

## Co-Infection (HIV or HBV)

**Melissa Osborn, MD**

### How does HIV affect HCV?

Many people with HIV also have HCV because both viruses are spread through blood. Co-infection is especially common in injection drug users (IDU) and in people with hemophilia (bleeding disorder in which the blood does not clot normally) who received contaminated blood products. People with HIV may have faster progression of their HCV with a shorter time until cirrhosis. HCV probably does not affect the progression of HIV. Also, many medications used to treat HIV can harm the liver, so certain HIV medications may need to be avoided.

### What special care should a person who is co-infected with HIV and HCV get?

An HIV positive person with confirmed HCV co-infection should:

- Ask for vaccination against hepatitis A and hepatitis B if at risk in order to prevent further damage to the liver
- Receive care from a specialist who has expertise in HIV and HCV or be sure their provider consults with specialists of both diseases
- Do everything possible to slow the progress of liver damage
  - Limit or stop alcohol consumption to avoid further liver damage
  - Talk about the need for liver biopsy or treatment of HCV with their healthcare provider

### What treatments are available for HIV/HCV co-infection?

Patients with HIV are treated with the same medications as HIV-negative patients with hepatitis C (interferon and ribavirin). The response rates are lower in co-infected patients, about 14-20% for genotype 1 and about 40-50% for genotypes 2 and 3. Often, a liver biopsy is obtained to help decide how urgently treatment should be considered. Since HCV progresses faster in co-infected patients, your healthcare provider may recommend treatment at an earlier time than in HIV-negative patients. Sometimes it is necessary to treat HIV infection first, since medicines for HCV do not work as well in patients with low CD4 counts. Your healthcare provider will talk to you about the best time to start HIV and HCV treatment.

It is important for co-infected patients to be treated by a specialist who is knowledgeable about both HIV and HCV. Treatment is slightly different in co-infected patients, and there are certain HIV medicines which cannot be used with HCV treatments.

All persons co-infected with HCV and HIV should be:

- Seen by physicians knowledgeable about both HIV and HCV.
- Provided with information to maintain liver health.
- Counseled about the impact of alcohol on the progression of liver disease.
- Counseled on ways to reduce the transmission of HIV and HCV.
- Vaccinated against hepatitis A and hepatitis B if not already immune.
- Considered for HIV and/or HCV treatment as needed.
- Counseled about drug interactions and side effects of HCV and HIV treatments.

## What about hepatitis B and hepatitis C co-infection?

Because the two viruses have overlapping transmission routes, some people are infected with both hepatitis B and C. Although co-infection with hepatitis B and hepatitis C is not very common, studies have shown that those infected with both viruses may have faster progression and more severe liver disease than those infected with only one virus. Fortunately, pegylated-interferon is also active against hepatitis B, so it is possible to treat both infections at the same time. The other medicines available for hepatitis B are not active against HCV. Patients with hepatitis B and C together should see a specialist experienced in treating viral hepatitis to help determine the best treatment or combination of treatments. Sometimes, hepatitis B does not need to be treated, but only a healthcare provider can help you make this decision.

## Internet Resources

[www.cdc.gov/hiv/resources/factsheets/Coinfection.htm](http://www.cdc.gov/hiv/resources/factsheets/Coinfection.htm)

This fact sheet gives a brief overview of HIV and HCV co-infection and provides links to other parts of the CDC website with related material. This is a good place to start.

[www.hivandhepatitis.com](http://www.hivandhepatitis.com)

This site has a lot of information on the latest studies and information being presented in the scientific community about HIV and hepatitis B and C. It is best for those who know the basics but want more detailed information.

[www.thebody.com/nmai/hepc.html](http://www.thebody.com/nmai/hepc.html)

“The Body” is a complete HIV/AIDS Resource that provides answers to many frequently asked questions about HIV and HCV co-infection.

Fact sheets from [www.aidsinfonet.org](http://www.aidsinfonet.org) are also available through this website.

[www.hepb.org](http://www.hepb.org)

The hepatitis B Foundation website covers everything you need to know about hepatitis B, both the basics and more detailed information on new developments in treatment. They publish two free newsletters, “B Informed” and “B Connected,” available by mail or on the Internet.

[www.projectinform.org](http://www.projectinform.org)

Project Inform is a national nonprofit community based organization working to end the AIDS epidemic.

[www.natap.org](http://www.natap.org)

National AIDS Treatment Advocacy Project (NATAP) web site is a leader in up-to-the minute HIV treatment information, covering the latest in drug development and research comprehensive conferences, etc.

[www.hepnet.com/hepb.html](http://www.hepnet.com/hepb.html)

The hepatitis Information Network contains links to a variety of hepatitis B information and news.