



## **Executive Summary**

In 2006, 296,835 HIV tests were conducted at Florida's registered testing sites, representing a 0.7% increase (approximately 2,000 tests) over the previous year. This marks the 6th consecutive year that the number of HIV tests performed in Florida exceeded 250,000.

Increases in testing were recorded among Hispanics, while whites and blacks maintained their levels from last year. Persons who reported heterosexual sex as their highest risk accounted for the majority of the tests. Post-test counseling rates were 46.3% for negatives and 77.5% for positives; however, newly diagnosed persons received their results 95% of the time. Testing with OraSure and rapid testing accounted for 16.7% and 18.3% of all HIV tests conducted in 2006, respectively.

The number of positive HIV tests decreased by 6.8% in 2006. The overall positivity rate also decreased from 1.8% in 2005 to 1.6% in 2006. Persons who reported MSM as their highest risk accounted for 31.6% of all positive tests reported in 2006, yielding a positivity rate of 7.5%. While heterosexuals accounted for 23.9% of positive tests, the positivity rate for this risk group was only 0.7%. Blacks and adults age 30 and older continue to record higher than average positivity rates.

## Trends in HIV Testing

Since 1985, when the Florida Department of Health began collecting data on HIV testing at registered testing sites across the state, 4.3 million anonymous and confidential tests have been conducted. Today, over 1,800 public and private sites are registered with the Department of Health to provide HIV counseling, testing, and linkage services. Social and demographic data, including risk behaviors, are collected at these sites, and are compiled along with test results by the Early Intervention Section of the Bureau of HIV/AIDS in Tallahassee. While this database is currently not unduplicated, and as such cannot be used to provide data on the number of individuals tested, it does constitute a record of the number of tests conducted. It is a crucial indicator about the nature and direction of the epidemic, and is used to inform and evaluate HIV prevention activities and policy making at the state and local level.

Figures 1a and 1b show testing trends in Florida between 1989 and 2006. Testing levels increased rapidly through the early 1990s. During the mid-1990s the number of tests performed remained fairly steady, and peaked at 301,687 in 2003. The testing level dropped by 4,852 (approximately 2.0%) in 2006 compared with 2003. In contrast, positivity rates dropped sharply in the 1980s as more and more people at a relatively lower risk began to be tested, and have remained generally stable between 1996 and 2001. Positivity rates have declined steadily since 2001. The actual number of positive tests identified each year has also declined at a relatively steady rate since peaking in 1991, although increases were recorded from 1999 to 2002.

Figure 1a. HIV Tests Conducted in Florida and Seropositivity Rates, 1989-2006

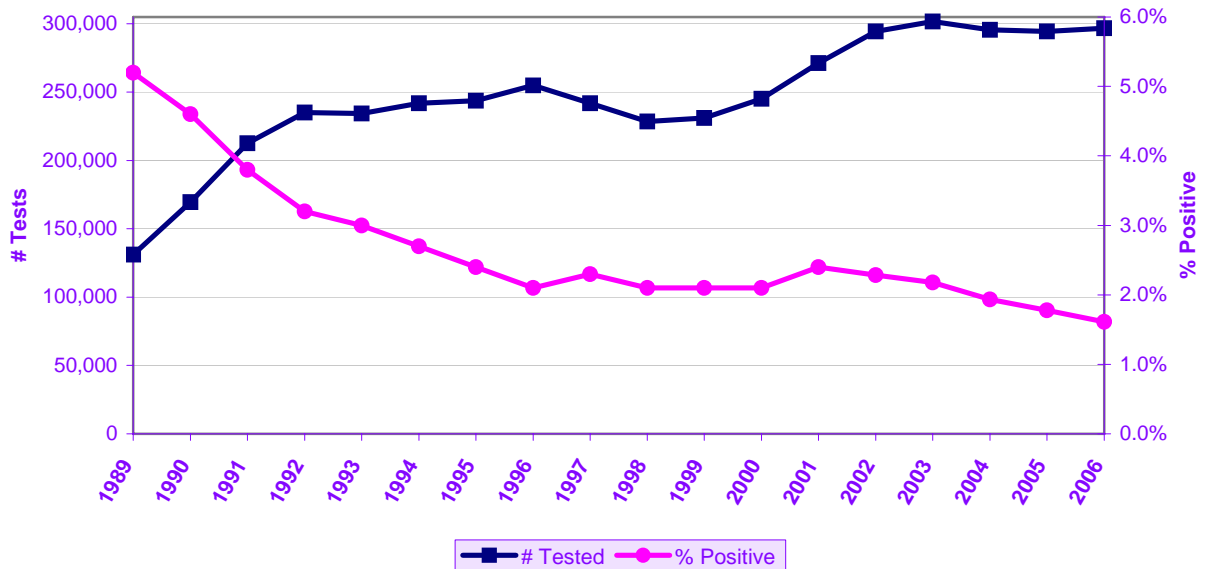


Figure 1b. HIV-Positive Tests in Florida and Seropositivity Rates, 1989-2006

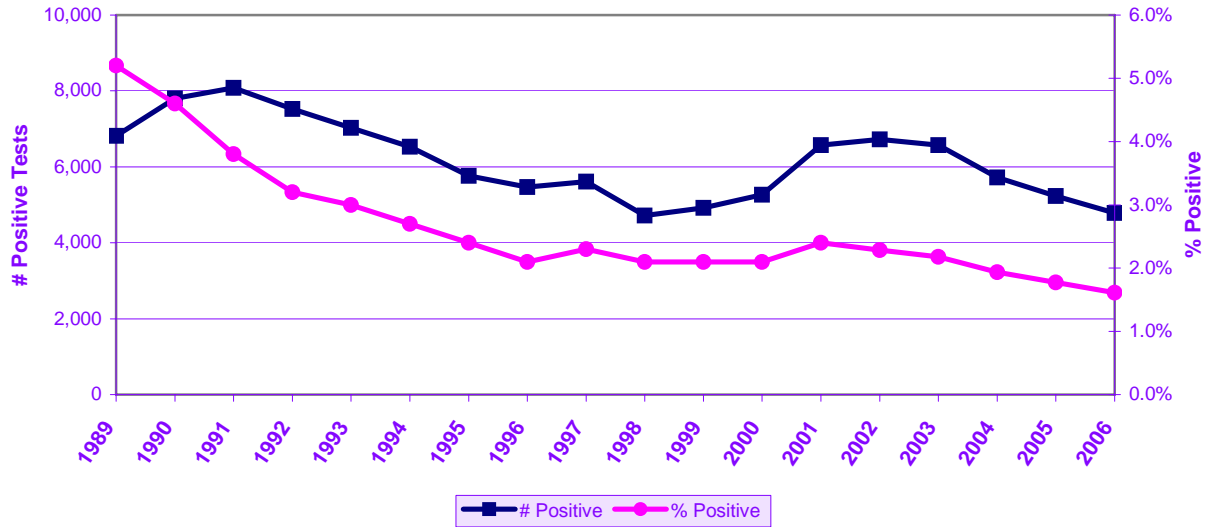


Figure 2 compares testing levels at anonymous and confidential sites by quarter, from January 2001 through December 2006. Some observable patterns may be seasonal or related to specific events; National HIV Testing Day occurs annually on June 27, and sharp increases in testing numbers have been recorded in the weeks around this event. Hurricanes in 2004 and 2005 may also have led to a decrease in testing in the latter part of those years.

Increasing levels of confidential testing are most apparent in the first two quarters of 2001 and 2004, followed by stronger declines in the third and fourth quarters. In 2002, 2003 and 2006, large increases in the first three quarters were followed by declines in the fourth quarter. In contrast, quarterly levels of anonymous testing have remained fairly stable over most of this period, although a sizeable decline was observed in the last quarters of 2002, 2003, and 2006. Anonymous testing accounted for 2.9% of all tests conducted in the last quarter of 2006, compared to 6.1% in the last quarter of 2004.

**Figure 2. Number of HIV Tests Completed at Anonymous and Confidential Sites in Florida, January 2001-December 2006**

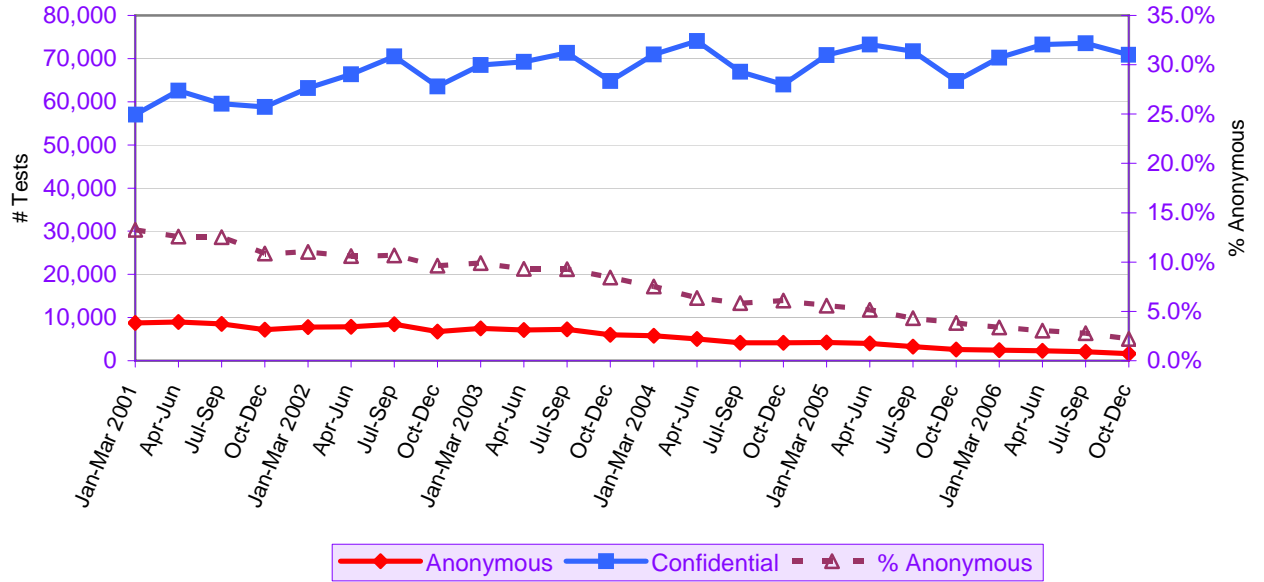


Figure 3 shows trends in testing among the seven largest counties in Florida. Broward, Duval, Hillsborough, Miami-Dade, Orange, Palm Beach, and Pinellas counties together account for 48% of all HIV tests conducted between 2001 and 2006. Between 2001 and 2003, the level of testing in these seven counties increased overall by almost 11% (over 30,000 tests), Miami-Dade and Broward peaked with 32% and 30% increases, respectively. In 2003, statewide testing levels rose to an all-time high, with large contributions from all counties except Duval. Compared with 2003, the level of testing, in these seven counties decreased by 18.5%.

