Perinatal Surveillance Report

Key Findings, Georgia, 2023

GPACC Quarterly Meeting / May 22, 2025

Today's Presentation

- Overview of perinatal surveillance efforts in Georgia
- Key findings from the 2023 perinatal surveillance report

Perinatal HIV Surveillance in Georgia

Introduction

- The risk of mother to child transmission of HIV ranges from 15% to 45%, without any interventions[1]. With all proper interventions followed, the risk of mother to child transmission of HIV is reduced to <1%[2].
- The number of perinatal HIV infections has markedly decreased on average since 2012. The preliminary estimated transmission rate was 0.9% in 2023.
- Efforts to educate healthcare providers in GA about the perinatal HIV transmission guidelines likely contributed to the observed reduction in transmissions.

1. World Health Organization, Mother to Child Transmission of HIV http://www.who.int/hiv/topics/mtct/en/
2. Department of Health and Human Services, Recommendations for the Use of Antiretroviral Drugs During Pregnancy and Interventions to Reduce Perinatal HIV Transmission in the United States https://clinicalinfo.hiv.gov/en/guidelines/perinatal

Steps to Prevent Vertical HIV Transmission

The prevention of vertical HIV transmission from mother to child involves:

Occurs before and during delivery

1. **HIV testing during pregnancy**
2. **Antiretroviral therapy (ART)**
3. **Cesarean delivery**
4. **Administering infant ART**

Occurs after delivery

5. **Proper HIV management for both mother and baby while breastfeeding***

*Breastfeeding remains a decision up to the mother. The mother should be counseled on the risks and extra steps needed to reduce the chance of transmission of HIV via breastfeeding.

Maternal HIV Viral RNA Levels

- Maintaining low HIV viral load levels in the mother, achieved with continued HIV care and access to HIV antiretrovirals, is one of the key factors in preventing vertical transmission across all stages of pregnancy.

- Recommendations for interventions performed at labor and delivery will differ depending primarily on maternal viral load across pregnancy

Maternal HIV Viral RNA Levels

Maternal HIV load	IV ZDV	Mode of Delivery	Infant ARV
<50 copies/mL and no adherence concerns	Not required	Vaginal	ZDV for 2 weeks
≥50 and ≤1,000 copies/mL	May be considered	Vaginal	3 drug regimen 2-6 weeks
>1,000 copies/mL	Recommended	Scheduled cesarean delivery	3 drug regimen 2-6 weeks

Perinatal HIV Exposure Surveillance in Georgia

- Perinatal HIV exposure surveillance has been conducted in GA since 2016, with approximately 200-250 women with HIV giving birth identified each year.

Surveillance Efforts in Georgia

Perinatal HIV surveillance in Georgia is conducted using five data sources:

1. Birth certificate data
2. Registry match to the HIV surveillance system
3. Pharmacy alert systems, alerting HIV perinatal surveillance when infant antiretrovirals are ordered
4. Active reporting of exposed infants directly from hospitals
5. Individual reports of HIV exposure or transmission from providers

