



Canada's source for  
HIV and hepatitis C  
information

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Cette publication est également disponible en français.

#### Disclaimer

Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV- and hepatitis C-related illness and the treatments in question.

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# Living with HIV and Hepatitis C Co-infection



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Co-infection is when a person is living with more than one infection at a time. This booklet is about HIV and hepatitis C co-infection, which means that a person has both HIV and hepatitis C.

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There are many steps you can take to stay healthy, including getting enough exercise and rest, eating as well as you can and quitting or cutting back on alcohol and other substances that can put a strain on your liver.

A support network, including a doctor you can trust, can help too. An HIV or hepatitis C organization can help you get started.

### *Hepatitis C: Managing common symptoms and treatment side effects*

This book provides information on the common symptoms of hepatitis C and side effects of its treatment. Information on support, financial assistance and other aspects of hepatitis C are also included.

### *Managing Your Health: A guide for people living with HIV*

This comprehensive guide for living with HIV includes information on social, treatment-related, health-related and practical issues.

### *Practical guides for people living with HIV*

*A Practical Guide to Complementary Therapies*

*A Practical Guide to HIV Drug Treatment*

*A Practical Guide to Herbal Therapies*

*A Practical Guide to Nutrition*

### *CATIE fact sheets*

Fact sheets offer in-depth information on HIV, hepatitis C and medications, side effects, natural health products and other health-related issues.

### *Pre-fix: harm reduction for + users*

This plain language booklet includes sections about safer drug use, doctor/patient relationships, healthy living and treatment-related issues.

### *You can have a healthy pregnancy if you are HIV positive*

This booklet covers useful topics such as getting pregnant, having a healthy HIV-negative baby and finding support if you are HIV positive.

**These and many other relevant resources can be accessed on CATIE's websites or by calling CATIE at 1-800-263-1638.**

## For more information

For more information about something you read in this booklet, contact CATIE, Canada's source for up-to-date, unbiased information about HIV and hepatitis C. CATIE offers information for people living with HIV and/or hepatitis C in print, online and by phone in English and in French.

To contact CATIE, you can call our toll-free phone line at 1-800-263-1638. All calls are private and confidential. You can also visit us online at [www.catie.ca](http://www.catie.ca) or [www.hepCinfo.ca](http://www.hepCinfo.ca).

## More CATIE resources

[www.hepCinfo.ca](http://www.hepCinfo.ca)  
[www.catie.ca](http://www.catie.ca)

CATIE's websites provide information on preventing, treating and living with hepatitis C and/or HIV. [www.hepCinfo.ca](http://www.hepCinfo.ca) includes a series of basic and in-depth articles. [www.catie.ca](http://www.catie.ca) provides a large collection of resources related to HIV and HIV and hepatitis C co-infection. The [www.catie.ca](http://www.catie.ca) homepage is a good place to start your search.

### Lists of HIV and hepatitis C organizations

[www.aso411.ca](http://www.aso411.ca) provides information about HIV and related services in Canada. A national directory of hepatitis C and related services is available on [www.hepCinfo.ca](http://www.hepCinfo.ca). Look for Organizations and Referrals on the homepage.

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Blood tests will show whether treatment is working. Both treatments cause side effects, and there are ways to manage them. After hepatitis C treatment ends, people have many options for healthy living. For now, HIV treatment is a lifelong commitment.

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HIV and hepatitis C can pass to another person when blood carrying the virus gets into their bloodstream. HIV can also pass through semen (cum, including pre-cum), vaginal fluids, anal fluids and breast milk.

You can protect yourself and others from HIV, hepatitis C and other infections. Learn about your options for safer sex, safer drug use and healthy pregnancies.

## What is co-infection?

Co-infection is when a person is living with more than one infection at a time.

### **HIV and hepatitis C co-infection means that a person has both HIV and hepatitis C.**

This booklet provides information specific to HIV and hepatitis C co-infection. There are many other co-infections, such as HIV and hepatitis B, HIV and tuberculosis (TB) or hepatitis C and hepatitis B.

CATIE offers information on HIV infection, hepatitis C infection and HIV and hepatitis C co-infection. In addition, we provide information on other co-infections that are common among people with HIV. Check out [www.catie.ca](http://www.catie.ca), [www.hepcinfo.ca](http://www.hepcinfo.ca) or contact CATIE at 1-800-263-1638.

**What are HIV and AIDS?** HIV stands for human immunodeficiency virus. It is a virus that weakens your immune system, your body's built-in defence against disease and illness. Without treatment, HIV can make it harder for your body to fight off other diseases and illnesses. Over time, you can become sick with life-threatening infections. This is the most serious stage of HIV infection, called AIDS (acquired immune deficiency syndrome).

There's no cure for HIV, but with the right treatment, care and support, most people with HIV can stay healthy and live long lives.

When it comes to **hepatitis C**, transmission between mother and baby is not common. The chance increases when a woman is co-infected with HIV.

Some women want to try to clear the hepatitis C virus before becoming pregnant. It's important to be aware that ribavirin, one of the drugs commonly used to treat hepatitis C, can cause severe birth defects if taken during pregnancy. Both male and female partners should wait at least six months after finishing hepatitis C treatment before trying to get pregnant.

**Breastfeeding** is generally not a risk for hepatitis C transmission. However, it is a risk for HIV transmission. Guidelines strongly encourage HIV-positive mothers to use baby formula. If you can't afford baby formula, some provinces and territories provide it free.



- **If you snort drugs**, you can lower the risk by using your own equipment and trying not to share with other people. Consider items that you can use once then throw away, such as a rolled-up Post It note or a plastic straw.

**If you don't have access to new needles**, you can clean your own needles and syringes before each time you use them. Still, it is best not to share with other people. To clean the syringe, flush it twice with clean water, twice with bleach and then twice with new water. Each flush should last 30 seconds. This will kill HIV, but bleach is not effective at killing hepatitis C in needles or syringes.

