

Cytomegalovirus (CMV)

This sheet is about exposure to cytomegalovirus (CMV) in pregnancy and while breastfeeding. This information is based on available published literature. It should not take the place of medical care and advice from your healthcare provider.

What is cytomegalovirus (CMV)?

CMV is a common virus that can spread from one person to another through contact with saliva, semen, vaginal fluids, blood, urine, tears, feces, or breast milk. Most people with CMV do not have symptoms, but some may have fever, tiredness, and muscle aches when they are first infected.

Once the CMV virus gets into the body, it stays there for life. A healthy immune system usually keeps the virus in check. Sometimes the virus can be reactivated (“wakes up” and becomes active). People can also be infected with more than one strain of CMV in their lives.

Over half (more than 50%) of people in the United States have the virus by age 40, and 1 out of 3 children have the virus by age 5. Close contact with children less than three years old, such as in daycare settings, is a common way to become infected with CMV.

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

Blood tests can be used to diagnose CMV infection in adults who have symptoms. Talk to your healthcare provider about your risk for CMV and what tests are right for you.

I have CMV. Can it make it harder for me to get pregnant?

Having CMV is not expected to make it harder to get pregnant.

Does having/getting CMV increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. It is not known if CMV increases the chance of miscarriage.

How likely is it that CMV infection in pregnancy will pass to the fetus?

When a person is pregnant and infected with CMV for the first time, there is about a 40% chance that it will pass to the fetus. When an old infection is reactivated, or you get a new strain of the virus during pregnancy, there may be a lower chance of passing the infection to the fetus than with a new infection.

Does having/getting CMV increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. If there is a CMV infection during pregnancy, the virus can pass to the fetus. This is called congenital CMV. Congenital CMV can cause vision problems (including blindness), an enlarged liver, an enlarged spleen, small head size, and problems with the nervous system.

Most babies with congenital CMV do not show signs or have health problems. However, some babies have health problems at birth or that develop later. Of those babies who get the virus, about 1-10% will have symptoms at birth. If the CMV infection happens in the first trimester, the chance that the brain, hearing, and vision will be affected is higher than if the infection happens later in pregnancy.

Does having/getting CMV increase the chance of other pregnancy-related problems?

Pregnancies affected with CMV have a higher chance of preterm delivery (birth before week 37) or low birth weight (weighting less than 5 pounds, 8 ounces [2500 grams] at birth).

There are some studies that suggest that CMV might cause jaundice (yellow skin and eyes caused by the buildup of bilirubin in the blood) or delays in physical movement. CMV might be a possible cause of stillbirth. However, CMV is common, and many pregnancies with CMV result in live birth.

Does having/getting CMV in pregnancy affect future behavior or learning for the child?

Babies that show signs of congenital CMV at birth can have long-term problems, such as intellectual disability, language delay, poor physical coordination, weakness, hearing loss, and seizures. Some babies who do not show signs of congenital CMV at birth can develop hearing loss or learning problems as they get older.

How can I find out during my pregnancy if my baby will be affected by CMV?

Ultrasound can show some of the issues caused by congenital CMV, such as slow growth, small head size, large placenta, and changes in brain structure. However, many babies with congenital CMV will not show any signs of infection on ultrasound. Issues such as intellectual disability and learning problems cannot be seen on ultrasound and may not be known until the child gets older.

Amniocentesis is a procedure that removes a small amount of fluid from around the fetus (the amniotic fluid). This fluid can be tested for CMV. Your healthcare provider can talk with you about the risks and benefits of getting this test during pregnancy. After a baby is born, their saliva, urine, or blood can be tested for CMV.

I am pregnant and have a CMV infection. Is there a way to prevent or treat congenital CMV?

At this time, there is no known treatment that can completely prevent all the symptoms or long-term effects of congenital CMV. Using antiviral medication when there is a CMV infection in pregnancy might lower the chance the virus will pass to the fetus. Newborns with CMV may be given antiviral medication. This may reduce the baby's chance for hearing loss, eye disease, and learning problems. Talk with your healthcare providers about what treatments are recommended for you and your baby.

Breastfeeding while I have CMV:

People with CMV 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. Babies born before 30 weeks of pregnancy and/or that weigh less than 3.3 pounds (1500g) may have a higher chance of getting sick from CMV through breast milk. If you suspect the baby has symptoms (fever, diarrhea, or yellowish skin/eyes), contact the child's healthcare provider. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a male has CMV, could it affect fertility or increase the chance of birth defects?

CMV has not been shown to affect male fertility (ability to get partner pregnant). In one study, there were no differences in fertility between males who have had CMV and those who have not. CMV can be spread to a partner who is pregnant. People who are pregnant and have partners who have recently been infected can use latex condoms during intercourse to reduce the chance of CMV infection during pregnancy. For more general information on paternal exposures, please see the MotherToBaby fact sheet at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/>.

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