

Cytomegalovirus (CMV) and Congenital CMV

Fact Sheet for Health Professionals

CMV is a common and widespread virus.

Nearly 1 in 3 children have been infected with CMV by age 5, and over half of adults have been infected with CMV by age 40. CMV is passed from person to person by direct contact with body fluids such as saliva, urine, semen, blood, tears, and breastmilk. People who are frequently around young children are at greater risk of CMV infection. Most healthy children and adults with a CMV infection don't have any symptoms and aren't aware that they have been infected.

People who get CMV shortly before getting pregnant or while pregnant can unknowingly pass the virus to their growing fetus. When a baby is born with a CMV infection, it is called congenital CMV.



About 1 out of every 200 babies is born with congenital CMV.

Most babies with congenital CMV never show signs or have health problems. However, about 1 in 5 babies with congenital CMV will have health concerns at birth or that develop later such as hearing loss, vision impairment, seizures, microcephaly, developmental differences, or cerebral palsy.

Health professionals play an important role in helping parents understand the services children with congenital CMV might need.

Primary Care Providers often coordinate the initial clinical evaluation of infants identified with congenital CMV by newborn screening. The clinical evaluation helps to find hidden signs of congenital CMV. Audiologists, physical and occupational therapists, and other specialists might be involved in the long-term care of kids with congenital CMV.

Some babies with signs of infection at birth may be treated with antiviral medication. All children with congenital CMV benefit from interventions and monitoring that help to detect and treat any concerns early - before language and social development are affected.

Hearing testing. Hearing loss may be present at birth or develop later. It may affect one or both ears. Any baby identified with congenital CMV should have regular hearing testing throughout childhood.

Early intervention. Early intervention (EI) provides services and supports to babies and young children with current or potential developmental challenges. In Minnesota, all children with congenital CMV are eligible for connection to EI at their local school district through the Help Me Grow referral system.

Family and parent support. The uncertainty of a congenital CMV diagnosis may cause stress for some parents. Resources such as the National CMV Foundation (<https://www.nationalcmv.org>) can be an important source of information and support.

Health professionals should provide information about CMV.

CMV is the most common infectious cause of birth defects, yet only 9% of women are aware of CMV. You can help educate people about CMV and the ways that they can reduce their risk of getting CMV. It is especially important to provide this information to parents, childcare providers, pregnant people, and people who can become pregnant.

Newborn Screening for Congenital CMV

In February 2023, the Minnesota Department of Health (MDH) Newborn Screening Program became the first in the nation to screen all newborns for congenital CMV. Screening for congenital CMV will help identify infants at risk for developing hearing loss and those who may benefit from follow-up monitoring and early access to treatment and interventions.

The screening test identifies CMV DNA in dried blood spots. If CMV is detected on the newborn screen, the baby should have a bagged urine sample collected for PCR analysis and detection of CMV. Confirmatory testing is most accurate when performed before 21 days of age. If the urine PCR analysis detects CMV, the baby's health care provider should coordinate additional evaluations to determine if the baby is symptomatic or asymptomatic.

Additional information about newborn screening for congenital CMV and the recommended CMV screening follow-up can be found on the MDH Newborn Screening Program website at <https://www.health.state.mn.us/newbornscreening/index.html>.

Tips for Risk Reduction

Share these practical tips to teach clients how to lower their risk of getting CMV by reducing contact with saliva and urine from babies and young children.

- Do not share food, drinks, eating utensils, or a toothbrush with a child.
- Do not put a child's pacifier in your mouth.
- When kissing a young child, try to avoid contact with saliva. Kiss them on the forehead or the top of the head instead of on the lips or cheek.
- Wash hands with soap and water often - especially after changing a diaper or helping a child use the toilet, having contact with a child's mucus, saliva, or tears, and touching a surface that may have a child's saliva or urine on it.

HAVE YOU HEARD?

Congenital CMV is the most common cause of nonhereditary hearing loss in childhood.



More questions?

Call (800) 728-5420 or visit us online at: www.health.mn.gov/CMV

