

# Clinical Laboratory Testing Update

Notification Date: May 3, 2018

Effective Date: May 3, 2018

## CMV-Associated Hearing Loss Testing in Newborns using Saliva

The Iowa Legislature passed a law ([Senate File 51](#)) in 2017 requiring newborn health care providers to offer testing for cCMV for any of their patients that did not pass their newborn hearing screening (the first test usually done in the hospital and the second re-screen done on an outpatient basis if they did not pass the first test).

From the Iowa Department of Public Health (IDPH) [Summary of Senate File 51](#), “If the results of the newborn hearing screening performed under this section demonstrate that the newborn has hearing loss, the birthing hospital, birth center, physician, or other health care professional required to ensure that the hearing screening is performed on the newborn under this section, shall do all of the following:

- (1) Test the newborn or ensure that the newborn is tested for congenital cytomegalovirus before the newborn is twenty-one days of age.
- (2) Provide information to the parent of the newborn including information regarding the birth defects caused by congenital cytomegalovirus and early intervention and treatment resources and services available for children diagnosed with congenital cytomegalovirus.”

**Iowa Administrative Code Chapter 641 IAC 3 states that it is the responsibility of the primary care provider (PCP) to ensure that hearing screening is performed on the newborn.** “Primary care provider” means a licensed physician, nurse practitioner, physician assistant or certified midwife who undertakes primary pediatric care responsibility for an infant or child to provide ongoing medical care and referrals to promote overall health and well-being”

For purposes of ensuring the newborn receives necessary follow-up interventions for congenital CMV (cCMV) before 21 days of age, hearing loss shall be considered when the newborn has failed to pass the initial hearing screening: the first screening conducted after birth and the second screening if the newborn does not pass the first screen after birth. The initial hearing screening is usually completed before the newborn is discharged from the hospital, or within 24 - 72 hours of life. Diagnostic testing for hearing loss should occur concurrently with the cCMV testing.

Current protocol for infants born at UnityPoint Health – Des Moines Hospitals which includes Iowa Lutheran Hospital, Iowa Methodist Medical Center, and Methodist West is:

1. If the neonate fails 2 hearing screens or will be discharged before first failed hearing screen can be repeated, perform PCR saliva testing for CMV
2. Notify provider and discuss need for PCR saliva testing for CMV if symptoms are present (see list below)
  - a. If any of the symptoms below are present, provider should consider consult with pediatric infectious disease physician
  - b. Symptom list:
    - i. Petechiae or purpura
    - ii. Intrauterine growth restriction
    - iii. Head circumference less than 3<sup>rd</sup> percentile (microcephaly)
    - iv. Intracranial calcifications
    - v. Thrombocytopenia (platelets less than 100,000)
    - vi. Enlarged liver or spleen
    - vii. Early jaundice in the first 24 hours or prolonged jaundice (longer than 14 days)

Pathology Laboratory offers non-invasive testing using saliva for CMV by PCR which detects cytomegalovirus but does not quantify viral load (Positive or Negative Result).



## CMV by PCR, Saliva Testing Information

**Patient Preparation:** Ensure neonate has had 1 hour or more since last receiving breast milk (i.e., oral care with breastmilk, gavage fed, milk drops, breastfed). (Source: CDC)

**Specimen Collection:** Swab area buccal area with a viral transport media swab (VTM) or universal transport media (UTM). (Calcium alginate-tipped swab, wood swab, or transport swab containing gel is not acceptable.) Place swab into container and tighten lid. Send specimen refrigerated. More information can be found at <http://www.pathologylab.org/clinical-testing.aspx?id=2908>

**Ordering Information:** CMV by PCR Qual Non-Blood [EPIC LAB236/Sunquest Code MNCMV]

**CPT Code:** 87496

**Questions, please contact:**

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