SCREENING AND TREATING HEPATITIS C IN PERINATALLY EXPOSED INFANTS

Infants born to persons with RNA-positive hepatitis C virus (HCV) are at risk for acquiring hepatitis C. The U.S. Centers for Disease Control and Prevention (CDC) recommends screening all pregnant persons during each pregnancy, and testing infants born to persons with HCV infection to determine their HCV status. The rate of perinatal transmission of HCV is approximately 5%, although rates are higher among persons with poorly controlled HIV coinfection, and persons with HCV RNA levels above >6 log10 IU/mL. **Screening, following, and treating children exposed to HCV is recommended.**

HEPATITIS C TEST TYPES

- **HCV RNA** test: a marker of HCV viremia in the blood by nucleic acid testing (NAT). The presence of HCV RNA indicates current infection.
- **Anti-HCV** test: detects the presence of hepatitis C antibodies in serum. The presence of HCV antibodies does not indicate whether the infection is acute, chronic, or resolved.

Additional test interpretation guidance: https://www.cdc.gov/hepatitis/HCV/PDFs/hcv_graph.pdf

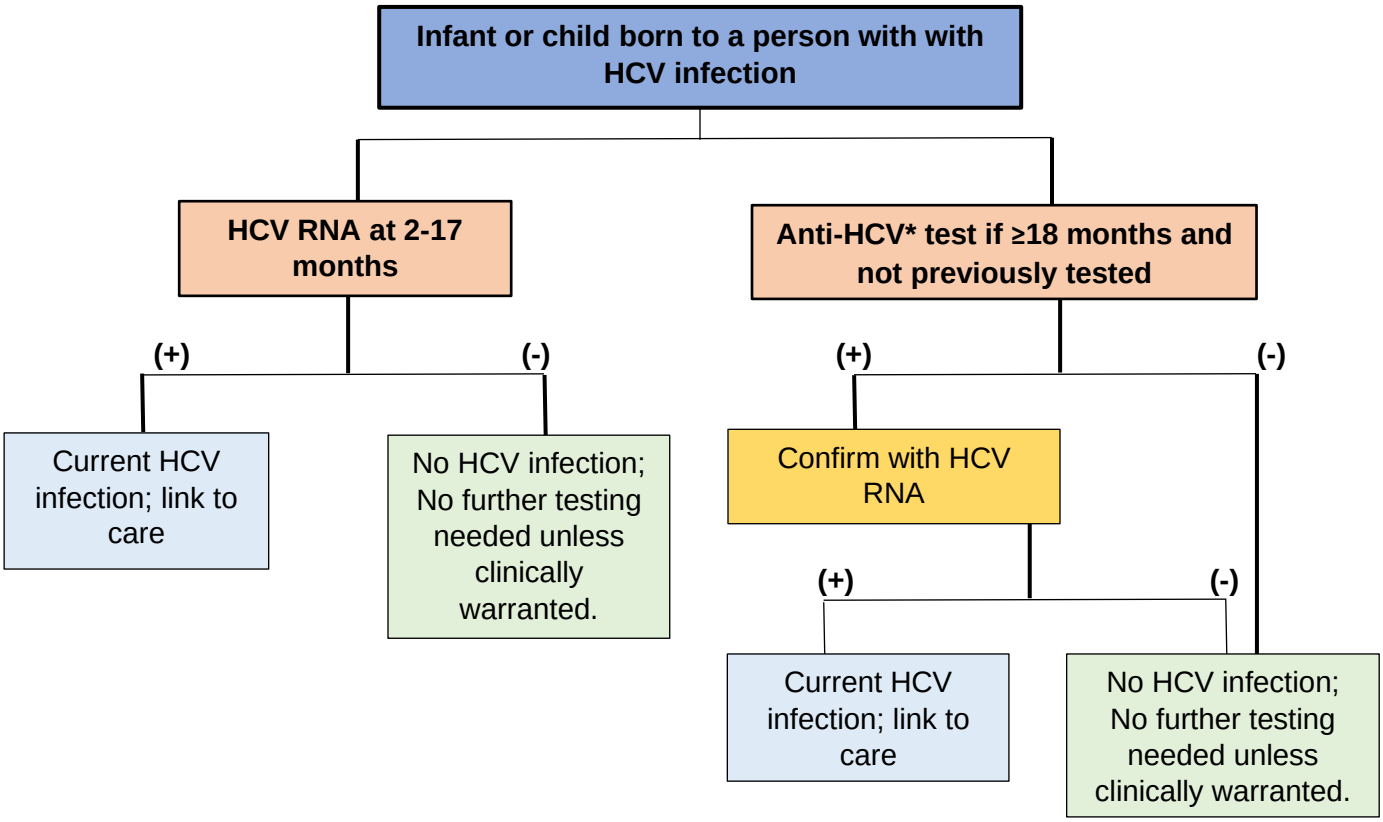
- Perinatally exposed infants[1] should receive an HCV RNA test at age 2–6 months to identify children in whom chronic HCV infection might develop if not treated.
  - Infants with detectable HCV RNA should be managed in consultation with a health care provider with expertise in pediatric hepatitis C management.
  - Infants with an undetectable HCV RNA result do not require further follow-up unless clinically warranted.
- Infants and children aged 7–17 months who are perinatally exposed to HCV and have not previously been tested should receive a HCV RNA test.
- Children aged ≥18 months who are perinatally exposed to HCV and have not previously been tested should receive an anti-HCV test with reflex to NAT for HCV RNA.
- Early testing with HCV RNA (i.e. at 2-6 months) during other well-child visits is cost-effective and cost-saving in preventing morbidity and mortality from chronic hepatitis C complications.
- Siblings of infants with perinatally-acquired HCV should be tested for HCV infection if born from the same person (following the same screening testing recommendations) unless the birthing person was known to be HCV negative (i.e., HCV RNA not detected) during the previous pregnancy.
- **Perinatal hepatitis C is a notifiable condition. All suspected or confirmed cases of hepatitis C must be reported to Maine CDC via electronic lab reporting, Telephone: 1-800-821-5821 or Fax: 1-800-293-7534.**

