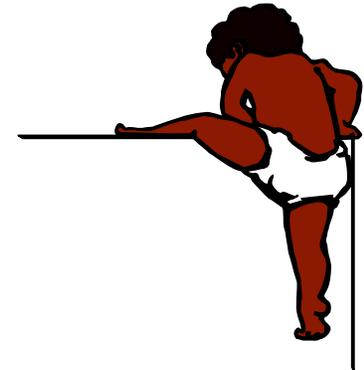
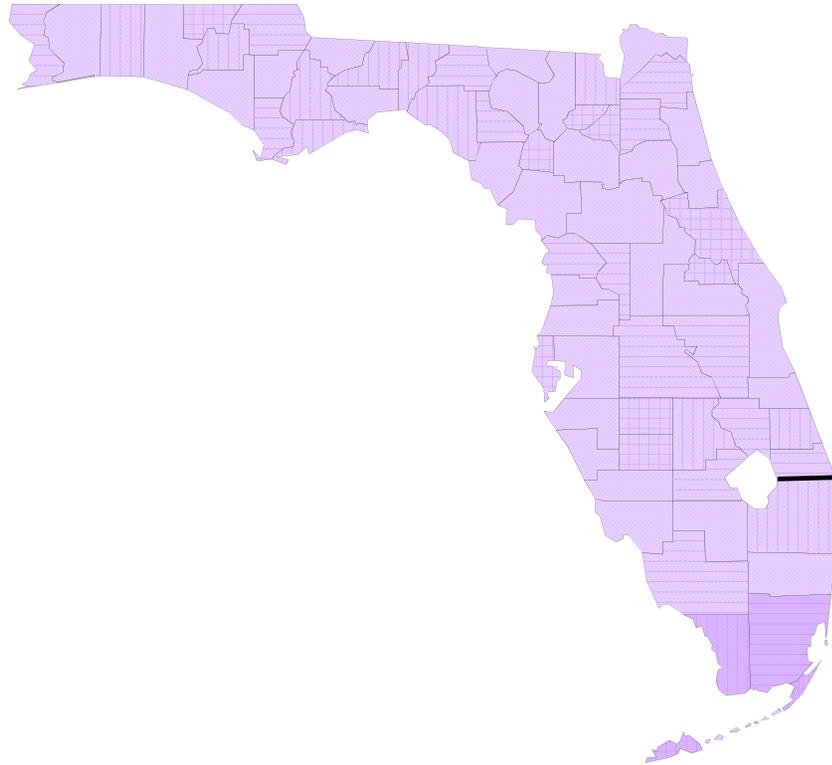
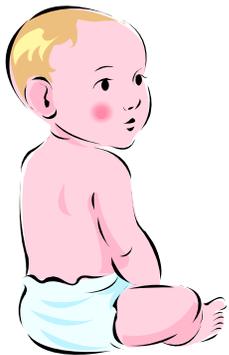


To protect, promote and improve the health of all people in Florida through integrated state, county, and community efforts.

Created: 12/27/13
Revision: 10/02/14



Epidemiology of HIV Among Pediatric* Cases in Florida, through 2013

HIV/AIDS Section
Division of Disease Control and Health Protection
Data as of 06/30/2014
*Infected prior to age 13



Pediatric HIV Surveillance

- Ⓡ Pediatric HIV cases include those persons who were infected with HIV UNDER 13 years of age.**
- Ⓡ Pediatric AIDS cases include those pediatric HIV cases that have developed AIDS, regardless of age of AIDS diagnosis.**
- Ⓡ The first pediatric AIDS case was born in 1979, diagnosed in 1982 and reported in 1983.**
- Ⓡ HIV (not AIDS) reporting began 07/1997.**

Pediatric HIV Surveillance Limitations

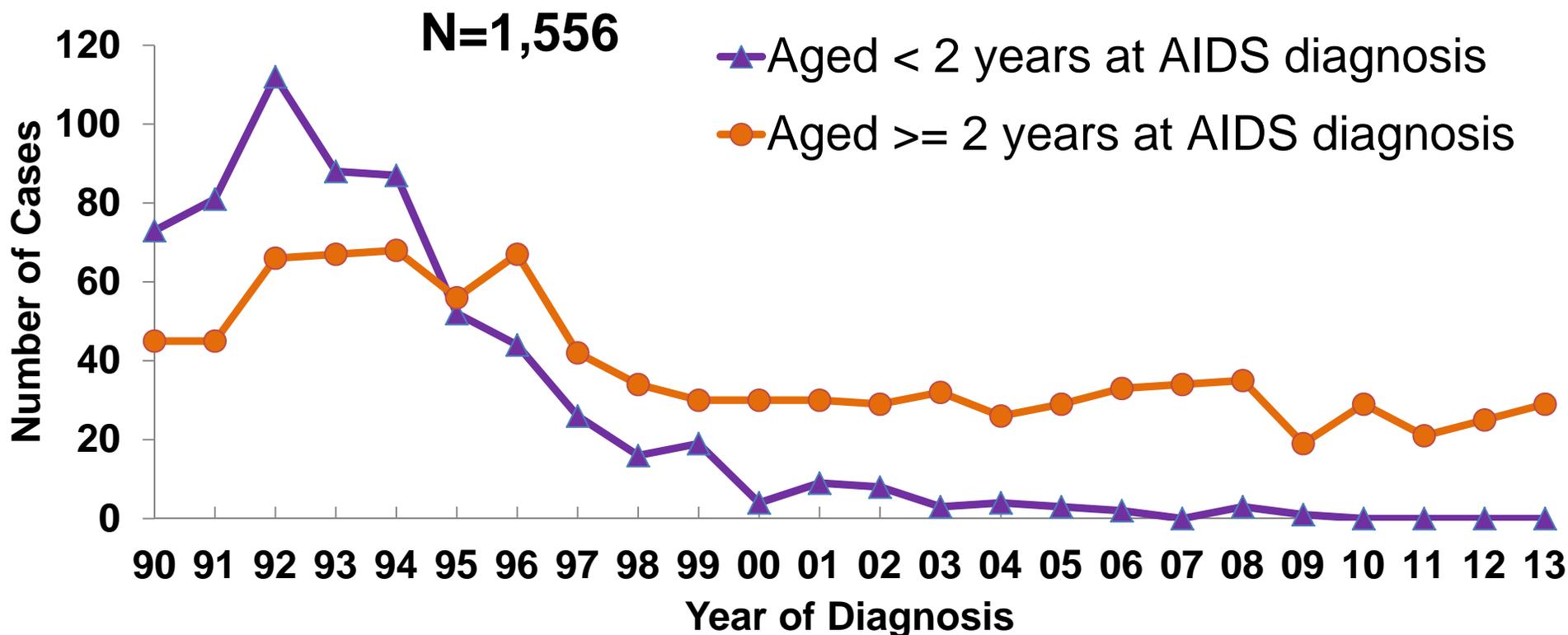
Limitations:

- ⚡ Due to reporting lags, the most recent calendar year data are considered to be provisional.**
- ⚡ HIV/AIDS Surveillance data are always being updated as newly diagnosed pediatric cases are identified, even if years later.**

Acronyms

- ◆ **ART = Antiretroviral Therapy**
- ◆ **AZT = Antiretroviral Zidovudine Therapy**
- ◆ **IDU = Injecting Drug Use**
- ◆ **NIR = No Identified Risk**

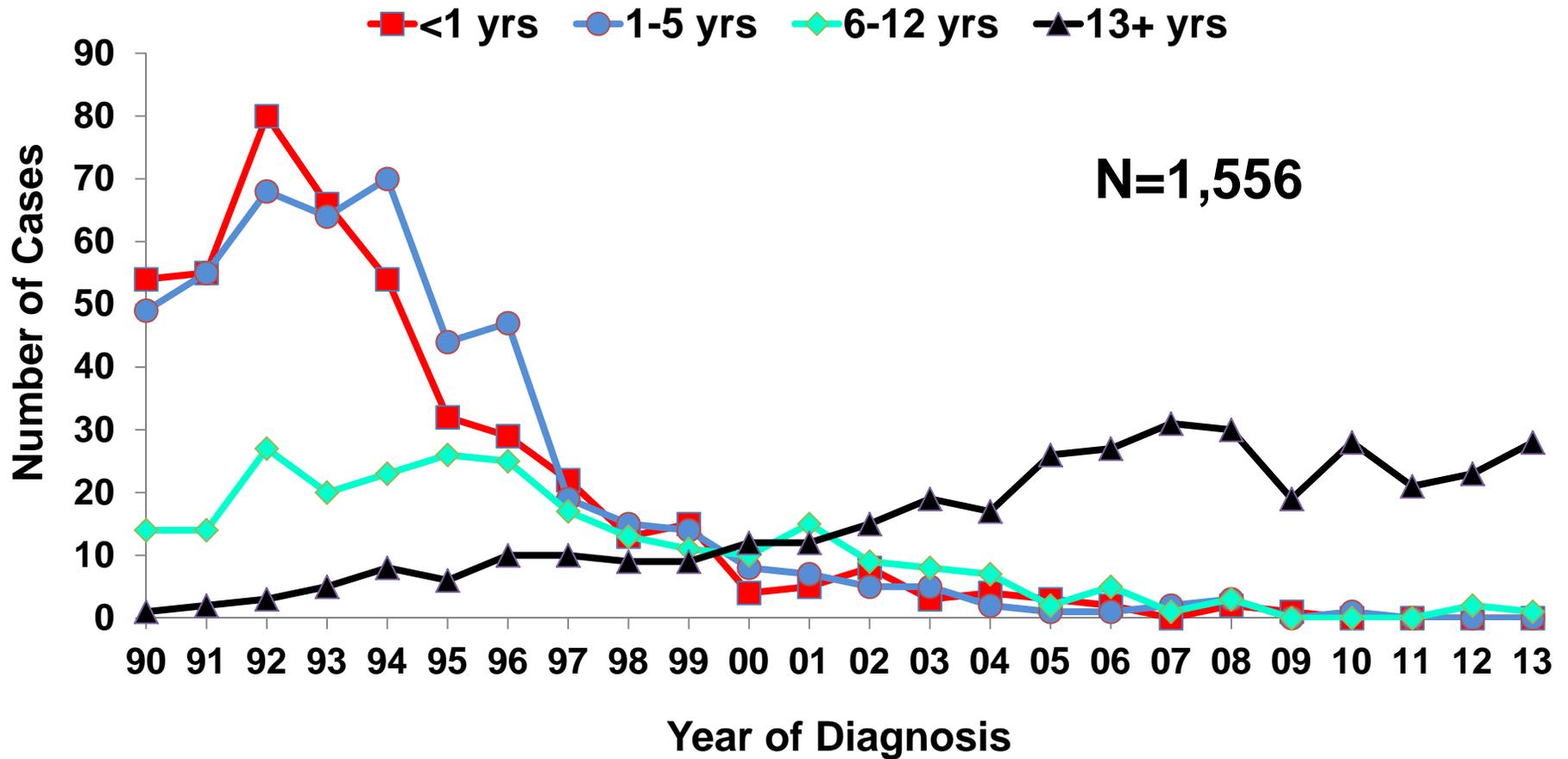
Pediatric AIDS Cases by Age Group at Diagnosis and Year of Diagnosis, 1990-2013, Florida



These data represent an 84% decline in pediatric AIDS cases *by year of diagnosis* from 1992 (N=178) to 2013 (N=29). Due to reporting lags, 2013 data by year of diagnosis are provisional. Data as of 06/30/2014.



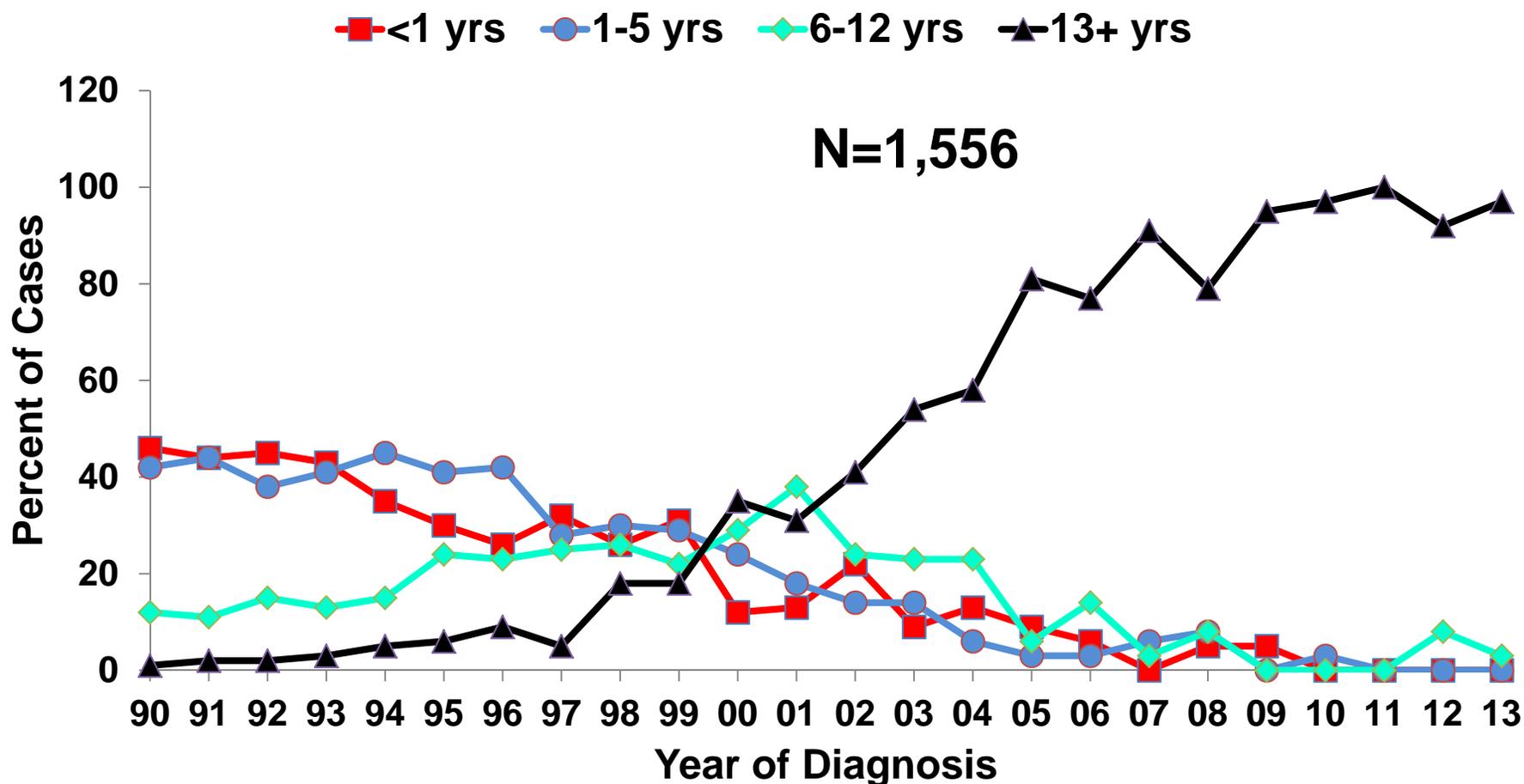
Pediatric AIDS Cases, by Age Group and Year of Diagnosis, 1990-2013, Florida



Note: As time goes on, the pediatric HIV cases are more likely to NOT develop AIDS until after age 12.



Pediatric AIDS Cases, by Age Group and Year of Diagnosis, 1990-2013, Florida



The number of perinatally infected persons aging to adolescence and adulthood *before* being diagnosed with AIDS is increasing gradually. This may be an indication of successful treatment and care.

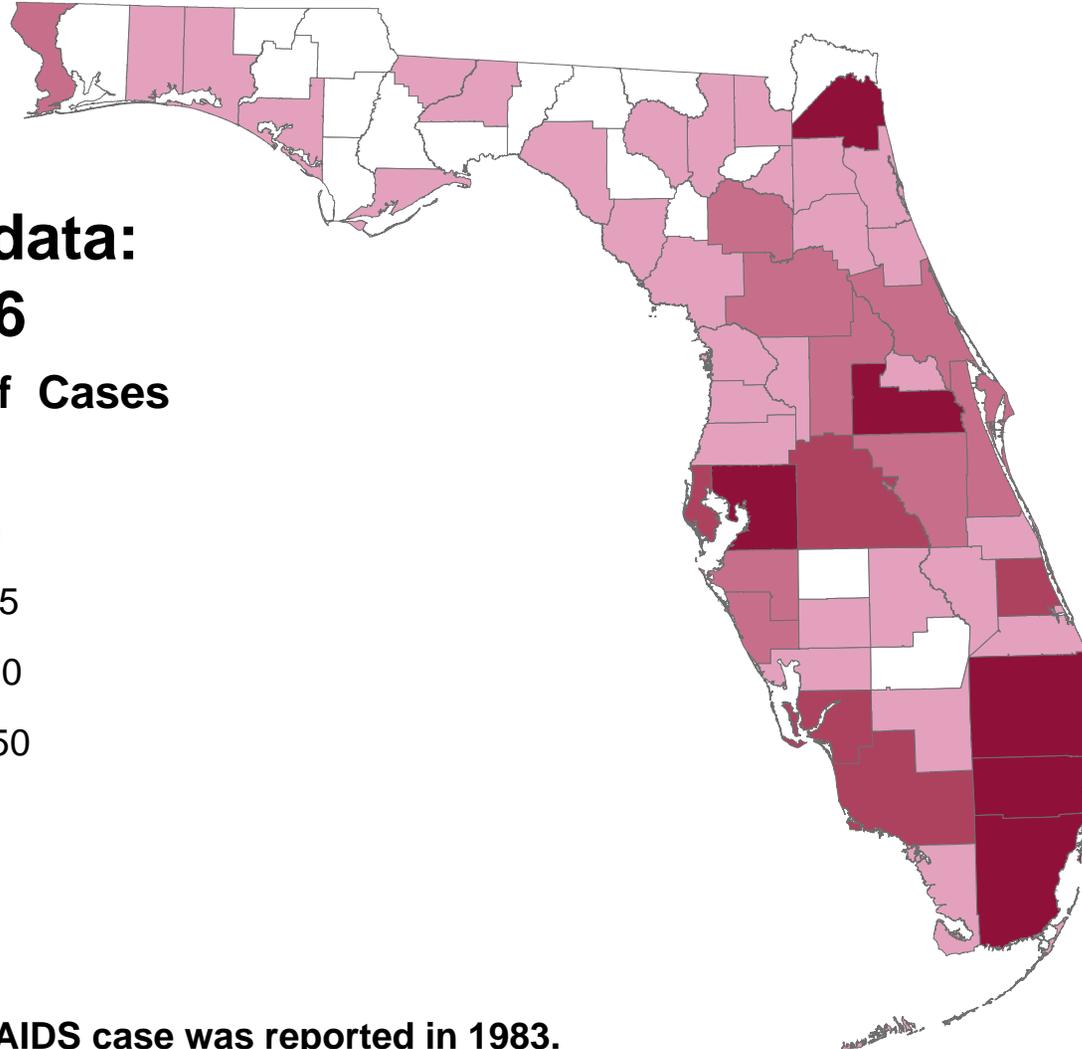
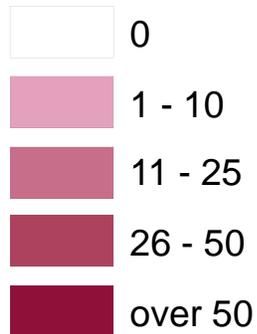


Cumulative Pediatric AIDS Cases, Reported 1983 through 2013, by County, Florida

Statewide data:

