



Society for
Maternal-Fetal
Medicine

by SOCIETY FOR MATERNAL-FETAL MEDICINE (SMFM); PATRICK S RAMSEY, MD, MPH

Q | **What is CMV?**

Cytomegalovirus (CMV) is a common viral infection in pregnancy that can cause fetal infection and result in problems for the newborn. Congenital CMV is the leading non-genetic cause of deafness. Approximately 0.5% to 1.3% of all births—or around 40,000 babies born in the United States—are affected by congenital CMV each year. Some affected babies may have no health problems, but some may become severely disabled and even die.

Q | **Are there risks if I become infected with CMV during pregnancy?**

The effects of CMV infection during pregnancy depend on whether you had a CMV infection previously and the time during pregnancy when you were exposed to the virus. The risk is greatest if you have never been exposed to CMV and become infected during the early part of your pregnancy.

Most adult women have been exposed to CMV. However, around 30% to 50% of women have never been exposed to CMV. They therefore have no protective antibodies against the virus. Approximately 1% to 4% of women will become infected with CMV while pregnant. That first infection usually does not cause symptoms in the mother, but can cause an infection in the baby in about 30% to 50% of cases.

In pregnancies with fetal infection, only 10% to 15% of babies are symptomatic at birth. Newborns may have jaundice (yellowing of the skin), skin rash, and an enlarged liver and spleen. There can be risks to a baby even if there are no symptoms at birth. Up to 25% of babies with congenital CMV who have no symptoms at birth can still develop complications at age 2 years. These problems can include progressive deafness, a low IQ, eye inflammation, seizures, and death.

Q | **Are there risks to the baby if I get a recurrence of CMV?**

Recurrent CMV infections can occur even if you have been previously exposed to CMV, and prior exposure does not necessarily prevent all fetal or neonatal infections. The risk of fetal infection is much lower when the mother has a recurrent CMV infection. Up to 8% of babies born to women with recurrent CMV infection may develop hear-

ing loss, eye inflammation, or other mild neurological problems by age 2 years, and up to 14% may by age 5.

Q | **How is CMV infection diagnosed?**

Routine screening of all pregnant women for CMV infection is not recommended. You may, however, be tested for CMV infection if certain findings are noted on a routine ultrasound.

When findings suggest that testing is needed, a blood test can look for CMV antibodies. The results can help determine if you are already immune to CMV through infection in the past, or have had a recent exposure.

Q | **How is fetal CMV infection diagnosed?**

Amniocentesis is used to diagnose fetal infection. While fetal CMV infection can be identified with amniocentesis, the information is not an indicator of the severity of the infection and/or the risk to the baby.

Q | **If I become infected with CMV, can fetal infection be prevented?**

Unfortunately, no treatments have been shown to be effective in preventing or treating congenital CMV infection. Studies have not shown that use of antibodies against CMV improves fetal outcomes. Possible treatment options such as antiviral therapy have shown no benefit and have uncertain risks.

Q | **How can I avoid getting CMV when I am pregnant?**

Good hygiene such as regular hand washing and glove use can lower the chance of becoming infected with CMV. If you have never had CMV or are not immune and you are working with children or someone known to have a CMV infection, these approaches can minimize your risk.