

Sexual transmission of hepatitis C: A guide for HIV-positive gay men



The intent of this publication is to highlight how hepatitis C (HCV) could be passed sexually and provide you information to make decisions on how to protect yourself.

First, a few basic points

The sexual transmission of HCV is poorly understood, and until recently was a fairly controversial topic. However, newer research is starting to inform us about the risks of HCV infection through sexual exposures.

There are many aspects about this topic that we don't have conclusive information. For example, we don't know how much HCV is necessary for infection. Is the amount for vaginal transmission different from the amount needed for rectal transmission? Is transmission through oral sex an issue?

We also talk about anal this and rectal that. When we state *anus* or *anal*, that means your butthole. When we state *rectum* or *rectal*, that means the cavity inside and above your butthole. The tissue on these body parts, like the skin on your penis, is softer and therefore more prone to micro tears during sex. Keep this in mind as you read through this publication because this is likely one factor among many that could increase your risk for sexual transmission of HCV.

How is hepatitis C transmitted?

Hepatitis C is transmitted through blood-to-blood contact. While it is primarily transmitted through sharing injection drug equipment like syringes, cookers, cotton and water, other non-injecting drug practices can also transmit HCV. These includes sharing straws for snorting or pipes for smoking drugs. Finally, other known

routes of transmission include unsterile tattoo equipment, poorly sterilized medical equipment, and other procedures where contaminated blood can infect you.

Medical providers are seeing a growing number of cases of HCV in HIV-positive people who have never injected drugs; thus, this is beginning to show a relationship between HIV infection and being vulnerable to the sexual transmission of HCV. This fact sheet is informed by this research.

What do we mean by "sex"?

Sex has different meanings for different people. For our purposes here, when it comes to the relationship between HCV transmission and sex, we will focus on anal sex (both insertive and receptive, or top and bottom), fisting and using sex toys. Other sexual activity carries little to no risk for HCV transmission, like oral sex, mutual masturbation or other activity that does not involve sharing body fluids like blood or semen.

Additionally, we don't go into detail about HCV risk from S/M practices. That said, if something has blood on it, it can transmit HCV. So if you practice S/M, keeping your tools clean and sterile is a good practice to reduce the risk of HCV and other blood-borne infections.



What's the scope of the problem?

Overall, the rates of sexual transmission of HCV are comparatively low, but there are important exceptions. Indeed, it becomes a little complicated as you start to break it down. For example, we know that HCV is transmitted from blood-to-blood contact, but what about contact with sexual fluids? The truth is, we don't know. Some studies have found HCV in semen and vaginal fluids on its own without blood being present, while others have not.

The most important factor in sexual transmission of HCV looks to be the presence of blood during sex. If a sexual practice leads to bleeding, the risk increases. Many different things determine the risk for sexual transmission of HCV, including but not limited to HIV status, sexual activity and substance use.

HIV-negative individuals appear to be at low risk for HCV. This is true of all genders and sexual orientations. Therefore, HIV-negative gay men who do not inject drugs are at low risk for sexual transmission.

However, people living with HIV have higher rates of sexually transmitted HCV — and re-infection, as we will discuss later. HIV-positive individuals should be aware of the risk factors that are associated with it, as well as ways to protect themselves from it.

Sero-sorting and HCV risk

Sero-sorting is when a person of one HIV status chooses to have sex with someone who they believe is the same status, in order to prevent HIV infection. So ... HIV-negative people seek other HIV-negative individuals, and HIV-positive people seek out each other as well.

Although the intent is to prevent passing HIV onto others, HIV-positive people who have condomless sex are at a higher risk for getting STDs and perhaps another strain of HIV (more likely within first 6 months of HIV infection). As for hepatitis C, studies show that men who sero-sort with other men have higher rates of HCV. This is partly because about 1 out of 3 HIV-positive people are co-infected with HCV. So if you sero-sort, talk to your partners about STDs and HCV and get tested for these infections regularly.

What is the effect of anal warts on HCV transmission?

We do not know if anal warts themselves increase this risk. However, we have begun to see a relationship between sexual risk of HCV in MSM and the treatment of anal warts. Although this evidence is not definitive, it's still wise to be aware of its potential risks.

The removal of anal warts — either by surgery or by applying a topical medication — can make you vulnerable to anal and rectal bleeding. The skin and the softer tissue of the anus and rectum needs time to heal. If you or your partner(s) returns to receptive anal sex before the area has the chance to heal, there will be more lesions and wounds for HCV-infected blood to come into contact, thereby increasing the risk of transmission.

What factors increase the risk of HCV?

FISTING:

Getting fisted is associated with sexual transmission of HCV. This can cause trauma to the surfaces of the anus and rectum that could lead to even microscopic bleeding, making one more vulnerable to HCV. Fisting someone may also increase your risk especially if you have recent breaks in the skin on your hands, wrists and arms.

SHARING SEX TOYS:

As with fisting, if using sex toys leads to bleeding anywhere in or on the body and especially on the penis or anus or in the rectum, then HCV can be transmitted from the blood-to-blood contact that results from sharing those toys.

