Epidemiology of HIV Among Pediatric* Cases in Florida, through 2014

HIV/AIDS Section
Division of Disease Control and Health Protection
Data as of 06/30/2015
*Infected prior to age 13

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

Created: 12/04/14
Revision: 05/27/16
Pediatric HIV Surveillance

- Pediatric HIV cases include those persons who were infected with HIV less than 13 years of age.
- Pediatric AIDS cases include those pediatric HIV cases that have developed AIDS, regardless of age at AIDS diagnosis.
- The first pediatric AIDS case was born in 1979, diagnosed in 1982 and reported in 1983.
In 2014, the HIV surveillance case definition was revised to adapt to changes in diagnostic criteria used by laboratories and clinicians. Therefore the following criteria were used to classify cases in this presentation:

- Cases diagnosed before 2014 were classified according to the 2008 HIV case definition.
- Cases diagnosed in 2014 were classified according to the 2014 HIV case definition.

The new CD4-based criteria for stage 3 (AIDS) among children resulted in a large increase in the number of stage 3 (AIDS) classifications among pediatric cases diagnosed during 2014.
Pediatric HIV Surveillance Structure

- The first part of this slide set will focus specifically on pediatric HIV infected cases who were first diagnosed with HIV infection and/or AIDS in Florida, regardless of risk or where they were infected or born.

- The second part of this slide set will focus specifically on perinatal HIV-infection cases and will include national data and data on perinatally-acquired HIV infected babies born in Florida.
Pediatric HIV Surveillance

Limitations:

- HIV/AIDS Surveillance data are always being updated as newly diagnosed pediatric cases are identified, even if years later. As a result, data on slide sets from previous years are outdated.
Acronyms

- ART = Antiretroviral Therapy
- AZT = Antiretroviral Zidovudine Therapy
- IDU = Injecting Drug Use
- NIR = No Identified Risk
How HIV is transmitted?

• Sharing needles and other injection drug equipment
• Sexual transmission
  (Highest: anal, Next highest: vaginal, Low: oral)
Lowest sexual risk: mutually monogamous relationship between 2 people who have both tested HIV negative.
• Needlestick injury (e.g. during health care work)
• Mother to child during pregnancy, childbirth, or breastfeeding
• Extremely rarely: blood transfusion, organ transplant
These data represent an 89% decline in pediatric AIDS cases by year of diagnosis from 1992 (N=177) to 2014 (N=21). Data as of 06/30/2015.
Pediatric AIDS Cases, by Age Group and Year of Diagnosis, 1990-2014, Florida

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

N=1,589
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 2014, by County, Florida

Statewide data:
N=1,947

Number of Cases

- 0
- 1 - 10
- 11 - 25
- 26 - 50
- over 50

Note: The first pediatric AIDS case was reported in 1983. Data as of 06/30/2015
Cumulative Pediatric HIV (not AIDS) Cases, Reported 07/1997 through 12/2014, by County, Florida

Statewide data:
N=672

Number of Cases

- 0
- 1 - 10
- 11 - 20
- over 20

Note: HIV (not AIDS) reporting began 07/1997. Data as of 06/30/2015

Florida HEALTH
## Cumulative Pediatric AIDS Cases
### Reported For Selected States, Reported through 2014

<table>
<thead>
<tr>
<th>Reporting State</th>
<th># of Cases</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>2,443</td>
<td>25%</td>
</tr>
<tr>
<td>Florida</td>
<td>1,568</td>
<td>16%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>806</td>
<td>8%</td>
</tr>
<tr>
<td>California</td>
<td>706</td>
<td>7%</td>
</tr>
<tr>
<td>Texas</td>
<td>407</td>
<td>4%</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>373</td>
<td>4%</td>
</tr>
<tr>
<td>Maryland</td>
<td>338</td>
<td>4%</td>
</tr>
<tr>
<td>Illinois</td>
<td>289</td>
<td>3%</td>
</tr>
<tr>
<td>Georgia</td>
<td>262</td>
<td>3%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>229</td>
<td>2%</td>
</tr>
<tr>
<td>Virginia</td>
<td>191</td>
<td>2%</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>196</td>
<td>2%</td>
</tr>
<tr>
<td>Remaining States</td>
<td>1,780</td>
<td>19%</td>
</tr>
<tr>
<td><strong>Total Cases</strong></td>
<td><strong>9,588</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Cumulative Data from CDC, HIV Surveillance Report, 2014, Vol. 26, Table 23
Pediatric HIV Infection Cases and State Population**
in Children <13 years of age, by Race/Ethnicity,
Diagnosed through 2014, Florida

