

# Hepatitis C

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Hepatitis C virus was first identified in the 1980s. Although it is not related to other hepatitis viruses, it can cause similar symptoms. It is chiefly transmitted by blood-to-blood contact and so the main groups affected have been injecting drug users and recipients of blood and blood products, e.g. people with haemophilia. People from these communities may also be co-infected with HIV.

There is growing evidence that hepatitis C can be spread sexually. Nearly all the infections have been in HIV-positive gay men. It's not clear how this happens, but it's been suggested that the risk may relate to sexual practices that involve contact with blood, most notably fisting, and through unprotected anal sex. Research involving heterosexual couples has tended to find that the risk of transmission through sex is low, and there is little evidence of the sexual transmission of hepatitis C in HIV-negative gay men. However, this is still a controversial area and research is ongoing. People infected with both HIV and hepatitis C may however be more likely to transmit hepatitis C through sex, perhaps because they often have higher levels of the virus in their genital fluids than HIV-negative people.

It is currently estimated that 10% of children born to hepatitis C-infected mothers will contract the virus; 25% for mothers who are also HIV-positive.

## Symptoms and illness

The effects of infection with hepatitis C vary. Less than 5% of people who contract the virus develop acute hepatitis symptoms such as jaundice, diarrhoea and nausea at the time of infection, and a significant minority may experience no symptoms at any stage. For those who do, common symptoms include extreme tiredness and depression.

It is not known what proportion of people with hepatitis C will develop liver disease. A small proportion of people infected with hepatitis C will manage to clear the infection. Approximately 85% of infected individuals will go on to develop chronic or ongoing hepatitis C infection. Patterns of disease progression seem to vary considerably from person to person. Some individuals may never experience symptoms, others may begin to develop symptoms like extreme tiredness and nausea ten to fifteen years after infection and a significant minority develop serious liver disease. The varying severity of hepatitis C may reflect differences between hepatitis C strains. Other factors such as being male, alcohol use, older age and having untreated HIV may also speed up hepatitis C disease progression.

It is thought that it takes on average 30 to 40 years to progress from infection with hepatitis C to liver cirrhosis in people who have only hepatitis C.

The prognosis of people co-infected with HIV and hepatitis C is unclear. Some studies suggest that HIV may hasten liver damage in co-infected people, but that this can be slowed by the use of HIV treatment.

## Diagnosis

A blood test for antibodies to hepatitis C can tell you whether or not you have been exposed to the virus, though a PCR (viral load) test may be used to confirm infection. Liver function tests may give an indication of whether hepatitis C has damaged your liver. A scan called a *FibroScan* can assess how much damage the virus has done to your liver. In some circumstances it might be necessary to have a liver biopsy. This involves the removal of a small amount of the liver under a local anaesthetic.

HIV infection can make the diagnosis of hepatitis C more difficult as infection may not show up on antibody tests in some people with HIV.

## Treatment

The aim of hepatitis C treatment is a cure – this is sometimes called a 'sustained virological response'.

Treating hepatitis C soon after a person with HIV is infected with it has the best chance of success. About two-thirds of people with HIV who have 'acute' hepatitis C achieve a sustained treatment response, but by contrast a treatment response is only seen in about a third of HIV-positive patients with chronic hepatitis C.

Other goals of treatment are to normalise liver enzymes (a marker of liver function); to lower hepatitis C viral load; to improve liver inflammation; and to prevent progression to cirrhosis or liver cancer.

Treatment for hepatitis C is not life-long and usually lasts 24 or 48 weeks. Currently three antiviral drugs are approved for hepatitis C: interferon-alpha (which is given by injection), with or without an anti-viral drug called ribavirin, and a new form of interferon called pegylated interferon which is given with ribavirin. The British HIV Association recommends that hepatitis C be treated with a combination of pegylated interferon and ribavirin.

Side-effects may be severe, although they tend to reduce as treatment goes on. They include high fevers, joint pain, depression and low white cell count. Ribavirin should not be taken at the same time as AZT, and can't be used during pregnancy.