# Recommendations for action in the absence of antibodies:

- Compliance with the hygiene measures described, especially when dealing with small children.
- Antibody tests in pregnancy
- If a first infection is suspected in pregnancy, depending on the stage of pregnancy, further clarification is indicated by stepwise diagnostic workups, progress checks and ultra sound checks.
- If acute infection is detected in pregnancy, further amniotic fluid tests should be carried out by PCR.
- If a congenital infection of the newborn is suspected, urine or saliva samples of the child should be tested by PCR for the presence of the virus within the first 10 days of life, so that treatment can be initiated early if necessary.

#### Is there a treatment?

- Healthy immune system: No CMV-specific therapy is needed.
- Weakened immune system: Various virostatic agents are available.
- During pregnancy, there are treatment options available as part of a "trial cure" based on the latest science. These therapies run outside the current indications for which the medications are approved and should only be offered after weighing the benefits and risks in consultation and collaboration with specialist centres.

#### For statutory health insurance holders:

Some medical services cannot be covered by health insurance companies or cannot be covered in every case (e.g. at the patient's own request) and must therefore be paid by the patient.

Please refer to the order form for individual healthcare services for the current prices.

#### For private health insurance holders:

Private health insurance will cover the costs according to the valid GOÄ if there has been no previous exclusion of benefits. If you have any questions about this, your doctor will be happy to advise you.



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# Cytomegalovirus

CMV infection in pregnancy





### What is Cytomegalovirus (CMV)?

Cy to megalovirus is one of the human herpes

viruses. The virus is spread worldwide, infects only humans and is

considered the most common pathogen to cause a congenital (present at birth) infection. It remains in many tissues of the body for a lifetime and then enters a "dormant phase" (also known as a latent phase) in different cell types (including blood stem cells and monocytes/macrophages). Under certain circumstances, the virus can be reactivated.

## How is Cytomegalovirus spread?

The virus is transmitted through virtually all bodily fluids - semen and vaginal fluids, saliva, urine, tears, but also breast milk and blood. The virus can be passed on through breastfeeding, kissing, sexual contact and through blood products and organ transplants. Many pregnant women become infected while handling young children who are often asymptomatic and who sometimes shed the virus until they are 8 years old.

#### What symptoms can occur?

People with healthy immune systems usually get through the infection without any symptoms at all or with non-specific symptoms (flu-like symptoms such as fever, lethargy, cough or swollen lymph nodes).

#### Infection in pregnancy

The initial infection does not pose a risk to the pregnant woman and is asymptomatic in about 75% of cases. However, the virus can be transmitted via the placenta to the unborn child. Especially in early pregnancy (first trimester) there is a high risk of permanent damage in more than 50% of foetuses with a transmission rate of 20%. In the third trimester, the transmission rate is much higher at 80%, but the risk of damage is much lower.

Possible risks to the unborn child in early pregnancy:

- Miscarriage
- Low birth weight
- Skin bleeding
- Liver damage, jaundice
- Brain damage, loss of vision or hearing

The damage at birth can be of varying severity. However, it can also present as a late consequence mainly in the form of hearing damage and in delays in mental and motor development. Reinfections in pregnancy with another strain of CMV and reactivations are possible but rare and rates of transmission to the unborn child are much lower [1%].

# How can I protect myself?

There is no vaccine for CMV yet. Simple precautions and hygiene measures, such as the use of condoms in the absence of immune protection, are

important to prevent or reduce the risk of infection. Especially when dealing with young children, the following should be considered:

- Hand hygiene with soap and water after changing nappies, feeding, bathing, touching toys or wiping face
- Do not share crockery, cutlery, toothbrushes, washcloths and towels
- Avoid kissing on the mouth
- Use washing-up liquid to clean toys that have come into contact with the urine or saliva of infants

### What diagnostic tests are available?

Since about half of all women of childbearing age in Germany do not have immune protection against CMV, ideally the individual immune status should be determined by an antibody test before pregnancy or when a pregnancy is confirmed.

#### Antibody testing:

 Before pregnancy, IgG antibody testing is recommended

 In (early) pregnancy, IgG and possibly IgM antibody testing is recommended.