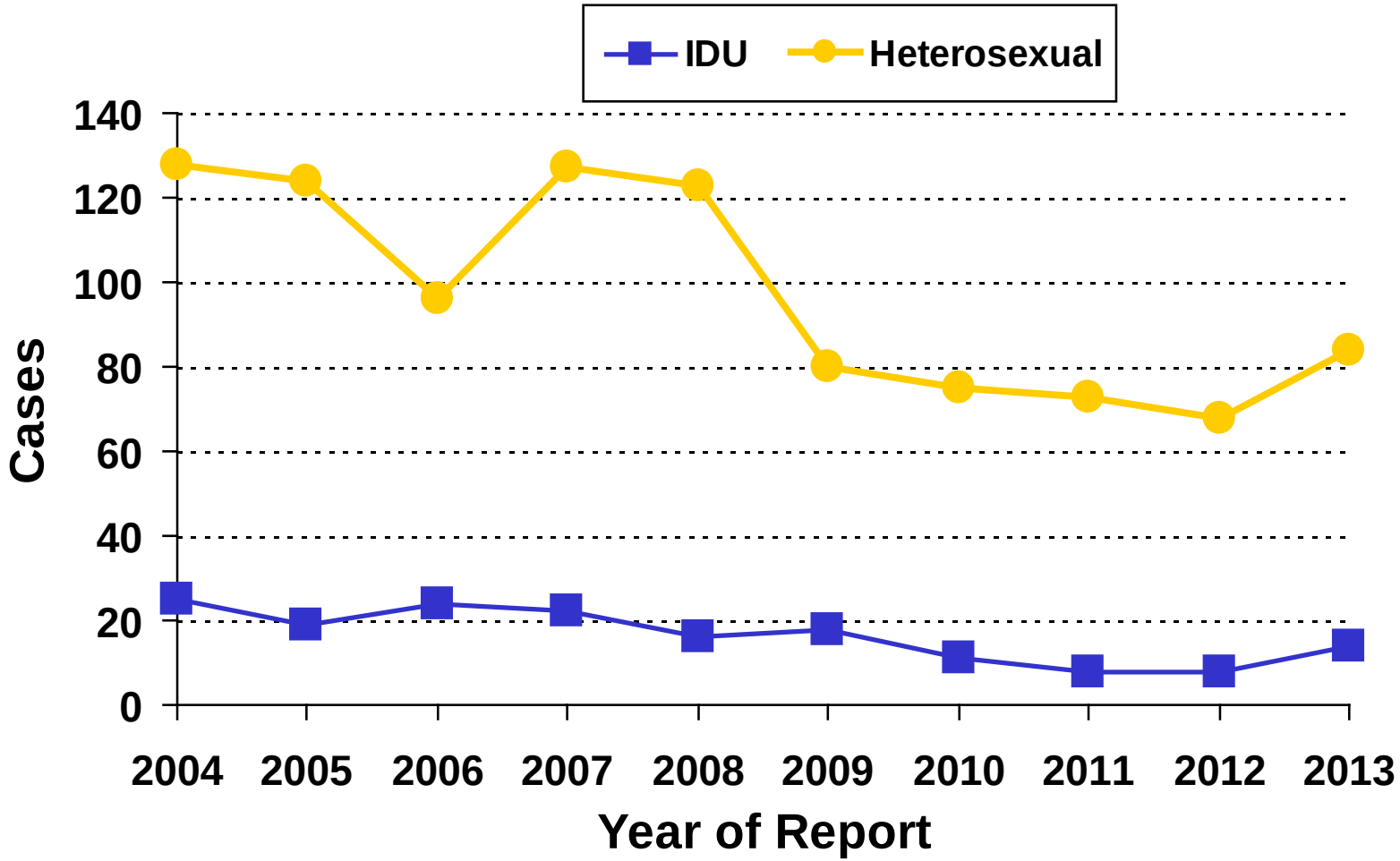
Adult Male HIV Infection Cases, by Mode of Exposure and Year of Report, 2004–2013, Partnership 6



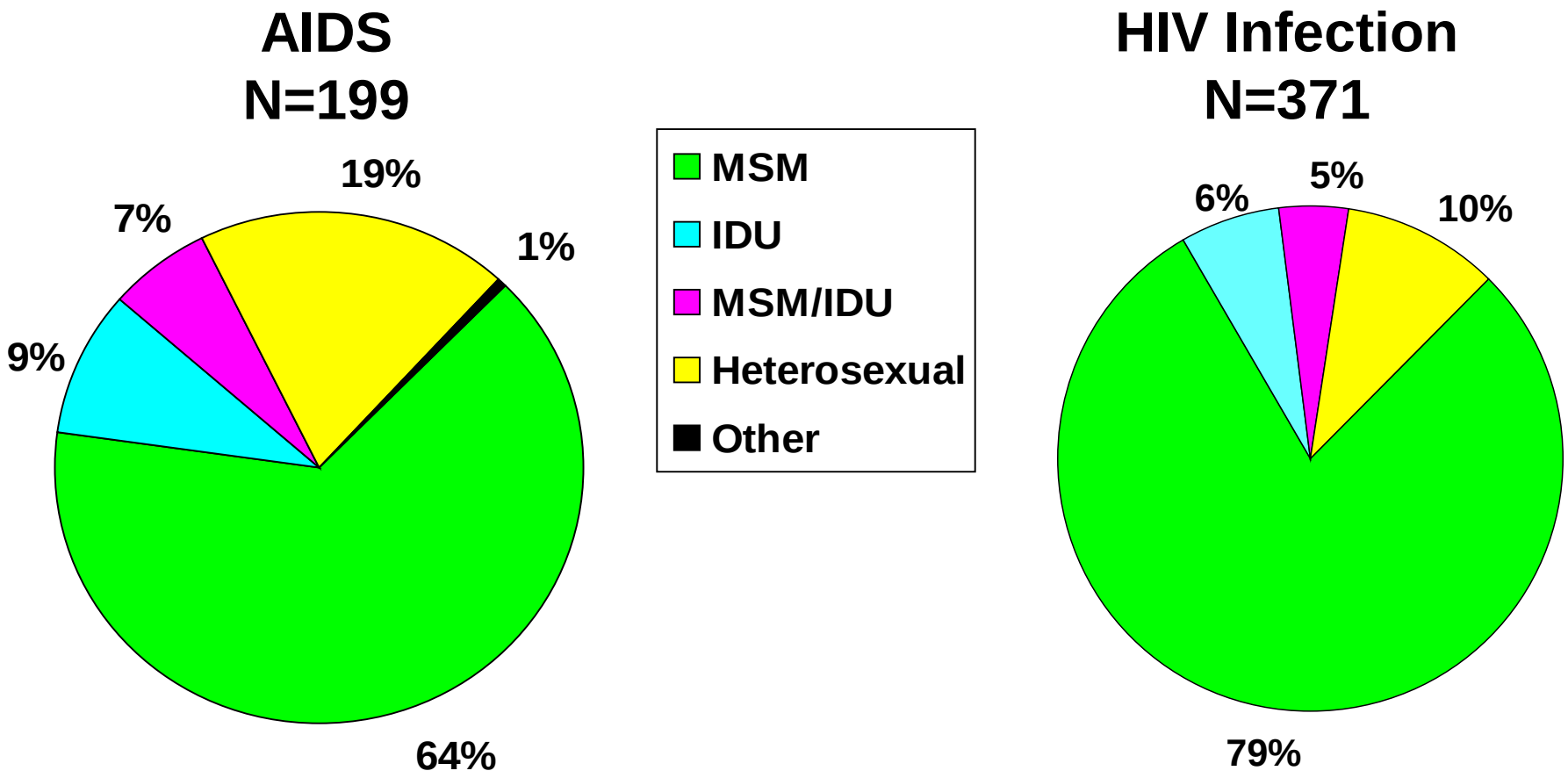
Note: NIRs redistributed. Men who have sex with men (MSM) remains as the primary mode of exposure among male HIV cases in Partnership 6, followed by heterosexual contact.

