

# Herpes Simplex Virus (HSV): Frequently Asked Questions

## 1. What is herpes?

Herpes is a common infection caused by two related viruses: Herpes Simplex Virus Type 1 (HSV-1) and Herpes Simplex Virus Type 2 (HSV-2). HSV-1 usually causes cold sores around the mouth, while HSV-2 usually causes sores in the genital area. After a person gets herpes, the virus stays in the body and can become active again later. (Whitley & Roizman, 2001; Johnston & Corey, 2016).

## 2. How common is herpes?

Herpes is very common worldwide. About 3.7 billion people under age 50 have HSV-1, and about 491 million people ages 15–49 have HSV-2. Many people with herpes do not know they have it because their symptoms are mild or they have none at all. (Looker et al., 2015; James et al., 2020; World Health Organization, 2023).

## 3. How does herpes spread?

Herpes spreads through direct skin-to-skin contact with someone who has the virus. This can happen through kissing or sexual contact such as oral, vaginal, or anal sex. The virus spreads most easily when sores are present, but it can also spread when a person has no symptoms. This is called asymptomatic shedding. (CDC, 2021; Johnston & Corey, 2016).

## 4. What symptoms does herpes cause?

Some people have no symptoms. Others may have outbreaks of sores. Symptoms may include small blisters, pain, itching, or tingling before sores appear. The first outbreak may also cause fever or swollen glands. Later outbreaks are usually shorter and milder. (Johnston et al., 2014; CDC, 2021).

## 5. What does latent infection mean?

After the first infection, herpes stays in the body by hiding in nerve cells. This is called latency. The virus can reactivate later and cause another outbreak. Triggers may include stress, illness, fatigue, or sun exposure. (Bloom, 2016; Whitley & Roizman, 2001).

## **6. How is herpes treated?**

There is no cure for herpes yet. However, antiviral medicines can help manage symptoms. Common medicines include acyclovir, valacyclovir, and famciclovir. These medicines can shorten outbreaks and reduce the chance of spreading the virus. (Corey et al., 2004; CDC, 2021).

## **7. What is asymptomatic viral shedding?**

Asymptomatic viral shedding means the virus can leave the skin even when no sores are visible. This means someone can spread herpes even if they feel fine and have no symptoms. (Tronstein et al., 2011; Johnston & Corey, 2016).

## **8. Why is herpes important for public health?**

Herpes affects millions of people and can have several health effects. It can increase the risk of getting HIV and can cause rare but serious infections in newborn babies. It can also cause emotional stress or stigma for some people. (Freeman et al., 2006; World Health Organization, 2023).

## **9. How can people reduce the risk of spreading herpes?**

People can reduce the risk by using condoms, avoiding sexual contact during outbreaks, taking antiviral medicine, and talking openly with partners about infection. Condoms reduce risk but cannot remove it completely because herpes spreads through skin contact. (Wald et al., 2001; CDC, 2021).

## **10. What new herpes treatments are being studied?**

Researchers are studying new vaccines and antiviral drugs to prevent herpes or reduce outbreaks. Some treatments aim to help the immune system control the virus better. (Bernstein et al., 2017; Johnston et al., 2014).

## **11. Are scientists studying gene editing to cure herpes?**

Yes. Some scientists are studying gene-editing tools that may be able to remove herpes virus DNA from infected cells. Early research in animals has shown promising results, but these treatments are not yet available for patients. (Aubert et al., 2020; Jerome et al., 2021).

## **12. Why has it been hard to make a herpes vaccine?**

It has been difficult to develop a herpes vaccine because the virus hides in nerve cells and can avoid the immune system. Researchers are still working on new vaccine technologies that may work better. (Johnston et al., 2014; Bernstein et al., 2017).

## **13. Are there herpes clinical trials happening now?**

Yes. Clinical trials around the world are studying new vaccines and treatments for HSV-1 and HSV-2. These studies are run by universities, hospitals, and pharmaceutical companies. Information about trials can be found on ClinicalTrials.gov. (Johnston & Corey, 2016).

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