WHAT TO DO IF YOUR CHILD DOES NOT PASS THE HEARING SCREEN

Indiana's Universal Newborn Hearing Screening Program

Building Bright Beginnings

Q & A

Why is my child being referred for further testing?
Your child's hearing screening results indicate that additional testing is necessary. Many children who don't pass the screening are found to have normal hearing. Some children, however, are born with a permanent hearing loss. It is important that a special diagnostic hearing test be completed. Hearing loss can have a significant impact on communication development. Early detection of hearing loss combined with early intervention give children the greatest opportunity to develop language and/or speech skills.

Who will help us know what to do next?
An intake coordinator from Indiana's early intervention system, First Steps, will contact you. First Steps is a family-centered, coordinated system that provides early intervention services to infants and toddlers with disabilities or who are at risk for developmental delays. Evaluations and services are provided with no out of pocket costs to Indiana families. The intake coordinator will help guide you in the evaluation process.

What is hearing loss?
Hearing loss can be permanent or temporary. It may occur anywhere along the outer, middle or inner ear. Therefore a series of tests will be done to determine the degree, type and possible cause of hearing loss.

HOW THE EAR WORKS:

The very small structures that allow us to hear sound are arranged inside the ear in a space not much larger than a fingernail. There is an eardrum, which is the tympanic membrane, three tiny bones, a snail-shaped structure of hearing (the cochlea) and nerves that carry sound messages to the brain. The ear also contains three coils (semi-circular canals) that help us to keep our balance.

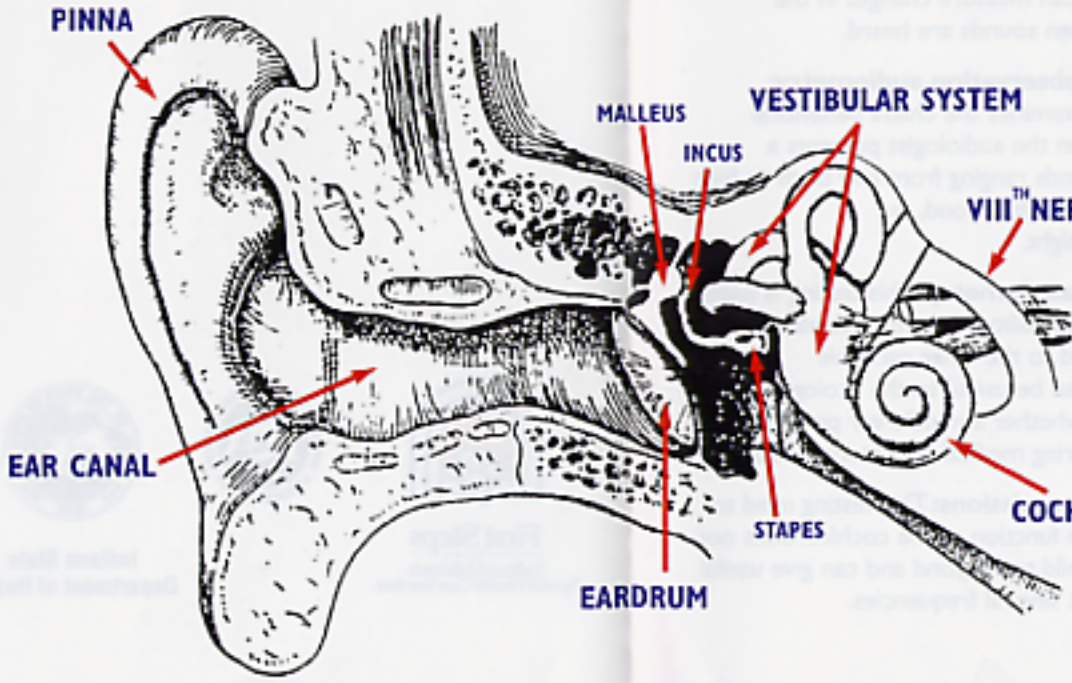
The Outer Ear is the part that we see and includes the ear canal. The ear canal is like a tunnel and ends at the eardrum or tympanic membrane.

The Middle Ear contains the eardrum and three tiny bones called the malleus, incus and stapes. These bones form a small bridge that hangs across the space in the middle ear.

The Inner Ear is made up of the snail-shaped structure of hearing, the cochlea, which is filled with fluid and thousands of little hair cells, which connect to the nerves.

When sounds pass through the ear, a chain reaction of vibrations goes through the middle ear. Then these vibrations set up electrical signals, which are sent by the nerves in the inner ear to the brain.

Because we have two ears, the difference between the sounds entering each ear creates a stereo effect. This helps the brain tell where the sound is coming from and what kinds of sounds they are.



PROFESSIONALS THAT MAY BE INVOLVED IN THE EVALUATION PROCESS

First Steps Intake Coordinator: This person is the point of contact for Indiana's Early Intervention Systems. They will contact you upon receiving a referral from the hospital.

Pediatrician or Family Practice Physician: This is your baby's primary care physician.

Otolaryngologist or Otologist: This medical doctor specializes in the problems of the ear, nose and throat and is sometimes referred to as an ENT doctor.

Audiologist: This is a licensed healthcare professional in the field of hearing, who tests hearing and evaluates hearing aids.

TYPES OF TESTS:

Auditory Brainstem Response: ABR or Brainstem Auditory Evoked Response, BAER is an objective test that can be done while a child is asleep and can measure changes in the brainwave when sounds are heard.

Behavioral observation audiometry: This testing examines the child's behavioral response when the audiologist presents a variety of sounds ranging from low pitch to high pitch and from soft to loud, out of the child's sight.

Impedance audiometry: This testing is used to measure the ability of the middle ear to conduct sound to the inner ear. This information can be useful to the otologist in determining whether a middle ear problem, possibly requiring medical treatment, exists.

Otoacoustic emissions: This testing used to determine the function of the cochlea, does not require the child to respond and can give useful information at several frequencies.

IF YOU HAVE QUESTIONS ABOUT INDIANA'S UNIVERSAL NEWBORN HEARING PROGRAM OR YOUR BABY'S HEARING TEST, PLEASE CONTACT:

- **Your primary care physician**
- **First Steps**
  Indiana Children's Special Health Care Services
  1-800-441-7837
- **Maternal and Child Health Services**
  Indiana State Department of Health
  1-800-761-1271

First Steps
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Indiana State Department of Health