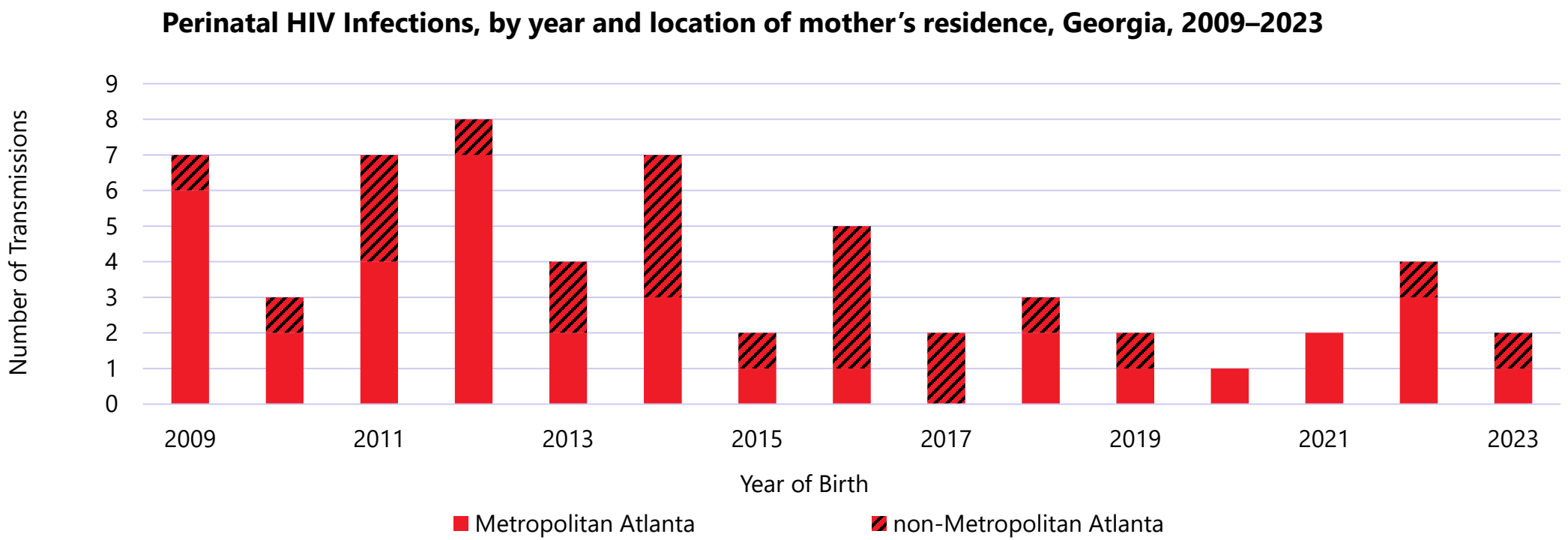
Surveillance Efforts in Georgia

Once the list of HIV-exposed infants are identified, medical records are abstracted and reviewed, using the following sources:

1. Maternal labor and delivery (L&D) charts
2. Infant birth charts
3. Prenatal care records, when available in the L&D charts
4. Statewide HIV surveillance data
5. Birth certificate data

Perinatal Surveillance Report

Perinatal HIV Exposure Surveillance in Georgia



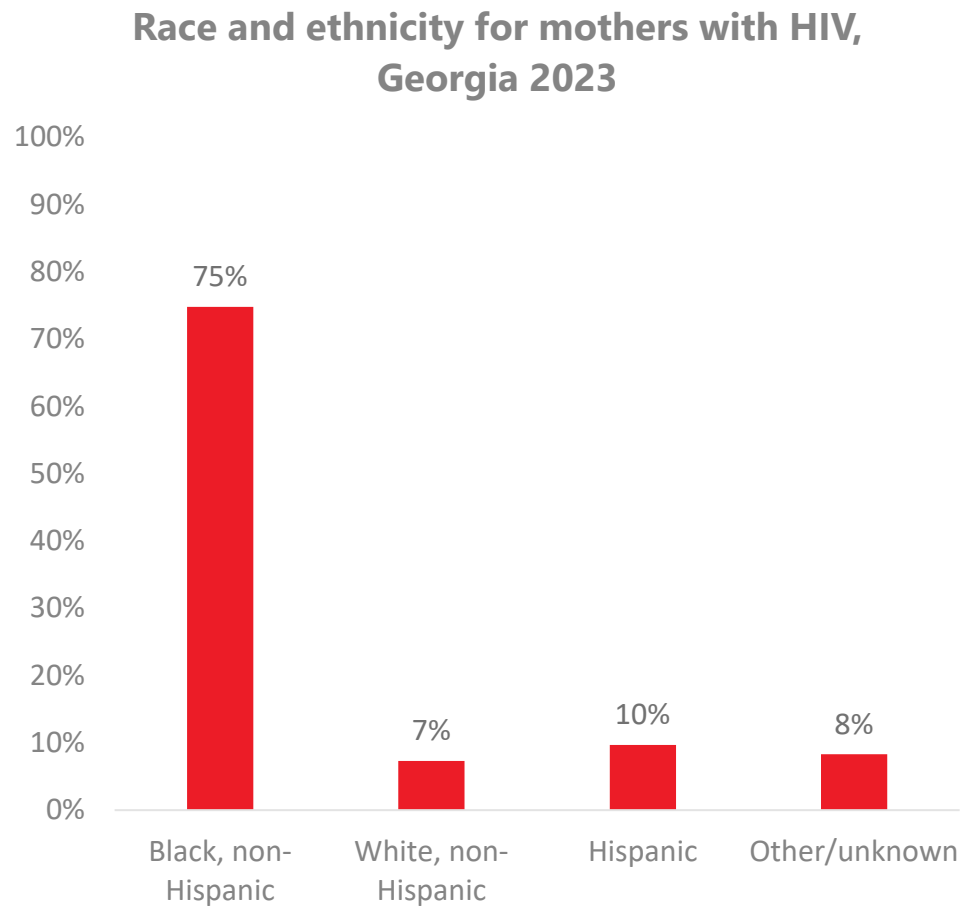
**Categorization of Metropolitan Atlanta vs. non-metropolitan Atlanta is determined by location of pregnant woman's residence at time of delivery*

