

Condoms & Herpes

Condoms do a great job at preventing some sexually transmitted diseases like gonorrhea, chlamydia and HIV. However, since HSV is transmitted by direct skin-to-skin contact, and since most people do have skin-to-skin contact during sexual foreplay before the condom goes on, condoms only reduce the risk of transmitting HSV by about 50%.

Using a barrier like a latex condom for fellatio or dental dam for oral-vaginal or oral-anal sex will prevent HSV-1 from being transmitted from the mouth.

Since HSV is surrounded by a lipid (fatty) coating, it is inactivated by soap, so simply washing after sex with regular soap and water might reduce the risk of picking up HSV infection. Studies have never been done to accurately look at this question, so no one knows for sure.



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Everything You Need to Know About Herpes

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Herpes simplex is a common viral infection. 80% of adults are infected with **Herpes simplex virus type 1 (HSV-1)**. It causes infection in the mouth, especially cold sores on the lips. HSV-1 can also sometimes be shed in saliva, even without causing cold sores or other symptoms. This is why it is such a common infection – most people who are shedding don't know it, and the virus is picked up simply through saliva contact. 50% of children are infected by the time they are six years old! Fortunately, HSV-1 in the mouth does not cause serious medical problems, though the cold sores it causes can be very uncomfortable and unsightly.

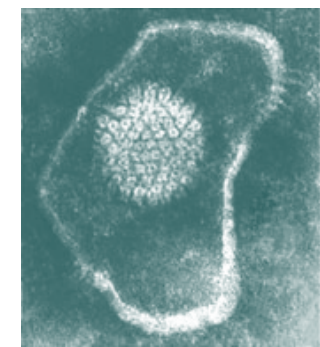
Herpes simplex virus type 2 (HSV-2) is the type that is more commonly found in the genital area, mainly on the penis or the vagina. It can also occur in the anal area in people who have anal sex. It is usually transmitted by direct genital-to-genital or anal-to-genital contact. It is estimated that 20% of young adults are infected with HSV-2. Herpes in the genital or anal area causes blisters that may itch or be painful. The blisters usually break and form small scabs, then heal up within a few days. If the sores are near the urethra (where urine comes out), sometimes the only symptom is burning on urination. About half of all people who are infected with HSV-2 do not have any symptoms at all, so they don't know they have it!

Both HSV-1 and HSV-2 remain in the body for life once someone has been infected with them. The immune system keeps the virus suppressed most of the time. The virus is "dormant" and still exists in the nerves deep in the skin. Sometimes however, even if the immune system is strong, HSV can start reproducing again and emerge back up to the skin, lips, or wherever the infection showed up the first time. If the immune system is weakened, either due to illness or stress, HSV is even more likely to break out.

Since HSV-1 is transmitted by saliva contact, it can potentially be transmitted to the genital or anal area by oral sex. HSV-1 and HSV-2 outbreaks can look and feel the same. The main difference is that HSV-2 in the genital area is more likely to relapse than HSV-1. Most of the time that someone has HSV in the genital area, it is due to HSV-2, but in a recent study of college-age students, almost 80% who had herpes in the genital area had it with type 1, not type 2. This is probably in large part dependant on how common oral sex is among the group that is being studied.

Asymptomatic infection

Most people who are infected with HSV-1 or -2, either orally or genitally, do not develop symptoms with their outbreaks. Presumably the outbreaks are happening but the symptoms are so mild that they might not be noticed. People who are in a long term relationship with someone who has genital herpes have an ~50% chance of becoming infected and developing genital herpes during the course of the relationship, even if they are careful to avoid sex when they know that an outbreak is occurring.



Electron micrograph of a herpes simplex virus.

being done. If you have had HSV cultured from a herpes sore, there is no need to do the blood test looking for antibodies because the definitive test, the culture, has already been done!

Before asking for the blood test, you should be prepared to know how you will use the information. Keep in mind that there is an 80% probability that the test for HSV-1 will be positive. If you are a sexually active young adult who has had multiple partners, there is a 20% chance the test for HSV-2 will be positive.

