

# Cytomegalovirus (Blood)



## Does this test have other names?

CMV (serum), cytomegalovirus serologic test, cytomegalovirus antibody, CMV antibody, CMV IgG, CMV IgM

## What is this test?

This test looks for antibodies to cytomegalovirus (CMV), a virus in the herpes family, in your blood.

CMV is so widespread that most people in the U.S. have been infected by the time they reach age 40. But many don't realize it. You can pick up the virus by handling or exchanging bodily fluids, such as saliva, blood, urine, breast milk, and semen. The virus usually causes only a mild illness. But it can do serious harm to unborn children, people with HIV/AIDS, or others with weak immune systems.

Antibodies are germ-fighting molecules that your immune system makes in response to infection. If you have CMV-specific antibodies in your blood, you may have a CMV infection.

Like other herpes family viruses, CMV hides in the body after the first infection and can flare up again. Later infections tend to be milder. In fact, in adults with a healthy immune system, the first infection may not have any symptoms.

## Why do I need this test?

You may need this test if you have unexplained symptoms that resemble the flu. If you've been infected with the virus, you may have these signs and symptoms:

- Prolonged high fever
- Fatigue
- Loss of appetite
- Muscle and joint pain or stiffness
- Headache
- Sore throat
- Swollen lymph nodes
- Swollen liver and spleen

You may also have this test if you are pregnant, have HIV, or are a transplant donor or recipient. If you have a current infection, your healthcare provider can give you certain medicines to reduce the danger of congenital CMV in infants or of active illness in people with weakened immune systems.

Only a lab test can confirm that you have CMV.

## What other tests might I have along with this test?

Your healthcare provider may also order other tests for CMV antibodies. These include tests of your cerebrospinal fluid (CSF) and urine. Your healthcare provider may also order tests to look for CMV antigens that CMV antibodies are meant to fight. A CMV antigen test may be called a CMV antigen assay or a CMV Ag test. (Ag stands for antigenemia, meaning antigen-in-blood.)

Your healthcare provider may also order a test called polymerase chain reaction (PCR) to hunt for the DNA of CMV in your urine, saliva, blood, CSF, or biopsy tissue. They may also order a viral culture test from any of these sample types.

Your healthcare provider may also order:

- Complete blood count (CBC)
- Mononucleosis or Epstein-Barr virus test

They may also test for pneumonia, hepatitis, and gastrointestinal problems.

## What do my test results mean?

Test results may vary depending on your age, gender, health history, and other things. Your test results may be different depending on the lab used. They may not mean you have a problem. Ask your healthcare provider what your test results mean for you.

Results are given in amounts of 2 kinds of antibodies: immunoglobulin M (IgM) and immunoglobulin G (IgG).

The test is positive if IgM antibodies are present. But this only means that you have been infected with CMV at some time in your life. It does not tell when the infection happened. Also, if your IgM and IgG levels are high, it may mean you have CMV. Your healthcare provider will likely give you the test again in 2 weeks to confirm the infection. If your IgG levels rise between the first and second test, that may mean you have an active infection. The fact that your IgG level increases is more important than the amount of IgG found. The increase shows that your immune system is busy fighting an infection and that the antibodies are not just leftover from an earlier fight.

If your results are higher, it may also mean that you have a connective tissue autoimmune disease, such as rheumatoid arthritis or systemic lupus erythematosus.

If your immune system is weakened, you may have lower results even with an active infection.

## How is this test done?

The test is done with a blood sample. A needle is used to draw blood from a vein in your arm or hand.

## Does this test pose any risks?

Having a blood test with a needle carries some risks. These include bleeding, infection, bruising, and feeling lightheaded. When the needle pricks your arm or hand, you may feel a slight sting or pain. Afterward, the site may be sore.

## What might affect my test results?

Other factors aren't likely to affect your results.

## How do I get ready for this test?

You don't need to prepare for this test. Be sure your healthcare provider knows about all medicines, herbs, vitamins, and supplements you are taking. This includes medicines that don't need a prescription and any illegal drugs you may use.

© 2000-2027 The StayWell Company, LLC. All rights reserved. This information is not intended as a substitute for professional medical care. Always follow your healthcare professional's instructions.  
This information is not intended as a substitute for professional medical care. Always follow your Healthcare professional's instructions. Copyright Krames LLC.