

Congenital CMV and Hearing Loss



Hearing loss is common in babies with congenital CMV, even those without symptoms at birth.



Cytomegalovirus, or CMV, is the most common infectious cause of birth defects in the United States. About 1 out of 200 babies is born with congenital CMV.

One out of 5 babies with congenital CMV will have symptoms or long-term health problems, such as hearing loss. Hearing loss may progress from mild to severe during the first two years of life, which is a critical period for language learning. Over time, hearing loss can affect your child's ability to develop communication, language, and social skills.

Some babies with signs of congenital CMV at birth may benefit from medicines.

Babies who show signs of congenital CMV disease can be treated with medicines called antivirals. Antivirals may decrease the severity of hearing loss. Babies who get treated with antivirals should be closely watched by their doctor because of possible side effects.

Hearing loss can be present at birth or develop later.

Babies with congenital CMV may have hearing loss in one ear, and may later develop hearing loss in the other ear. Progression may occur through adolescence.

Children with hearing loss can benefit from services.

Children diagnosed with hearing loss should receive services such as speech or occupational therapy. These services help ensure they develop important communication, language, and social skills. Children with hearing loss can also learn other ways to communicate, such as using sign language, and to use devices such as hearing aids and cochlear implants. The earlier children with hearing loss start receiving services, the more likely they are to reach their full potential.



Signs of congenital CMV in newborns

About 10% of babies with congenital CMV infection have signs at birth that include:

- Rash
- Jaundice (yellowing of skin or whites of the eyes)
- Microcephaly (small head)
- Intrauterine growth restriction (low weight)
- Hepatosplenomegaly (enlarged liver and spleen)
- Seizures
- Retinitis (damaged eye retina)

Signs of hearing loss in babies

- Does not startle at loud noises.
- Does not turn to the source of a sound after 6 months of age.
- Does not say single words, such as “dada” or “mama” by 1 year of age.
- Turns head when he or she sees you but not if you only call out his or her name.
- Seems to hear some sounds but not others.

Signs of hearing loss in children

- Speech is delayed.
- Speech is not clear.
- Does not follow directions. This could be the result of a partial or complete hearing loss.
- Often says, “Huh?”
- Turns the TV volume up too high



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National Center for Immunization and Respiratory Diseases (NCIRD)

For more information about CMV, visit:

www.cdc.gov/cmV

For more information about hearing loss, visit:

www.cdc.gov/ncbddd/hearingloss

CMV Fact Sheet for Pregnant Women and Parents



Most people have been infected with cytomegalovirus (CMV), but do not have symptoms. If a pregnant woman is infected with CMV, she can pass it to her developing baby. This is called congenital CMV, and it can cause birth defects and other health problems.

For pregnant women

You can pass CMV to your baby

If you are pregnant and have CMV, the virus in your blood can cross through your placenta and infect your developing baby. This is more likely to happen if you have a first-time CMV infection while pregnant but can also happen if you have a subsequent infection during pregnancy.

You are not likely to be tested for CMV

It is not recommended that doctors routinely test pregnant women for CMV infection. This is because laboratory tests cannot predict which developing babies will become infected with CMV or have long-term health problems.

You may be able to reduce your risk

You may be able to lessen your risk of getting CMV by reducing contact with saliva and urine from babies and young children. The saliva and urine of children with CMV have high amounts of the virus. You can avoid getting a child's saliva in your mouth by, for example, not sharing food, utensils, or cups with a child. Also, you should wash your hands after changing diapers. These cannot eliminate your risk of getting CMV, but may lessen the chances of getting it.

For parents

About 1 out of every 200 babies is born with congenital CMV. About 1 out of 5 of these babies will have birth defects or other long-term health problems.

Babies with congenital CMV may show signs at birth

Some signs that a baby might have congenital CMV infection when they are born are:

- Small head size
- Seizures
- Rash
- Liver, spleen, and lung problems

Tests on a baby's saliva, urine, or blood done within two to three weeks after birth can confirm if the baby has congenital CMV.

Early treatment may help

Babies who show signs of congenital CMV at birth may be treated with medicines called antivirals. Antivirals may decrease the severity of health problems and hearing loss but should be used with caution due to side effects.

Long-term health problems may occur

Babies with signs of congenital CMV at birth are more likely to have long-term health problems, such as:

- hearing loss
- intellectual disability
- vision loss
- seizures
- lack of coordination or weakness

Some babies with congenital CMV but without signs of disease at birth may still have or develop hearing loss. Hearing loss may be present at birth or may develop later in babies who passed their newborn hearing test. Sometimes, hearing loss worsens with age.

Hearing checks and therapies are recommended

Children with congenital CMV should have regular hearing checks. Children with hearing loss should receive services such as speech or occupational therapy. These services help ensure they develop language, social, and communication skills.

The earlier your child can get hearing checks and therapies, the more he or she can benefit from them.



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