



## Test for Herpes

### TESTS FOR HERPES

There are three common types of laboratory tests for genital herpes and several others that are less widely used.

Herpes laboratory tests are usually based on two categories:

Sensitivity - Refers to the likelihood of the test correctly diagnosing herpes.

Specificity - The probability of a test correctly determining that a patient does not have herpes.

For patients who have sores or other outward signs of infection, the leading method is to take a Viral Culture or sample of the infected tissue. When no symptoms are present or if they have already healed a blood test may be required. Speed and cost are also taken into account.

### Viral culture

This is where the virus is grown in material known as a culture medium. A viral culture looks for the presence of the virus in the lesion.

Viral culture testing is very specific, this method:

Does not frequently give a positive result when something else is the culprit

Can also be very sensitive if the specimen is adequate

Provides a way to tell whether the infection is caused by HSV-1 or HSV-2

Sometimes more than one test will be needed

A poor sample may cause sensitivity to drop. Even if herpes lesions are present, there may be very little active virus left in the lesions. In this case, the culture will come back as a false negative (the test says there is no herpes even when the patient actually has genital herpes).

Approximately twenty percent of culture tests produce a “false negative” when a patient has a first episode of herpes. With recurrent episodes, when less of the virus is present, the rate of false negatives goes up to 50 percent.

It can take any time from two to seven days to get viral culture results back from the laboratory, which may mean several visits to your Doctor before a diagnosis is confirmed.

Lots of people need to be tested more than once. The viral culture often misses herpes even when it is present. Often a patient who has received a negative culture result will be asked to come back again when a new genital lesion appears so the culture can be tried a second or third time.

### Blood Tests (serologic tests)

Herpes blood tests take a very different approach. These tests work by measuring the levels of Herpes simplex antibodies inside your body. Antibodies are substances produced by your immune system to fight off infections (such as herpes). Blood tests detect herpes by looking for antibodies in the blood or serum.

### When can a blood test be performed?

Blood tests can be performed even when there are no symptoms present. If the herpes antibodies are found in the blood, it means that herpes simplex is latent in the body.

This method of testing has the advantage that it can be done even when a person has no symptoms, so it is a very effective way to detect an established herpes infection. Blood tests do not require swabbing a lesion, so they can be done long after symptoms have faded.

Type-specific blood tests are ideal for those who have had a history of genital symptoms but have never had a successful confirmatory test.

### How effective is a blood test?

The sensitivity and specificity of blood tests is better than culture or antigen tests, but there are two important factors to consider:

Timing - if this is the first exposure to herpes, a person may take several weeks to develop the antibodies that blood tests look for. This means that if you perform the test too early the antibodies that the tests look for may not show up and you may receive a false-negative diagnosis.

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Conflicting Results - some blood tests cannot tell the difference between the two types of herpes simplex, HSV-1 and HSV-2 (the cold sore and genital herpes viruses). For this reason, anyone seeking an accurate diagnosis of their herpes type should request a type-specific test, which can accurately distinguish HSV-2 from HSV-1 antibodies.

While a blood test may reveal infection with HSV at a time when no genital symptoms are present, confirmation of the genital HSV infection is still essential.

If the blood test is specific for detection of antibodies to HSV type 2, the likelihood of genital HSV infection is increased, but still not proven. The doctor may ask you to re-visit for a swab test when genital symptoms or discomfort appear.

Usually, it takes between two weeks to three months after exposure to herpes for antibodies to appear in the blood. Some blood tests detect antibodies sooner than others. However, once antibodies are found they remain in the body for life.

If you have never had symptoms before but want to be tested for herpes, a type-specific blood test is the only way to find out your status. Getting tested may be relevant if you:

- Are in a relationship where your partner has herpes but you have had no symptoms and have never been tested
- Have been with an infected partner and feel you should be tested
- Have had several sexual partners and want to be tested for the most prevalent STDs