N=1,906

Number of Cases

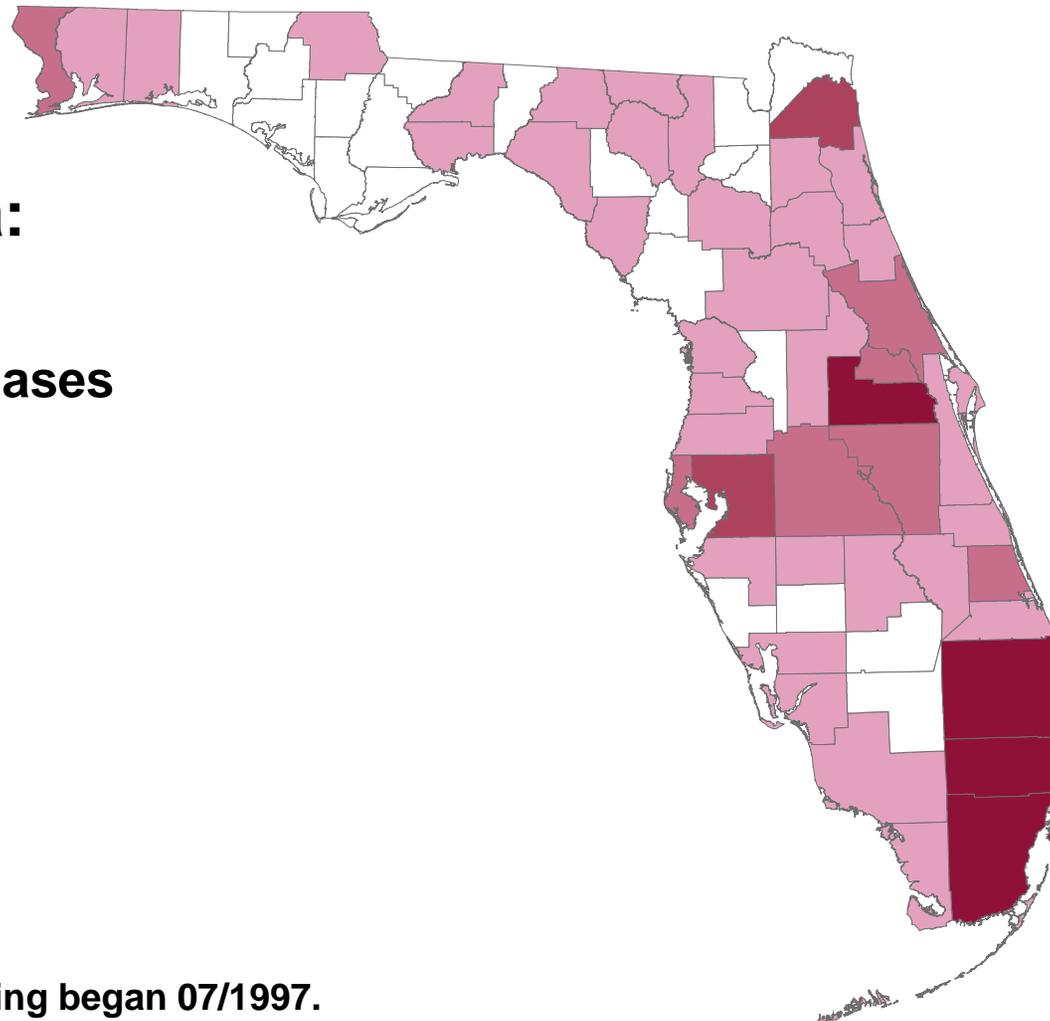
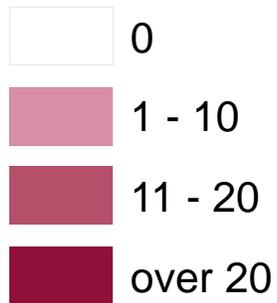


**Note: The first pediatric AIDS case was reported in 1983.
Data as of 06/30/2014**

Cumulative Pediatric HIV (not AIDS) Cases, Reported 07/1997 through 12/2013, by County, Florida

**Statewide data:
N=655**

Number of Cases



**Note: HIV (not AIDS) reporting began 07/1997.
Data as of 06/30/2014**

Cumulative Pediatric AIDS Cases Reported For Selected States, Reported through 2011*

Reporting State	# of Cases	% of Total
New York	2,457	26%
Florida	1,571	17%
New Jersey	816	9%
California	705	7%
Texas	396	4%
Pennsylvania	375	4%
Maryland	345	4%
Illinois	287	3%
Georgia	254	3%
Massachusetts	234	2%
Connecticut	187	2%
Virginia	188	2%
District of Columbia	193	2%
Remaining States	1,513	16%
Total Cases	9,521	100%

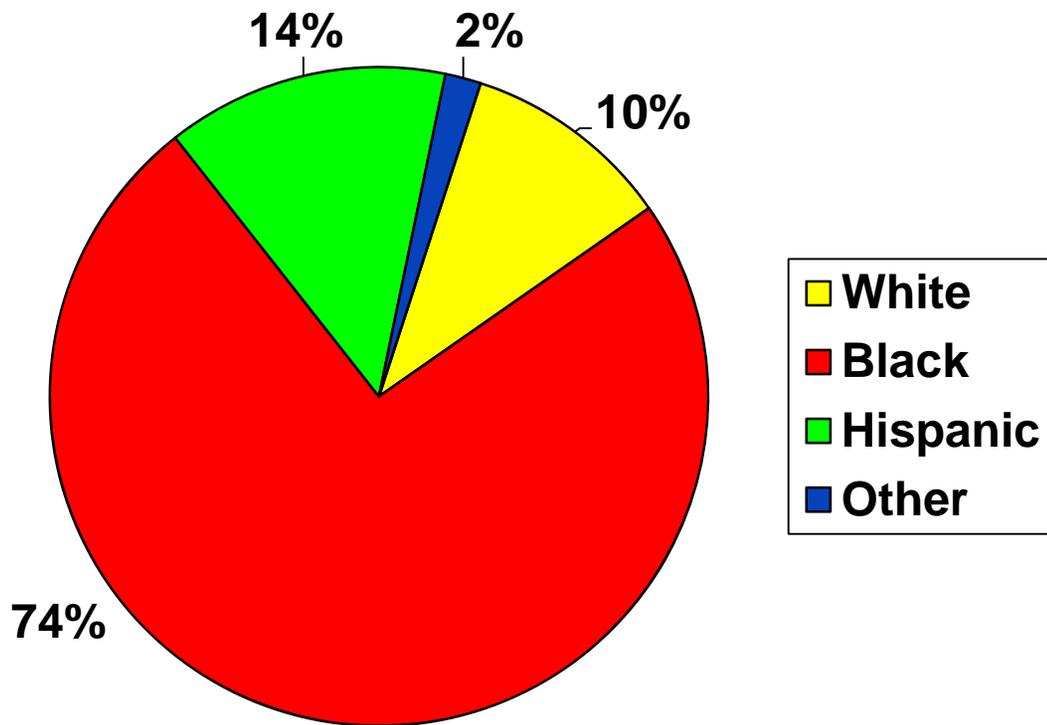
Source: Cumulative Data from CDC, HIV Surveillance Report, 2011, Vol. 23, Table 20

*Remainder of Area includes the remaining states

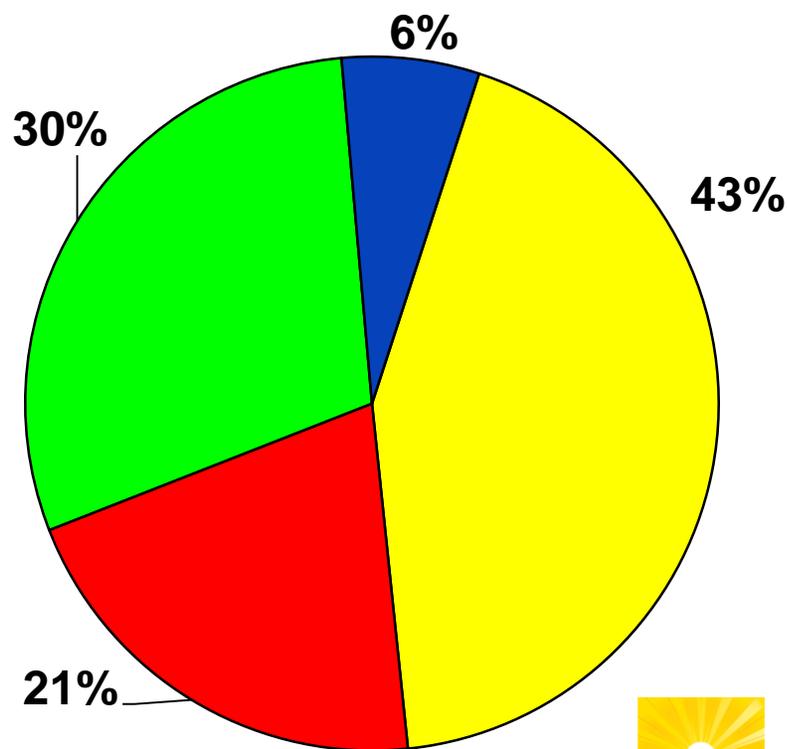


Pediatric HIV Infection Cases and State Population** in Children <13 years of age, by Race/Ethnicity, Reported through 2013, Florida

Pediatric HIV Infection Cases
N=2,561



Population Estimates
N= 2,888,401

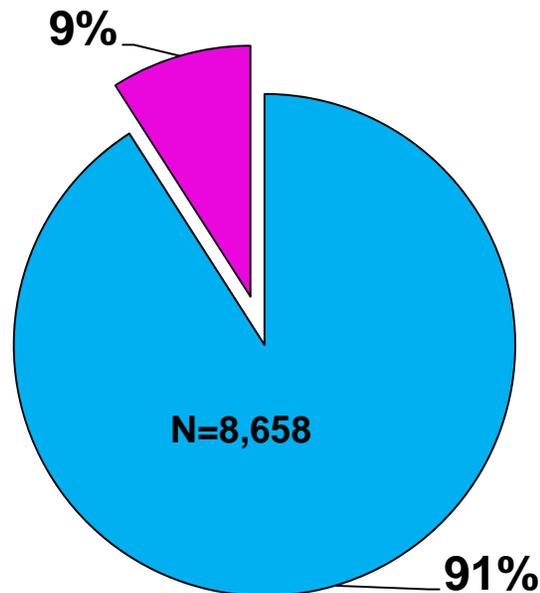


**Source: Population estimates are provided by Florida CHARTS as of 06/03/2014.

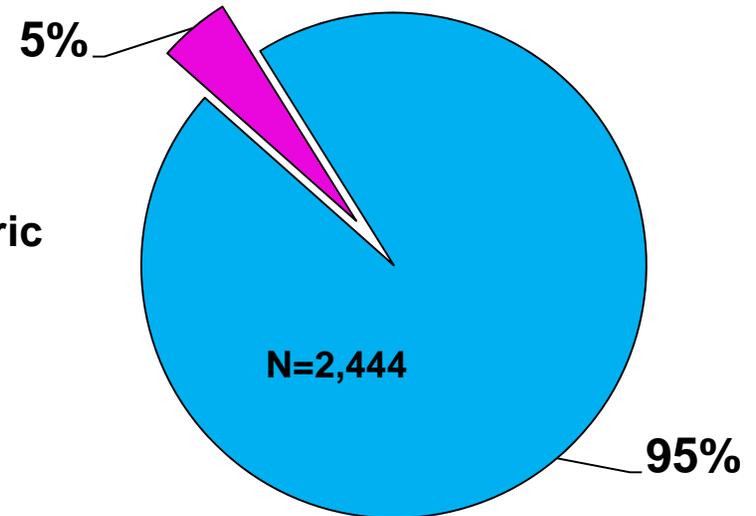


Cumulative Pediatric (<13 yr.) HIV Infection Cases by Mode of Exposure

United States*
(AIDS cases reported through 2011)
(N=9,521)



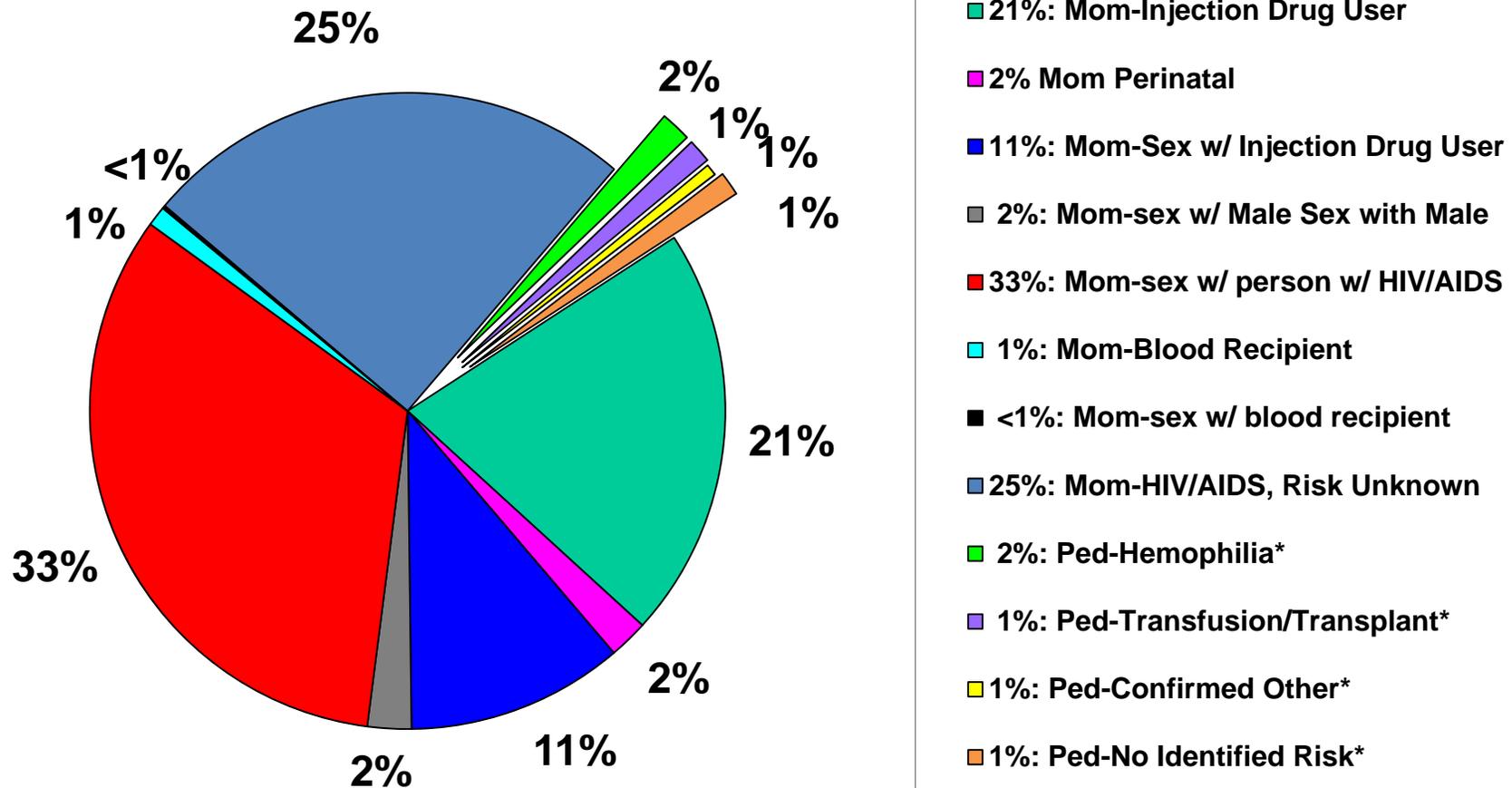
Florida
(reported through 2013)
(N=2,561)



* Source: CDC. (2013). *HIV Surveillance Report, 2011*. Vol. 23, Table 2a. (2012 data not available.)

**Other Pediatric Risk includes receipt of blood products or unknown risk.

Cumulative Pediatric HIV Infection Cases, by “Expanded” Modes of Exposure, Reported through 2013, Florida



*Note: 5% (exploded pieces) are *NOT* perinatal transmission cases.



Prevalence of AIDS-Defining Conditions* Most Commonly Reported Among Pediatric Cases, Reported through 2013, Florida

AIDS Defining Condition	# Cases	% Cases
Pneumocystis pneumonia	495	26%
Bacterial infections	432	23%
Candidiasis, esophageal	411	22%
Wasting syndrome	374	20%
Lymphoid interstitial pneumonia	301	16%
HIV encephalopathy	259	14%
Cytomegalovirus disease	145	8%
Herpes simplex	119	6%
Candidiasis, bronchi or lungs	84	4%
Cryptosporidiosis	81	4%
No Disease (Immune suppressed only)**	262	14%
Total Cases	1,907	

Note: Of the 2,561 HIV/AIDS pediatric cases, 1,907 (74%) have developed AIDS.

***Data are NOT mutually exclusive, many cases have more than one disease.**

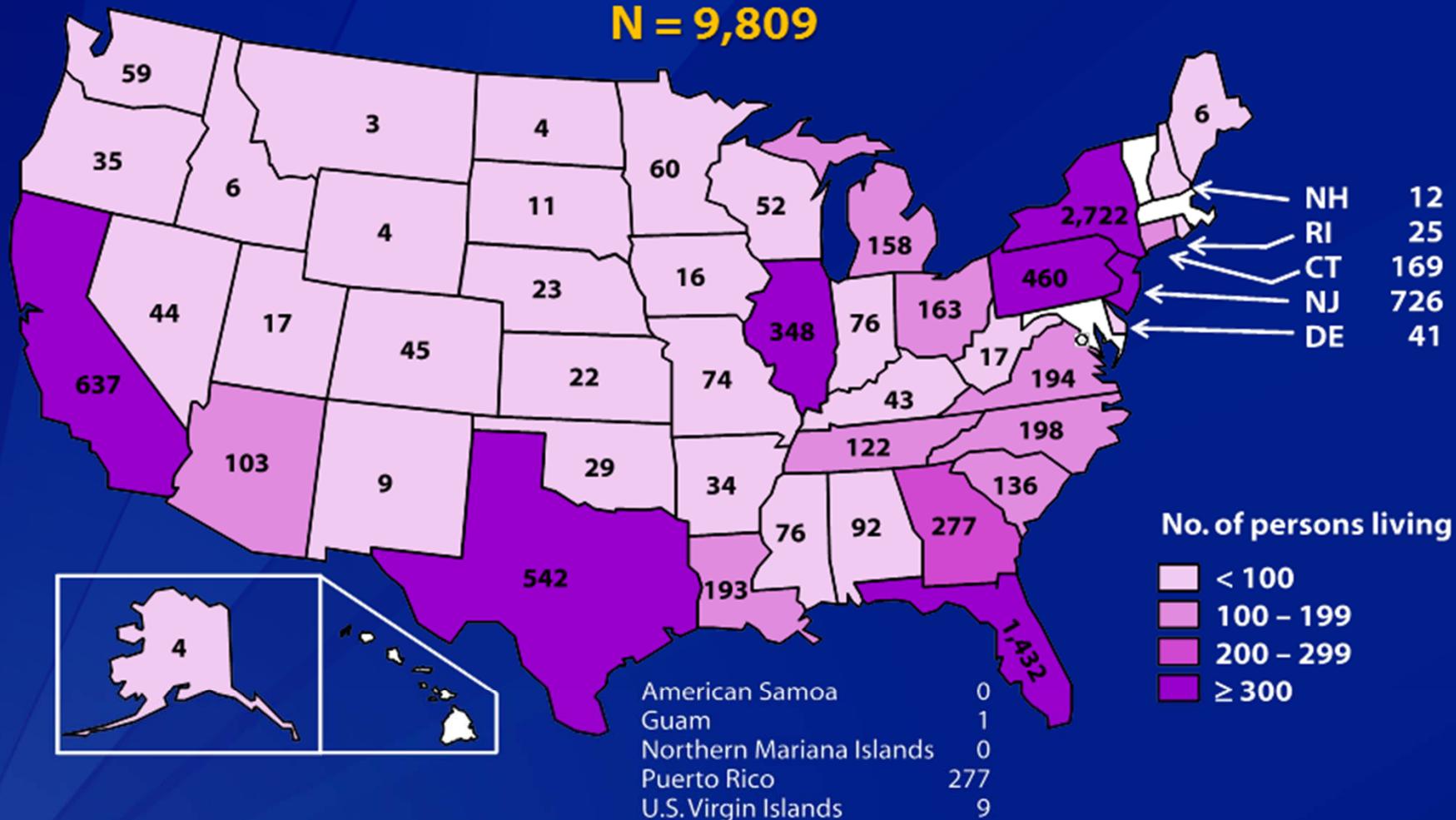
****Immune suppressed: CD4 count <200ul or CD4 percent <14%.**



Perinatal Acquired HIV Infected Cases

Persons Living with Perinatally Acquired HIV Infection, Year-end 2009—46 States and 5 U.S. Dependent Areas