Adult Female HIV Infection Cases by Exposure Category and Year of Report, 2004-2013, Partnership 6



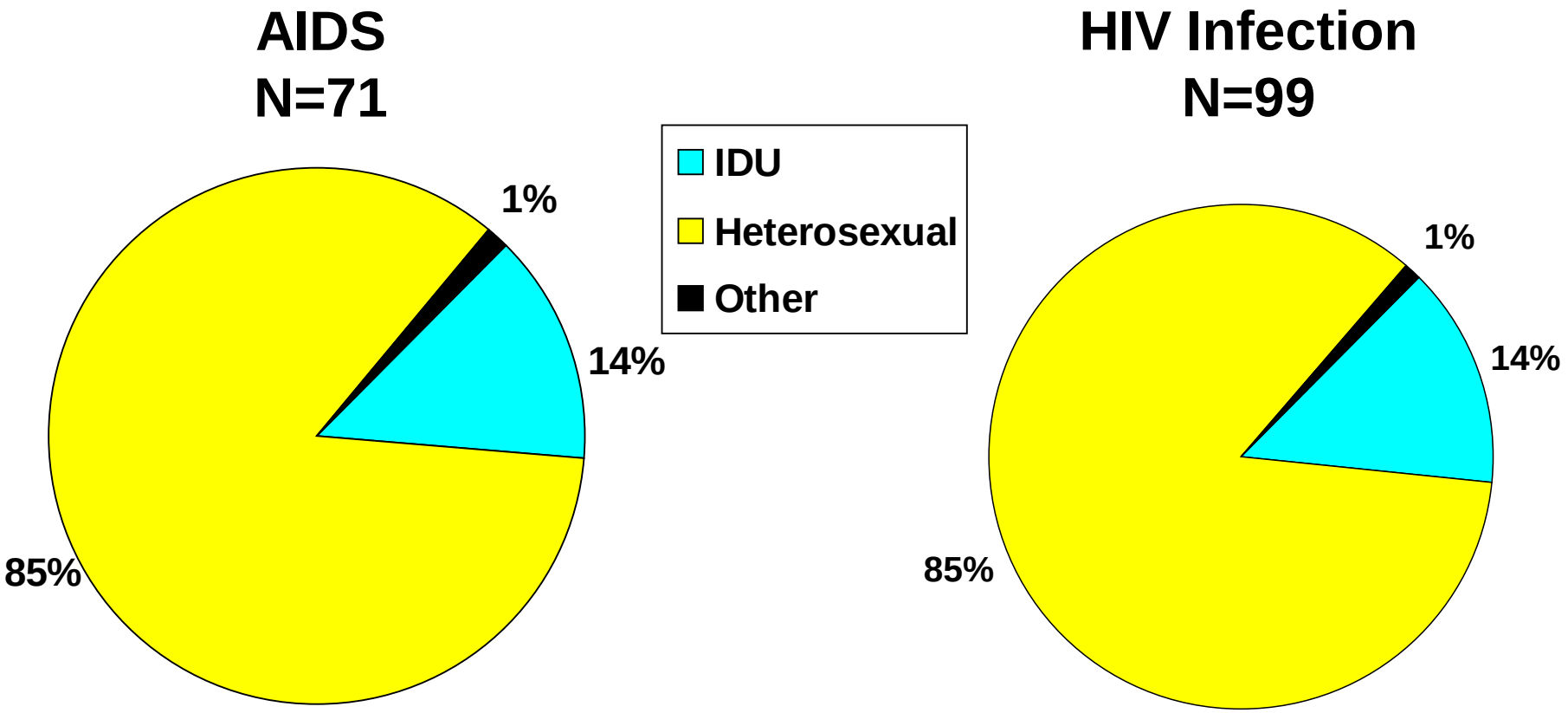
Note: NIRs redistributed. The heterosexual risk continues to be the dominant mode of exposure among females.

Adult Male AIDS and HIV Infection Cases, by Mode of Exposure, Reported in 2013, Partnership 6



Note: NIRs redistributed. Among the male AIDS and HIV infection cases reported for 2013, men who have sex with men (MSM) was the most common risk factor (64% and 79% respectively) followed by cases with a heterosexual risk (19% for AIDS and 10% for HIV). The recent increase among MSM is indicated by the higher MSM among HIV infection cases compared to AIDS cases, as HIV infection cases tend to represent a more recent picture of the epidemic.

Adult Female AIDS and HIV Infection Cases, by Mode of Exposure, Reported in 2013, Partnership 6



Note: NIRs redistributed. Among the female AIDS and HIV infection cases reported for 2013, heterosexual contact was the highest risk (85% for both respectively).