The average number of perinatal HIV transmissions between 2016-2023 is lower than the average number of perinatal HIV transmissions between 2009-2016.

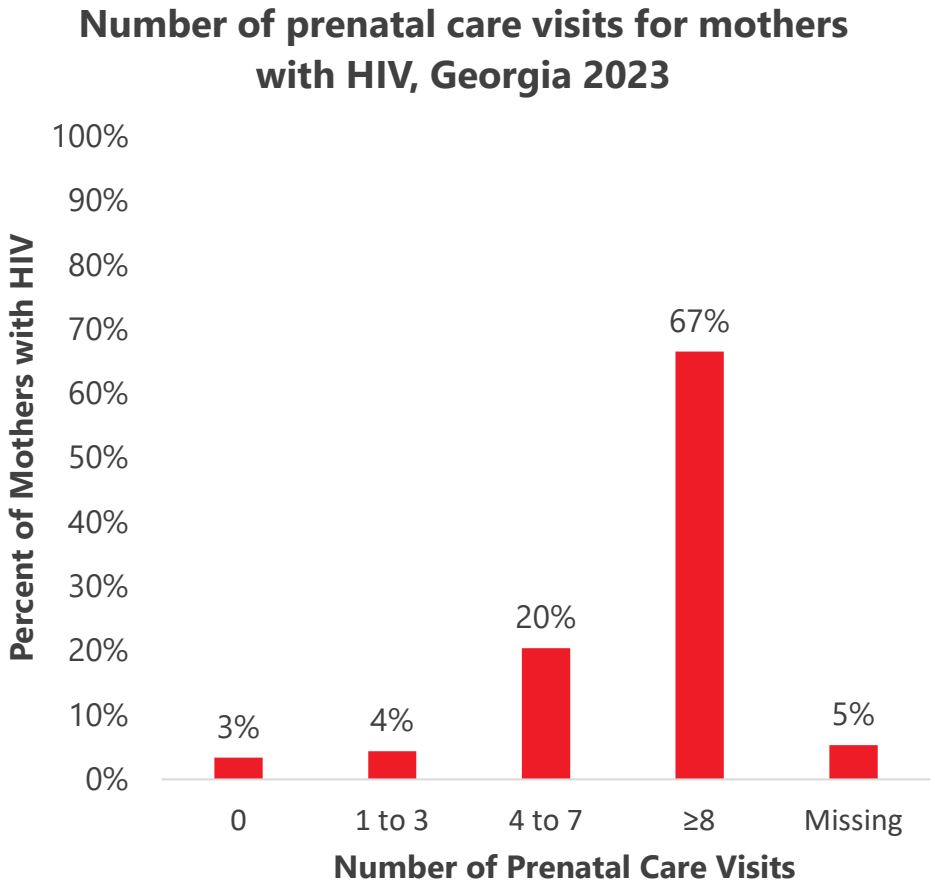
Demographics of Mothers with HIV, 2023

206 mother-baby pairs were identified via perinatal surveillance efforts

- A majority of these mothers were between the age of 25-34.
- 75% of the mothers identified as Black, non-Hispanic
- 91% of all mothers had a HIV transmission risk category of heterosexual contact



