February 22, 2011

# Hepatitis C Fact Sheet

1. **What is hepatitis disease?** – Hepatitis means inflammation of the liver. The liver is a vital glandular organ presents in the upper right part of the abdomen, it filters and detoxifies the blood. When the liver is inflamed this function can be affected. Hepatitis is most often caused by a virus. In the United States, the most common types of viral hepatitis are hepatitis A, hepatitis B, and hepatitis C. Heavy alcohol use, toxins, some medications, and certain medical conditions can also cause hepatitis.

2. **What is hepatitis C? -** Hepatitis C is a liver disease caused by the hepatitis C virus (HCV), which is found in the blood of persons who have this disease. This virus, first identified in the late 1980's, is one of the more common blood-borne infections in the United States. It is estimated that almost 4 million persons are infected. Most of these infections are chronic, cause cirrhosis (scarring of the liver), and may require a liver transplant. HCV is spread by contact with the blood of an infected person.

3. **Is there a vaccine for the prevention of HCV infection?** - No.

4. **What blood tests are available to check for HCV? -** Doctors can diagnose hepatitis C using specific blood tests that are not part of blood work typically done during regular physical exams. Typically, a person first gets a screening test that looks for HCV antibodies. Antibodies are proteins released into the bloodstream when a person becomes infected. The antibodies remain in the bloodstream, even if the person clears the virus. If the screening test is positive for HCV antibodies, different blood tests are needed to determine whether the infection has been cleared or has become a chronic infection.

5. **Can you have a "false positive" anti-HCV test occur? -** Yes. A false positive test means the test looks as if it is positive, but it is really negative. This happens more often in persons who have a low risk for the disease for which they are being tested. For example, false positive anti-HCV tests happen more often in persons such as blood donors who are at low risk for hepatitis C. Therefore, it is important to confirm a positive anti-HCV test with a confirmation test.

6. **Can you have a "false negative" anti-HCV test result? -** Yes. Persons with early infection may not as yet have developed antibody levels high enough that the test can measure. In addition, some persons may lack the (immune) response necessary for the test to work well. In these persons, research-based tests such as PCR may be considered.

7. **How long after exposure to HCV does it take to test positive for anti-HCV? -** Anti-HCV can be found in 7 out of 10 persons when symptoms begin and in about 9 out of 10 persons within 3 months after onset of symptoms. However, it is important to note that many persons who have hepatitis C have no symptoms.

8. **How long after exposure to HCV does it take to test positive with PCR? -** It is possible to find HCV within 1 to 2 weeks after being infected with the virus.

9. **How is hepatitis C spread? -** Hepatitis C is spread when blood from a person infected with the HCV enters the body of someone who is not infected.

10. **Who should consider getting tested for hepatitis C? –** Those who are:

    a. Current injection drug users,

    b. Past injection drug users, including those who injected only one time or many years ago,

    c. Recipients of donated blood, blood products, and organs prior to 1992 when HCV blood screening first became available,

    d. People who received a blood product for clotting problems made before 1987,

    e. People who spent many years on dialysis for kidney failure,

    f. People who received body piercing or tattoos done with non-sterile instruments,

    g. Persons with known exposures to the HCV -

        (1) Health care workers injured by needle sticks,

        (2) Recipients of blood or organs from a donor who tested positive for the HCV, or

        (3) HIV-infected persons.

    h. Children born to mothers infected with the HCV,

    i. Individuals having sexual contact with a person who is infected with the HCV,

    j. Individuals sharing personal care items, such as razors or toothbrushes, that may have come in contact with the blood of an infected person

11. **What is the next step if you have a confirmed positive anti-HCV test? -** Measure the level of a liver enzyme, Alanine Aminotransferase (ALT), in the blood. An elevated ALT indicates inflammation of the liver and you should be checked further for chronic (long-term) liver

disease and possible treatment. The evaluation should be done by a healthcare professional familiar with chronic hepatitis C disease.

12. **Can you have a normal liver enzyme (e.g., ALT) level and still have chronic hepatitis C? -** Yes. It is common for persons with chronic hepatitis C to have a liver enzyme level that goes up and down, with periodic returns to normal or near normal. Some persons have a liver enzyme level that is normal for over a year but they still have chronic liver disease. If the liver enzyme level is normal, persons should have their enzyme level re-checked several times over a 6 to 12 month period. If the liver enzyme level remains normal, your doctor may check it less frequently, such as once a year.

13. **Can I donate blood if I have had any type of viral hepatitis? -** No, if you ever tested positive for the HCV (or hepatitis B virus), experts recommend never donating blood, organs, or semen because this can spread the infection to the recipient.

14. **How long can HCV live outside the body and transmit infection? -** Recent studies suggest that HCV may survive on environmental surfaces at room temperature at least 16 hours, but no longer than 4 days.

15. **What do you use to safely remove HCV from environmental surfaces**? - Any blood spills should be cleaned using a dilution of one part household bleach to 10 parts water. Gloves should be worn when cleaning up blood spills.

16. **Is there any evidence that HCV has been spread during medical or dental procedures done in the United States? -** Medical and dental procedures done in the United States generally do not pose a risk for the spread of HCV. However, there have been a few situations in which HCV has been spread between patients when contaminated supplies or equipment were shared between them.