Cases Living with HIV Disease

Adults Living with HIV Disease
By Zip Code, Reported through 2012, Partnership 6

Total Living HIV/AIDS Cases

- 0
- 1 - 25
- 26 - 50
- 51 - 75
- Over 75

N=7,064

NIRs are not redistributed.
Excludes DOC, homeless, and cases with unknown zips.
***Includes MSM/IDU cases.**
Data as of 05/17/2013

Men who have Sex with Men (MSM)*
Living with HIV Disease
By Zip Code, Reported through 2012, Partnership 6

Presumed Living
MSM HIV/AIDS Cases

- 0
- 1 - 25
- 26 - 50
- 51 - 75
- Over 75

N=3,793

NIRs are not redistributed.
Excludes DOC, homeless, and cases with unknown zips.
***Includes MSM/IDU cases.**
Data as of 05/17/2013

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Men who have Sex with Men (MSM)*
Living with HIV Disease
By Zip Code, Reported through 2012, Tampa/St. Pete EMA

Presumed Living
MSM HIV/AIDS Cases

- 0
- 1 - 25
- 26 - 50
- 51 - 100
- Over 100

N=6,062

NIRs are not redistributed.
*Includes MSM/IDU. Data as of 05/17/2013

Injection Drug Users (IDUs)*
Living with HIV Disease
By Zip Code, Reported through 2012, Partnership 6

Presumed Living
IDU HIV/AIDS Cases

- 0
- 1 - 10
- 11 - 20
- 21 - 30
- Over 30

N=982

NIRs are not redistributed.
Excludes DOC, homeless, and cases with unknown zips.
***Includes MSM/IDU cases.**
Data as of 05/17/2013

Adult Heterosexuals Living with HIV Disease By Zip Code, Reported through 2012, Partnership 6

Presumed Living Heterosexual HIV/AIDS Cases

- 0
- 1 - 10
- 11 - 20
- 21 - 30
- Over 30

N=2,423

NIRs are not redistributed.
Excludes DOC, homeless, and cases with unknown zips.
Data as of 05/17/2013

Adults Living with HIV Disease By Zip Code and Race/Ethnicity, Reported through 2012, Partnership 6

1 Dot = 3 cases
Dots are randomly placed within zip codes.

- **Hispanic**
- **Black, not-Hispanic**
- **White, not-Hispanic**

N=6,941

Total includes all races, some which are not on map.
Excludes DOC, homeless, and cases with unknown zips.
Data as of 05/17/2013

Adults Living with HIV Disease By Zip Code and Sex, Reported through 2012, Partnership 6

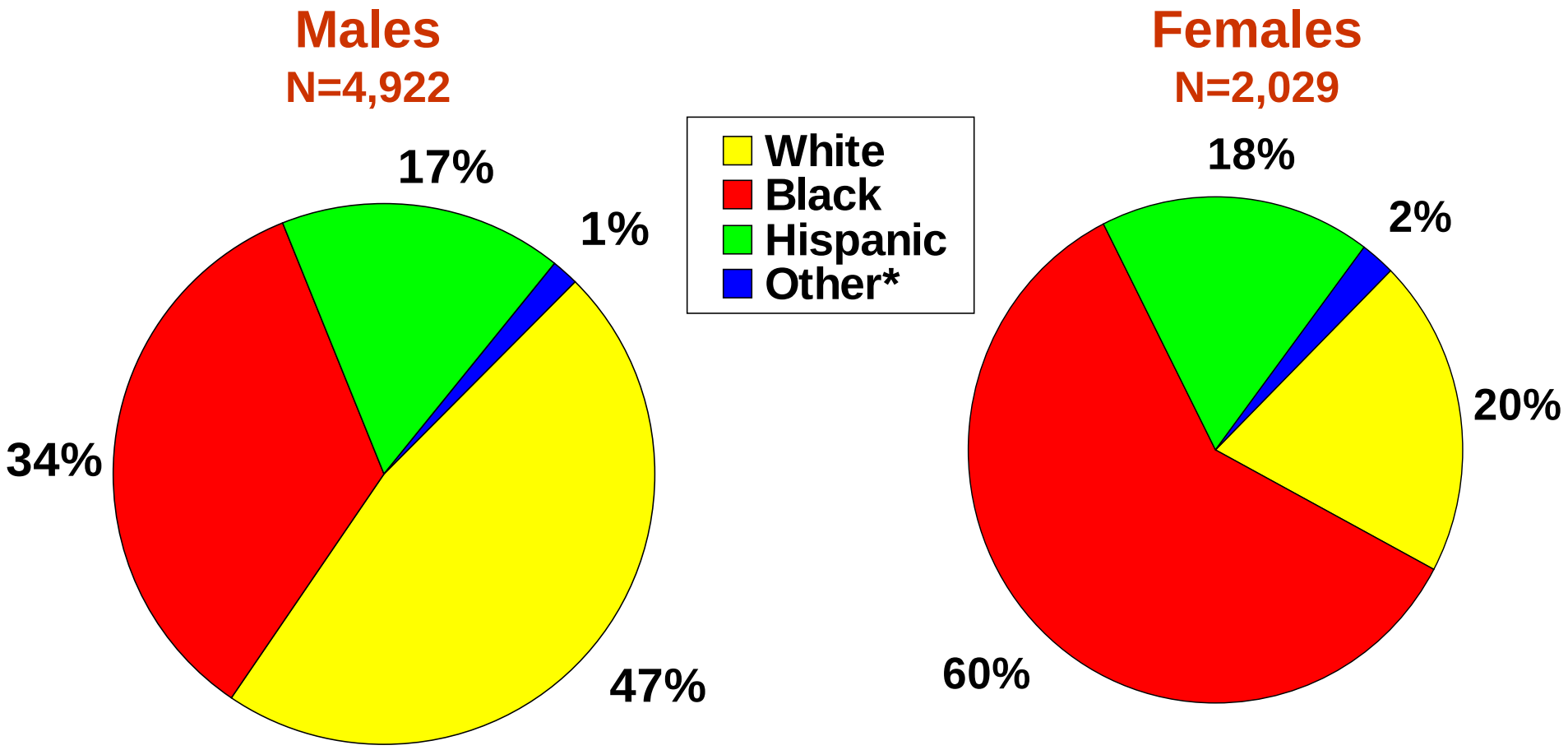
1 Dot = 3 cases
Dots are randomly placed within zip codes.