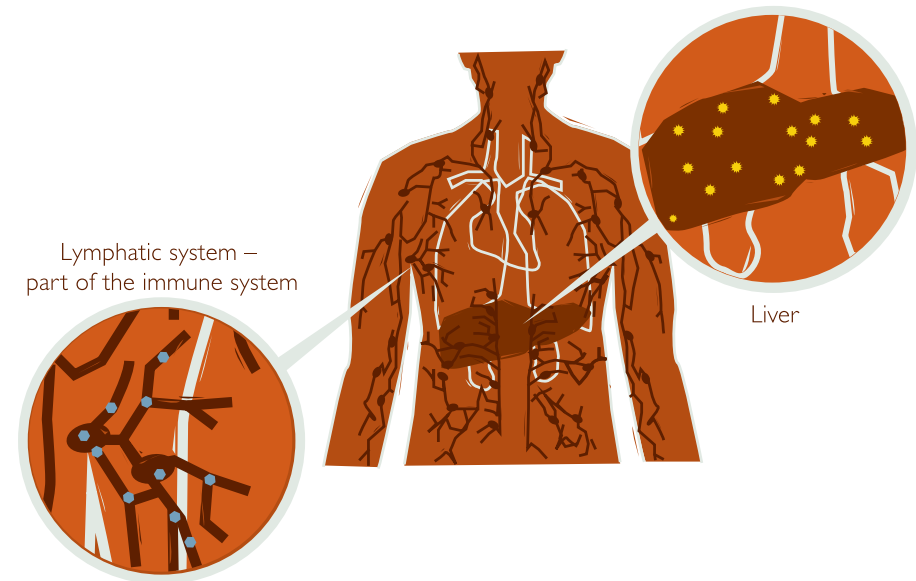
For more information on harm reduction, check out the booklet *Pre-fix: harm reduction for + users* online at [www.catie.ca](http://www.catie.ca) or call 1-800-263-1638 to order your free copy.

## You can have a healthy baby

Many people living with HIV and hepatitis C want to have children.

**Healthy pregnancies and healthy babies are possible for people living with HIV and hepatitis C.**

Although **HIV** can pass to a fetus or baby from an HIV-positive mother, advances in HIV treatment and care mean you can have an HIV-negative baby. For more information, check out the booklet *You can have a healthy pregnancy if you are HIV positive* online at [www.catie.ca](http://www.catie.ca) or call 1-800-263-1638 to order your free copy.



**What is hepatitis C?** Hepatitis viruses infect the liver. There are three types of hepatitis viruses that are common in Canada: hepatitis A, hepatitis B and hepatitis C. These viruses are different; they have different ways of passing between people, different symptoms and different treatments. This booklet focuses on hepatitis C.

Hepatitis C is a virus that affects your liver and causes damage to this important organ. This type of damage is called fibrosis in earlier stages and cirrhosis in later stages. Over time, the damaged liver isn't able to work as well. In severe cases, cirrhosis can lead to liver failure or liver cancer.

After infection with hepatitis C, the body tries to fight the virus. In some people, the body is able to clear the virus. If the virus is still in the body after six months, the infection becomes chronic and stays in the body.

There is a cure for hepatitis C; hepatitis C treatment can completely clear the virus from the body. But there is no vaccine for hepatitis C and the body does not develop protection against the virus. It is possible to become infected again.

#### How do you know whether you are co-infected?

A person can be co-infected and not know it. Both HIV and hepatitis C are slow-acting viruses. People can be infected for years with either virus without having any signs or symptoms of illness.

Tests are the only way to find out for sure if you have HIV and hepatitis C. The test for HIV is a blood test. Hepatitis C is detected with two blood tests. The first test is called an antibody test and the second test is called a viral load test (also called an RNA test or a PCR test). Only the hepatitis C viral load test can tell you if you currently have hepatitis C.

For more information about HIV or hepatitis C check out [www.catie.ca](http://www.catie.ca) and [www.hepCinfo.ca](http://www.hepCinfo.ca) or contact CATIE at 1-800-263-1638.

- **Good oral hygiene**, such as preventing sores in and around the mouth, can lower the risk of HIV, hepatitis C and other STIs passing during oral sex. Not brushing or flossing for at least 30 minutes before sex will also lower this risk.

## When using drugs

Sharing or borrowing equipment for preparing, injecting, smoking and snorting drugs can spread HIV and hepatitis C. This is because used equipment can have blood on it and even small amounts of blood carrying HIV or the hepatitis C virus can spread these viruses when there is contact with another person's bloodstream.

**If you use drugs, there are things you can do to lower the chance of HIV and hepatitis C passing to others and to protect yourself from other infections.**

The steps you can take are forms of **safer drug use**, also called harm reduction.

- **If you inject drugs, including steroids**, you can lower the risk by using new needles, syringes and other equipment (cookers, filters, water, swabs and ties) as often as you can. You can also have your own equipment and try not to share it.
- **If you smoke drugs**, you can lower the risk by using your own equipment (pipes, mouthpieces) and trying not to share with other people.

Pyrex pipes with mouthpieces are safest because they don't break down as easily or get as hot as other materials when heated. This can prevent cuts, burns and sores on the lips, helping to stop HIV and hepatitis C from passing.

Looking for some safer sex tips to get you started?

- **External (male) condoms and internal (female) condoms** are an effective form of protection against HIV, hepatitis C and most other STIs. Using a water-based lubricant with condoms can decrease the chances of the condom breaking. For information on how to use a condom, talk to a healthcare or community worker.
- You can reduce your risk of getting other STIs by **learning how different STIs pass between people, getting tested regularly** and **treating any infections right away**.
- Sharing sex toys can allow HIV, hepatitis C and other STIs to pass. **Putting a condom on the toy and changing it whenever a sex toy is passed from partner to partner or from one body opening to another**—mouth, anus or vagina—can lower this risk.