Prenatal Care, 2023



About **8%** of mothers received **little to no prenatal care** (3 or less visits)

39% received inadequate* prenatal care

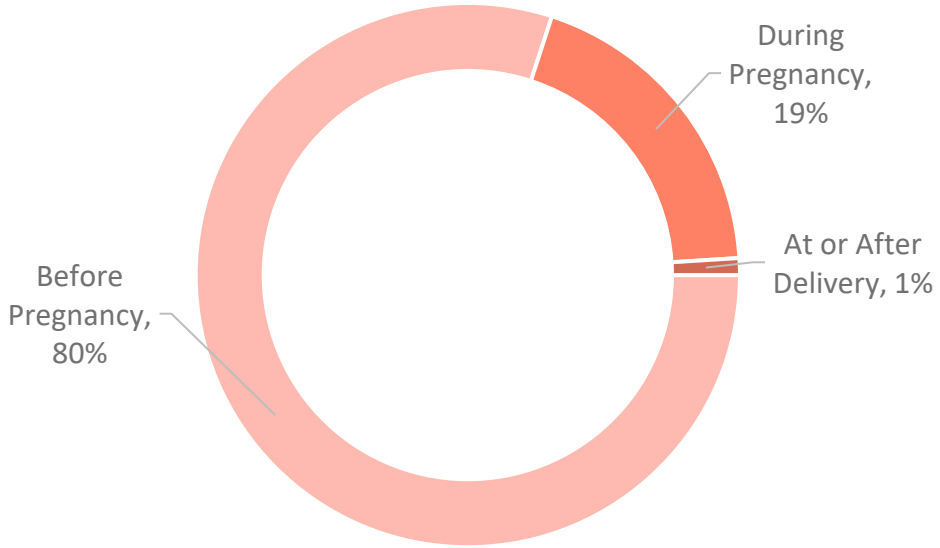
- HIV testing should occur at:
  - first prenatal care visit
  - first 3rd trimester visit
  - Labor and delivery

*Inadequate prenatal care means that prenatal care is not started on time, and/or fewer prenatal care visits occur overall than recommended.

Time of HIV Diagnosis, 2023

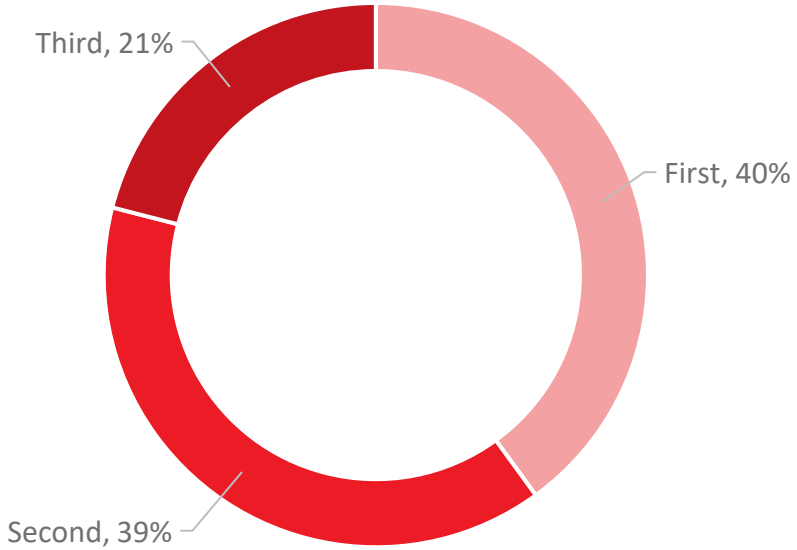
80% of mothers with HIV were diagnosed before pregnancy

Time of Diagnosis



Among mothers diagnosed during pregnancy, **21%** were diagnosed during the third trimester.