**Figure 3. HIV Testing Levels Among Florida Counties that Perform More than 10,000 HIV Tests per Year, 2001-2006**

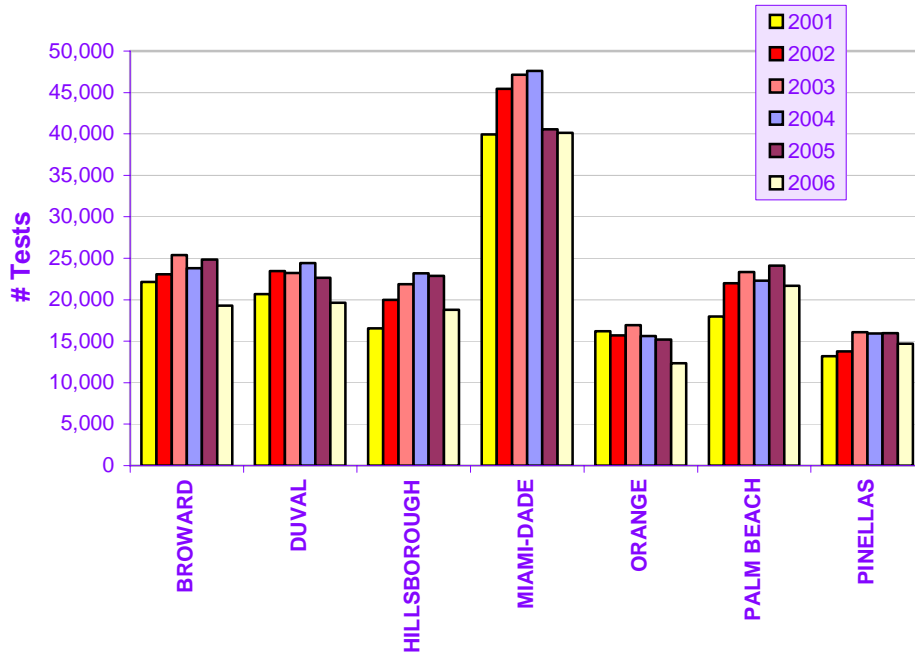


Figure 4a displays trends in anonymous and confidential testing within two high-risk groups: men who have sex with men (MSM) <sup>1</sup> and injection drug users (IDU). During the five years of analysis, MSM anonymous testing has consistently been much lower than confidential testing. Confidential testing in this risk group has increased, except in 2002, while anonymous testing has decreased during the five years of comparison.

Among IDU, levels of anonymous testing have consistently been much lower than levels of confidential testing. In 2001, 1,440 anonymous tests were recorded; this decreased to 324 in 2006. Confidential testing among IDU decreased between 2001 and 2002 and remained fairly level through 2006.

<sup>1</sup> The MSM category here includes MSM who are injecting drug users (MSM/IDU).

**Figure 4a. Number of HIV Tests Completed at Anonymous and Confidential Sites, MSM and IDU Risk Groups, 2001-2006**

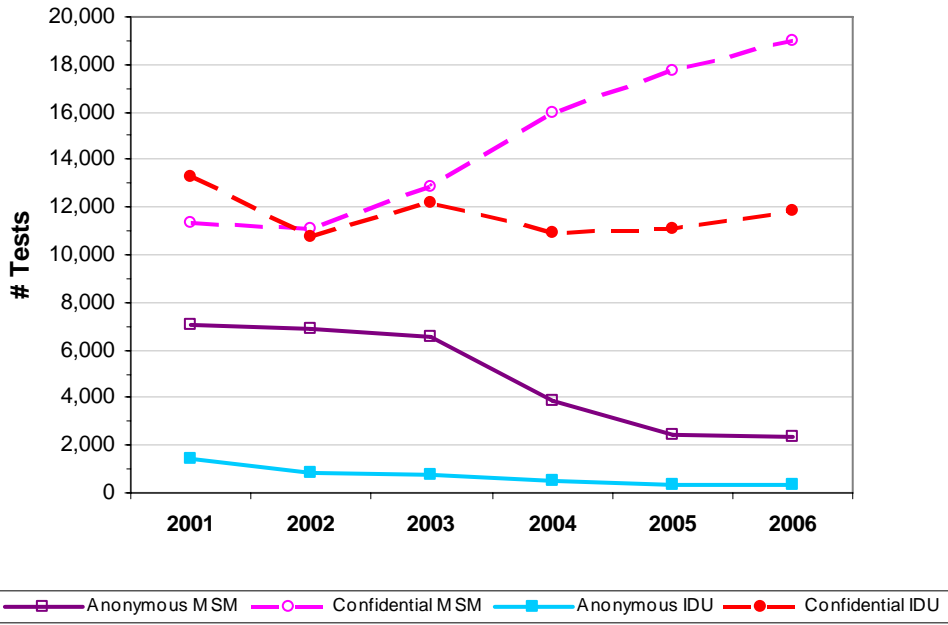
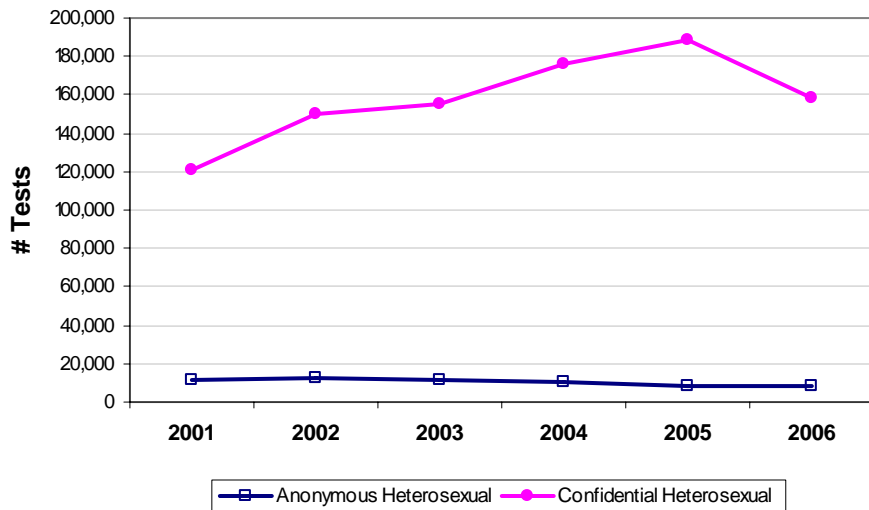


Figure 4b shows anonymous and confidential testing trends among those who identified heterosexual sex as their highest risk. The number of confidential tests administered in this risk group rose steadily throughout the years peaking in 2005 with 188,000 tests. This high-volume, typically low-risk group annually accounts for a very large proportion of all HIV tests.

**Figure 4b. Number of HIV Tests Completed at Anonymous and Confidential Sites, Heterosexual Risk Group, 2001-2006**



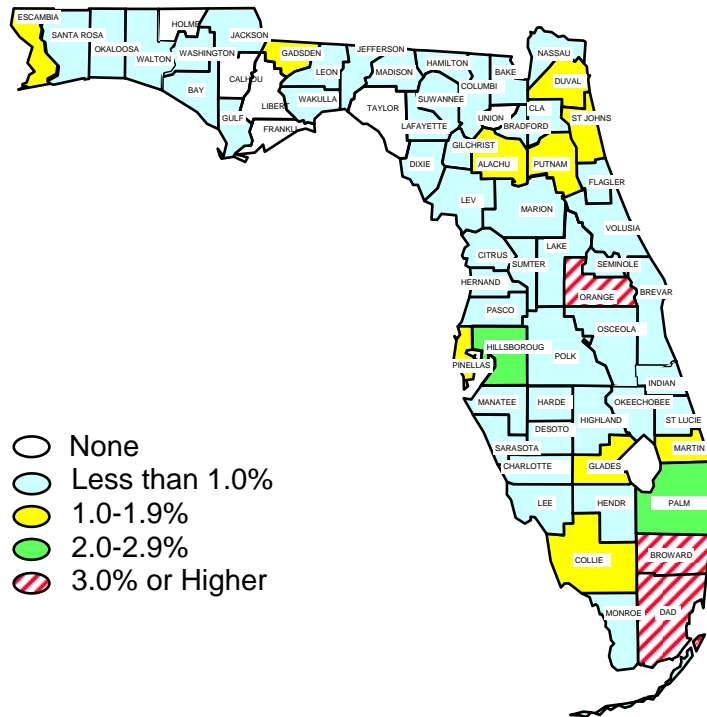
The accessibility and acceptance of HIV testing has changed considerably since the beginning of the epidemic. In the early years, a high proportion of HIV testing occurred in the health department. Over time, HIV testing became a routine procedure in more and more situations outside of the health department, such as blood donation, routine doctor visits, prenatal care, application for insurance, application for military service or employment. The increased presence of private laboratories and home testing methods has also diminished the untested population base from which the health department can draw. As a result, we have had to work harder to find those infected persons who do not know their HIV status.

At least 75% of persons with HIV in Florida know they are infected (based on estimates from the Centers for Disease Control and Prevention). Since 1999, the Department of Health has focused on increasing that proportion. A variety of strategies have been pursued, including: the increased use of OraSure and rapid testing in outreach settings; broader use of incentives; improved risk assessment and targeted testing; increased testing in correctional settings; increased emphasis on partner counseling and referral services; expansion of non-traditional, community-based testing programs; increased use of mobile vans; directly-funded CDC testing programs; and a social marketing campaign encouraging persons at risk for HIV to be tested. These strategies may have led to the 21.1% increase in testing between 2000 and 2006.

### **HIV Counseling and Testing in 2006**

In 2006, 296,835 HIV tests were performed at registered HIV testing sites in Florida. Of these, 4,786 were positive, resulting in an overall positivity rate of 1.6%. Positivity rates for individual counties are shown in Figure 5. Miami-Dade County recorded the highest positivity rate (3.5%), followed by Broward County (3.4%). Overall, eight counties reported positivity rates higher than the state average for 2006. Six counties reported no positive HIV tests in 2006 these counties are Calhoun, Union, Franklin, Holmes, Liberty, and Taylor. As always, these data should be viewed critically; while low positivity rates may be an accurate representation of HIV prevalence in a given area, they may also indicate that high-risk populations are not being reached. Conversely, high positivity rates could indicate access by high-risk populations, or they might be a result of operational factors, such as a standard recommendation that all clients receiving a positive result retest. Additional counseling and testing data for individual counties are available from the Early Intervention Section.

