

# HIV & Hepatitis Coinfection



**Healthy Living**  
*With HIV*

[www.patientedu.org/hiv](http://www.patientedu.org/hiv)

Coinfection with HIV and the hepatitis C virus (HCV) or hepatitis B virus (HBV) is a growing public health concern. The diseases are spread in similar ways, and many people are coinfecting with HIV and HCV, HIV and HBV, or even all three viruses. With careful management, most people with HIV/HCV or HIV/HBV coinfection can be successfully treated for both diseases.

## An Overview of HIV and Hepatitis

Hepatitis C virus and hepatitis B virus are viral infections of the liver. Over time, they can lead to serious problems such as liver cirrhosis and liver cancer. HIV infection leads to more aggressive hepatitis C or hepatitis B and a higher risk of liver damage. Although HCV does not make HIV disease progress more quickly, HIV/HCV coinfection may impair the ability of the immune system to recover after starting antiretroviral therapy.

Coinfection can also make treatments for HIV or hepatitis more difficult. People with liver damage due to chronic hepatitis are more likely to get *hepatotoxicity* (liver toxicity) related to anti-HIV drugs. In addition, drugs used to treat HIV and hepatitis can interact and side effects may become worse.

In most cases, doctors will try to control HIV before beginning patients on HCV treatment. The good news is most people with HIV/HCV or HIV/HBV coinfection can be successfully treated for both diseases with careful management.



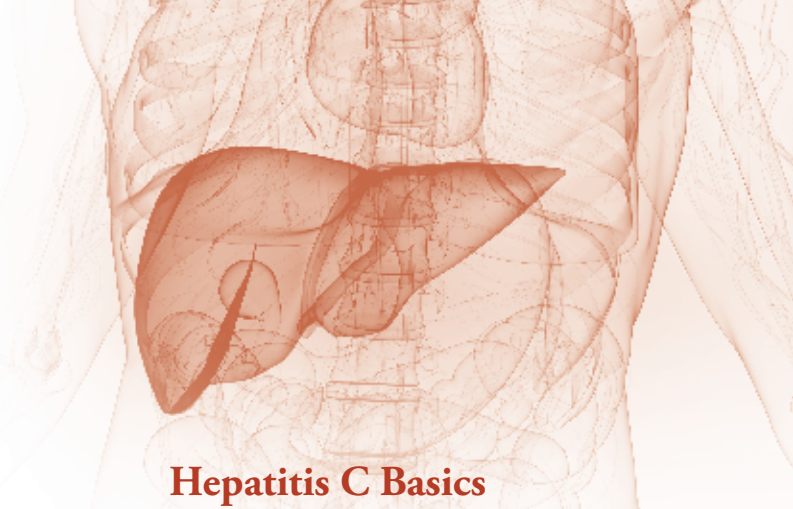
## The Growing Burden of Coinfection

Coinfection refers to an infection with 2 or more different disease-causing organisms. Hepatitis C is a common coinfection in people with HIV. Between 200,000 and 300,000 people in the United States have both HIV and HCV. Many years ago, it was expected that most people with HIV would die from AIDS, so doctors paid less attention to other long-term conditions like hepatitis. Chronic hepatitis C progresses slowly, however, and many HIV-positive people who were infected with HCV in the 1970s or 1980s are only now beginning to develop more serious liver disease.

HIV drugs have improved greatly and have cut back the death rate caused by opportunistic illnesses (OIs), but liver failure—which is often related to chronic viral hepatitis—has become a major cause of hospitalization and death in people with HIV. The presence of HIV makes hepatitis C progress more quickly. Because of this, HCV is thought of as an OI in people with HIV.

It is recommended that all people with HIV be screened for HCV. Detecting HCV in people whose immune systems are severely compromised can be challenging because they may not produce enough antibodies that will show up on tests. In HIV-positive people with CD4 cell counts over 200 cells/mm<sup>3</sup>, a standard HCV antibody test will usually work to detect HCV. However, if the CD4 cell count is below 200 cells/mm<sup>3</sup>, an HCV RNA viral load test may be needed to diagnose hepatitis C.

*It is recommended that all people with HIV be screened for HCV.*



## Hepatitis C Basics

Hepatitis C is a slowly progressing disease of the liver. Damage to the liver can lead to a variety of symptoms and associated conditions. In some people with HCV, the immune system can get rid of the virus completely on its own. However, about 8 out of 10 people infected with hepatitis C have a virus that becomes chronic, lasting more than 6 months.

HCV is most often spread through contaminated needles that are used to inject drugs. Tattoo needles and shared personal items such as razors and toothbrushes can also spread the virus. HCV transmissions through sexual contact or from mother to infant are uncommon, but do occur.

