



Empowering Children. Supporting Families. Building Brighter Futures.

Resource 086 | Other developmental health conditions

Congenital cytomegalovirus infection

What it means

Congenital cytomegalovirus (CMV) infection occurs when a baby acquires CMV before birth. Many infected babies have no obvious symptoms. Some develop hearing loss or other health and developmental difficulties, including problems that emerge later. Follow-up is important even when the newborn hearing screen is passed. [1]

Causes and risk factors

CMV is a common virus that can pass from a pregnant person to the developing baby. Congenital infection has different implications from infection acquired after birth. The outcome varies and cannot be predicted solely from knowing exposure occurred. A diagnosis should not be used to assign family blame. [1,2]

General family education. A concern deserves assessment, but this guide does not diagnose a child or prescribe treatment.



Signs and everyday impact

Symptomatic newborns may have small size, jaundice, unusual rash, a small head, or other organ findings. Hearing loss may be present at birth or develop later, including in children without other signs. Vision, movement, learning, or seizure concerns can occur, but not every infected child develops these difficulties. [1,2]

Assessment and diagnosis

Newborn diagnosis uses CMV testing of saliva, with urine confirmation when appropriate. Testing within the first three weeks is needed to establish congenital infection using these specimens. Later positive tests may not distinguish infection before from after birth. Hearing, vision, neurological, and developmental assessments guide follow-up. [1,2]

Treatment and therapy

A specialist may recommend antiviral medicine for selected symptomatic infants, with careful monitoring for adverse effects. Treatment decisions for other presentations require individual specialist discussion. Hearing care, communication access, developmental therapies, and educational supports address functional needs. Ongoing hearing surveillance is important because hearing levels can change. [1,2,3]

Support at home

Keep scheduled hearing and developmental follow-up appointments. Report reduced responses to sound or changes in communication even after a passed newborn screen. Use hearing technology or accessible communication as recommended. Follow antiviral and laboratory instructions if treatment is prescribed, and discuss new concerns promptly.

When to seek help

Contact the newborn team promptly if testing for congenital CMV is indicated, because timing matters. Seizures, severe lethargy, poor feeding, or breathing difficulty require urgent medical assessment.

Questions for your care team

- Was testing done early enough to establish congenital infection?
- Is antiviral treatment indicated in this presentation?
- What hearing and developmental follow-up schedule is needed?



Podcast preparation

Use this outline to develop a later podcast script.

Suggested opening

Welcome to Mariel Early Intervention. Today we discuss congenital cytomegalovirus infection. Congenital cytomegalovirus (CMV) infection occurs when a baby acquires CMV before birth. This is general education; each child needs individualized care.

Opening: Define the topic and its developmental context.

Understanding: Explain causes and signs without inviting self-diagnosis.

Assessment: Describe evaluation and distinguish screening from diagnosis.

Support: Discuss treatment, therapy, and practical family supports.

Closing: Explain urgent signs and one clear next step.

Misconception to address: Myth: a passed newborn hearing screen rules out later CMV-related hearing loss. Hearing can change over time.

Before recording: update clinical references and local service details, arrange clinical review, and use fully consented or fictional examples.

Terms in plain language

- Congenital infection: an infection acquired before birth.
- PCR: a laboratory method detecting genetic material from an organism.
- Hearing surveillance: repeated checks for changes in hearing.

Sources and further reading

Sources accessed 3 October 2026. Numbered references support the clinical overview. Treatment availability and referral routes vary by country.

[1] CMV in Newborns

<https://cdc.gov/cytomegalovirus/congenital-infection/index.html>

[2] Clinical Overview of CMV and Congenital CMV

<https://www.cdc.gov/cytomegalovirus/hcp/clinical-overview/index.html>

[3] Types of Hearing Loss

<https://cdc.gov/hearing-loss-children/about/types-of-hearing-loss.html>