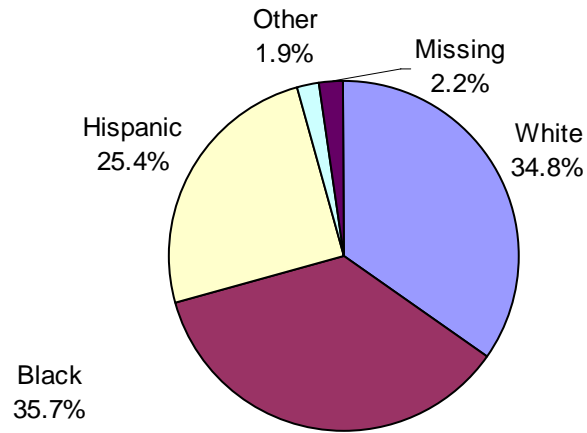
**Figure 5. HIV Seropositivity Rates by County, Florida, 2006**



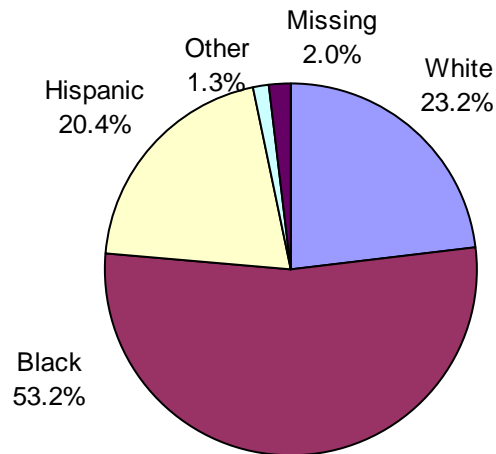
**Race/Ethnicity**

In 2006, blacks accounted for 35.7% of all tests (105,976); 34.8% (103,417) were performed on persons who identified themselves as non-Hispanic whites, and 75,280 (25.4%) of those tested were Hispanics (Figure 6a). Blacks accounted for 53.2% of positive tests (2,545) resulting in a positivity rate of 2.4% (Figure 6b). Whites accounted for 23.2% (1,109) of all positive tests with a positivity rate of 1.1%. Among the Hispanic population, the proportion of positive tests (977 or 20.4%) was more consistent with their testing level; the positivity rate for this group was 1.3%. Testing among Asians, Native Americans, and other racial/ethnic groups was minimal; when combined they accounted for 1.5% of all tests and 1.2% of positive tests.

**Figure 6a. Total HIV Tests by Race/Ethnicity, Florida, 2006  
(N=296,835)**

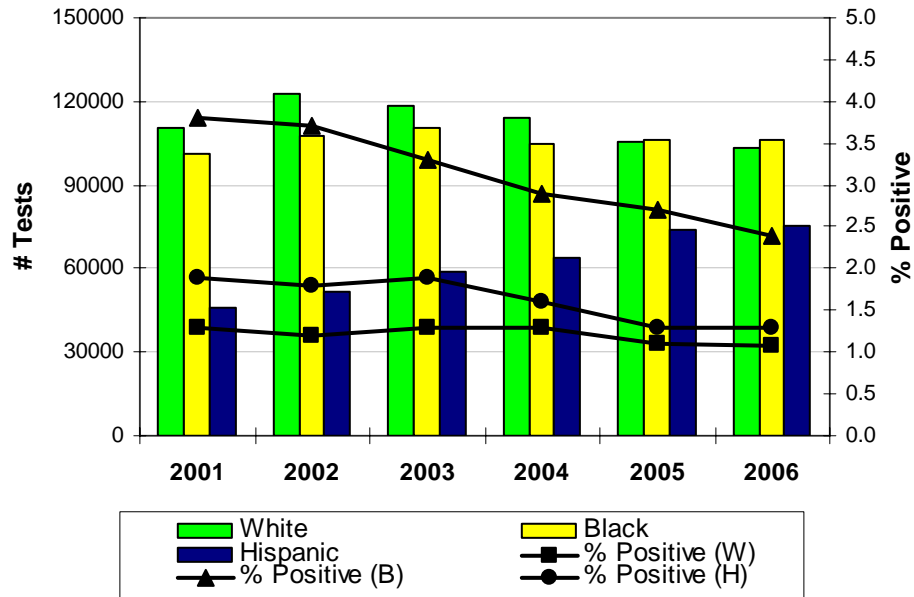


**Figure 6b. HIV-Positive Tests by Race/Ethnicity, Florida, 2006  
(N=4,786)**



Positivity rates for whites and Hispanics have not changed significantly from the 2005 rates. The positivity rate among blacks has continued to decrease for the sixth consecutive year (Figure 6b). Testing levels for whites and blacks varied slightly from 2005 levels, while testing among Hispanics has continued to increase every year since 2001.

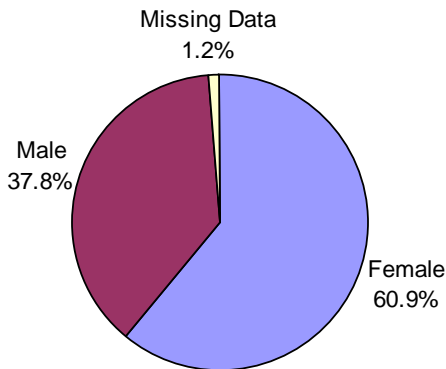
**Figure 6c. Number of HIV Tests & Positivity Rates by Race/Ethnicity, Florida, 2001-2006**



**Gender**

Figures 7a and 7b show the number of HIV tests and HIV-positive tests by gender. In 2006, 180,916 HIV tests were performed on females (60.9%); 112,286 (37.8%) were performed on males. However, males accounted for 65.9% of all positive tests, yielding a positivity rate of 2.8%, while females accounted for 32.9%, with a 0.8% positivity rate.

**Figure 7a. Total HIV Tests by Gender, Florida, 2006 (N=296,835)**



**Figure 7b. HIV-Positive Tests by Gender, Florida, 2006  
 (N=4,786)**

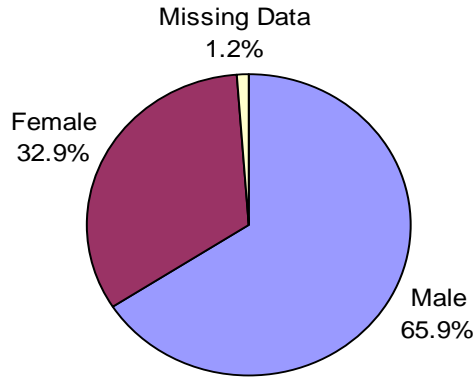
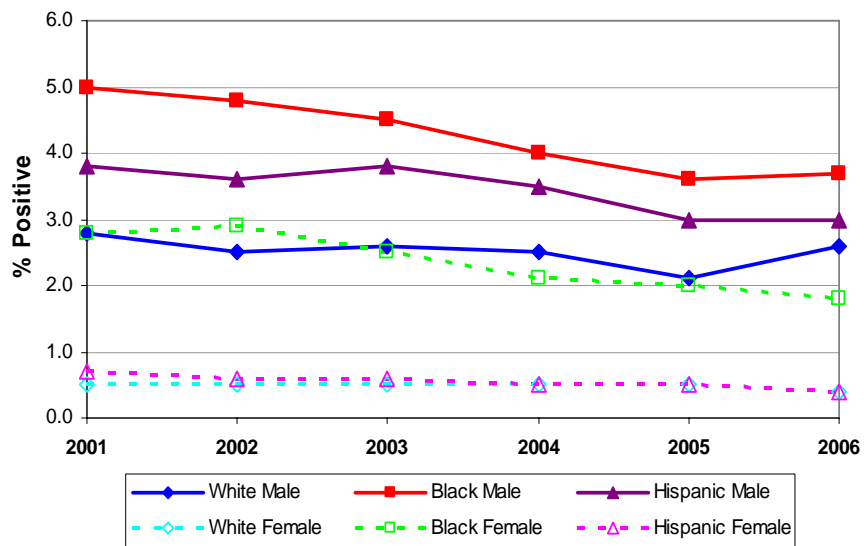


Figure 8 shows positivity rates for males and females by race/ethnicity from 2001 to 2006. Black males continue to have the highest positivity rates, followed by Hispanic males. In 2003, the positivity rate for black females was slightly surpassed by white males. This difference grew in 2004, narrowed in 2005, and grew again in 2006. Over these five years, positivity rates for Hispanic females were low; however, white females exhibited the lowest positivity rate until 2004 when their rate equaled that of Hispanic females.

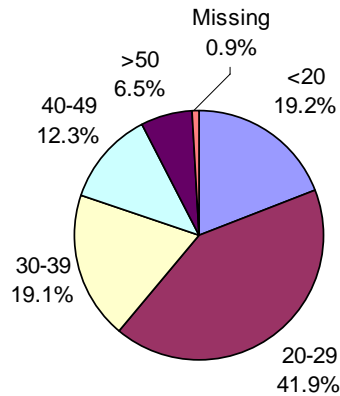
**Figure 8. HIV Seropositivity by Sex and Race/Ethnicity,  
 Florida, 2001-2006**



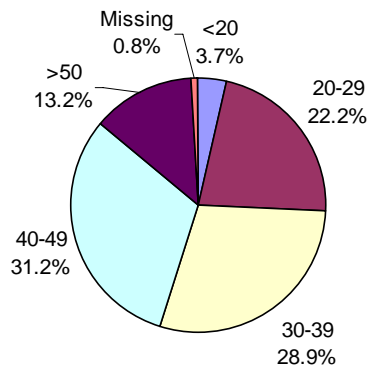
## Age

Those under the age of twenty represented 19.2% (57,053) of all tests, but only 3.7% (178) of positive tests, resulting in a positivity rate of 0.3% (Figures 9a and 9b). Persons between the ages of 20-29 continued to represent the highest proportion of tests (124,346 or 41.9%), yet only 22.2% of the positive tests (1,061), resulting in a positivity rate of 0.9%. With 19.1% of tests conducted, the 30-39 age group accounted for 28.9% of positive tests, resulting in a positivity rate of 2.4%. With only 12.3% of all tests conducted, the 40-49 age group accounted for the highest proportion of positive tests in 2006 (1,495 or 31.2%) and the highest positivity rate among all age groups (4.1%). Although the 50+ age group was not tested in very high numbers (19,426 or 6.5%), they accounted for 13.2% of positive tests, giving this group a positivity rate of 3.3%.