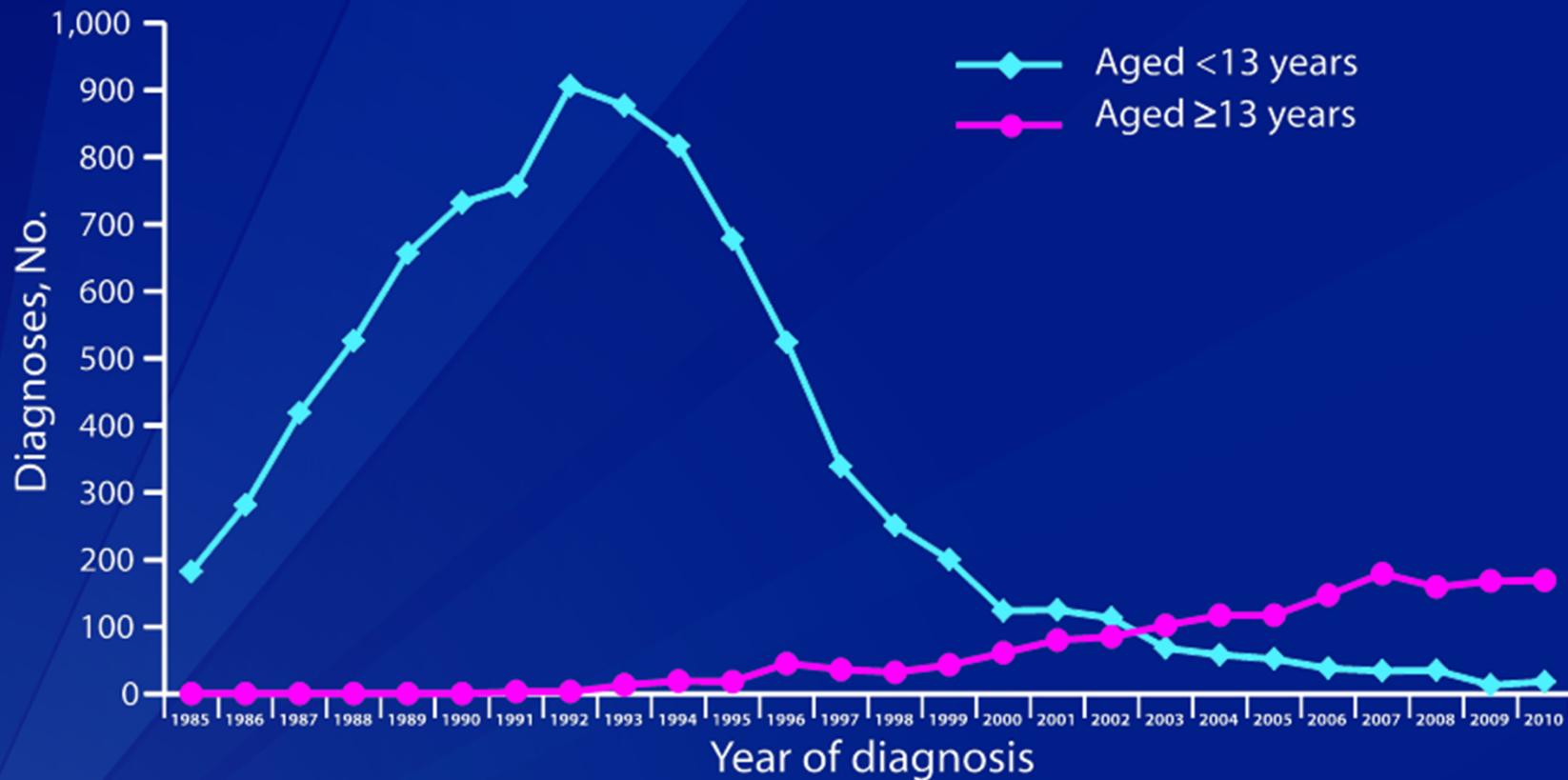
N = 9,809



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



AIDS Diagnoses among Perinatally Infected Persons, 1985–2010—United States and 6 U.S. Dependent Areas

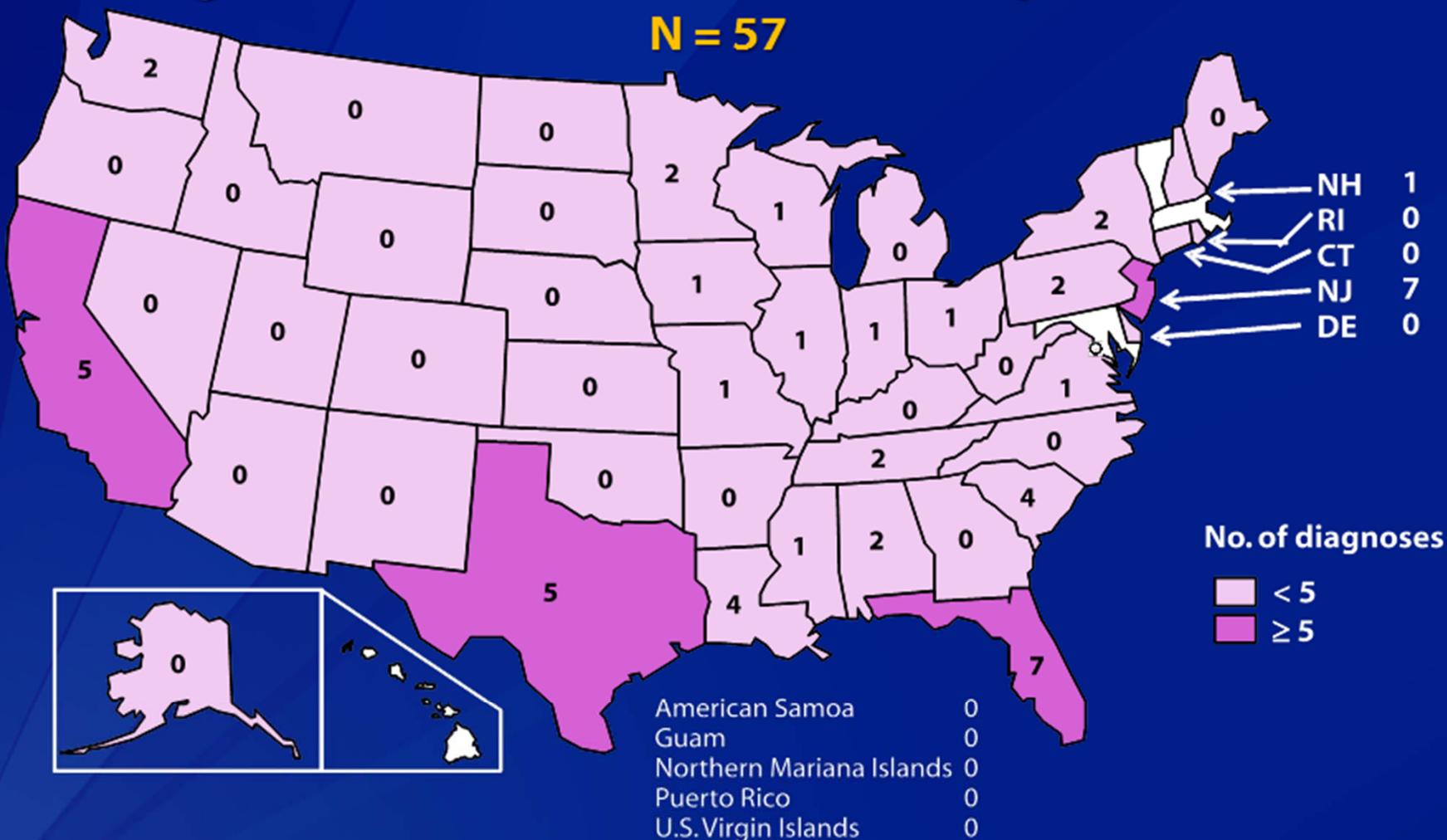


Note. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



Perinatally Acquired HIV Infections in Children Born During 2010—46 States and 5 U.S. Dependent Areas

N = 57

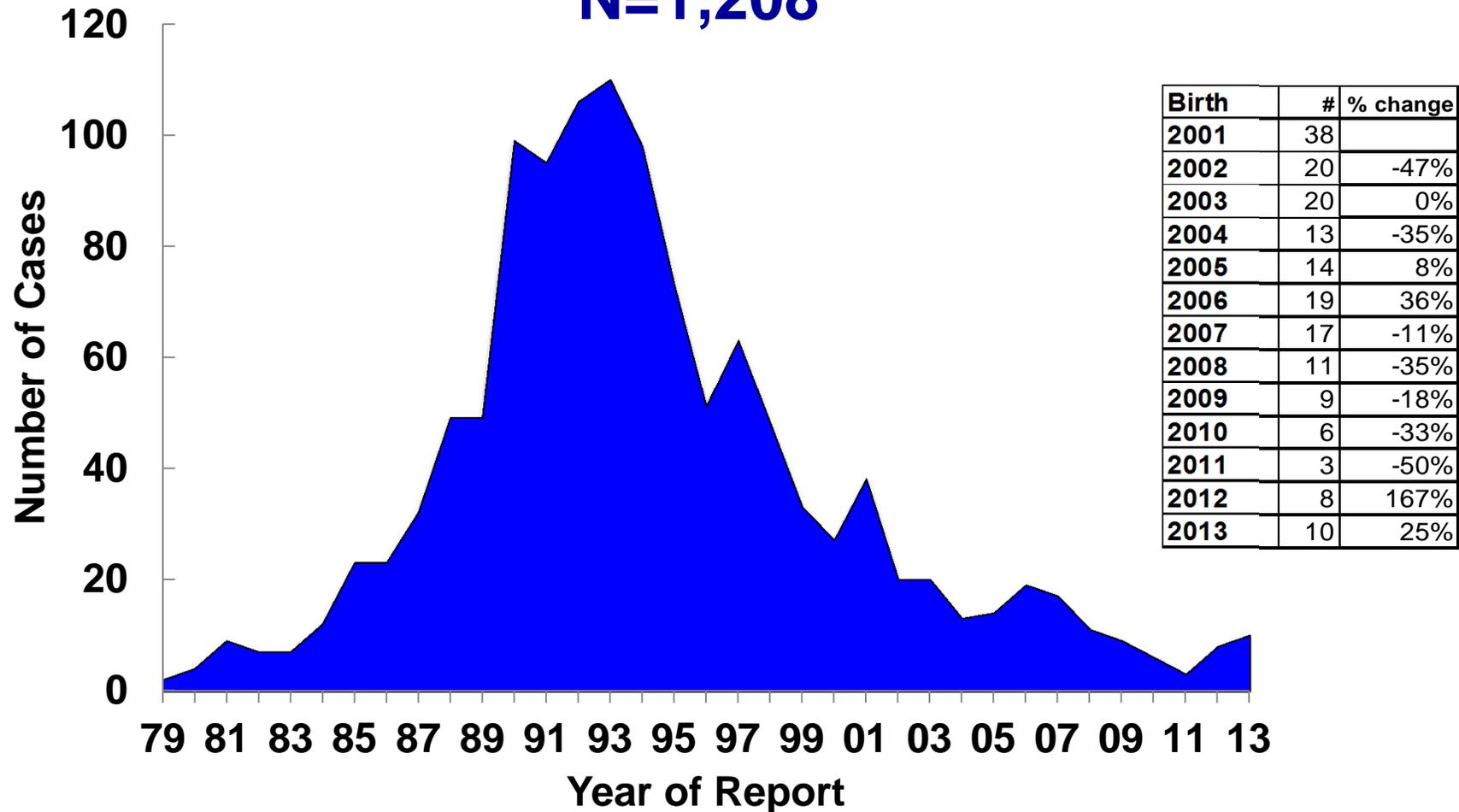


Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



Perinatally Acquired HIV Infected Cases, Born in Florida, by Year of Birth, 1979-2013

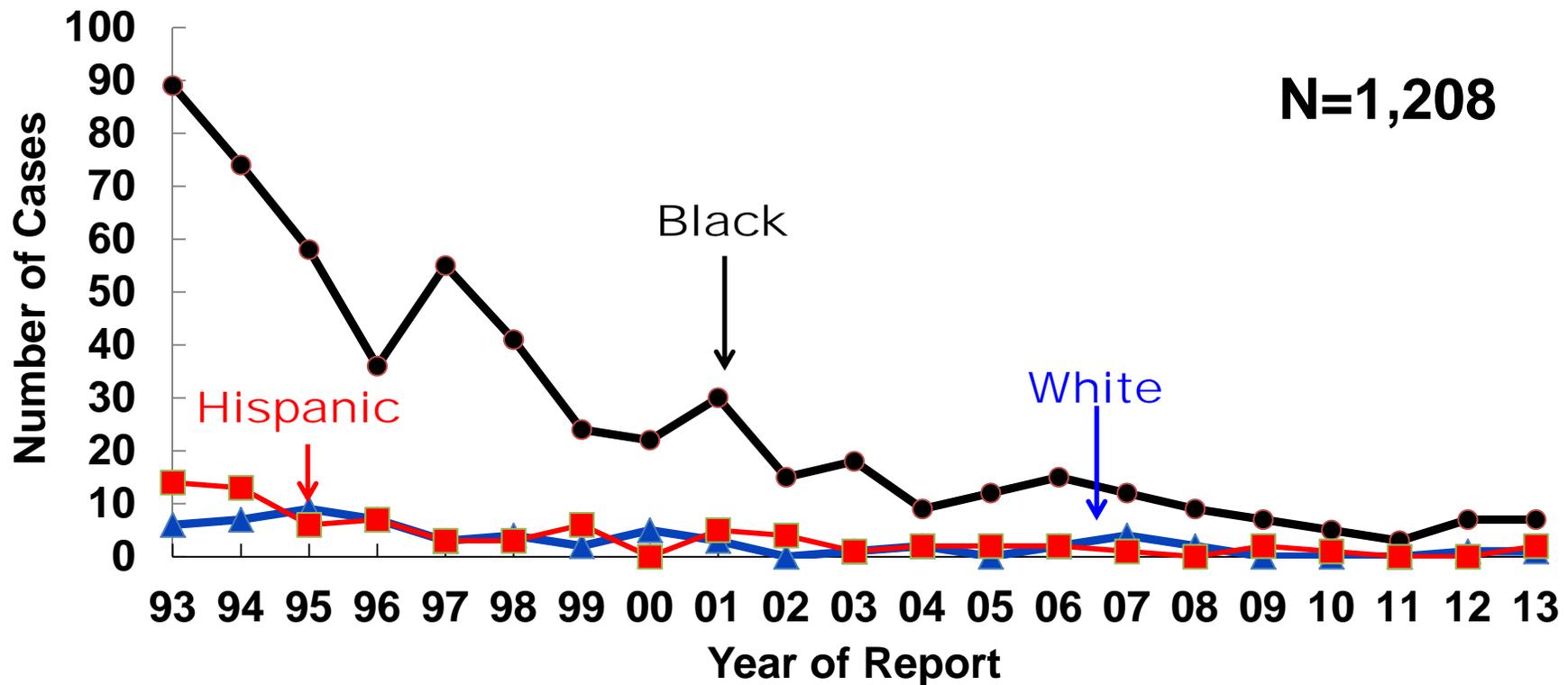
N=1,208



Note: These data represent a **91% decline** in HIV-perinatally infected births from 1993 (N=110) to 2013 (N=10). These data include ALL perinatally acquired HIV Infection cases BORN in Florida. 2013 data are provisional. Two of the babies born in 2013 have developed AIDS. Data as of 06/30/2014.



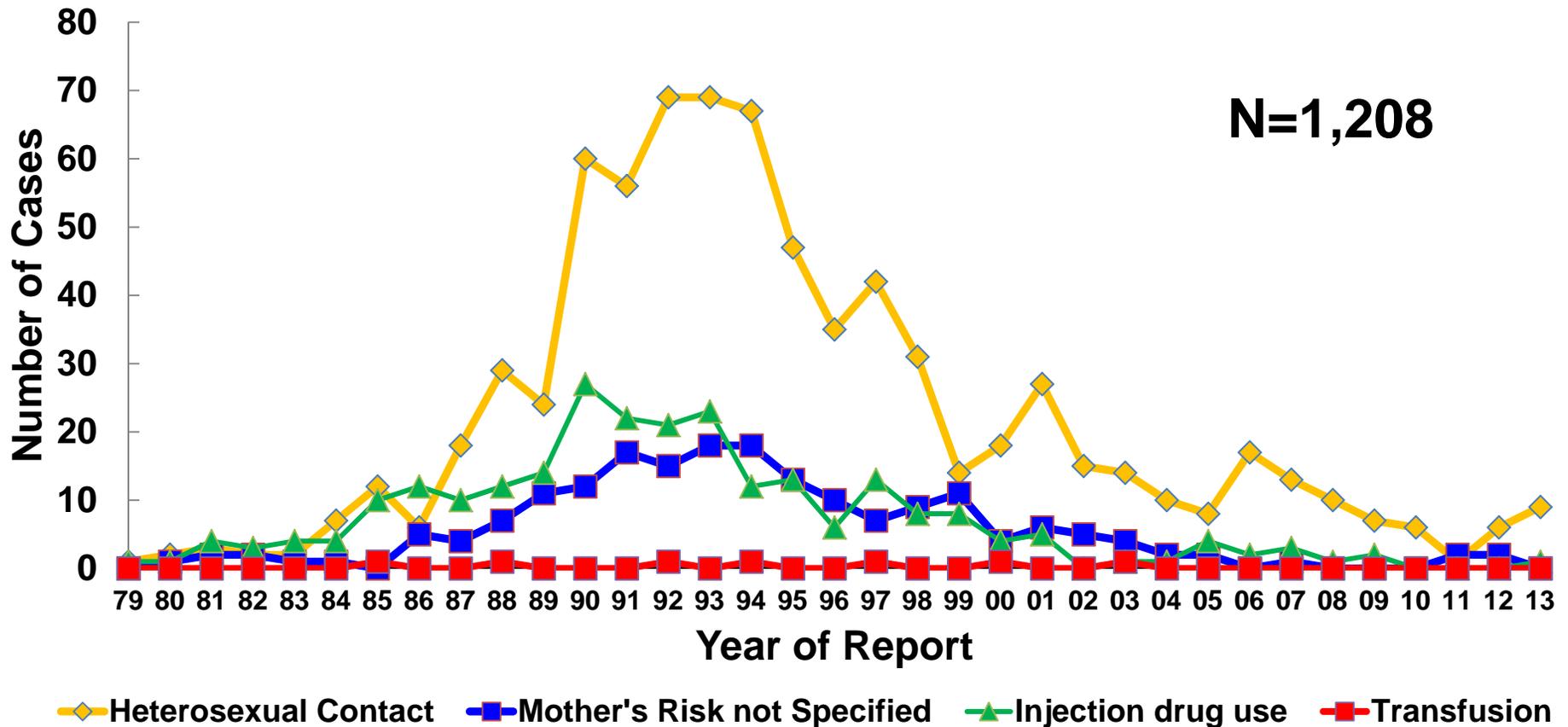
Perinatally Acquired HIV Infection Cases, Born in Florida, by Race/Ethnicity and Year of Birth, 1993-2013



Note: The majority of the perinatally acquired HIV Infection cases born in Florida are black. They represent greater than 70% of the cases for most years. Data for other/mixed race/ethnicity groups (N=11) for the same time period is not shown.



Perinatally Acquired HIV Infection Cases Born in Florida, by Mother's Mode of Exposure and Year of Birth, 1979-2013

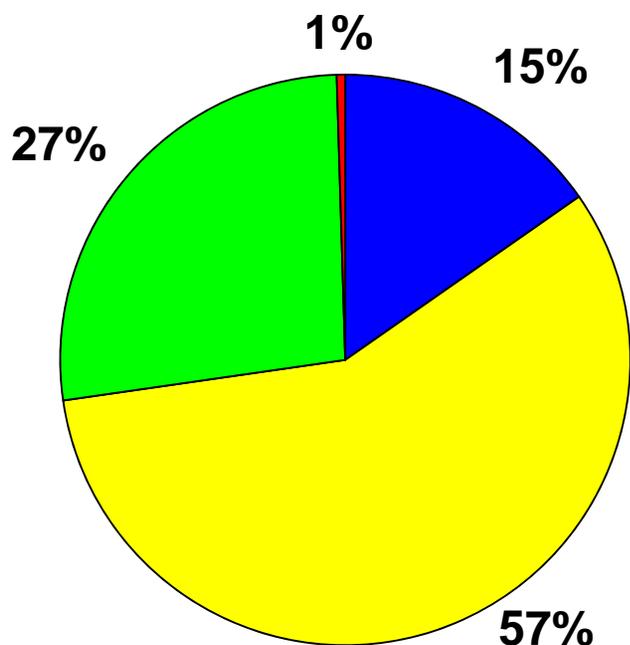


Note: Since 1992 a steady decline was observed for all risks, although heterosexual contact remains the primary mode of exposure among mothers infected with HIV.



