

Pediatric HIV/AIDS Cases* in Florida, through 2009

**Bureau of HIV/AIDS
HIV/AIDS Surveillance Section
(850) 245-4430 or SC 205-4430**

***HIV/AIDS cases infected UNDER 13 years of age.
Data as of 09/30/10.
Due to reporting lags, 2009 data are provisional.**

This pediatric epidemiological profile is updated and posted on the HIV/AIDS web site each year. For copies of either the pediatric epi profile and/or the pediatric slide set, please visit our website or contact the Data Analysis Unit at (850) 245-4430.

IMPACT OF HIV/AIDS AMONG CHILDREN (AGES 0-12)

Worldwide

It is estimated that 2.0 million children (under 15 years of age) worldwide are living with HIV infection. Each day, over 1,000 new infections occur and an average of 1,000 children die of HIV. Furthermore, an estimated 15 million children living today have lost one or both parents due to AIDS. Approximately 80% of these children, or 12 million, live in sub-Saharan Africa. It is estimated that over ninety percent of children are infected at birth or through breast-feeding, forms of HIV transmission that can be prevented. A small fraction of HIV infections in children are caused by contaminated injections, the transfusion of infected blood or blood products, sexual abuse, or scarification.

New HIV infections in children worldwide appear to have peaked in 2002. This is believed to be due mainly to the stabilization of HIV prevalence among women overall, and to increasing coverage of programs for preventing mother-to-child transmission of HIV.

The total number of AIDS deaths in children worldwide peaked around 2003 and has decreased since. This decline mainly reflects the drop in new infections in children, as well as increased access to antiretroviral treatment.

Source: UNAIDS Joint United Nations Programme on HIV/AIDS, July 2008

United States (pediatric AIDS)

Florida ranks second, behind New York, in the number of pediatric AIDS cases reported in 2008 (Table 1). Florida also ranks second in cumulative cases, followed by New Jersey and California.

Table 1. Reported Cumulative Pediatric AIDS Cases through 2008 by State*

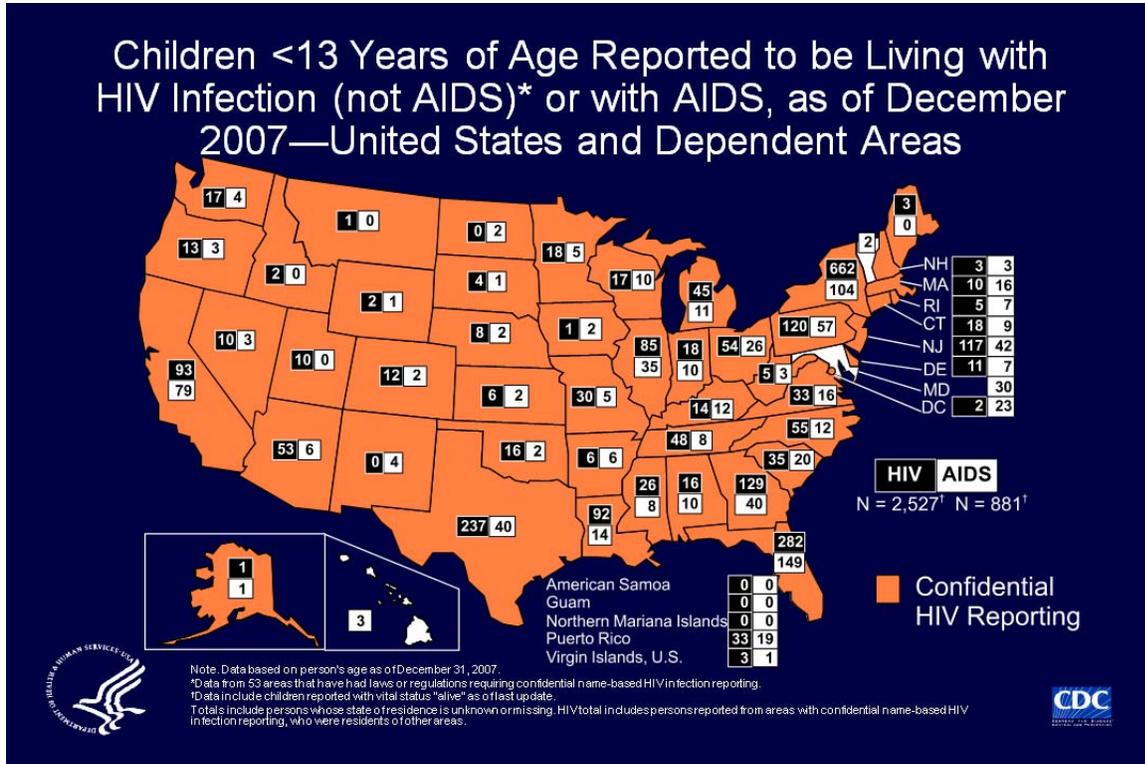
Reporting State	# of Cases	% of Total
New York	2,390	26%
Florida	1,571	17%
New Jersey	801	9%
California	687	7%
Texas	396	4%
Pennsylvania	375	4%
Maryland	330	4%
Illinois	288	3%
Georgia	245	3%
Massachusetts	226	2%
Connecticut	184	2%
Virginia	186	2%
District of Columbia	192	2%
Remainder of Area*	1,478	16%
Total Cases	9,349	100%

Source: Cumulative Data from CDC, HIV/AIDS Surveillance Report, 2008, Table 20

*Remainder of Area includes the remaining states

As of December 31, 2007, a total of 881 children in the United States and dependent areas were reported to be living with AIDS. An additional 2,527 children were reported to be living with HIV infection (not AIDS) from 53 areas (47 states and 5 U.S. dependent areas) that conducted confidential name-based HIV infection case surveillance in 2007, (Figure 1). Most of these cases were perinatally acquired. New York and Florida reported the largest number of cases. Thirty-one states did not report any pediatric AIDS cases. These data are useful in planning medical and social services to meet the current and future needs of this population.

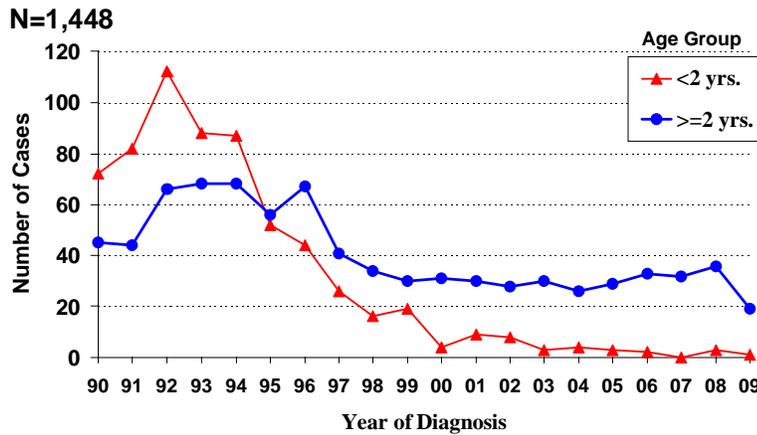
Figure 1. Children <13 Year of Age Living with HIV/AIDS in the US, 2007.



Florida (pediatric AIDS, data as of 09/30/10)

The incidence of AIDS in children under age two reached a high of 178 cases in 1992; this decreased to one case for children under the age of two in 2009 (Figure 2). HIV testing of pregnant women, combined with the introduction of zidovudine (ZDV) to prevent perinatal HIV transmission, has resulted in a 86% (Figure 9) reduction in perinatal HIV/AIDS cases in infants born in Florida since 1992. Consequently, it is important for all pregnant women to know their HIV status. This is substantiated by the fact that 95% of the 2,316 pediatric HIV/AIDS cases reported in Florida through 2009 were perinatally acquired. Florida law requires health care providers who attend a pregnant woman to test her for HIV at the initial prenatal care visit and again at 28 – 32 weeks gestation, unless she refuses. Pregnancy Risk Assessment Monitoring Pediatric AIDS cases diagnosed at age two and older have also sharply declined since 1992 (Figure 2). This is partially due to the maternal use of antiretroviral treatment to prevent perinatal transmission of HIV, as well as the use of prophylactic medicines in HIV-infected pediatric cases to prevent AIDS opportunistic infections.

Figure 2. Pediatric AIDS cases by age group and year of diagnosis, Florida, 1990-2009



These data represent a 88% decline in pediatric AIDS cases diagnosed from 1992 (N=178) to 2009 (N=20).
 *Due to reporting lags, 2009 data are provisional. Data as of 09/30/10

There has been a steady decrease in the number of diagnosed pediatric AIDS cases since 1992 and a decrease in the number of pediatric AIDS cases in those under six years of age (Figure 3). However, the percentage of new AIDS cases for those over age 12 has shown an *increasing* trend from 1% in 1990 to 95% in 2009 (Figure 4). This trend is most likely attributable to early diagnosis of HIV (prior to birth or shortly after) along with the increased use of antiretroviral and other medical therapies that help to delay the onset of AIDS. Since the total number of cases has fallen so steeply in the lower age groups, the actual number of AIDS cases diagnosed in 2009 over the age of twelve is 32, compared to only 1 in 1990.

Figure 3. Pediatric AIDS Cases, by Age Group and Year of Diagnosis, Florida, 1990-2009.

