

Hepatitis C Virus (HCV) Information for Health Care Providers

What should be reported?

- Acute hepatitis C virus (HCV) infection (i.e., newly acquired symptomatic HCV infection).
- Chronic and past HCV infection (i.e., persistent infection with HCV, characterized by detection of HCV RNA >6 months after newly acquired infection).
- All available positive serology and nucleic testing results (i.e., EIA with signal-to-cutoff ratio, qualitative and quantitative PCR, genotype).

What is the etiology of HCV?

HCV is a small single-stranded RNA virus in the flavivirus family.

What are signs and symptoms of HCV?

- 80 percent of patients are asymptomatic.
- Symptoms may include fever, abdominal pain, loss of appetite, nausea, jaundice, or dark urine.
- Jaundice occurs in 25 percent of patients; liver function test results generally are less pronounced than with hepatitis B virus infection.
- Acute disease tends to be mild and insidious in onset.
- Average incubation period is 6-7 weeks (range: 2 weeks to 6 months).

What are the long-term effects of HCV?

- Chronic infection (80 percent of patients are asymptomatic).
- Chronic liver disease in 55 percent-85 percent of chronically HCV-infected persons.

- Death from chronic liver disease in <5 percent.
- HCV is the leading indication for liver transplant in the United States.

How is HCV transmitted?

All persons with HCV-RNA in their blood are considered infectious. The highest infection rates (60-90 percent) occur in persons with large or repeated, direct percutaneous exposure to blood or blood products, including:

- Less than 10 percent of cases are sexually transmitted.
- Perinatal transmission accounts for 5 percent of cases.

Who is at risk for HCV?

High risk:

- Injection drug users
- Recipients of clotting factors made before 1987

Intermediate risk:

- Hemodialysis patients
- Recipients of blood and/or solid organs donated before 1992
- Persons with undiagnosed liver problems
- Infants born to HCV-infected mothers

Low risk:

- Health care/public safety workers
- Persons who have sex with multiple partners
- Persons who have sex with an HCV-infected steady partner

How can HCV be prevented?

Persons who use or inject illegal drugs should be advised to:

- Stop using and injecting drugs;
- Enter and complete substance abuse treatment, including relapse prevention programs; or
- If continuing to inject drugs to:
 - Never reuse or share syringes, needles, water, or drug preparation equipment; if injection equipment has been used by other persons, clean with bleach and water;
 - Use only syringes obtained from a reliable source (e.g., pharmacy);
 - Use a new sterile syringe to prepare and inject drugs;
 - Use sterile water to prepare drugs, otherwise use clean water from a reliable source (e.g., tap water);
 - Use a new or disinfected container (“cooker”) and a new filter (“cotton”) to prepare drugs;
 - Clean the injection site with a new alcohol swab prior to injection; and
 - Safely dispose of syringes after one use.
- Receive vaccination against hepatitis B virus (HBV) and hepatitis A (HAV).

Persons diagnosed with a sexually transmitted disease or who are sexually active should be advised to:

- Have sex with only one partner or not at all;
- Use latex condoms correctly during every sexual encounter; and
- Get vaccinated against HBV (and, if risk factors are present, HAV).

Who should be tested for HCV?

- Testing is recommended for all high- and intermediate-risk persons.
- Testing is recommended for low-risk persons only after known exposure.
- Testing is recommended after 12-18 months of age- for infants born to HCV-infected mothers.

What is the treatment for HCV?

- Evaluate the patient for liver disease.
- There are a number of drugs licensed for treatment of persons with chronic HCV infection. Please visit www.HCVguidelines.org for additional information on HCV treatment.
- Evaluate patient for HAV and HBV immunization status; vaccinate if indicated.
- Advise against alcohol consumption and, if necessary, provide counseling for alcohol abuse.

What should be done after a person is exposed to HCV?

- Follow-up of occupational HCV exposures:
 - Perform anti-HCV testing of source patient.
 - For the person exposed to an HCV-positive source:
 - Perform baseline testing for anti-HCV, ALT activity, with follow-up testing at 4-6 months (for earlier diagnosis, testing for HCV RNA may be performed at 4-6 weeks).
 - Confirm all positive anti-HCV results obtained by enzyme immunoassay using HCV RNA testing.
- Immune globulin and antiviral agents are not recommended after exposure to HCV-positive blood. No guidelines exist for administration of antiviral therapy during HCV infection; however, limited data indicate that antiviral therapy may be beneficial if started early in HCV infection. When HCV infection is identified early, refer patient to a specialist for medical management.
- Institutions should establish policies and procedures for HCV testing after percutaneous or mucosal exposures to blood and ensure that staff is familiar with them.
- Clinicians who care for persons with occupational exposure to HCV should be familiar with the risk for HCV infection and recommendations for post-exposure counseling, testing, and follow-up.