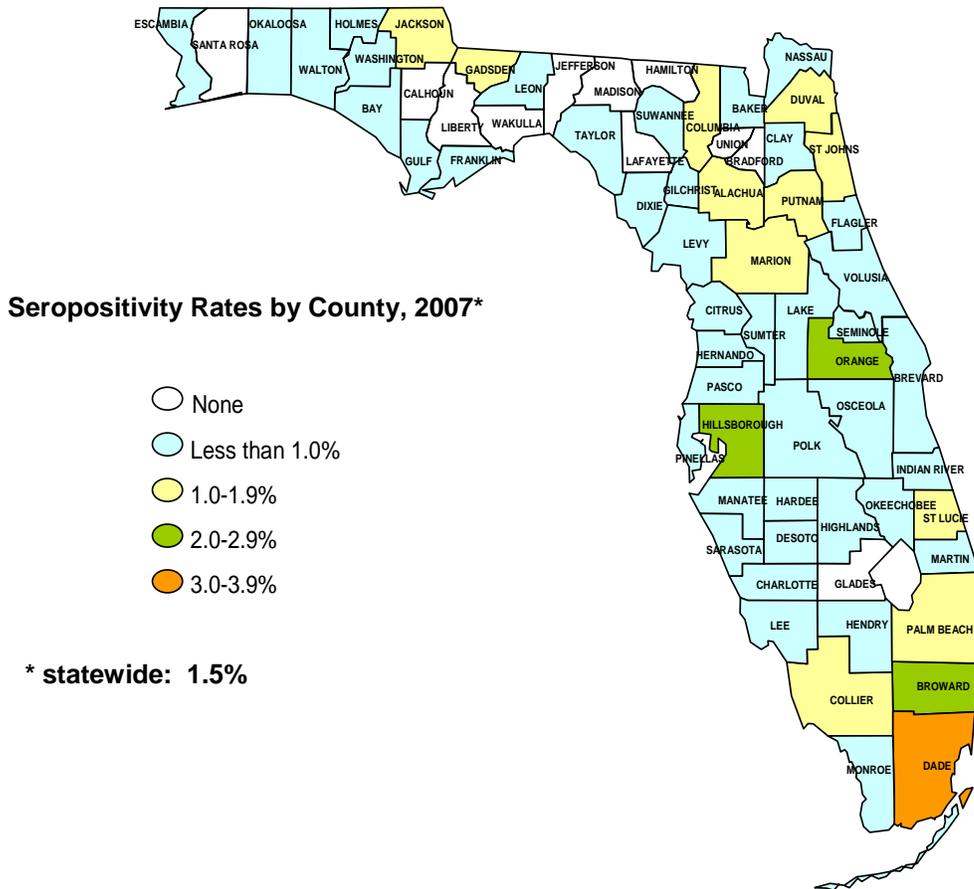




Florida Department of Health
 Division of Disease Control
 Bureau of HIV/AIDS

HIV Counseling and Testing Annual Report, 2007



For additional information regarding this report, please contact the Prevention Section of the Bureau of HIV/AIDS at (850) 245-4336, or visit our website at www.doh.state.fl.us.



Executive Summary

In 2007, 330,150 HIV tests were conducted at Florida's registered testing sites, representing an 11% increase (approximately 33,000 tests) over the previous year. This marks the 7th consecutive year that the number of HIV tests performed in Florida exceeded 250,000.

Increases in testing were recorded among all racial/ethnic groups, but especially in blacks. Persons who reported heterosexual sex as their highest risk represent the majority of the tests, with confidential testing accounting for 98%. Post-test counseling rates were 65.4% for negatives and 74.0% for positives; however, newly diagnosed persons received their results 92% of the time. Testing with OraSure and rapid testing in 2007 account for 15.7% and 27.1% of all HIV tests conducted, respectively.

The number of positive HIV tests increased by 5.5% in 2007. The overall positivity rate, however, decreased from 1.6% in 2006 to 1.5% in 2007. Persons who report MSM as their highest risk account for 33.4% of all positive tests reported in 2007, yielding a positivity rate of 7.5%. In addition, persons who report IDU as their highest risk had a positivity rate of 2.1%, accounting for 5.4% of all positive tests. Although heterosexuals represent 68.6% of all testing and 34.8% of positive tests, the positivity rate for this risk group is only 0.8%. Blacks and adults age 30 and older continue to record higher testing numbers and 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, 4.9 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 Prevention 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 2007. Testing levels increased rapidly through the early 1990s and remained fairly steady during the mid-1990s, peaking at 330,150 in 2007. Compared with 2003, the testing level increased by 28,463 (9.4%) in 2007. In contrast, positivity rates remained generally stable between 1996 and 2003 but have declined steadily since 2001. These rates dropped sharply in the 1980s as more and more people at a relatively lower risk began to be tested. Although increases were recorded from 1998 to 2002, the actual number of positive tests identified each year has declined at a relatively steady rate since peaking in 1991.

Figure 1a. HIV Tests Conducted in Florida and Seropositivity Rates, 1989-2007

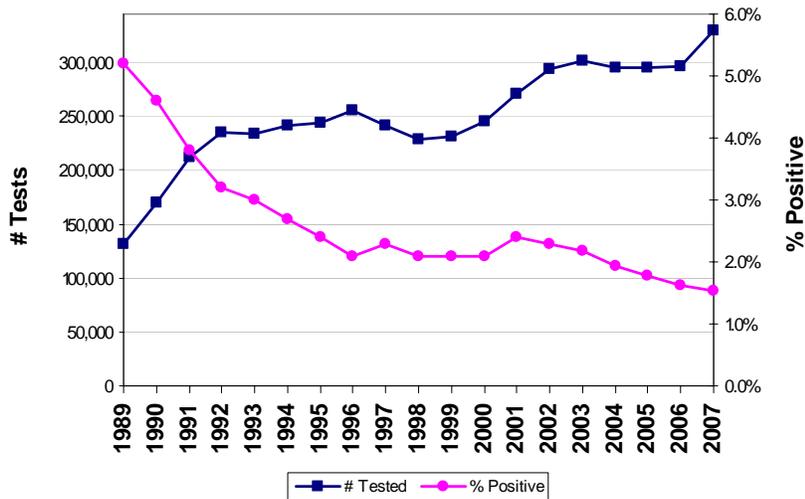


Figure 1b. HIV-Positive Tests in Florida and Seropositivity Rates, 1989-2007

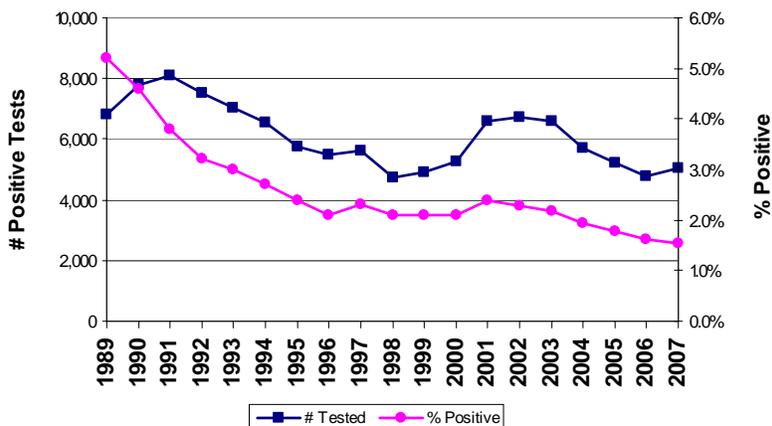
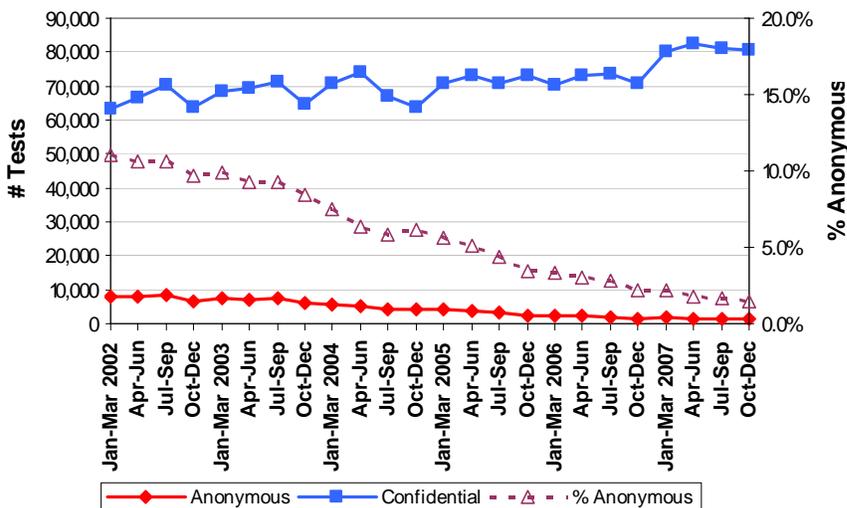


Figure 2 compares testing levels at anonymous and confidential sites by quarter, from January 2002 through December 2007. Some observable patterns may be seasonal or related to specific events. Sharp increases in testing numbers have been recorded in the weeks around National HIV Testing Day, which occurs annually on June 27. Hurricanes may have led to a decrease in testing in the latter part of 2004 and 2005.

Increasing levels of confidential testing are most apparent in the first two quarters in 2004 and 2005 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, anonymous testing has declined steadily over the past 5 years, accounting for 1.8% of all tests conducted in 2007, compared to 10.5% in 2002.