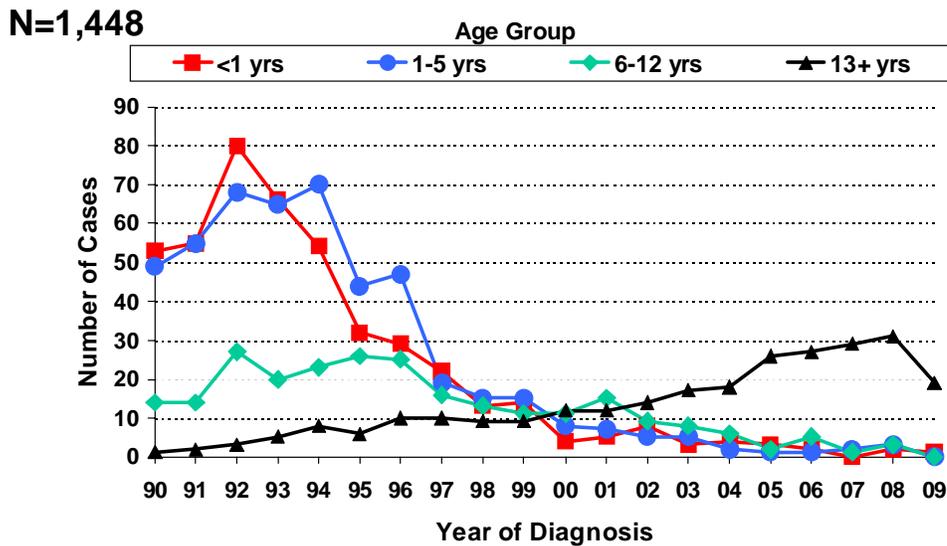
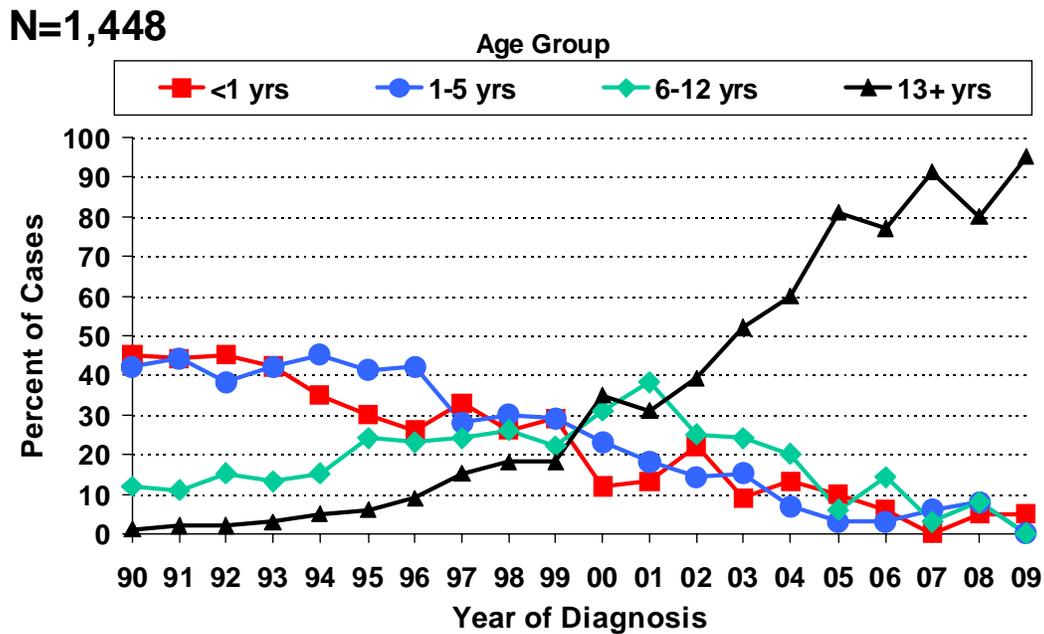


Figure 4. Percentage of Pediatric AIDS Cases, by Age Group and Year of Diagnosis, Florida, 1990-2009.

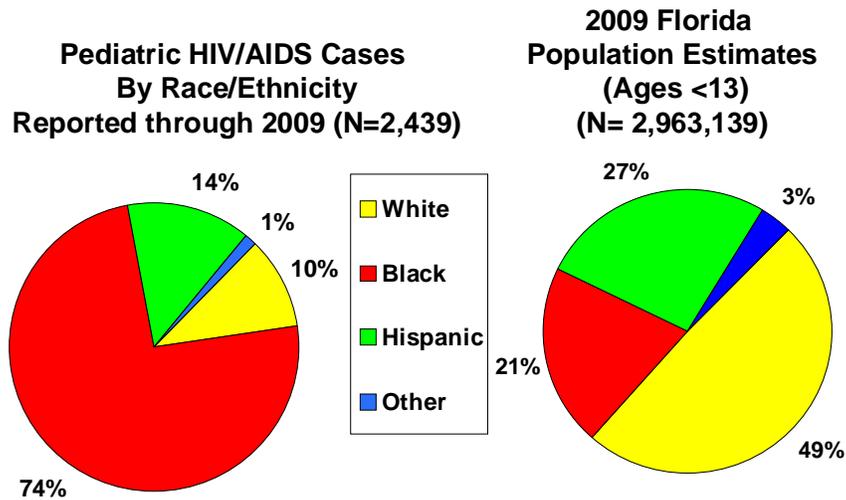


Florida (pediatric HIV/AIDS [cases with AIDS and HIV/not AIDS combined] data as of 09/30/10)

Pediatric HIV/AIDS cases by Race/Ethnicity

Of the 2,439 pediatric HIV/AIDS cases reported through 2009, 10% were white, 74% were black and 14% were Hispanic. When compared with the general population of persons less than 13 years of age, blacks are disproportionately affected by HIV/AIDS (Figure 5).

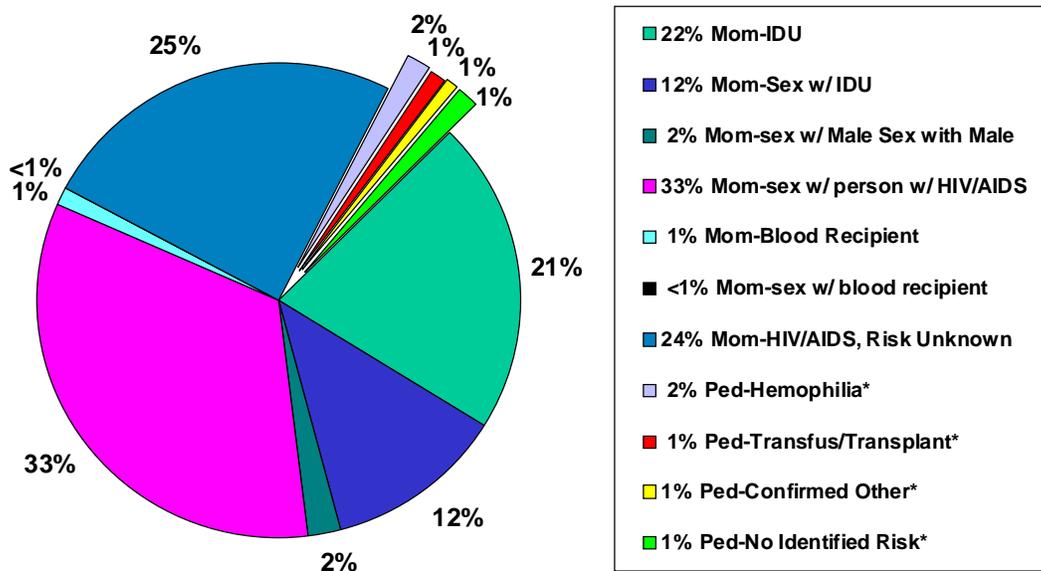
Figure 5. Cumulative Pediatric HIV/AIDS cases by race/ethnicity, Florida, data reported through 2009.



Pediatric HIV/AIDS cases by mode of exposure-

Ninety-five percent of the 2,439 pediatric HIV/AIDS cases reported through 2009 were perinatally acquired. Five percent were related to other confirmed risks, which include hemophilia, transfusion or pediatric sexual abuse cases (Figure 6).

Figure 6. Cumulative Pediatric HIV and AIDS Cases By “Expanded” Exposure Category, Florida, Reported through 2009 (N=2,439).



*Note: 5.05% (exploded pieces) are NOT perinatal transmission cases

The majority (76%) of the perinatally acquired cases were black, followed by Hispanic (13%) and white (9%). Two percent were of another race (or mixed race) Table 2.

Table 2. Pediatric HIV/AIDS Cases by Mode of Exposure and Race/Ethnicity, Florida, through 2009.

Exposure Category	White		Black		Hispanic		Other Race		Total	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Mom w/ HIV/AIDS Risk*	208	82%	1,765	97%	307	92%	36	97%	2,316	95%
Ped Other Risk**	42	17%	27	1%	16	5%	1	3%	86	4%
Ped Unknown Risk	4	2%	22	1%	11	3%	0	0%	37	2%
Total	254	100%	1,814	100%	334	100%	37	100%	2,439	100%

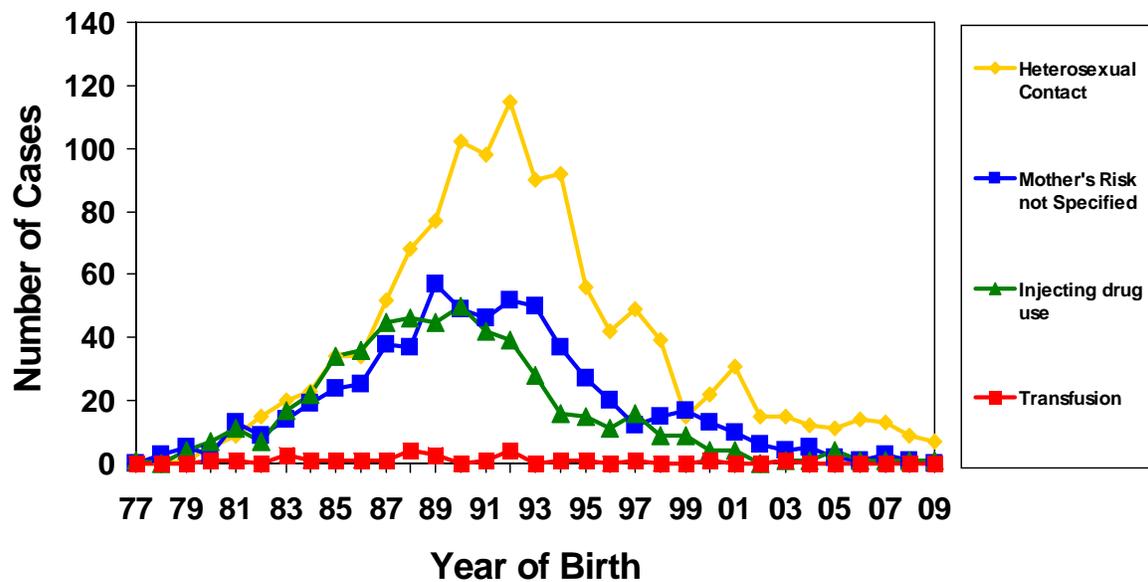
*Includes 268 AIDS cases who were diagnosed >12 years of age with a perinatal risk.