**Figure 9a. Total HIV Tests by Age Group, Florida, 2006  
(N=296,835)**

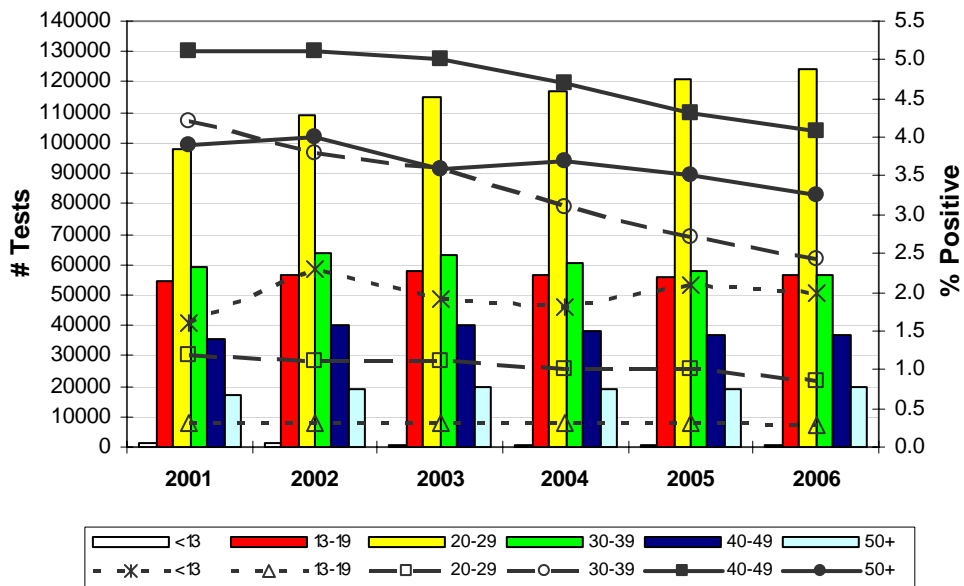


**Figure 9b. HIV-Positive Tests by Age Group, Florida, 2006  
(N=4,786)**



The distribution of testing across age groups has not changed significantly over time (Figure 9c). In 2006, there were slight decreases in the 30-39, and 40-49 age groups. The other age groups showed increases in 2006 when compared with 2005. Figure 9c shows positivity rates for 2001 to 2006 by age group. Positivity rates for persons aged 13-19 were the least variable during the past six years, while positivity rates among persons in the 30-39 age group have decreased by 36%. Between 2001 and 2006, positivity rates for children less than 13 years old fluctuated, although this variability is primarily attributed to the low volume of tests conducted. The 40-49 age group consistently recorded the highest positivity rates between 2001 and 2006.

**Figure 9c. Number of HIV Tests & Positivity Rates by Age Group, Florida, 2001-2006**



## Risk Exposure

Since individuals may engage in more than one risk behavior, each self reported exposure is categorized according to the highest level of risk. As Figure 10 shows, persons who identified heterosexual sex as their highest risk behavior comprise the majority of HIV tests conducted in 2006. The total number of tests conducted in this risk group increased steadily throughout the mid-1990s and by 1999, approximately 65% of HIV tests were performed on persons who identified heterosexual sex as their highest risk. By 2006, this proportion decreased to 56%. Three other risk groups with relatively large testing volumes experienced significant fluctuations over the past six years: testing levels among those identifying a current or past sexually transmitted disease (STD) diagnosis, injection drug users, and persons with a sex partner at risk varied over time but were relatively low compared with heterosexuals.

**Figure 10. Number of HIV Tests Among Selected Risk Exposure Groups, Florida, 2001-2006**

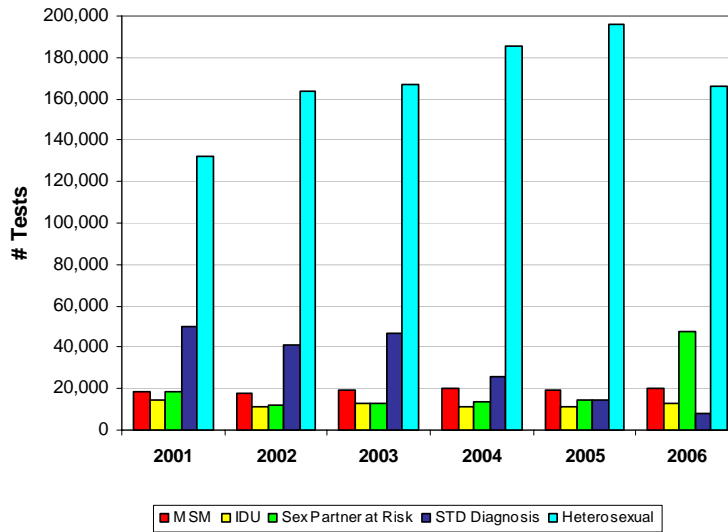


Figure 11 displays positivity rates for all risk exposure groups hierarchically starting with the lowest risk level. In 2006, the “sex with HIV” group had the highest positivity rate (12.13%). Men who have sex with men (MSM) and are injecting drug users (IDU) continued to be a risk group with very high positivity rate (9.9%). The positivity rate was also high among the MSM (7.5%). The high positivity rate of the perinatal risk group (9.6%) is due to the low numbers tested (12 positive tests out of 125 tested). Alternatively, the positivity rate for the heterosexual risk group remained at less than 1.0% even though they accounted for the majority of tests conducted. Only 14,802 tests were recorded in 2006 with no acknowledged risk.

**Figure 11. Positivity Rates by Self-Reported Risk Exposure, Florida, 2006**

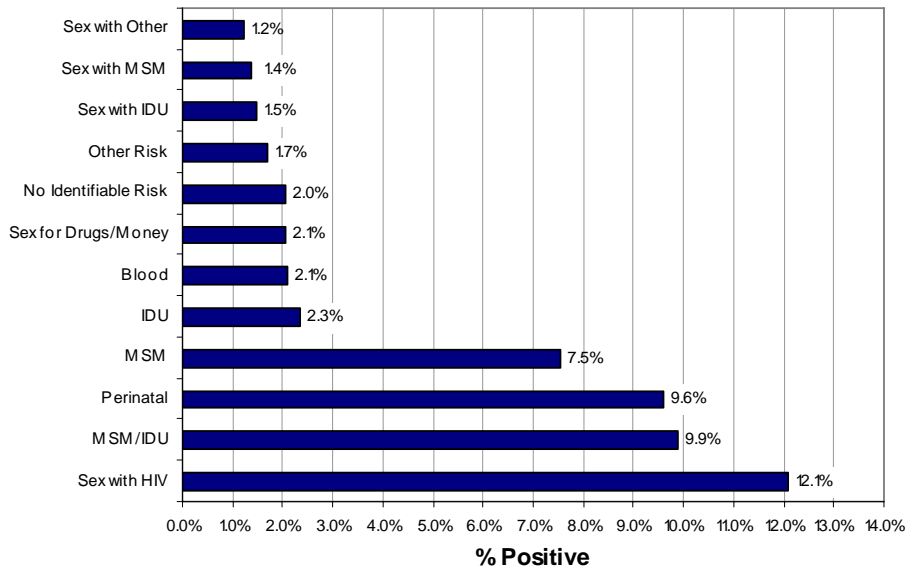
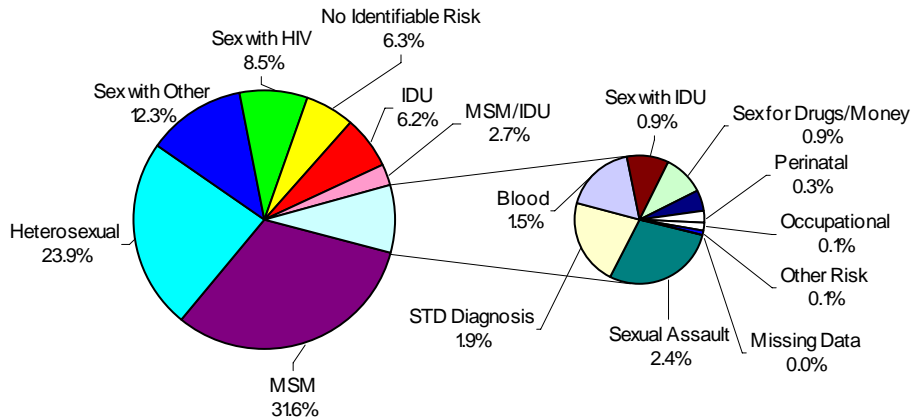


Figure 12 shows the distribution of HIV-positive test results by self-reported risk

exposure for 2006. MSM accounted for the greatest number of positive tests (1,512 or 31.6% and 1,643 or 34.3% when combined with IDU). Persons who identified heterosexual sex as their highest risk behavior comprised 23.9% (1,145) of all positive tests. Those who reported sexual relations with someone else who had HIV, accounted for 8.5% (407) of all positive tests. Persons who reported injection drug use as their highest risk accounted for 6.2% (298) of all positive tests. Although no other risk group accounted for more than 4% of positive tests in Florida in 2006, 6.3% of the positive tests (302) were reported with no identifiable risk data.

**Figure 12. Distribution of HIV-Positive Tests by Self-Reported Risk Exposure, Florida, 2006 (N=4,786)**



**Focus on Minorities**

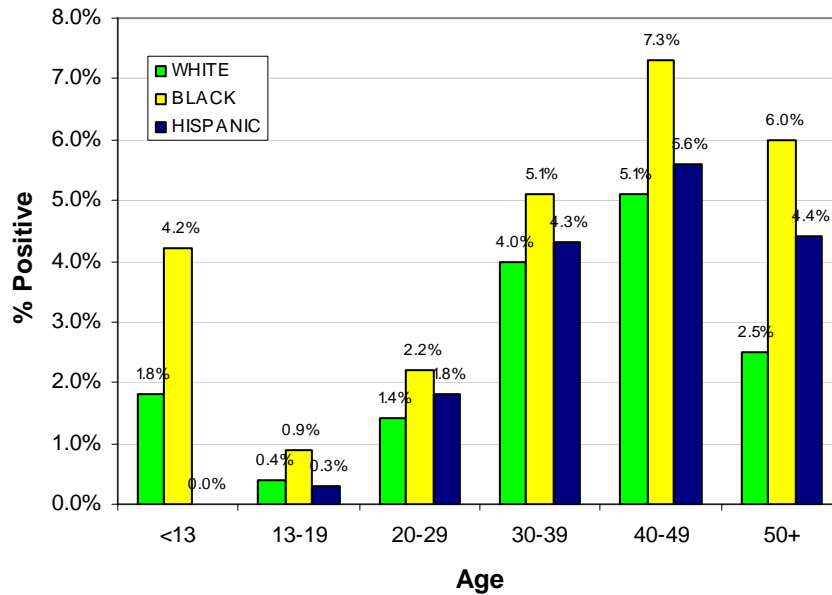
In 2006, Blacks and Hispanics comprised 73.6% (53.2% blacks and 20.4% Hispanics) of HIV cases. Analysis of HIV counseling and testing data has also revealed disproportionately higher positivity rates among blacks. Further specification of the distribution of HIV testing and positivity rates across racial/ethnic populations can provide useful insights into the nature and course of the epidemic in Florida’s minority communities.

**The Intersection of Race/Ethnicity, Gender, and Age**

One way to obtain a more specific description of HIV testing patterns and positivity rates in a population is to look at the intersection of race/ethnicity, sex, and age. Figure 8 shows that over time, black males have experienced the highest positivity rates, followed by Hispanic males, white males, and black females. White and Hispanic females consistently recorded positivity rates below 1.0%. This pattern has been further specified for 2006 by the incorporation of age.

