


# Women, Infants, Children and Youth: We Are Still Here

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# Epi Data: New Cases

- Women, Infants, Children and Youth (WICY) made up 42.9% of new HIV cases in the Baltimore EMA in 2013
  - Among new WICY HIV infections in 2013
    - 59% of new cases were reported in women of child bearing age
    - 40.8% of cases were reported among youth age 13-24, of which 33.3% were young men
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# WOMEN



# Prevention of Mother To Child Transmission (PMTCT)

- The original PrEP!
- In April 1994, the Public Health Service released guidelines for the use of AZT to reduce perinatal HIV transmission
- In 1995, the first recommendations for HIV counseling and voluntary testing for pregnant women were published
- In 2006, CDC released revised recommendations for HIV testing which specified that opt-out HIV screening should be included in the routine panel of prenatal screening tests for all pregnant women.

# PMTCT

- Having effective protocol for the prevention of Mother to Child Transmission is great
  - **HOWEVER**--- The real success of PMTCT is the result of the integrated multidisciplinary support offered to women who are HIV infected during their pregnancy and following delivery
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# HIV EXPOSED INFANTS



## HIV Diagnostic Outcomes among Infants, by Time of Antiretroviral (ARV) Treatment Birth Years 2008–2011—United States

Time of ARV treatment	Infected		Exposed but not infected	Total
	No.	% of Row Total	No.	No.
During Pregnancy (DP) only	4	6.1	62	66
During Labor and Delivery (L&D) only	2	1.3	148	150
Infant received ARV after birth (Infant ARV) only	53	5.7	875	928
DP and L&D	6	3.0	197	203
DP and Infant ARV	11	2.4	445	456
L&D and Infant ARV	77	2.8	2,649	2,726
DP and L&D and Infant ARV	66	1.2	5,228	5,294
No known treatment	115	13.3	750	865
<b>Total</b>	<b>334</b>	<b>3.1</b>	<b>10,354</b>	<b>10,688</b>

Note: Exposure data from 43 areas.