**Ped Other Risk includes female sex with male (sex abuse cases), transfusion & hemophilia cases.

PERINATALLY ACQUIRED HIV/AIDS CASES IN FLORIDA

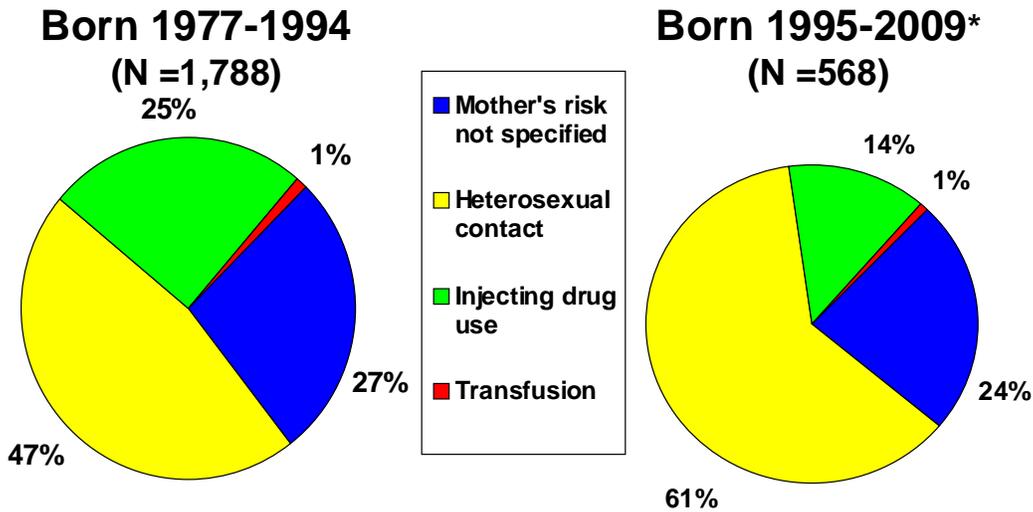
Distribution of the mother's exposure category has changed over time for children who were infected perinatally. In the early 1980's, many of these women were exposed to HIV through injection drug use or heterosexual contact (Figure 7). From 1989-1992, the risk of injection use decreased as the risk of heterosexual contact continued to increase. Since 1992 a steady decline was observed for all risks as the annual number of perinatal cases decreased, due to improved prophylaxis against OI's and the use of combination antiretroviral therapy by pregnant women with HIV since 1994. Throughout the entire reporting period, many of the mothers' risks were unknown. Most of the cases reported without a risk will be reclassified to the recognized risk categories as further information is reported. A review of data on women who were initially reported with no identified risk and later reclassified, suggests that greater than 85% of women with no identified risk were exposed through heterosexual contact. Since perinatal data revolves around the child's birth, the following data are based on year of birth, not year of report.

Figure 7. Mother's exposure category by year of the child's birth for perinatal HIV/AIDS, 1977-2009*, Florida, N=2,356.



Among children who were infected perinatally with HIV/AIDS, the distribution of their mothers' exposure categories has changed over time (Figure 8). Of the perinatal HIV and AIDS cases who were born through 1994, 47% were attributed to the mother's exposure to HIV through heterosexual contact, compared to 61% for those born 1995-2009. Injection drug use accounted for 25% of the cases born between 1977 and 1994, but only 14% of the cases born between 1995 and 2009. Cases where the mother's risk was unknown represented approximately one fourth of both the cases born 1977-1994 and 1995-2009.

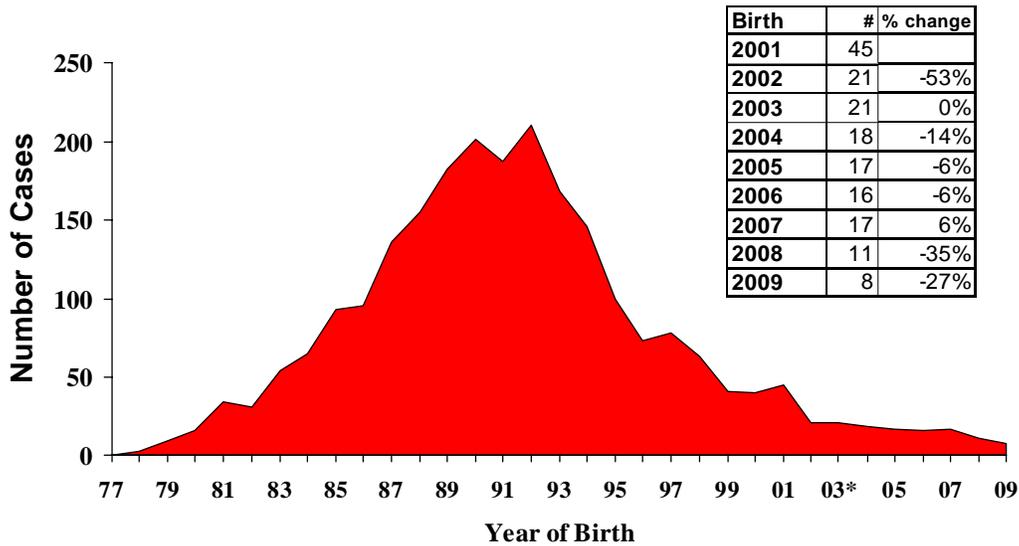
Figure 8. Mother's exposure category for perinatally acquired HIV/AIDS cases by year of child's birth, Florida (N=2,356).



Note: Includes all perinatal HIV/AIDS cases diagnosed in Florida, regardless of place of birth, *2009 data are provisional. Data as of 09/30/10.

Of the 2,356 perinatally infected babies born through 2009, 1 was born as early as 1977 (Figure 9). Since that time, the birth of HIV-infected babies continued to rise through 1992. In April 1994, the Public Health Service released guidelines for ZDV use to reduce perinatal HIV transmission, and in 1995 recommendations for HIV counseling and voluntary testing for pregnant women were published. The mandatory offering of HIV testing to pregnant women became law in Florida in October 1996. Since then, the percent of perinatally infected children who received ZDV or whose mothers received ZDV has increased markedly. Through enhanced perinatal surveillance systems, it has been documented that ZDV use among exposed infants and mothers of HIV-infected children has increased at the prenatal, intrapartum, delivery and neonatal stages. In the past few years, the use of other medical therapies, including protease inhibitors has supplemented the use of ZDV for both infected mothers and their babies. The use of these medical therapies has been accompanied by a decrease in the number of perinatally HIV-infected children and is responsible for the dramatic decline in perinatally acquired HIV/AIDS since 1994. Furthermore, as noted in detail later in this text, numerous initiatives have contributed to the reduction in these cases: provider education, social marketing etc. These initiatives have helped to further educate local providers in the importance of testing pregnant women for HIV and then offering effective treatment during the pregnancy and at delivery to further decrease the chances of vertical transmission. As a result, significant decreases in annual perinatal HIV-infected births have been observed since 1997, with a leveling trend since 2002.

Figure 9. Perinatally acquired HIV/AIDS cases by year of birth, 1977-2009, Florida, N=2,356.**



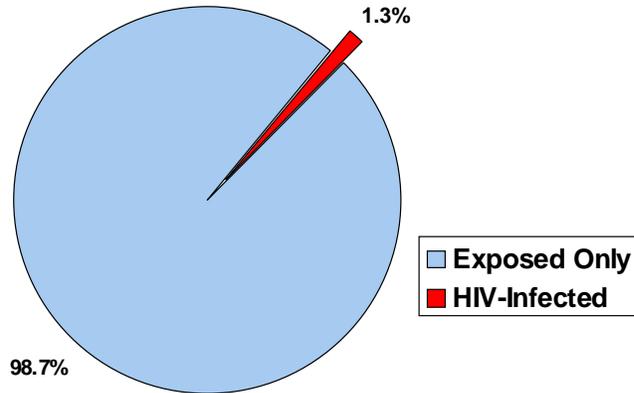
Note: These data represent a **97% decline** in HIV-perinatally infected births from 1992 (N=210) to 2009 (N=8)
 *Includes all perinatal HIV/AIDS cases diagnosed in Florida, regardless of place of birth.
 **HIV Infection Reporting began July, 2007. 2009 data are provisional. Data as of 09/30/10.

HIV Status for Babies KNOWN to be born to an HIV-Infected Mother in Florida

As of 09/30/10, a total of 617 babies were known to be born to HIV-Infected mothers in Florida in 2009, of which 8 (1.3%) are known to be HIV-infected (Figure 10).

Figure 10. HIV Status for Babies KNOWN to be Born to an HIV-Infected Mother in Florida, 2009 (N=617).