### Do you have to tell your sex partner(s) that you have HIV and hepatitis C?

Current Canadian criminal law requires people with **HIV** to disclose their status to their sex partner(s) before any activity with a “realistic possibility” of HIV transmission. This law can apply to other STIs. As of early 2012, it is unclear whether people with **hepatitis C** have a legal duty to disclose their hepatitis C status before sex.

Your local HIV organization, the Canadian HIV/AIDS Legal Network ([www.aidslaw.ca](http://www.aidslaw.ca)), or a lawyer or legal clinic in your area can help you understand when you have a legal duty to disclose your **HIV status**. They can also help you understand what consequences there could be if you choose not to tell your sex partner(s).

## You just found out you have HIV and hepatitis C

Coping with the fact that you have co-infection can be difficult. This is true whether you have been living with one virus and then learned that you have the other one or learned about both infections at the same time.

For some people who have been dealing with one infection, whether it is HIV or hepatitis C, a second infection is not easier to handle. It can feel like an extra obstacle or a setback in adjusting to life with a chronic illness.

On the other hand, some people who have been dealing with one infection feel empowered by their experiences managing that infection and are able to adapt what they have learned to a second infection.

If you have tested positive for HIV and hepatitis C at the same time, the initial shock can be especially difficult to cope with. In addition to the information in this booklet, you may want more general information about HIV and hepatitis C.

**The most important thing right now is to find a doctor and get other support.**

Everyone reacts to the news of being co-infected in his or her own way. Still, many people ask similar questions: How can co-infection affect me? What treatment options exist and how can treatment affect me? What resources are available to support me? This booklet is meant to answer many of these questions.

Living with both HIV and hepatitis C creates a unique set of challenges related to staying healthy, making decisions about treatment and protecting yourself and others. With the help of a healthcare team, information and support, you can live a long and healthy life.



Neither HIV nor hepatitis C can pass through dry kissing or casual contact such as hugging, shaking hands, sharing clothes or eating together.

## During sex

The chance of HIV passing during sex depends on different factors, including:

- **The kind of sex you're having** – HIV passes most easily during unprotected anal sex and unprotected vaginal sex. The risk of HIV passing during oral sex is usually low. Cuts, sores or inflammation in the mouth or throat or on the genitals can increase the risk during oral sex.
- **HIV treatment and viral load** – if you're on HIV treatment and have an undetectable viral load, the risk of HIV passing to a partner is lower.
- **If either partner has another sexually transmitted infection (STI)** – STIs can affect the genitals, anus, mouth and throat. Having an STI can increase the chance of HIV passing during sex.

Although sexual transmission of hepatitis C is rare, it can happen, especially during unprotected anal sex. Being co-infected with HIV and hepatitis C increases the risk of hepatitis C passing during unprotected sex.

**Safer sex** involves thinking about the kinds of sex you want to have, learning about the risks and using different strategies for lowering the risk of HIV, hepatitis C and other STIs.

**Together with your partner(s) you can make decisions about the level of risk and the strategies that are right for you.**



## Protecting yourself, protecting others

### How do HIV and hepatitis C pass from one person to another?

A major reason why co-infection with HIV and hepatitis C is common is that both viruses often pass the same way.

**Both viruses can pass through blood-to-blood contact (when blood carrying the virus gets into another person's bloodstream). HIV can also be spread through semen (cum, including pre-cum), vaginal fluids, anal fluids and breast milk.**



## Will you be sicker because you have HIV and hepatitis C?

At most, only one in four (25 percent) of people who have HIV and hepatitis C clear the hepatitis C virus on their own, without any treatment. This means that most people go on to live with chronic hepatitis C. Untreated, co-infection is a more serious health issue than having only HIV or hepatitis C.

**In general, co-infection can make the effects and symptoms of hepatitis C worse.**

Liver damage can happen more quickly and can be worse in a person who is co-infected with HIV, especially if someone has been HIV positive for many years or has a weak immune system (a CD4 count less than 200).

Experts have different opinions on the effect that co-infection has on HIV. When someone who is co-infected starts HIV treatment, the immune system may recover more slowly—this is usually temporary.

# Things you can do to live better with HIV and hepatitis C

## Get connected

HIV and hepatitis C services in your area can offer support and information. They can also help connect you to other people living with HIV, hepatitis C or co-infection. For information on services in your area, check out [www.catie.ca](http://www.catie.ca) and [www.hepCinfo.ca](http://www.hepCinfo.ca) or contact CATIE at 1-800-263-1638.

Facing emotional problems on your own can be very difficult. Help is available. If you are feeling down or depressed, it's important to talk about it with a doctor or a counsellor. There are different kinds of counselling and therapy available. Some of these are one-on-one (where it is just you and a counsellor) and some are done in groups (where you, other people and a counsellor all meet together). The setting and type of service you receive will depend on what kind of support you're looking for and which services are available in your community.

**If treatment did not clear the virus:** People can have many different emotions when hepatitis C treatment did not clear the virus. You may want to talk about your feelings with someone such as a friend, family member, counsellor, support worker, nurse or someone at a local HIV or hepatitis organization.

Focus on doing what you can to reduce liver damage and to live and feel well. (See “Things you can do to live better with HIV and hepatitis C” on page 10.) Continue to follow up with your doctor to monitor your liver.

There may be other options for you, such as:

- Trying treatment again, especially when new anti-hepatitis C drugs become available.
- Having a liver transplant. Liver transplantation is an option when someone has liver failure. Many people feel better, spend less time in hospital and are able to lead a more active life after receiving a liver transplant. But transplantation is not a cure for hepatitis C. If the hepatitis C virus is still in the body, it will infect the new liver.