The overall positivity rate for black males in 2006 was 3.7% (Figure 8). However, as Figure 13a shows, this rate varied considerably by age. The highest positivity rate was found among black males aged 40-49 (7.3%), followed by those aged 50+ (6.0%) and 30-39 (5.1%). This is particularly informative because 20-29 year olds accounted for the largest proportion of HIV tests conducted among black males (37.4%, data not shown), yet their positivity rate was relatively low (2.2%). Significant variation in positivity rates by age also exists among Hispanic males, whose overall positivity rate in 2006 was 3.4%. The highest positivity rate was found in the 40-49 age group (5.6%); the lowest in the less than 13 age group (0%).

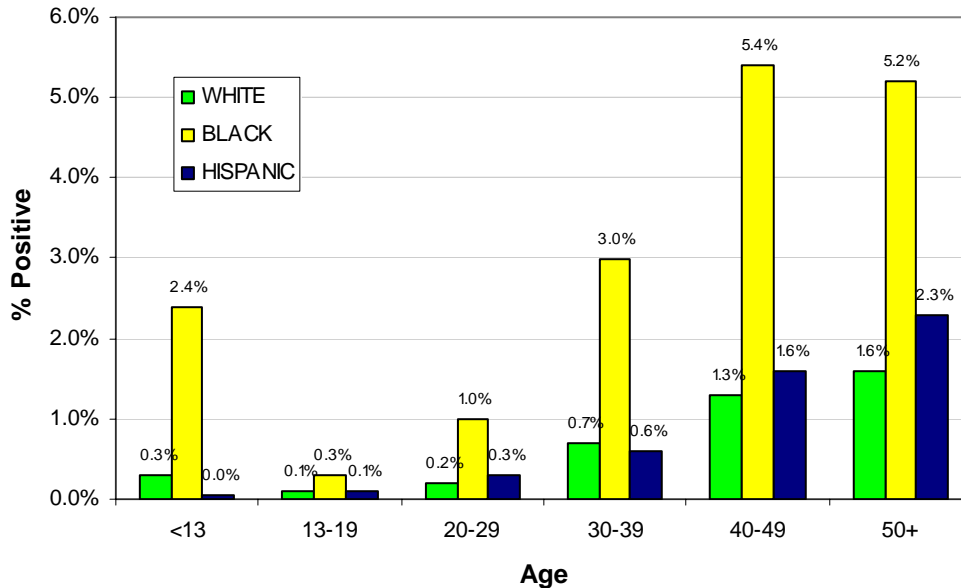
**Figure 13a. Seropositivity Among Males, by Age and Race/Ethnicity, Florida, 2006**



The overall positivity rate for black females in 2006 was 1.8% (Figure 8). However, Figure 13b shows that black females over the age of 30 are experiencing much higher positivity rates. Fewer tests were administered to black females aged 30 and older, yet positivity rates were quite high: 3.0% for those in the 30-39 age group, 5.4% for those aged 40-49, and 5.2% for those aged 50 and over. While 67.1% of black females tested were between the ages of 0 and 29 (data not shown), the corresponding positivity rates were 2.4% for less than 13 year olds, 0.3% for 13-19 year olds and 1.0% for 20-29 year olds. Among Hispanic females, positivity rates were low. However, the positivity rates for Hispanic females in the 40-49 and 50+ age groups were 1.6% and 2.3%, respectively, slightly higher than the 0.4% reported for all Hispanic females (Figure 8). These figures suggest that increased HIV testing of older minority men and women is needed.

The data presented here indicate that prevention efforts must continue to be directed toward older blacks and Hispanics in order to limit new infections and to ensure that access to education and care is maintained or improved.

**Figure 13b. Seropositivity Among Females, by Age and Race/Ethnicity, Florida, 2006**



### **The Intersection of Race/Ethnicity and Risk**

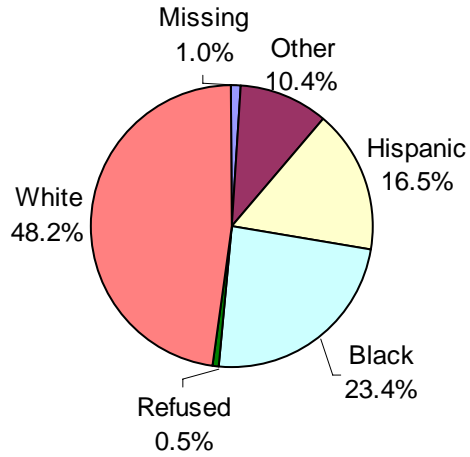
Male-to-male sex and injection drug use (separately or in combination) are behavioral practices that place individuals at high risk for HIV infection. In 2006, 34,129 HIV tests (11.5%) were performed on persons who identified themselves as MSM, IDU, or both MSM and IDU. As shown in Figure 11, the positivity rate among MSM/IDU in 2006 was 9.9%, 7.5% among MSM, and 2.3% among IDU. However, sharp differences in testing patterns and positivity rates are evident across racial/ethnic categories within these risk groups.

Figures 14 to 16 illustrate the distribution of HIV tests and HIV-positive tests by race/ethnicity for MSM/IDU, MSM, and IDU in 2006. Individuals identifying themselves as non-Hispanic white accounted for the largest proportion of HIV tests in all three of these risk groups: 48.2% of MSM/IDU, 42.8% of MSM, and 66.9% of IDU. Whites also accounted for the majority of positive HIV tests among MSM/IDU (50.4%), and MSM (38.2%). Both blacks and Hispanics are over-represented among HIV-positive MSM.

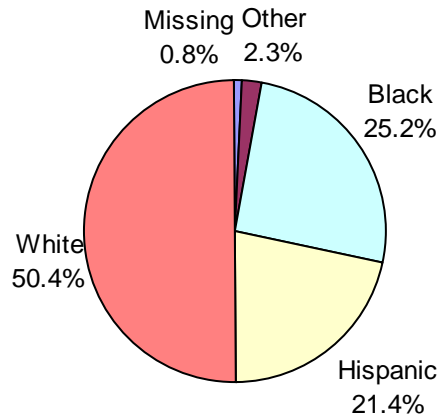
Racial/ethnic disparities appear to be stronger among injection drug users. Black females, who accounted for only 8.8% of tests among IDU in 2006, comprised 23.5% of positive tests in this risk group. Similarly, black males accounted for just 6.7% of tests, but 21.8% of the positives. In contrast, white males and females together accounted for over two-thirds of tests among IDU (36.3% for females and 30.6% for males), yet their combined share of positive tests was substantially lower (32.5%). The proportion of positive tests among Hispanic male IDU in 2006 was also fairly high (13.1%), although

there was no substantial difference between the share of all tests and the share of positive tests among Hispanic females.

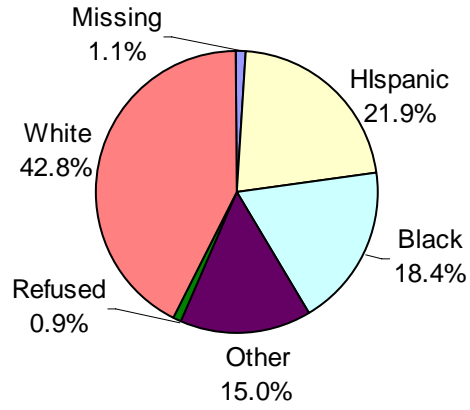
**Figure 14a. HIV Tests among MSM/IDU by Race/Ethnicity, Florida, 2006 (N= 1,313)**



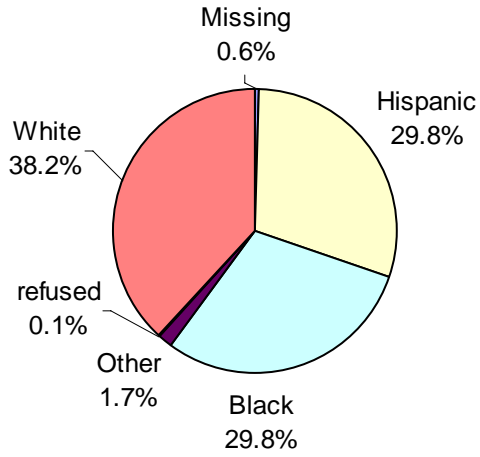
**Figure 14b. HIV-Positive Tests among MSM/IDU by Race/Ethnicity, Florida, 2006 (N= 131)**



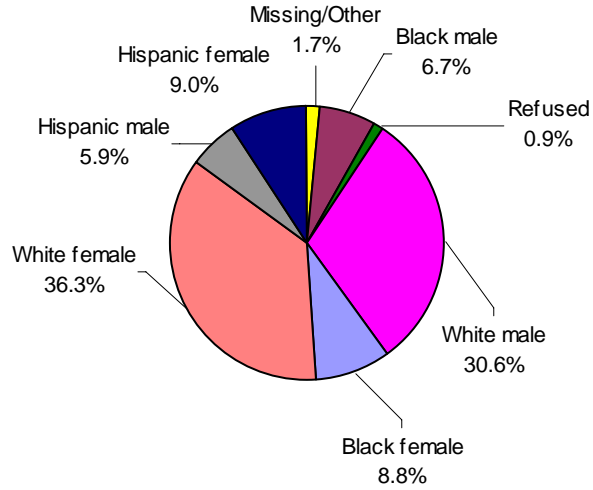
**Figure 15a. HIV Tests among MSM by Race/Ethnicity,  
Florida, 2006  
(N= 20,071)**



**Figure 15b. HIV-Positive Tests among MSM by Race/Ethnicity,  
Florida, 2006 (N =1,512)**



**Figure 16a. HIV Tests among IDU by Gender and Race/Ethnicity, Florida, 2006  
(N= 12,745)**



**Figure 16b. HIV-Positive Tests among IDU by Gender and Race/Ethnicity, Florida, 2006  
(N= 298)**

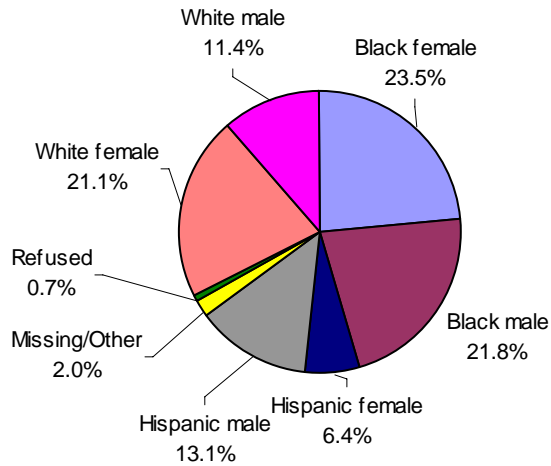
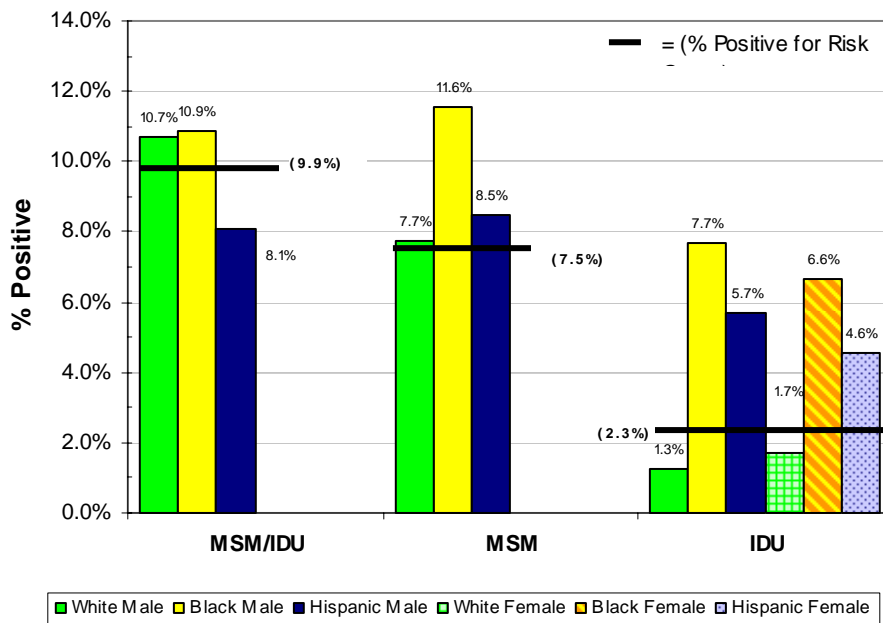