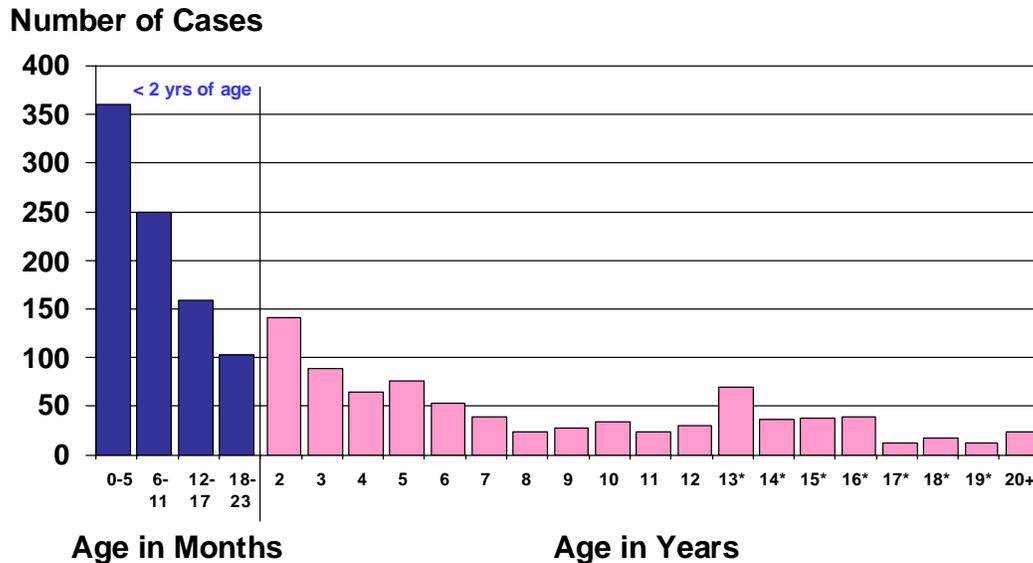
	2008		2009	
	#	%	#	%
Infected	10	1.6%	8	1.3%
not_infected	612	98.4%	609	98.7%
TOTAL BIRTHS	622		617	



Age at Diagnosis of Perinatally Infected HIV/AIDS Cases

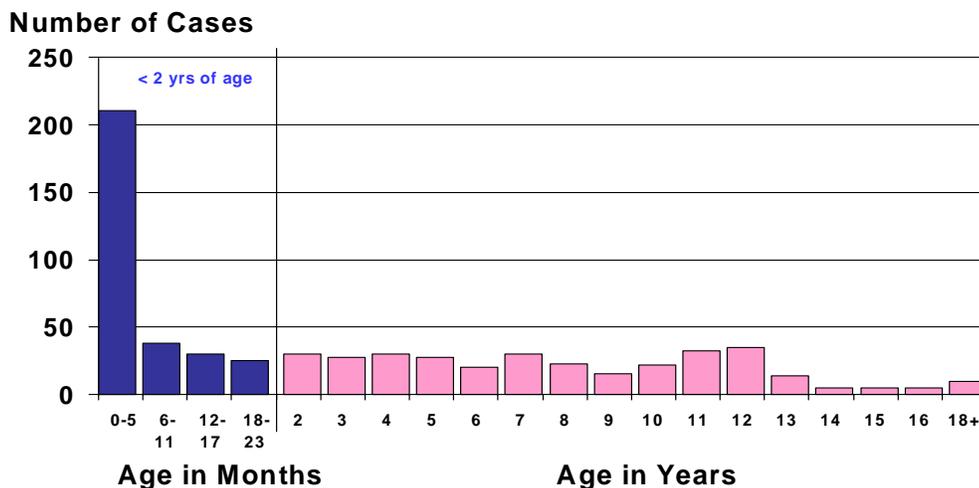
More than half (51%) (N=871) of the perinatal AIDS cases born through 2009 (N=1,715), were diagnosed with AIDS prior to the age of two (Figure 11). The number of AIDS cases diagnosed after age two decreases by age. Fourteen percent (N=247) of the cumulative AIDS cases were not diagnosed with AIDS until *after* the age of twelve (up from 5% in 2003).

Figure 11. Perinatally acquired AIDS cases by age at diagnosis, Florida, born through 2009 (N=1,715).



One-third (33%, N=211) of the 640 perinatal HIV (not AIDS) cases born through 2009 were diagnosed within the first 6 months of life (Figure 12). Almost one-half (47%, N=304) of these perinatal HIV cases were diagnosed under the age of two. As already noted, early diagnosis of HIV is the key to infected children living longer as well as prolonging the onset of AIDS.

Figure 12. Perinatally acquired HIV (not AIDS) cases by age of report, Florida, born through 2009 (N=640).

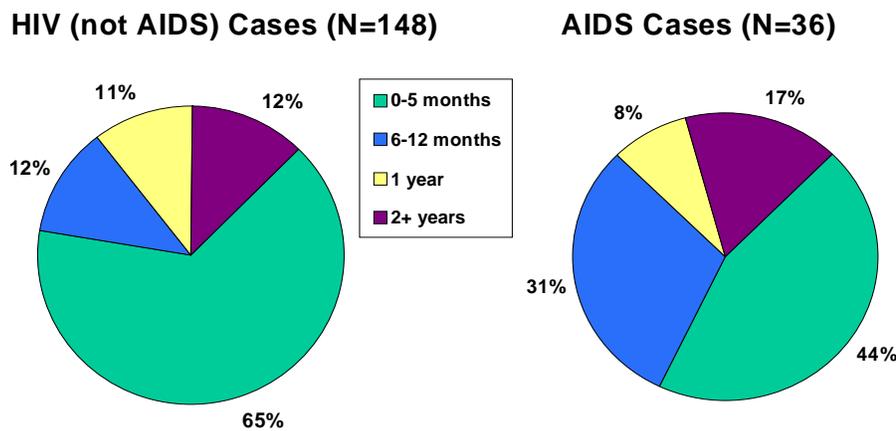


A total of 214 children born 2000-2009 were reported with perinatally acquired HIV in Florida, of which 184 (86%) were actually born *in* Florida. The following analysis will focus on the 184 perinatal HIV/AIDS cases that were born and reported in Florida.

Sixty-five percent (65%) of the HIV (not AIDS) cases perinatally infected and born in Florida 2000-2009 were diagnosed with HIV within the first 6 months of life (Figure 13). Seventy-seven percent (77%) were diagnosed within the first year of life.

Twenty percent (N=36) of the 184 perinatal cases born *in* Florida between 2000 and 2009 have been diagnosed and reported with AIDS as of 09/30/10. Seventy-five percent of these cases (N=27 of 36) developed AIDS within the first year of life. The onset of AIDS can be postponed in children perinatally infected with HIV if early detection and treatment occurs.

Figure 13. Percent of perinatal AIDS and HIV cases born in and reported in Florida, 2000-2009 (N=184), by age at diagnosis.



It is important for HIV-infected pregnant women to know their HIV status so they can make informed decisions about the use of ZDV and other antiretroviral therapy to reduce perinatal transmission of HIV to their infants. Forty-six percent (N=85) of women who gave birth in Florida to children diagnosed with HIV between 2000 and 2009 knew their HIV status *before* their child was born (Table 3). Four percent were diagnosed at delivery. Twenty-six percent (N=48) did *not* know their status until *after* their child was born. These data demonstrate that in most instances, these women received no prenatal care and presented at the hospital ready to deliver, with no time for HIV assessment. Oftentimes, the mother receives no HIV test, even after delivery. In other instances, pregnant women were diagnosed HIV negative during pregnancy, were never re-tested prior to delivery, and a negative HIV status was assumed. These perinatal cases are usually not identified as being infected until a year or more after birth, when they or their mother get sick and get tested. In many instances, it was the diagnosis of the child that led to the diagnosis of the mother. These data stress the importance of offering HIV testing, preferably with a rapid test, at labor and delivery to women of unknown HIV status. Florida law requires women who appear at delivery with no record of an HIV test during pregnancy to be tested for HIV. The Florida Department of Health contracts with the Florida/Caribbean AIDS Education and Training Center (AETC) to educate health care providers who care for pregnant women, about HIV testing and treatment guidelines.

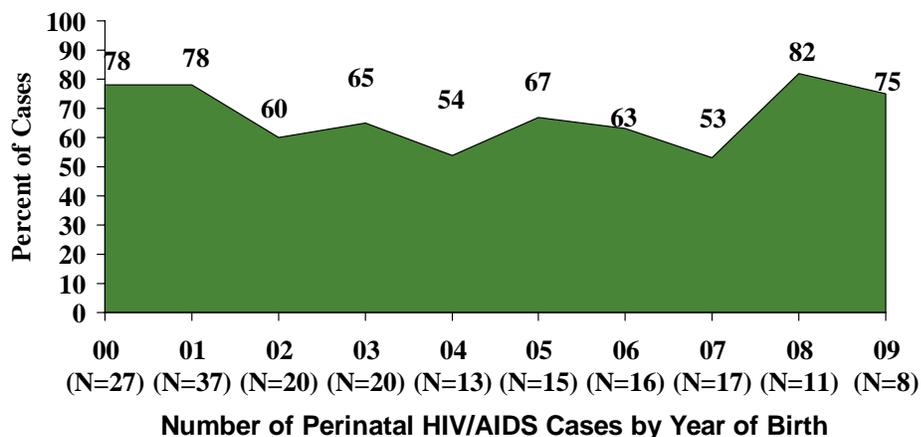
Table 3. Time of maternal HIV testing among perinatal AIDS and HIV cases born in and reported in Florida, 2000–2009, (N=184).

	TOTAL	
	No.	Percent
Before Pregnancy	85	46%
During Pregnancy	41	22%
At Delivery	8	4%
After Birth	48	26%
Unknown	2	1%
TOTAL	184	100%

Note: 126 (68%) of the 184 mom's knew they were infected prior to birth.
 *2009 data are provisional.

