Clinical Practice Policy:	Care of Infants of HIV Positive Mothers
Effective Date:	November 1, 2017
Approved By:	CLB Practice Council: CWN PPG Committee: 10/11/2107 SPP Committee: 10/18/2017 NEB: 10/20/2017

Purpose
To provide policies, guidelines and information for care of infants of HIV positive mothers.

Background
Infants born to HIV positive mothers require prompt recognition and care to minimize the risk of mother to child transmission of HIV infection.

Risk Factors
Infants born to mothers with known HIV infection

Immediate Care of Newborn after Birth
- Patient-specific care plan which can be found in the mother's record as bookmarked note entitled (when the note is opened)" Perinatal/Neonatal Antiretroviral Guidelines".
- NICU triage LIP must be notified of infants born to mothers who are HIV positive.
- Infants will be evaluated by NICU LIP in the NICU triage area.
- NICU LIP will page Children's Hospital Infectious Diseases Fellow for Immunocompromised Patients via CHB's page operator: (617 355-6369)
- The infant should be bathed and cleaned of maternal secretions (especially bloody secretions) as soon as possible after birth. Erythromycin ointment should be administered after the eyes are cleansed. Cleanse eyes from the inner aspect of the eye to the outer aspect with warm/room temperature damp cloth or gauze.
- Vitamin K should be given after the infant is bathed or the site is cleansed well.

Laboratory testing
- The following blood work is standard of care for the infant at risk and must be drawn before antiretroviral medication are is started:
  - **CBC with differential and platelet count**
  - **AST, ALT**
  - **HIV Proviral PCR** - Send minimum 1 ml in lavender top tube. Test is sent to ARUP Laboratories via BWH lab send out procedure. Turnaround time for results is 3-4 business days.
- CMV shell vial from urine or saliva OR a CMV PCR from urine should also be sent but should not delay treatment (hyperlink CMV CPP here)

© Department of Pediatric Newborn Medicine, Brigham and Women's Hospital

Antiretroviral Medications

Gestational age at birth (weeks)	Zidovudine Dose
< 30	2 mg/kg/dose PO OR 1.5 mg/kg/dose IV q12h X 4 weeks, then 3 mg/kg/dose PO OR 2.3 mg/kg/dose IV q12h X 2 weeks
30 - 34	2 mg/kg/dose PO OR 1.5 mg/kg/dose IV q12h X 2 weeks, then 3 mg/kg/dose PO OR 2.3 mg/kg/dose IV q12h X 4 weeks
≥ 35	4 mg/kg/dose PO q12h X 6 weeks OR 3 mg/kg/dose IV q12h X 6 weeks

Weight	Nevirapine Dose	Frequency of 3 dose regimen
< 1.5 kg	2 **mg/kg** PO	1st dose: STAT after birth 2nd dose: 48 hours after first dose Final dose: 96 hours after second dose
1.5 – 2 kg	8 mg PO	
> 2 kg	12 mg PO	

- Complete BWH Neonatal Drug Administration Guidelines for zidovudine, nevirapine and lamivudine can be found at the following links:
  - **Zidovudine:** http://www.bwhpikenotes.org/policies/departments/NICU/drug_admin/DAGs/Zidovudine.pdf
  - **Nevirapine:** http://www.bwhpikenotes.org/policies/departments/NICU/drug_admin/DAGs/Nevirapine.pdf
  - **Lamivudine:** http://www.bwhpikenotes.org/policies/departments/NICU/drug_admin/DAGs/Lamivudine.pdf

- Antiretroviral therapy should be ordered by the NICU LIP and started as soon as possible after birth, within 8 hours. and should be continued for the first 6 weeks of life.
- Please order antiretroviral medications as 'STAT' so medication preparation will be expedited and medications will be tubed to patient location.
- Once the medications are ready from pharmacy, they can be administered to the infant wherever the infant is (i.e. WBN or NICU)
- Parents/caregiver should be taught to administer neonatal medications.
- Initiate obtaining medications for outpatient administration ASAP and ensure parents obtain outpatient supply of medications before discharge:
  - Available from BWH outpatient pharmacy: Monday – Friday, 9 AM – 5:30 PM.
  - Please prescribe 2 week supply to be dispensed by BWH pharmacy and separate prescription for the balance of the 6 week supply to be filled at an outside pharmacy. Pharmacy will dispense one bulk bottle of oral solution (240 ml) and several oral syringes for medication administration.

© Department of Pediatric Newborn Medicine, Brigham and Women's Hospital

- In emergency, if supply available, a 2 week supply of medication may obtain from BWH inpatient pharmacy via 207 form (with patient name, MRN, and dispensed item).

Other Care Guidelines

- Hepatitis B vaccine should be administered after the infant is bathed or the site is cleansed well, within the first 24 hours of life
- Circumcision is not contraindicated for males born at risk for HIV disease.
- Breastfeeding is not recommended for infants of HIV infected mothers.
- Infants at risk for HIV disease should receive all routine immunizations. Modifications in the schedule for live virus vaccines may be required for infants with known HIV infection.

References:

1. Cloherty, J., Eichenwald, E. & Stark, A., (Eds.), 2012, Manual of Neonatal Care, 7th Ed., Philadelphia: Lippincott Williams & Wilkins.
2. Human Immunodeficiency Virus. In: Kimberlin D, Brady M, Jackson M, Long S eds. Red Book 2015: Report of the Committee on Infectious Diseases. Elk Grove Village, IL: American Academy of Pediatrics; 2015: p. 473-474.
3. Panel on Treatment of HIV-Infected Pregnant Women and Prevention of Perinatal Transmission. Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV Transmission in the United States. September 14, 2011; pp 1-207. Available at http://aidsinfo.nih.gov/ContentFiles/PerinatalGL.pdf. Accessed September 28, 2017.
4. Taketomo, Carol K. et al. (2011-2012), 18th ed. Pediatric Dosage Handbook. Hudson, Ohio: Lexi-Comp.
5. Tschudy, M.M. & Arcara, K.M. (2012). 19th ed. The Harriet Lane Handbook. Philadelphia: Elsevier Mosby.
6. Young T.E. & Mangum B. Neofax, 24th ed. 2011. Thomson Reuters Clinical Editorial Staff – PDR Network.

© Department of Pediatric Newborn Medicine, Brigham and Women's Hospital