CMV: Cytomegalovirus
Information about congenital CMV infection

What is CMV?
Cytomegalovirus, or CMV, is a common virus. It affects people of all ages, regions and social groups. At least half and as many as 8 out of 10 adults in the United States get CMV before they are 40 years old. For most healthy adults there are few or no symptoms or long-term problems from CMV infection. But once a person is infected, the virus stays in the person’s body for life. Even though it is not active, it can still be passed on to others.

How does CMV spread?
If you have CMV, you can pass it on by:
• Person-to-person contact, like a cold or flu is passed
• If you are pregnant, you can pass the virus to your baby before or during birth
• Blood transfusions and organ transplants

CMV is one of the most common viruses passed to a child before or during birth. There are two ways that pregnant women can pass CMV to babies.
• Before birth: A baby can get CMV before it is born. This is called a “congenital (kun-JEN-uh-tul) infection.” This is more common when a woman gets CMV for the first time while she is pregnant.
• During or after birth: A baby can get CMV during birth as it passes through the birth canal. A baby can also get the infection after birth from breast milk.

Congenital CMV, the kind that happens before birth, can cause problems for your baby. If your baby gets CMV after birth, it usually will not make your baby sick.

What happens if my baby has congenital CMV?
Congenital infection does not always cause problems for babies, but it can cause serious problems for some so it is best to avoid infection in the first place. Some problems happen right away, while others show up later.

If a mother passes CMV to her baby early in her pregnancy, this can cause more problems for the baby than if she passes it later in the pregnancy.

Some of the problems that congenital CMV can cause are:
• Hearing loss
• Liver problems
• Problems with blood cells that may make babies bleed too much or too easily
• Breathing problems, like pneumonia
• Developmental problems
About 1 in 10 babies with congenital CMV have symptoms soon after birth. A slightly larger number of babies with congenital CMV will have symptoms later on, in months or even years.

Hearing loss is the most common long-term problem. About 7 out of every 100 children with congenital CMV will have hearing loss caused by damage to the inner ear or to the nerves from the inner ear to the brain.

If your baby has congenital CMV, they need to see their healthcare provider and be followed closely as they grow. They may have long-term problems with hearing and development, and it is important that your child’s healthcare provider knows what to look for.

How do I know if my baby has CMV?

If your baby does not have symptoms, it can be hard to tell if they have a congenital infection or if they got the infection after birth. Your child’s doctor can collect blood, saliva or urine samples within the first few weeks of your baby’s life to test for congenital CMV.

Other tests your child’s doctor might do to see if your baby has CMV are:

• Hearing tests
• Eye exam
• Ultrasound or CT scan of the brain

Can you treat congenital CMV?

There is no cure for CMV. But it is possible to decrease the risk of problems by talking to your child’s healthcare provider early on.

Some babies who show symptoms of CMV infection or who have a bad infection are treated with medicines like ganciclovir (gan-SYE-klo-veer). This medicine does not cure CMV, but it can prevent more problems from happening. Ganciclovir is usually given through a vein (intravenously) for 6 weeks. There is another medicine that can be taken by mouth called valganciclovir. This medicine is given for up to 6 months to treat problems from CMV and prevent new problems. All medicines used to treat CMV have some side effects that require regular blood tests. Your healthcare provider will discuss with you which medicine your child may need.

How do I know if my baby will start having problems later on?

This is a list of tests that your child’s healthcare provider might do if your baby has congenital CMV. These tests help to find problems early. They are usually done during the first few years of life:

• Tests on blood or urine
• Hearing tests as your baby gets older
• Tests to monitor your baby’s growth and development

Babies who are treated with medicine like ganciclovir often need regular blood tests. They also need to be followed closely by their healthcare provider.
How can I help prevent CMV from spreading?

It is important to prevent the spread of CMV to women who are or who might be pregnant. Many pregnant women who get CMV get it from children. Older children can catch CMV and have no symptoms, and then spread it to the rest of the family. It is best for everyone to do these things to prevent the spread of the virus. But it is very important for pregnant women to do these things to avoid getting CMV:

• Wash your hands every time you change a diaper, both before and after.
• Avoid kissing your baby or child on the mouth.
• Avoid sharing bottles, pacifiers, or silverware between your baby or child and the rest of the family.

If you have any questions about CMV, how to prevent it, or what to do if you baby has it, please call the number in the “To Learn More” box on the left, or call your child’s healthcare provider.

For more information online:

• Centers for Disease Control and Prevention: www.cdc.gov/cmv
• National CMV Foundation: www.nationalcmv.org
• Mayo Clinic: www.mayoclinic.com/health/cmv/DS00938