The percent of pregnant women giving birth to a child diagnosed with HIV and who knew their HIV status prior to delivery varies from year to year, ranging from 50 to 82% (Figure 14). As the number of perinatal HIV cases has decreased each year, those who are born HIV-infected are more likely to be born to a mother whose HIV status was *not* known prior to birth. Oftentimes, these are mothers who had no prenatal care, and arrive at the hospital on the day of delivery with little time to assess her HIV status prior to delivery. Based on recommendations from the CDC, Florida has a priority initiative to reduce HIV transmission from mother to children by promoting voluntary maternal testing and antiretroviral therapy. As previously noted (Figure 4), the percent of perinatal AIDS cases being diagnosed later in life has increased over the past five years. These data further demonstrate the positive benefits of knowing the HIV status of the mother at birth and treating HIV-infected children with antiretrovirals and other prophylactic therapies shortly after birth; thus delaying the onset of AIDS.

Figure 14. Percent of pregnant women giving birth to a child diagnosed with HIV in Florida and were known to be HIV positive *prior* to delivery, by year of birth, 2000-2009, (126 of 184 births (68%).)



Missed Opportunities

There are several possible missed opportunities where interventions could have taken place to prevent HIV perinatal transmission among infants born during 2000 – 2009 (N=184) (Table 4). These data include 23 (12% of total) immigration cases born *outside* of Florida. These cases are counted in the Florida data because they were diagnosed with HIV as a resident in Florida, however, since the pregnancy and birth did not take place in Florida, the women did not access services in Florida during pregnancy.

Other missed opportunities include: inadequate prenatal care, no prenatal antiretroviral therapies (ART), no ART at delivery, and/or no neonatal ART (with in the first 6 weeks of the infant’s life). Other contributing factors include that some of the mothers breast-fed, abused drugs, or acquired a sexually transmitted disease (STD) during her pregnancy or a combination of the above.

Table 4. Possible Missed Opportunities to Prevent Perinatal Transmission of HIV Among HIV/AIDS Cases Born in and reported in Florida (2000-2009) (N=184).

Missed Opportunities	Number	Percent
<i>Immigrant Peds (born outside of Florida)*</i>	23	N/A*
Mom's HIV Status NOT Known Before Birth	46	25%
Inadequate Prenatal Care**	124	67%
No Prenatal ART	118	64%
No ART at Delivery	95	52%
Non-Caesarean Birth	84	46%
No Neonatal ART	64	35%
Breast Fed	18	10%
Other Contributing Factors	Number***	Percent
Mom was a substance abuser	52	28%
Mom acquired an STD	62	34%
Total Born & Reported in Florida, Born 2000-2008	184	
*A total of 184 peds reported in Florida were born from 2000 through 2009.		
Of these, 23 (12%) were born outside of Florida. Of these 23, 12 were known to be born outside of the US		
** Inadequate prenatal care indicates prenatal care after the 4th month and less than 5 visits		
***The same child can be in multiple categories		
****2009 data are not complete due to reporting lag.		

AIDS-Defining Conditions

Of the 2,439 pediatric HIV/AIDS cases reported through 2009, 1,823 (75%) have developed AIDS, of which 160 (9%) were diagnosed after the 13. The most commonly reported AIDS-defining conditions among all pediatric AIDS cases reported through 2009 are listed below (Table 5). Some children may have had more than one condition; therefore the total exceeds 100%. One fourth (27%) of children with AIDS have been diagnosed with pneumocystis pneumonia (PCP). An additional one-fourth (24%) were diagnosed with recurrent bacterial infections, 22% with esophageal candidiasis and 20% with wasting syndrome. The list of conditions presented is based on cumulative data since the beginning of the epidemic; however, the most commonly reported conditions for children diagnosed in 2009 have not changed much from those reported in earlier years.

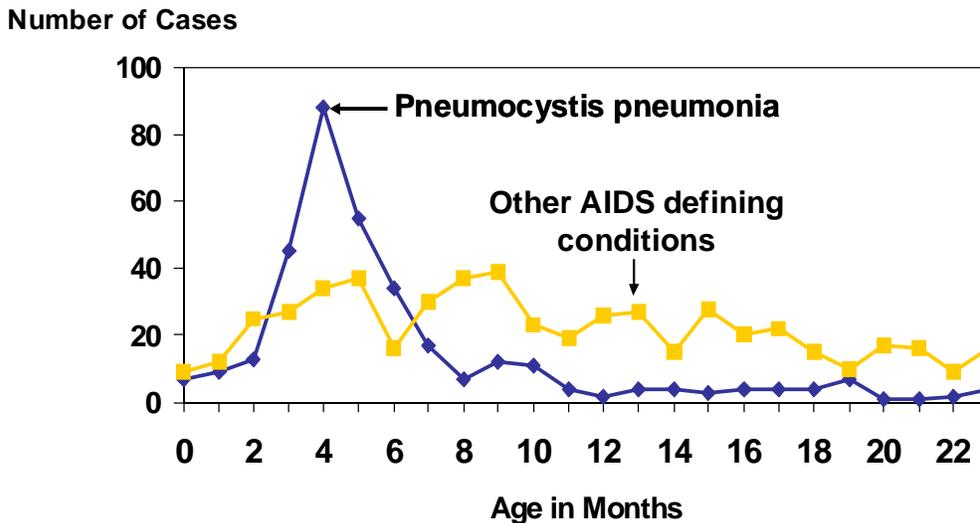
Table 5. Prevalence of AIDS defining conditions most commonly reported among children <13 years of age, reported through 2009, Florida, N=1,823.

DISEASE / CONDITION	NUMBER	% OF CASES
Pneumocystis pneumonia	486	27%
Bacterial infections	432	24%
Candidiasis, esophageal	398	22%
Wasting syndrome	363	20%
Lymphoid interstitial pneumonia	302	17%
HIV encephalopathy	253	14%
Cytomegalovirus disease	144	8%
Herpes simplex	112	6%
Candidiasis, bronchi or lungs	84	5%
Cryptosporidiosis	81	4%
CD4 immune deficiency (only)	203	11%

Note: Data are not mutually exclusive, many cases have more than one disease.

The peak of PCP in children with perinatally acquired AIDS is four months of age (Figure 15). The age at diagnosis for the other AIDS-defining conditions is much more evenly distributed during the first two years of life. Because of the early presentation of PCP, recommendations for all perinatally HIV-exposed children are for PCP prophylaxis to begin at four to six weeks of age. Once the child is proven to be uninfected, the PCP prophylaxis is discontinued. Early diagnosis, treatment and care of an HIV perinatally infected child is crucial in delaying the onset of AIDS.

Figure 15. AIDS defining conditions among perinatally acquired AIDS cases under age two, by age at diagnosis, reported through 2009, Florida, N=871.



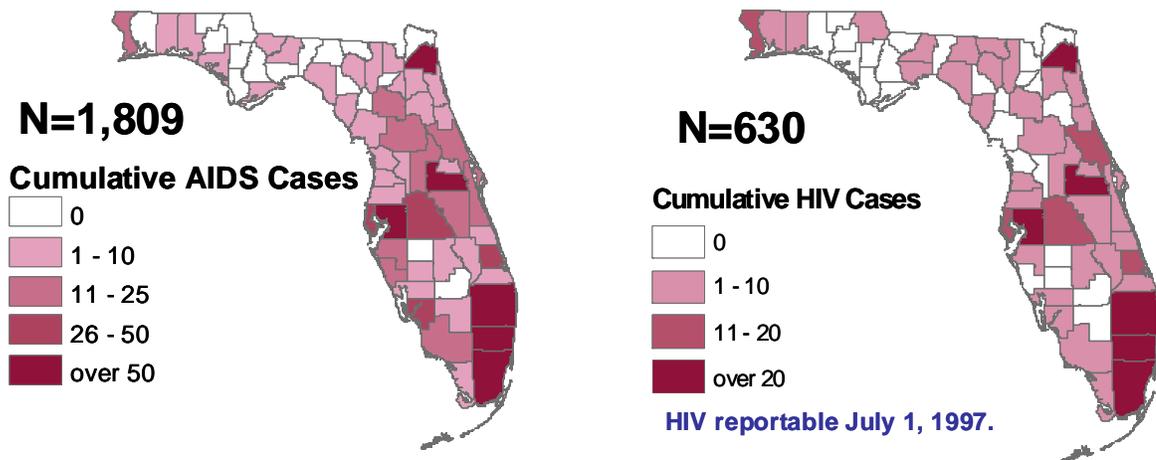
Distribution of Pediatric AIDS and HIV in Florida

Pediatric AIDS and HIV

Florida reported 1,809 pediatric (<13 years) AIDS cases through 2009, with the majority (63%) of these cases reported from Miami-Dade (N=584), Broward (N=312) and Palm Beach (N=235) counties (Figure 16).

Florida has reported a total of 630 pediatric (infected under 13 years) HIV cases from July 1997 through 2009 (Figure 16). The majority (52%) of these cases were reported from Miami-Dade (N=175), Broward (N=98) and Palm Beach (N=57) counties. Other counties with a high number of reported HIV pediatric cases included: Orange (N=57), Hillsborough (N=40), Duval (N=36) and St. Lucie (N=18).

Figure 16. Cumulative reported pediatric AIDS and HIV cases by county, Florida, through 2009.



Although there have been significant decreases in perinatal HIV cases since 1992, each of the top reporting areas have reported at least one since 2000 (Table 6). As noted above, efforts will continue to be made to educate providers about the value of knowing the HIV status of all pregnant women during prenatal care and at delivery, and for those pregnant women testing positive for HIV, to offer the best treatment available to prevent vertical transmission.

Table 6. Perinatal HIV/AIDS cases, born in Florida, 2000-2009, by area of birth and reported in Florida (N=184).