**Source: Population estimates are provided by Florida CHARTS as of 7/9/2015.
Cumulative Pediatric (<13 yr.)
HIV Infection Cases by Mode of Exposure

United States*
(AIDS cases reported through 2014)
(N=9,558)

- Perinatally Acquired: 91% (n=8,715)
- Other Pediatric Risk**: 9% (n=843)

Florida
(reported through 2014)
(N=2,619)

- Perinatally Acquired: 95% (n=2,501)
- Other Pediatric Risk**: 5% (n=118)


**Other Pediatric Risk includes receipt of blood products or unknown risk.
Cumulative Pediatric HIV Infection Cases, by “Expanded” Modes of Exposure, Reported through 2014, Florida, N=2,619

*Note: 5% (exploded pieces) are NOT perinatal transmission cases.
Prevalence of AIDS-Defining Conditions*  
Most Commonly Reported  
Among Pediatric Cases,  
Reported through 2014, Florida

<table>
<thead>
<tr>
<th>AIDS Defining Condition</th>
<th># Cases</th>
<th>% Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumocystis pneumonia</td>
<td>499</td>
<td>26%</td>
</tr>
<tr>
<td>Bacterial infections</td>
<td>432</td>
<td>22%</td>
</tr>
<tr>
<td>Candidiasis, esophageal</td>
<td>413</td>
<td>22%</td>
</tr>
<tr>
<td>Wasting syndrome</td>
<td>375</td>
<td>19%</td>
</tr>
<tr>
<td>Lymphoid interstitial pneumonia</td>
<td>303</td>
<td>16%</td>
</tr>
<tr>
<td>HIV encephalopathy</td>
<td>260</td>
<td>13%</td>
</tr>
<tr>
<td>Cytomegalovirus disease</td>
<td>144</td>
<td>7%</td>
</tr>
<tr>
<td>Herpes simplex</td>
<td>119</td>
<td>6%</td>
</tr>
<tr>
<td>Candidiasis, bronchi or lungs</td>
<td>84</td>
<td>4%</td>
</tr>
<tr>
<td>Cryptosporidiosis</td>
<td>82</td>
<td>4%</td>
</tr>
<tr>
<td>No Disease (Immune suppressed only)**</td>
<td>305</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Total Cases</strong></td>
<td>1,946</td>
<td></td>
</tr>
</tbody>
</table>

Note: Of the 2,619 HIV/AIDS pediatric cases, 1,946 (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%.
Perinatally Acquired HIV Infected Cases
How does perinatal transmission occur?

- **Prenatally**
  - HIV in maternal blood
  - Placenta generally prevents exchange of cells, but small tears especially late in pregnancy occur leading to entry of cells from mother to child
- **Childbirth**-exposure to cervical-vaginal secretions or blood during delivery
- **Breastfeeding**-HIV in breastmilk
Risk of perinatal transmission

Overall
• 18-33% chance of transmission if no antiviral treatment\(^1\)
  • 40% if mother has recently acquired infection, very high viral load
• <1% chance of transmission if viral load suppressed by recommended prevention intervention\(^2\)

Breastfeeding alone
• 4-9% depending on length of breastfeeding\(^3\)

http://apps.who.int/iris/bitstream/10665/43879/1/9789241596596_eng.pdf
Why is perinatal transmission important?

