

## Overview

*Hepatitis* means inflammation of the liver. This condition is most often caused by a virus. In the United States (US), the most common causes of viral hepatitis are hepatitis A virus (HAV), hepatitis B virus (HBV), and hepatitis C virus (HCV). You can get some forms of viral hepatitis the same way you get HIV—through unprotected sexual contact and injection drug use. Hepatitis B and hepatitis C are common among persons who are at risk for, or living with HIV infection. Hepatitis A virus, which causes a short-term but occasionally severe illness, is usually spread when the virus is taken in by mouth from contact with objects, food, or drinks contaminated by the feces (or stool) of an infected person.

Persons with HIV infection are disproportionately affected by viral hepatitis; about one-third of HIV-infected persons are coinfecting with hepatitis B or hepatitis C, which can cause long-term (chronic) illness and death. Viral hepatitis progresses faster among persons with HIV infection, and persons who are infected with both viruses experience greater liver-related health problems than those who do not have HIV infection. Although antiretroviral therapy has extended the life expectancy of persons with HIV infection, liver disease—much of which is related to hepatitis C and hepatitis B infection—has become the leading cause of non-AIDS-related deaths among this population.

People living with HIV infection who are co-infected with either hepatitis B or hepatitis C are at increased risk for serious, life-threatening complications. As a result, all persons living with HIV should be tested for hepatitis B and hepatitis C by their doctors. Coinfection with hepatitis may also complicate the management of HIV infection. To prevent coinfection with hepatitis B, the Advisory Committee on Immunization Practices recommends universal hepatitis B vaccination of susceptible patients with HIV infection or AIDS. Hepatitis A and hepatitis B vaccines are also recommended for all men who have sex with men (MSM), users of illicit drugs, and others at increased risk of infection.

## The Numbers

- About 25% of individuals infected with HIV in the US are also infected with HCV, and an estimated 10% of individuals infected with HIV are coinfecting with HBV.
- About 80% of injection drug users (IDUs) with HIV infection also have HCV.
- HIV coinfection more than triples the risk for liver disease, liver failure, and liver-related death from HCV.
- About 20% of all new HBV infections and 10% of all new HAV infections in the US are among MSM. For MSM not infected with HBV or HAV, any sexual activity with an infected person increases their risk. In particular, unprotected anal sex increases the risk for both HBV and HIV among MSM, and direct anal-oral contact increases the risk for HAV.
- Compared with other age groups, a greater proportion (about 1 in 33) of persons aged 46–64 years are infected with HCV.
- Chronic HCV is often “silent,” and many persons can have the infection for 20 to 30 years without having symptoms or feeling sick.
- In the US, HCV is twice as prevalent among blacks as among whites.

## Viral Hepatitis Transmission

People can be infected with the three most common types of hepatitis in these ways:

- **Hepatitis A:** Ingestion of fecal matter, even in tiny amounts, from close person-to-person contact with an infected person, sexual contact with an infected person, ingestion of contaminated food and drink, or contact with contaminated objects.
- **Hepatitis B:** Contact with infectious blood, semen, and other body fluids, primarily through birth to a mother who has hepatitis B; sexual contact with an infected person; sharing of contaminated needles, syringes, or other injection drug equipment; and needlesticks or other sharp instrument injuries.
- **Hepatitis C:** Contact with blood of an infected person, primarily through sharing contaminated needles, syringes, or other injection drug equipment; and less commonly, through sexual contact with an infected person, birth to an infected mother, and needlesticks or other sharp instrument injuries.

New data suggest that sexual transmission of HCV among MSM with HIV occurs more commonly than previously believed and that sexual transmission can occur undetected among HIV-infected MSM in the absence of injection drug use.

## Prevention

### Preventing HAV Infection

The best way to prevent infection with hepatitis A is to get vaccinated. Among the groups for whom the Centers for Disease Control and Prevention (CDC) recommends vaccination against hepatitis A are persons who are at risk for HIV infection, including MSM; users of recreational drugs, whether injected or not; and sex contacts of infected persons.

