

# WHAT IS HEPATITIS C?

**HEPATITIS C IS A CONTAGIOUS VIRAL INFECTION THAT CAUSES INFLAMMATION IN THE LIVER. IT IS CAUSED BY THE HEPATITIS C VIRUS (HCV), AND CAN BE ACUTE OR CHRONIC.**

## HOW IS HEPATITIS C TRANSMITTED?

Hepatitis C is a blood-borne virus that is transmitted when blood of an infected person enters the body of someone not infected.

People become infected by HCV by engaging in activities such as:

- Sharing needles, syringes or other equipment for intravenous drug use
- Needlestick accidents in health care settings
- Being born to an HCV-infected mother

Hepatitis C is **NOT** spread by the following activities:

- Breastfeeding
- Holding hands
- Hugging or kissing
- Sharing utensils
- Coughing or sneezing

## HIGH RISK GROUPS FOR INFECTION

- Current or former intravenous drug users, even if only injected once
- Persons born between 1945 and 1965
- Those infected with HIV
- Persons with signs and symptoms of liver disease
- Persons with known exposures to HCV (health care workers after needle sticks or mucosal membrane exposure to HCV infected patients)
- Children born to HCV infected mothers
- Persons who were ever on chronic hemodialysis
- Recipients of blood transfusions and solid organ transplants before July 1992
- Recipients of clotting factor concentrates before 1987

HEPATITIS C IS  
THE LEADING  
CAUSE OF **LIVER  
TRANSPLANTATION  
IN THE UNITED  
STATES.**

## SYMPTOMS

Approximately 70-80% of persons with acute hepatitis infections will not have any symptoms. As a result, many of these infections lead to chronic illness. However, some people develop symptoms soon after being infected, including:

- Fever
- Fatigue
- Loss of appetite
- Nausea
- Vomiting
- Abdominal pain
- Dark urine
- Clay-colored bowel movements
- Joint pain
- Jaundice

## TESTING

In order to be screened for HCV, one must receive specific blood tests that look for the presence of the virus or viral antibodies in the bloodstream. Generally, liver enzyme tests that are done as part of routine lab screenings will NOT indicate that a person has a hepatitis C infection.

HCV screening is NOT part of routine testing for pregnant women, unless the woman has risk factors for hepatitis C infection.

## TREATMENT

Acute hepatitis C infections clear from the body on their own without treatment in 25% of persons infected. However, infections can be treated with prescription medication that is also used to treat chronic infections.

Chronic Hepatitis C infections can be treated with several new treatments that have increased efficacy and fewer side effects than previous options.

## CURRENT INFECTION STATISTICS

- There has been a sharp increase in HCV infections among American Indian/Alaska Natives
  - > From 2011 to 2012, the rate of HCV infection in this population rose 86.2%, and slightly declined by 14.3% in 2013.
  - > 1.32 cases per 100,000 of the population in 2014.
- White/non-Hispanics have also seen a significant rise in infection rates.
  - > 64.3% from 2011 - 2013.
  - > 0.84 cases per 100,000 of the population (2014)
- Black/non-Hispanics experienced a 7.1% increase from 2011-2012, and a 33.3% increase in infection rates from 2012-2013.
  - > 0.19 cases per 100,000 of the population (2014)

## ACUTE INFECTION

A short-term illness that occurs within the first 6 months of infection. Without treatment intervention, acute hepatitis infections can become chronic.

- The CDC estimates that in 2014 there were 30,500 cases of acute hepatitis C infections reported in the United States.
- Actual reports in 2014 to the CDC of acute HCV cases were 2,194. However, the CDC estimates the aforementioned number based on under-reporting and asymptomatic infection
- Approximately 75 - 85% of persons infected with hepatitis C will develop a chronic infection.

## CHRONIC INFECTION

Long-term illness that occurs when the hepatitis C virus remains in a person's body. Chronic hepatitis illness can last a lifetime and cause serious liver problems, such as cirrhosis (scarring) of the liver or liver cancer.