Figure 2. Number of HIV Tests Completed at Anonymous and Confidential Sites in Florida, January 2002-December 2007



Testing among the seven largest counties in Florida is shown in **Figure 3**. Together, the counties of Broward, Duval, Hillsborough, Miami-Dade, Orange, Palm Beach, and Pinellas account for 57% of all HIV tests conducted in 2007. The level of testing in these seven counties increased overall by 13% (over 23,000 tests) between 2002 and 2007. Each of the seven counties had increases in testing in 2007, with the largest increases in Orange (42%) and Palm Beach (38%).

Figure 3. HIV Testing Levels Among Florida Counties that Perform More than 10,000 HIV Tests per Year, 2002-2007

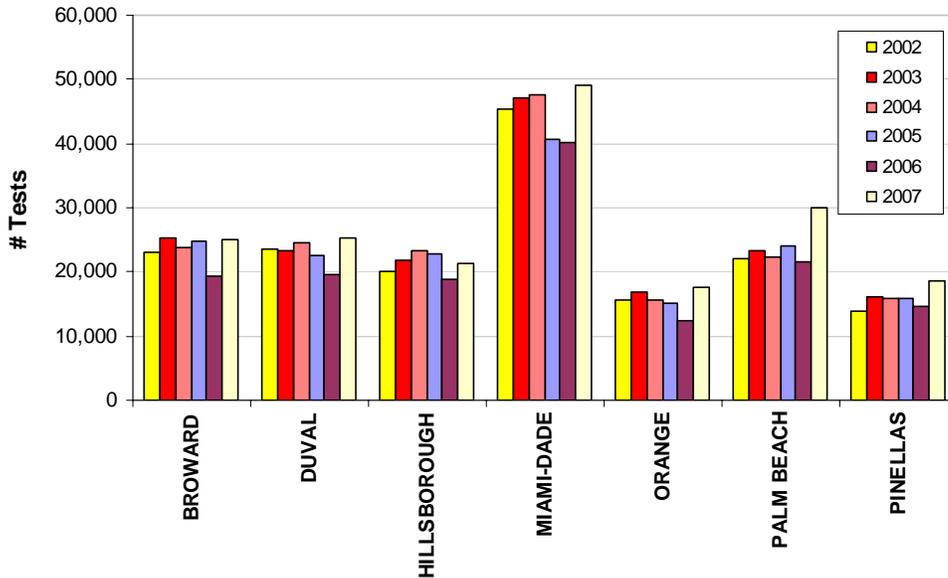


Figure 4a displays trends in anonymous and confidential testing within two high-risk groups: men who have sex with men (MSM)¹ and injection drug users (IDU). MSM anonymous testing levels have consistently been much lower than confidential testing during the past five years of analysis. Confidential testing in this risk group has increased 94% from 2002 to 2007, while anonymous testing has steadily decreased (86%) during the five years of comparison.

Among IDU, levels of anonymous testing have consistently been much lower than levels of confidential testing. In 2002, 874 anonymous tests were recorded; this decreased to 128 in 2007. In contrast, confidential testing among IDU increased in 2007 following fairly stable levels from 2002 through 2006.

¹ 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, 2002-2007

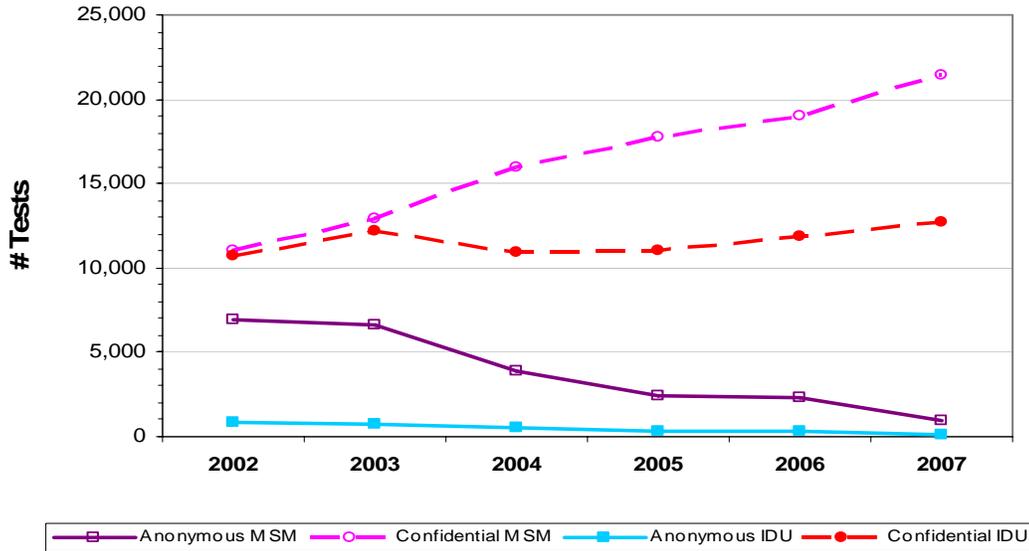


Figure 4b shows anonymous and confidential testing trends among those who identified heterosexual sex as their highest risk. The number of confidential tests administered in this risk group has risen steadily throughout the years, peaking in 2005 with 188,374 tests and again in 2007 with 223,167 tests. Anonymous testing among this group in 2007 decreased by 57% over 2006. This high-volume, typically low-risk group accounts annually for a very large proportion of all HIV tests.

Figure 4b. Number of HIV Tests Completed at Anonymous and Confidential Sites, Heterosexual Risk Group, 2002-2007



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 settings outside of the health department, such as blood donation, routine doctor visits, prenatal care, insurance, military service or employment application. The increased use of home testing methods and presence of private laboratories has also diminished the untested population base from which the health department can draw. As a result, finding those infected persons who do not know their HIV status has become a much more difficult task.

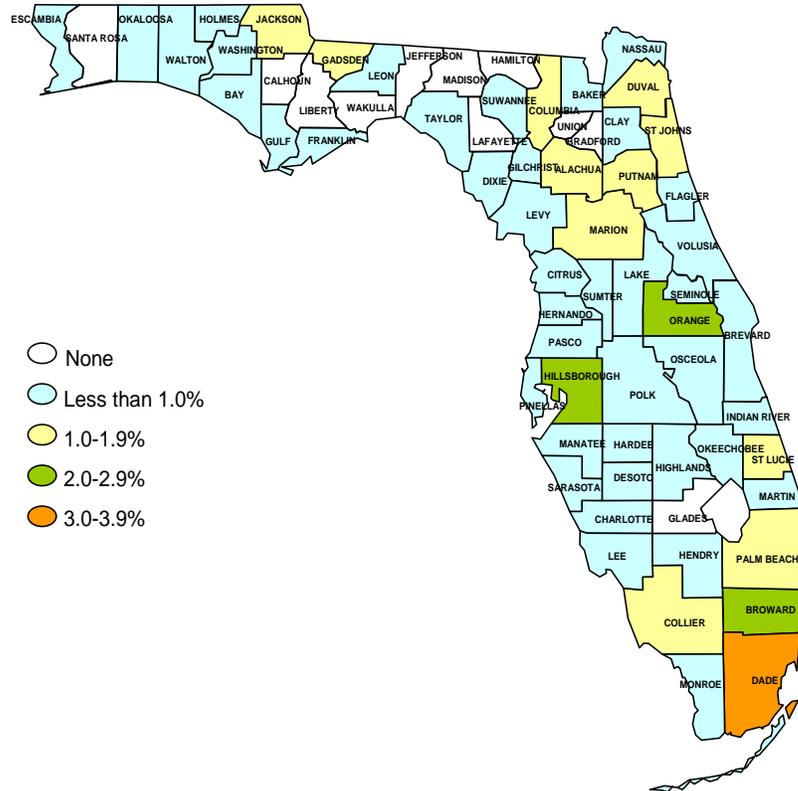
At least 80% of persons with HIV in Florida know they are infected. Since 1999, the Department of Health has focused on increasing the proportion who knows their HIV status. A variety of strategies have been pursued, including: the increased use of OraSure and rapid testing in outreach settings; testing in clinical settings such as emergency rooms; improved risk assessment and targeted testing; increased testing in correctional settings; increased emphasis on partner 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 undoubtedly have led, at least in part, to the 34.6% increase in testing between 2000 and 2007.

HIV Counseling and Testing in 2007

In 2007, 330,150 HIV tests were performed at registered HIV testing sites in Florida. Of these, 5,047 were positive, resulting in an overall positivity rate of 1.5%. Positivity rates for individual counties are shown in **Figure 5**. Miami-Dade County recorded the highest positivity rate (3.1%), followed by Broward County (2.6%). Overall, eight counties reported positivity rates higher than the state average for 2007. Twelve counties reported no positive HIV tests in 2007: these counties are Bradford, Calhoun, Dixie, Glades, Hamilton, Jefferson, Lafayette, Liberty, Madison, Santa Rosa, Union, and Wakulla.

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 seek a retest. Additional counseling and testing data for individual counties are available from the Prevention Section.

