



HEPATITIS C (HCV) and HIV

WHAT IS HEPATITIS C?

The hepatitis C virus (HCV) can cause liver damage. Hepatitis C is transmitted primarily by direct blood-to-blood contact. Most people get HCV through injection drug use with shared equipment. Up to 90% of people who have ever injected drugs, even just once, have been infected with HCV. Some people have gotten HCV from unprotected sex. This is particularly true for HIV-positive men who have sex with men, people with other sexually transmitted diseases, people with multiple sexual partners, and those who engage in sexual activities that cause bleeding, such as fisting. Tattooing with shared ink and equipment can cause infection. Some people get infected in medical settings, through unsterilized equipment. Healthcare workers can get HCV through needle stick accidents. The risk from blood transfusions and blood products in the US is virtually zero.

HCV spreads more easily than HIV through contact with infected blood. In the US, at least 4 times as many people have HCV as have HIV. You could be infected with HCV and not know it, since most people don't have symptoms. About 15% to 30% of people clear HCV from their bodies without treatment. The rest develop chronic infection, and the virus stays in their body unless it is successfully treated. HCV might not cause any problems for about 15 to 20 years, or even longer, but it can cause serious liver damage, called cirrhosis. People with cirrhosis are at risk for liver cancer, liver failure, and death. A large study in 2011 found that having chronic hepatitis C doubled the risk of death from any cause.

HOW IS IT DIAGNOSED?

Some people with HCV have abnormally high levels of liver enzymes, and their doctor orders an HCV test. In 2012, the CDC recommended that all people born between 1945 and 1965 be tested for HCV. See Fact Sheet 122 for more information on these tests. If you have been at risk for HCV, get tested even if your liver enzyme levels are normal. HCV testing is recommended for all people with HIV, since having both viruses, called coinfection, is common.

Usually, the first blood test for HCV is an antibody test. A positive result means that you have been infected with HCV. However, some people recover from HCV without treatment, so you need a HCV viral load test

to know if you have chronic infection. HCV viral load testing is recommended if you have a positive HCV antibody test result, or have recently been at risk for HCV infection or have any signs or symptoms of hepatitis.

HCV tests are similar to the HIV antibody test (see Fact Sheet 102) and HIV viral load tests (see Fact Sheet 125) tests. HCV viral loads are usually much higher than HIV viral loads. They are often in the millions. However, unlike in HIV, HCV viral load does not predict disease progression.

HCV viral load or liver enzyme levels cannot tell how damaged your liver is. A liver biopsy is the best way to check the condition of the liver. See Fact Sheet 672 for more information. If there is very little liver damage, some experts recommend monitoring; if there is damage (scarring,) HCV treatment may be necessary.

HOW IS HCV TREATED?

Almost all cases of HCV could be cured if treatment is started very soon after infection. Unfortunately most people don't have any signs of hepatitis, or can mistake them for the flu. Most cases are not diagnosed until years later. In 2014 the World Health Organization issued its first HCV treatment guidelines. They are available at <http://www.who.int/hiv/pub/hepatitis/hepatitis-c-guidelines/en/>

The first step in treating HCV is to find out which genotype you have (see fact sheet 674). Most people with HCV in the US have genotype 1.

The usual treatment for HCV genotype 1 is a combination of two drugs, pegylated interferon (pegIFN) and ribavirin (RBV) plus an HCV protease inhibitor. Fact Sheets 680 on interferon and ribavirin, 682 on telaprevir (Incivek) and 683 on boceprevir (Victrelis) have more information on these drugs. These drugs have some serious side effects, including flu-like symptoms, irritability, depression, and low red blood cell counts (anemia) or white blood cell counts (neutropenia.) Talk with your health care provider about how to deal with side effects.

People with HCV genotypes 2, 3 and 4 are treated with pegifn and RBV (but not for long!) ew treatments for HCV are being developed.

HCV treatment does not work for everyone, and some people can't tolerate the side effects. People do better if they:

- Do not have serious liver damage
- Are white, not African American
- Have a good result on the IL28B genotype test
- Have HCV genotype 1B instead of genotype 1a Have never been treated for HCV

CAN HCV BE PREVENTED?

Although there are vaccines to protect you from getting infected with hep A or hep B, there is no vaccine for HCV. The best way to prevent HCV infection is to avoid sharing injection equipment and other contact with the blood of people infected with HCV.

HCV AND HIV TOGETHER

Because HIV and HCV are both spread by contact with infected blood, many people are "coinfected" with both viruses.

- **HIV coinfection is linked to faster HCV disease progression**, and a greater risk of severe liver damage. On the other hand, HCV does not seem to speed up HIV disease progression.
- **People with both infections are more likely to be depressed.** Depression is a symptom of HCV. This can cause missed doses of medications (poor adherence, see Fact Sheet 405) and problems thinking (see Fact Sheet 505.)
- **HIV positive people with less than 200 CD4 cells are at highest risk for serious liver damage from HCV.**
- **HCV treatment is less effective for coinfecting people.** Cure rates are about 20% with type 1 and 50-70% with types 2 or 3.
- **If someone meets the guidelines for HIV treatment their HIV should be treated first.** Leaving HIV untreated for 6 to 12 months could have serious consequences.
- **Some HIV drugs must be avoided during HCV treatment. Do not use didanosine (ddI) and stavudine (d4T) with RBV. Avoid retrovir (AZT) during HCV treatment** because it increases the risk for anemia. If you are coinfecting, be sure your health care provider knows how to treat both diseases.

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