



Oral and Genital Herpes

Herpes simplex can be treated with antivirals, but there is no vaccine or cure.

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Herpes simplex refers to conditions caused by two related viruses that cause painful blisters. Herpes is hard to prevent, can be difficult to treat and cannot be cured, but scientists are working on vaccines and better medications.

Oral herpes (cold sores or fever blisters), which affects the lips and mouth, is usually caused by herpes simplex virus-1 (HSV-1), while genital herpes, which affects the genital or anal region, is typically caused by herpes simplex virus-2 (HSV-2). However, both viruses can occur in either area.

Around two thirds of Americans have HSV-1 and about 15% of adults have HSV-2. People living with HIV are more likely to carry HSV and are prone to more frequent and severe outbreaks. What's more, having HSV makes it easier to acquire and transmit HIV.

HSV-1 and HSV-2 belong to a larger human herpesvirus family that also includes Epstein-Barr virus and the varicella-zoster virus that causes chicken pox and shingles. Like other herpesviruses, they cause lifelong infection. HSV-1 and HSV-2 establish latent infection in nerve cells and are not cleared by the immune system.

HSV-1 is mainly transmitted through contact with cold sores or via saliva. HSV-2, classified as a sexually transmitted infection (STI), usually spreads via contact with sores on the genitals or in the anal area. But the viruses can be transmitted from the mouth to the genitals or vice versa during oral sex. HSV spreads most easily when a person has active sores, but some people shed virus prior to outbreaks.

People with herpes often experience shame or stigma and have concerns about transmitting the virus. Talk to your sex partners about genital herpes and other STIs, and avoid sex during active outbreaks. Condoms and dental dams offer partial protection. Interestingly, some studies suggest that HIV pre-exposure prophylaxis (PrEP) also reduces the risk of acquiring HSV.

HSV-1 and HSV-2 are inactive most of the time, but they can periodically reactivate and cause recurrent outbreaks. Herpes usually begins with small red bumps that fill with fluid and rupture to form painful blisters. This may be accompanied by flu-like symptoms and swollen lymph nodes. In a small number of cases, herpes simplex can affect organs, including the eyes, lungs, liver and

brain.

Herpes sores typically heal within about two weeks and the virus becomes dormant, but it does not go away. Many factors can trigger recurrent outbreaks, including other illnesses, sun exposure and emotional stress. Some people experience a tingling or burning sensation known as a prodrome shortly before an outbreak.

Antiviral medications can reduce the severity and length of symptoms, help prevent viral reactivation and lower the risk of HSV transmission, but they do not eliminate the virus.

Three similar nucleoside analogs—acyclovir (Zovirax), valacyclovir (Valtrex) and famciclovir (Famvir)—are approved to treat oral and genital herpes. These antivirals are well tolerated and have few side effects. Treatment works best if started within 24 hours after the first symptoms or prodromal signs. HSV does not always respond to commonly used antivirals, and some people—especially those who are immunocompromised—develop acyclovir-resistant virus.

Researchers are working on new therapies that might be more effective. Pritelivir, an antiviral that targets HSV helicase-primase enzymes, is in Phase III trials. Several other treatments are being studied, including monoclonal antibodies and gene therapy. There are currently no vaccines to prevent or treat HSV-1 or HSV-2 infection, but this is also an active area of research.

A growing herpes advocacy movement is following in the footsteps of HIV activists to get more funding and research. Ask your doctor whether a clinical trial might be a good option for you.