Hepatitis C

Summary

Hepatitis C is a contagious liver disease that ranges in severity from a mild illness lasting a few weeks to a serious, lifelong illness that attacks the liver.

Hepatitis C virus (HCV) causes both acute and chronic infection. Acute HCV infection is usually asymptomatic and is only very rarely (if ever) associated with life-threatening disease. About 15–45% of infected persons spontaneously clear the virus within 6 months of infection without any treatment.

The remaining 55–85% of persons will develop chronic HCV infection. Of those with chronic HCV infection, the risk of cirrhosis of the liver is between 15–30% within 20 years.

Agent

Hepatitis C virus (HCV) is an enveloped, single-stranded RNA virus which appears to be distantly related to Flaviviruses.

At least six distinct HCV genotypes (genotypes 1–6) and more than 50 subtypes have been identified. Genotype 1 is the most common HCV genotype in the United States.

Transmission

Reservoir:

Humans. HCV has also been transmitted experimentally to chimpanzees.

Mode of transmission:

More commonly, a person can get HCV infection through:

- Shared use of needles, syringes, or other drug-preparation equipment (most common means of HCV transmission)
- Receipt of donated blood, blood products, and organs
- Needle stick injuries in health care settings
- Birth to an HCV-infected mother

Less commonly, a person can also get Hepatitis C virus infection through:

- Receipt of tattoos in non-professional settings
- Receipt of long-term hemodialysis
- Shared personal care items, such as razors or toothbrushes
- Sexual contact with a person infected with HCV

Period of communicability:

From one or more weeks before onset of the first symptoms; may persist in most persons indefinitely. Peaks in virus concentration appear to correlate with peaks in ALT activity.

Clinical Disease

Incubation period:

Average 6–7 weeks; range 2 weeks to 6 months.

Illness:

Onset is usually insidious, with symptoms such as fever, fatigue, dark urine, clay-colored stool, abdominal pain, loss of appetite, nausea, vomiting, joint pain, and jaundice. However, hepatitis C infections progress to jaundice less frequently than hepatitis B infections. Initial infection may be asymptomatic (more than 90% of cases) or mild. About 50% - 80% develop chronic infection, out of which 60% - 70% develop chronic liver disease and 1% - 5% develop liver cancer.

Diagnosis

Clinical criteria:

Acute Hepatitis C:

An illness with discrete onset of any sign or symptom consistent with acute viral hepatitis (e.g., fever, headache, fatigue, loss of appetite, nausea, vomiting, diarrhea, and abdominal pain); and

(a) Jaundice OR

(b) Peak elevated total bilirubin level ≥ 3.0 mg/dl OR

(c) Peak elevated serum alanine aminotransferase (ALT) level >200 IU/L

Chronic Hepatitis C:

One or more of the following

(a) Jaundice OR

(b) Peak elevated total bilirubin level ≥ 3.0 mg/dl OR

(c) Peak elevated serum alanine aminotransferase (ALT) level >200 IU/L AND

The absence of a more likely diagnosis (which may include evidence of acute liver disease due to other causes or advanced liver disease due to pre-existing chronic Hepatitis C virus (HCV) infection or other causes, such as alcohol exposure, other viral hepatitis, hemochromatosis, etc.)

Perinatal Hepatitis C:

Perinatal hepatitis C in pediatric patients may range from asymptomatic to severe and rapidly progressing hepatitis.

Treatment

There are several direct- acting antiviral (DAA) medications available for treating people with HCV infections. Examples include Elbasvir/Grazoprevir (Zepatier), Glecaprevir/Pibrentasvir (Mavyret), Sofosbuvir/Ledipasvir (Harvoni), Sofosbuvir/Velpatasvir (Epclusa), and Sofosbuvir/Velpatasvir/Voxilaprevir (Vosevi). Some DAA regimens for treatment are pan-genotypic and do not require genotype testing, though some cases may require genotype testing for treatment authorization. New Mexico Medicaid no longer requires prior authorization for treatment with Epclusa and Mavyret. Persons with HCV and chronic HBV co-infection require linkage to care with regular monitoring to prevent liver damage and/or hepatocellular carcinoma. The complete guidance, which is updated regularly, is available at www.hcvguidelines.org.

Surveillance

Laboratory criteria:

Acute and Chronic Hepatitis C:

Confirmed:

- Nucleic acid test (NAT) for HCV RNA positive (including qualitative, quantitative or genotype testing)
- A positive test indicating presence of hepatitis C viral antigen(s) (HCV antigen)

Probable:

- A positive test for antibodies to hepatitis C virus (anti-HCV)

Perinatal Hepatitis C:

Confirmed:

- HCV RNA positive test results for infants between 2 to 36 months of age; OR
- HCV genotype test results for infants between 2 to 36 months of age or greater; OR
- HCV antigen test results for infants between 2 to 36 months of age or greater.