Perinatally Acquired HIV Infection Cases Born in Florida, by Mother's Mode of Exposure and Year of Birth, 1979-2013

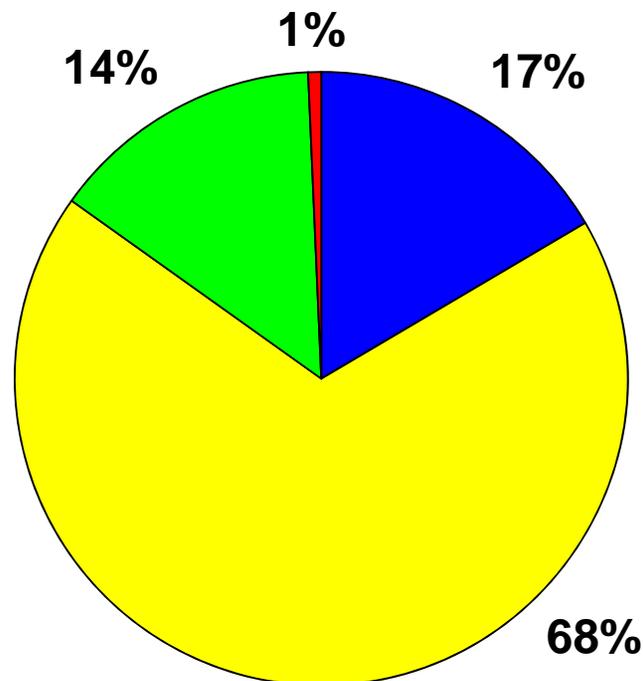
Born 1979-1993
N = 627



N=1,208

- Mother's risk not specified
- Heterosexual contact
- Injection drug use
- Transfusion

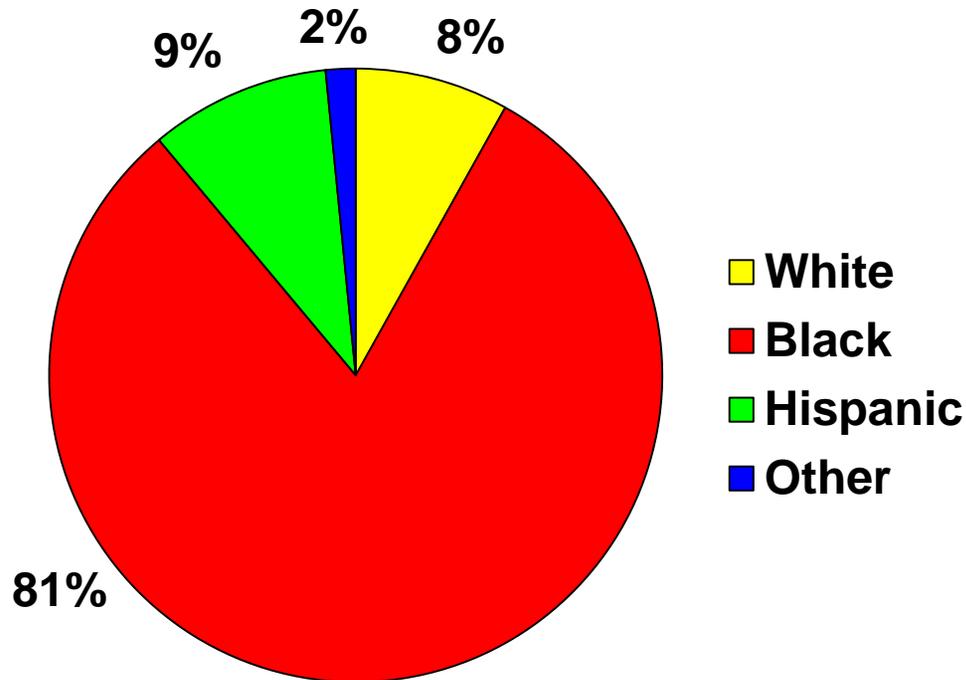
Born 1994-2013
N = 581



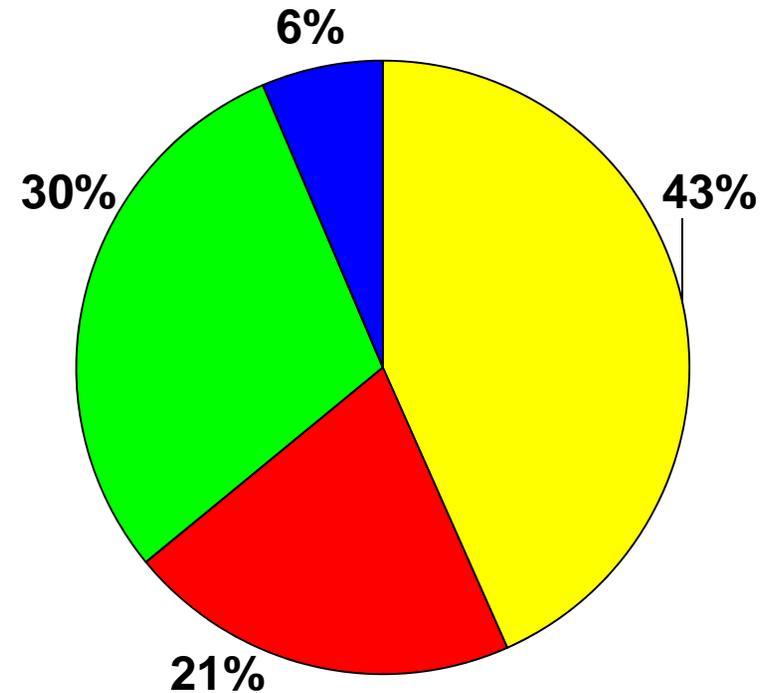
Note: Among children who were infected perinatally with HIV/AIDS, the distribution of their mothers' exposure categories has changed over time. For both time periods, heterosexual contact was the highest risk, with 57% of the cases born between 1979-1993, increasing to 68% of cases born between 1994-2013.

Perinatally Acquired HIV Infection Cases Born in Florida, and State Population*, by Race/Ethnicity, Born through 2013, Florida

**Perinatally Acquired
HIV Infection Cases
N=1,208**



**Population Estimates
N= 2,888,401**

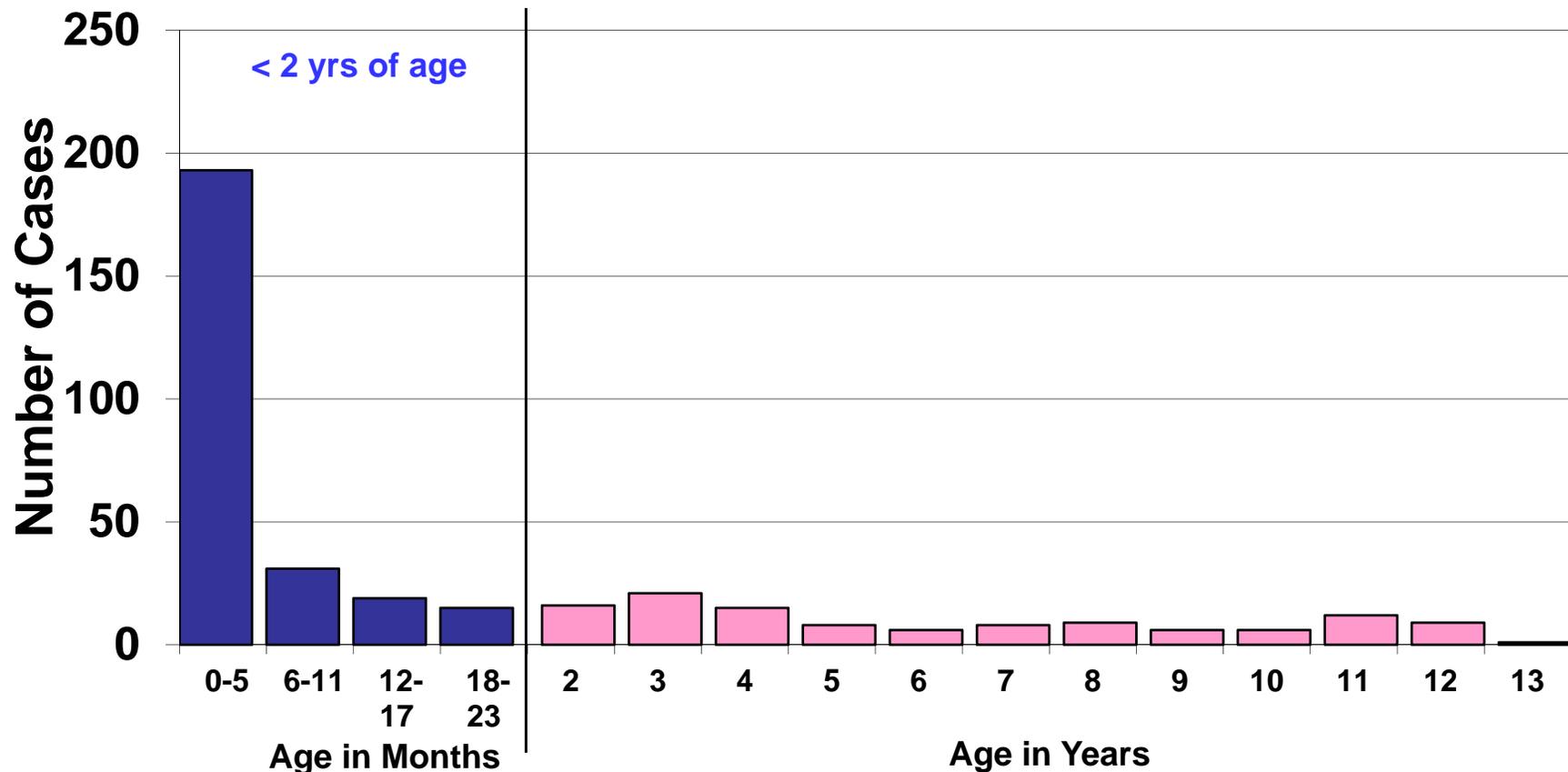


Perinatally acquired HIV infection cases among non-Hispanic blacks are disproportionately affected compared with those of other race/ethnicities. Of the 1,208 perinatally acquired HIV infection cases born in Florida through 2013, 8% were white, 81% were black and 9% were Hispanic.

*Source: Population estimates are provided by Florida CHARTS as of 06/03/2014.



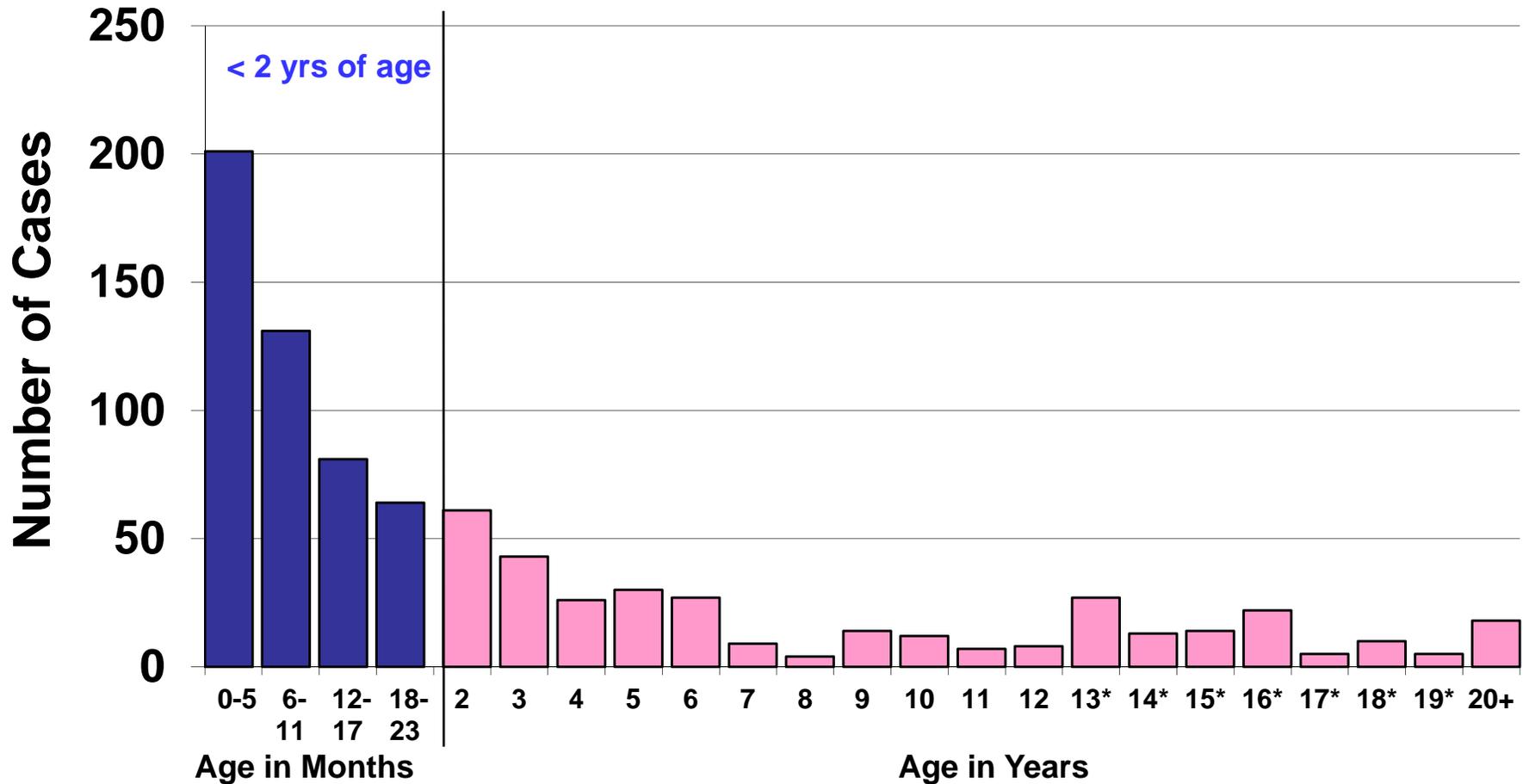
Perinately Acquired HIV Infection Cases Born in Florida, 1979-2013, by Age at HIV Diagnosis (N=376)



More than one half (51%, N=193) of the 376 perinatal HIV (not AIDS) cases born through 2013 were diagnosed less than the first 6 months of life. Over two-thirds (69%, N=259) of these perinatal HIV cases were diagnosed under the age of two. Furthermore, less than 1% (N=1) were diagnosed with a perinatal risk after the age of 12.



Perinatally Acquired AIDS Cases Born in Florida, 1979-2013, by Age at AIDS Diagnosis, (N=832)

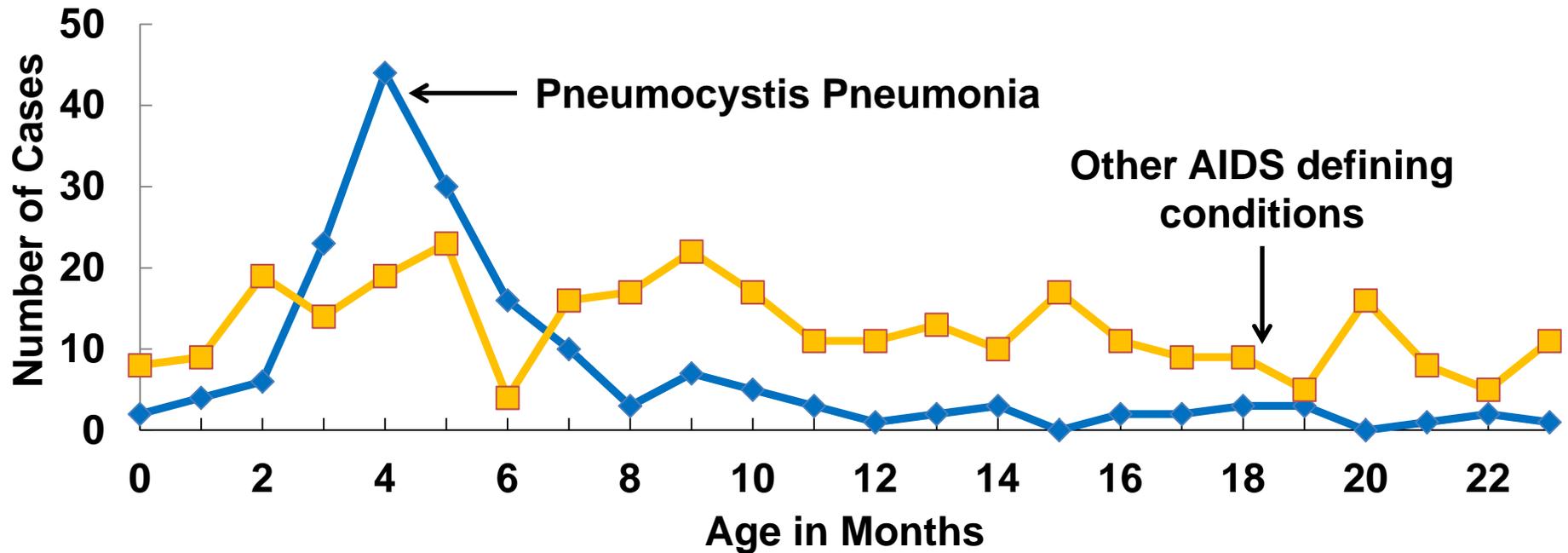


Nearly three-fifths (57%, N=477) of the perinatal AIDS cases born through 2013 (N=832), were diagnosed with AIDS prior to the age of two. The number of AIDS cases diagnosed after age two decreases by age.

* 14% (N=114) of the cumulative AIDS cases were not diagnosed with AIDS until after the age of twelve.

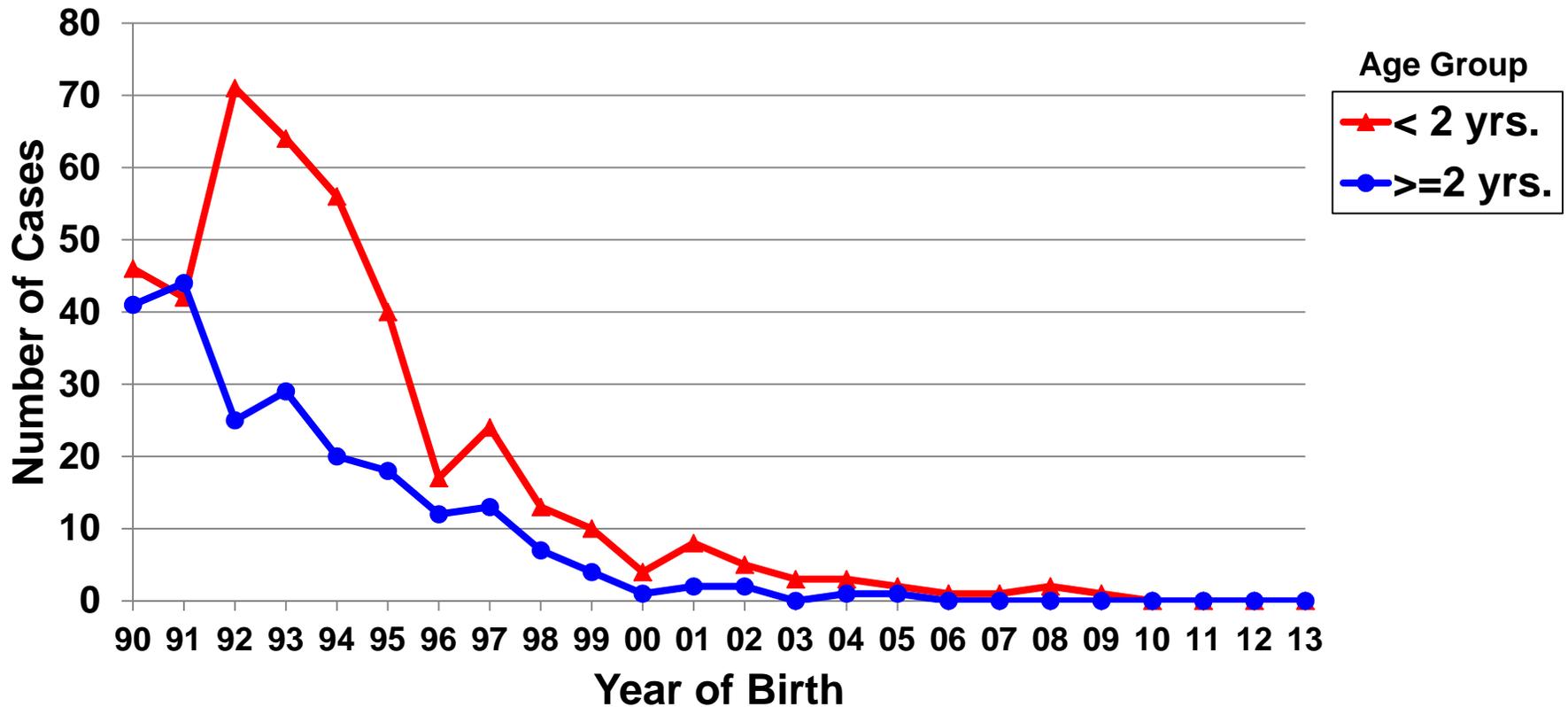


AIDS-Defining Conditions for Perinatally Acquired AIDS Cases Less than Two Years of Age, Born in Florida 1979-2013, by Age at AIDS Diagnosis (N=477)



The peak of PCP in children with perinatally acquired AIDS is four months of age. The age at diagnosis for the other AIDS-defining conditions is much more evenly distributed during the first two years of life.