- **Male**
- **Female**

N=7,064

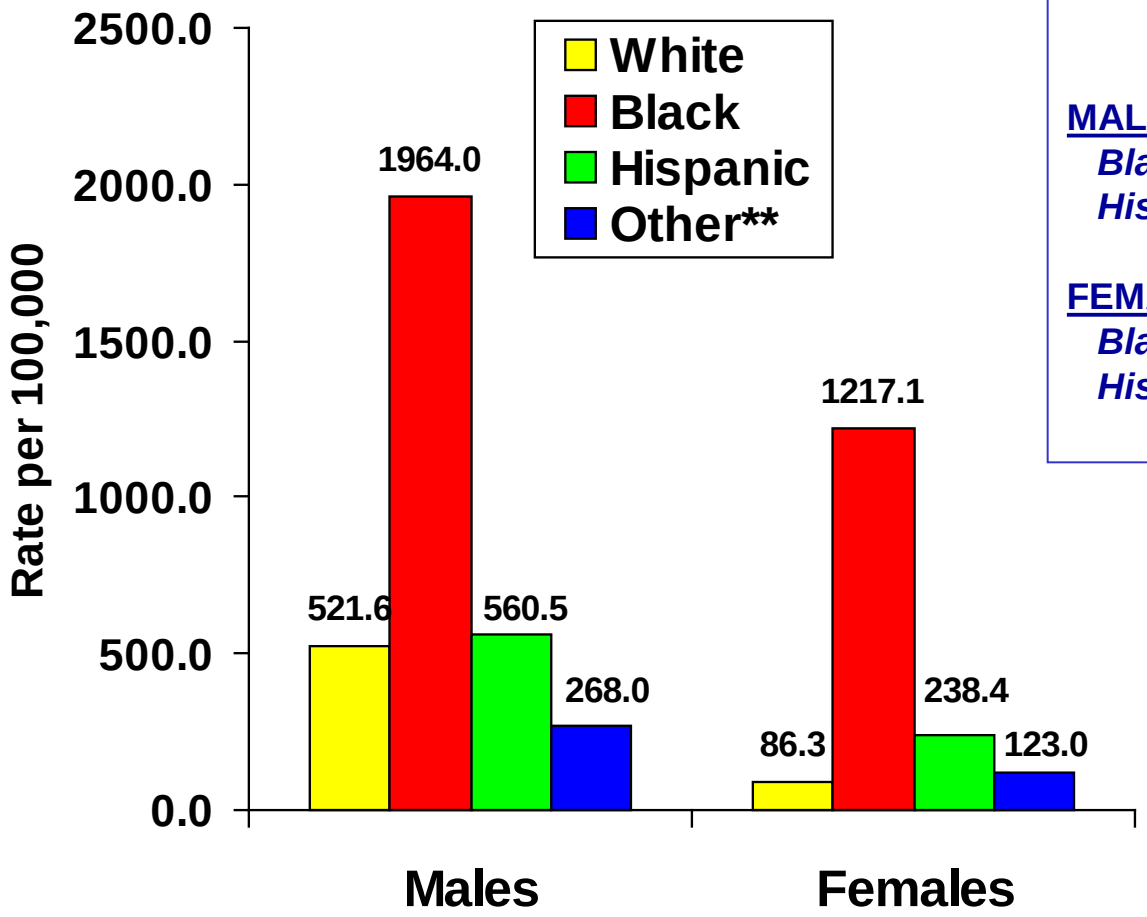
Excludes DOC, homeless, and cases with unknown zips.
Data as of 05/17/2013

Adults Living with HIV Disease, by Sex and Race/Ethnicity Reported through 2012, Partnership 6



Note: Among adult males living HIV disease, whites represent the race most affected (47%). Among adult females, blacks represent the race most affected (60%).
*Other includes Asian/Pacific Islanders and Native Alaskans/American Indians.

Case Rates* of Adults Living with HIV Disease, by Sex and Race/Ethnicity, Reported through 2012, Partnership 6



RATE RATIOS:

MALES

Blacks:Whites, 3.8:1
Hispanics:Whites, 1.1:1

FEMALES

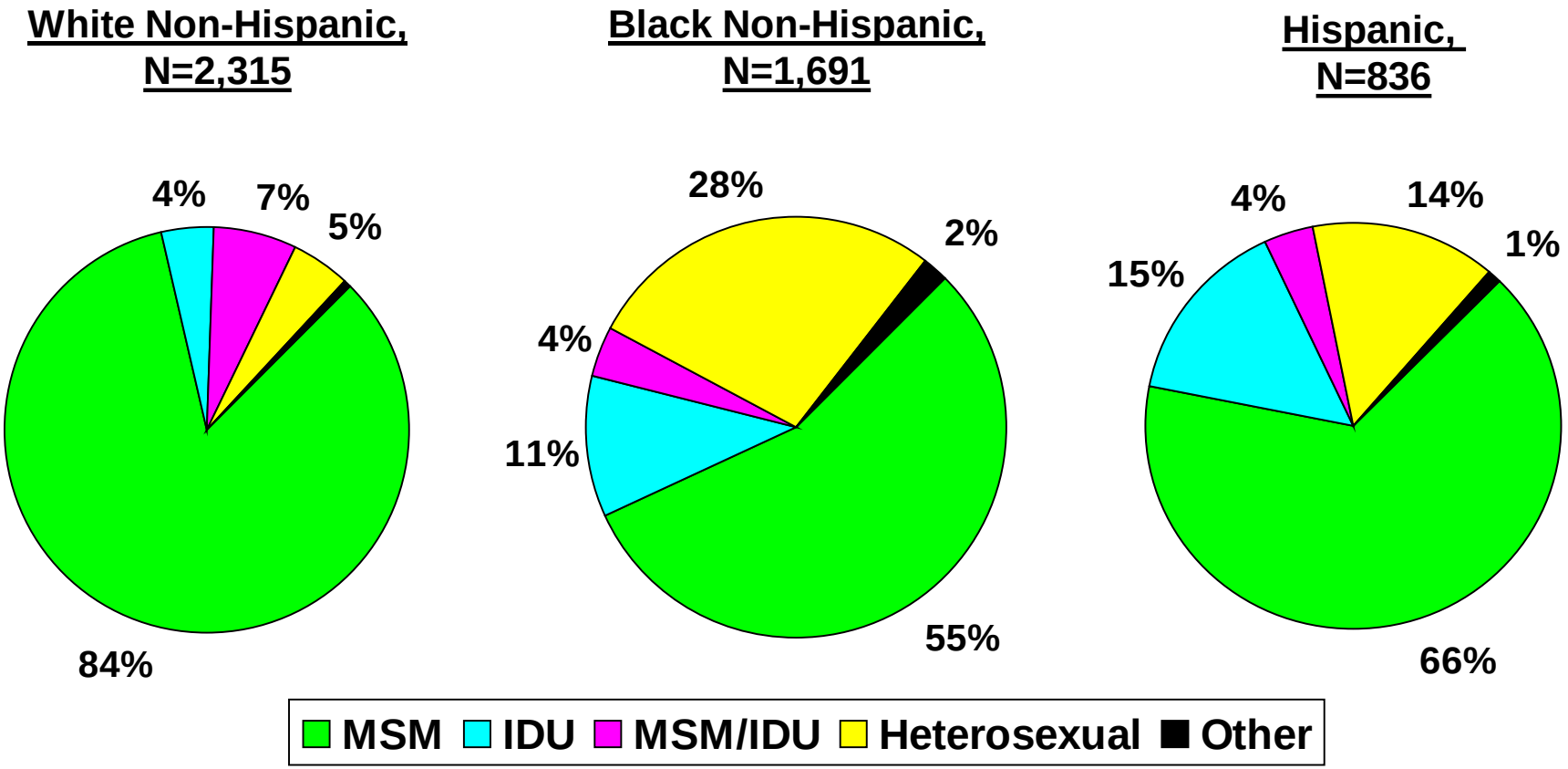
Black:Whites, 14.1:1
Hispanics:Whites, 2.8:1

Note: Among black males living with HIV disease reported through 2012, the case rate is nearly 4 times higher than the rate among white males. Among black females living with HIV disease, the case rate is 14 times higher than the rate among white females. Hispanic male and female rates are higher than the rates among their white counterparts. Data excludes Department of Corrections cases.