Figure 5. HIV Seropositivity Rates by County, Florida, 2007

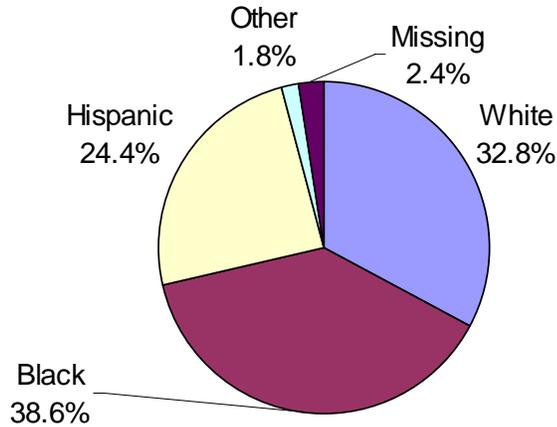


Race/Ethnicity

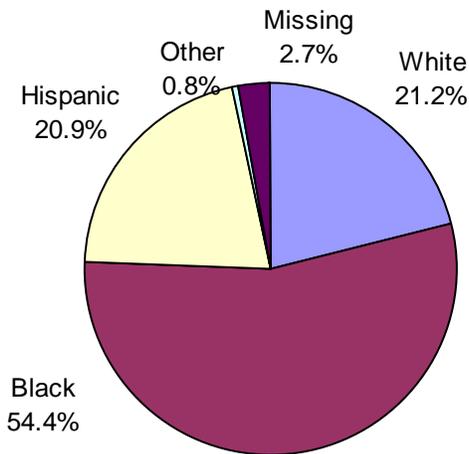
In 2007, blacks accounted for the greatest proportion (38.6%, 127,448) of all tests; 32.8% (108,116) were performed on persons who identified themselves as non-Hispanic whites, and 80,680 (24.4%) of those tested were Hispanics (**Figure 6a**). For positive tests, blacks accounted for more than one-half (54.4%, 2,748), resulting in a positivity rate of 2.2% (**Figure 6b**). Whites accounted for 21.2% (1,070) of all positive tests with a positivity rate of 1.0%.

Among the Hispanic population, the proportion of positive tests (1054 or 20.9%) is 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 account for 1.8% of all tests and 0.8% of positive tests.

**Figure 6a. Total HIV Tests by Race/Ethnicity, Florida, 2007
(N=330,150)**



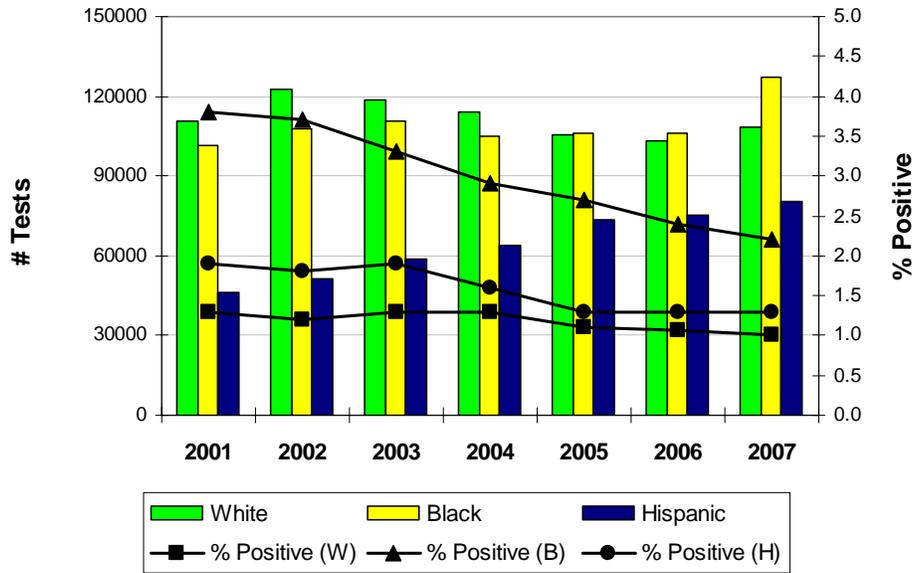
**Figure 6b. HIV-Positive Tests by Race/Ethnicity, Florida, 2007
(N=5,047)**



Positivity rates for whites and Hispanics have not changed significantly from 2005 rates, while the positivity rate among blacks has continued to decrease for the seventh consecutive year (**Figure 6c**).

Testing levels for whites increased slightly from 2006 levels (4.5%), while testing among blacks increased 20.3%. Among Hispanics, testing levels have continued to increase every year since 2001, with an increase in 2007 from 2006 of 7.2%.

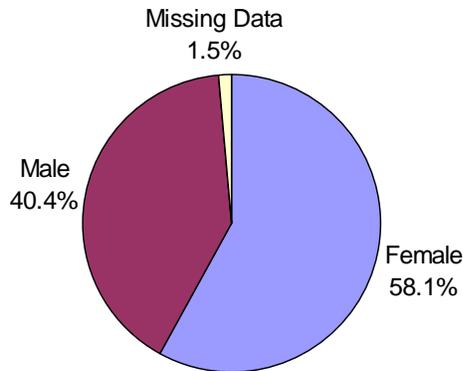
Figure 6c. Number of HIV Tests & Positivity Rates by Race/Ethnicity, Florida, 2001-2007



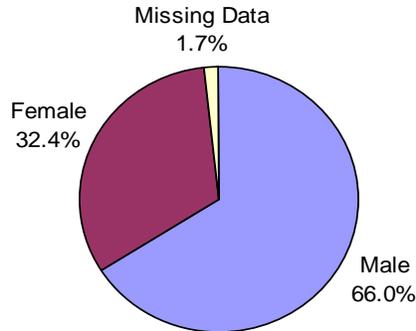
Gender

Figures 7a and 7b show the number of HIV tests and HIV-positive tests by gender for 2007. Females account for 191,755 HIV tests (58.1%) and 133,405 (40.4%) tests were performed on males. However, males account for the greatest number of positive tests (66%), yielding a positivity rate of 2.5%, while females account for 32.4% of positive tests with a positivity rate of 0.9%.

Figure 7a. Total HIV Tests by Gender, Florida, 2007 (N=330,150)

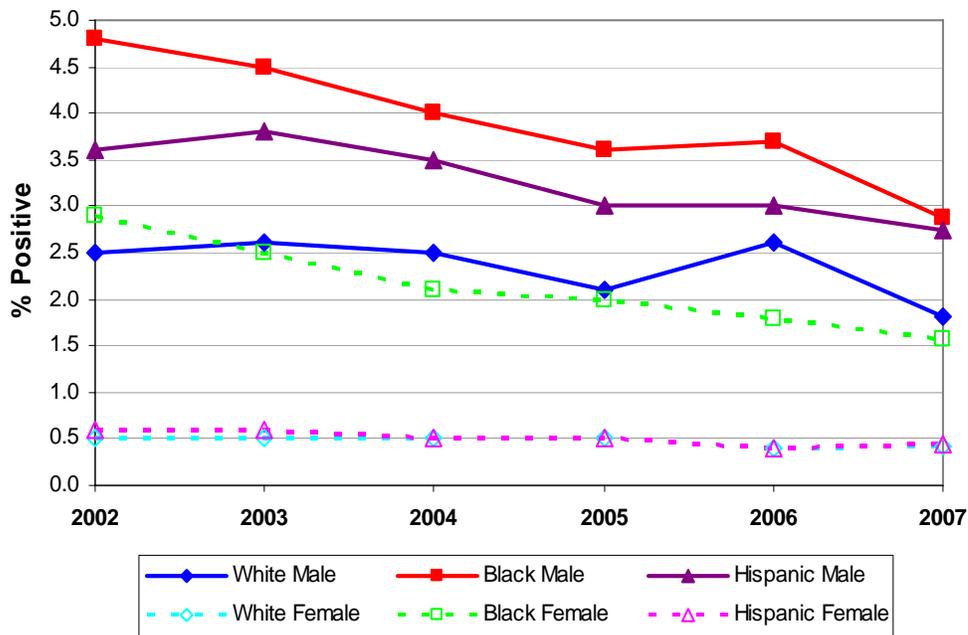


**Figure 7b. HIV-Positive Tests by Gender, Florida, 2007
 (N=5,047)**



Positivity rates for males and females by race/ethnicity from 2002 to 2007 are shown in **Figure 8**. 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 that of white males. This difference increased in 2004, narrowed in 2005, and increased again in 2006, only to close the gap in 2007. Although over these five years positivity rates for Hispanic and white females are low; white females exhibit the lowest positivity rate until 2004, when their rate equaled that of Hispanic females.

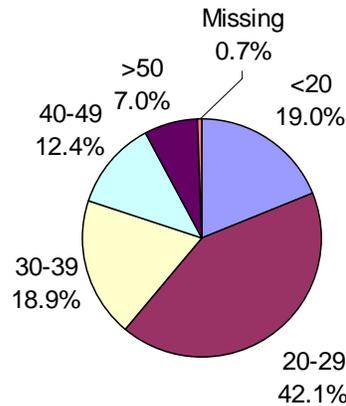
**Figure 8. HIV Seropositivity by Sex and Race/Ethnicity,
 Florida, 2002-2007**



Age

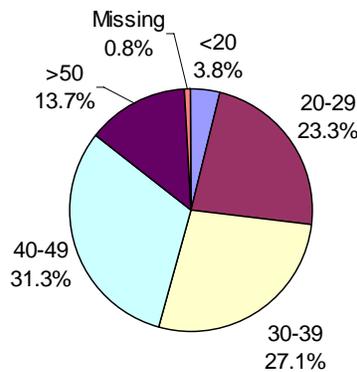
Figures 9a and 9b show the number of HIV tests and HIV-positive tests by age groups. Those under the age of twenty represent 19% (62,683) of all tests, while persons between the ages of 20-29 continue to represent the highest proportion of tests (138,870 or 42.1%). The 30-39 age group accounted for nearly 20% of all tests. The 50+ age group accounted for the lowest number of tests (22,961 or 7.0%).