Perinatally Acquired AIDS Cases Born in Florida 1990-2013, by Age Group and Year of Birth (N=634)

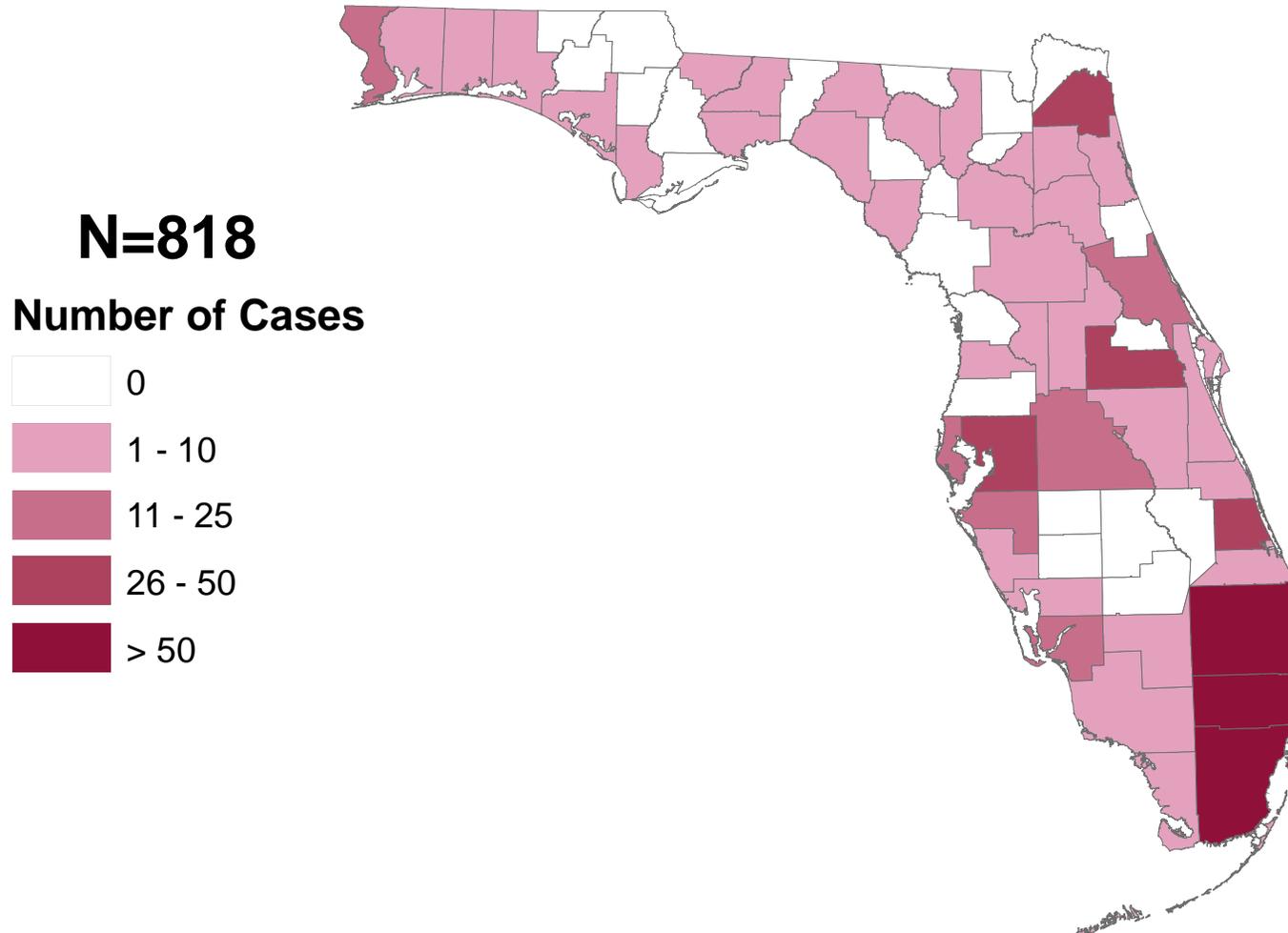


Note: These data represent a 100% decline in perinatally acquired AIDS cases from 1992 (N=95) to 2013 (N=0).

2013 data are provisional. Data as of 06/30/2014.

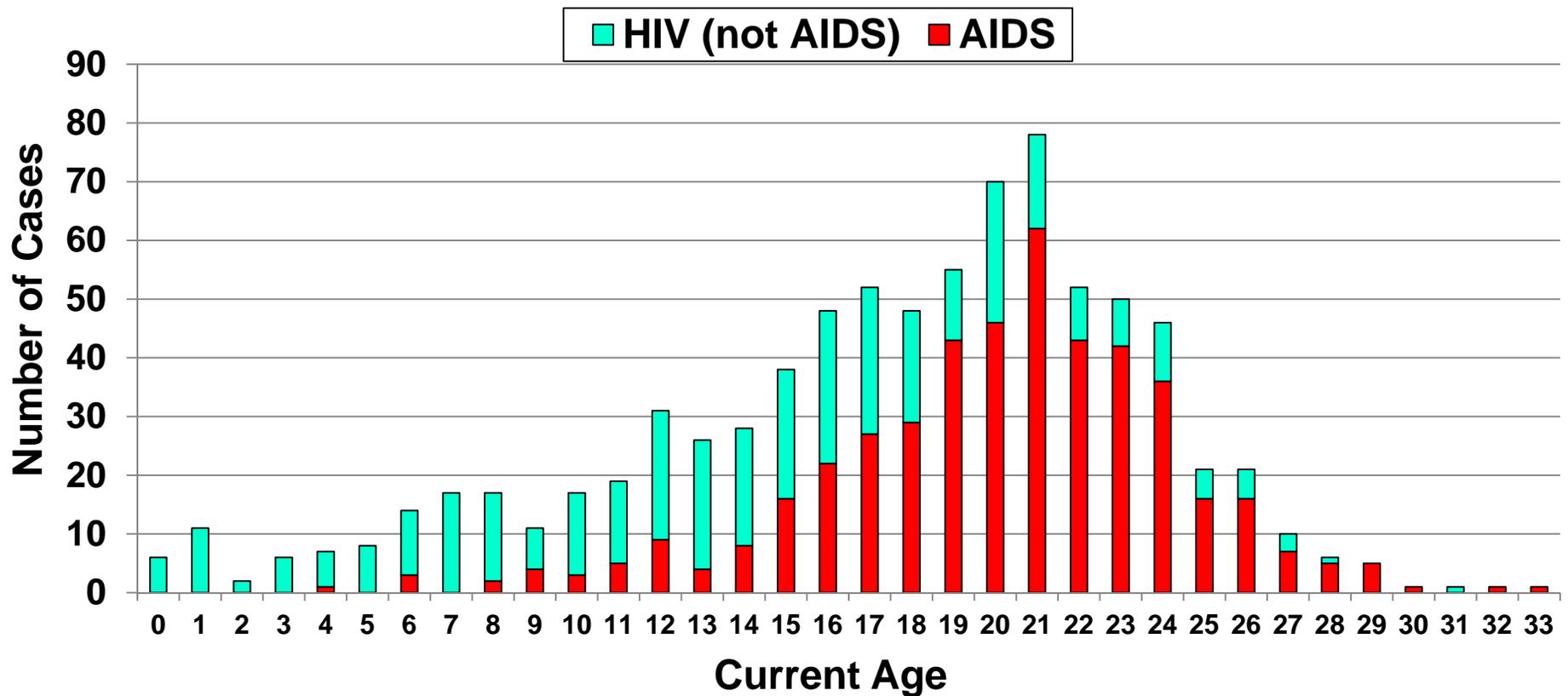


Living Perinatally Acquired HIV Infection Cases, by County of Birth, Born in Florida 1979 through 2013



Florida has 818 living Perinatally Acquired HIV Infection cases born 1979 through 2013, with the majority (57%) of these cases born in South Florida: Miami-Dade (N=235), Broward (N=133) and Palm Beach (N=101). Data as of 06/30/2014

Current Age* Distribution of Living Perinatally Acquired HIV Infection Cases by Disease Status, Born in Florida, 1979 through 2013 (N=824)



*Current age of living (not known dead) HIV/AIDS perinatal cases born through 2013.
Data as of 06/30/2014



Perinatally Acquired HIV Infection Cases, by Selected Regions of Birth Born in Florida 2005 through 2013

Region of Birth	Born 2005-2013	
	# of cases	% of Total
Area 01*	4	4%
Area 03*	3	3%
Area 08 (Lee Only)	3	3%
Area 08 (not Lee)*	0	0%
Area 15*	5	5%
Broward County	17	18%
Duval County	9	9%
Hillsborough/Pinellas Counties	7	7%
Miami-Dade County	21	22%
Orange County	11	11%
Palm Beach County	7	7%
Polk	2	2%
Remainder of state	8	8%
TOTAL CASES	97	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.

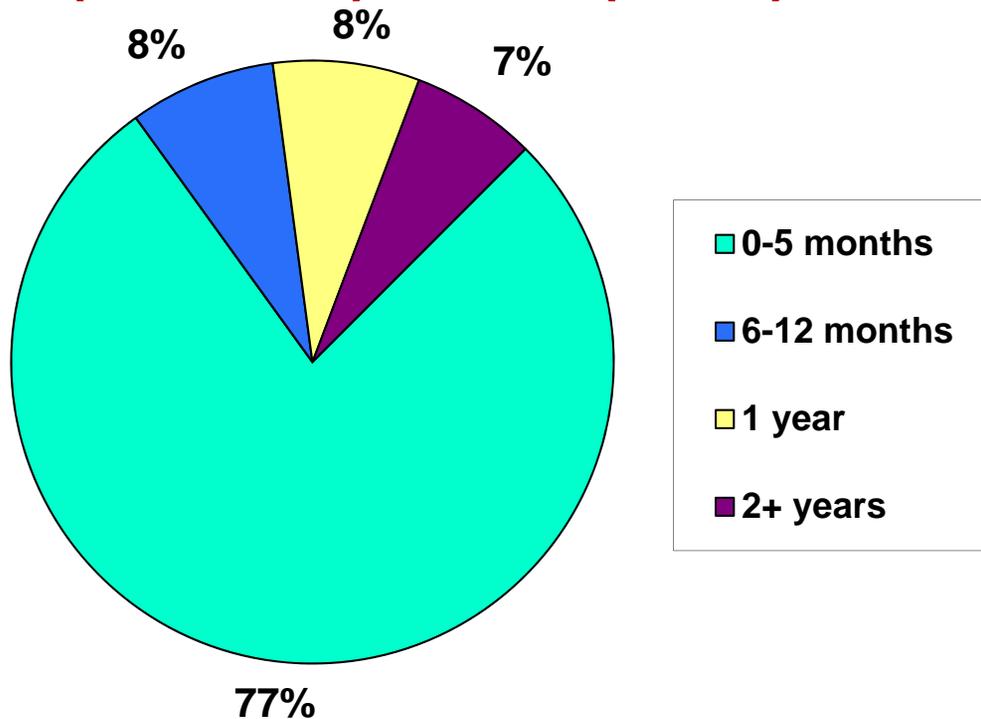
*Area 15 = St. Lucie, Indian River, Martin, and Okeechobee Counties.

Note: A total of 7 perinatal cases reported in Florida were born outside of the US and NOT included in these data.

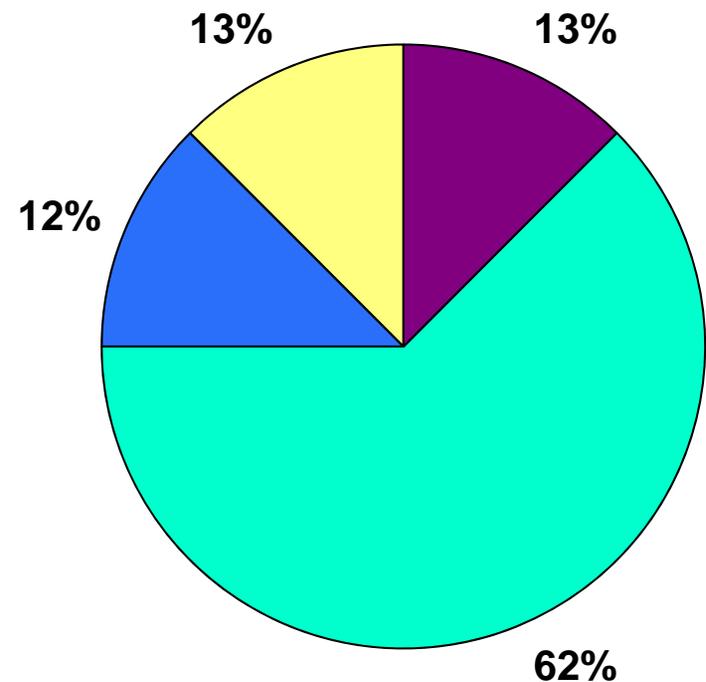


Perinatally Acquired HIV Infection Cases Born in Florida, 2005-2013, by Disease Status and Age Group (N=86)

HIV (not AIDS) Cases (N=89)

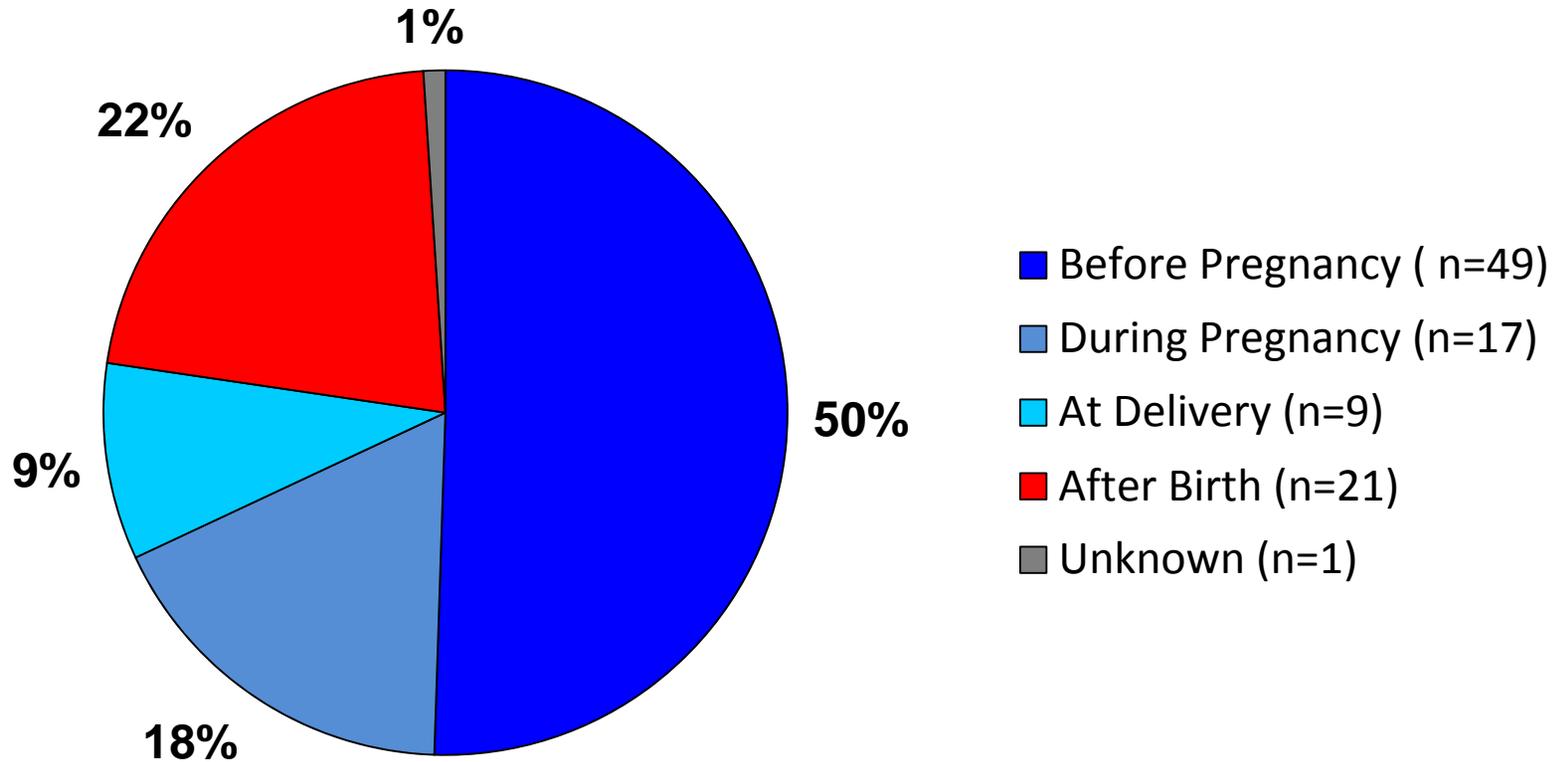


AIDS Cases (N=8)



Note: Between 2005 and 2013 there were a total of 89 perinatally acquired HIV infection cases born *in* Florida. Of those cases 85% (n=76) were diagnosed with HIV within the first year of life. Among the eight perinatal AIDS cases, 75% (n=6) developed AIDS within the first year of life.

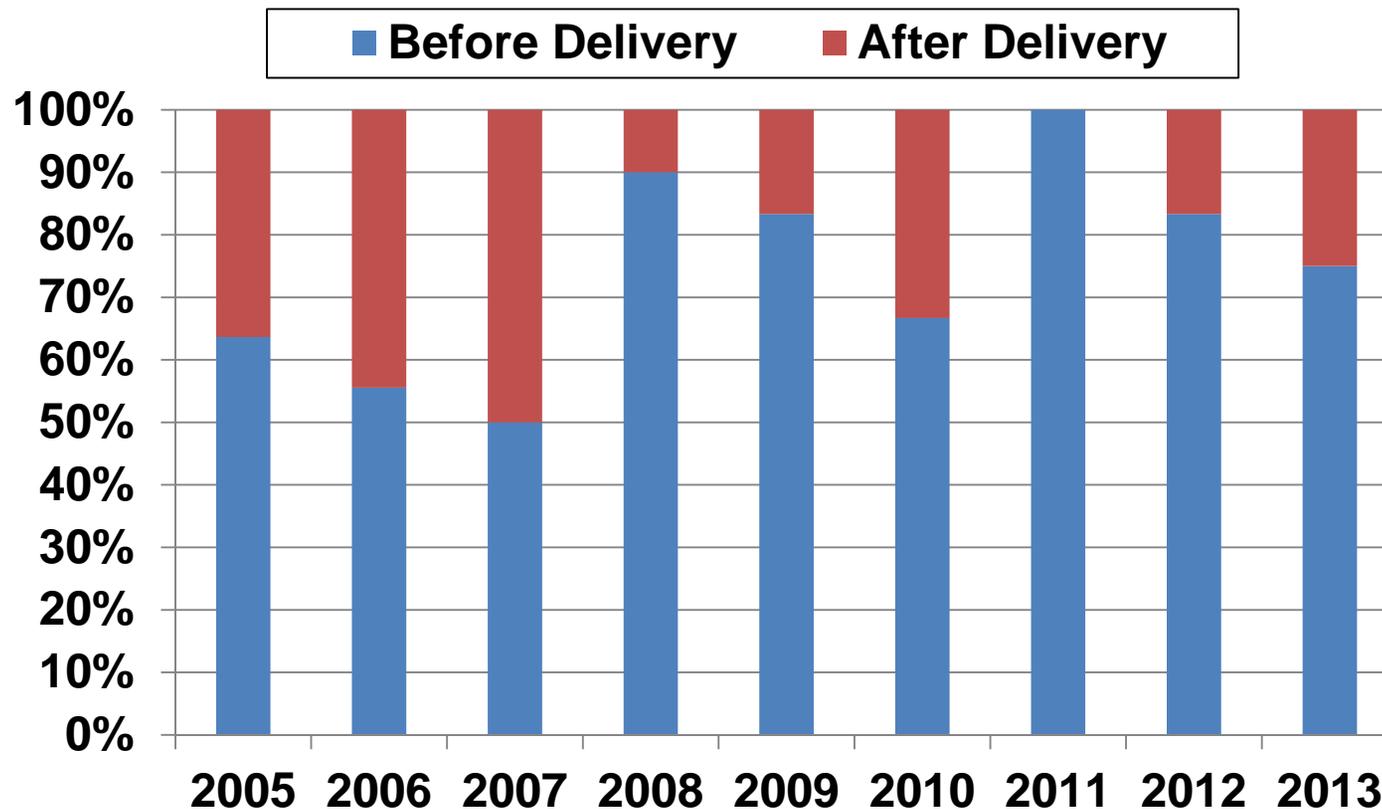
Time of Maternal HIV Testing Among Perinatally Acquired HIV Infected Babies Born in Florida, 2005-2013 (N=97)



Note: One half (50%, n=49) of the 97 HIV-infected mothers who gave birth in Florida between 2005 and 2013 knew they were infected *before* delivery. It is important for HIV-infected pregnant women to know their HIV infection status in order to make informed decisions about antiretroviral therapy to reduce perinatal transmission of HIV to their infants. The Public Health Service recommends that all pregnant women be offered HIV counseling and voluntary HIV tests.



