I. Purpose

To provide a clinical practice policy for initial evaluation and care of the newborn infant with possible congenital Zika virus infection.

II. Background

This guideline has been developed in accordance with CDC and MA DPH guidelines (most recently updated on 8/16/16) and in collaboration with BCH Division of Infectious Diseases. Using the links below, please review these resources for more information:

- Interim Guidance for Evaluation and Management of Infants with Possible Congenital Zika Virus Infection - United States, August 2016
- Zika Training For Healthcare Providers
- Clinical Guidance for Healthcare Providers Caring for Infants and Children
- Zika Virus Infection and Microcephaly

Please review the following instructional video on measurement of head circumference:
- Measuring Infant Head Circumference: An instructional video for healthcare providers

III. Policies

A. No precautions different from routine Standard Precautions are required for all infants undergoing evaluation for possible congenital Zika virus infection.

B. The NICU team should attend deliveries of all infants with possible congenital Zika virus infection.

C. For newborns with normal clinical exam and normal fetal imaging studies born to Zika virus-exposed (confirmed or pending confirmation) mothers or mothers with negative Zika virus rRT-PCR and IgM, but who were tested for Zika >12 weeks after potential exposure:
   - Perform a detailed physical exam at birth, including anthropometric data.
   - If physical exam is normal, transfer the baby to NICU triage at 2 hours of life for the following:
     - Draw 2.5 ml blood in a red top tube for Zika virus rRT-PCR and IgM testing.
o Place a urine bag and collect 3-5 ml urine for Zika virus rRT-PCR testing (the baby may be transferred to WBN with the urine bag in place for specimen collection).

o Fill out the BWH specimen submission form and send to the lab with blood and urine samples.
  ▪ See BWH specimen submission form here:
    • http://www.bwhpikenotes.org/Departments_Centers/NewbornMedicine_NICU/documents/State%20Lab%20Form.pdf

- O The ordering provider on the submission form should be the Attending MD listed on the Team in EPIC
  ▪ e.g. at birth, all BWH Faculty Newborn Service patients are currently listed with Lise Johnson, MD as the Attending. Babies cared for by other groups who round at BWH will have a pediatrician from the respective group listed as Attending MD for the Epic Team).

- O Call the State Lab (24/7 line: 617-983-6800) to provide information on patient’s clinical history and samples that are being sent for testing.

- O Call the pediatrician and transfer the baby to WBN.
  - In WBN:
    - O Obtain a head ultrasound within the first 24 h and hearing screening prior to discharge.
    - O Request a non-urgent BCH Infectious Disease Consult (BCH ID) (617-355-6832); discuss and determine the feasibility and necessity of additional studies (eye exam, CSF, and brain MRI) on a case-by-case basis. The BCH ID consult will help arrange follow-up in the Perinatal Diagnostic Clinic at BCH with the Director of the clinic (e.g. Dr. Sandra Burchett) or their clinical designee, or the ID fellow. This clinic will help arrange an eye exam, and follow-up hearing assessments.

D. For symptomatic newborns (microcephaly or abnormal neurologic exam) or newborns with positive fetal imaging studies (i.e. brain calcifications) born to Zika virus-exposed (confirmed or pending confirmation) mothers:

- Admit to NICU.

- In addition to the studies in C, include the following in the evaluation:
  - O CSF studies (cell counts, protein, glucose, Zika virus rRT-PCR and an additional tube to save if possible)
  - O Brain MRI, (in addition to head ultrasound)
  - O Eye exam