Public Health Epidemiology & Public Health Preparedness

May 8, 2024, Vol. 44, No. 13 (Page 1 of 2)

## **EPI-NEWS**

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IN THIS ISSUE: RECOMMENDATIONS FOR HEP C TESTING AMONG PERINATALLY EXPOSED INFANTS AND CHILDREN

### CDC Recommendations for Hepatitis C Testing Among Perinatally Exposed Infants and Children — United States, 2023

#### Introduction

Hepatitis C is a liver infection caused by the hepatitis C virus (HCV). For some persons hepatitis C is an acute, short-term illness. However, more than half of people infected with HCV develop chronic illness that can lead to serious adverse health outcomes including cirrhosis, liver cancer, and death.<sup>1</sup>

HCV is spread when blood from a person infected with the virus enters the body of someone who is not infected. Today, most people become infected with HCV by sharing needles or other equipment used to prepare and inject drugs. However, perinatal exposure (i.e., exposure during pregnancy or delivery) can also result in HCV infection. Rising rates of HCV infection among reproductive-aged persons in recent years has resulted in an increase in HCV infections during pregnancy. In 2020 the Centers for Disease Control and Prevention (CDC) released universal screening recommendations for adults, which included recommendations for screening for pregnant persons during each pregnancy.<sup>1,2</sup>

It is estimated that 6-7% of perinatally exposed infants and children will develop chronic HCV infection. However, approximately 70% of perinatally exposed children are not being tested for HCV. Therefore, in November 2023 CDC released additional recommendations for HCV testing among perinatally exposed infants and children with the goal of identifying more children with perinatal HCV and getting them linked to care. This Epi-News summarizes these new recommendations.<sup>2</sup>

#### Epidemiology

Rates of HCV infections have been rising in the United States since 2010, with rates of acute infections more than tripling among reproductiveaged persons as of 2021, from 0.8 to 2.5 per 100,000 population among persons aged 20–29 years and from 0.6 to 3.5 among persons aged 30– 39 years. Subsequently, **overall rates of HCV infections during pregnancy have increased by 20% during 2016–2020 and up to tenfold during 2000– 2019**. CDC estimates that approximately 69,800 acute HCV infections occurred during 2021, with the highest rate among persons aged 20–39 years, representing approximately half of reported acute cases. Because of the increase in acute HCV infections, newly reported chronic cases are also highest among persons aged 20–39 years.<sup>2</sup>

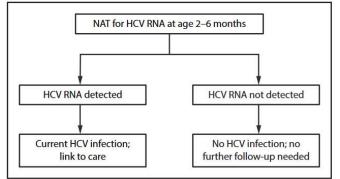
Although a history of injection drug use is the most commonly reported risk factor among adults for acquiring HCV infection, perinatal transmission is the primary risk factor among young children. Perinatal transmission is limited to infants born to pregnant persons with detectable HCV RNA and occurs more frequently among pregnant persons with poorly controlled HIV coinfection and possibly also those injecting drugs. The specific levels of HCV RNA or a specific HCV genotype are not known to be associated with increased risk for transmission. Giving birth to a child who was perinatally infected also does not increase risk for perinatal transmission over baseline in subsequent pregnancies.<sup>2</sup>

A total of 199 perinatal HCV cases were reported to CDC in 2021.<sup>2</sup> To date Northern Nevada Public Health has reported two (2) cases of perinatal HCV since it became nationally notifiable in 2018.

#### CDC's HCV Testing Recommendations for Perinatal Exposed Infants and Children

 HCV testing of all perinatally exposed infants with a nucleic acid test (NAT) for detection of HCV RNA at age 2–6 months (Figure 1). Infants and children aged 7–17 months who are perinatally exposed to HCV and have not previously been tested also should receive a NAT for HCV RNA. Infants with detectable HCV RNA should be managed in consultation with a health care provider with expertise in pediatric hepatitis C management. To confirm chronic hepatitis C, children who test positive should be retested with a NAT for HCV RNA before beginning treatment, which can be started as early as age 3 years. Infants with an undetectable HCV RNA result do not require further follow-up unless clinically warranted.

## Figure 1: Algorithm for hepatitis C virus testing of perinatally exposed children — United States, 2023<sup>\*,1,5,1]</sup>



Abbreviations: FDA = Food and Drug Administration; HCV = hepatitis C virus; NAT = nucleic acid test.

- \* Perinatally exposed children are children born to pregnant persons with HCV infection.
- <sup>†</sup> Perinatally exposed children aged 7–17 months who have not previously been tested also should receive a NAT for HCV RNA.
- <sup>§</sup> Off-label use of an FDA-approved diagnostic test requires validation by the testing laboratory.
- <sup>9</sup> No further follow-up needed after a negative HCV RNA performed at age 2–6 months unless clinically warranted (i.e., clinical symptoms or signs or laboratory findings consistent with hepatitis C).

Source: https://www.cdc.gov/mmwr/volumes/72/rr/rr7204a1.htm.

2) Children aged  $\geq$ 18 months who are

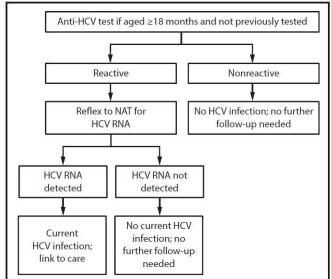
perinatally exposed to HCV and have not
previously been tested should receive an
anti-HCV test with reflex to NAT for HCV
RNA (Figure 2). Children aged ≥18 months
with detectable HCV RNA should be linked to
care. Children aged ≥18 months with nonreactive anti-HCV or an undetectable HCV
RNA result do not require further follow-up.

#### Treatment

Approximately 6-7% of perinatally exposed children will acquire perinatal HCV infection. Curative therapy is FDA approved for children aged  $\geq$ 3 years.<sup>2</sup> Detailed management guidelines are available at

https://www.hcvguidelines.org/uniquepopulations/children.

# Figure 2: Algorithm for hepatitis C virus testing of perinatally exposed children\* aged $\geq$ 18 months who have not previously been tested<sup>†</sup> — United States, 2023



**Abbreviations:** anti-HCV = hepatitis C virus antibody; HCV = hepatitis C virus; NAT = nucleic acid test.

- \* Perinatally exposed children are children born to pregnant persons with HCV infection.
- $^{\dagger}$  Not tested for perinatal HCV transmission with a NAT for HCV RNA at age 2–17 months.
- Source: https://www.cdc.gov/mmwr/volumes/72/rr/rr7204a1.htm.

#### Reporting

Hepatitis C infection, to include acute, chronic, and perinatal, is a reportable communicable disease. The full list of reportable communicable diseases and reporting forms can be found at:

http://tinyurl.com/WashoeDiseaseReporting.

Report communicable diseases to Northern Nevada Public Health. To report a communicable disease, please call 775-328-2447 or fax your report to NNPH at 775-328-3764.

#### Acknowledgement

Thank you to all health care providers, infection control practitioners, laboratory staff, as well as schools and daycares for their reporting and collaboration to make this work possible.

#### References

1 Centers for Disease Control and Prevention. Hepatitis C. Accessed 19 Feb 2024. <u>https://www.cdc.gov/hepatitis/hcv/index.htm</u>. 2 Panagiotakopoulos L, Sandul AL, et al. CDC Recommendations for Hepatitis C Testing Among Perinatally Exposed Infants and Children — United States, 2023. MMWR Recomm Rep 2023;72(No. RR-4):1–19. DOI: <u>http://dx.doi.org/10.15585/mmwr.rr7204a1</u>.