Women Giving Birth to Perinatally Acquired HIV Infected Babies in Florida by Mother's Knowledge of HIV Status at Delivery by Year of Birth, 2005-2013



Note: The proportion 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 90% or higher.

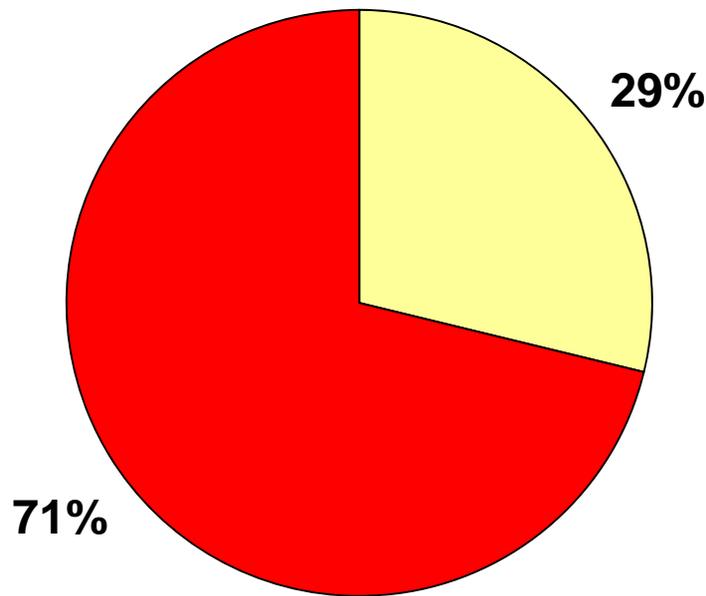


Possible Missed Opportunities that Could Have Prevented Perinatal Transmission of HIV Among HIV Positive Babies Born in Florida, 2005-2013

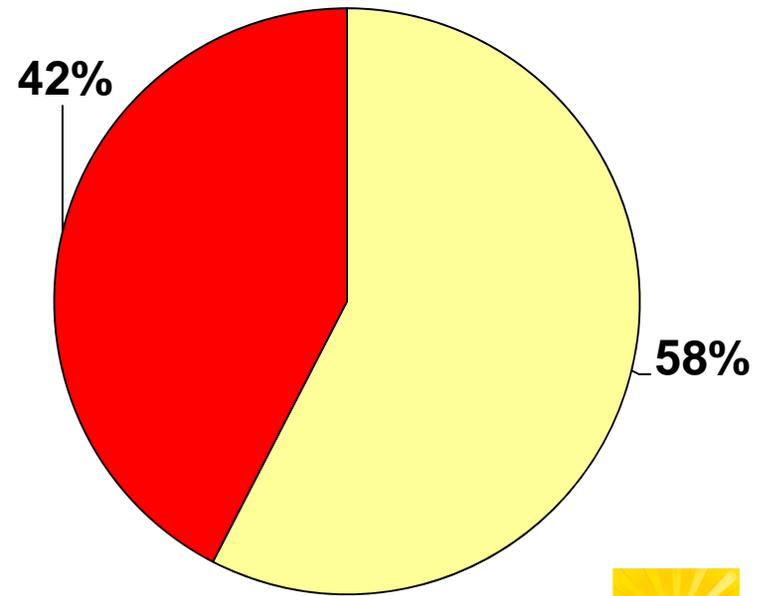
Total Born Florida, 2005 - 2013	97	
Missed Opportunities	Number	Percent
Mom's HIV Status NOT Known Before Birth	21	22%
Inadequate Prenatal Care*	70	72%
No Prenatal Antiretroviral Therapy	58	60%
No Antiretroviral Therapy at Delivery	40	41%
Non-Caesarean Birth	35	36%
No Neonatal Antiretroviral Therapy	22	23%
Breast Fed	8	8%
Other Contributing Factors**	Number	Percent
Mom was a substance abuser during pregnancy	33	34%
Mom acquired an STD during pregnancy	32	33%
*Inadequate prenatal care indicates prenatal care after the 4th month and less than 5 visits		
**The same child can be in multiple categories		

Perinatally Acquired HIV Infection Cases in Children Whose Mom's HIV status was Known Prior to Delivery Born in Florida, 2005-2013, by Receipt of Adequate Prenatal Care and Any Prenatal Antiretroviral Therapy (ART) (N=66)

Adequate Prenatal Care
Began by 4th month with 5+ visits



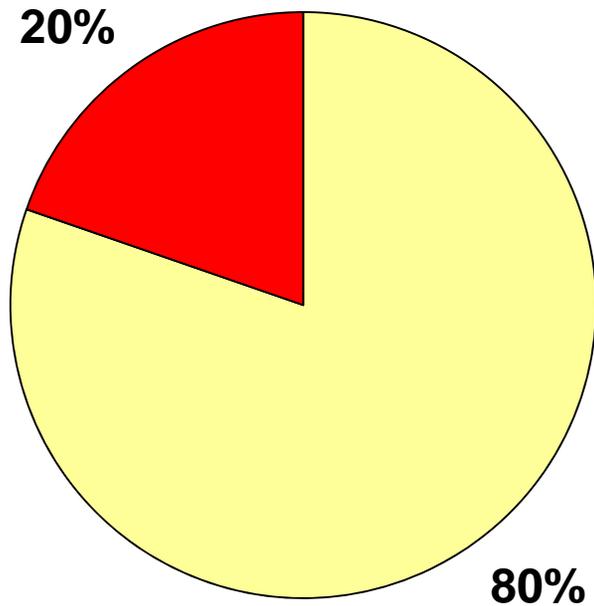
Any Prenatal ART
AZT and/or antiretrovirals



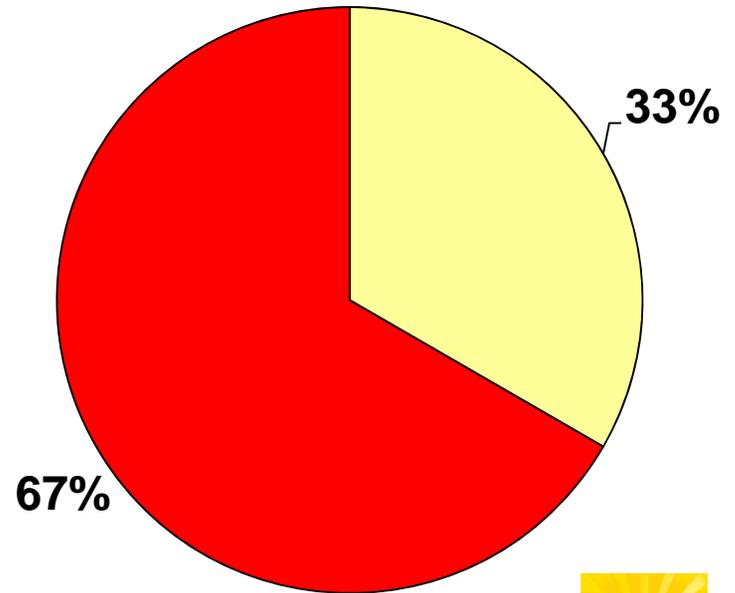
Yes
No

Perinatally Acquired HIV Infection Cases in Children Whose Mom's HIV status was Known Prior to Delivery Born in Florida, 2005-2013, by Receipt of Antiretroviral Therapy (ART) During Delivery and Elective Caesarean Delivery (N=66)

ART During Labor
AZT and/or antiretrovirals



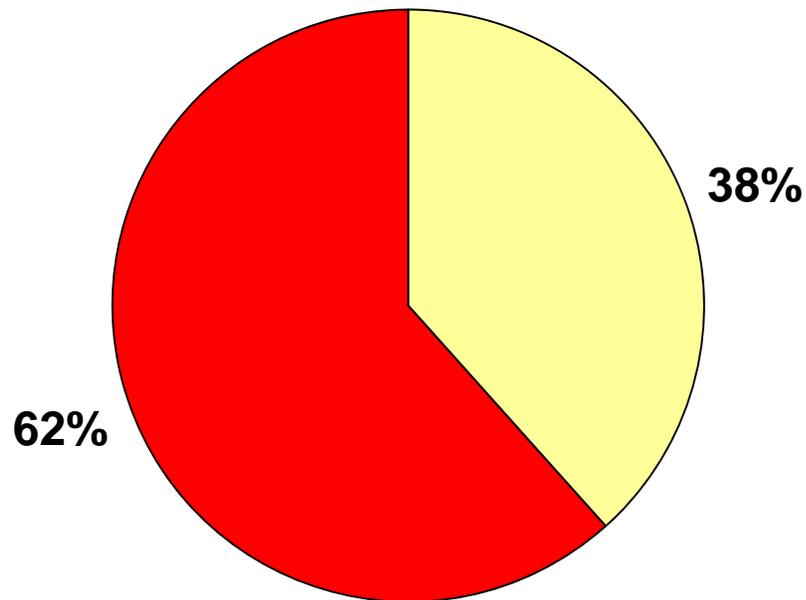
Elective Caesarean Delivery



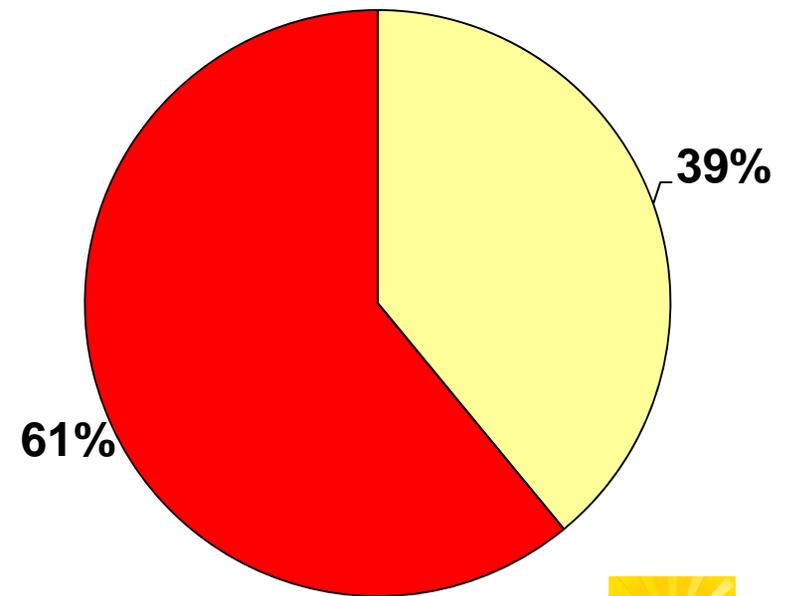
Yes
No

Perinatally Acquired HIV Infection Cases in Children Born in Florida, 2005-2013, by Maternal Drug Abuse and History of a Sexually Transmitted Disease (STD) (N=97)

Maternal Drug Abuse



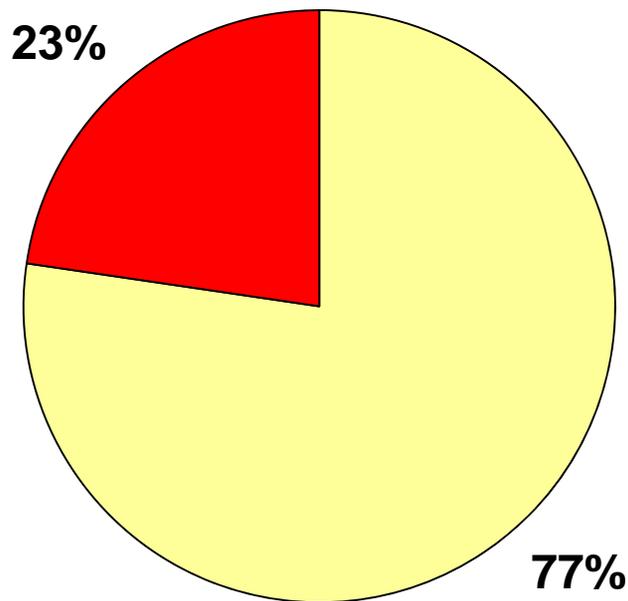
History of an STD During Pregnancy



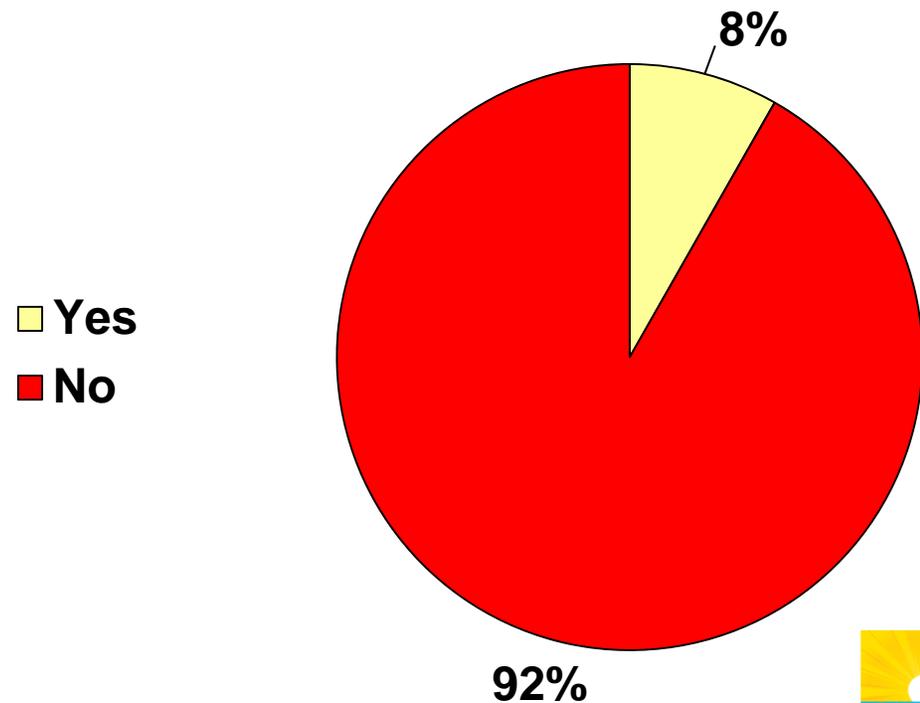
Yes
No

Perinately Acquired HIV Infection Cases in Children Born in Florida, 2005-2013, by Receipt of Neonatal Antiretroviral Therapy (ART) and Exposure to Breastfeeding (N=97)

Received *any* Neonatal ART

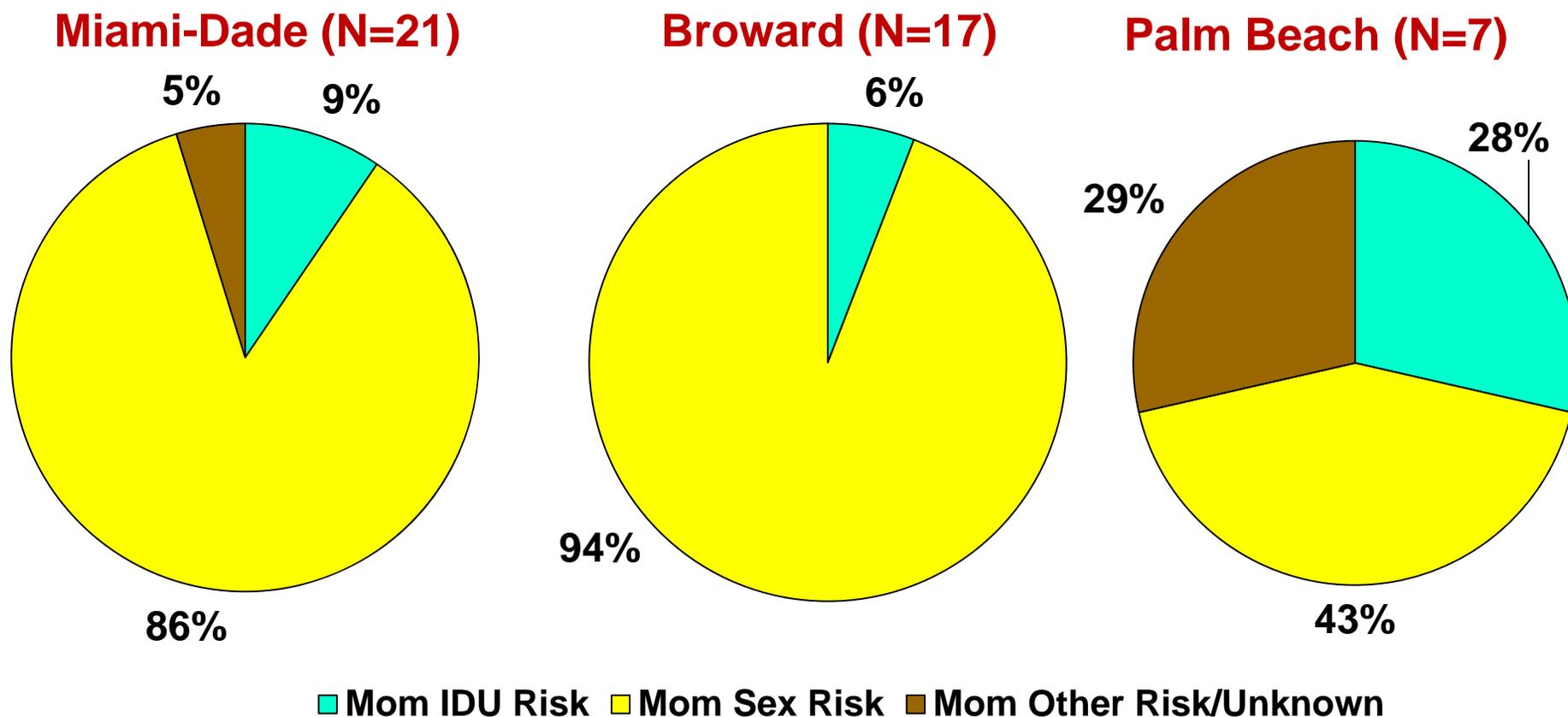


Breastfed



■ Yes
■ No

Perinatally Acquired HIV Infection Cases Born in Selected South Florida Counties, 2005-2013, by Mother's Exposure Category (N=45)

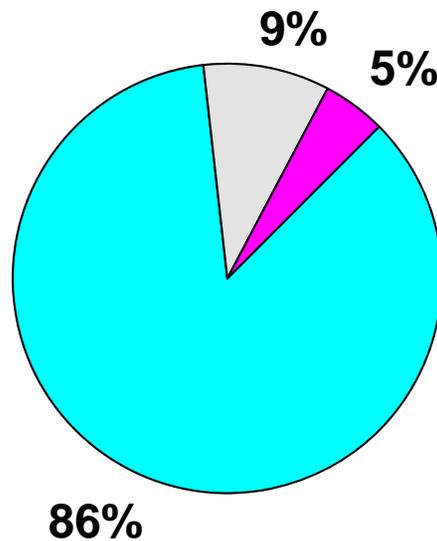


Note: A total of 45 (46% of the state total) perinatally acquired HIV infection cases born in Florida 2005-2013 were born in Miami-Dade, Broward and Palm Beach counties. There is some variation in the Mother's exposure category by county.

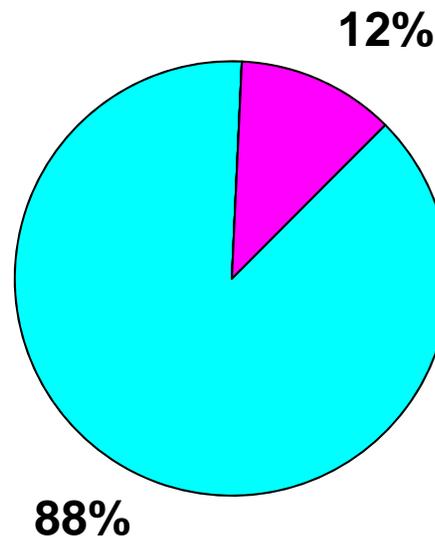


Perinatally Acquired HIV Infection Cases Born in Selected South Florida Counties, 2005-2013, by Age at First Diagnosis (N=45)

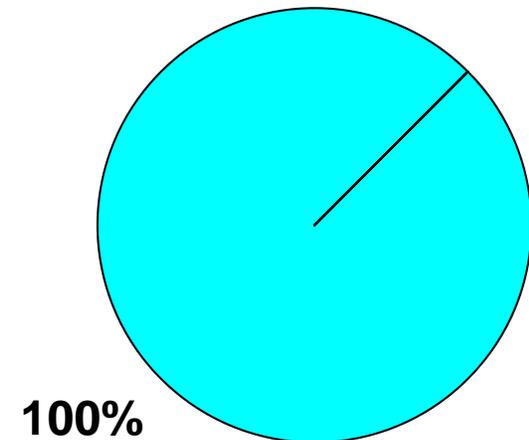
Miami-Dade (N=21)



Broward (N=17)



Palm Beach (N=7)



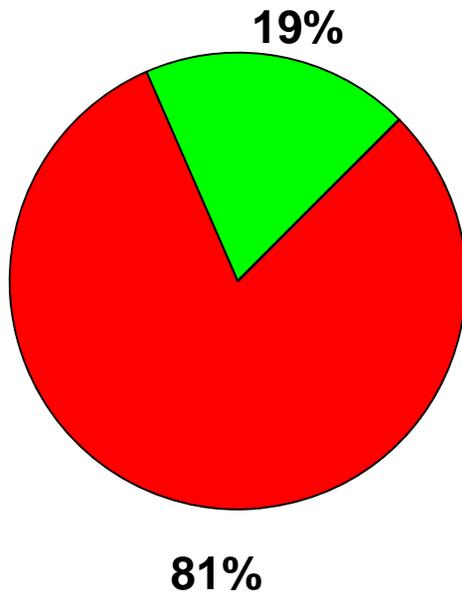
■ Age 0 ■ Age 1 ■ Age 2-4

Note: Eighty-nine percent (40 of 45) of the perinatally acquired HIV infection cases born in South Florida were diagnosed within the first year of life. As noted earlier, an early diagnosis of perinatally acquired HIV infection allows the opportunity of early treatment, thus possibly prolonging the onset of AIDS.

