

## Hepatitis C

### **Modes of Transmission**

Hepatitis C 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 (rarely)

There have been no studies that have shown an association with military service or exposure resulting from the following: medical, surgical, or dental procedures; tattooing; acupuncture; ear piercing; or foreign travel. If transmission from such exposure does occur, it is too infrequent to detect.

### **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
- light stool
- fever
- nausea
- vomiting
- fatigue
- abdominal pain and
- anorexia

#### *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 10-30 years from the original time of infection to recognize chronic hepatitis C, about 20 years to recognize cirrhosis, and 30 or more years to recognize liver cancer.

### **Testing**

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

Anti-HCV by EIA	Anti-HCV by RIBA	Qualitative HCV-RNA	Interpretation
+	+	+	Acute infection
+	+	-	Resolved infection or intermittent viremia
+	-	-	False-positive EIA
-	-	+	False negative anti-HCV (early infection or immunocompromised host)

## 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, biopsy results, and other factors, and are not based solely on the presence of symptoms, since the disease is typically asymptomatic.

- **Pegylated Interferon:** a form of interferon, given once a week. The pegylation of the interferon delays clearance rate in the body, and maintains higher interferon levels in the blood.
- **Ribavirin:** is given by mouth in combination with alpha interferon, and the length of treatment is determined by the physician.
- **Combination of Interferon and Ribavirin:** generally when treating patients for HCV the two treatments are given together, and is considered the most effective treatment for reducing the HCV viral load.

## Pregnancy and Perinatal Issues

### *Transmission Through Breast Milk*

It is not currently known if hepatitis C can be transmitted through breast milk; there is not sufficient information to determine if there is an adequate amount of the virus present in breast milk to pose a high risk to the infant. Generally, hepatitis C positive women are advised that they may breast-feed.