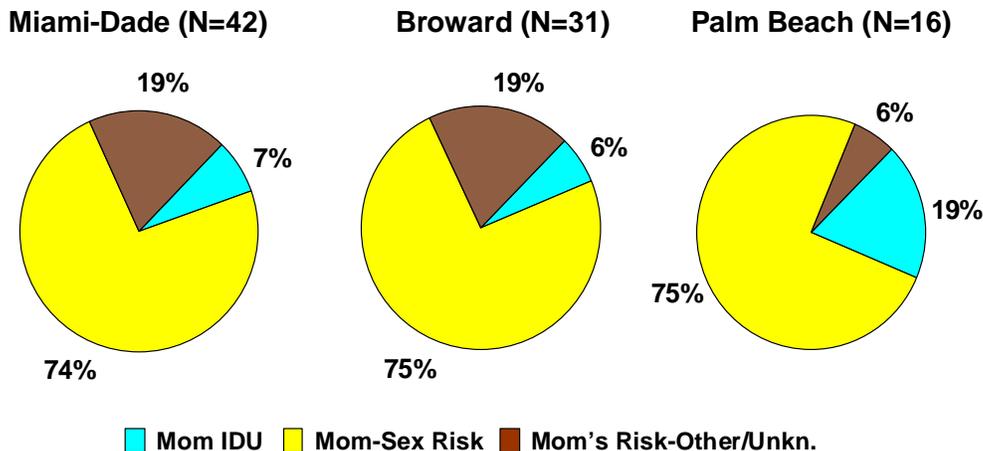
AREA of BIRTH	BORN 2000-2009	
	# OF CASES	% OF TOTAL
Area 01*	5	3%
Area 03*	4	2%
Area 08 (Lee Only)	5	3%
Area 08 (not Lee)*	2	1%
Area 15*	13	7%
Broward County	31	17%
Duval County	16	9%
Hillsborough/Pinellas Counties	11	6%
Miami-Dade County	42	23%
Orange County	17	9%
Palm Beach County	16	9%
Polk	4	2%
REMAINDER OF STATE	18	10%
TOTAL CASES	184	100%

*Area 1 = Escambia, Okaloosa, Santa Rosa & Walton Counties;
 *Area 3 = Alachua, Bradford, Columbia, Dixie, Gilchrist, Hamilton, Lafayette, Levy, Putnam, Suwannee, & Union Counties;
 *Area 8 (not Lee) = Charlotte, Collier, DeSoto, Glades, Hendry & Sarasota Counties.
 *Area 15 = St. Lucie, Indian River, Martin, and Okeechobee Counties.

Pediatric HIV/AIDS in South Florida

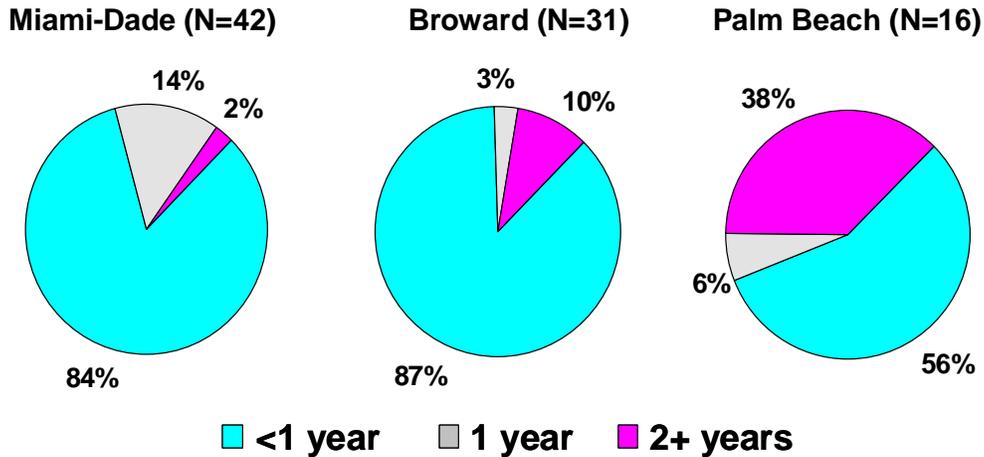
A total of 89 perinatal HIV/AIDS cases born between 2000 and 2009, were reported in Miami-Dade, Broward and Palm Beach counties. This represents 49% of the 184 perinatal HIV and AIDS cases born in Florida during this time period. All of the pediatric HIV/AIDS cases reported from these three counties were perinatally acquired. However, there is some variation in the modes of exposure of the mother by county (Figure 17).

Figure 17. Mother’s Exposure Category for Perinatal HIV/AIDS Cases Reported in Miami-Dade, Broward, and Palm Beach Counties, Born 2000 through 2009, (N=89).



Eighty percent (81%, 71 of 89) of the perinatal HIV/AIDS cases born and reported in South Florida were diagnosed within the first year of life (Figure 18). As noted earlier, an early diagnosis of perinatally acquired HIV infection allows the opportunity of early treatment, thus possibly prolonging the onset of AIDS.

Figure 18. Pediatric HIV/AIDS Cases by Age at Diagnosis, Reported in Miami-Dade, Broward, and Palm Beach Counties, Born 2000 through 2009, (N=89).



As previously mentioned, pediatric AIDS in Florida disproportionately affects non-Hispanic blacks. In South Florida, 81%, (72 of 89) of the pediatric HIV/AIDS cases were among blacks (Figure 19). These data differ greatly from the population by race/ethnicity for women of childbearing age (15-44) living in these counties (Table 7).

Figure 19. Pediatric HIV/AIDS Cases by Race/Ethnicity, Reported in Miami-Dade, Broward, and Palm Beach Counties, Born 2000 through 2009, (N=89).

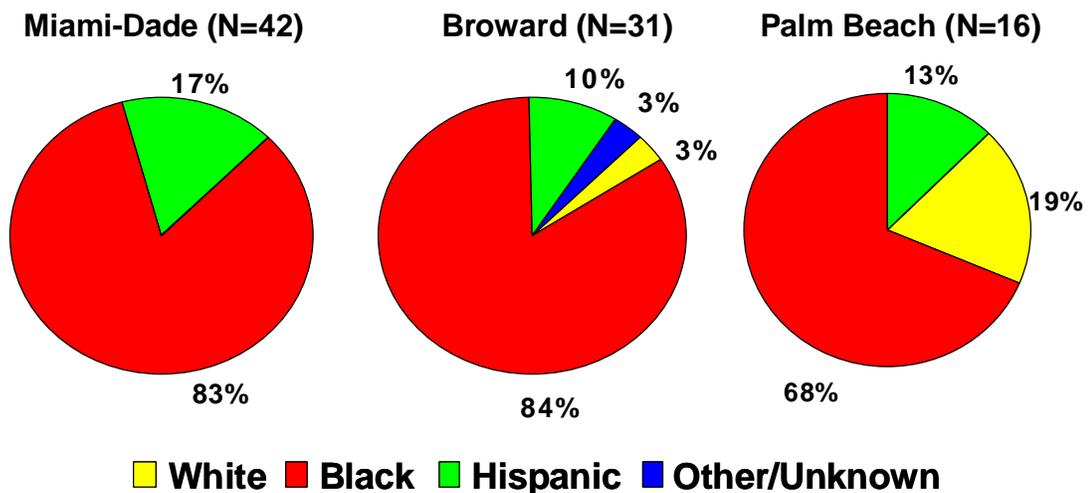


Table 7. Distribution of Women of Childbearing Age* (15-44) by Race/Ethnicity for Miami-Dade, Broward and Palm Beach Counties.

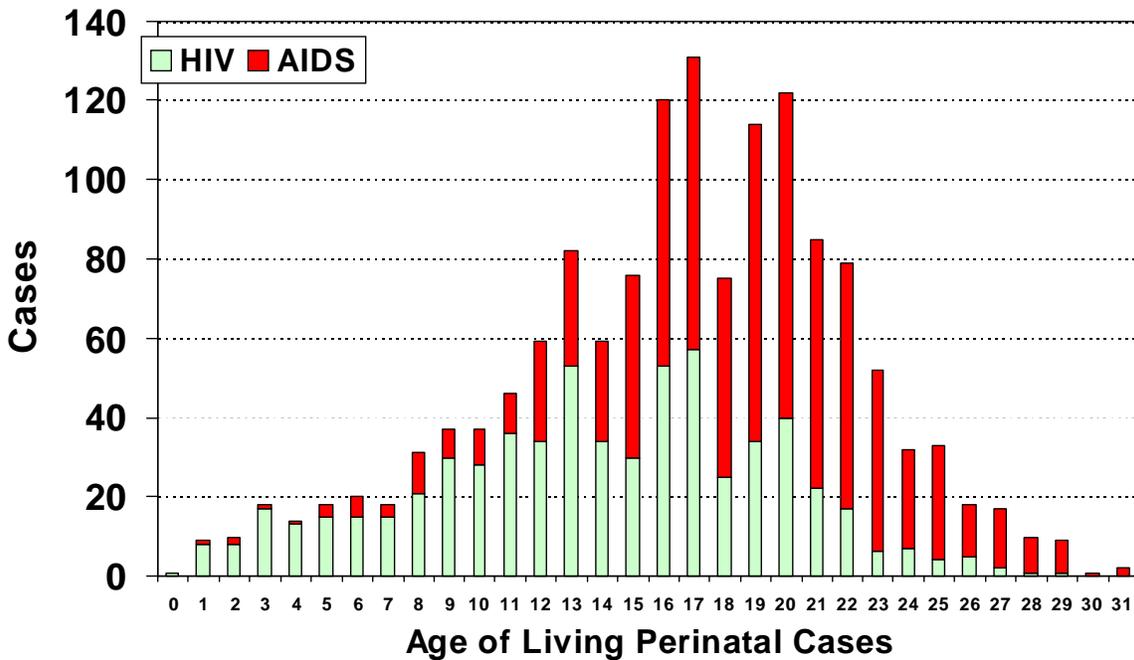
	White	Black	Hispanic	Other	Total
Miami-Dade	17%	21%	59%	4%	100%
Broward	49%	25%	20%	6%	100%
Palm Beach	61%	18%	16%	5%	100%

*Based on 2000 Census Data

Prevalence of Perinatal HIV/AIDS Cases in Florida

As of December 31, 2009, there were 1,475 perinatal HIV/AIDS cases in Florida reported and presumed to be living through 2009 (Figure 20). Their current ages range from 1 to 28 years. Overall, 843 (57%) have developed AIDS. As expected, the majority of the cases under age 10 are diagnosed with HIV (not AIDS) and the majority of cases ages 10 and older have developed AIDS. Of the 1,475 cases presumed to be living, 164 AIDS cases were not reported with AIDS until after age 12. Access to antiretroviral medications and prophylaxis against opportunistic infections has aided in prolonging the life of many of these perinatal cases.