### Preventing HBV Infection

The best way to prevent infection with hepatitis B is to get vaccinated. Among the groups for whom CDC recommends vaccination against hepatitis B are persons who have or are at risk for HIV infection, including MSM; persons who inject drugs; susceptible sex partners of infected persons; persons with multiple sex partners; anyone with a sexually transmitted infection (STI); and health care and public safety workers exposed to blood on the job.

### Preventing HCV Infection

There is no vaccine for hepatitis C. If you have HIV infection, you can adopt measures to prevent getting hepatitis C. These actions will also reduce the chance of transmitting your HIV infection to others. The best way to prevent hepatitis C infection is to never inject drugs, or to stop injecting drugs if you currently do so by getting into and staying in a drug treatment program. If you continue injecting drugs, always use new, sterile syringes and never reuse or share syringes, needles, water, or other drug preparation equipment.

Do not share toothbrushes, razors, or other personal items that may come into contact with another person's blood. Do not get tattoos or body piercings from an unlicensed facility or in an informal setting. These practices may also put you at increased risk for infection with any bloodborne virus if dirty needles or other instruments are used.

Get screened and vaccinated for HAV and HBV.

Use condoms consistently and correctly, limit the number of sex partners, and get treatment for other STIs.

## Testing and Treatment

Health care providers use blood tests to detect viral hepatitis antibodies in their patients, many of whom may have no symptoms. In the case of hepatitis B, the test result can help determine if a person has already been infected, and if so, if that infection resolved or resulted in a chronic infection. If an antibody test is positive for hepatitis C, a confirmatory test must be done.

Because viral hepatitis infection is frequently serious in persons with HIV infection and may lead to liver damage more quickly, CDC recommends that all persons with HIV infection be tested for hepatitis B and hepatitis C. Coinfection with viral hepatitis may also complicate the treatment and management of HIV infection.

Treatment for viral hepatitis varies. More than 99% of persons infected with hepatitis A will recover without treatment. Acute hepatitis B has no treatment; however, chronic hepatitis B can be treated with either interferon or lamivudine. Hepatitis C can be treated with a combination of interferon and ribavirin, and many persons infected with hepatitis C experience clearance of the virus as a result of treatment. In May 2011, the Food and Drug Administration (FDA) approved two new drugs for treating chronic HCV infection.

### Treating Viral Hepatitis in Persons with HIV Infection

HIV/HBV coinfections and HIV/HCV coinfections can each be effectively treated in many persons. However, managing HIV/HBV and HIV/HCV coinfections is complex, and persons with HIV/HBV or HIV/HCV should seek care from health care providers with expertise in the management of both HIV infection and viral hepatitis. Coinfected persons should be counseled about drug interactions and side effects of hepatitis and HIV treatments. Deciding if and when to start hepatitis treatment should be individualized, and determining whether treatment is the right choice is a decision each person should make with their health care provider.

#### Additional Resources:

**CDC-INFO**  
1-800-CDC-INFO (232-4636)  
cdcinfo@cdc.gov  
*Get answers to questions  
and locate HIV testing sites.*

**CDC HIV Web Site**  
[www.cdc.gov/hiv](http://www.cdc.gov/hiv)

**Locate an HIV Testing Site**  
[www.hivtest.org](http://www.hivtest.org)

**CDC National Prevention  
Information Network (NPIN)**  
1-800-458-5231  
[www.cdcnpin.org](http://www.cdcnpin.org)  
*Technical assistance and  
resources.*

**AIDSInfo**  
1-800-448-0440  
[www.aidsinfo.nih.gov](http://www.aidsinfo.nih.gov)  
*Treatment and clinical trials.*

**AIDS.gov**  
[www.aids.gov](http://www.aids.gov)  
*Comprehensive government  
HIV resources.*