Case Definition:

Confirmed Acute Hepatitis C:

- A case that meets clinical criteria and has confirmatory laboratory evidence, OR
- A documented negative HCV antibody followed within 12 months by a positive HCV antibody test (anti-HCV test conversion) in the absence of a more likely diagnosis, OR
- A documented negative HCV antibody OR negative hepatitis C virus detection test (in someone without a prior diagnosis of HCV infection) followed within 12 months by a positive hepatitis C virus detection test (HCV RNA test conversion) in the absence of a more likely diagnosis

Probable Acute Hepatitis C:

- A case that meets clinical criteria and has presumptive laboratory evidence, AND
- Does not have a hepatitis C virus detection test reported, AND
- Has no documentation of anti-HCV or HCV RNA test conversion within 12 months

Confirmed Chronic Hepatitis C:

- A case that does not meet OR has no report of clinical criteria, AND
- Has confirmatory laboratory evidence, AND
- Has no documentation of anti-HCV or HCV RNA test conversion within 12 months

Probable Chronic Hepatitis C:

- A case that does not meet OR has no report of clinical criteria, AND

- Has probable laboratory evidence AND
- Has no documentation of anti-HCV or RNA test conversion within 12 months, AND
- Does not have an HCV RNA detection test reported

Confirmed Perinatal Hepatitis C:

- Infant who has a positive test for HCV RNA nucleic acid amplification test (NAAT), HCV antigen, or detectable HCV genotype at ≥2 months and ≤36 months of age and is not known to have been exposed to HCV via a mechanism other than perinatal.
- Epidemiologic Linkage: Maternal infection with HCV of any duration, if known. Not known to have been exposed to HCV via a mechanism other than perinatal (e.g. not acquired via healthcare).

Reporting:

Report all probable or confirmed cases of Hepatitis C within 24 hours to the New Mexico Department of Health (NMDOH) at 1-833-796-8773. Required information includes: patient's name, age, sex, race, ethnicity, home address, home phone number, occupation, and health care provider. Information should also be entered into NM-EDSS per established procedures.

Case Investigation:

1) Create a contact listing and follow-up with the listed contacts.

2) Provide education on avoiding further exposures and to ensure proper medical care is obtained and precautions taken if symptoms develop.

3) Children born to HCV-infected mothers should be tested, as follows:

- HCV RNA at 2 to 36 months of age or
- Anti-HCV at 18 months of age or greater.

4) For additional guidance on persons for whom HCV testing is recommended, refer to the CDC's Testing for Hepatitis C webpage (https://www.cdc.gov/hepatitis-c/testing/index.html)

5) Report the final disposition of each contact investigated.

Control Measures

1. Case management
   1.1. Isolation: Universal precautions to prevent exposure to blood and body fluids.
   1.2. Concurrent Disinfection: Of equipment contaminated with blood or infectious body fluids.
   1.3. Quarantine: Not applicable. Persons should not be excluded from childcare centers.
   1.4. Prophylaxis: Not applicable.
2. Contact management
   2.1. Prophylaxis: No prophylaxis available for contacts. Refer at-risk contacts for medical evaluation and follow-up.
3. Prevention:
   3.1. Vaccination: Currently, no effective HCV vaccine or post-exposure prophylaxis is available.

3.2. Primary prevention includes activities to reduce the risk of contracting the infection. See HCV Fact Sheet.

3.3. Secondary prevention includes activities to reduce the risk of liver disease and other HCV-related chronic diseases among HCV-infected persons. This includes vaccination for HAV and HBV

4. Outbreak

4.1. Outbreak Definition: The occurrence of ≥ 2 acute cases of hepatitis C in association with a common exposure is considered an outbreak.

4.2. Notify the NMDOH immediately at 1-833-796-8773.

4.3. Further guidance on investigating outbreaks including hepatitis C cases that are suspected to be related to healthcare delivery can be found at: www.cdc.gov/hepatitis/Outbreaks/index.html.

References

American Academy of Pediatrics. (2024). Hepatitis C. In: Kimberlin DW et al eds. Red Book: *Report of the Committee on Infectious Disease*, 33rd ed. Itasca, IL: American Academy of Pediatrics.

Centers for Disease Control and Prevention. (2017). *Hepatitis C Resources for Health Care Professionals*. Centers for Disease Control and Prevention. https://www.cdc.gov/hepatitis-c/hcp/resources/index.html

Centers for Disease Control and Prevention. (2025). *Hepatitis C Testing*. Centers for Disease Control and Prevention. https://www.cdc.gov/hepatitis-c/testing/index.html

Centers for Disease Control and Prevention. (2020). *Surveillance Case Definitions for Current and Historical Conditions*. Centers for Disease Control and Prevention. https://ndc.services.cdc.gov/

Centers for Disease Control and Prevention. (2021). *Viral Hepatitis Surveillance and Case Management: Guidance for State, Territorial, and Local Health Departments*. Centers for Disease Control and Prevention. Viral Hepatitis Surveillance and Case Management | Viral Hepatitis | CDC

Heymann, D., ed., *Control of Communicable Diseases Manual*, 21st edition. Washington, DC, American Public Health Association, 2022.

See **Hepatitis C** Fact Sheets (English) (Spanish).