STDs:

Sexually transmitted diseases that cause ulcers or sores are associated with sexual transmission of HCV due to the presence of blood in a wound or sore. These include herpes, chancroid, lymphogranuloma venereum (LGV) and primary syphilis. Each of these is more common in people living with HIV.

GROUP SEX:

Engaging in group sex appears to increase the risk of sexual transmission of HCV. This may be due to the use of drugs or repeated trauma to the sex organs.

MULTIPLE SEX PARTNERS:

As with group sex, having multiple partners is associated with sexual transmission of HCV. More partners means increasing the possibility of having sex with someone who has hepatitis C.

USING NON-INJECTABLE DRUGS WITH SEX:

This could happen with sharing snorting equipment or pipes, but using drugs can also reduce one's inhibitions that lead to taking more risks than usual. Some substances like poppers may increase bleeding, while others like ketamine might numb you to feeling any trauma during anal sex.

AMOUNT OF HCV:

The virus is at its highest level in the blood. It can also be found in lower amounts in semen (cum), but there's conflicting information of how much that is and how much it varies from day to day and from person to person. We also don't know about the HCV levels in pre-cum or anal fluids. Outside of blood levels, we don't know how infectious these other fluids can be.

MUCOUS MEMBRANES:

As we stated above fisting, sharing toys and group sex all could cause trauma to the mucous membranes of your sex organs. The rectum is a thinner surface, making it easier for infections to get into the body. The friction from sex can inflame the surfaces of the penis and anus, perhaps leading to micro or larger tears to those membranes. All of this can increase the chance for HCV to get into your body through the exposure of blood.

Testing for hepatitis C

As a person living with HIV, you should have gotten an HCV test when you first entered medical care. Beyond that, there is no consensus for how often an HIV-positive person should test. Several international guidelines call for annual HCV screening, and many providers in the United States do the same practice.

Talk with your medical provider about your HCV risks and your desire for routine screening. Most importantly, don't rely on noticing symptoms or abnormal blood tests like elevated liver function

tests (LFTs): HCV can be "silent" with no symptoms and it doesn't always trigger higher LFTs.

Hepatitis C is screened by using two tests: an HCV antibody test and an HCV RNA test. The antibody test looks for antibodies to hepatitis C, or the proteins that your immune system makes in reaction to the virus. It can take up to 6 months for an HCV antibody test to detect those antibodies. The RNA test looks for active hepatitis C in the blood. This test can be accurate as early as 6 weeks after infection but may take months.

Here's a chart to show the range of HCV test results and what they mean:

HCV antibody result		Viral load result	What it means ...
Negative	+	Negative	You do not have HCV.
Positive	+	Negative	You do not have HCV: you have cleared the virus, either through treatment or as one who naturally clears the virus.
Positive	+	Positive	You have chronic HCV.
Negative	+	Positive	You have early HCV infection OR your immune system cannot produce enough HCV antibodies.

Regardless of the result, talk to your medical provider about the result and what follow-up testing is needed, if any. You can also check out the publication, *What you need to know about hepatitis C testing and prevention*, for more details. Call 1-877-HELP-4-HEP to talk with a counselor about HCV testing.

Ways to reduce the risk of hepatitis C

- 1. Talk to your partner(s) about hepatitis C.** If he is HCV-infected, or doesn't know his status, do things that are less risky, such as oral sex, masturbation or wear a condom.
- 2. Wear a condom for anal sex.** Both tops and bottoms have an increased risk for sexual transmission of HCV. Condoms can provide an effective barrier to prevent blood contact. Use water-based lube to make sex smoother and potentially minimize micro tears and bleeding.
- 3. Check yourself for STDs.** Routine screenings for syphilis is an important part of your medical care, but give yourself self exams too. If you see a sore, check with your medical provider or go to an STD clinic to have it looked at. If you feel rectal discomfort or see any rectal bleeding, do the same.
- 4. Practice safer fisting.** Check out your hands for any cuts or bleeding cuticles. Wear latex gloves and change to new ones for each new partner should you be in a group setting. Hepatitis C is a tough virus that can live in lube, so don't share that either.
- 5. Keep your sex toys as clean as possible.** Cover dildos and vibrators with condoms and change them with each partner. Do not use toys with more than one person before fully washing them.
- 6. Take a break from anal play** until you've fully healed from hemorrhoids or anal warts or damage from anal sex, especially if you experience discomfort or pain or see visible blood.
- 7. Don't share anything** if you use drugs (injectable or non-injectable). HCV can live on surfaces for weeks at time, so anything that has blood on it can transmit the virus, including snorting equipment of crack/crystal meth pipes.
- 8. Screen for HCV regularly:** At least once each year, but more often may work better for you depending upon your level of risk.

Lastly, remember that you can get re-infected with hepatitis C if you clear the virus naturally or are cured because of treatment. You'll always test antibody positive, but you won't know if you actually have active virus in you that is potentially harming your liver unless you do routine HCV RNA (or viral load) testing. Talk with your medical provider about how often you should screen for HCV to detect re-infection as early as possible.