- Child’s burden
  - Need for lifelong antiretroviral treatment
  - Potential for opportunistic infections and developmental delays
  - Potential social disadvantages
- Costly to family
  - Child’s care and treatment complicated
  - Expense and potential loss of work time
  - Emotional impact
- Costly to society- lifetime medical cost at least $270,000
- Therefore, goal is elimination of mother-to-child transmission

Prenatal HIV testing globally

Fig. 3.5. Estimated HIV testing and counselling coverage among pregnant women, low- and middle-income countries overall and by WHO region, 2005 and 2009–2012


Chart courtesy of WHO, HIV/AIDS Data and Statistics
Pregnant women receiving antiretroviral treatment, globally

**Fig. 3.2.** Number of pregnant women living with HIV in low- and middle-income countries and the number and percentage of those women receiving ARV drugs for PMTCT of HIV, 2005–2013

- Total number of pregnant women living with HIV (all needing PMTCT ARVs)
- Number of pregnant women living with HIV receiving ARV medicines for PMTCT (Option A, B and B+)
- Ranges
- Percentage coverage

Single-dose nevirapine is included in the data for 2005 to 2009.

Sources: Global AIDS Response Progress Reporting (WHO/UNICEF/UNAIDS) and validation process for the number of pregnant women living with HIV receiving ARV drugs for PMTCT, and UNAIDS 2013 estimates for the number of pregnant women living with HIV.

Slide courtesy of WHO, HIV/AIDS Data and Statistics
Progress is being made globally

Fig. 1.3. Estimated number of new HIV infections among children (younger than 15 years) globally, 2001–2013

Source: 2013 UNAIDS/WHO estimates.
Persons Living with Perinatally Acquired HIV Infection
Year-end 2010—United States and 6 Dependent Areas
N = 10,798

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.
Stage 3 (AIDS) Classifications among Perinatally Infected Persons, 1985–2011—United States and 6 Dependent Areas

![Graph showing Stage 3 (AIDS) Classifications among Perinatally Infected Persons, 1985–2011—United States and 6 Dependent Areas.](image)

- **Aged <13 years**
- **Aged ≥13 years**

**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 2011—United States and 6 Dependent Areas

N = 53

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, 1979-2014, N=1,220

Note: These data represent a 95% decline in HIV-perinatally infected births from 1993 (N=109) to 2014 (N=6). These data include ALL perinatally acquired HIV Infection cases BORN in Florida. One of the babies born in 2014 have developed AIDS. Data as of 06/30/2015.
Perinatally Acquired HIV Infection Cases, Born in Florida, by Race/Ethnicity and Year of Birth, 1993-2014

N=1,220

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.
Perinatally Acquired HIV Infection Cases
Born in Florida, by Mother’s Mode of Exposure and Year of Birth, 1979-2014

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, 1979-2014

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 most common risk, with 58% of the cases born between 1979-1993, increasing to 69% of cases born between 1994-2014.
Perinatally acquired HIV infection cases among non-Hispanic blacks are disproportionately affected compared with those of other race/ethnicities. Of the 1,220 perinatally acquired HIV infection cases born in Florida through 2014, 8% were white, 81% were black and 9% were Hispanic.

*Source: Population estimates are provided by Florida CHARTS as of 07/09/2015.
More than one half (55%, N=207) of the 377 perinatal HIV (not AIDS) cases born through 2014 were diagnosed less than the first 6 months of life. Over two-thirds (69%, N=262) of these perinatal HIV cases were diagnosed under the age of two. Furthermore, less than 1% (N=2) were diagnosed with a perinatal risk after the age of 12.
Nearly three-fifths (57%, N=480) of the perinatal AIDS cases born through 2014 (N=843), were diagnosed with AIDS prior to the age of two. The number of AIDS cases diagnosed after age two decreases by age. * 14% (N=120) of the cumulative AIDS cases were not diagnosed with AIDS until after the age of 12.
AIDS-Defining Conditions for Perinatally Acquired AIDS Cases Less than Two Years of Age, Born in Florida 1979-2014, by Age at AIDS Diagnosis (N=480)

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 1990-2014, 
by Age Group and Year of Birth (N=644)

Note: These data represent a 99% decline in perinatally acquired AIDS cases from 1992 (N=97) to 2014 (N=1). Data as of 06/30/2015.
A total of 833 perinatally acquired HIV Infection cases born in Florida through 2014 are still presumed to be alive. The majority (57%) of these cases born in South Florida: Miami-Dade (N=236), Broward (N=134) and Palm Beach (N=101). Data as of 06/30/2015
Current Age* Distribution of Living Perinatally Acquired HIV Infection Cases by Disease Status, Born in Florida, 1979 through 2014 (N=833)

*Current age of presumed living perinatally acquired HIV Infection cases born in Florida through 2014.