**Figure 9a. Total HIV Tests by Age Group, Florida, 2007
(N=330,150)**



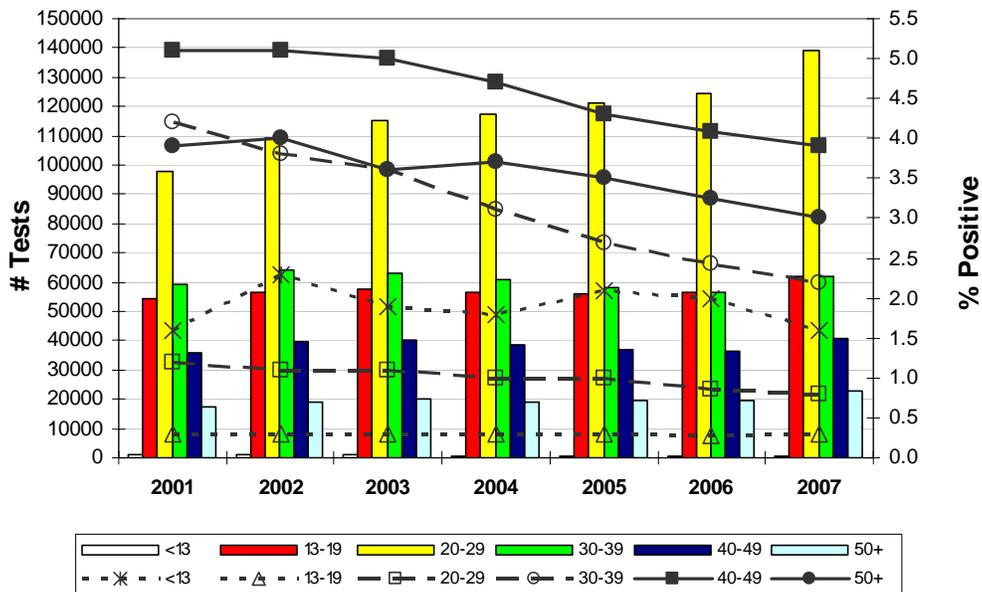
With only 12.4% of all tests conducted, the 40-49 age group accounted for the greatest proportion of positive tests in 2007 (1,582 or 31.3%) and the highest positivity rate among all age groups (3.9%). Persons between the ages 30-39 accounted for 27.1% of positive tests, resulting in a positivity rate of 2.2%. The 20-29 age group represented 23.3% of positive tests and a positivity rate of 0.8%. Although the 50+ age group was not tested in very high numbers (22,961 or 7.0%), they accounted for 13.7% of positive tests with a positivity rate of 3.0%.

**Figure 9b. HIV-Positive Tests by Age Group, Florida, 2007
(N=5,047)**



The distribution of testing across age groups has not changed significantly over time. In 2007, testing increased in all age groups when compared with 2006. **Figure 9c** shows positivity rates for 2001 to 2007 by age group. Positivity rates for persons aged 13-19 were the least variable during the past seven years, while positivity rates among persons in the 30-39 age group have decreased by 48%. Between 2001 and 2007, 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 has consistently recorded the highest positive rates between 2001 and 2007.

Figure 9c. Number of HIV Tests & Positivity Rates by Age Group, Florida, 2001-2007



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 2007. 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. Although this proportion decreased to 56% in 2006, it is 69% in 2007. 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, 2002-2007

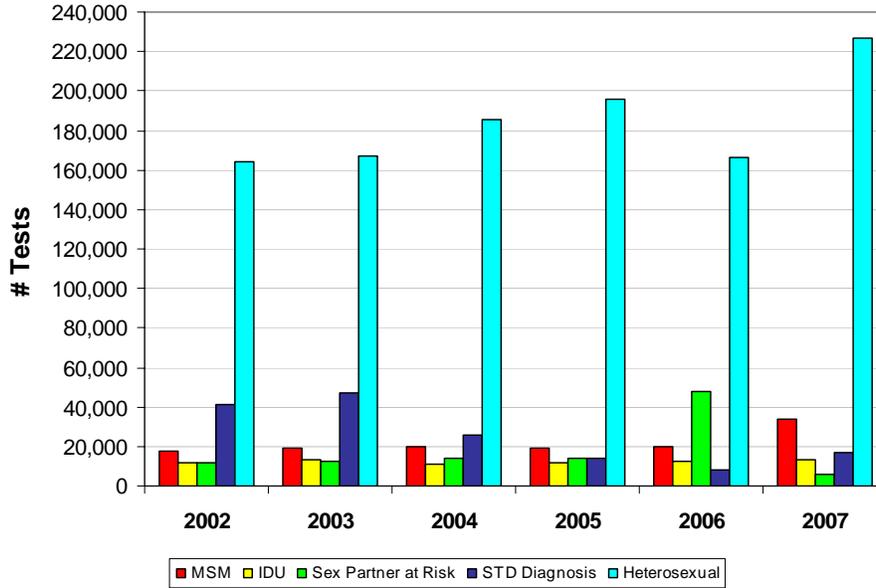


Figure 11 displays positivity rates for all risk exposure groups hierarchically starting with the lowest risk level. In 2007, the “sex with HIV positive” group has the highest positivity rate (11.7%). Men who have sex with men (MSM) and are injecting drug users (IDU) continue to be a risk group with a very high positivity rate (9.7%). The positivity rate is also high among MSM (7.4%). Alternatively, the positivity rate for the heterosexual risk group remains at less than 1.0% even though they account for the majority of tests conducted. Less than 1% of tests were recorded in 2007 with no acknowledged risk, yet 3.3% of those tests were positive.

Figure 11. Positivity Rates by Self-Reported Risk Exposure, Florida, 2007

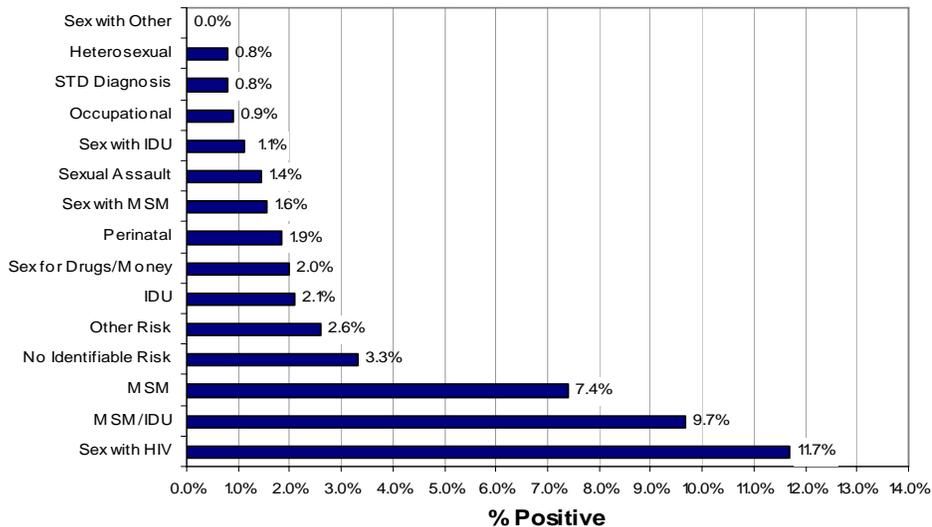
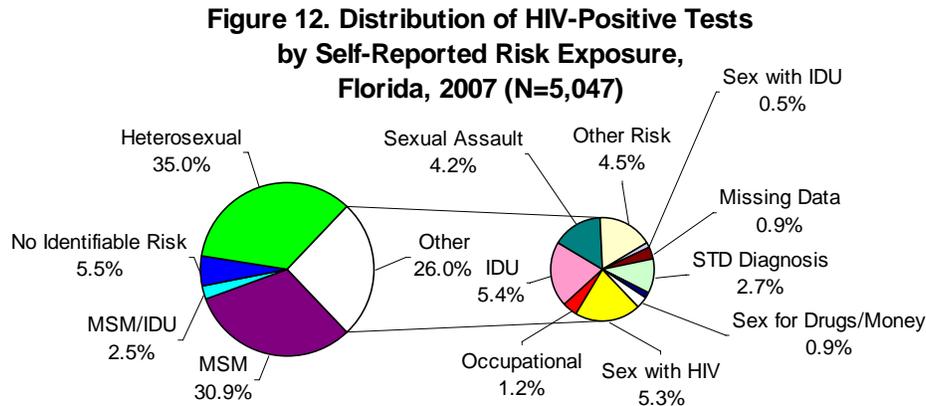


Figure 12 shows the distribution of HIV-positive test results by self-reported risk exposure for 2007. MSM account for the greatest number of positive tests (1,561 or 30.9% and 1,685 (33.4%) when combined with IDU). Persons who identified heterosexual sex as their highest risk behavior comprise 35% (1,758) of all positive tests. Those who reported having sexual relations with someone who had HIV account for 5.3% (265) of all positive tests. Persons who reported injection drug use as their highest risk account for 5.4% (271) of all positive tests.



Focus on Minorities

In 2007, blacks and Hispanics comprise 66% (45% blacks and 21% Hispanics) of HIV cases. Analysis of HIV counseling and testing data reveals 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.

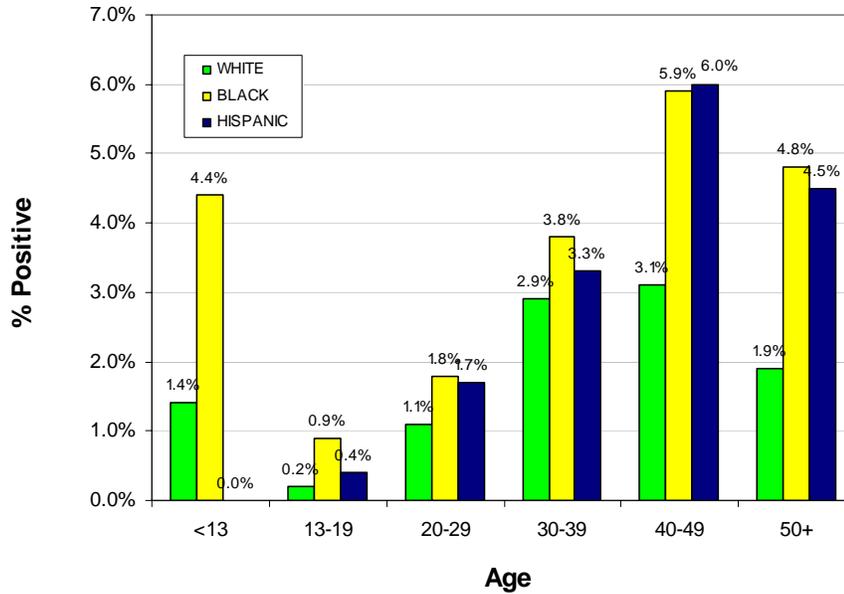
The Intersection of Race/Ethnicity, Gender, and Age

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 2007 by the incorporation of age.

