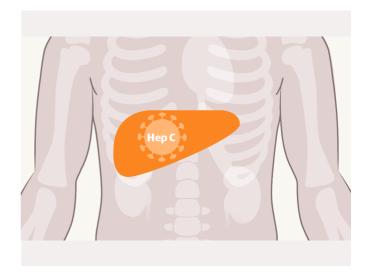


# Factsheet Hepatitis C and HIV

#### **Key points**

- Hepatitis C is a blood-borne infection that is transmitted in some of the same ways as HIV.
- Over time untreated hepatitis C can cause serious liver disease including cirrhosis and liver cancer.
- Modern hepatitis C treatment has few sideeffects and can cure almost everyone.



Hepatitis C is a disease of the liver caused by the hepatitis C virus (HCV). This virus is mainly transmitted through blood-to-blood contact, for example when sharing needles to inject drugs, but it can also be transmitted through sex and from mother to child during pregnancy. Experts estimate that a majority of people living with HCV are not aware that they are infected. There is no vaccine to prevent hepatitis C.

Modern hepatitis C treatment can cure almost everyone. There are six types of HCV, known as genotypes. Genotype 1 is most common in the UK and has the most treatment options.

Hepatitis means inflammation of the liver. Located on the right side of the abdomen behind the ribcage, the liver carries out many vital functions. These include filtering the blood, helping convert food into energy, processing medications and producing proteins that help the blood clot after an injury.

Over years or decades untreated chronic HCV infection can cause serious liver disease, and it is one of the leading reasons for liver transplants. Damage to the liver can include:

Fibrosis – build-up of collagen and other fibrous scar tissue, leading to a 'stiff' liver.

**Cirrhosis** – serious scarring that blocks blood flow through the liver, kills liver cells and interferes with liver function.

**Hepatocellular carcinoma (HCC)** – a type of cancer that starts in the liver.

**End-stage liver disease** – severe loss of liver function that can result in death without a liver transplant.



## Your lifestyle and hepatitis C

The following steps can help you avoid hepatitis C infection. If you've had hepatitis C in the past, they can help stop you from getting it again.

**Don't share needles.** Hepatitis C is transmitted through contact with blood, and sharing needles or other equipment to inject drugs is one of the biggest risk factors.

Don't share straws or notes to snort or inhale drugs.

**Don't share personal items.** Avoid sharing personal items that could come in contact with blood, such as razors, toothbrushes and manicure tools.

Only get tattoos and body piercings done in a professional setting using sterile equipment.

Sexual transmission between heterosexual men and women is rare. However, a significant number of HIV-positive gay and bisexual men have acquired hepatitis C through sexual transmission in recent years. The following points can help HIV-positive gay and bisexual men avoid hepatitis C:

**Use condoms during anal sex.** The hepatitis C virus is found in semen and rectal mucus, as well as in blood. Many men who acquire hepatitis C report sex without a condom as their only risk factor.

**Use gloves during fisting.** Use a new glove with each partner. Washing hands carefully between partners is probably less effective, but better than nothing.

Don't share sex toys. If you do, cover them with a new condom each time.

#### Don't share pots of lubricant.

In addition, the following suggestions will help you keep your liver in good health, whether or not you have hepatitis C:

**Drink less alcohol.** Alcohol can cause a different kind of hepatitis and can make liver disease worse in people with hepatitis C.

**Maintain a healthy weight.** Being overweight and having metabolic problems such as diabetes can lead to the build-up of fat in the liver, leading to worse liver damage.

#### Who is at risk?

A large number of people who inject drugs now or did so in the past have hepatitis C. Having received a blood transfusion or organ transplant before the early 1990s is also a risk factor. People from developing countries may have picked up hepatitis C from medical equipment used on more than one person. Healthcare and emergency services workers are at risk for



occupational exposure to HCV.

It can take decades for HCV infection to cause severe liver disease, so most people with advanced cirrhosis or liver cancer are over the age of 50.

## Hepatitis C in people with HIV

Because HIV and HCV are transmitted in some of the same ways, many people have both viruses, which is known as co-infection. HIV-positive people with hepatitis C have faster liver disease progression, on average, and may have a more urgent need for treatment. Most people with HIV and HCV co-infection can be successfully treated for both diseases.

### **Symptoms**

Many people do not have symptoms during acute or early HCV infection. Others may have symptoms that include fatigue (unusual tiredness), flu-like symptoms, loss of appetite, nausea, pain in the upper abdomen or jaundice (yellowing of the skin and eyes).