Figure 20. Current age distribution* of persons presumed to be living with perinatal AIDS or HIV (not AIDS), reported through 2009, as of 09/30/10, Florida, (N=1,475).

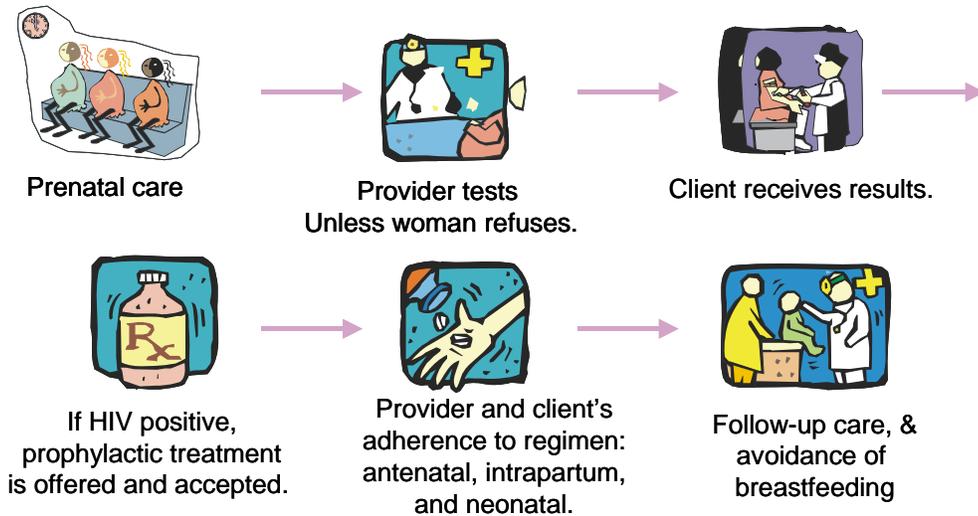


*Current age of presumed living (not known dead) HIV/AIDS perinatal cases born through 2009. Data as of 09/30/10

Prevention is the Key to Success

Without appropriate medical therapy, about 30% of babies born to pregnant women with HIV in Florida will be diagnosed with HIV. Infection can occur at any time during the pregnancy (usually preceding or during delivery), and can also occur through breastfeeding. Because infection can occur through breast milk, women with HIV are strongly encouraged not to breast feed their children. Even with proper prenatal care and treatment, approximately 2% of babies born to HIV-infected women will become infected. Prevention is the key to success (Figure 21).

Figure 21. Steps to prevention success



Since 1994, Florida has had a comprehensive perinatal HIV prevention program designed to reduce the incidence of perinatal HIV transmission in the state (Figure 22). This comprehensive program is two-pronged; targeting both health care providers and consumers for education and support. The availability of Enhanced Perinatal Surveillance data, collected by local surveillance staff on all HIV-infected infants and a sample of exposed infants, has been particularly helpful in directing the Bureau of HIV/AIDS perinatal HIV prevention activities.

Figure 22. Perinatal Programs for Women

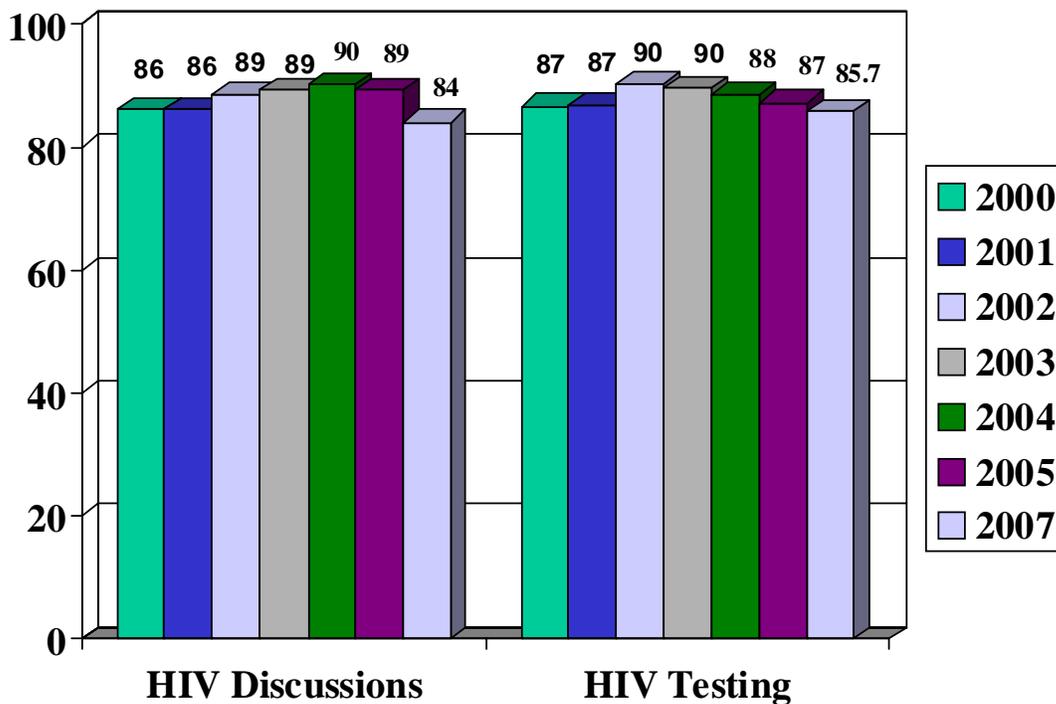
Perinatal Programs for Women

- The Targeted Outreach for Pregnant Women Act (TOPWA) program.
- Collaboration with state agencies and organizations to ensure that perinatal HIV issues are addressed.
- Perinatal social marketing campaign.
- “Women and Children: The Perinatal HIV Program” is located on the Bureau of HIV/AIDS internet site
- Provide 6-weeks of free AZT for newborns of families with no medical coverage

The Florida Department of Health contracts with the Florida/Caribbean AIDS Education and Training Center (AETC) to educate health care providers who care for pregnant women, about HIV testing and treatment guidelines. The goal of the AETC project is to deliver innovative training methods to health care providers, community-based organizations, and perinatal organizations, on Florida's requirements for the HIV testing of pregnant women, and the most up-to-date treatment options for reducing perinatal HIV transmission. In addition, the AETC is targeting hospital labor and delivery units for intensive technical assistance to promote appropriate intrapartum care and to assist in the development of written protocols, in particular the implementation of rapid testing for women presenting at delivery with no record of a blood test for HIV during pregnancy, and women with no prenatal care. The AETC has created a number of social marketing materials for consumers and providers that incorporate information on the Florida statute pertaining to the HIV testing of pregnant women.

Data from the Pregnancy Risk Assessment Monitoring System (PRAMS) indicate that Florida's HIV testing rates for pregnant women have increased significantly over the past few years. PRAMS is a joint surveillance project between the Florida Department of Health and the Centers for Disease Control and Prevention designed to monitor the physical, economic, and social health of Florida's mothers and newborns. Figure 23 shows the percentage of women surveyed who state their prenatal care provider discussed HIV testing with them and the percentage of women who state they were tested for HIV, during their most recent pregnancy.

Figure 23. PRAMS: Healthcare Provider Discussions About HIV Testing, and Pregnant Women Tested for HIV in Florida, 2000-2007



The Bureau of HIV/AIDS has initiated a number of projects to address the underlying issues that place pregnant women at risk for HIV. Through enhanced collaborative activities with the Office of Infant, Maternal and Reproductive Health and other state partners, information on the importance of HIV testing and the availability of treatment for HIV-infected pregnant women is being disseminated to healthcare providers and consumers statewide, and barriers to the care and treatment of HIV-infected pregnant women are being addressed at both the community and state levels.

Every baby born to an HIV-infected mother is prescribed Zidovudine (AZT) for six weeks after birth. In 2008, a program was instituted to provide this medication free of charge for HIV-exposed newborns whose families have no means to purchase the medication. This is a pilot program in the communities near the eleven hospitals that have the greatest number of HIV exposed births. A voucher is provided to the perinatal nurse, who redeems it for the prescription of Zidovudine. Specific Walgreens pharmacies near these hospitals are prepared to redeem the vouchers.

Targeted Outreach for Pregnant Women Act Program Summary

In 1999, the Targeted Outreach for Pregnant Women Act (TOPWA) program was established to find at-risk or HIV-infected pregnant women who are not receiving adequate prenatal care and link them with services. The TOPWA program is currently in twelve Florida counties with twelve community-based organizations providing services. Through July 2008, TOPWA providers conducted over 69,870 outreach sessions in high-risk venues where the targeted population was likely to be found. Over 185,898 women were screened for TOPWA and provided information on the importance of early and ongoing prenatal care, HIV prevention for women and preventing mother-to-child transmission, and the dangers of substance abuse. In order to identify pregnancy as early as possible, TOPWA conducted over 36,570 free on-site pregnancy tests for women unsure of their pregnancy status, identifying over 5,000 pregnant women.

Over 28,600 high-risk or HIV-infected pregnant women have been enrolled in TOPWA and assessed to determine their level of risk and service needs. Figure 24 shows the race/ethnicity of women screened for and enrolled in the TOPWA program. The program's emphasis on minority groups reflects the high numbers of non-white women becoming infected with HIV in Florida, and the Department of Health's commitment to eliminate racial and ethnic health disparities.

Figure 24. Proportion of women screened and enrolled in TOPWA by race/ethnicity, Florida, January 1999- July 2009.