The overall positivity rate for black males in 2007 was 2.9% (Figure 8). However, as **Figure 13a** shows, this rate varies considerably by age. The highest positivity rate is found among black males aged 40-49 (5.9%), followed by those aged 50+ (4.8%) and less than 13 year olds (4.4%). This is particularly informative because 20-29 year olds account for the largest proportion of HIV tests conducted among black males (39.2%, data not shown), yet their positivity rate is relatively low (1.8%).

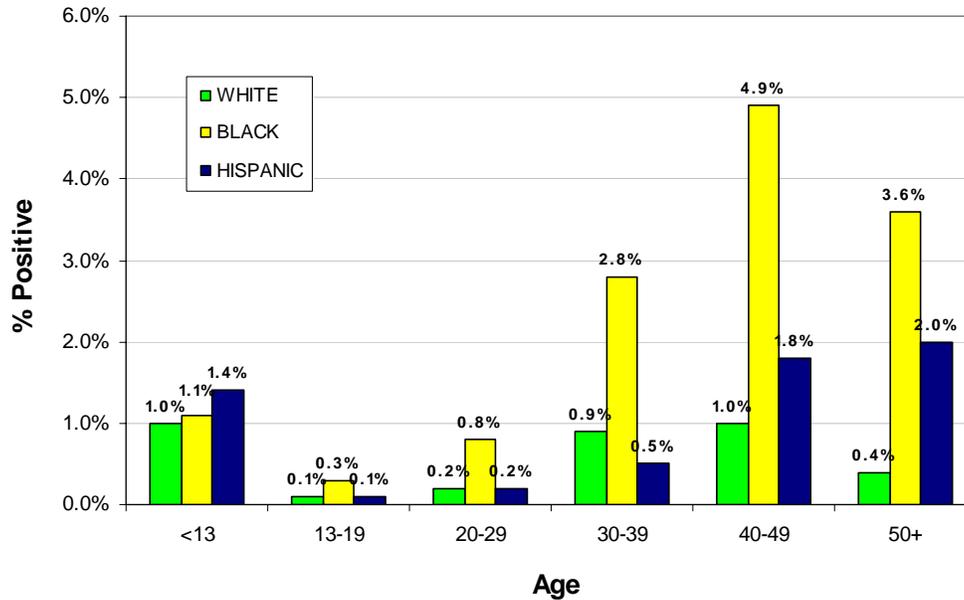
Significant variation in positivity rates by age also exists among Hispanic males, whose overall positivity rate in 2007 was 2.8%. The highest positivity rate was found in the 40-49 age group (6.0%), followed by those aged 50+ (4.5%). However, the largest proportion of testing occurs among those 20-39 years of age. The lowest positivity rate is in the less than 13 years of age group (0%).

Figure 13a. Seropositivity Among Males, by Age and Race/Ethnicity, Florida, 2007



The overall positivity rate for black females in 2007 was 1.6% (Figure 8). However, **Figure 13b** shows that black females over the age of 30 are experiencing much higher positivity rates: 2.8% for those in the 30-39 age group, 4.9% for those aged 40-49, and 3.6% for those aged 50 and over. While 68.6% of black females tested were between the ages of 0 and 29 (data not shown), the corresponding positivity rates were 1.1% for less than 13 year olds, 0.3% for 13-19 year olds and 0.8% for 20-29 year olds.

Figure 13b. Seropositivity Among Females, by Age and Race/Ethnicity, Florida, 2007



Among Hispanic females, positivity rates were low across the age groups under 40 years of age. The positivity rates for Hispanic females in the 40-49 and 50+ age groups were 1.8% and 2.0%, respectively. This is slightly higher than the 0.4% reported for all Hispanic females (Figure 8), suggesting 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.

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 2007, 35,259 HIV tests (10.7%) 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 2007 was 9.7%, 7.4% among MSM, and 2.1% 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 2007. Individuals identifying themselves

as non-Hispanic white account for the largest proportion of HIV tests in all three of these risk groups: 55.1% of MSM/IDU, 46.1% of MSM, and 67.2% of IDU. Whites also account for the majority of positive HIV tests among MSM/IDU (55.5%), and MSM (33.0%). Both blacks and Hispanics are over-represented among HIV-positive MSM.

Figure 14a. HIV Tests among MSM/IDU by Race/Ethnicity, Florida, 2007 (N= 1,282)

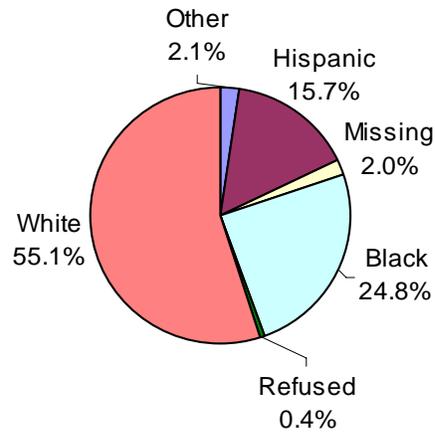
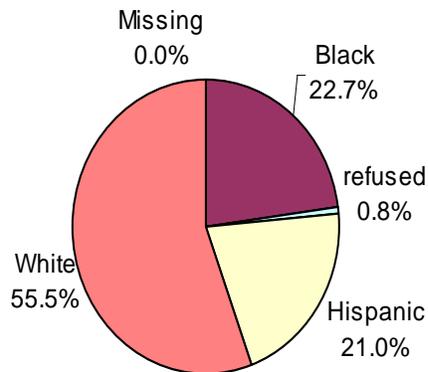
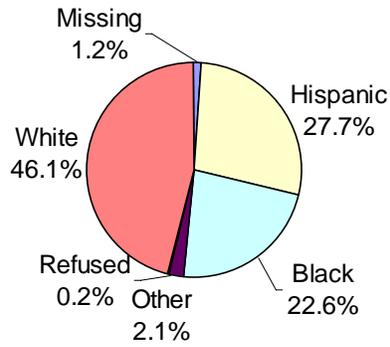


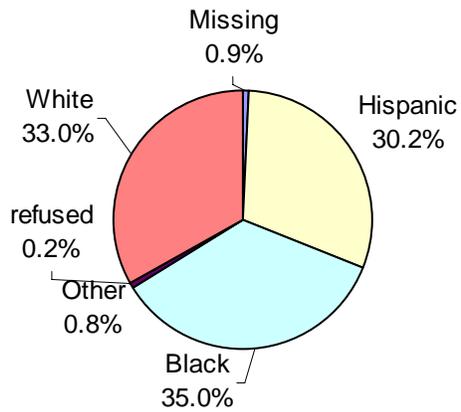
Figure 14b. HIV-Positive Tests among MSM/IDU by Race/Ethnicity, Florida, 2007 (N= 124)



**Figure 15a. HIV Tests among MSM by Race/Ethnicity,
Florida, 2007
(N= 21,095)**



**Figure 15b. HIV-Positive Tests among MSM by Race/Ethnicity,
Florida, 2007
(N =1,561)**



Racial/ethnic disparities appear to be stronger among injection drug users. Black females, who account for only 7.7% of tests among IDU in 2007, comprise 17.7% of positive tests in this risk group. Similarly, black males account for just 7.7% of tests, but 18.8% of the positives. In contrast, white males and females together account for two-thirds of tests among IDU (33.9% for females and 33.3% for males), yet their combined share of positive tests is substantially lower (42%). The proportion of tests among Hispanic male IDU in 2007 (7.9%) is similar to that of black males, but the proportion of positives for this group (15.1%) is less than the proportion of positives for either the black (18.8%) or the white (17.3%) males). Hispanic females account for 5.0% of tests among this group; their share of positive tests is 4.8%.