Figure 17 shows that aggregate positivity rates for MSM/IDU, MSM, and IDU mask important and occasionally dramatic differences between racial/ethnic groups. The relatively high volume of testing by whites, combined with their generally lower positivity rates, reduce the average positivity rate for the whole population in each of these risk groups. For example, in 2006, the positivity rate for black MSM was 11.6%, approximately 4 percentage points higher than that for all MSM (7.5%). The difference is also apparent for black female IDU, whose positivity rate in 2006 (6.6%) was 4.3 points higher than the 2.3% reported for all IDU. This figure shows that blacks experienced significantly higher positivity rates in these three risk exposure groups.

**Figure 17. Seropositivity Among Selected Risk Exposure Groups by Gender and Race/Ethnicity, Florida, 2006**



Together MSM, IDU, and MSM/IDU accounted for 34,129 HIV tests in 2006, 18.1% were blacks, 19.3% were Hispanics and 62.5% were whites. However, of the 1,941 positive tests for these three risk groups, 33.2% were blacks, 8.6% were Hispanics and 59.2% were whites (data not shown). The data presented here indicate that there is a continuing need to increase testing and prevention education among individuals that engage in very-high-risk behaviors.

**Focus on OraSure**

The Bureau of HIV/AIDS has been providing Florida counseling and testing programs with OraSure Oral HIV-1 Antibody Testing Systems since February 1998. This testing method, which tests for antibodies in oral mucosal transudate, is as accurate as a blood test for diagnosis in public health and clinical settings. In Florida, OraSure is primarily for use in outreach settings, to reach high-risk persons who are less likely to access the health care system and less accepting of conventional testing methods (e.g., persons who are homeless, drug users, younger, or those who live in rural areas).

In 2006, 49,658 HIV tests were administered with OraSure in Florida, a decline in usage compared with 2004 (63,293) and 2003 (78,378). The statewide positivity rate using OraSure also decreased from 3.1% in 2001 to 2.5% in 2006. The top 15 counties are listed by positivity rate in Table 1. Compared to the overall positivity rates shown in Figure 5, some counties were able to achieve higher positivity rates using OraSure. These differences may result from the success of using OraSure in outreach settings. Among the 35 counties that used more than 100 OraSure tests in 2006, Miami-Dade had the highest positivity rate (7.4%), followed by Broward County (7.2%). Twenty-seven counties performed fewer than 100 tests in 2006.

**Table 1. HIV Seropositivity Rates using OraSure for Select Counties, Florida, 2006**

County	Tested	Positive	Positivity Rate
Miami-Dade	7895	634	7.4%
Broward	4916	383	7.2%
Palm Beach	4562	222	4.6%
St Lucie	667	32	4.6%
Orange	1765	77	4.2%
Hillsborough	2695	86	3.1%
Pinellas	1516	46	2.9%
Suwannee	110	3	2.7%
Martin	154	4	2.5%
Volusia	975	22	2.2%
Duval	4022	84	2.0%
Clay	192	4	2.0%
Putnam	262	5	1.9%
Sarasota	1301	24	1.8%
Escambia	1522	25	1.6%

Non-Hispanic blacks accounted for the majority of OraSure tests conducted in 2006 (21,793 or 42.4%), as compared to non-Hispanic whites (17,553 or 34.8%), and Hispanics (8,214 or 16.5%). Males accounted for a slightly higher proportion than females (50.8% vs. 49.2%).

### **Focus on Rapid Testing**

In July 2003, the first rapid HIV testing program was implemented in the Duval County Jail. The OraQuick Rapid HIV-1/2 Antibody Test is a screening test that produces very quick results, usually in 20-40 minutes, and can be performed using whole blood through

finger stick or venipuncture or with an oral specimen. It is extremely accurate and non-reactive (negative) results are final. Reactive results must be confirmed by a standard HIV test, which could be done using blood or OraSure.

In 2006, 54,402 tests were recorded using rapid testing, up from 3,790 in 2003 when the program started. The statewide positivity rate using rapid testing decreased from 2.2% in 2003 to 1.8% in 2006. Positivity rates by county are illustrated in Table 2. All counties are not shown but the positivity rates for those counties are less than 0.5%.

**Table 2. Rapid Tests and Positivity Rates for Select Counties, Florida, 2006**

<b>County</b>	<b>Total Tests</b>	<b>No. Negative</b>	<b>No. Confirmed Positive</b>	<b>Positivity Rate</b>
Alachua	161	150	11	6.8%
Palm Beach	1,801	1,710	91	5.1%
Leon	223	212	11	4.9%
Bay	151	144	7	4.6%
Broward	4,321	4,134	187	4.3%
Orange	1,455	1,396	59	4.1%
Pinellas	1,523	1,466	57	3.7%
Duval	4,922	4,755	167	3.4%
Hillsborough	4,483	4,347	136	3.0%
Miami-Dade	8,991	8,738	253	2.8%
Saint Lucie	1,405	1,377	28	2.0%
Sarasota	475	466	9	1.9%
Collier	486	478	8	1.7%
Polk	499	492	7	1.4%
Volusia	628	621	7	1.1%
Monroe	359	355	4	1.1%
Pasco	311	308	3	1.0%
Martin	148	147	1	0.7%
Manatee	744	740	4	0.5%
<b>Total</b>	<b>33,086</b>	<b>32,036</b>	<b>1,050</b>	<b>3.2%</b>

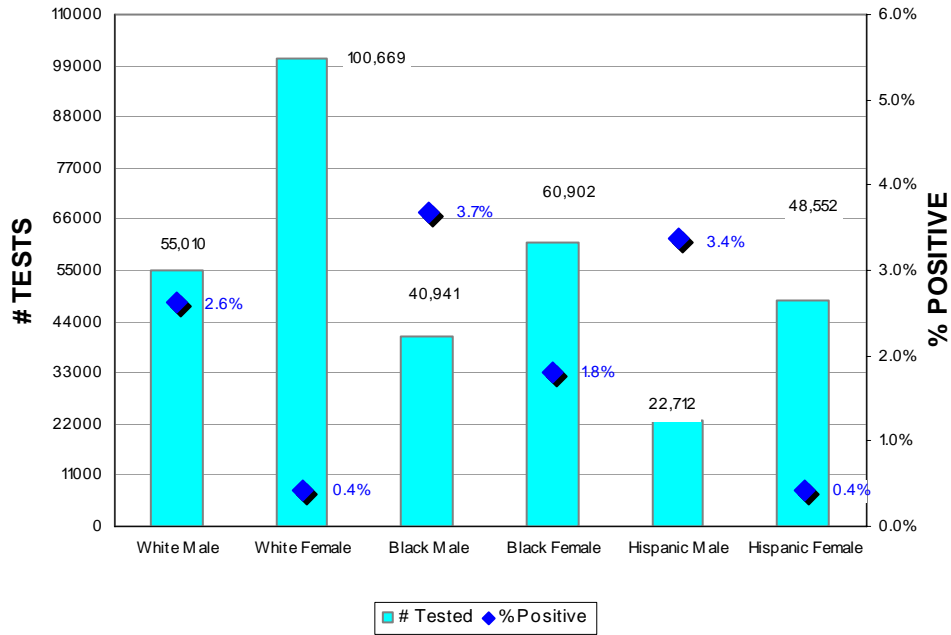
Among counties that used more than 100 rapid tests in 2006, Alachua had the highest positivity rate (6.8%) followed by Palm Beach (5.1%).

Non-Hispanic blacks recorded a large proportion of rapid tests conducted in 2006 (22,102 or 40.6%), non-Hispanic whites recorded 17,942 or 32.9%, and Hispanics 12,397 or 22.8%. Males accounted for a higher proportion than females (61.0% vs. 39.0%)

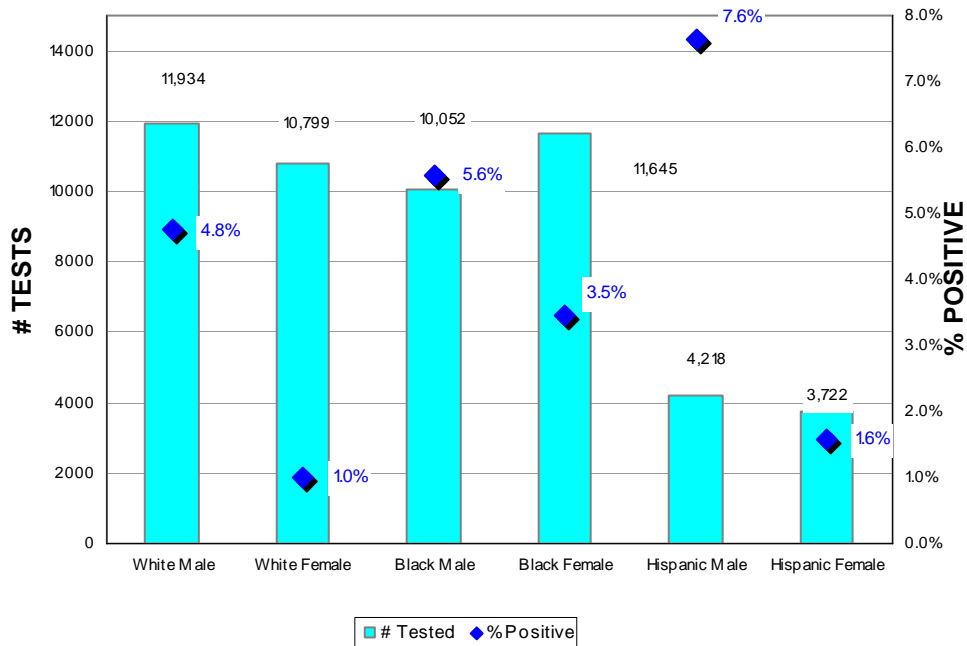
Figures 19a, 19b, and 19c compare testing levels and positivity rates by race/ethnicity and gender for blood, OraSure and rapid testing in 2006. White females had the highest

number of blood tests, and white males had the highest levels of OraSure and rapid testing. Hispanic males were tested in higher numbers than their female counterparts for OraSure and rapid testing. Compared to blood testing, higher positivity rates were recorded among black females using OraSure and rapid testing (3.5% and 2.6% vs. 1.8%). Hispanic males testing with OraSure had the highest positivity rate, 7.6%.

