

## Test Name

Herpes Simplex Virus, Type 1 and Type 2, HSV Test

## Also known as:

HSV-1 or HSV-2 IgM or IgG

## What is this test used for?

HSV testing identifies the presence of the Herpes virus antibodies in the blood.

Herpes is a common viral infection from **TORCH** complex, caused by the Herpes Simplex Virus (HSV). The virus exists as two main types, HSV-1 and HSV-2.

- ✓ **HSV-1**, which usually causes blisters or cold sores around the mouth (oral herpes)
- ✓ **HSV-2**, which usually causes blisters or sores in the genital area (genital herpes)

The herpes simplex virus can be passed through direct contact with sores. HSV-2 is frequently a sexually transmitted disease. Both HSV-1 and HSV-2 are recurring infections - once someone is infected and the initial infection resolves, the HSV will remain in a latent form.

During periods of stress or illness, the virus may reactivate. People with suppressed immune system such as with HIV/AIDS or those who have had an organ transplant, may have more frequent and serious outbreaks of HSV.

A pregnant woman who has been diagnosed with herpes may be monitored regularly prior to delivery to identify a reactivation of her infection, which would indicate the necessity for a caesarean section to avoid infecting the baby.

In rare cases, HSV can cause encephalitis or meningitis, life-threatening infections of the brain and spinal cord. These infections can be very serious. Herpes can also be dangerous to a newborn baby. A mother with herpes can pass the infection to her baby during delivery. Neonatal herpes symptoms appear during the first month of life and, if left untreated, can cause long-term damage to a baby's health.

## When the test is ordered?

HSV test may be ordered when:

- ✓ Someone has symptoms of herpes, such as blisters or sores on the genitals or other part of the body
- ✓ The patient's sex partner has herpes
- ✓ Someone has signs and symptoms of encephalitis suspecting HSV infection ( Fever, severe persistent headache, a stiff neck, sensitivity to light, mental changes, lethargy)
- ✓ On a regular basis when a pregnant woman has herpes. A mother and newborn may be tested for HSV when a baby shows signs of HSV infection, such as meningitis or skin lesions that could be caused by the herpes virus.
- ✓ Someone has other STD (Sexually Transmitted Disease) and is at risk for the infection. Risk factors include: multiple sex partners, a man who has sex with men, having a partner with HIV and/or another STD.

## How is the test performed?

A blood sample is taken from a vein.

## How to prepare for the test?

No preparation is needed.

## Interpretation of results:

HSV antibody testing detects immune proteins that the body produces in response to a herpes infection. The body produces two classes of antibodies. It begins to produce the IgM class antibody several days after a primary (initial) HSV infection and these antibodies may be detectable in the blood for several weeks. It then begins to produce HSV IgG antibodies after HSV IgM. IgG levels rise for several weeks, slowly decline, and then stabilize in the blood. Once someone has been infected with HSV, that person will continue to produce small quantities of HSV IgG.

- ✓ A positive HSV-1 or HSV-2 IgM antibody test indicates an active or recent infection.

- ✓ A positive HSV-1 or HSV-2 IgG antibody test indicates a previous infection.
- ✓ Negative HSV antibody results mean that it is unlikely that the person has been exposed to HSV or that the body has not had time to begin producing HSV antibodies.