



Liver Complications

Hepatitis and HIV

Hepatitis viruses cause liver disease while human immunodeficiency virus (HIV) affects the immune system. HIV mainly infects CD4 helper T cells, white blood cells that coordinate the immune response. Untreated HIV infection can lead to acquired immune deficiency syndrome, or AIDS.

Hepatitis B virus (HBV), hepatitis C virus (HCV) and HIV are transmitted in some similar ways, and many people are living with two or all three of these viruses.

HIV/HBV Coinfection

When a person living with HIV also has chronic hepatitis B, the term used is HIV/HBV coinfection. According to the Centers for Disease Control and Prevention, around 10% of people with HIV also have HBV.

While HIV and HBV are transmitted via some similar routes, having well-controlled HIV does not appear to make people more susceptible to hepatitis B. Of note, pregnant women with HIV are more likely to transmit HBV to their babies during gestation or delivery.

People living with both HIV and HBV are at increased risk for liver damage and life-threatening complications. This damage also tends to occur more rapidly in people with HIV/HBV coinfection. However, people who are on antiretroviral treatment and maintain an undetectable HIV viral load can lower their risk for severe liver disease.

Having hepatitis B can complicate HIV treatment, so it's important for people with HIV/HBV coinfection to work with health care providers who have experience treating both viruses. Click here for [current treatment guidelines](#) for people with HIV/HBV coinfection.

A number of [medications](#) are used to treat hepatitis B, but there are some specific recommendations for people living with HIV. Certain antiretrovirals are active against both HIV and HBV, and people with coinfection should include these medications in their HIV treatment regimen. This should be a consideration when thinking about switching to a new regimen. People taking antiretrovirals—whether they have hepatitis B or not—should have their liver enzymes monitored regularly.

It is important for people with HIV/HBV coinfection to take their medications as prescribed. Missing doses can cause HBV or HIV to develop drug resistance. What's more, stopping medications

that suppress hepatitis B replication can cause HBV viral load and liver enzyme levels to increase rapidly (known as a flare), which can lead to severe symptoms.

Both HIV and HBV medications can suppress viral replication indefinitely, but HIV treatment does not lead to a cure, and hepatitis treatment seldom does so. Long-term treatment for both viruses is effective, safe and generally well tolerated.

HIV/HCV Coinfection

When a person with HIV also has chronic hepatitis C, the term is HIV/HCV coinfection. It is estimated that around 20% of people living with HIV in the United States also have hepatitis C.

People with well-controlled HIV do not appear to be more susceptible to HCV infection. However, some studies have found that HIV-positive people are more likely to acquire or transmit HCV during sex, and pregnant women with HIV are more likely to transmit HCV to their babies. What's more, people with HIV are less likely to naturally clear HCV without treatment.

HIV/HCV coinfection can increase the risk for liver damage and life-threatening complications. Earlier in the AIDS epidemic, people with coinfection were prone to rapid and aggressive liver disease progression, but this is less likely today for people who are on effective antiretroviral treatment with an undetectable HIV viral load. Nonetheless, the American Association for the Study of Liver Diseases recommends that people with HIV/HCV coinfection should be prioritized for hepatitis C treatment.

Having hepatitis C can complicate HIV treatment, so it's important for people with HIV/HCV coinfection to work with health care providers who have experience treating both viruses. Click here for [current treatment recommendations](#) for people with HIV/HCV coinfection.

Unlike HBV, there are no antiretrovirals that treat both HIV and HCV. Some HIV medications are less liver-friendly than others. Certain antiretrovirals, including protease inhibitors and non-nucleoside reverse transcriptase inhibitors, are metabolized by the liver. Fortunately, modern HIV meds are less likely to cause liver toxicity than some older drugs. People taking antiretrovirals should have their liver enzymes monitored regularly, regardless of their HCV status.

In addition, some HIV and HCV drugs can potentially interact with each other, which could reduce their effectiveness or worsen side effects.

Despite this added complexity, most people with HIV and HCV can be successfully treated for both diseases. Studies show that hepatitis C cure rates for people living with HIV are about the same as those for HIV-negative people.

Visit the [Hepatitis B Basics](#) and [Hepatitis C Basics](#) to learn more about transmission, diagnosis and treatment for each virus. Click here to learn about [HBV/HCV coinfection](#).