Figure 16a. HIV Tests among IDU by Gender and Race/Ethnicity, Florida, 2007 (N= 12,882)

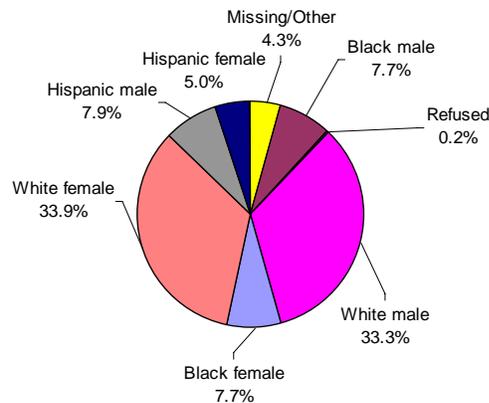


Figure 16b. HIV-Positive Tests among IDU by Gender and Race/Ethnicity, Florida, 2007 (N= 271)

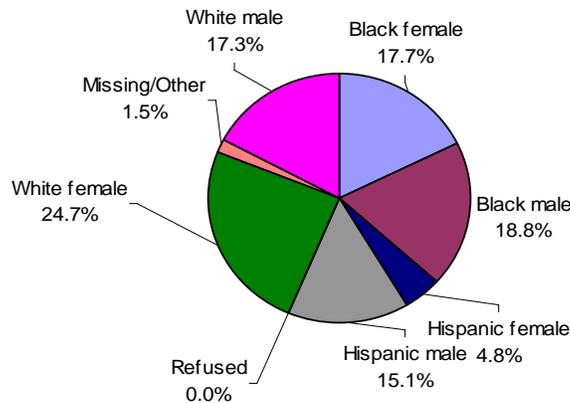
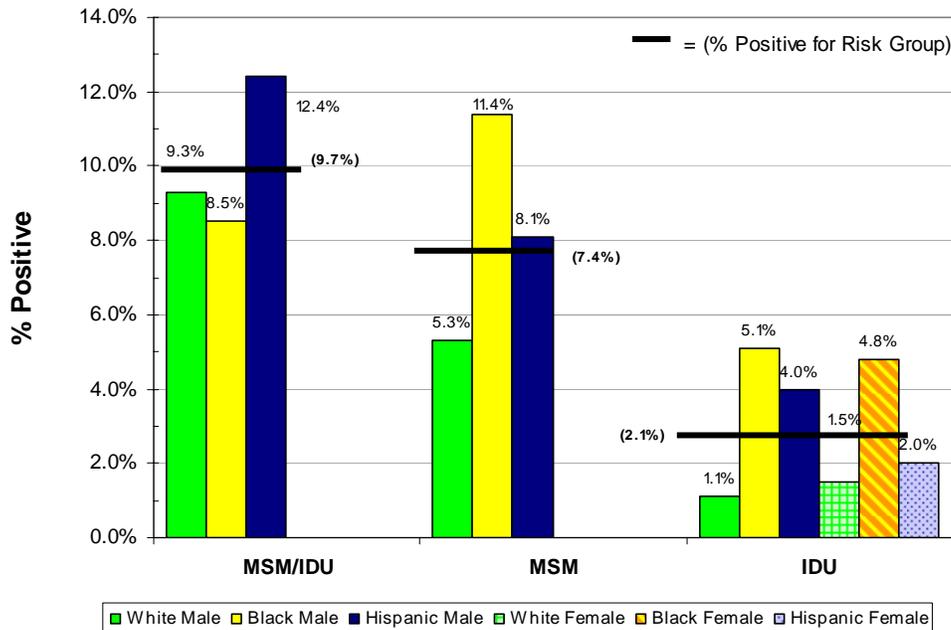


Figure 17 shows that aggregate positivity rates for MSM/IDU, MSM, and IDU mask important and occasionally dramatic differences between racial/ethnic groups. The relatively high volume of testing by whites, combined with their generally lower positivity rates, reduce the average positivity rate for the whole population in each of these risk groups. For example, in 2007, the positivity rate for black MSM was 11.4%, approximately 4 percentage points higher than that for all MSM (7.4%). The difference is also apparent for black male IDU, whose positivity rate in 2007 (5.1%) was nearly 3 points higher than the 2.1% reported for all IDU and for the black female IDU whose positivity rate was 2.7 points higher than that for all IDU. This figure shows that blacks and Hispanics experience significantly higher positivity rates in these three risk exposure groups.

Figure 17. Seropositivity Among Selected Risk Exposure Groups by Gender and Race/Ethnicity, Florida, 2007



Together MSM, IDU, and MSM/IDU account for 35,259 HIV tests in 2007, 20.1% were blacks, 21.9% were Hispanics and 54.2% were whites. However, of the 1,956 positive tests for these three risk groups, 34.4% were blacks, 28.1% were Hispanics and 35.5% 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 2007, 51,908 HIV tests were administered with OraSure in Florida, a decline in usage compared with 2004 (63,293) and 2003 (78,378), but a slight increase over 2006 (49,658). The statewide positivity rate using OraSure also decreased: from 3.1% in 2001 to 2.1% in 2007. 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 counties that used more than 100 OraSure tests in 2007, Miami-Dade had the highest positivity rate (5.6%), followed by Broward County (5.4%). Twenty-four counties performed fewer than 100 tests in 2007.

Table 1. HIV Seropositivity Rates using OraSure for Select Counties, Florida, 2007			
Miami-Dade	7,481	417	5.6%
Broward	4,467	243	5.4%
Collier	599	25	4.2%
Palm Beach	3,672	107	2.9%
Brevard	262	6	2.3%
Volusia	654	12	1.8%
St Lucie	1,602	23	1.4%
Indian River	491	7	1.4%
Hillsborough	3,347	46	1.4%
Escambia	2,127	29	1.4%
Orange	3,531	43	1.2%
Pinellas	2,291	26	1.1%
Leon	2,477	24	1.0%
Duval	4,745	45	0.9%
Pasco	1,068	8	0.7%

Non-Hispanic blacks accounted for the majority of OraSure tests conducted in 2007 (23,754 or 45.7%), as compared to non-Hispanic whites (17,669 or 34.%), and Hispanics

(8,280 or 15.9%). Females accounted for a slightly higher proportion than males (49.8% vs 48.8%).

Focus on Rapid Testing

The first rapid HIV testing program was implemented in the Duval County Jail in 2003. Since then, rapid HIV testing has expanded to many counties in Florida. Rapid HIV tests are screening tests that produce very quick results, usually in 10-40 minutes, and can be performed using whole blood through finger stick or venipuncture or with an oral specimen. They are 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 2007, 89,624 tests were recorded using rapid testing, an increase from 3,790 in 2003 when the program started. The statewide positivity rate using rapid testing decreased from 2.2% in 2003 to 1.7% in 2007. Positivity rates for counties that used more than 100 rapid tests in 2007 are illustrated in Table 2. Among these counties, Pinellas had the highest positivity rate (2.5%) followed by Miami-Dade (2.3%).

Table 2. Rapid Tests and Positivity Rates for Select Counties, Florida, 2007

County	Total Tests	No. Negative	No. Confirmed Positive	Positivity Rate
Pinellas	2,956	2,880	74	2.5%
Miami-Dade	25,104	24,515	581	2.3%
Orange	5,718	5,613	103	1.8%
Broward	11,699	11,493	197	1.7%
Duval	9,674	9,516	158	1.6%
St Lucie	2,745	2,702	41	1.5%
Palm Beach	8,876	8,741	127	1.4%
Hillsborough	10,339	10,198	140	1.4%
Bay	576	569	7	1.2%
Escambia	184	181	2	1.1%
Sarasota	1,076	1,065	11	1.0%
Collier	1,157	1,148	9	0.8%
Volusia	2,467	2,448	19	0.8%
Leon	822	816	6	0.7%
Alachua	1,114	1,107	7	0.6%
Pasco	352	350	2	0.6%
Brevard	996	991	5	0.5%
Polk	1,468	1,461	7	0.5%
Manatee	1,171	1,166	5	0.4%
Monroe	962	958	4	0.4%
Total	89,456	87,918	1,505	1.7%

Non-Hispanic blacks recorded a large proportion of rapid tests conducted in 2007 (41,400 or 46.2%), non-Hispanic whites recorded 25,941 or 28.9%, and Hispanics 18,928 or 21.1%. Males account for a higher proportion than females (61.3% vs. 37.4%)

Figures 19a, 19b, and 19c compare testing levels and positivity rates by race/ethnicity and gender for blood, OraSure and rapid testing in 2007. White females had the highest number of blood tests followed by black females. Black males had the highest levels of rapid testing, while black females had the highest levels of OraSure. 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 (2.4% and 1.7% vs. 1.3%). Black and Hispanic males had the highest positivity rates, regardless of testing method.

