

# Born to HIV-Positive Women: A Guideline for SSM Health Hospitals

## Management of Neonates Clinical Practice Guideline (CPG)

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**Background Information for Guideline**

The risk of Mother to Child Transmission (MTCT) of HIV can be significantly reduced by following the guidelines provided by the National Institute of Health (NIH) and endorsed by the American Academy of Pediatrics (AAP). The aim of this guideline is to standardize care for neonates born to HIV positive mothers in regard to HIV diagnostic testing, the use of antiretroviral therapy (ART), and follow-up planning.

SSM Cardinal Glennon Children's Medical Center works in conjunction with the Project ARK and St Louis Children's Hospital to assist with all neonates born to HIV-positive women. Project ARK is a St. Louis-based, federally funded program to support children and adults with HIV.

**Guideline Inclusion Criteria**

This guideline is intended for neonates born to HIV-positive mothers at an SSM facility.

**Guideline Exclusion Criteria**

This guideline is not intended for:

- (a) neonates with documented HIV infection (i.e. positive HIV RNA PCR)
- (b) neonates > 48 hours of age
- (c) Please call the Pediatric Infectious Diseases on-call attending physician for these circumstances

**1. HIV-related Testing of the Neonate**

- a. As soon as feasible after birth, obtain a HIV-1 RNA PCR QUANTITATIVE and CBC with differential.
- b. After discharge from the birth hospital, the neonate will have multiple follow up visits with SLCH
- c. Turn-around-time for HIV-1 RNA PCR QUANTITATIVE is typically 2-3 business days
- d. If HIV-1 RNA PCR QUANTITATIVE is positive from the HIV PCR obtained at birth, page the Pediatric Infectious Diseases physician on call.

**2. Prophylactic Antiretroviral Therapy for the Neonate**

- a. Antiretroviral therapy for the neonate will depend on a number of risk factors in regard to prenatal and perinatal care and divided into **low risk** or **high risk**
  - i. **Low risk definition** (must meet all of the below criteria)
    1. Neonates born to mothers who have received standard antepartum and intrapartum antiretrovirals (or from at least early in the second trimester)
    2. Mother has an undetectable viral load prior to delivery
  - High risk definition** (neonates with any of the following risk factors)
    1. Neonates born to mothers who did not receive standard antepartum and intrapartum antiretrovirals
    2. Mothers who have a detectable HIV viral load prior to delivery
  - ii. Note: the AAP Red Book recommends that HIV positive woman who are on antiretroviral therapy during pregnancy and have a viral load of <1000 copies/mL near delivery do not need intrapartum IV zidovudine. All other women, including those with unknown HIV RNA PCR, should receive IV zidovudine.
  - b. Management of neonates defined as low risk stratified by gestational age
    - ii. first 6 weeks of life
    - iii.  $\geq 30$  to  $< 35$  weeks' gestation: oral zidovudine (AZT) 2 mg/kg, twice daily for 14 days, then increase to 3 mg/kg, twice daily to complete a 6 week total course
    - iv.  $< 30$  weeks' gestation: oral zidovudine (AZT) 2 mg/kg, twice daily for 28 days, then increase to 3 mg/kg, twice daily to complete a 6 week total course
    - v. If the baby cannot tolerate oral zidovudine (AZT), intravenous AZT can be used (see 2021 Red Book or Lexicomp for dosing)
- b. **Management** of neonates defined as **high risk**
  - i. zidovudine (AZT) **PLUS** lamivudine (3TC) **PLUS** nevirapine (three drugs total)
  - ii. zidovudine (AZT) dosing
    1. Use same dosing as listed above for the low risk group
  - iii. Nevirapine dosing
    1. Gestational age  $\geq 37$  weeks: 6 mg/kg/dose PO BID
    2. Gestational age 34-37 weeks:
      - a. Birth to 1 week of age: 4 mg/kg/dose PO BID
      - b.  $>1$  week of age: 6 mg/kg/dose PO BID
  - iv. Lamivudine (3TC) dosing
    - a. Birth to 4 weeks of age: 2 mg/kg/dose PO BID
    - b.  $>4$  weeks of age: 4 mg/kg/dose PO BID
  - v.

### 3. **Follow-Up Plan for Neonates Being Discharged from their Birth Hospital**

4. As soon as possible after delivery, please contact Carrie Shouse RN who is the Perinatal Nurse Coordinator with Project ARK at (314) 458-7820 (alternative number: 314-652-2444)

ext. 102). Typically, Project ARK staff will come to the birth hospital to meet with mom and her newborn before they are discharged to home.

5. Other Contact Info

a. Carrie Shouse

- i. The SPOT | Project Ark
- ii. Washington University School of Medicine
- iii. Department of Pediatrics
- iv. 4169 Laclede Ave | Campus Box 8116
- v. Saint Louis, Missouri 63108
- vi. SPOT Phone: 314 535-0413 ext. 220
- vii. SPOT Fax: 314.535.0038

b. Phyllis Ballard, RN

- i. Clinical Nurse Coordinator
- ii. Washington University Department of Pediatrics
- iii. Project ARK/The Spot
- iv. One Children's Place ,Campus Box 8116
- v. St Louis MO 63110
- vi. 314-454-4145 office
- vii. 855-877-7850 fax
- viii. 314-412-6302 cell
- ix. [ballard\\_p@wustl.edu](mailto:ballard_p@wustl.edu) email

- c. Prior to discharge, all newborns born at SSM Hospitals in the St. Louis region should have follow up arranged with SLCH Pediatric Infectious Diseases clinic
- d. Prior to discharge, please arrange follow up with

## **References**

The above guideline was adapted from recommendations made by the following publications:

- NIH website: <https://aidsinfo.nih.gov/guidelines/html/3/perinatal/187/antiretrovial-managment-of-newborns-with-perinatal-hiv-exposure-or-perinatal-hiv>
- 2021 Red Book (published by the AAP)