** The vital status for some of the cases born from 1986 or earlier could not be validated therefore some of these presumed living cases may be deceased. Data as of 06/30/2015
A total of 507 babies were known to be born to HIV-infected mothers in Florida in 2014, of which 6 (1.2%) were known to be HIV-infected. (Data as of 06/30/2015).

Note: Perinatal exposure became reportable 11/20/2006, therefore 2007 is the first complete year.
## Perinatal HIV Transmission

**Florida, 2007-2014**

<table>
<thead>
<tr>
<th>Year</th>
<th>HIV + Births</th>
<th># HIV + Infants (% transmission)</th>
<th>% Change (from prior year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>38 (2.5%)</td>
<td>38 (2.5%)</td>
<td>--</td>
</tr>
<tr>
<td>2007</td>
<td>672</td>
<td>17 (2.5%)</td>
<td>--</td>
</tr>
<tr>
<td>2008</td>
<td>628</td>
<td>11 (1.8%)</td>
<td>-35%</td>
</tr>
<tr>
<td>2009</td>
<td>620</td>
<td>9 (1.5%)</td>
<td>-18%</td>
</tr>
<tr>
<td>2010</td>
<td>577</td>
<td>6 (1.0%)</td>
<td>-33%</td>
</tr>
<tr>
<td>2011</td>
<td>578</td>
<td>3 (0.5%)</td>
<td>-50%</td>
</tr>
<tr>
<td>2012</td>
<td>527</td>
<td>8 (1.5%)</td>
<td>+166%</td>
</tr>
<tr>
<td>2013</td>
<td>513</td>
<td>10 (1.9%)</td>
<td>+25%</td>
</tr>
<tr>
<td>2014</td>
<td>507</td>
<td>6 (1.2%)</td>
<td>-25%</td>
</tr>
</tbody>
</table>
Perinatally Acquired HIV Infection Cases, by Selected Regions of Birth
Born in Florida 2007 through 2014

<table>
<thead>
<tr>
<th>Region of Birth</th>
<th>Born 2007-2014</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of cases</td>
<td>% of Total</td>
<td></td>
</tr>
<tr>
<td>Area 01*</td>
<td>4</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Area 03*</td>
<td>3</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Area 08 (Lee Only)</td>
<td>3</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Area 08 (not Lee)*</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Area 15*</td>
<td>2</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Broward County</td>
<td>11</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Duval County</td>
<td>8</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Hillsborough/ Pinellas Counties</td>
<td>5</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Miami-Dade County</td>
<td>14</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Orange County</td>
<td>8</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Palm Beach County</td>
<td>2</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Polk</td>
<td>2</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Remainder of state</td>
<td>8</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CASES</strong></td>
<td><strong>70</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

*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: Four perinatal cases reported in Florida were born outside of the state. An additional five perinatal cases were born outside of the US and were NOT included in these data.
Perinatally Acquired HIV Infection Cases Born in Florida, 2007-2014, by Disease Status and Age Group (N=70)

HIV (not AIDS) Cases (N=62)

- 82% 0-5 months
- 5% 6-12 months
- 5% 1 year
- 8% 2+ years

AIDS Cases (N=8)

- 50% 0-5 months
- 37% 6-12 months
- 13% 1 year
- 0% 2+ years

Note: Between 2007 and 2014 there were a total of 70 perinatally acquired HIV infection cases born in Florida. Of those cases 90% (n=56) were diagnosed with HIV within the first year of life. Among the eight perinatal AIDS cases, 88% (n=7) developed AIDS within the first year of life.