- The CDC reported that in 2014 there were 2.7 - 3.9 million cases of chronic hepatitis C infection in the United States

- Hispanics had infection rate increases of 23.5% from 2011-2012, and 4.8% from 2012-2013
  - > 0.25 cases per 100,000 of the population (2014)
- Asian/Pacific Islanders saw a 100% increase in infections from 2011-2012, and a decrease of 20% from 2012-2013
  - > 0.07 cases per 100,000 of the population (2014)

## HIGH RISK BEHAVIORS

During 2014, reported risk behaviors from persons with acute HCV infections.

- 68.2% of those questioned about intravenous drug use report use of injected drugs
- 11.7% of those asked reported having sex with another man
- 30.4% of those questioned reported having 2 or more sexual partners

**Source:** Centers for Disease Control and Prevention 2014 Statistics and Surveillance Data for Viral Hepatitis <http://www.cdc.gov/hepatitis/statistics/2014surveillance/commentary.htm#hepatitisC>

## WHO IS MOST AT RISK FOR HCV INFECTION?

- “Baby Boomers” between the ages of 50-70 are traditionally a high-risk group to have chronic HCV. They are 5 times more likely to have the virus than other age groups.
  - > Baby boomers are more likely to have HCV because many of them contracted the virus in the 1970s and 1980s when infection rates were very high.
  - > Some may also have received blood transfusions prior to 1992 when screening of the blood supply and universal precautions were adopted.
- The most recent (acute) cases of HCV have seen the most cases in males in the age range of 20-39 years of age.
  - > This phenomenon is attributed to high rates of intravenous drug use in this demographic.
- Deaths related to Hepatitis C have been increasing steadily from 2010 to 2014. In 2014, the number of overall deaths attributed to HCV infection was 19,659, or a rate of 5 per 100,000 of the U.S. population. (Based on 2000 census data.)
- Persons between ages 55-74 years have the highest rate of death attributed to HCV.
  - > 25 per 100,000 for ages 55-64
  - > 7.22 per 100,000 for ages 65-74
- While the other demographic groups have only experienced nominal changes in the death rate from 2009 – 2013, Native American/Alaska Natives have experienced a sharp increase in number of HCV related deaths.
  - > 9.90 in 2009 to 12.22 in 2013. Currently a modest decrease to 11.20 in 2014.
- Males have a 2.6 times higher death rate related to HCV infections than females in any racial or age group.

ASYMPTOMATIC PERSONS CAN STILL TRANSMIT THE VIRUS TO OTHERS. **DUE TO THE ASYMPTOMATIC NATURE OF THE INFECTION, MANY PEOPLE DO NOT KNOW THEY ARE INFECTED.**

- > 7.39 per 100,000 for males vs. 2.81 per 100,000 for females.
- 9 states and the District of Columbia did not report any data on acute HCV infections from 2009-2013. This could indicate an issue with consistent reporting and data management practices.
  - > WY, SD, RI, NH, MS, HI, DE, DC, AZ, AK.
- 3 states reported rates of 3 or fewer cases per year during the surveillance period, which may indicate inconsistent reporting in those states as well.
  - > SC, NE, AR
- There are 6 genotypes of HCV. Genotype 1 is the most common in the United States. Genotype 1a is the most common subtype, followed by Genotype 1b.
- Genotypes 2 and 3 are also present in the U.S. at much lower rates.
- The CDC estimates that between 50-90% of persons infected with HIV who use injection drugs are also infected with HCV.  
<http://www.cdc.gov/hepatitis/hcv/cfaq.htm#cFAQ13>

## TREATMENT

- Direct Acting Antiviral drugs (DAAs) have come on the market that provide an effective “cure” for HCV infection.
  - > 8-24 weeks of treatment
  - > Provide a sustained virologic response indicating no detectable presence of the virus on the bloodstream for several months after the completion of drug therapy.

**THERE IS  
NO VACCINE FOR  
HEPATITIS C**