

# Parent Education Pages

## Audiology Evaluation

The Joint Committee on Infant Hearing (JCIH) has representatives from Pediatrics, Otolaryngology, Speech Language Pathology, Audiology, Deaf Education and State Early Hearing Detection and Intervention (EHDI) programs. JCIH published a position statement in 2019 that provides guidance on the roles and responsibilities of the providers you may encounter on your journey with your newly identified child who is Deaf or Hard of Hearing (DHH).

### First Step is Testing

Pediatric audiologists have specific equipment and skills to work with babies. You can find a qualified pediatric audiologist near your area at [www.ehdipals.org](http://www.ehdipals.org). You may need a doctor's referral to make an appointment. If so, talk to your pediatrician or baby's medical provider to get the referral.

- Unless your baby has a medical condition that won't allow testing, the audiology evaluation should be completed by the time your baby is three months of age. If your baby is older, they may need to be sedated in order to complete the full test.
- When fluid is in the middle ear it is commonly called an ear infection (otitis media if infected, middle ear effusion if just fluid). Most children have ear infections during their early childhood years. Babies who are deaf or hard of hearing may also have ear infections which may cause a temporary conductive hearing loss. A pediatric audiologist can rule out permanent hearing loss even if there is fluid in the middle ear (infected or not). It is especially important for children with fluid to be tested by a qualified pediatric audiologist as early as possible so that the type of hearing loss can be found, especially if a baby has both conductive and permanent hearing losses.

### Auditory Neuropathy

Auditory neuropathy is a rare condition that happens more often in babies who have spent time in the Neonatal Intensive Care Unit (NICU).

- The nerve is involved which may cause the baby to have hearing that may be mild, severe or fluctuating.
- Babies with auditory neuropathy may need more frequent testing to monitor if changes in the hearing have occurred.

### Guidelines

The information shared here is simplified language of the guidelines set forth by the JCIH. The guidelines were written for professionals and families to set standards of care for children through the hearing screening, diagnosis and early intervention process. Parents should consider these overall recommendations and timelines may vary based on family circumstances.



[Questions to ask your Audiologist](#)



[Next Steps after diagnosis](#)



[Types of Hearing Tests](#)



[Family Support](#)

### Types of Tests

Several tests will be done on each ear to find out:

- If there is hearing loss
- Degree of loss (how much your baby can hear)
- Type of loss (if the loss is likely to be temporary or permanent)

Testing will most likely include an Auditory Brainstem Response (ABR) test where a series of sounds are played at different frequencies (itches) and decibels (loudness) in each ear and the brain's response to those sounds is recorded through electrodes (wires on the surface of the skin). Sounds are played through the ear and the bones of the head to figure out the type of hearing loss (what part of the ear may be causing the loss).

Some of the tests do not tell us how much hearing loss there is but can help tell how well some of the parts of the ear are working.

- One of these tests is called tympanometry which will measure how well the eardrum can move.
- Acoustic reflexes are another way that the audiologist can tell what type of hearing loss may be present.

Usually when babies are six to nine months old the audiologist is able to complete what is called a behavioral test or visual reinforcement audiometry (VRA).

- This test requires a baby to hold their head up and turn to a sound. This more subjective test shows how your baby responds to sound.
- As your child gets older the audiologist may expand the behavioral testing to include a response to words while doing a play task during the test. Behavioral testing gives the audiologist the best information on how a child actually hears not just how their ears work.

Babies who are deaf or hard of hearing may also have other medical conditions that make completing a hearing test challenging. Because of this, some babies may not be able to be sedated or perform the behavioral test until they are older.

### What's Next

Testing may take more than one visit to get all of the results needed to decide if your child needs medical intervention, hearing aids, cochlear implants or needs to be monitored. Ideally, enough testing will be completed by three months of age to confirm if your child is deaf or hard of hearing.

Once a hearing loss is confirmed a referral to early intervention should be made by the audiologist. Your doctor can also make the referral or you can contact your local early intervention program. Early Intervention should begin as soon as possible after a confirmation of hearing loss, ideally before six months of age.