



HEPATITIS C and HIV

WHAT IS HEPATITIS C?

The hepatitis C virus (HCV) can cause liver damage. HCV is transmitted by direct blood-to-blood contact. Most people get Hepatitis C (Hep C) through injection drug use with shared equipment. Up to 90% of people who have ever injected drugs, even once, have been infected with HCV. Some people have gotten HCV from unprotected sex. This is particularly true for HIV-infected men who have sex with men, people with other sexually transmitted diseases and people with multiple sexual partners. Some people get infected in medical settings, through accidental needle sticks or unsterilized equipment. The risk of infection from blood transfusions and blood products in the US is virtually zero.

Hep C spreads more easily than HIV through contact with infected blood. In the US, about 4 times as many people have hep C as have HIV. You could be infected with HCV and not know it. About 15% to 30% of people clear the Hep C virus from their bodies without treatment. The other 70% to 85% develop chronic infection, and the virus stays in their body unless it is successfully treated. Hep C 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.

HOW IS IT DIAGNOSED?

Sometimes, people with Hep C have abnormally high results on routine blood tests that measure liver enzymes. See Fact Sheet 122 for more information on these tests. If you have been at risk for Hep C, get tested even if your liver enzyme levels are normal. Hep C testing is recommended for all people with HIV, since having both viruses, called coinfection, is common.

Usually, the first blood test for Hep C is an antibody test. A positive result means that you have been infected with Hep C. However, some people recover from Hep C without treatment, so you need a Hep C viral load test to know if you are chronically infected. Hep C viral load testing is recommended if you have been at risk for Hep C or have any signs or symptoms of hepatitis.

Hep C tests are similar to the HIV antibody (see Fact Sheet 102) and viral load (see Fact Sheet 125) tests. Unlike HIV viral loads, Hep C viral loads are usually much higher; often in the millions. Unlike HIV, the Hep C viral load does not predict disease progression.

Hep C viral load or liver enzyme levels cannot tell how damaged your liver is. Some blood tests and scans can detect very serious liver damage, but many experts think that a liver biopsy is the best way to check the condition of

the liver. During a liver biopsy, a sample of liver tissue is removed with a thin needle and studied under a microscope. If there is very little liver damage, some experts recommend monitoring; if there is scarring, Hep C treatment may be necessary.

HOW IS HEP C TREATED?

Almost all cases of Hep C could be cured if treatment with interferon was 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.

The first step in treating Hep C is to find out which type of Hep C you have. There are at least six types of Hep C. Most people with Hep C in the US have type 1. Some have type 2 or 3. Type 4 is less common in the US. Types 1 and 4 are harder to treat than types 2 or 3.

The usual treatment for Hep C is a combination of two drugs, pegylated interferon (PEG-IFN) and ribavirin (RBV). PEG-IFN is injected once a week. RBV is a pill taken twice daily. 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. Talk with your health care provider about how to deal with side effects.

Ribavirin can cause severe birth defects.

Women should not use it for at least six months before they become pregnant, or during pregnancy. Men should not use RBV for at least six months before they get a woman pregnant.

Hep C treatment usually lasts from 3 to 12 months. The goal of HCV treatment is to get rid of the virus, and to stay virus-negative for six months after finishing treatment. This is called an SVR, or sustained virologic response, or a "cure." After treatment, about 45% of patients with Hep C type 1 and 80% of patients with type 2 or 3 have an SVR. **These rates are for people with Hep C alone. People who are coinfecting with HIV have lower cure rates.**

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

- Have type 2 or 3 hep C
- Start with a lower Hep C viral load
- Do not have serious liver damage
- Are women
- Are younger than age 40
- Do not have HIV or hepatitis B infection
- Are white, not African American

CAN HEP C BE PREVENTED?

Although there are vaccines to protect you from getting infected with hep A or hep B,

there is no vaccine for Hep C. The best way to prevent Hep C infection is to avoid sharing injection equipment and other contact with the blood of people infected with hep C.

HEP C AND HIV TOGETHER

Because HIV and Hep C are both spread by contact with infected blood, many people are "coinfecting" with both viruses. **HIV increases liver damage from Hep C.** Coinfecting people are more likely to have liver problems from anti-HIV drugs, but your health care provider can choose drugs that easier on the liver.

• **People with both infections are more likely to be depressed.** Depression is a symptom of Hep C. 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 Hep C.**

• **Coinfecting people usually have higher Hep C viral loads, which means that treatment may be less likely to work.**

• **Hep C 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.

• **Sometimes Hep C should be treated first.** If HIV doesn't need to be treated yet (if CD4 cell counts are high enough, and HIV viral load is low enough), it's a good idea to treat Hep C first. Then the liver can be in better condition to deal with HIV drugs.

• **Some HIV drugs must be avoided during HCV treatment. Do not use didanosine (ddI) with RBV. Avoid zalcitabine (AZT) during HCV treatment** because it increases the risk for anemia. If you are coinfecting with Hep C and HIV, be sure your health care provider knows about both diseases.

THE BOTTOM LINE

Hep C is a serious health problem in the US. Many more people have Hep C than HIV, but they may not know it. Hep C infection can go on for years and damage the liver before causing obvious problems.

HIV infection makes Hep C worse. Hep C damages the liver, which can make it harder to take ARVs. People with HIV should get tested for HCV. Early treatment works better.

Treatment of people with both HCV and HIV can be complicated. Their health care provider should be familiar with both diseases.

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