

Herpes Simplex Virus (HSV)

Key facts:

- The herpes simplex virus (HSV) is categorized into 2 types: HSV-1 and HSV-2.
- HSV-1 is mainly transmitted by oral-to-oral contact, causing oral herpes (including symptoms known as cold sores), but it can also lead to genital herpes.
- HSV-2 is a sexually transmitted infection that causes genital herpes.
- An estimated 3.7 billion people under age 50 (67%) have HSV-1 infection globally.
- An estimated 491 million people aged 15-49 (13%) worldwide have HSV-2 infection.
- Most HSV infections are asymptomatic, but symptoms of herpes include painful blisters or ulcers that can recur over time.
- Infection with HSV-2 increases the risk of acquiring and transmitting HIV infection

Overview

Infection with herpes simplex virus (HSV), known as herpes, is common globally. HSV type 1 (HSV-1) is typically transmitted by oral-to-oral contact and causes infection in or around the mouth (oral herpes), but it can also cause genital herpes. HSV-2 is mainly sexually transmitted and causes genital herpes.

Both oral and genital herpes are mostly asymptomatic or unrecognized but can cause painful blisters or ulcers at the site of infection, ranging from mild to severe. Infection is lifelong, and symptoms can recur over many years. Some medications are available to reduce the severity and frequency of symptoms, but they cannot cure the infection.

Signs and symptoms

Oral herpes infection is mostly asymptomatic, but symptoms can include painful blisters or open sores (ulcers) in or around the mouth (cold sores). Infected persons will often experience a tingling, itching or burning sensation around their mouth before the appearance of sores. These symptoms can recur periodically, and the frequency varies from person to person.

Genital herpes can be asymptomatic or have mild symptoms that go unrecognized. When symptoms occur, genital herpes is characterized by one or more genital or anal blisters or ulcers. Additionally, symptoms of a new infection often include fever, body aches and swollen lymph nodes. After an initial episode, which can be severe, symptoms may recur. Genital herpes caused by HSV-1 typically does not recur frequently. With HSV-2, recurrent symptoms are common. However, recurrences are often less severe than the first episode and tend to decrease over time.



Transmission

HSV-1 is mainly transmitted via contact with the virus in sores, saliva or surfaces in or around the mouth. Less commonly, HSV-1 can be transmitted to the genital area through oral-genital contact to cause genital herpes. It can be transmitted from oral or skin surfaces that appear normal; however, the greatest risk of transmission is when there are active sores. People who already have HSV-1 are not at risk of reinfection, but they are still at risk of acquiring HSV-2.

HSV-2 is mainly transmitted during sex through contact with genital or anal surfaces, skin, sores or fluids of someone infected with the virus. HSV-2 can be transmitted even if the skin looks normal and is often transmitted in the absence of symptoms.

Treatment

Antiviral medications – such as acyclovir, famciclovir and valacyclovir – are the most effective medications for people infected with HSV. These can help to reduce the severity and frequency of symptoms but cannot cure the infection.

Prevention

People with symptoms of oral herpes should avoid oral contact with others (including oral sex) and sharing objects that touched saliva. Individuals with symptoms of genital herpes should abstain from sexual activity while experiencing symptoms. Both HSV-1 and HSV-2 are most contagious when sores are present, but can also be transmitted when no symptoms are felt or visible.

For sexually active people, consistent and correct use of condoms is the best way to prevent genital herpes and other STIs. However, HSV infection can still occur through contact with genital or anal areas not covered by the condom.

Pregnant women with symptoms of genital herpes should inform their health care providers. Preventing acquisition of HSV-2 infection is particularly important for women in late pregnancy when the risk for neonatal herpes is greatest.