In the past, HIV-positive people in Canada were excluded from receiving a transplanted organ. However, in some provinces, HIV-positive people are now considered for the waiting lists for organ transplants.



## After hepatitis C treatment

**If treatment cleared the virus:** Depending on the health of your liver, your doctor may want to continue monitoring for liver cancer. He or she may recommend an annual screening test, for example. You may also continue to experience some symptoms of liver damage, such as tiredness or difficulty concentrating. For many people, the liver heals itself over time.

The body does not develop protection against the hepatitis C virus and it is possible to become infected again. Understanding how hepatitis C can pass from person to person will help you take steps to protect yourself in the future. (See “Protecting yourself, protecting others” on page 36.)



## Build a healthcare team

Building a healthcare team that you trust can help you live better with HIV and hepatitis C. In addition to a doctor and nurse, you may also see specialists—doctors who concentrate on a particular condition—such as an infectious disease specialist, HIV specialist or liver specialist (a hepatologist). Other people who can support you include a pharmacist, naturopath, counsellor, psychologist, psychiatrist, dietitian or social worker.

Some services provide support and care for both HIV and hepatitis C in one place and at the same time. Other times, people get care for their HIV, hepatitis C and other health issues in different places.

Some people who are co-infected use street drugs. Some healthcare professionals have negative attitudes towards people who use drugs. This can make it hard to trust them.

**If you aren't sure where to start when putting together your team, your local HIV or hepatitis C organization or community health centre may be able to help. Remember, every person has the right to good, respectful medical care.**

No matter what your team looks like, it's a good idea to keep all of your health information together. This will help you and your team share information. A personal health record makes it easier to keep track of your prescriptions and appointments, to collect and review your test results and look for trends over time. CATIE has a personal health record available for downloading and printing: [www.catie.ca/pdf/myh/MYH\\_Health-Record.pdf](http://www.catie.ca/pdf/myh/MYH_Health-Record.pdf)

## Get the right tests

Your doctor will likely recommend a variety of tests to check (monitor) how HIV and hepatitis C are affecting you, your immune system and your liver. You and your doctor will decide how often you have each of the tests.

### Differences between viral loads

HIV and hepatitis C virus naturally make copies of themselves (replicate) at different speeds—don't be alarmed by hepatitis C viral loads that are a lot higher than your HIV viral loads.

An **HIV viral load test** measures the amount of HIV in your blood. The viral load test measures the number of copies of HIV in a millilitre of blood. Generally, the higher the viral load, the faster HIV will attack the immune system.

There is also a **hepatitis C viral load test** to measure the amount of hepatitis C virus in your blood. This test is sometimes called an RNA test or a PCR test. Unlike HIV and the immune system, a higher or lower hepatitis C viral load does not imply more or less liver damage.

From managing drug side effects to boosting your immune system, there are many reasons why people take natural health products. For example, antioxidant supplements (such as vitamins A, C, and E, N-acetylcysteine (NAC), co-enzyme Q<sub>10</sub> and alpha-lipoic acid) are popular among people with HIV because they help protect and heal the body's cells from damage caused by HIV. However, no natural health product has proven to be effective as a treatment for HIV itself or as a treatment for hepatitis C.

While natural health products do not require a doctor's prescription, they have benefits and side effects, just like other drugs. Some natural health products can also interact badly with anti-HIV or anti-hepatitis C medications. This is especially true for herbs. For example, St. John's wort, an herb used to treat depression, can cause problems with anti-HIV medications. Milk thistle, an herb that some people believe may improve liver health, can also cause problems with many medications, including anti-HIV and anti-hepatitis C medications.

Consider visiting a doctor who specializes in naturopathic medicine. The Canadian Association of Naturopathic Doctors (CAND) has information on regulated naturopathic doctors across Canada. Call the CAND at 1-800-551-4381 or go to [www.cand.ca](http://www.cand.ca).

For more information on herbal therapies and complementary therapies for people living with HIV, check out CATIE's practical guides online at [www.catie.ca](http://www.catie.ca) or call 1-800-263-1638 to order your free copy.

If you are using substances, you may want to talk to your doctor or nurse about how to get help for dependence on alcohol or street drugs. These changes will make it easier to take treatment and make you healthier.

Some people are tempted to stop their treatment early because of side effects. But, for the treatment to work, it is important to take all doses exactly as prescribed. If you experience severe side effects, you should talk to your doctor or nurse about ways to reduce them.

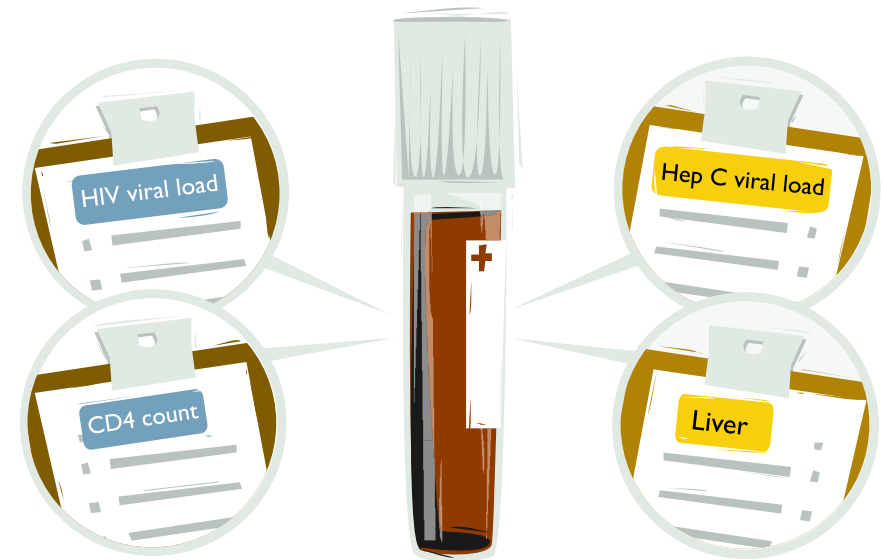
For more information on the common symptoms of hepatitis C and side effects of its treatment (along with practical tips for managing those symptoms and side effects), check out the book *Hepatitis C: Managing common symptoms and treatment side effects* online at [www.hepCinfo.ca](http://www.hepCinfo.ca).

