



DuPage County Health Department R E V I E W

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The purpose of this two-page surveillance update is to promote the control and prevention of **communicable disease (CD)** by providing clinically relevant information and resources to healthcare professionals in DuPage County.



Under the Microscope Hepatitis C

For questions or to report suspect and known cases of hepatitis C, please call **Communicable Disease Services** at 630-682-7979, ext. 7553.

The hepatitis C virus (HCV) is a major public health problem and a leading cause of chronic liver disease. HCV is the leading cause of death from liver disease in the United States.¹

HCV infects approximately 36,000 persons each year in the United States. Although generally a mild condition, hepatitis C is much more likely than hepatitis B to lead to chronic liver disease. People infected with HCV can become chronic carriers of the virus, although they may have no symptoms. It is estimated that there are approximately 4 million HCV chronic carriers in the U.S. **Around 70 percent of all HCV carriers will develop chronic liver disease, regardless of whether they have symptoms.**²

HCV-associated end-stage liver disease is the most frequent indication for liver transplantation among adults. Because most HCV-infected persons are aged 30–49 years, the number of deaths attributable to HCV-related chronic liver disease could increase substantially during the next 10–20 years as this group of infected persons reaches ages at which complications from chronic liver disease typically occur.³

HCV is spread primarily by exposure to human blood. **Approximately 80 percent of persons who share needles to inject drugs are infected with HCV.** Persons who receive blood transfusions face some risk, although it is very low since testing of donated blood for HCV began in 1990. Hepatitis C has been transmitted between sex partners and among household members, but the degree of risk is believed to be low.²

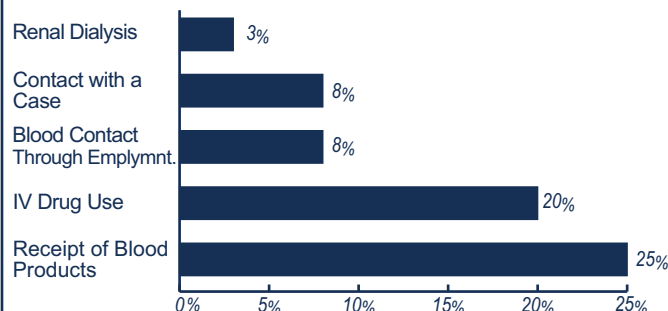
Nosocomial transmission of HCV is possible if infection control techniques or disinfection procedures are inadequate and contaminated equipment is shared among patients. Health care, emergency medical, and public safety workers who have **exposure to blood in the workplace** are at risk for being infected with bloodborne pathogens. The average incidence of anti-HCV seroconversion after unintentional needle sticks or sharps exposures from an HCV-positive source is 1.8% (range: 0%–7%), with one study reporting that transmission occurred only from hollow-bore needles compared with other sharps.³

Reducing the burden of HCV infection and HCV-related disease in the United States requires implementation of **primary prevention** activities that reduce risks for contracting HCV infection and **secondary prevention** activities that reduce risks for liver and other chronic diseases in HCV-infected persons. In addition, **surveillance and evaluation** activities are required to determine the effectiveness of prevention programs in reducing incidence of disease, identifying persons infected with HCV, providing appropriate medical follow-up, and promoting healthy lifestyles and behaviors.³

Who should be tested for hepatitis C?

- Persons who have ever (even if only one time) injected illegal drugs
- Persons who received blood products for treatment of bleeding problems prior to 1987 (those who received clotting factor concentrates produced before 1987)
- Persons who were ever on chronic renal dialysis
- Persons with persistently elevated liver function tests
- Persons who were notified they received a blood transfusion from a donor who later tested positive for HCV
- Persons who received a blood transfusion before July 1992
- Persons who receive an organ transplant before July 1992
- Health care, emergency medical and public safety workers who received an accidental needle stick or had mucous membrane exposure to HCV-positive blood
- Children born to HCV-positive mothers²

Exposure History of DuPage Hepatitis C Cases in 2005 (percent responding "yes") n=214*



* Exposure history data available for 214 of the 238 DuPage hepatitis C cases reported in 2005. Respondents may answer "yes" to more than one exposure

References:

1. <https://www.aasld.org/eweb/docs/hepatitisc.pdf>
2. <http://www.idph.state.il.us/public/hb/hbhepc.htm>
3. <ftp://ftp.cdc.gov/pub/Publications/mmwr/rr/r4719.pdf>