Trimester of Pregnancy when Diagnosed



Viral Suppression during Pregnancy, 2023

- **86%** of mothers at time of delivery had a viral load <1000 copies/mL of HIV plasma RNA, considered clinically to be controlled HIV.

Prenatal care viral load testing for HIV within four weeks of delivery is especially important for determining proper interventions

Maternal interventions during L&D, 2023

Through medical record chart abstraction, it was found that some or all interventions were skipped for one or more reasons. Some reasons are highlighted here:

1. Precipitous vaginal delivery, for mothers with a viral load ≥1,000 count/mL or unknown viral load
2. Self-reported viral suppression, without valid laboratory evidence

Baby interventions during L&D, 2023

99%

of all babies received infant zidovudine*

(*medication for neonatal HIV prophylaxis/therapy, considered the standard of care for neonates)

87%

of all babies born to mothers with unknown or uncontrolled HIV levels received the recommended 3-drug presumptive HIV therapy

Perinatal Transmission in Georgia, 2023

Confirmed perinatal HIV transmissions, Georgia, 2023

Birth	Time of HIV Diagnosis for Pregnant Woman	Viral Load at Delivery	Comments
#1	Before pregnancy	>1000 c/mL	• **Baby received all recommended interventions** • Mother self-reported ART adherence and viral suppression but no recent laboratory tests were available to confirm • Mother did not receive IV ZDV nor a C-section based off her self-report • Viral load at time of delivery was >1000 c/mL but reported after delivery. Last undetectable viral load was prior to start of pregnancy
#2	Before pregnancy	>1000 c/mL	• **Baby and mother received all recommended interventions** • Mother did not have any HIV care during pregnancy • Mother may have been experiencing homelessness

The rate of perinatal HIV transmission in Georgia in 2023 is estimated to be 0.9%

- Both mothers had a viral load of >1000 count/mL at delivery
- One mother self-reported viral suppression, leading to missed interventions
- Another mother was likely unhoused, leading to issues in ART adherence

Key Takeaways

To maintain the trend of preventing mother to child perinatal transmission of HIV, important factors include:

1. Monitoring and keeping mothers with HIV in prenatal care, including proper screening done at the 1st and 3rd trimester visits, as well as at time of delivery.
2. Assisting women with HIV in becoming virally suppressed and maintaining viral suppression

Key Takeaways

- Statewide efforts to educate providers on the importance of following perinatal HIV guidelines and increased implementation of 3rd trimester testing have contributed to the reduction in transmission.
- Continued efforts to increase outreach and education on HIV care during a mother's pregnancy, including seeking HIV prenatal care, and adherence to ARTs for viral suppression remain important in reducing transmissions.

While many interventions can be performed at the time of labor and delivery, the most important factors for prevention are during pregnancy.

As a Reminder: Perinatal Exposure Reporting

According to Georgia's notifiable disease reporting law, healthcare facilities providing HIV care and testing must report within seven (7) days any HIV perinatal exposure (infant whose mother has tested positive for HIV regardless of if the infant's HIV status is known; all labs from birth to 17 months must be reported and a Pediatric Case Report Form completed).

The pediatric case report form, which is also used to report perinatal exposure, can be found on the GA DPH website and submitted by (1) submitting a secure and confidential electronic pediatric case report form via SendSS , (2) calling the HIV Epidemiology Unit at 1-800-827-9769, (3) or mailing the below paper reports to the Georgia Department of Public Health using the following address:

Mailing Address
Georgia Division of Public Health
Epidemiology Section
P.O. Box 2107
Atlanta, GA 30314

Please double envelope all mail and do NOT write HIV or AIDS or any PII (personally identifiable information) on the envelope.