Most people who get HCV will develop chronic infection, meaning it does not go away on its own within six months. Symptoms can vary widely during the early and middle stages of chronic hepatitis C. People with hepatitis C are more likely to develop certain non-liver-related conditions such as thyroid problems and cardiovascular disease.

While many people living with hepatitis C never have serious symptoms, up to a quarter will develop advanced fibrosis or cirrhosis. Compensated cirrhosis means that the liver can still mostly do its job. Decompensated cirrhosis means the liver is failing. People with liver failure can have many symptoms including ascites (fluid build-up in the abdomen), bleeding in the throat or stomach and mental confusion (hepatic encephalopathy).

# Diagnosis and monitoring

The British HIV Association (BHIVA) recommends that all people living with HIV should receive an HCV antibody screening test, which shows if you have been exposed to the virus. It is also advisable for anyone at risk of hepatitis C, including children born to mothers with HCV and sexual partners of people with HCV.

If an antibody test is positive, it should be followed by a PCR test for HCV RNA, also known as viral load, to confirm current active infection. Some people clear the virus naturally and will be HCV antibody positive but PCR negative. In addition, HCV genotype testing is done to help choose the best treatment.

"Most people with HIV and HCV coinfection can be successfully treated for both diseases."



Liver function tests, including the ALT test, measure proteins associated with liver inflammation. An imaging test called *FibroScan* is often used to assess how much liver damage you have. This can also be done with a liver biopsy, in which a small sample of liver tissue is removed for lab testing.

### **Treatment and management**

Treatment of hepatitis C has improved rapidly in recent years. The latest therapies are direct-acting antiviral drugs that interfere with different steps of the HCV lifecycle. A combination of drugs may be co-formulated into a single pill.

Modern treatment typically lasts for two or three months, usually does not cause side-effects and cures more than 95% of treated people.

In contrast, the old treatment with interferon injections and ribavirin tablets lasted six months to a year, caused difficult side-effects such as flu-like symptoms and depression, and only cured about half of treated people.

The short-term goal of treatment is sustained virological response, or continued undetectable HCV viral load 12 weeks after finishing treatment, known as SVR12. This is considered a cure as relapse is rare after this point.

Successful treatment of HCV will prevent transmission of HCV to others. However, having HCV once does not protect against future infection, and it is possible to become re-infected if risky behaviour continues.

The newest direct-acting antivirals are pangenotypic, meaning that they work against all HCV genotypes. They can cure most people who were once considered difficult to treat, including people with genotype 3, those with advanced liver or kidney disease and those who did not respond to a previous treatment attempt.

People with HIV and HCV co-infection did not respond as well to interferon treatment, but this is no longer the case with the new drugs. Several studies have shown that HIV-positive people treated with direct-acting antivirals have cure rates as high as those of HIV-negative people, and they do not have worse side-effects.

The major consideration when treating hepatitis C in people with HIV is avoiding interactions between hepatitis C medications and antiretroviral drugs. These interactions could potentially decrease levels of HIV or HCV medications so they are no longer effective, or raise drug levels so they cause worse side-effects. Most people with HIV can adjust their antiretroviral regimen, if needed, to prevent interactions with hepatitis C treatment.

Getting treated for hepatitis C will reduce your risk of short-term and long-term complications of liver disease.

The long-term goal of hepatitis C treatment is to stop liver disease progression. Studies have



shown that eradicating HCV can halt - and in some cases partially reverse - liver damage and reduce the risk of developing liver cancer. But people who do not start treatment until after they have already developed cirrhosis will remain at some risk.

People with severe liver disease who are awaiting a liver transplant can be successfully treated for hepatitis C. In some cases, treatment may improve liver function enough that a transplant is no longer needed. Treatment after a liver transplant is also an option.

Most experts now recommend that everyone living with hepatitis C should be considered for treatment, including those with mild liver damage and people who are on opioid substitution therapy or continue to use drugs.

#### Other sources of information

For more information, you may find these two organisations helpful:

- Hepatitis C Trust: www.hepctrust.org.uk. You can contact their helpline team on 020 7089 6221.
- British Liver Trust: www.britishlivertrust.org.uk. You can contact their helpline team on 0800 652 7330.

#### Find out more

HIV & hepatitis Information booklet

How hepatitis C is passed on during sex Basic leaflet with pictures

Hepatitis B and HIV Simple factsheet



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