Figure 19a. HIV Blood Tests by Race/Ethnicity and Gender, Florida, 2007

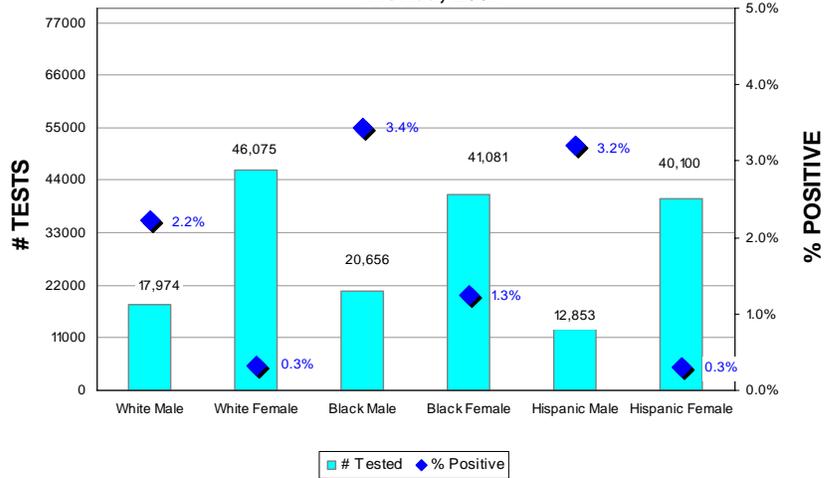


Figure 19b. HIV OraSure Tests by Race/Ethnicity and Gender, Florida, 2007

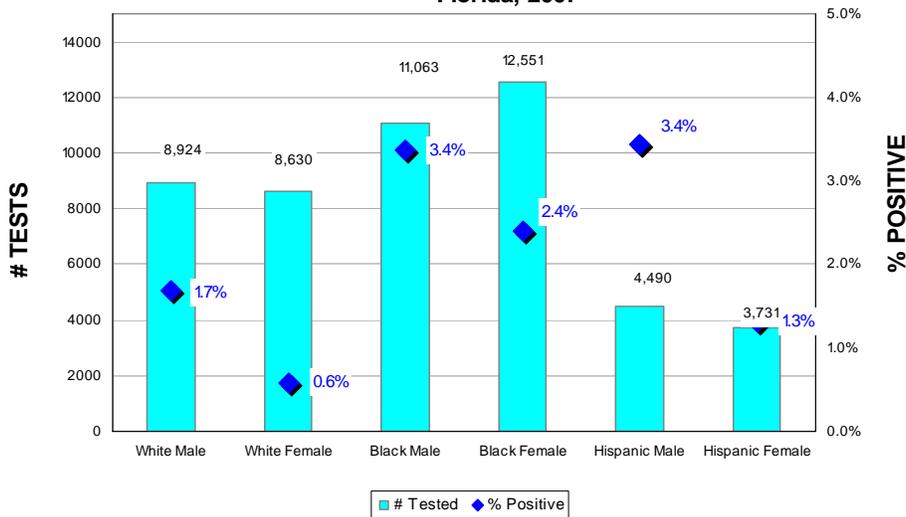
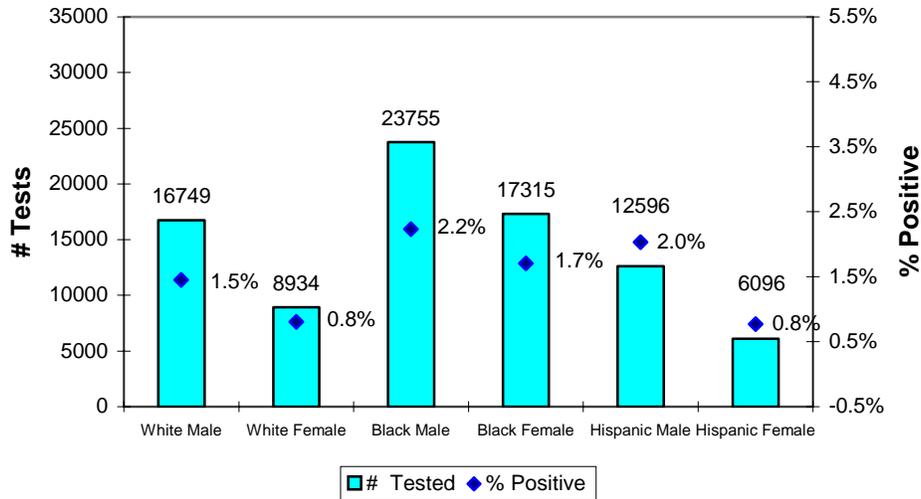


Figure 19c. HIV Rapid Tests by Race/Ethnicity and Gender, Florida, 2007



Figures 20a, 20b, and 20c compare testing levels and positivity rates by risk groups for blood, OraSure, and rapid testing in 2007. 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 2.1%. Compared to blood and OraSure testing, the positivity rates for MSM using rapid testing were lower (12.8% and 9.5% vs. 4.5%). A higher positivity rate using OraSure and rapid testing compared to blood, was recorded for the STD diagnosis exposure category (1.4 and 0.9% vs. 0.6%).

Figure 20a. HIV Blood Tests by Risk, Florida, 2007

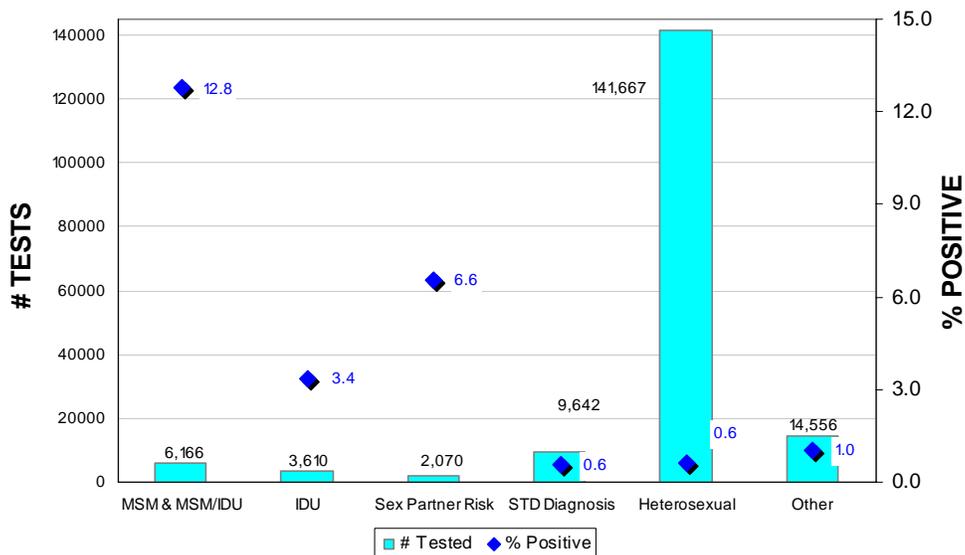


Figure 20b. HIV OraSure Tests by Risk, Florida, 2007

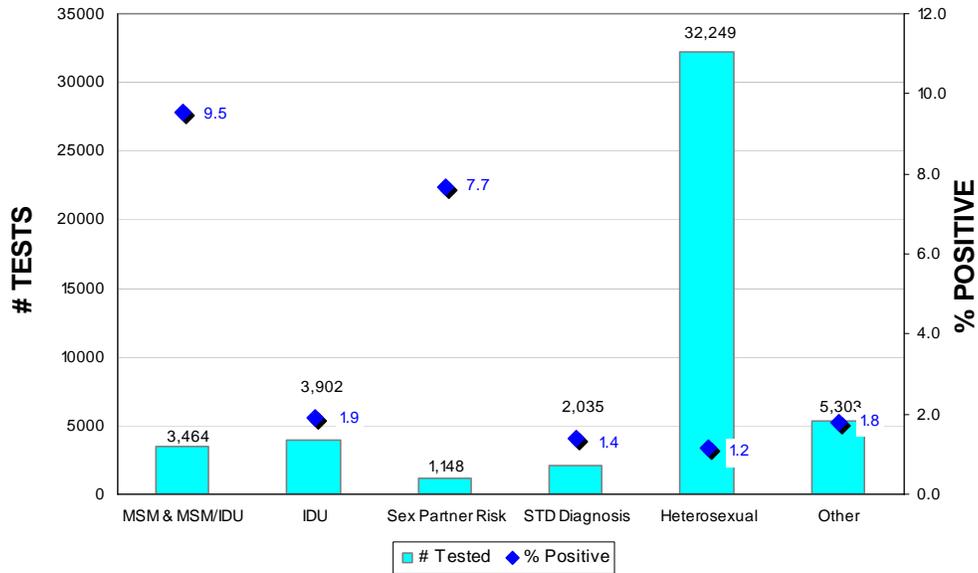
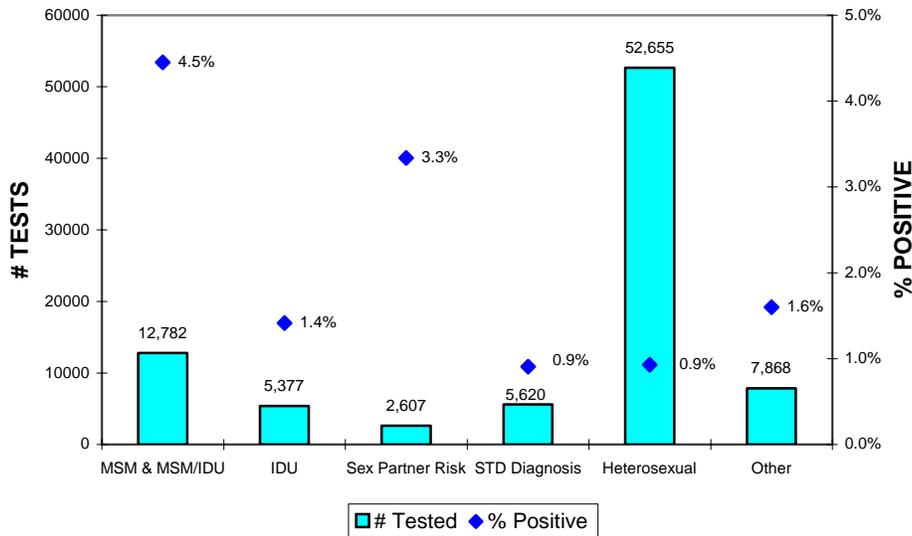


Figure 20c. HIV Rapid Tests by Risk, Florida, 2007



These data indicate that OraSure and rapid testing continue to be a valuable asset to HIV prevention programs throughout Florida. 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 2007, OraSure and rapid testing accounted for 43% 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 continues to be 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 64.7% (213,526) of the HIV tests conducted in 2007. The majority of these repeat testers were clients who previously tested negative (208,000 or 97.4%), while 2,738 (1.3%) previously tested positive or had a reactive rapid test.

Among the 5,047 positives in 2007, 31.4% (1,585) previously tested negative and 43.4% (2,190) previously tested positive, or had a reactive rapid test result (some may have tested positive in previous years). Persons who identified heterosexual sex as their highest risk behavior accounted for nearly one-third (487 or 31%) of those who previously tested negative, while another 38% (606) of the positives that previously tested negative were identified as MSM (data not shown).