CATIE also offers information on anti-HIV drug side effects (and practical tips for managing them) online at [www.catie.ca](http://www.catie.ca). Or you can call 1-800-263-1638 to speak with someone knowledgeable about HIV and hepatitis C treatments.

## Natural health products

Natural health products are vitamins and minerals, herbal remedies, homeopathic medicines, ancient systems of healing, probiotics and supplements.

**Talk to your doctor and pharmacist about any natural health products you take or are thinking of taking as part of your treatment plan.**



Viral load testing is mostly used before starting treatment and during treatment to monitor how treatment is working. It is especially important not to focus on any one number, but to look at trends over time.

Your **CD4 cell count** will give you and your doctor a rough idea of how strong your immune system is. Generally, you should be getting your CD4 count checked every three to six months. It may make sense to check it more often if you've been stressed or sick.

**Liver tests** are used to look at the health of the liver. Many doctors recommend liver tests every three to six months when you're co-infected with HIV and hepatitis C. These tests include:

- Blood tests (some check the levels of liver enzymes, such as ALT and AST, and some measure liver function, such as bilirubin, prothrombin time and albumin)

- Liver biopsy (which uses a small needle to take out a tiny sample of the liver that the doctor can look at under the microscope to check for damage)
- Ultrasound (which takes a picture, like a photograph, of the liver to measure how much damage there is)
- Fibroscan (which measures how stiff the liver is; it is also called transient elastography; machines are available in some clinics in Canada)

More and more, doctors are using combinations of less invasive tests, such as blood tests and ultrasounds, instead of biopsies, which are minor surgery and cause discomfort in some people.

In severe cases, cirrhosis from hepatitis C can lead to liver cancer. Finding cancer in its early stages can lead to more successful treatment. Talk with your doctor about your risk for liver cancer and a screening schedule that makes sense for you.

## Take simple steps towards healthy living

You can help stay healthy, keep your immune system strong and lower your risk for liver damage with some key health habits. However, it can be hard to always make healthy choices because other things in your life may be more important.

**Do as much as you can, and remember that every healthy choice helps your liver, your immune system and your overall health.**

drugs. Also, the side effects of HIV treatments often become less intense with time.

### **Work with your healthcare team to plan for side effects before starting treatment.**

Planning for side effects means understanding what side effects you might experience and thinking of ways to manage them. For example, there are medications your doctor can prescribe to help manage diarrhea during the first few weeks after starting HIV treatment. Or you can reduce the flu-like symptoms of hepatitis C treatment by taking over-the-counter medication the day of the interferon injection.

**Depression** is a very common side effect of hepatitis C treatment. It deserves attention because about one out of every three people treated for hepatitis C can develop mental health problems, including depression. The good news is that there are ways to lower the risk of depression. Some doctors start their patients on medications to lower the risk of depression a month before starting them on hepatitis C treatment.



## Undetectable, cleared and cured: three important words

An **undetectable** HIV viral load means that the amount of HIV is so low that the test used to measure HIV viral load can no longer detect the virus in the blood. An undetectable HIV viral load allows your immune system to rebuild itself and for you to remain healthy. It does NOT mean that HIV is gone from your body. You are still HIV positive. Currently, there is no cure for HIV.

With hepatitis C treatment, hepatitis C viral load can also become **undetectable**. If

hepatitis C viral load remains undetectable six months after you have finished treatment, the hepatitis C virus is cleared from the body.

If the virus is **cleared** from the body, treatment has **cured** hepatitis C. This stops the damage to the liver. However, treatment itself cannot repair the damage that hepatitis C has already done to the liver. In many people, the liver is able to heal itself over time.

Unfortunately, hepatitis C treatment does not work for everyone. Sometimes, if treatment is not working, your doctor may stop your treatment early. (See the section “After hepatitis C treatment” on page 34 for more information.)

## Dealing with side effects

In general, people who are co-infected and taking treatment for HIV, hepatitis C or both experience the same side effects as people who are living with one virus and taking one treatment. The main difference is that some side effects may happen more often or feel more intense among people who are co-infected.

The good news about anti-HIV drugs is that newer drugs are much easier for the body to tolerate than older

- **Quit or cut down on alcohol.** The process of breaking down alcohol in the body puts an extra strain on the liver and can cause more damage. Also, treatment for hepatitis C has a better chance of working if you can cut back on or stop drinking alcohol.
- **Quit or cut down on smoking.** Smoking tobacco can put an extra strain on your liver and can lead to other health issues such as heart disease, cancer and breathing problems.
- **Quit or cut down on street drugs.** Some drugs may affect your liver or your ability to take certain HIV or hepatitis C medications. It may become harder for your liver to break down the drugs and there's a higher risk for overdose. For information on safer drug use, consider talking to a doctor or harm reduction worker you can trust.



- **Consult with your doctor or pharmacist before taking painkillers and other medications, vitamins, herbs and supplements.** Some are more liver friendly than others. If you are on treatment for HIV and/or hepatitis C, speak with your doctor about possible interactions.
- **Exercise, rest and relaxation are all important.** Find the right balance for you. A health professional can give you advice for your situation.
- **Eat a healthy and balanced diet.** Choose fresh foods over salty, sugary, fatty and fried foods whenever possible. Drink plenty of water.
- **Get tested for hepatitis A and B.** Both of these viruses also infect the liver and can make liver damage worse if you already have hepatitis C. There are vaccines to protect against hepatitis A and B. If you have never been vaccinated, it's something to consider, especially if you travel or have multiple sexual partners.