***Source: Population estimates are provided by FloridaCHARTS.**

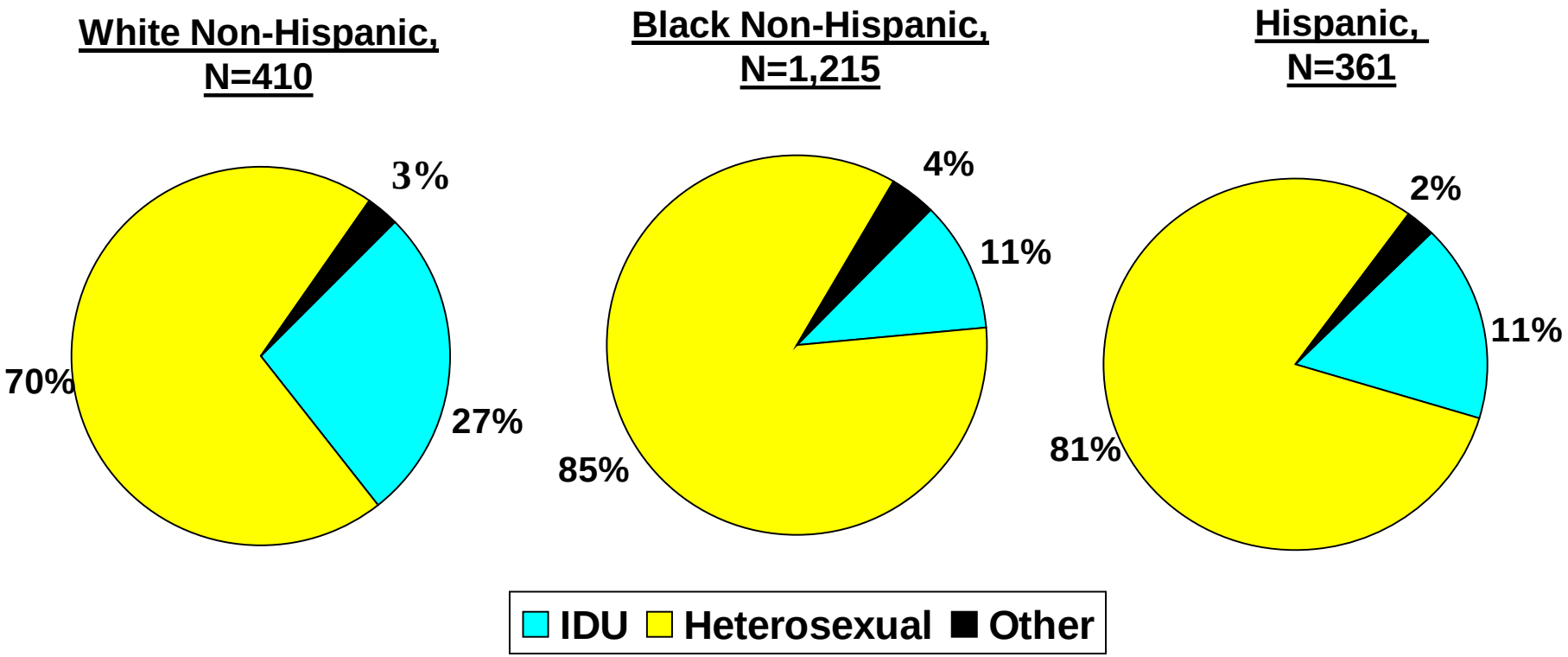
****Other includes Asian/Pacific Islanders and Native Alaskans/American Indians.**

Adult Males Living with HIV Disease by Race/Ethnicity and Mode of Exposure Reported through 2012, Partnership 6



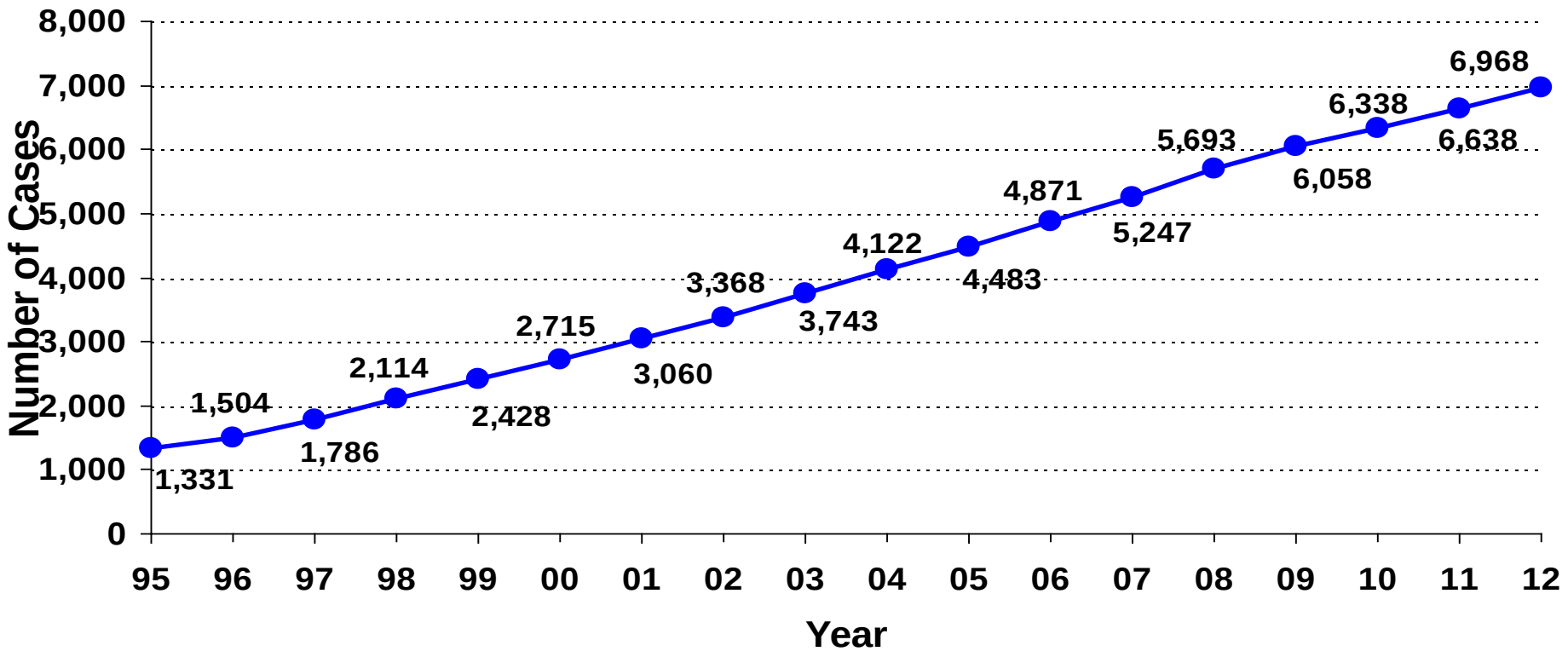
Note: NIRs redistributed. Among males living with HIV disease, the distribution of risk among blacks differs from that among whites and Hispanics. MSM represents the highest risk for all races. White males have the smallest proportion of heterosexual contact cases.