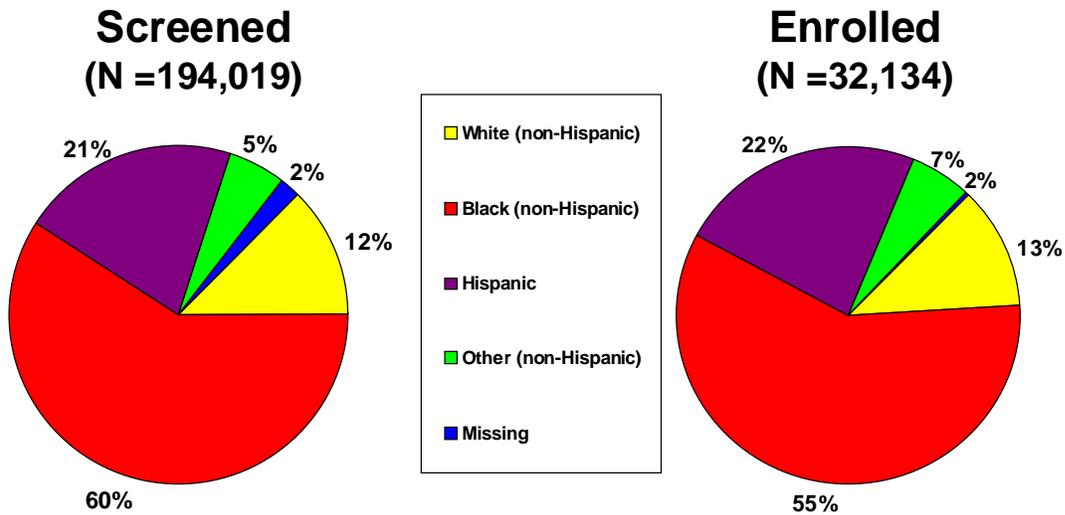
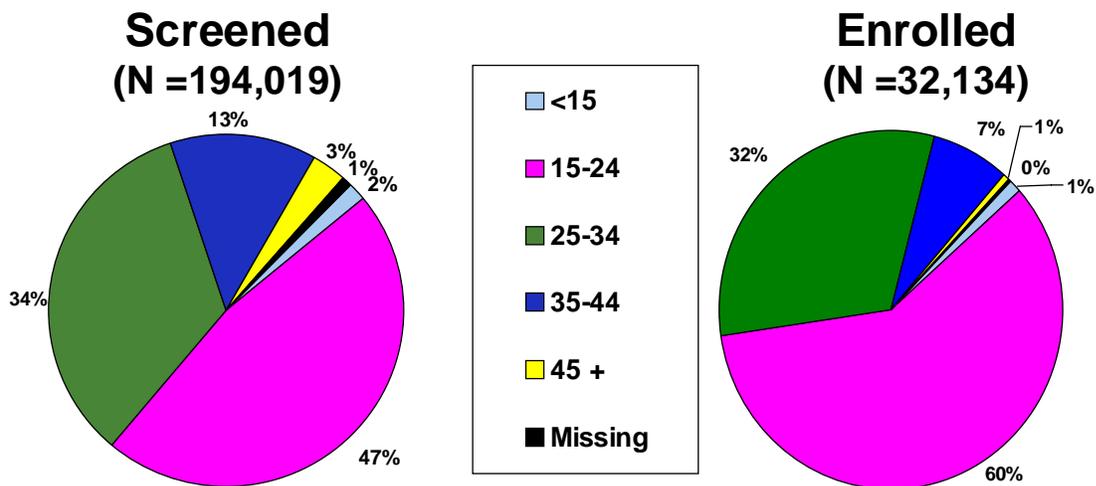


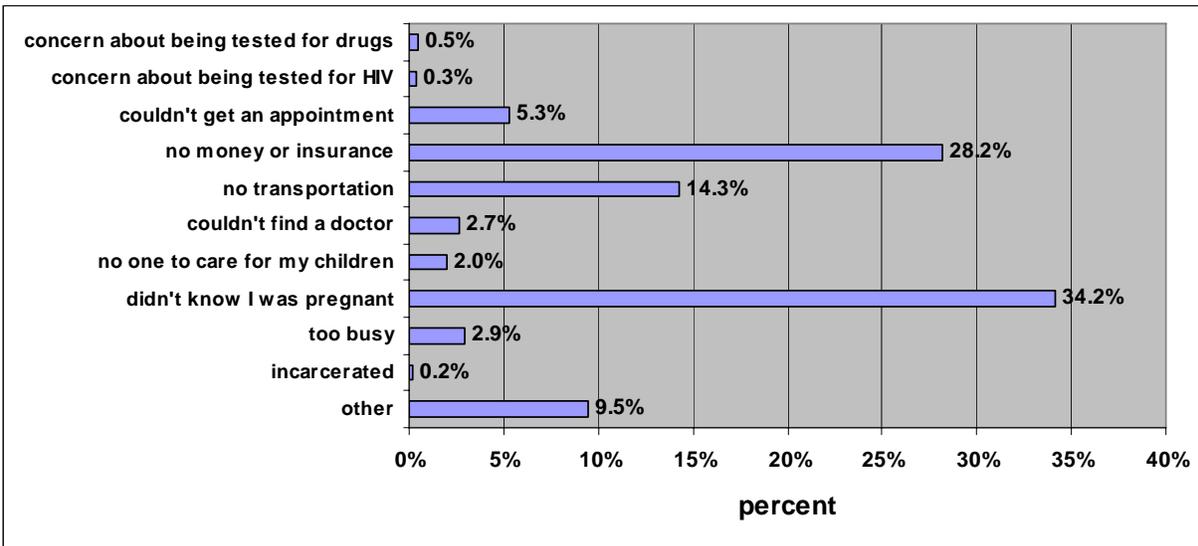
Figure 25 shows the age of women screened for and enrolled in the TOPWA program. Although 47% of women screened for TOPWA are age twenty-four and under, 60% of enrolled women are in this age group, reflecting TOPWA's focus on the most at-risk pregnant women.

Figure 25. Proportion of women screened and enrolled in TOPWA by age, Florida, January 1999- July 2009.



Of enrolled pregnant women, 42% were not in prenatal care at the time of TOPWA assessment. Figure 26 shows reasons given by TOPWA clients for not receiving adequate prenatal care (clients had the option to choose more than one category). The primary reason for inadequate care was not knowing pregnancy status, followed by no money or insurance to pay for prenatal care visits and not having transportation. All these issues are addressed by the TOPWA providers who assist clients with Medicaid and PEPW (Presumptive Eligibility for Pregnant Women) enrollment, or attempt to locate alternative prenatal care coverage. Providers often provide translation services to immigrant women facing language barriers to assist them in the enrollment process. Free on-site pregnancy testing is offered to all women to ensure early access to prenatal care services. Transportation to prenatal care appointments is provided when identified as a barrier to the client accessing care. Additional TOPWA data [not shown] indicate 52% of enrolled women had less than a high school education, 85% had an annual income of less than \$10,000, and 68% were unemployed at the time of assessment. Low levels of education and minimal employment skills place women at a disadvantage and at risk for poor health outcomes. TOPWA providers focus on empowering women to not only access needed services, but also to address the underlying issues that place them at risk such as domestic violence, substance abuse, homelessness, or for immigrant women a non-citizen status.

Figure 26. Reasons for no/inadequate prenatal care among women enrolled in TOPWA, Florida, January 1999- March 2008, N=34,311.



Enrolled TOPWA clients received close to 32,000 referrals, actively linking them to prenatal care and other needed services. All TOPWA referrals are tracked to ensure completion and clients followed through birth of the infant; HIV-infected clients are followed until there is a confirmed HIV status for the infant. In addition to street outreach, TOPWA program providers develop relationships with community agencies and health clinics that refer potential clients. Linkages with local county jails, domestic violence shelters, substance abuse centers, immigrant centers, the Healthy Start program, the WIC program, and other health and social service

agencies have enabled TOPWA providers to access the target population and effectively link clients with services. The TOPWA program plays a particular role in locating clients that have fallen out of prenatal care or HIV/AIDS services and through partnerships with prenatal care clinics, Title IV providers and infectious disease specialists, will assist clients to return to care.

The TOPWA program offers free on-site HIV testing with OraSure, allowing at-risk women to know their status in order to protect their health and the health of their children. Through July 2007, over 20,000 HIV tests had been conducted identifying 300 HIV-infected women. 21% percent of the pregnant women enrolled in TOPWA had never been tested for HIV, and 28% of women identified as HIV positive through OraSure testing were also pregnant. Five hundred and twenty-four pregnant women known to be HIV infected have been enrolled in TOPWA. Of those, only six five infants have been reported as HIV infected.

In 2002, the first funded TOPWA jail program was established at the Palm Beach County Jail. Since then, TOPWA programs have been implemented on-site at the Orange County Jail (Orlando), the Hillsborough County Jail (Tampa) and the Miami-Dade County Jail (Miami). All other TOPWA providers are required to link with either their local HIV/AIDS Jail Linkage program or directly with their county jail, to enroll incarcerated pregnant women upon release. The on-site jail programs screen female inmates for the TOPWA program and offer free HIV testing with OraSure and free pregnancy testing. Upon release, clients who have not yet delivered are linked to health and social services for ongoing prenatal care. Incarcerated women are particularly at high risk for HIV infection and poor pregnancy outcomes, and this is reflected in the collected data. The TOPWA jail programs have conducted over 3,500 HIV tests with a seropositivity rate of 2.5%.

For further information on the TOPWA program or Florida's perinatal HIV prevention program, please contact Nita Harrelle, Perinatal HIV Prevention Coordinator, Bureau of HIV/AIDS, Florida Department of Health at (850) 245-4424, or visit the Bureau of HIV/AIDS perinatal website at http://www.doh.state.fl.us/disease_ctrl/aids/Perinatal/PERINATAL.html