17. **Can HCV be spread by sexual activity? -** Yes, but not as readily as other blood-borne agents such as hepatitis B virus.

18. **Is it possible that HCV could be transmitted through the bite of a mosquito or other blood sucking arthropods, especially in third world countries? -** HCV has not been shown to be transmitted by mosquitoes or other insects.

19. **Should pregnant women be routinely tested for anti-HCV? -** No. Pregnant women have no greater risk of being infected with HCV than non-pregnant women. If a pregnant woman has risk factors for HCV infection, they should be tested for anti-HCV.

20. **What is the risk that infected women will spread HCV to their infants? -** About 4 out of every 100 infants born to HCV infected women become infected. This occurs at the time of birth, and there is no treatment that can prevent this from happening. Most infants infected with HCV at the time of birth have no symptoms and do well during childhood. More studies

are needed to find out if these children will have problems from the infection as they grow older.

21. **Is there a greater risk of infant transmission if the mother is co-infected with HIV?** – Yes. About 4 of every 100 infants born to mothers with hepatitis C become infected with the virus. However, the risk becomes greater if the mother has both HIV and HCV infection.

22. **Should a woman with hepatitis C be advised against breast-feeding**? - No. There is no evidence that breast-feeding spreads HCV. HCV positive mothers should consider abstaining from breast-feeding if their nipples are cracked or bleeding.

23. **When should babies born to mothers with hepatitis C be tested to see if they were infected at birth?** - Children should not be tested for anti-HCV before 18 months of age as anti-HCV from the mother might last until this age. If diagnosis is desired prior to 18 months of age, testing for HCV RNA could be performed at or after an infant's first well-child visit at age 1-2 months. HCV RNA testing should then be repeated at a subsequent visit independent of the initial HCV RNA test result.

24. **How can persons infected with HCV prevent spreading HCV to others?**

    a. Do not donate blood, body organs, other tissue, or semen.

    b. Do not share personal items that might have your blood on them, such as toothbrushes, dental appliances, nail-grooming equipment or razors.

    c. Cover your cuts and skin sores to keep from spreading HCV.

25. **How can a person protect themselves from getting hepatitis C and other diseases spread by contact with human blood?**

    a. Don't ever shoot drugs. If you shoot drugs, stop and get into a treatment program. If you can't stop, never reuse or share syringes, water, or drug works, and get vaccinated against hepatitis A and hepatitis B.

    b. Do not share toothbrushes, razors, or other personal care articles. They might have blood on them.

    c. If you are a healthcare worker, always follow routine barrier precautions and safely handle needles and other sharps. Get vaccinated against hepatitis B.

    d. Consider the health risks if you are thinking about getting a tattoo or body piercing: You can get infected if:

(1) The tools that are used have someone else's blood on them.

(2) The artist or piercer doesn't follow good health practices, such as washing hands and using disposable gloves.

(3) HCV can be spread by sex, but this does not occur very often. If you are having sex, but not with one steady partner:

(a) You and your partners can get other diseases spread by having sex (e.g., AIDS, hepatitis B, Gonorrhea or Chlamydia).

(b) You should use latex condoms correctly and every time. The efficacy of latex condoms in preventing infection with HCV is unknown, but their proper use may reduce transmission.

(c) You should get vaccinated against hepatitis B.

26. **Should patients with hepatitis C change their sexual practices if they have only one long-term steady sex partner?** - No. There is a very low chance of spreading HCV to that partner through sexual activity. If you want to lower the small chance of spreading HCV to your sex partner, you may decide to use barrier precautions such as latex condoms. Ask your doctor about having your sex partner tested.

27. **What can persons with HCV infection do to protect their liver?**

a. Stop using alcohol.

b. See your doctor regularly.

c. Don't start any new medicines or use over-the-counter, herbal, and other medicines without a physician's knowledge.

d. Get vaccinated against hepatitis A if liver damage is present.

28. **What other information should patients with hepatitis C be aware of?**

a. HCV is not spread by sneezing, hugging, coughing, food or water, sharing eating utensils or drinking glasses, or casual contact.

b. Persons should not be excluded from work, school, play, child-care or other settings on the basis of their HCV infection status.

c. Involvement with a support group may help patients cope with hepatitis C.

29. **What are the chances of persons with HCV infection developing long term infection, chronic liver disease, cirrhosis, liver cancer, or dying as a result of hepatitis C? -** Of every 100 persons infected with HCV about:

    a. Fifty-five to 85 persons might develop long-term infection.

    b. Seventy persons might develop chronic liver disease.

    c. Five to 20 persons might develop cirrhosis over a period of 20 to 30 years.

    d. One to 5 persons might die from liver cancer or cirrhosis.

    e. Hepatitis C disease is a leading cause of liver transplants.

30. **What is the treatment for chronic hepatitis C? -** Combination therapy with Interferon and Ribavirin is the treatment of choice resulting in sustained response rates of 40%-80%. Decisions regarding treatment (when and how to treat) are complex. Persons with hepatitis C infection should be treated by a health care provider familiar with the disease and available state-of-the-art therapeutic options.

31. **For more information about hepatitis C**:
    http://www.cdc.gov/ncidod/diseases/hepatitis/c/index.htm

This fact sheet provides general information. Please contact your physician for specific clinical information.