



Hepatitis C is a liver disease caused by infection with hepatitis C virus (HCV). HCV was discovered in 1988, previously called "non-A, non-B" hepatitis. In 1992, a highly sensitive antibody test was implemented nationwide. About 25,000-30,000 new infections occur each year. An estimated 2.7 million Americans are chronically infected, with many showing no signs or symptoms and are not aware of their infection. Less than 3% of persons die as a result of HCV related chronic liver disease. Hepatitis C is a slowly progressing disease that may take 20 to 30 years to cause serious liver damage often without symptoms.

## **TRANSMISSION**

- Hepatitis C virus is found in the blood of an infected person.
- Injection drug use is the primary risk factor for HCV infection. 90% become infected within the first 12 months.
- Sexual transmission is low but possible even with one steady partner. Having multiple sex partners or a sexually transmitted disease (STD) can increase your risk of transmission.
- Health care workers have a 1.8% risk of acquiring HCV after a contaminated needlestick.
- There is no evidence indicating that HCV is transmitted through breast milk.
- HCV can be spread by sharing razors or toothbrushes with HCV-contaminated blood on them.
- Acquiring HCV infection from a blood transfusion is less than 1 per 1 million units.
- Hepatitis C is not spread through sneezing, hugging, kissing, coughing, sharing eating utensils or casual contact.
- Organ transplant from an infected donor
- Birth to an HCV-infected mother

## **SYMPTOMS**

- Most people who are newly infected with HCV do not have symptoms. If present, they may be very mild or flu-like, including nausea, fatigue, loss of appetite, fever, headaches, or abdominal pain.
- The incubation period for HCV infection varies from 2 to 26 weeks (an average of 45 days).
- 55% to 85% of persons never clear their infection and develop chronic (life-long) infection.

## **DIAGNOSIS**

- HCV infection can be determined by a specific blood test that detects antibodies; however, the antibody is insufficient to provide immunity. The test does not distinguish between acute and chronic infection or past versus present infection. If the initial test is positive, a supplemental test should be done to confirm HCV infection status and exclude laboratory error.
- This test is not a part of a routine physical exam. Ask your doctor for a hepatitis C test.

## **HEPATITIS C TESTING ROUTINELY RECOMMENDED**

- Ever injected illegal drugs
- Received clotting factors made before 1987
- Received blood or organs before July 1992
- Ever treated with hemodialysis
- Evidence of liver disease
- Immediate testing of health care, emergency, and public safety workers after needlestick or mucosal exposure to HCV-positive blood
- Children born to HCV-positive women usually one year to 18 months after birth.



## **MEDICAL EVALUATION AND MANAGEMENT FOR CHRONIC HCV INFECTION**

Persons testing positive for hepatitis C should be assessed for evidence of chronic liver disease and for possible treatment by a physician knowledgeable about hepatitis C. Antiviral drugs are available for the treatment of chronic hepatitis C, but they are not suitable or effective for everyone. Persons with chronic liver disease should always be vaccinated against hepatitis A and B. They should also be counseled to reduce further harm to the liver, and should limit or abstain from alcohol use.

## **TREATMENT**

- Combination therapy with pegylated interferon and ribavirin is the treatment of choice resulting in sustained response rates of 45%-85% (up to 50% for patients infected with the most common genotype found in the U.S. [genotype 1] and up to 85% for patients infected with genotypes 2 or 3). Pegylated interferon alone may be a treatment option. Blood tests and liver biopsy findings might determine the need for treatment.
- Interferon must be given by injection and may cause a number of side effects, including flu-like symptoms of headache, fever, fatigue, loss of appetite, nausea, vomiting, depression and thinning of the hair. Interferon can interfere with the production of white blood cells and platelets.
- Ribavirin, given by mouth, can cause birth defects. Women who are pregnant or planning a pregnancy should not take ribavirin. Pregnancy should not be attempted until 6 months after treatment has ended. Ribavirin also causes early destruction of red blood cells and severe anemia requiring frequent monitoring.
- Treatment of children with HCV is under investigation.
- Almost half of all liver transplants in the US are performed for end-stage hepatitis C. However, the virus usually infects the transplanted liver and may require a second transplant.
- Maintain as normal a life as possible, eat a well-balanced diet, exercise, and keep a positive attitude. Avoid depressing tasks, and learn how to pace yourself. Rest when you feel tired. Plan physically exhausting tasks for the morning when your energy level is at its peak.
- There is no specific evidence proving that herbal supplements relieves hepatitis symptoms or fights the virus. And many herbs are toxic to the liver. The NIH has established a Complementary Alternative Medicine Committee to evaluate alternative treatments.

## **PREVENTION**

- There is NO vaccine to prevent HCV infection and the development of one in the near future is unlikely. Vaccines for hepatitis A and B do not provide immunity against hepatitis C.
- Don't touch anything that might have the blood of an infected person on it, such as razors, scissors, toothbrushes, nail clippers, tampons, or sanitary napkins. Wipe up blood spills with disposable towels soaked in 1:100 dilution of household bleach. All soiled towels and gloves should be put in a plastic, leak-proof bag for disposal.
- Don't share anything that might have blood on it; don't share drugs, needles, syringes, or any drug "works."
- Use latex condoms correctly and every time including during foreplay to reduce possible exposure to AIDS, hepatitis B, gonorrhea, or chlamydia. No sex is the best preventive measure.
- Notify your physician and dentist that you are infected with HCV.
- Get vaccinated against hepatitis A and B.
- If you are infected with HCV, limit or do not drink alcohol because it accelerates the liver damage.