



# HEPATITIS: Overview

## WHAT IS HEPATITIS?

Hepatitis means an inflammation, or swelling, of the liver. Viruses can cause hepatitis. Alcohol, drugs (including prescription medications), or poisons can also cause hepatitis. So can opportunistic infections such as Mycobacterium Avium Complex (MAC, see fact sheet 514) or Cytomegalovirus (CMV, see fact sheet 504).

Hepatitis is a very common disease. It can affect people even if their immune systems are healthy. Hepatitis can lead to serious scarring (cirrhosis) of the liver and liver failure, which can be fatal.

Many cases of hepatitis aren't treated because people either don't feel sick at all, or think they have the flu. The most common symptoms are loss of appetite, fatigue, fever, body aches, nausea and vomiting, and stomach pain. Some people may have dark urine, light-colored bowel movements, and a yellowing of the skin or of the eyes (jaundice).

Your health care provider will check your blood to see if your liver is working normally. These "liver function" tests measure the amounts of certain chemicals: bilirubin, AST, and ALT (or SGOT and SGPT). High blood levels can be a sign of hepatitis. See fact sheet 122 for more information on liver function tests. Blood tests also look for the viruses that can cause hepatitis. Testing for hepatitis is recommended for all HIV+ people. Sometimes, a sample of the liver is taken with a needle and tested for signs of infection. This is called a biopsy.

## VIRAL HEPATITIS

Scientists know about six viruses that can cause hepatitis. They are called hepatitis A, B, C, D, E, and G viruses, or HAV, HBV, and so on. Over 90% of cases of hepatitis are caused by hepatitis A, B, or C.

Viral hepatitis can be acute or chronic. Acute means the first few weeks to months after you get hepatitis. You may feel sick for a couple of weeks. Chronic hepatitis means that the liver might be inflamed for six months or more. Chronic hepatitis stays in your body. You can infect other people, and your disease can become active again.

**Hepatitis A and E** are both acute diseases. They are spread by contact with fecal matter, either directly or from water that has sewage in it, or through food handled by

someone with contaminated hands. Hep A and Hep E do not cause chronic illness.

**Hepatitis B or HBV** is the most common hepatitis virus. It can be transmitted from mother to infant, through sexual contact, or through contact with infected blood. People with HIV are much more likely to develop chronic Hep B. Hepatitis B is more serious in people with HIV, but some HIV drugs (3TC, tenofovir, emtricitabine) fight HIV and HBV. For more information, see the Treatment Action Group's Guide to Hepatitis B for People Living with HIV at [http://treatmentactiongroup.org/uploadedFiles/Projects/Hepatitis\\_C\\_-\\_HIV/HBVGuide09.pdf](http://treatmentactiongroup.org/uploadedFiles/Projects/Hepatitis_C_-_HIV/HBVGuide09.pdf)

**Hepatitis C or HCV** is usually spread by direct contact with blood, usually through sharing needles and other injection equipment. Although it doesn't happen as often, some people—especially HIV+ MSM—have gotten HCV from unprotected sex. About 75-85% of people infected with HCV develop chronic hepatitis. Hepatitis C can be very mild or show no symptoms, but over 15-50 years, can cause serious liver damage in about 20% of people. HIV worsens hepatitis C. See Fact Sheet 507 for more information on hepatitis C and HIV.

**Hepatitis D** only shows up in people who get hepatitis B. People who get type D get sicker than people who just have type B.

**Hepatitis G** virus is more accurately called GBV-C virus. It does not cause any known disease. GBV-C infection is common in people with HIV. One report suggested that infection with GBV-C might slow the progression of HIV disease. However, people with HIV who "clear" infection with GBV-C have worse outcomes.

The best way to prevent viral hepatitis is through cleanliness and by avoiding contact with blood. You may not know if someone else is infected. Condoms can help prevent transmission of hepatitis B and C. Also, there are vaccines that can protect you against developing hepatitis A and B, even if you've already been exposed to them. These vaccines may not work for people with CD4 counts below 350.

There are no treatments for hepatitis A and E, but they usually only last a couple of weeks. Pegylated interferon and three drugs used against HIV - lamivudine (3TC), tenofovir (TDF) and emtricitabine (FTC) - help treat hepatitis B and D. In September 2002, adefovir dipivoxil (Hepsera) was

approved in the US to treat hepatitis B; Tenofovir was approved in August of 2008 and is a better treatment for hepatitis.

Fact sheet 507 has more information on drug treatments for hepatitis C.

## OTHER TYPES OF HEPATITIS

Hepatitis caused by **alcohol, drugs, or poisons** leads to the same symptoms as viral hepatitis. In these cases, the liver is not damaged by a viral infection. The job of the liver is to break down many substances in the blood, and it can get overloaded. Some medications used to fight AIDS or related diseases can cause hepatitis. So can the common painkiller, acetaminophen (Tylenol).

The best treatment for these types of hepatitis is to stop using alcohol or the drugs that are irritating the liver.

If hepatitis is caused by an opportunistic infection (OI) related to AIDS, the OI has to be controlled so that the liver can heal.

## MEDICATION PROBLEMS

The liver needs to be working properly to break down most drugs. Drugs that didn't cause you any problems when your liver was healthy can make you very sick if you have hepatitis. This is also true for alcohol, aspirin, herbs, and recreational drugs. Be sure your health care provider knows about **all** pills or supplements you are taking.

Some medications to treat hepatitis interact with antiretroviral medications. Your health care provider will have to check carefully to see which drugs can be taken together.

## ALTERNATIVE APPROACHES

Two herbs seem to help with any form of hepatitis. One is licorice (*Glycyrrhiza glabra*), often taken as capsules or as a tea. The other is milk thistle (*Silybum marianum*, see Fact Sheet 735), used as an extract or a tea. Be sure to talk with your health care provider or an experienced herbalist before using licorice or milk thistle.

Revised June 24, 2009