



**MotherToBaby**

Medications & More During Pregnancy & Breastfeeding  
Ask The Experts

**Fact Sheet**

by the **Organization of Teratology Information Specialists (OTIS)**

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## **Cytomegalovirus (CMV)**

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether exposure to cytomegalovirus (CMV) can increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care provider.

### ***What is cytomegalovirus (CMV)?***

CMV is a common herpes virus. CMV can infect people of all ages. More than half (over 50%) of people in the U.S. have CMV by the age of 40; and 1 out of 3 children has the infection by age 5. Once the virus enters the body it stays there for life and a healthy immune system usually keeps the virus in check. Most people infected with CMV will never have any symptoms. When first infected, a very small number of adults may have symptoms such as fever, feeling tired, and muscle aches.

### ***How do you get cytomegalovirus (CMV)?***

CMV is spread from one person to another through contact with saliva, semen, vaginal fluids, blood, urine, tears, feces, or breast milk. CMV is a common virus so anyone can be exposed. However, evidence suggests that close contact with children less than three years of age is a common way to become infected. Close contact includes activities like changing diapers and kissing.

### ***What is congenital cytomegalovirus (congenital CMV)?***

Pregnant women with a first-time infection of CMV (“primary infection”), a reactivation of CMV (the virus “wakes up” and becomes active), or those who are exposed to a new strain of virus have a chance of passing the virus to the developing baby. This is called congenital CMV.

Congenital CMV is the leading viral cause of developmental disability, and the leading non-genetic cause of hearing loss. Other features of congenital CMV can include vision problems, including blindness, jaundice (yellow skin and eyes), large liver and spleen, low birth weight and small head size. Neurological problems (problem with the nervous system) and delays in developing physical movement can be seen with congenital CMV. A higher risk of pregnancy loss has also been reported.

### ***If I had CMV before getting pregnant is my future pregnancy protected from birth defects related to CMV?***

With some other viruses, having an infection prior to a pregnancy can give healthy women immunity to developing the infection again; giving protection against a new infection, similar to how a vaccine works. However, with CMV, past exposure is not as protective.

### ***I am pregnant and have just found out that I have CMV. Will my baby have a higher chance for problems?***

When a woman has a primary CMV infection during pregnancy, the chance that she will pass the infection to her baby is somewhere between 30% and 50%. However, not all of these pregnancies will be affected by birth defects. Of those born with the infection, about 1-10% will have symptoms at birth. However, long term effects such as hearing loss and learning problems can still occur in 10-15% of infected babies that do not show symptoms at birth.

For pregnant women who get a reactivation of an old infection, the chance of passing the infection to the developing baby is thought to be much lower than with a primary infection.

If the CMV infection happens in the first trimester, the risk is higher for the virus to affect the brain, hearing and vision than if the exposure happens in the second half of the pregnancy.

**I work in a daycare or have young children at home. What steps can I take to help prevent infection?**

Close contact with children less than three years of age increases the chance of exposure to CMV. The best way to prevent infection is to practice good hygiene, particularly proper hand washing. An interventional study in pregnant women who never had a CMV infection found that teaching about good hygiene (and practicing good hygiene) reduced the risk of infection with CMV compared to women who were not taught the same information.

Wash hands after changing diapers and after contact with urine, feces, or saliva. Also, clean toys, strollers, high chairs and other surfaces where children play and put their hands or saliva. Try to avoid mouth-to-mouth kissing with children in day-care. Do not share food, drinks, or eating utensils.

***How can I find out if I am infected with CMV?***

If a woman is unsure about her CMV status, she can ask her health care provider for a CMV IgM and IgG antibody test. In the U.S., CMV screening is not routinely offered to pregnant or non-pregnant women.

***How can I find out if my baby has been infected with CMV during my pregnancy?***

Some babies that have been infected with CMV will show signs of problems on ultrasound, such as slow growth, small head size, large placenta, and differences in certain structures in the brain. However, many babies with congenital CMV will not show any signs of infection on ultrasound.

If your health care provider suspects CMV related problems he or she may discuss the option of an amniocentesis. The amniocentesis tests fluid from around the baby (the amniotic fluid) and looks for signs of the virus. Your health care provider can discuss the risks and benefits of getting this test.

If a baby is suspected of having CMV after birth, the baby's saliva, urine, or blood can be tested.

***I am pregnant and have a CMV infection. Is there any way to keep my baby from getting infected?***

At this time, there is no treatment that is known to prevent infection before birth.

***Is there any way to treat congenital CMV?***

There is no treatment that will completely prevent all the symptoms or long term effects of congenital CMV. However, newborns with CMV who are given an antiviral medication might have a lower chance of hearing loss, eye disease, and learning problems.

***Can I breastfeed if I have a CMV infection?***

Women are encouraged to breastfeed if the baby is full term and healthy. Full-term babies who get infected with CMV through breast milk usually do not get seriously ill. Premature babies born before 30 weeks and less than 1500 g (about 3.3 pounds) may have a higher risk of getting a symptomatic CMV infection from breastfeeding. Speak with your baby's health care providers if you are breastfeeding and have CMV.

***What if the father of the baby has a CMV infection?***

A man cannot pass a CMV infection directly to a baby during pregnancy. However, since CMV can be spread by sexual intercourse, you should use a latex condom if you are pregnant and you know that your partner has recently been infected. In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the Paternal Exposures fact sheet at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/>.

**References Available By Request**

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