



# HEPATITIS: Overview

## WHAT IS HEPATITIS?

Hepatitis means inflammation of the liver. Some viruses, alcohol, drugs (including prescription medications), or poisons can cause hepatitis. Some opportunistic infections such as *Mycobacterium Avium* Complex (MAC, see fact sheet 514) or Cytomegalovirus (CMV, see fact sheet 504) can also cause hepatitis.

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. If you have hepatitis and your health care provider wants to see if your liver is damaged, they might order a biopsy. In this test, a sample of the liver is taken with a needle and tested for signs of infection and scarring (cirrhosis.).

## VIRAL HEPATITIS

Scientists know about several viruses that can cause liver infection. The most important and common ones are called hepatitis A, B, C, D, and E 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 that the disease only lasts for a few weeks or months. Usually, then the body gets rid of the infection. *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 infections. 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. HAV can also be transmitted sexually, particularly during activities such as rimming. Hep A and Hep E do not cause chronic illness. A vaccine can prevent HAV infection.

**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. A vaccine can prevent HBV infection. Globally, about 10% of people with HIV also are infected with HBV. People with HIV are much more likely to develop chronic cases of HBV. Hepatitis B is more serious in people with HIV, but some HIV drugs fight both HIV and HBV.

**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+ men who have sex with men (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. There is no vaccine for HCV. New HCV medications can cure HCV infection in many people with chronic infection. See Fact Sheet 507 for more information on hepatitis C and HIV.

**Hepatitis D** only shows up in people who get hepatitis B. People with HIV who get HDV are more likely to get sick than people who just have HBV.

## PREVENTION AND TREATMENT

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. 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 as well 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. Three drugs used to treat HIV: lamivudine (3TC), tenofovir (TDF) and emtricitabine (FTC) – also help treat hepatitis B and D. Adefovir (Hepsera) and

tenofovir (Viread) are approved in the US to treat hepatitis B.

Fact sheet 507 has more information on drug treatments for hepatitis C. Several drugs are approved to treat HCV, including sofosbuvir (fact sheet 685), simeprevir (fact sheet 684) and ribavirin (fact sheet 680). For more information about HCV treatments, see fact sheet 676.

People with chronic hepatitis should avoid drinking alcohol and taking acetaminophen (Tylenol).

## 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.

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 or pharmacist will have to check carefully to see which drugs can be taken together.

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