HIV viral load usually becomes undetectable within three to four months, depending on how high it was before treatment. Don't be alarmed if your viral load doesn't become undetectable right away. Talk to your doctor about how long it could take in your case.

Once your HIV viral load becomes undetectable, it should stay there. If your HIV viral load becomes detectable again, you may need to change your combination of anti-HIV medications.

CD4 counts don't usually increase as quickly as HIV viral load drops, especially if you're co-infected with hepatitis C. Once HIV is under control, your immune system should become stronger.

Changes in your hepatitis C viral load show whether **hepatitis C treatment** is working. Your hepatitis C viral load will be measured at different times during treatment.

**Ideally, the hepatitis C viral load will become undetectable, though this is not always the case.**

Generally, the earlier hepatitis C becomes undetectable during treatment, the higher the chance of clearing the virus. Treatment sometimes works more slowly for people who are co-infected. Small drops in hepatitis C viral load at the beginning of treatment do not always mean that treatment is not working or will not work. If this happens, don't be discouraged. Be patient and hang in there!

If the hepatitis C viral load becomes undetectable during treatment, it will be measured again six months after treatment is finished. Hepatitis C is cleared from the body when the virus is undetectable six months after the end of treatment. This is called a sustained virological response (SVR).

## Alcohol: Thinking about cutting back?

Drinking less alcohol is one of the best things you can do for your health when you are co-infected with HIV and hepatitis C. If you want to make this change in your life, try different strategies to discover what works for you. You might:

- Set a drinking goal and try to stick to it.
- Space out alcoholic drinks with non-alcoholic drinks such as water.
- Switch to smaller drinks or drinks with lower alcohol content (three percent instead of five percent, for example).
- Seek support through a support group, addiction treatment or counselling.

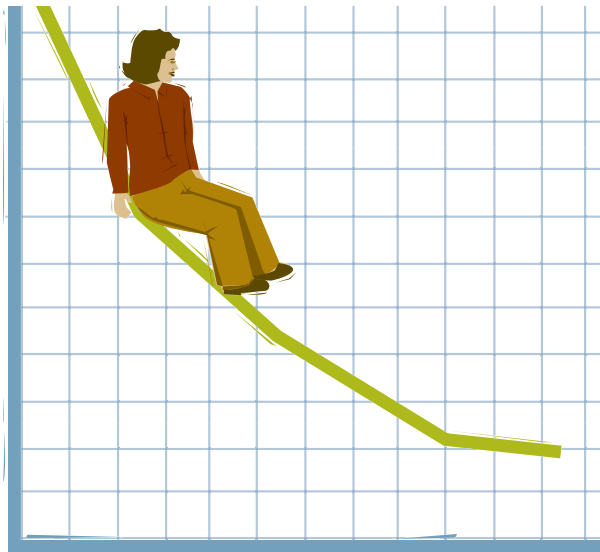


## Once you've started treatment for HIV or hepatitis C

### How to know whether treatment is working

**HIV treatment** slows down the production of HIV in your body. This leads to drops in your HIV viral load.

**The goal is to have your HIV viral load become undetectable.**



- **Get regular checkups to monitor your overall health.** When thinking about health, it's important that we don't focus only on liver health and CD4 cell counts—there are other health issues that are linked to HIV, hepatitis C and co-infection. Let your doctor know about any problems you are having, changes you notice or if something feels different. These changes may or may not be related to HIV or hepatitis C.

CATIE offers more information on how to live better with HIV and hepatitis C—including nutrition information, sharing information about your diagnosis and more—online at [www.catie.ca](http://www.catie.ca) and [www.hepCinfo.ca](http://www.hepCinfo.ca).

## Learn about the treatments for HIV and hepatitis C

Treatments are available for HIV and for hepatitis C. You and your healthcare team will decide on how to best treat the two viruses. The treatments are different in several ways. (See “Different viruses, different treatments” on the next page for more information.)

## Different viruses, different treatments

Since treatment information can be complicated and changes quickly, this is a general introduction to major treatment issues related to HIV and hepatitis C co-infection. However, as you begin to make treatment decisions, you may want more detailed and current information than this booklet provides.

### Treatment is available for HIV and for hepatitis C.

HIV and hepatitis C treatments are different: they have different goals, work in different ways and have different regimens.

**HIV treatment** means taking a combination of anti-HIV drugs—usually at least three—every day. Treatment is usually taken once or twice a day and some drugs are combined into one pill so that there are fewer pills to take.

There are more than 20 different anti-HIV drugs, and experts recommend specific first-time combinations because they are safe, effective and generally easy to take. However, other factors, such as the type of virus that you have, your other medical conditions or your other prescription drugs, may mean you and your doctor will decide on a different combination for you.

You and your doctor will also decide when is the best time for you to start treatment. Because co-infection can increase how fast liver damage happens, the sooner you

Another type of drug interaction is when an **existing medical condition** such as hepatitis C changes how effective or safe a medication is. Many anti-HIV drugs are broken down by the liver and this can put an extra strain on the liver and cause more damage to it. Your doctor may recommend switching to more liver-friendly anti-HIV drugs or lowering the dose—the effects on the liver usually go away after these changes are made.

If you are taking HIV treatment, regular blood tests to monitor your liver health will help to identify possible problems. This is true whether or not you are also taking hepatitis C treatment. This way, most people can be on a treatment that is safe and effective.

## Paying for treatment

The cost of treatment for HIV or hepatitis C is expensive. Some people have private drug plans that will cover the cost of treatment. If you do not, there are other options.

In Canada, there are different federal, provincial and territorial drug benefit programs to help cover these costs. Special authorization is sometimes needed in order for these medications to be covered by a public program.

In addition to government programs, many pharmaceutical companies that market anti-HIV and anti-hepatitis C drugs offer programs to help people cover costs involved with taking their medication.