Most people with HCV have no symptoms. Those that do may experience fatigue, nausea, loss of appetite, abdominal pain, and a flu-like feeling. It's been estimated that between 10% and 25% of people with chronic HCV will develop severe liver disease. **These diseases may include:**

- Liver inflammation.
- Fibrosis—the development of tough, stringy tissue in the liver.
- Cirrhosis—scarring.
- Hepatocellular carcinoma—liver cancer.
- Liver failure.

## Detecting HCV

Antibody tests are used to detect HCV infection. Genotype tests are used to find out what strain of HCV a person has. Many people with chronic hepatitis have high liver enzyme levels. Viral load tests measure the amount of HCV genetic material (RNA) in the blood. They help indicate whether treatment is working.

A liver biopsy, in which a small sample of tissue is taken using a needle and examined under a microscope, is considered the “gold standard” for gauging the extent of liver damage. Biopsies can help doctors make decisions about whether treatment is needed.

## HCV Treatment in People With HIV

There are several things people with HIV/HCV coinfection can do to keep their liver healthy. These include avoiding alcohol, living healthy lifestyles, and being cautious about the use of various types of drugs (Table 1).

Table 1 | Healthy Liver Tips

- Get vaccinated against hepatitis A and hepatitis B.
- Avoid alcohol.
  - Many studies show that alcohol contributes to liver damage, especially in people with chronic viral hepatitis.
- Be cautious about using prescription drugs, over-the-counter medications, street drugs, and herbal remedies.
  - Be especially careful when combining different drugs.
  - Tell healthcare providers about all drugs and herbs being used.
- Avoid exposure to environmental toxins.
  - These include solvents, paint thinners, and pesticides.
  - If it's necessary to use such chemicals, work in a well-ventilated area and wear gloves and a protective face mask.
- Eat a healthy, well-balanced diet.
- Get regular, moderate exercise.
- Sleep enough at night and rest during the day as needed to help manage fatigue.
- Get regular health check-ups.
  - This includes monitoring of liver enzymes and blood cell counts.

Source: TheBody.com ([www.thebody.com/content/art2542.html?ts=pf](http://www.thebody.com/content/art2542.html?ts=pf))





It's also strongly recommended that people with HCV be vaccinated against both hepatitis A virus (HAV) and HBV if they're not already immune.

**Table 2 outlines some key points to remember when it comes to HAV and HBV vaccinations:**

### Table 2 | Hepatitis A and B Vaccination

- HAV and HBV disease can be much worse in people with HCV.
- The HBV vaccine is recommended for:
  - Sexually active gay men (regardless of HIV status).
  - Healthcare workers.
  - Others at risk for infection.
- The HBV vaccine is now routinely administered to infants and adolescents.
- In HIV/HCV-coinfected people, vaccination should be done early—while CD4 cell counts are still high—to ensure an adequate antibody response.
- The HAV vaccine consists of 2 doses within a 6-month period.
- The hepatitis vaccine requires 3 doses within a 6-month period.
- A combination HAV/HBV vaccine is also available.
- Both vaccines are considered safe for people with HIV.

Source: TheBody.com ([www.thebody.com/content/art2542.html?ts=pf](http://www.thebody.com/content/art2542.html?ts=pf))

## Treatment Considerations

Not everyone with HCV needs to be treated. Many different factors should be taken into account when deciding whether or not to treat.

**Such factors include:**

- A person's age.
- How long a person has been infected.
- HCV genotype.
- Extent of existing liver damage.

The treatment of HIV/HCV-coinfection is not well understood, largely because most of the studies that led to the approval of HCV treatments excluded difficult-to-treat patient groups. That includes people with HIV. Fortunately, anti-HIV drugs have brought about improvements in health and longevity, which in turn have changed treatment for people with HIV/HCV coinfection.

HIV/HCV-coinfected people can achieve good responses to HCV treatment, and the rate of side effects appears to be similar in people with and without HIV. Guidelines recommend that HCV treatment be considered for all people at greatest risk for hepatitis C progression. They also no longer recommend against treatment for HIV/HCV-coinfected people or those with alcohol or drug use issues.



## Decisions, Decisions

People with HIV who are diagnosed with hepatitis C should be evaluated and considered for HCV treatment. Many people with chronic hepatitis C—regardless of whether or not they're coinfectd—do not experience symptoms for decades and may never develop serious liver disease. Treatment may not be given for people who don't have symptoms, have normal liver enzyme levels, and have minimal existing liver fibrosis because watchful waiting with regular monitoring may be a better option. For people with moderate to severe liver fibrosis, hepatitis C will typically be treated.

### Treatment is most successful in people who:

- Have low HCV viral loads.
- Are under the age of 40.
- Are female.
- Have HCV genotypes other than 1.
- Have not yet sustained extensive liver damage.

