

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

GENITAL HERPES

WHAT IS GENITAL HERPES?

Genital herpes is a common sexually transmitted infection (STI) caused by herpes simplex virus type 1 (HSV 1) or herpes simplex virus type 2 (HSV 2). It is estimated that at least 1 in 6 adults in the United States is infected with genital herpes, but most do not know they are infected because they have no symptoms.

- **HSV 2** is the most common cause of genital herpes because it usually affects an individual below the waist (eg. the genital area, around the anus, the buttocks, and thighs).
- **HSV 1** usually infects the mouth and lips, causing cold sores, also known as oral herpes. Most people with oral herpes were infected at a young age from non-sexual contact with saliva.
- However, because of oral sex, HSV 1 has become a common cause of genital herpes, especially in college students.
- HSV 2 can also be transmitted to the mouth and lips through oral sex, though it rarely recurs there.

Unlike many common viruses, the herpes virus causes a lifelong infection.

- Most of the time, the virus remains dormant or inactive. It avoids the immune system by hiding in the nerve roots near the spine.
- Under certain circumstances, the virus may become active again, multiply, and travel back to the surface of the skin, causing symptoms to recur.
- Triggers can include stress, fatigue, illness, sun exposure, friction in the genital area, and menstruation.

HOW IS HERPES TRANSMITTED?

HSV is spread by contact with infected skin, saliva, or genital secretions. Examples include kissing, genital-to-genital contact, and oral sex.

- Avoid touching visible lesions because the fluid inside a herpes sore carries the virus itself. Wash your hands immediately if any sores are touched.
- The risk of spreading the infection is much greater when symptoms are present. However, HSV can be transmitted even when there are no symptoms. This can occur when the virus is released from the skin via asymptomatic viral shedding.
- HSV 2 infections are more common among women, possibly because genital infection is more easily transmitted from men to women than from women to men during vaginal sex.

It is estimated that most genital HSV infections are transmitted by persons who are asymptomatic and do not know that they are infected. Therefore, condoms or latex barriers should be used with every sexual encounter to decrease the risk of transmission.

WHAT ARE THE SYMPTOMS?

The symptoms of HSV vary greatly among individuals and among episodes. Most people with HSV have no or very mild symptoms.

❖ **Primary HSV Infections**

A primary outbreak refers to the first episode of HSV in a person who has never been exposed to HSV 1 or 2.

- Symptoms of the first outbreak appear an average of 4 days (range is 2-12 days) following exposure and can last up to 2-4 weeks if left untreated.
- Symptoms typically begin as small red bumps that develop into blisters on or around the genitals or rectal area. After the blisters break open, painful shallow sores or ulcers develop, which then crust over and heal without scarring.
- Flu-like symptoms are common with the first episode of infection. These can include fever, muscle aches, headaches, and swollen lymph nodes in the groin area.
- Symptoms tend to be more severe with the first outbreak because the immune system is not yet familiar with the virus. However, it is common for the first episode to be so mild that it goes completely unnoticed until a repeat outbreak occurs weeks to years later.

❖ **Nonprimary HSV Infections**

A nonprimary first episode refers to infection with HSV 2 in a patient who has been previously infected with HSV 1 (or, less commonly, vice versa).

- Symptoms tend to be milder than a primary infection because antibodies against one HSV type offer some protection against the other.
- One study has shown that prior HSV 1 infection increased the likelihood of having no symptoms with an outbreak three-fold.

❖ **Recurrent HSV Infections**

Recurrent outbreaks are common, especially during the first year after a primary infection, when viral activity is highest. Over time, the number and severity of recurrences will gradually decrease.

- Symptoms from a recurrent infection tend to be less severe than primary or nonprimary infections.
- About 25% of recurrences are asymptomatic.
- Up to 50% of patients with recurrent outbreaks experience mild prodromal symptoms, which can precede the appearance of lesions by hours to days. This is often described as a localized tingling/burning in the skin or shooting pain in the buttocks or legs. Some people experience the prodromal symptoms without ever developing visible sores.

WHAT ARE RISK FACTORS FOR RECURRENCE?

Recurrent genital infections are more common if:

- HSV 2 is the cause. Up to 90% of people with a primary HSV 2 infection experience a recurrence during the first year after infection.
- The initial infection was severe or prolonged.

HOW COMMON IS VIRAL SHEDDING?

Asymptomatic viral shedding occurs intermittently after both initial and recurrent HSV infections.

- Asymptomatic viral shedding is more frequent with HSV 2 and in those with symptomatic infections.
- Asymptomatic shedding is highest during the first 12 months after the initial infection, then decreases over time.
- Most HSV 2 infections are transmitted during asymptomatic viral shedding.

WHAT ARE POSSIBLE COMPLICATIONS?

Meningitis and urinary retention occur in a minority of patients with genital HSV infection.

The open sores caused by genital herpes increases the risk of transmitting or acquiring HIV during sex if you or your partner has HIV. Therefore, anyone diagnosed with HSV should be tested for HIV and other STIs. Condoms help decrease the spread of HSV and HIV.