Note: Nearly two-thirds (57%, n=40) of the 70 HIV-infected mothers who gave birth in Florida between 2007 and 2014 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, 2007-2014

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, 2007-2014

<table>
<thead>
<tr>
<th>Missed Opportunities</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mom's HIV Status NOT Known Before Birth</td>
<td>13</td>
<td>19%</td>
</tr>
<tr>
<td>Inadequate Prenatal Care*</td>
<td>59</td>
<td>84%</td>
</tr>
<tr>
<td>No Prenatal Antiretroviral Therapy</td>
<td>36</td>
<td>51%</td>
</tr>
<tr>
<td>No Antiretroviral Therapy at Delivery</td>
<td>29</td>
<td>41%</td>
</tr>
<tr>
<td>Non-Caesarean Birth</td>
<td>23</td>
<td>33%</td>
</tr>
<tr>
<td>No Neonatal Antiretroviral Therapy</td>
<td>13</td>
<td>19%</td>
</tr>
<tr>
<td>Breast Fed</td>
<td>6</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>70</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Other Contributing Factors**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mom was a substance abuser during pregnancy</td>
<td>28</td>
<td>40%</td>
</tr>
<tr>
<td>Mom acquired an STD during pregnancy</td>
<td>24</td>
<td>34%</td>
</tr>
</tbody>
</table>

*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, 2007-2014, by Receipt of Adequate Prenatal Care and Any Prenatal Antiretroviral Therapy (ART) (N=51)

Adequate Prenatal Care
Began by 4th month with 5+ visits
- Yes: 88%
- No: 12%

Any Prenatal ART
AZT and/or antiretrovirals
- Yes: 65%
- No: 35%
Perinatally Acquired HIV Infection Cases in Children Whose Mom’s HIV status was Known Prior to Delivery Born in Florida, 2007-2014, by Receipt of Antiretroviral Therapy (ART) During Delivery and Elective Caesarean Delivery (N=51)

**ART During Labor**
AZT and/or antiretrovirals
- Yes: 22%
- No: 78%

**Elective Caesarean Delivery**
- Yes: 24%
- No: 76%

Maternal Drug Abuse During Pregnancy: 41% Yes, 59% No

History of an STD During Pregnancy: 36% Yes, 64% No
Perinatally Acquired HIV Infection Cases in Children Born in Florida, 2007-2014, by Receipt of Neonatal Antiretroviral Therapy (ART) and Exposure to Breastfeeding (N=70)

Received *any* Neonatal ART

- Yes: 81%
- No: 19%

Breastfed

- Yes: 9%
- No: 91%
Perinatally Acquired HIV Infection Cases Born in Selected South Florida Counties, 2007-2014, by Mother’s Exposure Category (N=27)

- Miami-Dade (n=14): 93% (Mom IDU Risk), 7% (Mom Sex Risk)
- Broward (n=11): 82% (Mom Sex Risk), 9% (Mom Other Risk/Unknown)
- Palm Beach (n=2): 100% (Mom Sex Risk)

Note: A total of 27 (39% of the state total) perinatally acquired HIV infection cases born in Florida 2007-2014 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, 2007-2014, by Age at First Diagnosis (N=27)

Miami-Dade (n=14)  Bromard (n=11)  Palm Beach (n=2)

93%  7%  93%

91%  9%  100%

Note: Ninety-three percent (25 of 27) 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 delaying the onset of AIDS.
Perinatally Acquired HIV Infection Cases
Born in Selected South Florida Counties, 2007-2014, by Race/Ethnicity (N=27)

- Miami-Dade (n=14)
  - 86% Black
  - 14% Other

- Broward (n=11)
  - 91% Black
  - 9% Other

- Palm Beach (n=2)
  - 50% Black
  - 50% Other

Note: Pediatric AIDS in Florida disproportionately affects non-Hispanic blacks. In South Florida, 85%, (23 of 27) of the pediatric HIV/AIDS cases were among blacks.
Guidelines to prevent perinatal HIV transmission in United States

• Screening
  • Test first trimester and third trimester in high risk area
  • Test at labor and delivery if test result unknown
• Antiretroviral treatment if mother HIV infected
  • Goal is viral suppression throughout pregnancy AND
  • During labor and delivery AND
  • First 6 weeks of infant’s life
• Elective C-section if maternal viral load >1000 copies/ml
• No breast feeding

Framework for elimination of perinatal HIV transmission

Number and Percentage of Persons Diagnosed and Living with HIV (PLWH) Engaged in Selected Stages of the Continuum of HIV Care 0-12 years of age, 2014

