

Fact Sheet

HEPATITIS C

Information for Health Professionals

What is Hepatitis C?

Formerly known as non-A, non-B hepatitis, hepatitis C is an RNA virus that accounts for about 20% of all cases of acute hepatitis. There are over 4 million people infected in the U.S., and over 30,000 acute new infections each year. Hepatitis C is responsible for 8-10,000 deaths per year and is the leading cause for liver transplantation in the U.S.

How is Hepatitis C transmitted?

Several routes have been described, but the parenteral route, injection drug use, needle-stick accidents, and transfusion of infected blood or blood products (especially prior to 1990), is the most common. The role of sexual transmission is not clear, but high-risk sexual activity (multiple partners, history of STD's) is a risk factor. Hepatitis C can be transmitted perinatally to about 5% - 6% of infants. Also, chronic hemodialysis is considered a risk factor. Mode of transmission is unknown in a significant number of patients. There is NO evidence that hepatitis C can be transmitted by casual contact, through foods or by coughing or sneezing.

What are the symptoms?

Patients can be completely asymptomatic. Only about 25% - 35% will develop malaise, weakness, or anorexia. Other possible symptoms include nausea, vomiting, abdominal pain, and jaundice (when the whites of the eyes and the skin turn yellow).

What is the incubation period?

The incubation period is 2 weeks to 6 months.

How is Hepatitis C diagnosed?

There are numerous blood tests, including enzyme immunoassay for HCV antibody and recombinant immunoblot assay (RIBA). HCV RNA can generally be detected in the blood within 1 - 3 weeks of exposure. Virtually all patients develop liver cell injury as shown by increased ALT levels. Liver biopsy is generally required to determine the extent of liver disease regardless of the ALT level.

What are the potential outcomes/consequences of becoming infected?

Hepatitis C is self-limited in only 15% of cases. A persistent infection develops in as many as 85% of patients with acute hepatitis C. This is due to the fact that HCV is not easily cleared by the host's immunologic defenses. The natural history of the disease differs according to geography, alcohol use, virus characteristics, and coinfection with other viruses. Fulminant, rapid liver failure is rare. Cirrhosis develops in at least 20% within two decades of onset. Risk of liver cancer (hepatocellular carcinoma (HCC)) occurs in about 1% - 5% after 20 years. Once cirrhosis develops, then the risk of HCC increases to 1% - 4% per year.

How is Hepatitis C treated?

At this time, treatment with Alpha-interferon (IFN) with Ribavirin is being used, which is considered firstline treatment for most patients. All persons with HCV should be vaccinated against hepatitis A and B. Complete abstinence from alcohol is a must.

Who should be treated?

Many factors should be considered in determining who should be treated. Contraindications to IFN include persistently normal or near-normal ALT levels, major depressive illness, cytopenias, hyperthyroidism, renal transplantation, and evidence of autoimmune disease. Active alcohol or drug use may also be a contraindication to treatment. Most contraindications are not absolute and should be decided on a case-by-case basis.

Is there a pre-exposure vaccine available as there is for Hepatitis A and B?

There is currently no available vaccine to prevent infection with hepatitis C. There is also no post-exposure prophylaxis with hepatitis C as there is for hepatitis A and B.

What is recommended for postexposure testing?

Individuals who have been or may have been exposed need baseline and 6 month testing for HCV and ALT. Any positive HCV antibody test should be followed by further confirmatory testing.

How is transmission prevented?

- Adherence to standard precautions is essential.
- HCV(+) persons should refrain from donating blood, organs, tissues, or semen.
- Safer sexual practices, such as use of latex condoms.
- In households with an HCV(+) member, sharing razors and toothbrushes should be avoided. Covering open wounds is recommended. It is NOT necessary to avoid close contact with family members or to avoid sharing meals or utensils. There is also NO evidence to justify exclusion of HCV(+) children or adults from participation in social, educational, and employment activities.
- Pregnancy is NOT contraindicated in HCV-infected individuals. There is also no evidence that breast-feeding transmits HCV from mother to baby; therefore, it is considered safe. Babies born to HCV(+) mothers should be tested for anti-HCV at one year.
- Needle exchange and other safer injection drug use programs may be of benefit in reducing parenterally transmitted diseases.