HOW DOES HERPES AFFECT PREGNANCY?

If you are pregnant, tell your doctor if you have ever been diagnosed with or exposed to genital herpes. Though transmission of HSV from an infected mother to her baby is rare, it can have serious and potentially fatal consequences on the baby. Transmission risk is highest in women experiencing their first genital HSV infection near the time of delivery. This is because the baby can be exposed to infected skin as it passes through the birth canal.

If a woman experiences herpes symptoms during her pregnancy, she should be treated immediately with an antiviral medication. Suppressive treatment may also be recommended during the last 4 weeks of pregnancy to reduce the risk of another outbreak and viral shedding at delivery. If herpes symptoms are present at the time of delivery, a C-section will be performed to protect the baby.

HOW IS HERPES DIAGNOSED?

Genital herpes can be diagnosed by a visual inspection of the skin and by taking a sample of the fluid from the open sore(s) for viral culture.

- The culture will look for the presence of HSV 1 and 2 in the sample. However, it will detect the virus in only about 50% of patients with genital ulcers.
- The culture is most sensitive during the first 48 hours of symptoms. Therefore, it is important to see your medical provider as soon as possible for an accurate diagnosis.
- Viral cultures are also more likely to be positive with primary episodes compared to recurrent episodes.

Blood tests for HSV are also available. They are often used when a patient without symptoms is concerned that he or she may have been exposed to HSV.

- Unlike a viral culture, HSV blood tests do not detect the virus itself. Instead they look for the presence of antibodies against HSV 1 or HSV 2. It takes a few weeks for antibodies to develop, so results may be negative early or during the initial episode of infection.
- A positive HSV 2 antibody test indicates past or present infection with genital herpes.
- However, a positive HSV 1 antibody test cannot differentiate between oral and genital herpes.
- *Routine screening with these blood tests is not recommended because frequent testing in asymptomatic individuals can lead to high false-positive rates for HSV 2.* Talk to your medical provider to see if testing would be appropriate in your case.

HOW IS HERPES TREATED?

Although there is no cure for herpes, early treatment with an antiviral medication can decrease the severity and duration of symptoms, as well as shorten the length of asymptomatic viral shedding.

❖ Antiviral Medications

- Only oral antiviral medications (and not creams like Abreva) are effective treatments for HSV. The three medications available are acyclovir (Zovirax), valacyclovir (Valtrex), and famciclovir (Famvir).
- These medications have similar efficacy for treatment of symptoms and prevention of recurrences.
 - Side effects are rare.

❖ Treatment of Primary HSV

All patients with a suspected primary episode of HSV should be treated with an antiviral medication.

Medication should be started within 72 hours of symptom onset for maximum benefit. Medication can be beneficial after 72 hours if new lesions are still developing.

❖ Treatment of Recurrent HSV

Three options are available:

No treatment may be recommended if symptoms are mild or infrequent.

Episodic therapy involves taking an antiviral medication only when symptoms occur.

- Therapy should be started at the first sign (ideally within the first 24 hours) of a recurrence, which may include tingling, itching, or pain at the site prior to the appearance of a blister.

Suppressive therapy requires taking an antiviral medication on a daily basis to prevent HSV reactivation and to decrease asymptomatic viral shedding.

- Suppressive treatment should be considered in individuals with frequent recurrences (usually 6 or more a year), severe symptoms, or those with uninfected sexual partners.
- Studies show that about half of patients on suppressive therapy remain symptom free. Other patients experience a 75% decrease in recurrences.
- The need for continuing suppressive treatment should be evaluated on an annual basis because the number of recurrences naturally decreases over time. In addition, the long-term safety of treatment beyond 1 year for valacyclovir and 6 years for acyclovir is still unknown.
- If suppressive treatment is being used for the primary purpose of decreasing HSV transmission to an uninfected partner, valacyclovir is the drug of choice.

❖ Self-Care Tips

- Avoid touching visible sores. If sores are touched, wash your hands with soap and water immediately.
- Wear loose clothing and cotton underwear to decrease skin irritation and increase air circulation.
- Soak the area for 15 minutes twice a day to reduce pain. Sit in a few inches of warm water, or use Burrow's soaks/compresses (available in drugstores).
- Weaken your urine concentration to decrease pain with urination. Hydrate well, & use a squirt bottle filled with water to dilute the urine stream while voiding.

HOW IS HERPES PREVENTED?

The only foolproof way to avoid HSV is abstinence.

Research is ongoing for a herpes vaccine. Reduce the risk of getting HSV or passing it to others by:

- Limiting your number of sexual partners.
- Abstaining from sexual contact when symptoms are present. This includes avoiding oral sex when you or your partner has cold sores.
- Using latex barriers (such as condoms, dental dams, and finger cots) correctly and consistently.
- Informing your partner if you have HSV so that you can make educated choices together. Suppressive treatment with antiviral medications can be used to decrease transmission to partners.

RECOMMENDED RESOURCES:

- www.ashasexualhealth.org
- www.cdc.gov/std
- CDC National STD Hotline: 1-800-232-4636
- National Herpes Hotline: 1-919-361-8488