

Hepatitis C: General Information

Modes of Transmission

The hepatitis C virus (HCV) is found in blood, and can be spread by:

- Sharing injection drug equipment
- Blood transfusion or organ transplant before 1992
- Receiving clotting factor concentrates before 1987
- An infected mother to her infant during delivery
- Occupational exposure through needle stick
- Sexual contact

Symptoms

The incubation period can vary from 2 to 26 weeks, with an average between 6 to 9 weeks.

Acute Hepatitis C

People who are infected with hepatitis C are usually asymptomatic. However, if a patient has acute hepatitis C, symptoms may include:

- Jaundice
- Dark urine
- Diarrhea
- Nausea
- Fatigue
- Stomach pain

Chronic Hepatitis C

Chronic hepatitis C refers to an infection where the body is not able to eliminate the virus. Most of those infected are asymptomatic and it may take 10 to 30 years from the original time of infection to recognize chronic hepatitis C.

Vaccination and Prophylaxis

There is no vaccine currently available for the hepatitis C virus.

Treatment

Treatment options for hepatitis C are determined by blood test, liver biopsy results and other factors, and are not based solely on the presence of symptoms, since the disease is typically asymptomatic.

The treatment for hepatitis C has evolved substantially since the introduction of highly-effective therapies in 2011. Since that time, new drugs with different mechanisms of action have become, and continue to become, available. For a complete list of current FDA-approved therapies to treat hepatitis C, visit: www.hepatitisc.uw.edu/page/treatment/drugs.

Testing

Hepatitis C status can be determined using results of several commonly ordered tests. The following interpretations are appropriate:

Interpretation of Tests Results for HCV Infection and Further Actions

Test Outcome	Interpretation	Further Actions
HCV antibody nonreactive	No HCV antibody detected	Sample can be reported as nonreactive for HCV antibody. No further action required. If recent exposure in the person tested is suspected, test for HCV RNA. ¹
HCV antibody reactive	Presumptive HCV infection	A repeatedly reactive result is consistent with current HCV infection, or past HCV infection that has resolved, or biological false positivity for HCV antibody. Test for HCV RNA to identify current infection.
HCV antibody reactive, HCV RNA detected	Current HCV infection	Provide the person tested with appropriate counseling and link to care and treatment. ²
HCV antibody reactive, HCV RNA not detected	No current HCV infection	No further action required in most cases. If distinction between true positivity and biologic false positivity for HCV antibody is desired, and if sample is repeatedly reactive in the initial test, test with another HCV antibody assay. In certain situations ³ , follow up with HCV RNA testing and appropriate counseling.

1. If HCV RNA testing is not feasible and the person tested is not immunocompromised, do follow-up testing for HCV antibody to demonstrate seroconversion. If the person tested is immunocompromised, consider testing for HCV RNA.
2. It is recommended before initiating antiviral therapy to retest for HCV RNA in a subsequent blood sample to confirm HCV RNA positivity.
3. Follow up with HCV RNA testing and appropriate counseling if the person tested is suspected of having HCV exposure within the past six months, or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.

Source: CDC. *Testing for HCV infection: An update of guidance for clinicians and laboratorians. MMWR 2013;62(18).*

Other References:

1. Centers for Disease Control and Prevention (CDC). Recommendations for prevention and control of hepatitis C virus infection and HCV-related chronic disease. MMWR 1998;47 (No. RR-19)
2. CDC website: cdc.gov/hepatitis/hcv