Testing for Herpes

The only way to definitively diagnose herpes infection is to culture a herpes sore while it is fresh and before it has scabbed over. An indirect way of diagnosing if someone has herpes infection is to see if antibodies to HSV are present in the blood. The blood test can distinguish between type 1 and type 2, meaning that it can tell if the person is infected with HSV-1, HSV-2, both, or neither. (The older version of the test that was around before 2003 was not able to accurately distinguish between HSV-1 and HSV-2.)

What the blood test cannot do is tell **where** on the body the person is infected. If antibodies to HSV-1 are present, it usually means that the person has HSV-1 infection in the mouth, as do 80% of adults. If antibodies to HSV-2 are present, then it usually means that the person has genital infection with HSV-2.

Should the blood test be done?

Testing for antibodies to HSV might not part of a "standard" screen for sexually transmitted diseases at MIT or elsewhere, so if you want it, you should ask your medical provider if it is

For example, if you are HSV-1 negative, will you be concerned about catching it by salivary contact from one of the 80% of adults who are already infected? Do you really want to avoid kissing 80% of the potential kissing partners out there?

If you are HSV-2 positive, will you inform all of your sexual partners before having sex with them? Will you choose to take daily suppressive doses of acyclovir or valacyclovir to reduce the risk of transmitting it? What about if you are HSV-1 positive but HSV-2 negative but do perform oral sex?

There is no right or wrong answer to these questions. Unlike problem sets, sometimes having more information can make the answers actually seem more difficult, so think about how you will deal with the answer **before** you have the test done.

Some people with herpes choose to reduce the risk of transmission to other as much as absolutely possible by taking suppressive therapy daily. Some choose to reduce the risk by using condoms or treating only symptomatic outbreaks. And some choose to

just take chances on transmitting herpes that they might not take with some other sexually transmitted diseases like HIV because they know that herpes isn't a life-threatening or fertility-threatening disease.

Treatment of HSV

Treating outbreaks

The standard treatment for herpes outbreaks is acyclovir (Zovirax) 400 mg three times daily for 5 days. Valacyclovir (Valtrex) is a newer drug that is actually broken down into acyclovir after it is absorbed into the body and metabolized. It is the acyclovir that acts against the herpes.

Suppressive therapy

Taking a low dose of acyclovir or valacyclovir every day can lower the likelihood of the HSV reactivating and causing outbreaks. It can also lower the likelihood of developing asymptomatic outbreaks and can lower the risk of transmitting the HSV to a sexual partner.

Another reason to consider suppressive therapy is that studies have shown that having HSV-2 may increase the risk of picking up HIV infection if you are exposed to it. This probably is true since if there are open sores on the genitals, even if they are not noticeable, and you are exposed to HIV, then the HIV is more likely to get into the body. Obviously, using condoms is the best way to protect yourself from HIV, but if you are still

having unsafe sex, then by suppressing your HSV-2 you might be indirectly reducing your risk of picking up HIV.

Valacyclovir (Valtrex) or acyclovir (Zovirax)?

Acyclovir has been around for so long that the patent has run out and it is now available generically. This makes it less expensive. Valacyclovir has not been around as long as acyclovir, so its safety during pregnancy is not known. Both drugs work well in treating HSV infections. The decision about which drug is more appropriate for you should be discussed with your primary care provider.

Why Hasn't Anyone Told Me This Yet????

There are so many different sexually transmitted disease out there: HIV, hepatitis B, syphilis, hepatitis C, scabies, crabs, herpes, chlamydia, gonorrhea, human papillomavirus, lymphogranuloma venereum, chancroid – just to name a few. The ones that patients, as well as doctors and nurses, tend to be most concerned about are the ones that are most likely to cause severe medical problems like infertility or even death. Even though HSV is the **second most common** sexually transmitted disease, many people don't get as concerned about it as they do about ones like HIV (which is difficult to treat), hepatitis B (which can cause liver cancer), or chlamydia (which can cause infertility in women).

One of the worst things about HSV is that once it's there, it's there forever. On the other hand, it is not life threatening, does not cause infertility, and there are medicines that can easily treat outbreaks or suppress the infection. Your own level of concern about HSV (and your partner's) might be very different than another person's concern. That's why it is important to have an individual discussion about your sexual health with your health educator or doctor or nurse if you want