Adult Females Living with HIV Disease by Race/Ethnicity and Mode of Exposure Reported through 2012, Partnership 6



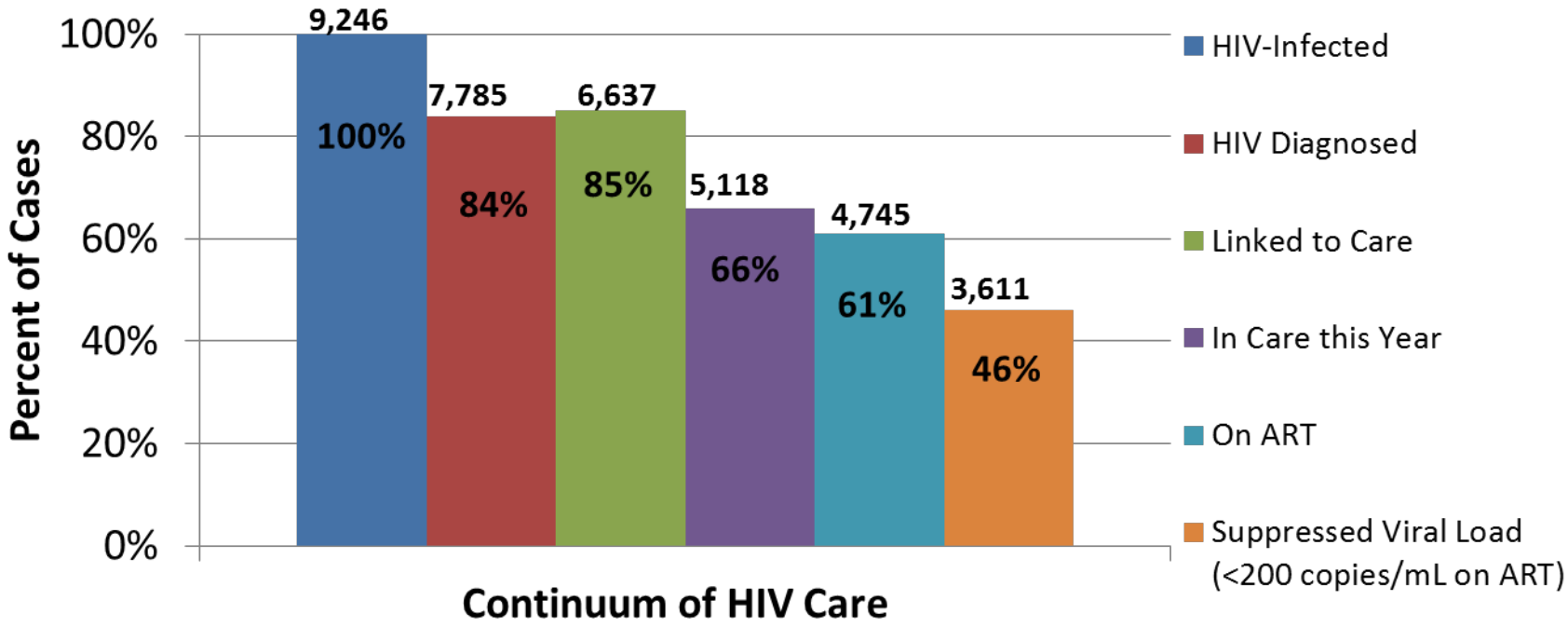
Note: NIRs redistributed. Among females living with HIV disease, the distribution of risk among whites differs from that among blacks and Hispanics. Heterosexual contact is the majority risk for all races. However, whites have the largest proportion of IDU cases.

Annual Prevalence of Adults Living with HIV Disease, 1995-2012, Partnership 6



As a result of declining deaths, annual HIV/AIDS diagnoses have exceeded deaths since 1995, and the number of persons reported with HIV/AIDS that are presumed to be alive has been increasing. Since the year 1995, prevalent cases have increased by over 424%. In 2012, the prevalence increased by 5% from the previous year.

Number and Percentage of HIV-Infected Persons Engaged in Selected Stages of The Continuum of HIV Care — Partnership 6, 2012



- HIV-infected=HIV diagnosed cases divided by 84.2% (to account for 15.8% national estimated unaware of their status in Florida). The 2011 indicator report (http://www.cdc.gov/hiv/pdf/2011_Monitoring_HIV_Indicators_HSSR_FINAL.pdf) estimates that 15.8% are undiagnosed (Table 9a) – this report uses 2010 data and was published in October 2013.
- HIV Diagnosed=Number of cases known to be alive and living in Florida through 2012, regardless where diagnosed, as of 06/30/2013 (used for unmet need calculations), plus an additional 4% to account for OOS in care, but not yet entered into eHARS.
- Linked to Care (Ever in Care) =Based on calculated data of persons living with HIV disease in Florida (regardless of where diagnosed) who ever had a CD4 or Viral load test in the eHARS dataset . (National estimates are 77%).
- In Care this Year=Based on Unmet need calculations as prescribed by HRSA, for persons living with HIV in Florida (regardless of where diagnosed) and having at least 1 HIV-related care service involving either a VL or CD4 test, or a refill of HIV-related RX, plus 5% for unreported/missing labs and plus 6% for OOS cases known in care, but not yet entered into eHARS. (National estimates for in care are 57%).
- On ART=Estimated 92.7% of In care this year in Florida per MMP (National estimates are 88%)
- Suppressed VL=Estimated 76.1% on ART are in care this year in Florida per MMP (National estimates are 77%).

