**Foreword**

Hepatitis C virus is transmitted through blood-to-blood exposure. The most common transmission routes include sharing HCV-infected needles and drug preparation tools, and blood products/transfusions received before 1992. Sexual transmission is less common but has been documented in studies.

Some transmission routes including tattooing, body-piercing and sharing personal items such as toothbrushes and razors are possible transmission routes, but are not well documented. Health-care workers are at risk because of needlestick accidents and unavoidable situations that may result in direct contact with blood from an HCV infected individual.

**Health Care Workers**

Health care workers or health care personnel are defined as people whose occupational activities involve contact with patients or with blood or other body fluids from patients in a health care, laboratory, or public safety setting. This includes health care, laboratory, public safety, emergency responders, community health outreach workers or any person who works where there is a possibility of exposure to blood.

**Occupational Exposure**

It has been well-documented that transmission of hepatitis C in a health care situation can occur. However, the general rate of transmission is considered very low — about 2%, which is similar to the prevalence rate in the general US population. The risk is primarily with needlestick accidents involving hollow-bore needles. Transmission from exposure to fluids or tissues other than HCV-infected blood can occur but it is uncommon. If exposure does occur, testing should be initiated and an occupational exposure report should be filed.

**Prevention**

According to the Occupational Safety and Health Administration (OSHA) all workers are required to keep a barrier between them and anyone else’s blood or body fluids.
Occupational Exposure

All health care workers should always follow standard universal precautions including the use of gloves and face and eye protection when appropriate. Properly dispose of or sterilize used equipment. Safely dispose of used bandages, and clean and disinfect spilled blood and body fluids.

Exposure

Unlike hepatitis B, there is no pre- or post-exposure vaccine or immunoglobulin (IG) to protect against HCV transmission.

If exposure does occur the U.S. Public Health Service Guidelines for the management of HCV exposure include:

For the source of infection – perform testing for anti-HCV (antibody).
• For the person exposed to an HCV positive source:
  ♦ Perform baseline testing for anti-HCV and ALT activity; and
  ♦ Perform follow-up testing at 3 and 6 months for anti-HCV antibodies and ALT activity – if earlier diagnosis of HCV infection is desired, testing for HCV RNA (viral load) may be performed at 4 and 12 weeks.

Antiviral Therapy for Post Exposure

There are currently no treatment recommendations for patients with acute hepatitis C, but recent data has shown that up to 95% of people treated with HCV medications were able to rid their bodies of the hepatitis C virus. The decision of when to treat is usually made after the 6 month post-exposure period. At that time treatment decisions are based on current recommendations for those who are chronically infected with hepatitis C.

Additional information about this topic is available from the CDC

CDC Report: Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis:
www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm

Related publications:

• Are You at Risk for Getting Hepatitis C?
  www.hcvadvocate.org/hepatitis/factsheets_pdf/hcsp-ATRISK.pdf

• HCV and Tattoos

• How Long Does HCV Live on Surfaces and in Syringes?

For more information

• Americans with Disabilities Act
  www.ada.gov

• Centers for Disease Control and Prevention
  www.cdc.gov

• Hepatitis C Support Project
  www.hcvadvocate.org

• Mayo Clinic
  www.mayoclinic.com