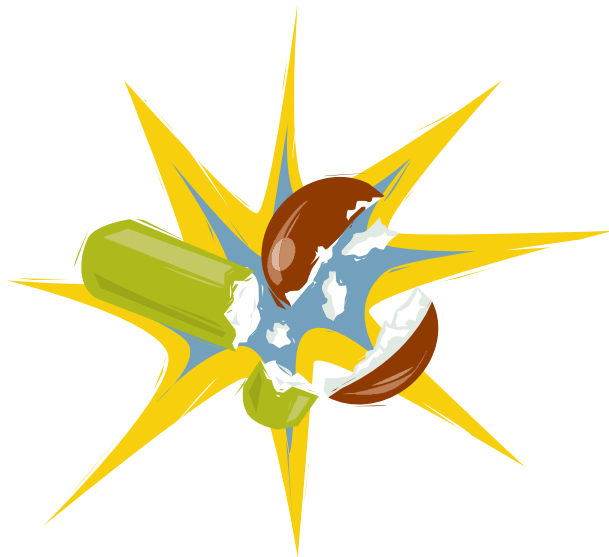
CATIE offers more information about drug coverage programs for anti-HIV and anti-hepatitis C drugs online at [www.catie.ca](http://www.catie.ca) and [www.hepCinfo.ca](http://www.hepCinfo.ca).

## Making sure your drugs work together

Sometimes when people take medications for more than one condition at the same time, these medications react with each other. This reaction is called a **drug-drug interaction**. Drug-drug interactions can cause more side effects or change how effective a particular medication is.

It is important to be aware that some of the medications commonly used to treat HIV and hepatitis C can interact with one another. Other medications that you may be taking, including methadone, can also interact with certain anti-HIV or anti-hepatitis C medications.

**Talk to your doctor about the different medications you are taking so that he or she can help you avoid drug interactions. Getting your different prescriptions filled by a single pharmacy can also help avoid unexpected interactions.**



### HIV

### Hepatitis C

#### What is the main goal of treatment?

The goal of HIV treatment is to lower the HIV viral load to an undetectable level and keep it there. This allows the immune system to retain (or rebuild) its strength and keep you healthy.

There is no cure for HIV infection—at least, not yet.

The goal of hepatitis C treatment is to clear the virus from the body.

Clearing the virus can also be called a viral cure or a sustained virological response (SVR). It means that a person does not have hepatitis C any more.

#### Are there other goals?

Treating HIV can also improve the health of many other systems in your body, including your heart, kidneys and liver. A healthier liver can better handle hepatitis C.

Being on treatment and having an undetectable viral load lowers the risk of HIV passing to other people.

Treatment may improve the overall health of the liver.

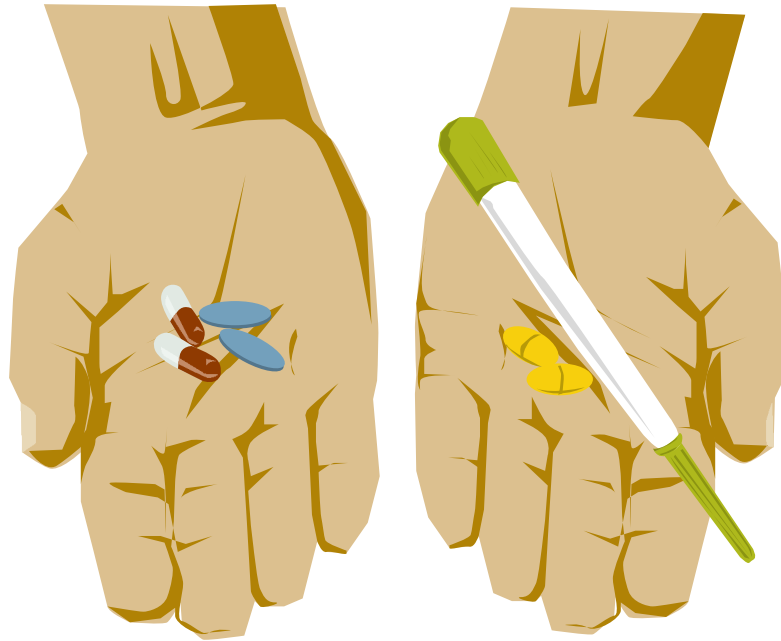
By improving liver health, hepatitis C treatment can also reduce the risk of liver-related complications with HIV treatment.

#### Do I have to go on treatment?

Almost everyone with HIV needs to start HIV treatment eventually.

Treatment is especially important for people who are co-infected because liver damage can happen more quickly.

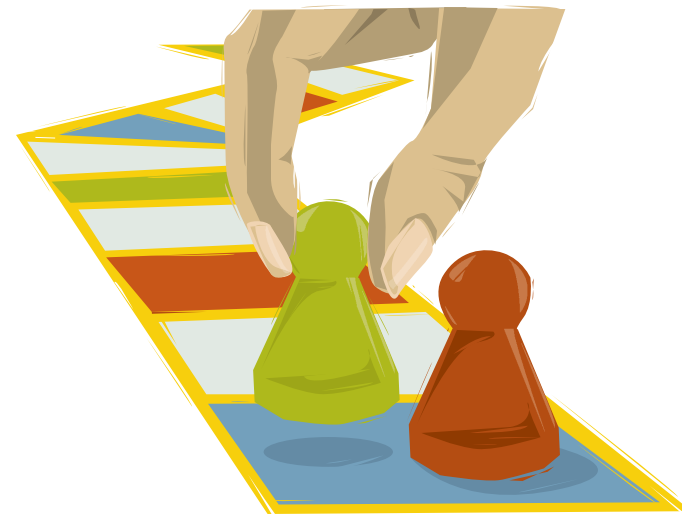
A few people clear the virus without treatment and, for some others, liver damage happens slowly enough that they do not need treatment.



start HIV treatment the better it is for your liver and overall health. The lower your CD4 count, the more seriously you should think about HIV treatment. People with higher CD4 counts can monitor their counts and, together with a doctor, weigh the benefits and challenges of starting treatment.