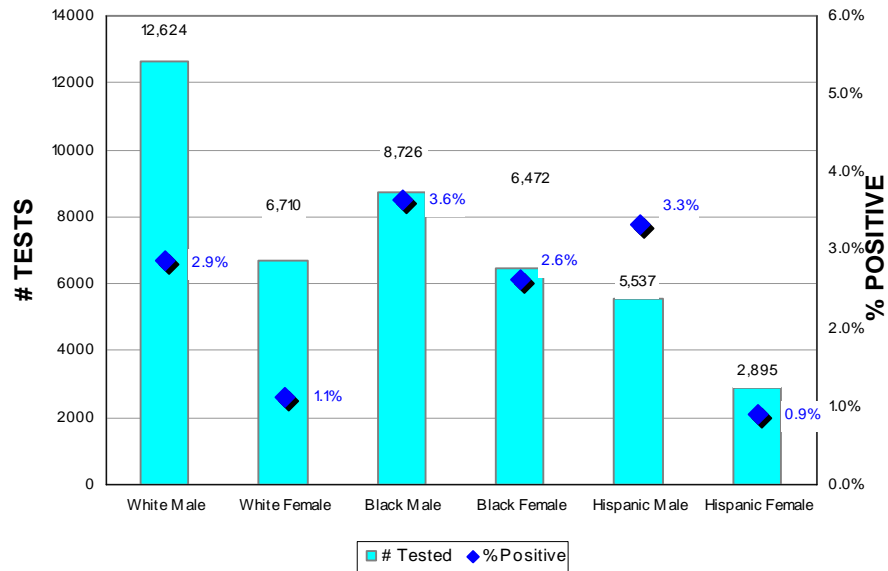
**Figure 19a. HIV Blood Tests by Race and Gender, Florida, 2006**



**Figure 19b. HIV OraSure Tests by Race and Gender, Florida, 2006**



**Figure 19c. HIV Rapid Tests by Race and Gender, Florida, 2006**



Figures 20a, 20b, and 20c compare testing levels and positivity rates by risk groups for blood, OraSure, and rapid testing in 2006. Regardless of the type of test, the majority were administered to persons who identified heterosexual sex as their highest risk. The OraSure test had the highest overall positivity of 2.5%. Compared to blood and OraSure testing, the positivity rates for MSM using rapid testing were lower (11.3% and 10.7% vs. 4.2%). A higher positivity rate using OraSure and rapid testing compared to blood, was recorded for the STD diagnosis exposure category (1.7 and 1.8% vs. 0.9%).

**Figure 20a. HIV Blood Tests by Risk, Florida, 2006**

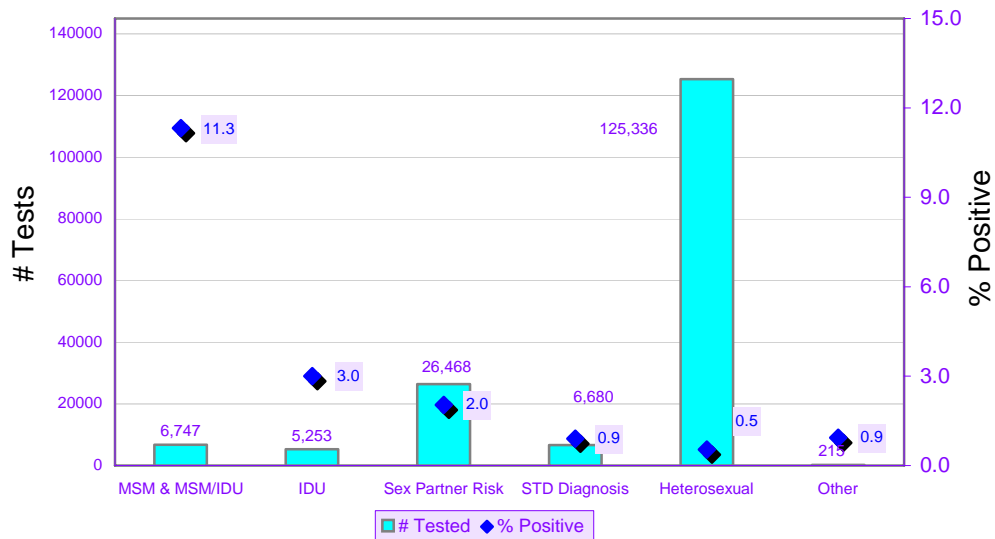


Figure 20b. HIV OraSure Tests by Risk, Florida, 2006

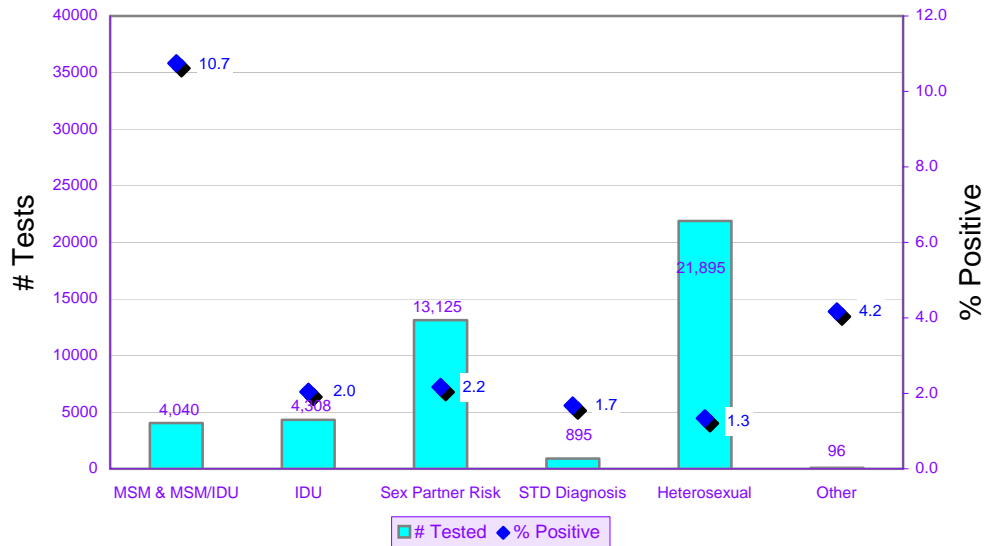
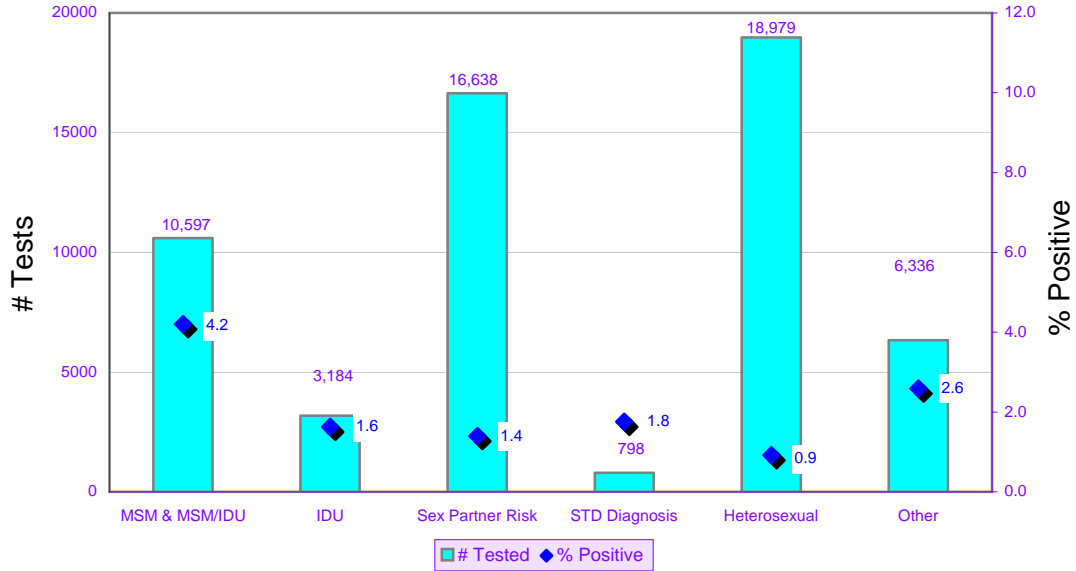


Figure 20c. HIV Rapid Tests by Risk, Florida, 2006



These data indicate that OraSure and rapid testing have become a valuable asset to HIV prevention programs throughout Florida. Growing evidence from the field suggests that the availability of OraSure and rapid testing have increased test acceptance in a variety of outreach settings, including housing projects, homeless shelters, rural communities, jails and high-risk youth programs. In 2006, OraSure and rapid testing accounted for 35% of all HIV tests conducted at registered HIV counseling and testing sites. Their

effectiveness as an outreach tool has been demonstrated in larger counties, where the growth of street outreach and community-based testing sites demands faster, easier, and less threatening means of testing for HIV.

OraSure has been very successful in uncovering HIV-positive cases in several rural counties with historically low positivity rates. Rapid testing has been extremely valuable in jails, where inmates are often released and lost to follow-up before traditional test results are available. OraSure and rapid testing are an important part of ongoing efforts to increase access and availability of HIV testing and counseling services among high-risk populations, and will continue to increase the proportion of HIV-infected persons in Florida who know their status.

### **Focus on Repeat HIV Testers**

Persons who have tested at least once before make up 63% (185,671) of the HIV tests conducted in 2006. The majority of these repeat testers were clients who previously tested negative (182,536 or 98.3%), while 3,135 (1.7%) previously tested positive.

Among the 4,786 positives in 2006, 29.1% (1,391) previously tested negative and 49.6% (2,376) previously tested positive (some may have tested positive in previous years). Persons who identified heterosexual sex as their highest risk behavior accounted for one-quarter (338 or 24%) of those who previously tested negative, while another 40% (557) of the positives that previously tested negative were identified as MSM (data not shown).