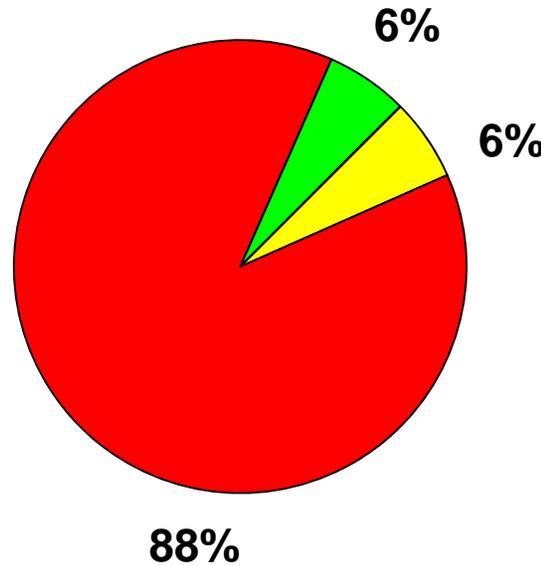


Perinatally Acquired HIV Infection Cases Born in Selected South Florida Counties, 2005-2013, by Race/Ethnicity (N=45)

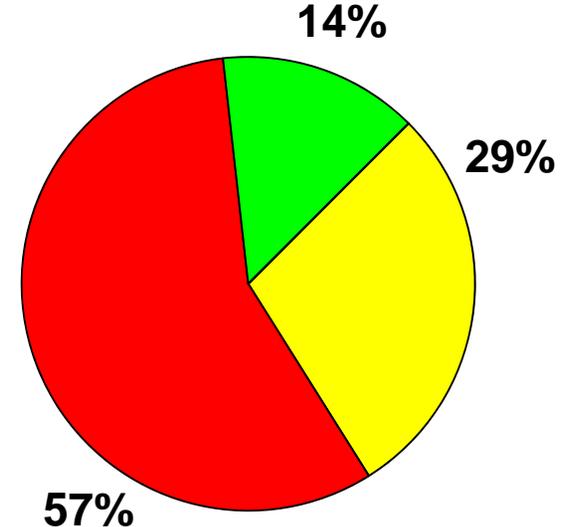
Miami-Dade (N=21)



Broward (N=17)



Palm Beach (N=7)



■ White ■ Black ■ Hispanic ■ Other/Unknown

Note: Pediatric AIDS in Florida disproportionately affects non-Hispanic blacks. In South Florida, 80%, (36 of 45) of the pediatric HIV/AIDS cases were among blacks.

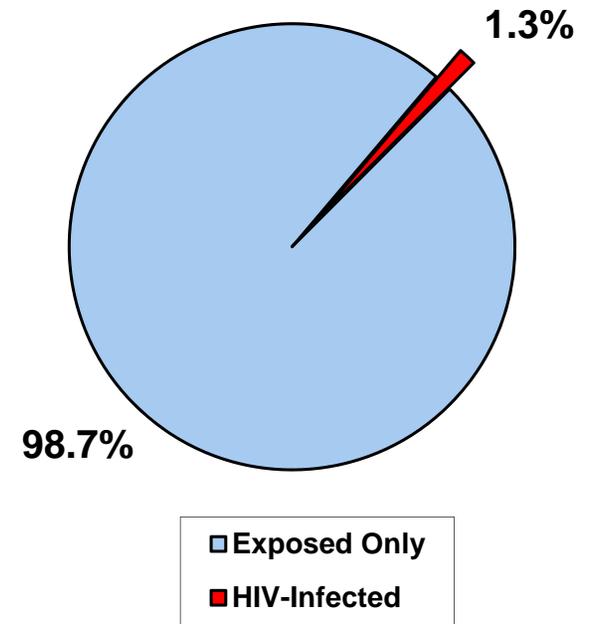


HIV Status for Babies Born to an HIV-Infected Mother in Florida, 2008-2013

	2008		2009		2010	
	#	%	#	%	#	%
Exposed	617	98.2%	611	98.7%	570	99.0%
Infected	11	1.8%	8	1.3%	6	1.0%
Total Births	628		619		576	

	2011		2012		2013	
	#	%	#	%	#	%
Exposed	576	99.5%	515	98.5%	493	98.0%
Infected	3	0.5%	8	1.5%	10	2.0%
Total Births	579		523		503	

2013 Births



A total of 493 babies were known to be born to HIV-Infected mothers in Florida in 2013, of which 10 (2.0%) were known to be HIV-infected. (Data as of 08/29/2014).

2013 data are incomplete due to reporting lags.

Note: Perinatal exposure became reportable 11/20/2006.

STEPS TO PERINATAL SUCCESS



Get Prenatal Care



Get an HIV Test



**If HIV+, Maintain
Medication Adherence**



**Keep All Prenatal
Appointments**



**Follow Up for Mom
And Baby**



**Ensure Baby Gets
6-weeks of AZT**

STEPS TO PERINATAL SUCCESS, CONTINUED



Counsel Against Breast Feeding



Link to Birth Control if that Is the Client's Choice



**Ensure that Baby
Receives HIV testing
By 4 months**

Perinatal Programs



- Perinatal Prevention is focused on:
 - Prevention Services for women of child bearing age.
 - Ensuring services for HIV-infected pregnant women and their newborns
 - Education and technical assistance for clinicians who treat pregnant 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 on Face Book and Twitter
- ▶ The Perinatal HIV Program” is located on the HIV/AIDS and Hepatitis Program internet site
- ▶ A Perinatal website through USF that is widely used
- ▶ Provide 6-weeks of free AZT for newborns of families with no medical coverage



The Baby RxPress Program provides a voucher that can be exchanged at Walgreens for the six-weeks of AZT that is prescribed for all HIV-exposed newborns.

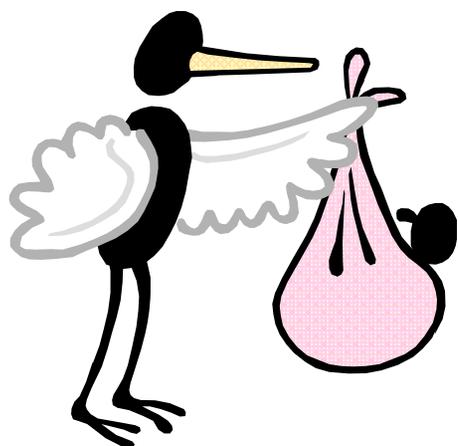
Vouchers can be obtained from a local HIV perinatal nurse or the HIV/AIDS and Hepatitis Program Prevention Section.



AETC staff work to:

- Educate medical professionals who provide care for HIV-infected pregnant women and their babies.
- Assist hospitals in implementing rapid HIV testing in labor & delivery units.
- Maintain a comprehensive website with CDC guidelines, forms, and resources for clinicians.

Source: <http://www.usfcenter.org/Perinatal/>



Targeted Outreach for Pregnant Women

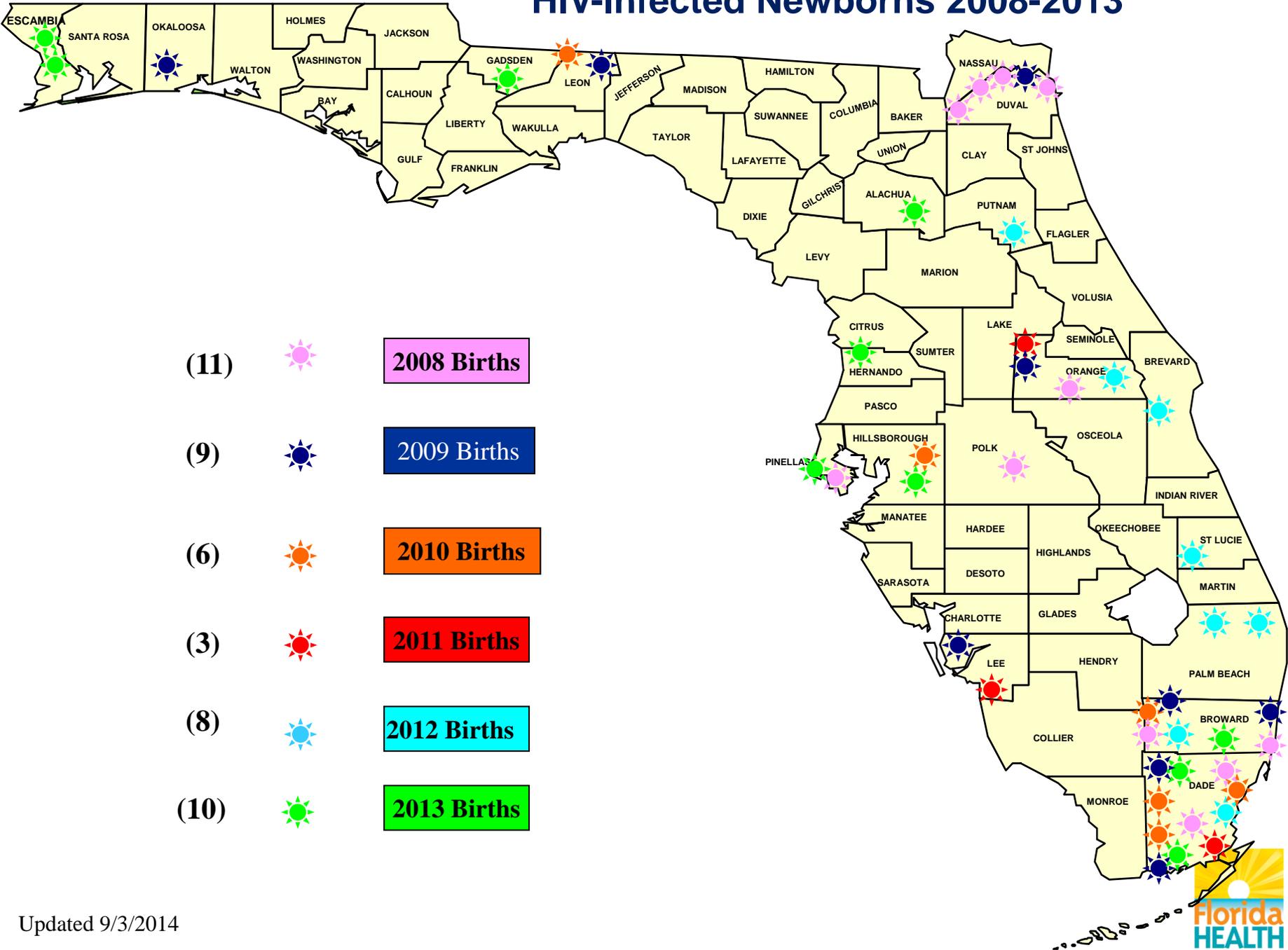
Act (TOPWA)

- ▶ 8 programs (3 also have jail components).
- ▶ Conducts outreach to high-risk pregnant women and actively links them with services.
- ▶ Offers on-site pregnancy and HIV testing.
- ▶ Assists mothers with obtaining family planning services if they choose to delay the birth of a subsequent baby.

For more information on TOPWA please see this webpage:
http://www.preventhivflorida.org/Women_Children/TOPWA.htm



HIV-Infected Newborns 2008-2013

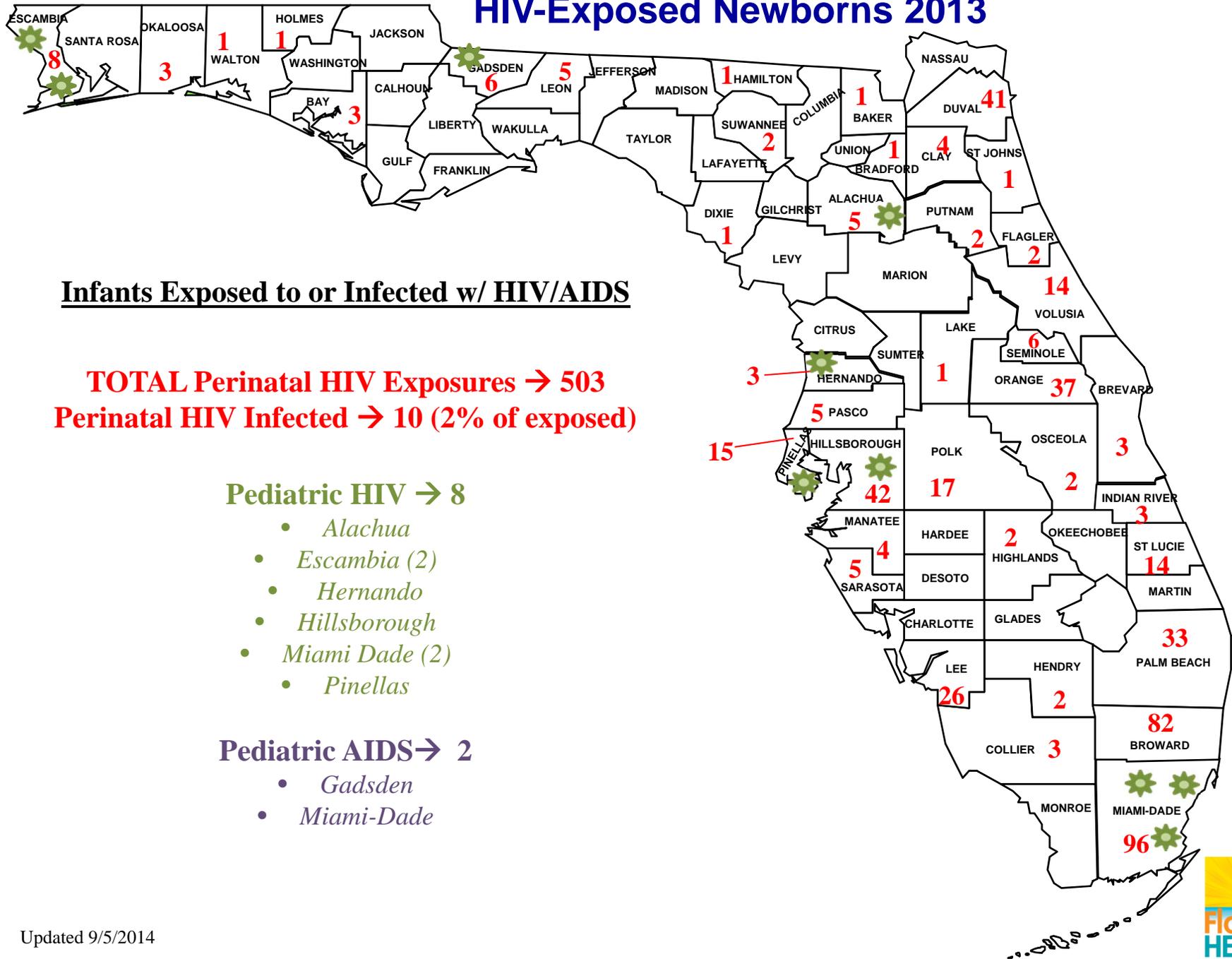


- (11)  2008 Births
- (9)  2009 Births
- (6)  2010 Births
- (3)  2011 Births
- (8)  2012 Births
- (10)  2013 Births

Updated 9/3/2014



HIV-Exposed Newborns 2013



Infants Exposed to or Infected w/ HIV/AIDS

TOTAL Perinatal HIV Exposures → 503
Perinatal HIV Infected → 10 (2% of exposed)

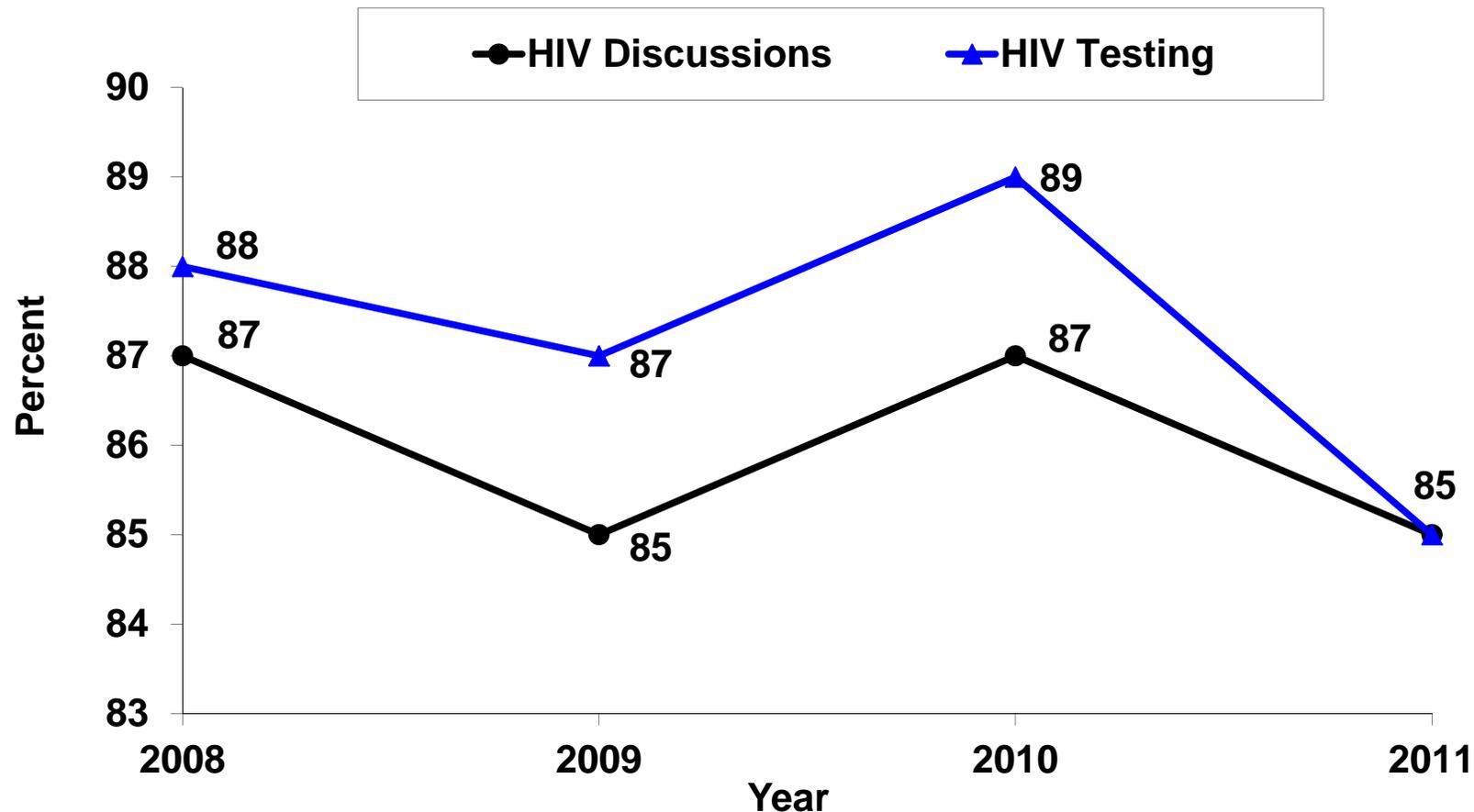
Pediatric HIV → 8

- Alachua
- Escambia (2)
- Hernando
- Hillsborough
- Miami Dade (2)
- Pinellas

Pediatric AIDS → 2

- Gadsden
- Miami-Dade

PRAMS: Healthcare Provider Discussions About HIV Testing, and Pregnant Women Tested for HIV in Florida, 2008-2011*