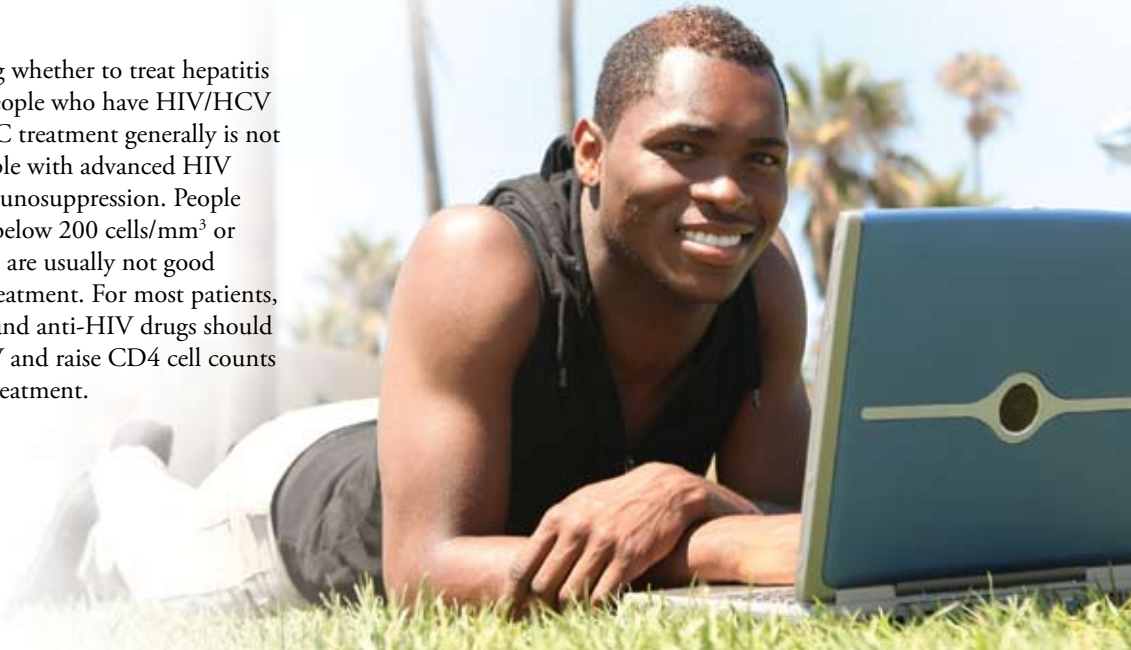
Treatment decisions should be guided by biopsy results rather than liver enzyme levels alone. HCV viral load is also not a good marker of disease progression.

Guidelines for deciding whether to treat hepatitis C generally apply to people who have HIV/HCV coinfection. Hepatitis C treatment generally is not recommended for people with advanced HIV disease and severe immunosuppression. People with CD4 cell counts below 200 cells/mm<sup>3</sup> or an OI at the same time are usually not good candidates for HCV treatment. For most patients, OIs should be treated and anti-HIV drugs should be used to control HIV and raise CD4 cell counts before starting HCV treatment.

*Many people with chronic hepatitis C do not experience symptoms for decades.*

## Remember the Goals

No treatments have been specifically approved by the FDA for use in people with HIV/HCV coinfection, but most doctors use the same regimens for coinfectd people as they do for those with HCV alone. The goals of treating HCV in people living with HIV are to decrease the rate of liver disease progression and improve tolerance of anti-HIV drugs. The benefits should be weighed against the adverse effects of anti-HCV therapy and possible interactions with anti-HIV and anti-HCV treatments. If people are coinfectd with HIV and HCV, they should report all new symptoms to their doctors. Healthcare providers, support groups, and HCV advocacy organizations can further help people learn to manage and live with their HCV treatment side effects.





**Living with HIV  
you have to**

**doesn't mean  
live here.**

Ask your doctor if  
there are HIV medications  
with a low risk of diarrhea.



To learn more about HIV and AIDS, visit Healthy Living With HIV at: [www.patientedu.org/HIV](http://www.patientedu.org/HIV).

*Brought to you by:*

## Healthy Living *With HIV*



Pri-Med Patient Education Center  
2127 Second Avenue North  
Fort Dodge, IA 50501  
[service@patientedu.org](mailto:service@patientedu.org)

*The editorial content for this brochure was developed and created solely by the Patient Education Center. The content does not necessarily represent the opinions and/or views of our advertisers.*

**Disclaimer:** The information provided in this brochure and on the PEC Web site is for informational purposes only and is not intended to provide or be a substitute for professional medical advice, diagnosis, or treatment. Neither PEC nor its affiliates or licensors guarantee the accuracy, adequacy, timeliness, or completeness of any information and are not responsible for errors or omissions in any consequences arising from the use of the information. The use of the PEC Web site is at the user's own risk and all information contained therein is subject to change. Mention of a specific product, company, organization, Web site, or URL address, treatment, therapy, or any other topic does not imply a recommendation or endorsement by PEC, its affiliates, or its licensors.



Printed on 10%  
post-consumer  
recycled paper.

PEC-HL-SPO-R-015