

Hepatitis C Positive Donor Organs for Transplant **Frequently Asked Questions**

What is hepatitis?

Hepatitis means inflammation of the liver. When the liver is inflamed or damaged, its function can be affected. Heavy alcohol use, toxins, some medications, and certain medical conditions can all cause hepatitis. However, hepatitis is often caused by a virus. The most common hepatitis viruses are hepatitis A virus, hepatitis B virus, and hepatitis C virus.

What is hepatitis C?

Hepatitis C (HCV) is a liver infection caused by the hepatitis C virus. HCV can range from a mild illness lasting a few weeks to a serious, lifelong illness. HCV is often described as “acute,” meaning a new infection or “chronic,” meaning lifelong infection.

Chronic HCV can be a lifelong infection with the hepatitis C virus if left untreated. Left untreated, chronic HCV can cause serious health problems, including liver damage, cirrhosis (scarring of the liver), liver cancer, and even death.

Most people however who have HCV may not even be aware that they have HCV and will never develop significant liver disease.

How serious can HCV be without treatment?

Without treatment or if treatment fails, chronic hepatitis C can be a serious disease resulting in long-term health problems, including liver damage, liver failure, liver cancer, or even death.

Of every 100 people infected with hepatitis C virus:

- ❖ 75-85 will develop chronic infection
- ❖ 10-20 will develop cirrhosis over 20-30 years

Of every 100 people with hepatitis C and cirrhosis, with each passing year:

- ❖ 3-6 will develop liver failure
- ❖ 1-5 will develop liver cancer

How do we test for HCV?

The only way to know if you have HCV is to get tested and you may need more than one type of test. A blood test, called a HCV antibody test, can tell if you have ever been infected with the hepatitis C virus. Antibodies are chemicals released into the bloodstream when someone gets infected. Another test, called a HCV RNA test, can tell if you have a current infection with the hepatitis C virus. RNA is the virus’ genetic material.

How do we know that the donor has HCV?

- ❖ Screening of all organ donors includes a medical and social history questionnaire similar to a questionnaire you may have completed when donating blood. This questionnaire helps identify risk factors (for example IV drug use) that could lead to the donor having hepatitis C virus.
- ❖ Asking screening questions is not enough – donors are also tested for a variety of viruses including HIV, hepatitis B and HCV. If a donor tests positive for HCV with standard testing or a risk factor for HCV is identified in the questionnaire, a second, more sensitive test is done to determine if the donor in fact has HCV. This test is a nucleic acid test (NAT). There is still a small chance with testing that the donor does in fact not have HCV.

What are the chances of getting HCV from a transplant using an organ from a donor with HCV?

If the donor has HCV, the risk of transmission is 100%. You will get HCV.

How will you know that I have HCV?

It can take two to three weeks after a transplant for HCV RNA test to show you have HCV. This test will be done weekly for the first month after your transplant and again at 3 months or until you test positive. It may take up to two weeks to get the results of this test. Treatment should start within one to 4 months after your positive test result is received. The start of treatment will be based on your doctor's clinical judgment.

Can HCV be treated?

HCV can now be treated with medications. A Liver Specialist (Hepatologist) at London Health Sciences Centre will follow and test you for HCV and when you test positive, they will treat you.

Treatment is with new drugs called Direct Acting Antivirals (DAAs). Treatment is over 90% successful with the first drug you are given. For the less than 10% who do not respond to the first drug, you will be given a second drug and this is over 90% successful. This means that overall, the treatment with these drugs is 99% successful in getting rid of HCV.

The start of treatment can vary but will start between 3 weeks and 4 months after you test positive for HCV and will continue for 12 weeks. Serious side effects are extremely rare.

Are the costs for DAAs/medications covered?

HCV treatment can cost between \$20,000 to \$60,000, depending on the treatment course. HCV drugs are covered by most public (e.g. ODSP and Trillium) and private drug plans. If you have private coverage, you can expect treatment start to be delayed for up to one month as there is a required approval process. This will not impact the success of the treatment. Your Social Worker can help you understand and work through your drug coverage.

If I get Hepatitis virus infection from my transplant, do I need to be careful with people around me?

If you are exposed to HCV virus from the transplant organ, you will need to be tested for infection and treated if positive. **Until you are clear of infection, you will need to take precautions with people around you as there is a small risk of transmission.** Once the antiviral treatment is complete and your HCV RNA result shows that there is no virus detectable in your blood, there is no risk of transmission.

Hepatitis C is usually spread when blood from a person infected with the hepatitis C virus enters the body of someone who is not infected. People can become infected with the hepatitis C virus during such activities as:

- ❖ Sharing needles, syringes, or other equipment to prepare or inject drugs

Less commonly, a person can also get hepatitis C virus through

- ❖ Sharing personal care items that may have come in contact with another person's blood, such as razors or toothbrushes
- ❖ Having sexual contact with a person infected with the hepatitis C virus

Hepatitis C virus is **NOT** spread by sharing eating utensils, breastfeeding, hugging, kissing, holding hands, coughing, or sneezing. It is also not spread through food or water.

We advise patients with HCV to:

- ❖ Not share personal items that may have come in contact with your blood – e.g. toothbrushes, razors, needle
- ❖ Practice protected sex

References:

- Centers for Disease Control and Prevention <https://www.cdc.gov/hepatitis/hcv/cfaq.htm>
- Canadian Liver Foundation <https://www.liver.ca/patients-caregivers/liver-diseases/hepatitis-c/>
- Bourliere M, Gordon SC, et al. Sofosbuvir, Velpatasvir, and Voxilaprevir for Previously Treated HCV Infection. N Engl J Med 2017;376:2134-46.
- Feld JJ, Jacobson IM, et al. Sofosbuvir and Velpatasvir for HCV Genotype 1, 2, 4, 5, and 6 Infection. N Engl J Med 2015;373:2599-607.
- Foster GR, Afdhal N, et al. Sofosbuvir and Velpatasvir for HCV Genotype 2 and 3 Infection. N Engl J Med 2015;373:2608-17.