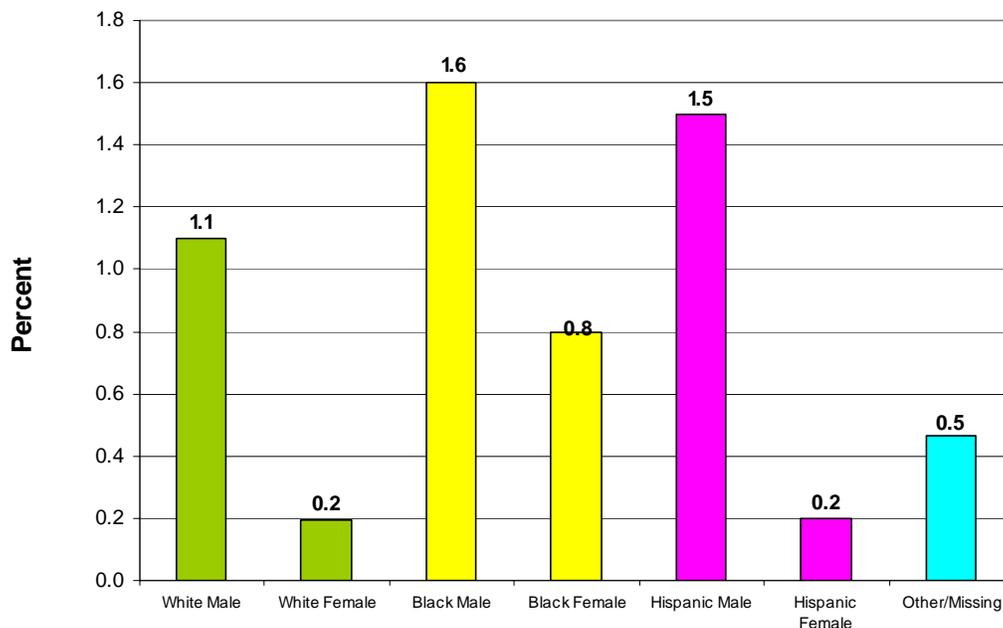
Table 3 shows positives in 2007 that previously tested negative and positive, by gender and race/ethnicity. Black males and females account for the highest number of positives and the highest number of previous testers; however, the proportion of positive white males and females who previously tested negative is the highest (71.7%). Among Hispanics, males account for the highest number of positives and the highest number of previous testers; however, the proportion of positive Hispanic females who previously tested positive is the highest (56.6%).

Table 3. Total Number of HIV-Positive Tests and Number (%) of HIV-Positive Tests Among Persons Who Previously Tested Positive and Negative, by Gender and Race/Ethnicity, Florida, 2007			
Race/Ethnicity and Gender	Total Positives	# (%) Previously Tested Positive	# (%) Previously Tested Negative
White Male	774	353 (45.6)	289 (37.3)
White Female	259	122 (47.1)	89 (34.4)
Black Male	1563	630 (40.3)	488 (31.2)
Black Female	1090	466 (47.8)	331 (30.4)
Hispanic Male	824	383 (46.5)	250 (30.4)
Hispanic Female	221	125 (56.6)	44 (19.9)
Missing/Other	316	111 (35.1)	94 (29.7)
Total	5,047	2,190 (43.4)	1,585 (31.4)

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 2007 (43.4%) 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.

Figure 21 shows HIV positivity rates by race/ethnicity and gender for those who tested positive for the first time in 2007. Of the 5,047 positive test results obtained in 2007, 413 (8.2%) were among persons who had never been tested before. Another 1,585 (31.4%) were among persons who had previously tested negative. These groups combined represent “new” positives in 2007. The positivity rate among the new positives was highest for black males (1.6%), followed by Hispanic males (1.5%) and white males (1.1%). 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, 2007 (N=1,998)



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 and the need for follow up and care, and to discuss the importance of risk-reducing behavior regardless of the test results.

More than 50% of negatives were post-test counseled from 2001 to 2007 (**Figure 22**). In 2007, the statewide post-test counseling rate for negatives was 65.4%. For positives the post-test counseling rate was 73.7%; however, newly diagnosed persons received their results 92% of the time.

Figure 22. Percentage of Clients Post-test Counseled, Florida, 2001-2007

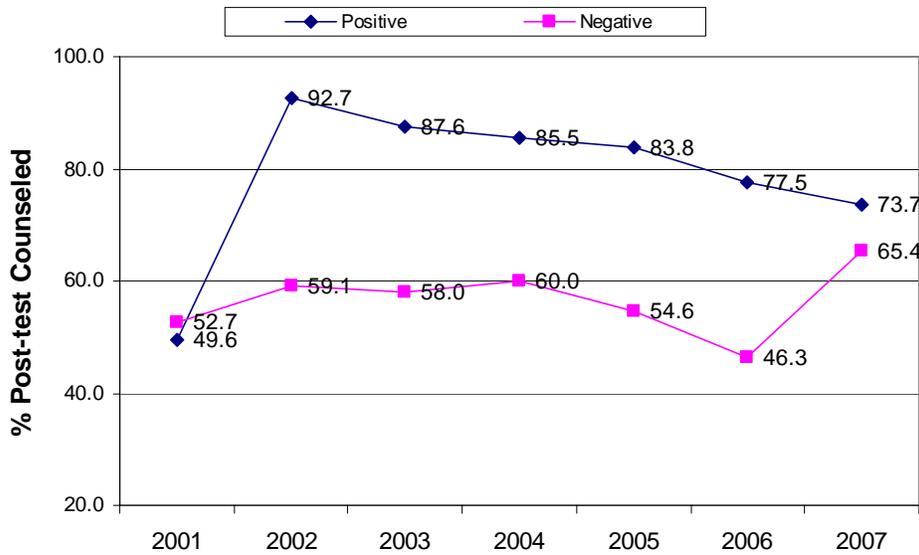


Table 4 shows the number of clients with a positive or negative test result who received post-test counseling in 2007. Testing was highest in the county health department STD setting (78,852). Correctional facilities recorded the highest post-test counseling rate for negatives (89.0%), followed by community-based organizations with (82.4%). The highest post-test counseling rate for positives was recorded for county health department family planning clinics with 94.9%, followed by the college/university testing sites with (88.2%).

Site Type	No. Negative	No. Post-test Counseled (Negative)	(%)	No. Positive	No. Post-test Counseled (Positive)	(%)
Anonymous	5,727	3,861	67.4%	88	67	76.1%
CHD STD	77,614	40,547	52.2%	1,238	829	67.0%
Drug Treatment Center	13,285	9,686	72.9%	127	106	83.5%
CHD Family Planning	53,647	27,602	51.5%	59	56	94.9%
CHD Prenatal/OB	31,156	19,124	61.4%	36	30	83.3%
CHD TB	2,729	1,803	66.1%	24	14	58.3%
Adult Health	18,524	11,300	61.0%	740	486	65.7%
Correctional Facility	32,362	28,810	89.0%	412	324	78.6%
College/University	2,865	2,034	71.0%	51	45	88.2%
Private M.D.	3,830	1,977	51.6%	198	141	71.2%
Special Study/TOPWA	4,677	3,776	80.7%	157	52	33.1%
Community-based Organization	65,193	53,740	82.4%	1,657	1,352	81.6%
CHD Field Visit	13,175	8,378	63.6%	256	219	85.5%
Unknown	148	1	0.7%	4	0	0.0%
Total	324,932	212,639	65.4%	5,047	3,721	73.7%

In 2007, there were some differences by gender, age, and race/ethnicity in post-test counseling rates. As shown in **Table 5**, males have higher post-test counseling rates for positives (74.0%) and for negatives (70.7%). Only 59.0% of negative children (under the age of 13) and 63.6% of the positive children received post-test counseling, compared to 71.4% of negatives in the over 50 age group and 84.0% of positives in the 13-19 age group. Post-test counseling rates did not vary substantially by race/ethnicity. MSM/IDU and MSM had high rates of post-test counseling, regardless of test result.

Table 5. Number Tested and Number (%) Post-test Counseled by Gender, Age, Race/Ethnicity and Serostatus, Florida, 2007

	No. Negative	No. Post-test Counseled (Negative)	(%)	No. Positive	No. Post-test Counseled (Positive)	(%)
Gender						
Male	129,991	91,952	70.7%	3,329	2,463	74.0%
Female	190,039	117,774	62.0%	1,634	1,194	73.1%
Other/Missing	4,902	2,913	59.4%	84	64	76.2%
Total	324,932	212,639	65.4%	5,047	3,721	73.7%
Age						
Less than 13	644	380	59.0%	11	7	63.6%
13-19	61,817	38,447	62.2%	181	152	84.0%
20-29	137,635	88,577	64.4%	1,174	931	79.3%
30-39	60,824	40,093	65.9%	1,369	1,005	73.4%
40-49	39,409	27,822	70.6%	1,582	1,103	69.7%
50+	22,257	15,891	71.4%	689	494	71.7%
Missing age	2,346	1,429	60.9%	41	29	70.7%
Total	324,932	212,639	65.4%	5,047	3,721	73.7%
Race/Ethnicity						
White	106,995	69,933	65.4%	1,070	760	71.0%
Black	124,630	82,768	66.4%	2,748	2,056	74.8%
Hispanic	79,587	51,223	64.4%	1,054	776	73.6%
Other/Missing	13,720	8,715	63.5%	175	129	73.7%
Total	324,932	212,639	65.4%	5,047	3,721	73.7%
Risk						
MSM/IDU and MSM	20,692	16,613	80.3%	1,685	1,270	75.4%
IDU	12,611	9,213	73.1%	271	183	67.5%
Partner at risk	5,513	4,202	76.2%	311	205	65.9%
Perinatal	1,261	811	64.3%	24	13	54.2%
STD diagnosis	17,159	11,472	66.9%	136	97	71.3%
Sex for drugs/\$	2,312	1,791	77.5%	47	35	74.5%
Other	9,369	6,364	67.9%	87	66	75.9%
Sexual assault	14,387	9,299	64.6%	209	145	69.4%
Heterosexual	224,729	143,547	63.9%	1,758	1,352	76.9%
No Identifiable risk	8,432	5,049	59.9%	224	174	77.7%
Missing/Refused	8,467	4,278	50.5%	295	181	61.4%
Total	324,932	212,639	65.4%	5,047	3,721	73.7%

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:

- 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 services;
- 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,
- 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.