MNPQC

PERINATAL EDUCATION ECHO SERIES

OCTOBER 8, 2026 | SESSION SNAPSHOT

Congenital Cytomegalovirus: The Silent Epidemic; Burden, Awareness Gaps, and What Every Prenatal Provider Should Know

SESSION SUMMARY

This session explored the prevalence and impact of congenital Cytomegalovirus (cCMV) in the U.S. and Minnesota, gaps in provider and patient awareness, and the challenges of prenatal testing. It also reviewed current clinical guidance and practical, evidence-based prevention strategies providers can share with pregnant women to help reduce the risk of infection.

ABOUT CYTOMEGALOVIRUS

What is CMV and cCMV?

CMV infection is a very common member of the herpes virus (HHV-5). When a pregnant woman passes CMV to their developing fetus during pregnancy, this is known as congenital CMV or cCMV.

Two Types of CMV Infections:

- *Primary:* Occurs when a person is exposed to the infection for the very first time in their life.
- *Non-Primary:* Is a recurrent infection in a person who already has CMV in their body or is reinfected with a different strain of CMV.

How Does CMV Spread?

This infection is transmitted through saliva, urine, breast milk, and sexual contact. cCMV is transmitted through amniotic fluid.

WHO IS AT RISK?

By age 40, over 50% of U.S. adults have been infected with CMV. Fetal transmission is overall 38%. Primary infection accounts for 75% of cases. Non-primary infections acquired in pregnancy account for 3% of cases in adults.

By Trimester: First-trimester infections are linked to more severe fetal outcomes (19–29% of cases), while third-trimester infections have higher transmission rates (66%) but less severe outcomes.

Populations at Higher Risk:

- Pregnant women exposed to children under age 3, including parents and childcare workers (20–25 times higher risk).
- Pregnant women ages 20–40.
- People in their first pregnancy.
- People living in areas with lower CMV prevalence.

Sources: Adler SP et al. J Pediatrics | Taylor GH. Am Fam Physician | Wiley NG et al. Birth Defects Res | Fowler KB et al. JAMA

WHY THIS MATTERS?

- **1 in 200 infants** are born with cCMV in the US, and in those cases, **18% result in developmental disorders** such as seizures, microcephaly, or vision and hearing loss.
- In Minnesota, from 2023-2026, MDH reported over **630 cases of cCMV**.

CMV DIAGNOSIS & TREATMENT

Understanding Testing Limitations:

Immunoglobulin (Ig) testing, such as IgM or IgG, can be challenging to interpret when differentiating primary from non-primary CMV infection. IgM testing may indicate recent or active infection, but cannot pinpoint when it occurred and may produce false positives. IgG testing indicates past exposure, but cannot determine exactly when infection occurred.

Treatment Options:

No FDA-approved prenatal treatment is available, making prevention and risk reduction key strategies. Oral Valacyclovir is the standard treatment for symptomatic congenital CMV (cCMV) in newborns, while research on treating asymptomatic cases is ongoing.

KEY RECOMMENDATIONS:

1. Patient & Family Counseling

Counseling can reduce maternal CMV infections by up to 85%, yet awareness remains low. A 2020 study found that 51% of providers never counseled patients about CMV, and only 20–40% of pregnant women were aware of it. Counsel all patients during preconception and prenatal visits, regardless of risk.

Sources: Adler SP et al. J Pediatrics | Fellah T et al. J Clin Virol

2. Consider Maternal Universal Screening

Even without treatment, early CMV screening can identify prior immunity and help guide preventive counseling. Patients who know their status may be motivated to take steps to reduce their risk of infection.

3. Empower Patients & Their Families

Stay updated on CMV testing and prevention best practices to educate and empower patients. Education should include clear, practical prevention strategies that the *whole family* can follow.

Updated as of October 2026

CMV RISK REDUCTION TIPS & TRICKS:

Remember that the CMV infection spreads through infected body fluids such as urine, blood, tears, saliva, and breast milk. The infection can also be passed through organ transplantation or blood transfusions.

Risk reduction tips and tricks include:

- Wash your hands, especially after changing diapers, wiping noses, or handling children's toys.
- Avoid sharing utensils, cups, food, or toothbrushes with young children.
- Avoid kissing babies and toddlers on the mouth. Instead, kiss them on the forehead or head.

PRESENTER CONTACT

Stephen Contag, MD | scontag@umn.edu
University of Minnesota

RESOURCES:

- **Reminder:** Utilize the SMART DOT Phrases in the electronic medical record (EMR) system if your facility uses them. Search *.cmvsmartphrases*.

- **Minnesota Department of Health (MDH) CMV & cCMV Provider and Family Resource Page:** Includes helpful information about the basics regarding CMV and cCMV, along with specific resources designed for families, caregivers, and health professions. Explore the page: **health.mn.gov/CMV**

- **MDH Newborn Screening Program:** Did you know that **Minnesota was the first state to add CMV screening** to the standard newborn screen blood draw, which is completed before a family is discharged at the hospital? Learn more about the screening program: **health.state.mn.us/people/newbornscreening/index.html**

- **MDH CMV Public Health Data Dashboard:** CMV is a reportable condition in Minnesota through newborn screening and cases identified in other diagnostic testing. This data dashboard is available to help the public and professionals better understand cCMV in Minnesota. Access the dashboard **here**.

- **The National CMV Foundation** offers parents, families, and professionals valuable information about congenital CMV. Learn more by visiting the Foundation's website: **www.nationalcmv.org/resources**

- **American Academy of Pediatrics (AAP) cCMV Toolkit:** **This toolkit** was developed with AAP state chapters and local health departments through a CDC-funded project focused on emerging health threats affecting infants and children. The toolkit includes educational resources about congenital CMV that can be shared with clinicians and families, including downloadable materials and social media graphics. families.

ADDITIONAL DETAILS

If you have questions about this session snapshot or would like to request access to the session slides, please contact the QI Team: QI@minnesotaperinatal.org.

Learn more about this ECHO Series. Visit our ECHO webpage.

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