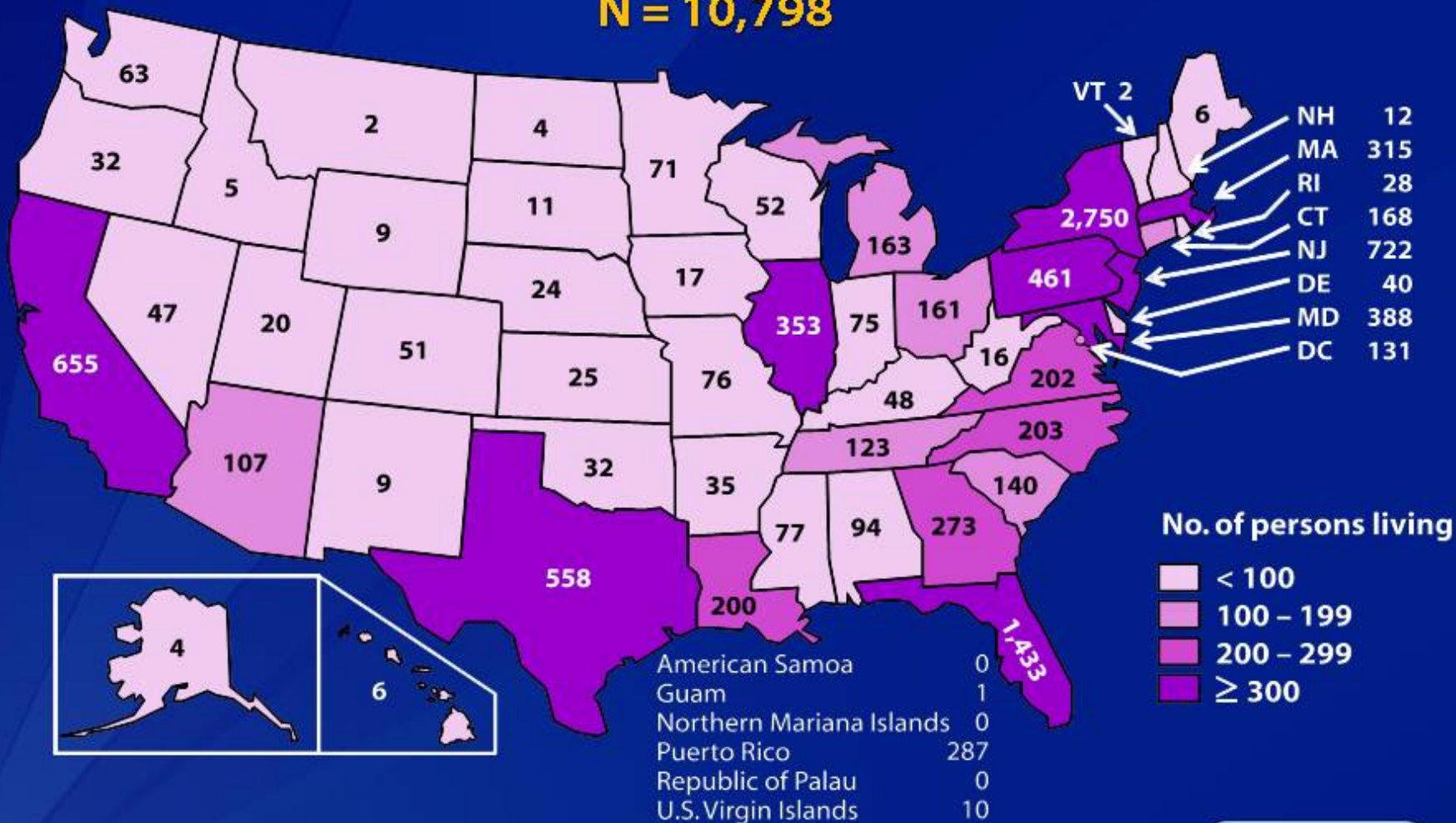
# CHILDREN & YOUTH





# 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.



# Unique Clinical Issues for Youth Infected Perinatally Infected vs. Behavioral Risk


## Youth infected perinatally

- High rates of pre-natal illicit/street drug and alcohol exposure
- History of disruptions in placements leading to multiple separations from parents and caregivers
- More likely to have experienced periods of poor health during childhood
- Extended period sub-optimal HIV treatment (pre-HAART-1998) with possible developmental/ neuro-cognitive consequences
- More likely to have heavy ARV exposure history, therefore more likely to have multi-drug resistant virus
- WERE NOT EXPECTED TO SURVIVE

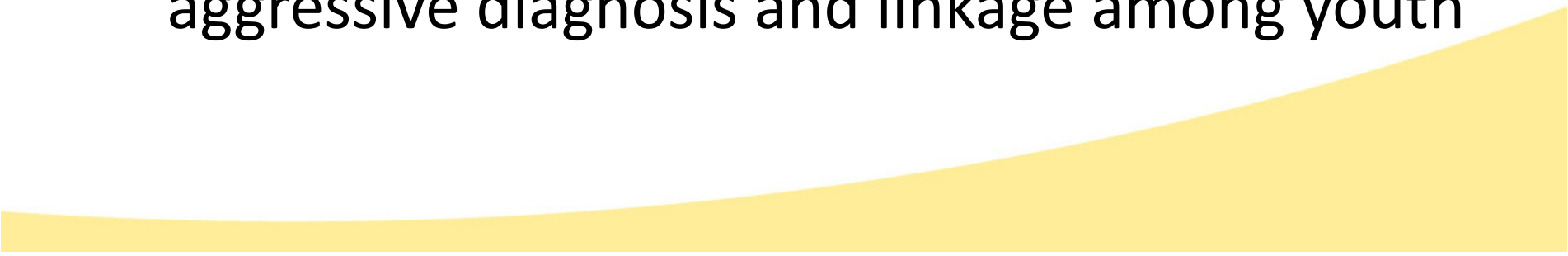
## Youth infected behaviorally

- Potentially healthier childhood
- Newly diagnosed
- More likely to be from a marginalized population with less social support
  - YMSM
  - Transgender youth
- Treatment in the absence of symptoms