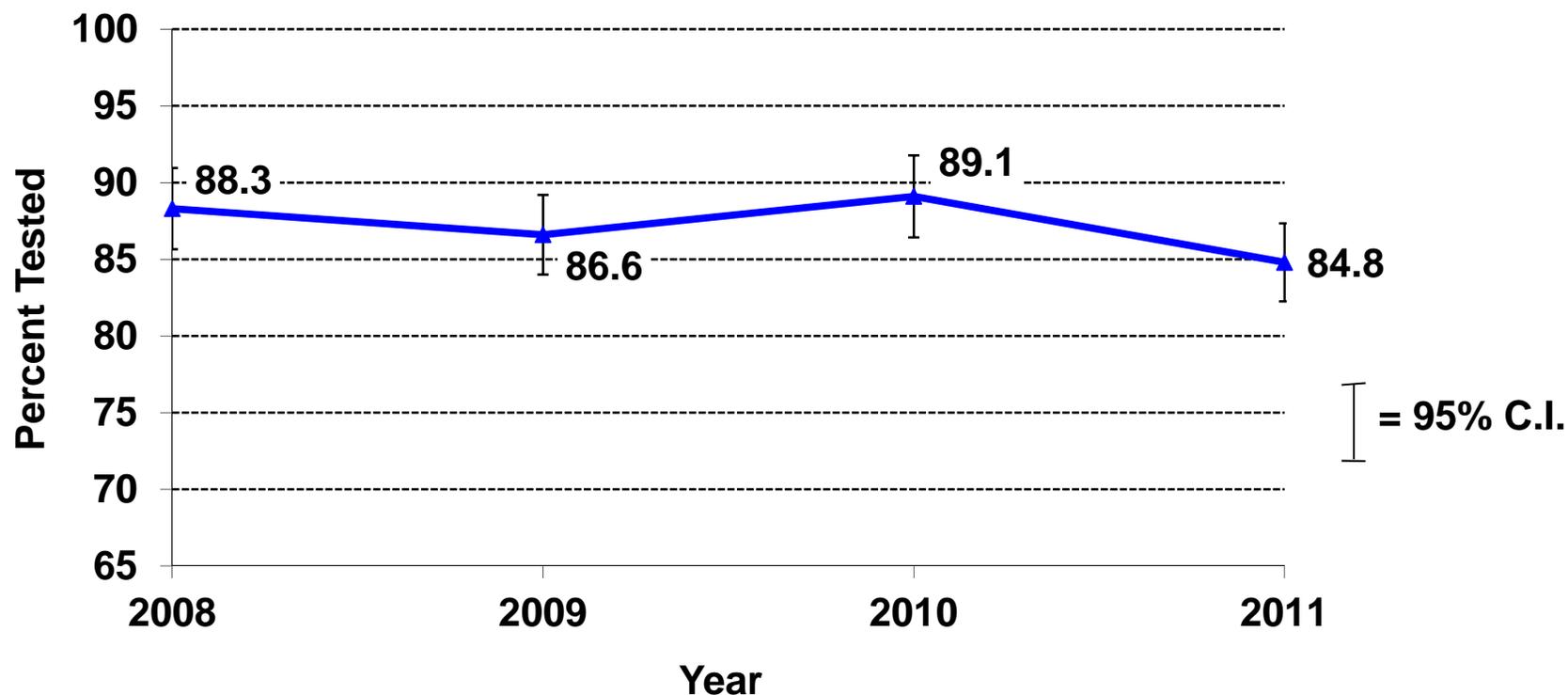


Note: Overall, Florida's percentage of childbearing women tested perinatally for HIV is among the highest in the U.S., which has probably contributed to the continued decline in pediatric HIV/AIDS cases. However, Florida's HIV testing for pregnant women have decreased 3.5 percentage points from 2008 to 2011. Source: Florida Pregnancy Risk Assessment Monitoring System (PRAMS). *2011 data is the most recent available.

<http://www.floridahealth.gov/statistics-and-data/survey-data/pregnancy-risk-assessment-monitoring-system/reports/index.html>



Prenatal HIV Testing Among Women Delivering a Live Birth, 2008-2011*, Florida



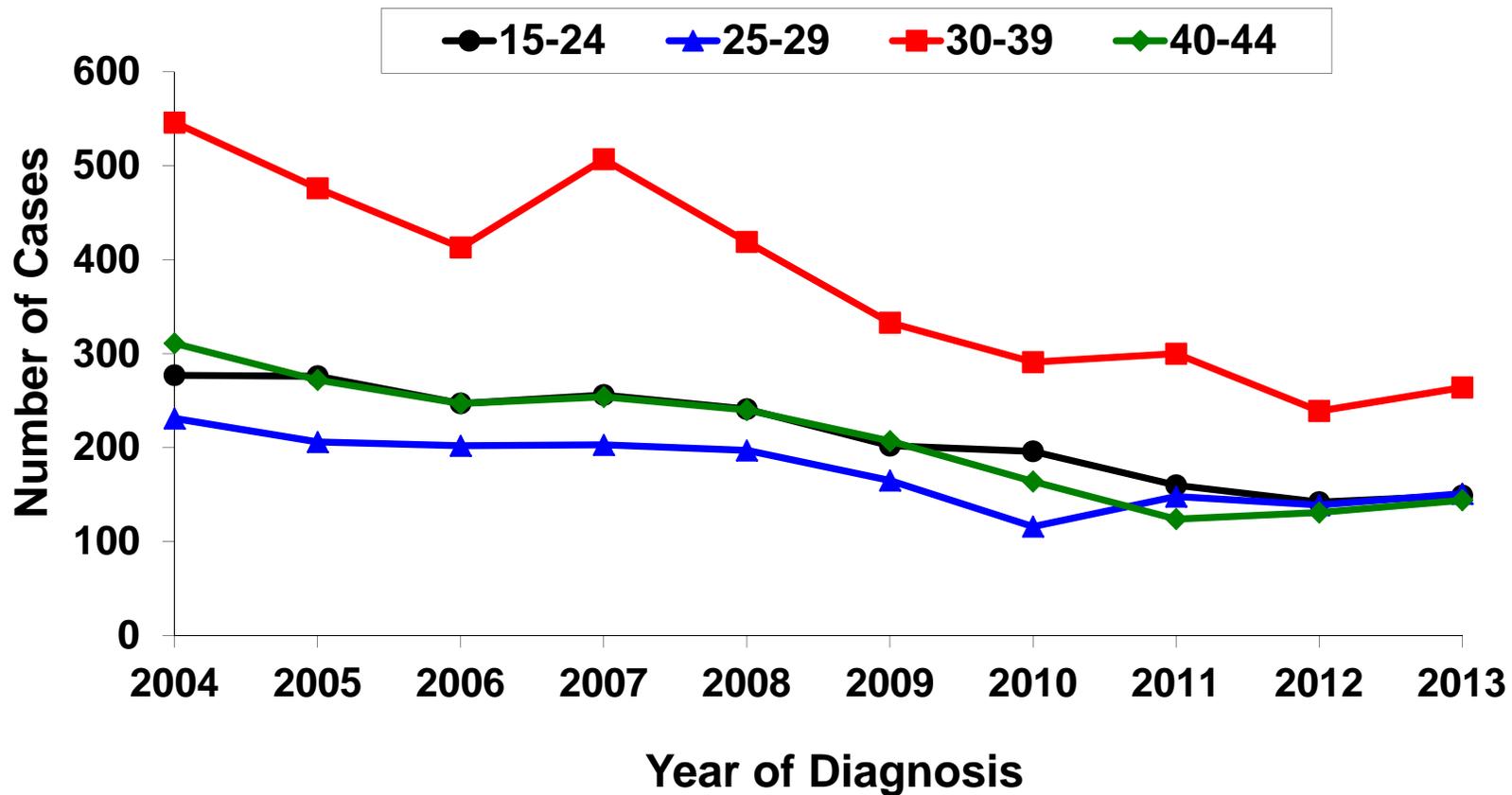
Note: Overall, Florida's percentage of childbearing women tested perinatally for HIV is among the highest in the U.S., which has probably contributed to the continued decline in pediatric HIV/AIDS cases. However, Florida's HIV testing for pregnant women have decreased 3.8 percentage points from 2008 to 2011.

Source: Florida Pregnancy Risk Assessment Monitoring System (PRAMS). (*2011 data is most recent available.)

<http://www.floridahealth.gov/statistics-and-data/survey-data/pregnancy-risk-assessment-monitoring-system/reports/index.html>



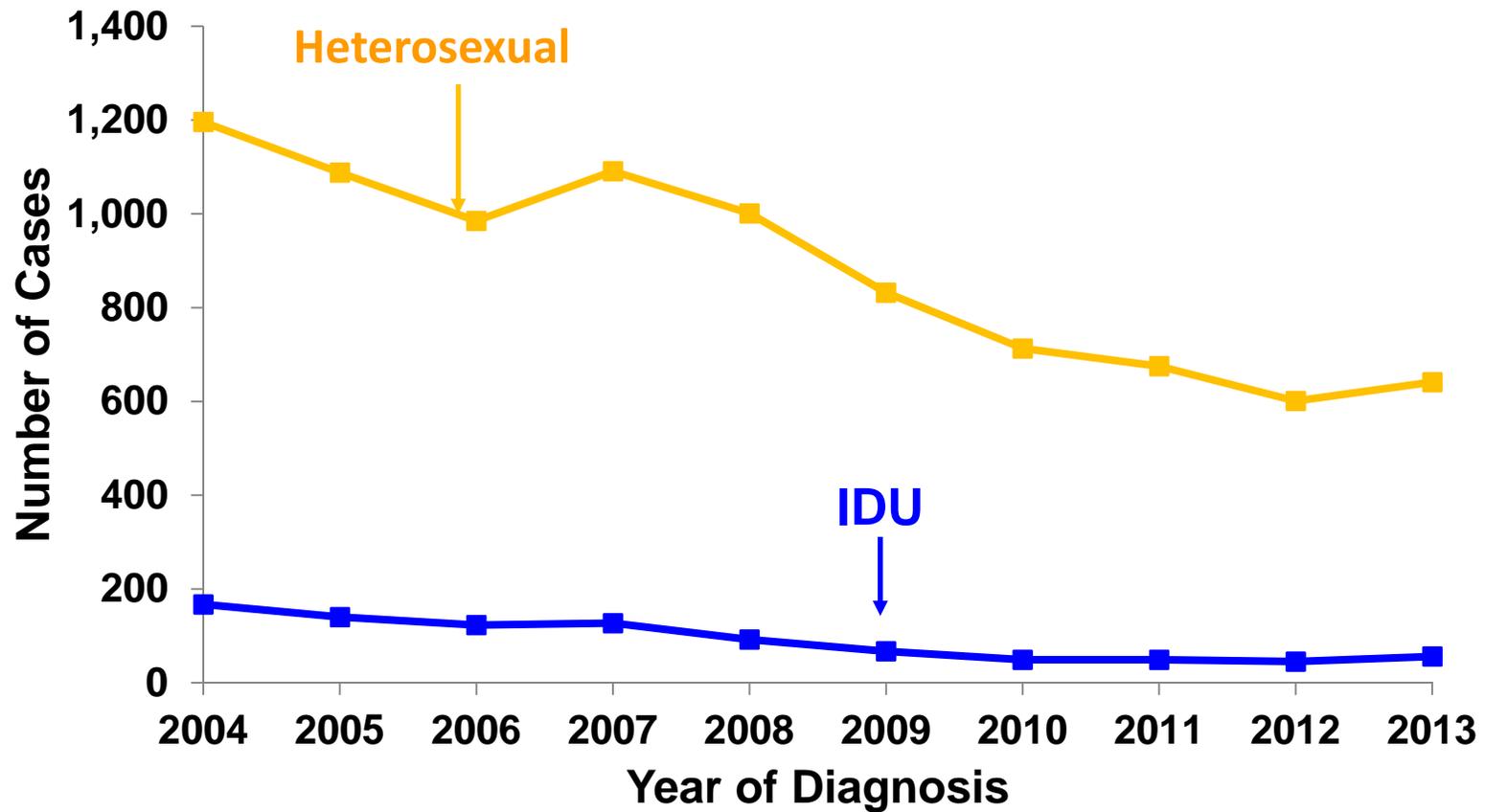
Cases of HIV Disease Among Women of Childbearing Age (Ages 15-44), by Age of Diagnosis, and Year of Diagnosis, 2004–2013, Florida



Decreases in newly diagnosis HIV/AIDS cases among women ages 15-44 have been observed by all age groups.



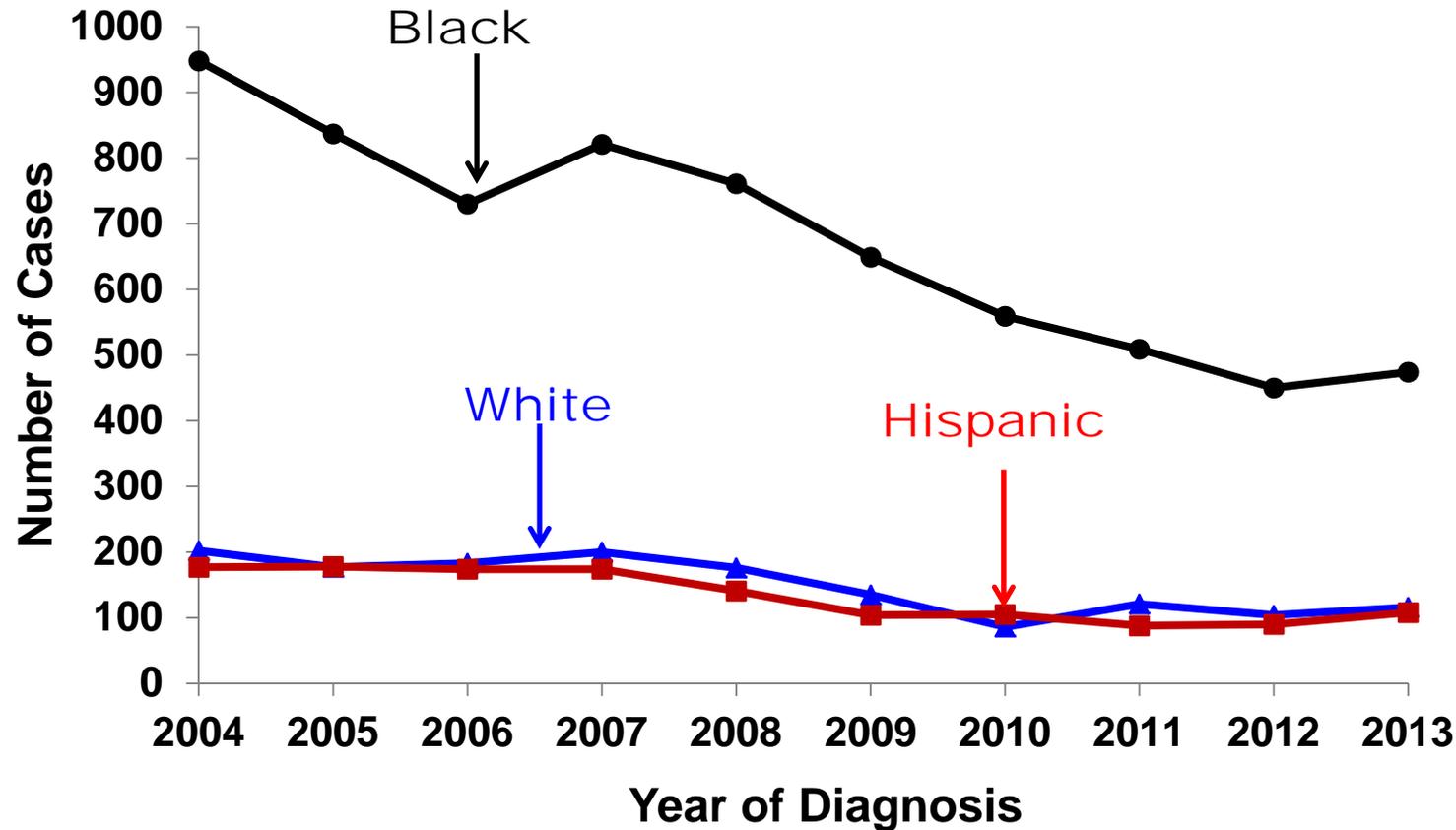
Cases of HIV Disease Among Women of Childbearing Age (Ages 15-44), by Mode of Exposure, and Year of Diagnosis, 2004–2013, Florida



Note: NIRs redistributed.



Cases of HIV Disease Among Women of Childbearing Age (Ages 15-44), by Race/Ethnicity, and Year of Diagnosis, 2004–2013, Florida

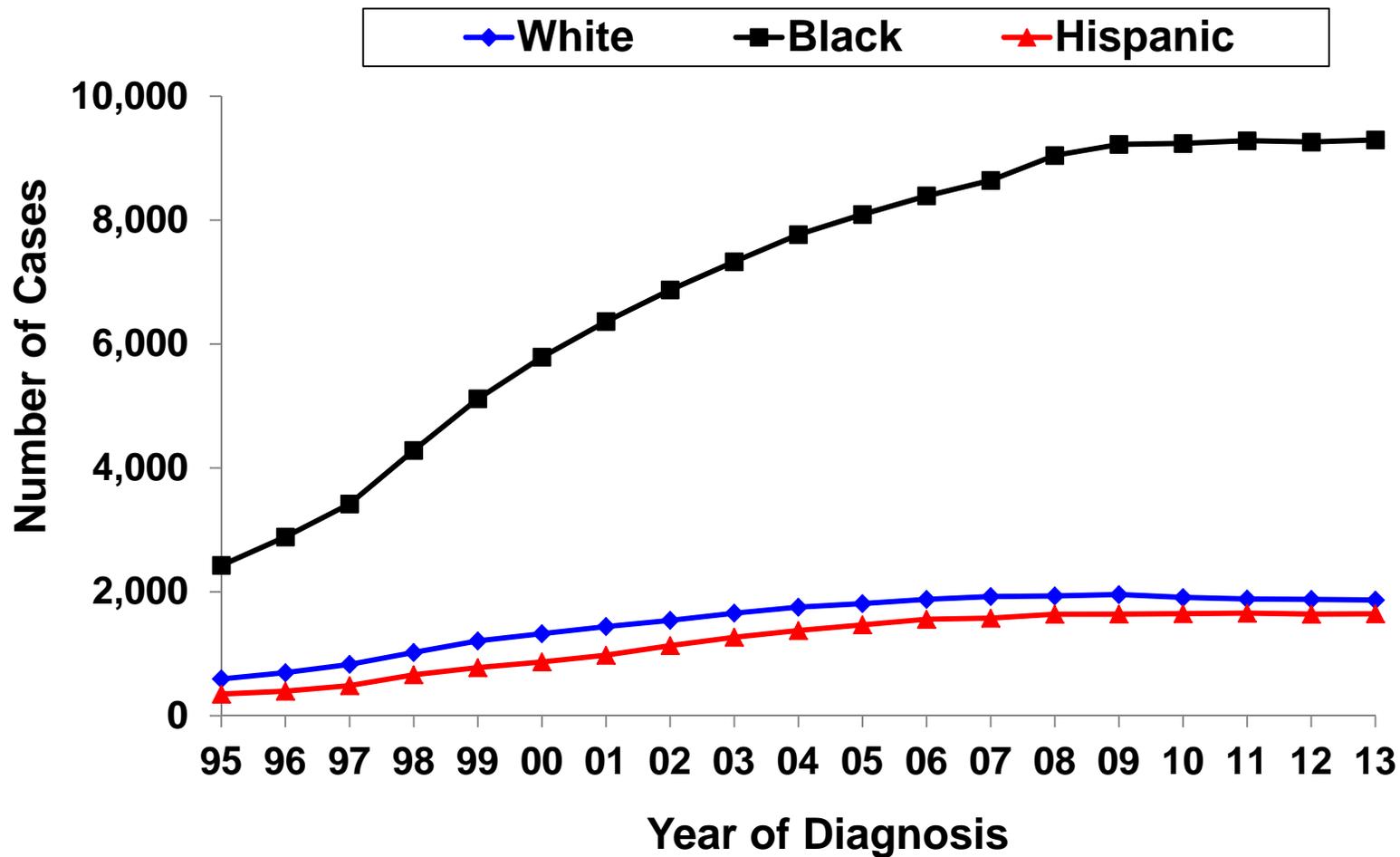


Note: Although the majority of HIV cases among women are black, the number of black female HIV cases has decreased 50% from 2004 to 2013. Likewise, the number of HIV cases decreased by 43% among white females and 39% among Hispanic females, over this same time period.

*Other races represent less than 1% of the cases and are not included. Data as of 06/30/2014



Annual Prevalence of HIV Disease Among Women of Childbearing Age (Ages 15-44), by Race/Ethnicity, Reported 1995-2013, Florida



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Visit Florida's internet site for:
Monthly Surveillance Reports
Slide Sets and Fact Sheets
Annual Reports and Epi Profiles

<http://www.floridahealth.gov/diseases-and-conditions/aids/surveillance/index.html>

Visit CDC's HIV/AIDS internet site for:
Surveillance Reports, fact sheets and slide sets

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