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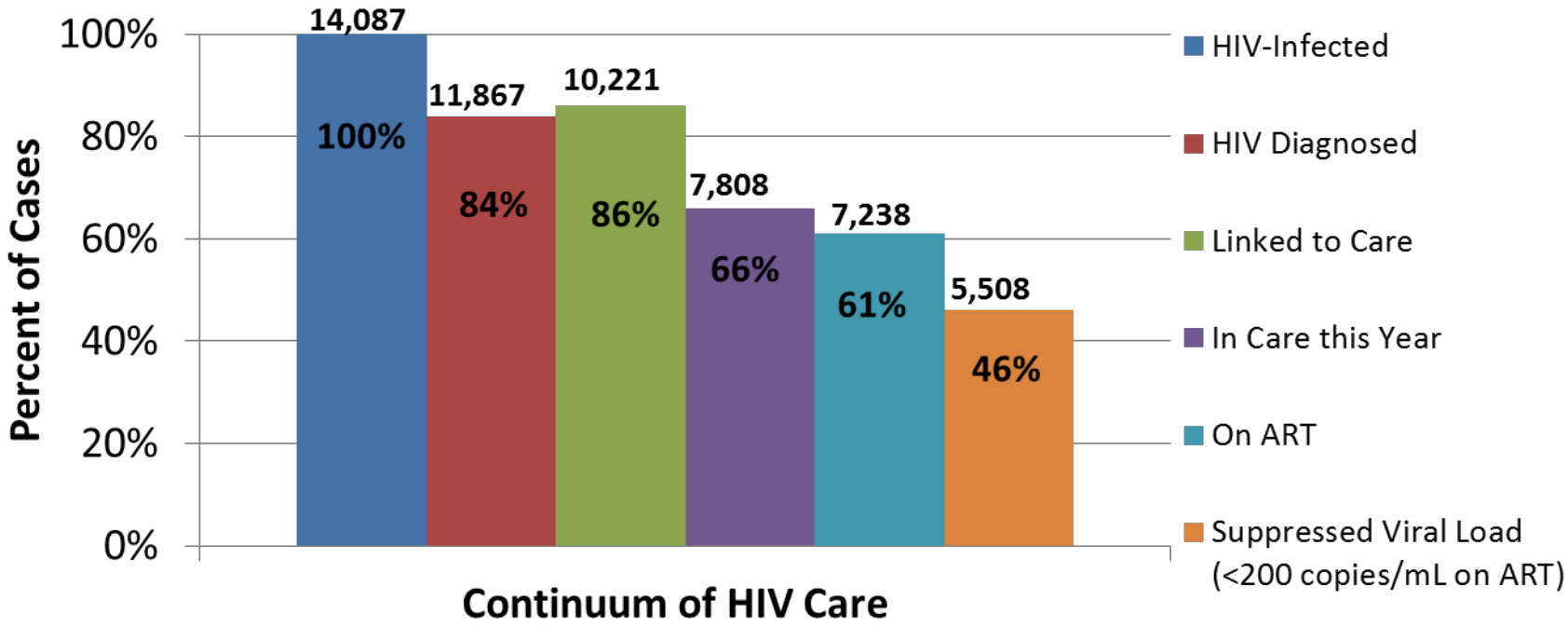
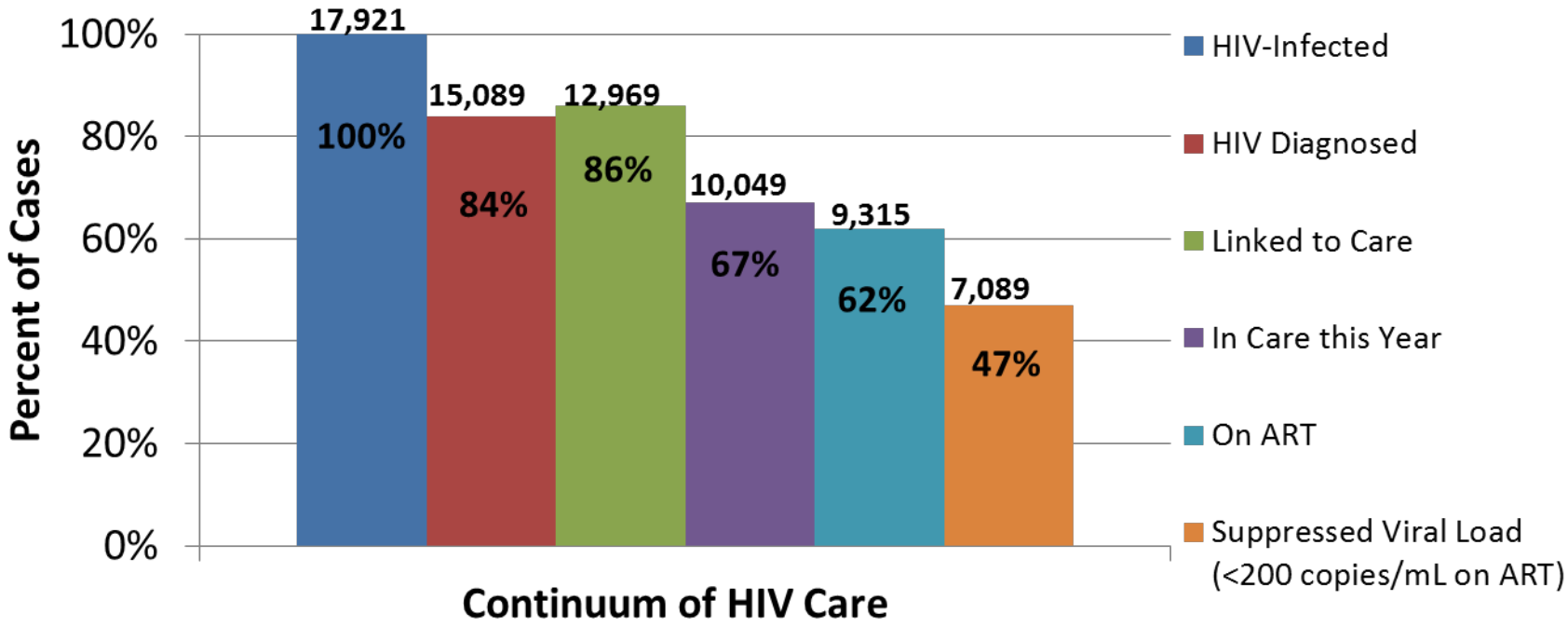
Number and Percentage of HIV-Infected Persons Engaged in Selected Stages of The Continuum of HIV Care — Tampa/St. Pete EMA, 2012



- HIV-infected=HIV diagnosed cases divided by 84.2% (to account for 15.8% national estimated unaware of their status in Florida). The 2011 indicator report (http://www.cdc.gov/hiv/pdf/2011_Monitoring_HIV_Indicators_HSSR_FINAL.pdf) estimates that 15.8% are undiagnosed (Table 9a) – this report uses 2010 data and was published in October 2013.
- HIV Diagnosed=Number of cases known to be alive and living in Florida through 2012, regardless where diagnosed, as of 06/30/2013 (used for unmet need calculations), plus an additional 4% to account for OOS in care, but not yet entered into eHARS.
- Linked to Care (Ever in Care) =Based on calculated data of persons living with HIV disease in Florida (regardless of where diagnosed) who ever had a CD4 or Viral load test in the eHARS dataset . (National estimates are 77%).
- In Care this Year=Based on Unmet need calculations as prescribed by HRSA, for persons living with HIV in Florida (regardless of where diagnosed) and having at least 1 HIV-related care service involving either a VL or CD4 test, or a refill of HIV-related RX, plus 5% for unreported/missing labs and plus 6% for OOS cases known in care, but not yet entered into eHARS. (National estimates for in care are 57%).
- On ART=Estimated 92.7% of In care this year in Florida per MMP (National estimates are 88%)
- Suppressed VL=Estimated 76.1% on ART are in care this year in Florida per MMP (National estimates are 77%).

