



Newborn Hearing Screening

FAST FACTS

~1.3%

About 1.3% of children in Ohio have permanent hearing loss.

20%

of children with permanent sensorineural hearing loss are positive for cytomegalovirus at birth.

Newborn hearing screening is critical for early identification of hearing loss and improved language outcomes. All babies should have a newborn hearing screening by one month of age. Most babies are screened at the birth hospital.

Babies who fail the newborn hearing screening must undergo a diagnostic cytomegalovirus (CMV) PCR test (saliva or urine) by 21 days of life. A positive CMV test indicates congenital CMV.

ASSESSMENT

Assess any baby with a failed newborn hearing screening, prior to the CMV test if possible.

- Urge family to schedule diagnostic CMV test if they have not done so yet.
- Educate family about the importance of early hearing loss identification and treatment.
- Evaluate baby's middle ear status. Address any wax or fluid concerns.

Babies who pass their newborn screening may still need audiological follow-up with diagnostic hearing evaluation. Refer to the Joint Commission Infant Hearing recommendations (available at JCIH.org) for guidance.

HPE (HISTORY AND PHYSICAL EXAM) RED FLAGS

JCIH.org provides extensive follow-up recommendations for children with the following HPE red flags (risk factors):

- Associated syndrome or neonatal risk factors for hearing loss
- Family history of permanent childhood hearing loss
- Patients with NICU stay of five days or more

Review **Risk Factors/Guidelines for Infants Who Pass the Newborn Screening** (<https://bit.ly/JCIHtable>).

WHEN TO REFER

Newborns with a failed hearing screen and a positive CMV test: After receiving positive CMV test result, the Division of Audiology at Cincinnati Children's will refer family to an infectious disease specialist. Babies with congenital CMV may be eligible for antiviral treatment to prevent progression of hearing loss and other neurologic sequelae. Early treatment has been shown to prevent or lessen severity of hearing loss. Treatment must be started by six weeks of age. Division of Audiology also will schedule a diagnostic hearing evaluation.

Newborns with a failed hearing screen and a negative CMV test: After receiving negative CMV test result, the Division of Audiology will schedule a diagnostic hearing evaluation.

Newborns who pass the newborn hearing screening: Per JCIH guidelines, if one or more HPE red flag is present, audiological follow-up is needed. PCP should refer patient to the Division of Audiology.

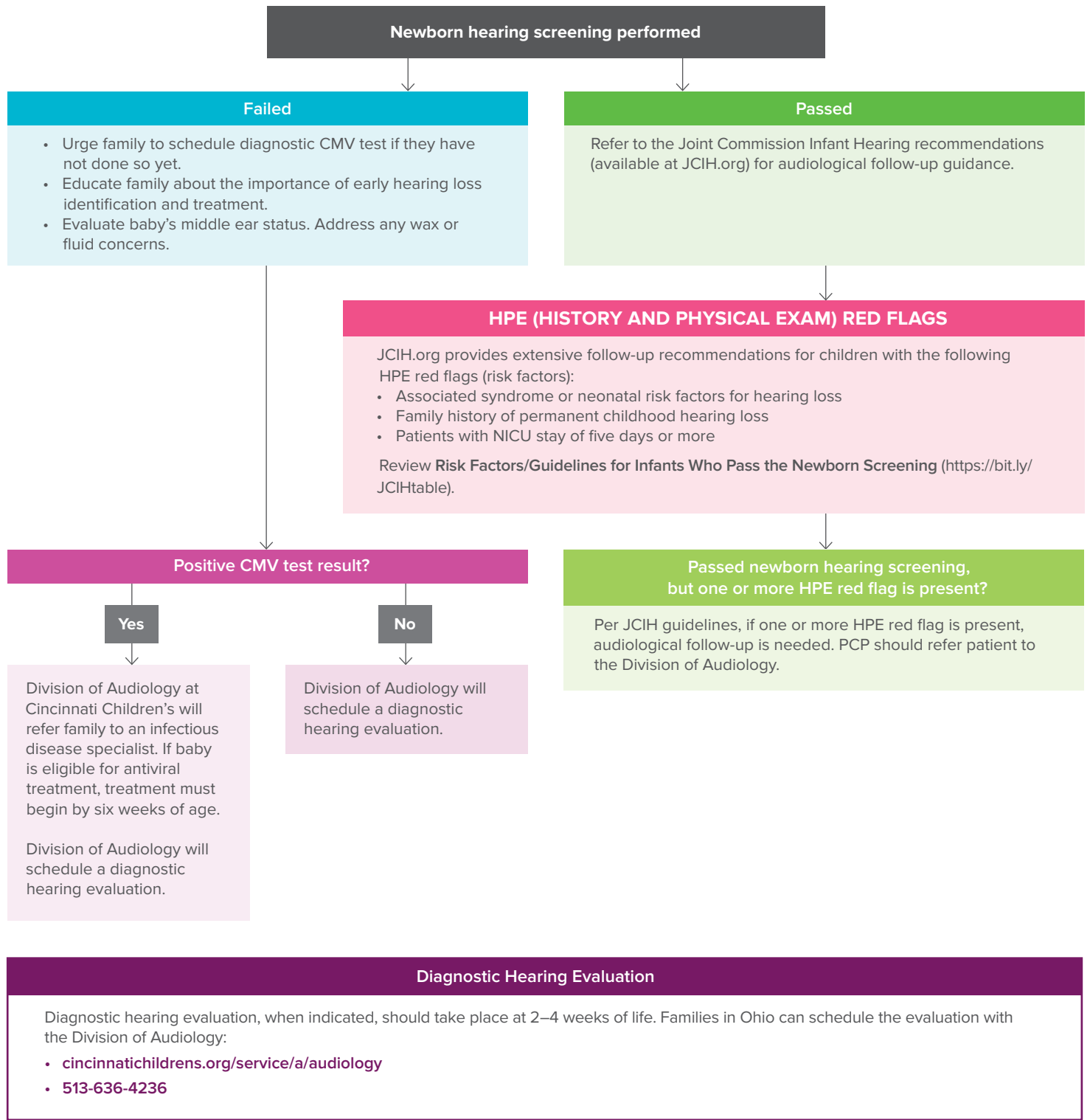
Diagnostic hearing evaluation should take place between 2–4 weeks of life. Families in Ohio can schedule a diagnostic hearing evaluation with the Division of Audiology:

- [cincinnatichildrens.org/service/a/audiology](https://www.cincinnatichildrens.org/service/a/audiology)
- 513-636-4236

If you would like additional copies of this tool, or would like more information, please contact the Physician Outreach and Engagement team at Cincinnati Children's.

For urgent issues or to speak with an audiologist on call 24/7, call the Physician Priority Link® at 1-888-636-7997.

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