At this time, HIV is a lifelong infection and HIV treatment is a lifelong commitment. Stopping treatment, even for a short time, is not recommended because there is a risk of serious health problems, including more liver damage. These short breaks from treatment can also cause your anti-HIV drugs to stop working.

Many people who are co-infected consider **hepatitis C treatment** when they have early signs of scarring (or fibrosis) on the liver.



Taking on two treatment routines and two sets of side effects at the same time can be difficult, but many people say that the experience of taking HIV treatment actually helped to prepare them for hepatitis C treatment. For example, strategies for remembering to take your anti-HIV drugs or tips for coping with side effects can be used when taking hepatitis C treatment.

**Starting treatment for both viruses at the same time is not recommended.**

Some people, especially people with HIV who visit their doctor regularly, learn they have hepatitis C when the infection is caught early (in the **acute phase**). If this is the case for you, your doctor might recommend waiting a few weeks to see if the body clears the hepatitis C virus on its own. If it seems that the body will not clear the virus by itself, your doctor might recommend starting hepatitis C treatment right away.

Acute hepatitis C is easier to treat than chronic hepatitis C; the treatment may be simpler, length of treatment may be shorter and the success rate is higher.

- How fast **liver damage** is happening. Your liver might not get worse or it could get worse very fast. Monitoring your liver health will give some information about how fast the disease is happening. Severe liver damage can make hepatitis C and HIV more difficult to treat and can also limit which HIV medications you can take.
- Your **support network**. Joining a support group and talking with family and friends can all play an important role throughout all phases of treatment.
- If you are **pregnant** or your partner is pregnant, or if either of you wants to have a baby, see the section “You can have a healthy baby” on page 40 for important information.

Your healthcare team can help you consider all of these factors and come to a decision that is best for you. The most important thing is to start treatment when you are ready. Finally, even if you want to start treatment, it often takes time to prepare everything.

## Which treatment to take first?

If you have never been on HIV or hepatitis C medications before, the decision about which condition to treat first is made by you and your doctor. Your doctor may recommend **treating HIV first** because this will raise CD4 cell counts. On the other hand, your doctor may recommend **treating hepatitis C first** if your immune system is strong but your liver has a lot of scarring.

**Already on HIV treatment?** If your HIV is under control with HIV treatment, you might consider taking hepatitis C treatment while staying on your anti-HIV drugs. Your doctor may recommend changing the specific HIV medications you take to avoid interactions with hepatitis C medications.

At this time, hepatitis C treatment for someone who is co-infected with HIV generally lasts for about one year. Sometimes, if treatment is not working or if you have too many side effects, your doctor may stop your hepatitis C treatment early.

Your hepatitis C treatment options and how well you respond to hepatitis C treatment depends on many factors. Among the most important is the type (called the strain or genotype) of hepatitis C virus you have. Some strains are harder to treat than others. A hepatitis C genotype test can tell which type you have.

For many years, the standard treatment for hepatitis C has been a combination of two drugs: pegylated-interferon and ribavirin. Interferon is given by a once-a-week injection and ribavirin is taken twice a day in pill form.

New drugs for hepatitis C are being developed—some work in ways that are different from current drugs. For example, the first protease inhibitors for hepatitis C, boceprevir (Victrelis) and telaprevir (Incivek), were approved for use in Canada in 2011. Over the next few years, we can expect new treatments that do a better job of treating hepatitis C.

Unfortunately, approval of these new drugs for people who are co-infected with HIV and hepatitis C is slower than approval of drugs for people who are only living with one of the viruses. Still, early studies for many new treatments show positive results.

For more information on HIV treatment, check out CATIE’s *A Practical Guide to HIV Drug Treatment for People Living with HIV* online at [www.catie.ca](http://www.catie.ca) or call 1-800-263-1638 to order your free copy. CATIE also has in-depth information on the different anti-HIV and anti-hepatitis C drugs online at [www.catie.ca](http://www.catie.ca) and [www.hepCinfo.ca](http://www.hepCinfo.ca).

# Deciding to start treatment for HIV or hepatitis C

## Things to think about before starting treatment

Starting treatment for HIV or hepatitis C is a big decision. This is because there are benefits and challenges to each treatment. Before starting either treatment, there are many issues, both medical and non-medical, to consider, including:

- **Side effects**, both short term and long term, and if you feel strong enough and supported enough to manage them. Learning as much as you can about the side effects of treatment and how to cope with them beforehand will help you make better decisions. (See “Dealing with side effects” on page 30 for more in-depth information.)
- Your **ability to stick to** (adhere to) the treatment regimen. Adherence is important for the drugs to work. This is particularly true for HIV therapy, which is a lifelong commitment. If HIV keeps making copies of itself when exposed to low levels of anti-HIV drugs, it will eventually figure out how to make copies of itself even when it is exposed to the proper drug levels. Then your drugs will no longer work for you.

Thinking about how taking medications every day may affect your life can help you stick to your treatment once you start taking it. Common issues that come up include managing side effects, handling taking pills in different situations of daily life, remembering to take pills on time and even understanding your feelings towards the medications.

If you are at a point in your life where, for whatever reason, you are not able to take your medications regularly and as prescribed, take a clear and honest look at what’s giving you trouble. Solving these problems is a very individual matter. Your pharmacist, clinic nurse, social worker or friends who have been on treatment can often help you.

- **Other health problems**, like heart disease, diabetes, anemia, obesity or mental health issues such as depression. These conditions may affect the specific drugs you take or how you can prepare for the side effects of treatment. For example, some people with depression start antidepressant medications a few weeks before starting hepatitis C treatment.