Florida HEALTH

Number and Percentage of HIV-Infected Persons Engaged in Selected Stages of The Continuum of HIV Care — Consortium Partnerships 5/6/14, 2012



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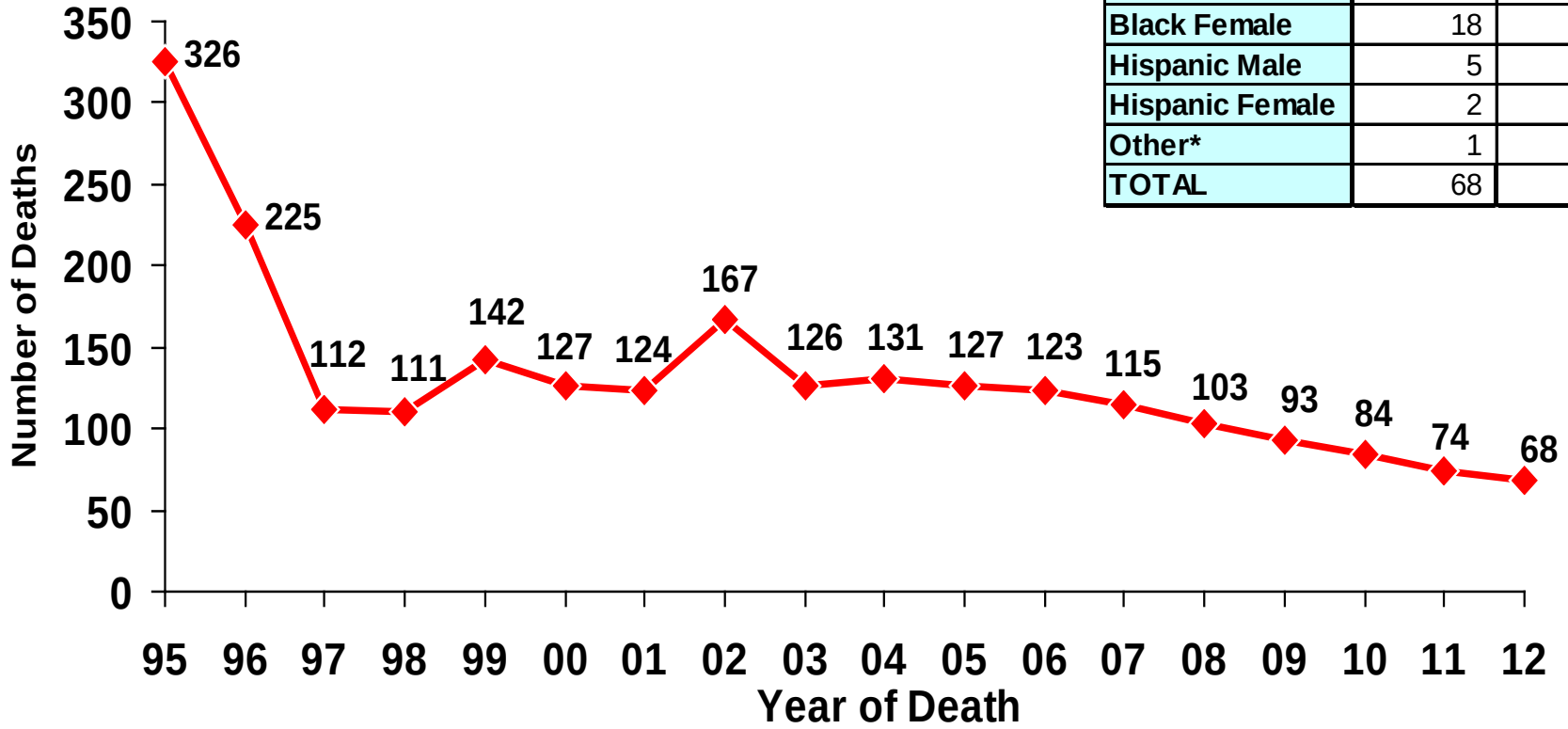
Florida HEALTH

Resident Deaths due to HIV Disease by Year of Death, 1995-2012, Partnership 6

Race/Ethnicity	2012	
	No.	rate
White Male	14	2.8
White Female	7	1.3
Black Male	21	18.8
Black Female	18	14.5
Hispanic Male	5	2.6
Hispanic Female	2	1.0
Other*	1	1.2
TOTAL	68	3.9



Source: Florida Department of Health, Bureau of Vital Statistics, Death Certificates (as of 05/07/2013). Population data are provided by FloridaCHARTS.

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

Some Useful Links

CDC HIV/AIDS Surveillance Reports (State and Metro Data):
http://www.cdc.gov/hiv/stats/hasrlink.htm

MMWR (Special Articles on Diseases, Including HIV/AIDS):
http://www.cdc.gov/mmwr/

U.S. Census Data (Available by State, County):
http://www.census.gov

Partnership 6 Dept. of Health, HIV/AIDS & Hepatitis Program Website
(Slide Sets, Fact Sheets, Monthly Surveillance Report, Counseling & Testing Data, etc., etc.):
http://www.doh.state.fl.us/disease_ctrl/aids/index.html

Florida HEALTH

"The reason for collecting, analyzing and disseminating information on a disease is to control that disease. Collection and analysis should not be allowed to consume resources if action does not follow."

--Foege WH et al. Int. J of Epidemiology 1976; 5:29-37

For Florida HIV/AIDS Surveillance Data

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Visit Florida's internet site for:

Monthly Surveillance Reports

Slide Sets and Fact Sheets

Annual Reports and Epi Profiles

http://www.doh.state.fl.us/disease_ctrl/aids/trends/trends.html

Visit CDC's HIV/AIDS internet site for:

Surveillance Reports, fact sheets and slide sets

http://www.cdc.gov/hiv/topics/surveillance/resources/reports/index.htm