# Youth who Acquire HIV

- From 2001-2012, the proportion of new HIV infections among 13-29 year olds increased from 14.3% to 37.1%
  - The percentage of MSM as a portion of male youth living cases has increased from 58.4% to 61.9% since 2011
  - In 2013, 20-29 year olds have had the highest rates of new HIV diagnoses in Maryland (55.8 per 100,000)
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# Linkage to Care

- According to a national study using CDC HIV Surveillance Data and data from the Medical Monitoring Project (Hall et al., 2013), among youth living with HIV (13 to 24 years of age), only 40.5% knew their diagnosis and of that group, 30.6% were linked to care
  - These estimates indicate a need for more aggressive diagnosis and linkage among youth
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# **SURROGATE MARKERS FOR HIV RISK AMONG YOUTH**



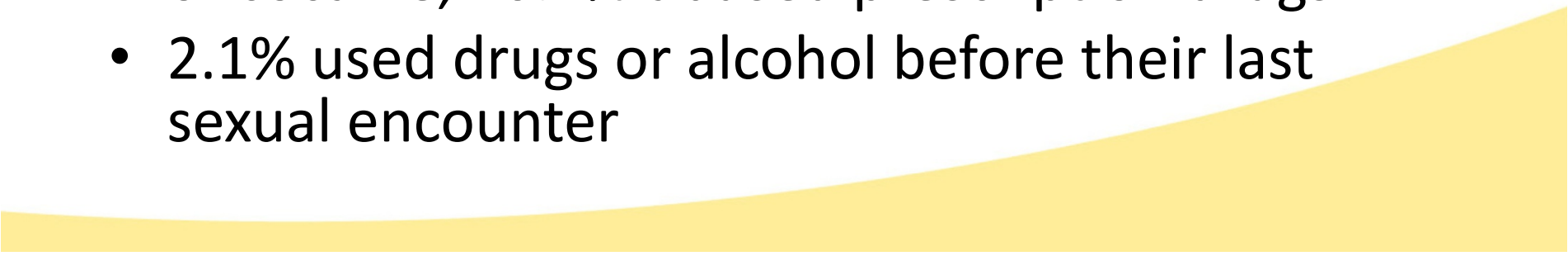
# Risk Categories

- STIs
- Pregnancy



# Sexual Risk

(Youth Behavioral Risk Survey, 2012)


- 47.4% of youth report having sexual intercourse <13 yrs
  - End of high school 75% of youth report at least one sexual experience
  - 15.3% report four or more sexual partners
  - 8.0% have been forced to have sex (11.8% female, 4.5% male)
  - 39.9% had smoked marijuana, 6.8% used a form of cocaine, 20.7% abused prescription drugs
  - 2.1% used drugs or alcohol before their last sexual encounter
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# STI Risk


- Young people, aged 15-24 account for more than half of sexually transmitted infections
- There were 456 primary and secondary syphilis cases reported in Maryland in 2013, at a rate of 7.7 per 100,000
- In 2014, 25.7% of syphilis cases were among persons under the age of 24.
- The rate of chlamydia in Maryland was 450.7 per 100,000 in 2013. In 2014, 71% of chlamydia cases were among persons under the age of 24.
- The rate of gonorrhea in Maryland was 101.0 per 100,000 in 2013. In 2014, 58% of gonorrhea cases were among persons under the age of 24.



# Pregnancy Risk

- Maryland is ranked 26 among the 50 states plus the District of Columbia for teen pregnancies, with 24% of births occurring to teen mothers
  - In pregnancies where the mother is under 20 years of age, 51% are to African American mothers, compared to 24% nationally
  - This coincides with the disproportionate impact of HIV on African American young women in Maryland
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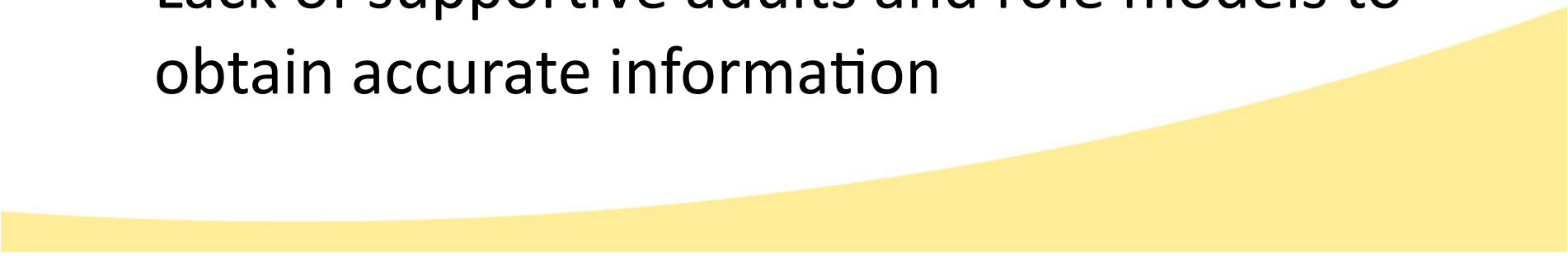
# Pregnancy Data