Additional resources on viral hepatitis from Maine CDC:
https://www.maine.gov/dhhs/hepatitis

[1] Perinatally exposed children are children born to pregnant persons with HCV infection.

HEPATITIS C TESTING ALGORITHM FOR PERINATALLY EXPOSED INFANTS

(+) indicates positive result (-) indicates negative result



***Request reflexive anti-HCV to HCV RNA testing wherever possible to minimize occasions of venipuncture.**

This testing algorithm is consistent with CDC Recommendations for Hepatitis C Testing Among Perinatally Exposed Infants and Children — United States, 2023.

HCV Quick Testing Guide		
Infected with HCV	**Previously Exposed to HCV**	**No Exposure to HCV**
HCV RNA (+) and Anti-HCV (+)	HCV RNA (-) and Anti-HCV (+)	HCV RNA (-) and Anti-HCV (-)

Additional Resources:

- Algorithm For Screening and Treating Hepatitis C In Pregnant and Postpartum Women: https://www.maine.gov/dhhs/oms/about-us/projects-initiatives/mainemom
- CDC Recommendations for Hepatitis C Testing Among Perinatally Exposed Infants and Children — United States, 2023: https://www.cdc.gov/mmwr/volumes/72/rr/rr7204a1.htm
- Guidelines by the American Association for the Study of Liver Disease: https://www.hcvguidelines.org/unique-populations/children

TREATMENT OF HEPATITIS C IN PERINATALLY EXPOSED INFANTS

- Direct-acting antiviral (DAA) treatment with an approved regimen is recommended for all children and adolescents with HCV infection aged ≥3 years as they will benefit from antiviral therapy, regardless of disease severity.
- No recommended curative treatments are FDA approved for pregnant persons or children aged <3 years.
- All perinatally exposed infants with a positive HCV RNA test at >2 months should be linked to care, typically to a pediatric infectious disease specialist or pediatric gastroenterologist.
- Below is a list of specialists in Maine:

Maine Medical Partners Division of Pediatric Gastroenterology
887 Congress Street, Suite 300
Portland, ME 04102
Phone: 207-662-5522
Fax: 207-662-5526

Maine Medical Partners Pediatric Infectious Diseases
887 Congress Street, Suite 300
Portland, ME 04102
Phone: 207-662-5522
Fax: 207-662-5526

Northern Light Pediatric Gastroenterology
417 State Street, Webber Medical Building, Suite 121
Bangor, ME, 04401
Phone: 207-973-7107
FAX: 207-973-9003

Northern Light Pediatric Infectious Disease Care
417 State Street, Webber Medical Building
Bangor, ME, 04401
Phone: 207-973-4051
FAX: 207-973-9003

PROVIDER TALKING POINTS

Reassurance is critical when talking to pregnant patients about a hepatitis C diagnosis or to the parent(s)/ guardian(s) of an infant or child perinatally exposed to HCV. A Guide for Pregnant People with Hep C is available here.

Counsel patients on the following:

- The risk of transmission is low (5-10%) and it will not impact delivery or ability to breastfeed.
- If the infant does contract HCV, treatment can be initiated as young as 3 years old.
    - Treatment is appropriate for almost everyone with HCV, even if they do not have symptoms.
    - Treatment with direct-acting antivirals (DAA) reduces the risk of liver damage (including cancer).
    - DAA therapy consists of daily oral medication for a few months (typically 8-12 weeks) and cures most HCV infections (over 90%) with few side effects.
- Treatment should be recommended for the pregnant person as well. This can take place during the postpartum period, upon cessation of breastfeeding, if applicable.
- Any other biological children, regardless of age, should also be screened for HCV as they could also have been exposed prenatally. If they test positive, it is not too late to treat.
- HCV is not transmitted by casual contact.
    - Children with HCV infection do not pose a risk to other children and can participate in school, sports, and activities without restrictions.
- It is important to minimize blood exposures, such as avoiding the sharing of toothbrushes, razors, and nail clippers, and the use of gloves and dilute bleach[2] to clean up blood.

[2] In general, bleach should be diluted with water 1:10 (bleach: water). It is important to check each product label.