<table>
<thead>
<tr>
<th>Stage Description</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV Diagnosed (PLWH) Through 2014</td>
<td>178</td>
<td>100%</td>
</tr>
<tr>
<td>Ever in Care</td>
<td>176</td>
<td>99%</td>
</tr>
<tr>
<td>In Care/Retained in Care in 2014</td>
<td>158</td>
<td>89%</td>
</tr>
<tr>
<td>Suppressed Viral Load (&lt;200 copies/mL) in 2014</td>
<td>122</td>
<td>69%</td>
</tr>
</tbody>
</table>

- 86% of those diagnosed with HIV in 2014 had documented HIV-related care within 3 months of diagnosis
- 77% of PLWH in care had a suppressed viral load in 2014

**Notes**

1. **HIV Diagnosed**: Persons diagnosed and living with HIV (PLWH) in Florida through the end of 2014.
2. **Ever in Care**: PLWH with at least 1 documented viral load (VL) or CD4 lab, medical visit or prescription since HIV diagnosis.
3. **In Care**: PLWH with at least 1 documented VL or CD4 lab, medical visit or prescription in 2014.
   - **Retained in Care**: PLWH with 2 or more documented VL or CD4 labs, medical visits or prescriptions (at least 3 months apart) in 2014.
4. **On ART**: This bar was omitted on tables with demographic and risk breakdowns because the estimated value is based on small numbers.
5. **Suppressed Viral Load**: PLWH with a suppressed VL (<200 copies/mL) on last VL in 2014.
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/
Eight programs (three 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:
HIV Infected Newborns 2007 - 2014

<table>
<thead>
<tr>
<th>Number of Cases</th>
<th>Year of Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>2007</td>
</tr>
<tr>
<td>11</td>
<td>2008</td>
</tr>
<tr>
<td>9</td>
<td>2009</td>
</tr>
<tr>
<td>6</td>
<td>2010</td>
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<td>3</td>
<td>2011</td>
</tr>
<tr>
<td>8</td>
<td>2012</td>
</tr>
<tr>
<td>10</td>
<td>2013</td>
</tr>
<tr>
<td>6</td>
<td>2014</td>
</tr>
</tbody>
</table>

Data as of 6/30/15
Infants Exposed to OR Infected w/ HIV/AIDS

TOTAL Perinatal HIV Exposures → 506
Perinatal HIV Infected → 6 (1.2% of exposed)

Pediatric HIV (not AIDS) → 5 cases
- Duval
- Escambia
- Manatee
- Miami-Dade
- Orange

Pediatric AIDS → 1 case
- Palm Beach

Data as of 06/30/2015

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 2 percentage points from 2008 to 2012.

Source: Florida Pregnancy Risk Assessment Monitoring System (PRAMS). (*2012 data is most recent available.)
Over the past ten years, women aged between 30-39 continue to represent the majority of women of childbearing age newly diagnosed with HIV disease each year.
Cases of HIV Disease Among Women of Childbearing Age (Ages 15-44), by Mode of Exposure, and Year of Diagnosis, 2005–2014, Florida

Note: Heterosexual risk continues to be the dominant mode of exposure among females.
Cases of HIV Disease Among Women of Childbearing Age (Ages 15-44), by Race/Ethnicity, and Year of Diagnosis, 2005–2014, Florida

Note: Although the majority of HIV cases among females are black, the number of HIV cases among black females have decreased 45% from 2005 to 2014. Likewise, the number of HIV cases decreased by 19% among white females and 40% among Hispanic females, over this same time period.
*Other races represent less than 3% of the cases and are not included. Data as of 06/30/2015.
Since 1995 black females represent over 65% of women of childbearing age living with HIV disease each year.
*Note: These data represent adults living with HIV disease diagnosed in Florida regardless of their current residence. Other races represent less than 3% of the cases and are not included. Data as of 06/30/2015.
For Florida HIV/AIDS Surveillance Data
Contact: (850) 245-4444

Lorene Maddox, MPH Ext. 2613
Tracina Bush, BSW Ext. 2612
Madgene Moise, MPH Ext. 2373

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

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