- Retrospective chart review of 88 perinatally infected adolescents
  - 29 (59%) had been pregnant at least once
  - 10 (20%) had been pregnant > once (range 2-8)
  - Of a total of 47 pregnancies:
    - 24 live births (including one set of twins)
    - 9 terminations
    - 9 miscarriages
  - Mean age at first pregnancy: 19.2 years (range 16.3 - 22.0)
  - Mean age at second pregnancy: 20.1 years (range 17.8 – 24.7)
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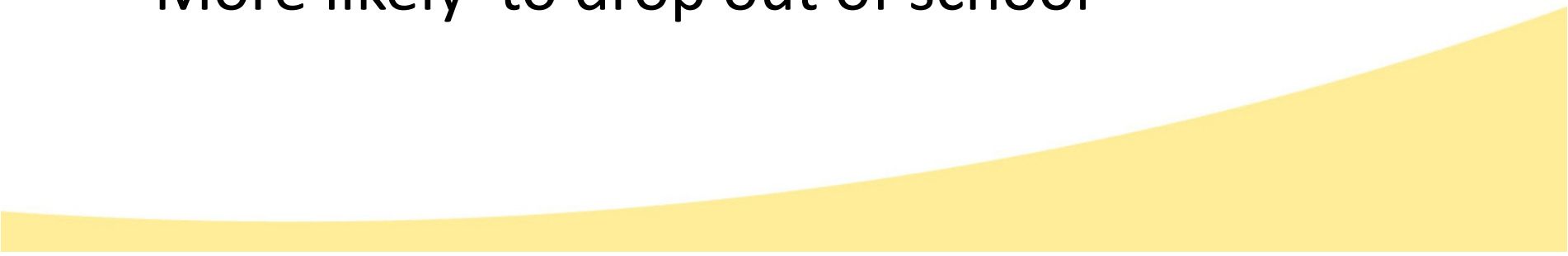
# Adherence Indicators During Pregnancy

- **Adherence to appointments**
  - Pre-pregnancy clinic attendance 61.6%  
(range 30 – 100%)
  - Prenatal visit clinic attendance 73.7%  
(range 40.9 - 100%)
- **Significant improvement in clinic attendance (p= .001)**
- **Viral Suppression**
  - Pre-pregnancy (last 2 prior to pregnancy): Mean VL = 15,766  
(range ND - 102,320)
  - Prenatal (at first OB appointment and last prior to delivery)  
Mean VL= 4,062 (range ND – 47,000)
- **Significant improvement in viral suppression (p= .009)**

# YMSM Risk factors

- Fatalistic view of life
  - Determine how safe a partner is by partner's social network
  - Lack of gender appropriate health and sex education
  - Lack of condom negotiation skills
  - Lack of supportive adults and role models to obtain accurate information
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# Risk for Transgender Youth

- Disproportionately affected by poverty
  - More likely to engage in sex work due to discrimination experienced in main stream employment
  - More likely to be harassed in public spaces making transgender persons less likely to access services.
  - More likely to drop out of school
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# Summary

- WICY population represent high risk
  - Services directed to pregnant women who are HIV infected have been successful in the prevention of mother to child transmission
  - HIV exposed infants require intensive services in the first months of life to support PMTCT
  - The needs of the aging perinatally infected population are unique
  - Youth continue to represent highest risk group in Maryland – YMSM and Transgender Youth
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