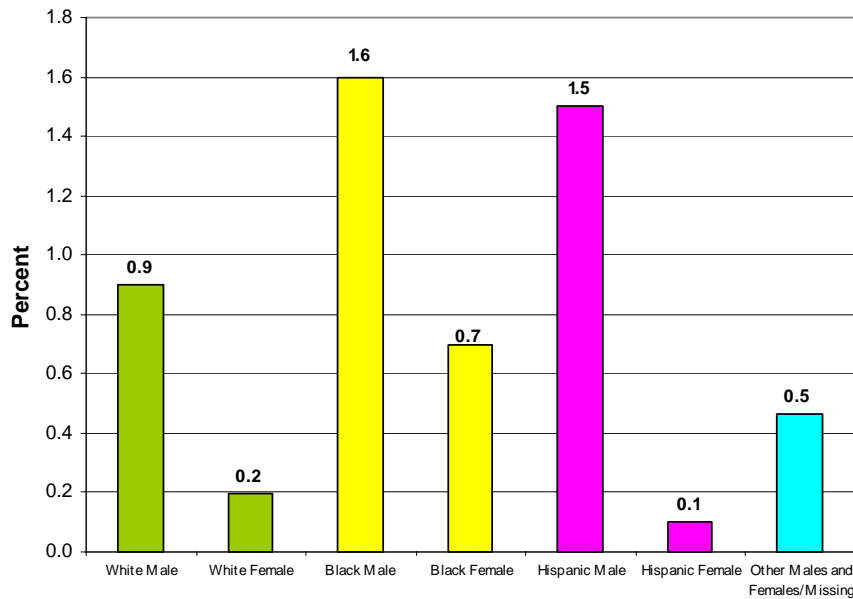
Table 3 shows positives in 2006 that previously tested negative and positive, by gender and race/ethnicity. Black males accounted for the highest number of positives and the highest number of previous testers; however, the proportion of positive white males who previously tested negative was the highest (33.6%). Positive white females also have a high proportion of those who previously tested negative (30.4%).

These data indicate that a large proportion of positive tests are being identified among persons who previously tested negative. Many individuals may be concerned because of their continued practice of high-risk behaviors, and thus return often for testing. A large proportion of positives identified in 2006 (48.3%) have already been found to be HIV infected. HIV-infected persons retest for a number of reasons, including: denial; belief that medication has cured them; proof of positivity needed to access services; boredom (e.g., inmates); desire to try a new test (e.g., rapid testing); and desire to find out if they are still positive. Further assessment is necessary to understand reasons for repeat testing practices.

<b>Race/Ethnicity and Gender</b>	<b>Total Positives</b>	<b># (%) Previously Tested Positive</b>	<b># (%) Previously Tested Negative</b>
White Male	839	426 (51.0)	282 (33.6)
White Female	270	129 (48.0)	82 (30.4)
Black Male	1,457	688 (47.2)	415 (28.5)
Black Female	1,080	564 (52.2)	298 (26.0)
Hispanic Male	767	383 (50.0)	226 (29.4)
Hispanic Female	205	122 (60.0)	37 (18.0)
	<b>4,786</b>	<b>2,312 (48.3)</b>	<b>1,340 (28.0)</b>

Figure 21 shows HIV positivity rates by race/ethnicity and gender for those who tested positive for the first time in 2006. Of the 4,786 positive tests results obtained in 2006, 659 (14.0%) were among persons who had never been tested before. Another 1,340 (28.0%) were among persons who had previously tested negative. These groups combined represent “new” positives in 2006. The positivity rate among the new positives was highest for black males (1.6%), followed by Hispanic males (1.5%), and white males (0.9%). These positivity rates are substantially lower than those presented in Figure 8 and may be more reflective of the true prevalence among persons who receive voluntary HIV testing. Positivity rates, presented elsewhere in this report are influenced by the large number of duplicate positives within the database, as persons receiving a positive test result are very likely to repeat the test.

**Figure 21. Positivity Rates Among Those Testing Positive for the First Time, by Race/Ethnicity and Gender, Florida, 2006 (N=1,999)**



**Focus on Post-Test Counseling**

The post-test counseling (PTC) session provides an opportunity to inform the client of their HIV test result, to assess the patients' understanding of the results, to assess the need for follow up and care, and to discuss the importance of risk-reducing behavior regardless of the test results. From 2001 to 2005, more than 50% of negatives were post-test counseled. In 2006, the statewide post-test counseling rate for positives was 77.5%; however, newly diagnosed persons received their results 95% of the time (Figure 22).

**Figure 22. Percentage of Clients Post-test Counseled, Florida, 2001-2006**

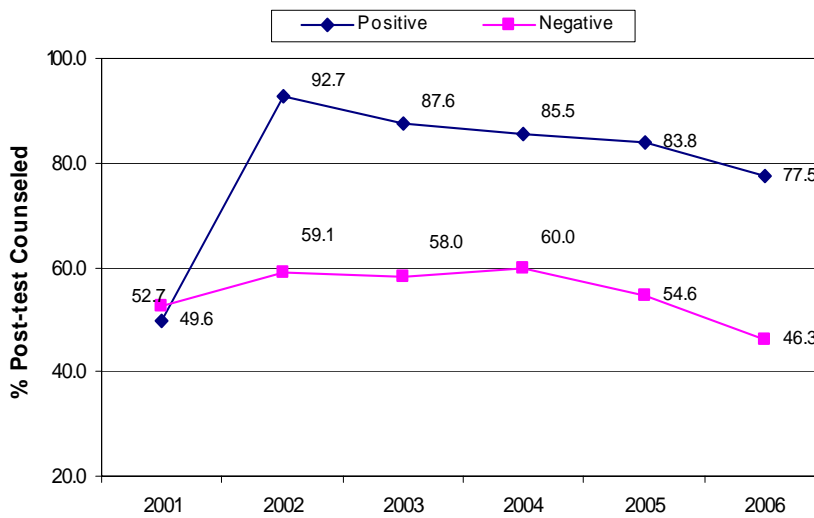


Table 4 shows the number of clients with a positive or negative test result who received post-test counseling in 2006. College/University sites recorded the highest post-test counseling rate for negatives (57.3%), followed by CBO with (55.8%). CHD family planning had the highest post-test counseling rate for positives (94.6%).

**Table 4. Number Tested and Number (%) Post-test Counseled for Negatives and Positives by Site Type, Florida, 2006**

Site Type	No. Negative	No. Post-test Counseled (Negative)	(%)	No. Positive	No. Post-test Counseled (Positive)	(%)
Anonymous	8,298	4,113	50.0%	153	99	64.7%
CHD STD	70,803	28,274	39.9%	1,188	848	71.4%
Drug Treatment Center	12,377	6,431	52.0%	104	79	76.0%
CHD Family Planning	54,087	22,270	41.2%	56	53	94.6%
CHD Prenatal/OB	32,879	16,680	50.7%	40	34	85.0%
CHD TB	2,628	1,266	48.2%	26	20	76.9%
Adult Health	16,686	7,795	46.7%	696	517	74.3%
Correctional Facility	18,308	8,436	46.1%	335	264	78.8%
College/University	2,172	1,245	57.3%	29	27	93.1%
Private M.D.	3,282	832	25.4%	152	118	77.6%
Special Study/TOPWA	2,999	1,350	45.0%	60	51	85.0%
Community-based Organization	55,553	31,021	55.8%	1,665	1,370	82.3%
CHD Field Visit	11,795	5,290	50.6%	284	227	79.9%
Total	291,836	135,003	46.3%	4,786	3,707	77.5%

In 2006, there were some differences by gender, age, and race/ethnicity in post-test counseling rates. As shown in Table 5, females had higher post-test counseling rates for negatives (75.5%) and males for positives (78.0%). Only 29.3% of negative children and 61.1% of the positive children received post-test counseling, compared to 48.8% of negatives in the over 50 age group and 79.4% of positives in the 13-19 group of age. Only 40.5% of negative blacks had their post-test counseling session, compared to 47.4% of negative Hispanics. Positive whites had a higher post-test counseling rate (81.0%) than positive blacks or Hispanics.

**Table 5. Number Tested and Number (%) Post-test Counseled by Gender, Age, Race/Ethnicity and Serostatus, Florida, 2006**

	No. Negative	No. Post-test Counseled (Negative)	(%)	No. Positive	No. Post-test Counseled (Positive)	(%)
<b>Gender</b>						
Male	179,246	51,381	28.7	3,152	2,457	78.0
Female	109,021	82,328	75.5	1,575	1,200	76.2
Other/Missing	3,573	1,299	36.4	59	50	84.7
Total	291,840	135,008	46.3	4,786	3,707	77.5
<b>Age</b>						
Less than 13	682	200	29.3	18	11	61.1
13-19	56,157	24,868	44.3	160	127	79.4
20-29	123,211	56,838	46.1	1061	839	79.1
30-39	55,301	25,924	46.9	1383	1,077	77.9
40-49	35,077	16,789	47.9	1495	1,157	77.4
50+	18,777	9,167	48.8	631	473	75.0
Missing age	2,635	1,222	46.4	38	23	60.5
Total	291,840	135,008	46.3	4,786	3,707	77.5
<b>Race/Ethnicity</b>						
White	102,248	47,425	46.4	1,109	898	81.0
Black	103,339	41,831	40.5	2,545	1,916	75.3
Hispanic	74,252	35,163	47.4	977	743	76.0
Other/Missing	12,001	10,589	88.2	155	150	96.8
Total	291,840	135,008	46.3	4,786	3,707	77.5
<b>Risk</b>						
MSM/IDU and MSM	19,694	10,895	55.3	1,643	1,296	78.9
IDU	12,435	6,050	48.7	298	226	75.8
Partner at risk	47,967	19,458	40.6	588	472	80.3
Perinatal	100	30	30.0	12	7	58.3
STD diagnosis	8,283	3,545	42.8	89	71	79.8
Sex for drugs/\$	1,983	851	42.9	42	32	76.2
Blood	3,338	1,617	48.4	72	42	58.3
Sexual assault	9,250	4,681	50.6	113	74	65.5
Heterosexual	164,995	78,266	47.4	1,145	889	77.6
No Identifiable risk/Missing data	23,795	9,615	40.4	784	598	76.3
Total	291,840	135,008	46.3	4,786	3,707	77.5

## **Acknowledgement**

The Bureau of HIV/AIDS would like to acknowledge the dedication and commitment of the many individuals who have worked so hard over the past year to make Florida's public HIV counseling, testing and linkage system one of the best in the nation. Although too numerous to list, these individuals include: our CHD administrators, HIV/AIDS Program Coordinators, nursing directors and the many health department staff who perform HIV counseling, testing and linkage services and oversee those programs; STD staff who have the difficult job of notifying the newly infected and conducting partner counseling and referral services; our 501 trainers who ensure that future counselors are prepared; our health educators and outreach workers who educate and inform; our colleagues in the state laboratories, without whom we would not have a testing program; our partners in community agencies, faith-based organizations, and correctional facilities who reach out to those we cannot reach; staff within the bureau who work tirelessly on this program; and finally, our Early Intervention Consultants, those front line staff who have worked so diligently to ensure the success of CTL in Florida. We look forward to our continued collaboration as we strive to ensure that all Floridians have the opportunity to learn their HIV status and take steps to protect themselves.