

Hearing Tests for Babies and Children



No child is too young to have their hearing tested. In fact, in most cases, hearing tests will be done on newborns before they leave the hospital. These tests are important because they help identify hearing problems early. The sooner a hearing problem is found, the sooner managing hearing loss can begin. This allows for the best possible outcome for the child. If you have any concerns about your child's hearing, be sure to mention them to your child's healthcare provider. They will refer you to an audiologist. This is a healthcare professional who specializes in hearing problems. The audiologist will perform hearing tests on your child. Below are common hearing tests done on infants and children.

Auditory brainstem response audiometry (ABR)

This is also called brainstem auditory evoked response (BAER) or brainstem auditory evoked potentials (BAEP).

- What the test measures:
 - The test records brainwaves and how well sound signals travel along the hearing nerve to the brain. It helps predict how well the inner ear and brainstem are working with regard to hearing.
- How the test is done:
 - A child may be sleeping or sedated.
 - Electrodes on sticky pads are placed in or behind the child's ears and on the head. The electrodes record how the brain responds to different sounds. These sounds travel through earphones or headphones, which are placed inside or over the child's ears.
 - The test takes 30 to 60 minutes.

Otoacoustic emissions (OAE)

- What the test measures:
 - OAE tests the function of the inner ear. Sound is sent into the ear canal and the response of the inner ear is measured. The test helps determine whether there is a problem and if further testing is needed.
- How the test is done:
 - The child needs to be asleep or sitting quietly.
 - Sound is sent into the ear canal through a probe (small, thin medical instrument with a rubber tip) that sends and records sound. The ear's response to sound is measured.
 - OAE tests for fluid, blockage, or any damage to portions of the ear.
 - The test takes a few minutes.

Acoustic immittance testing

There are 2 kinds of acoustic immittance tests: tympanometry and acoustic reflex testing.

- What the tests measure:

- These tests are done to see how the middle ear responds to sound or pressure. The tests help find problems with the middle ear that may cause trouble hearing.
- How the tests are done:
 - A probe is put into the ear canal.
 - For tympanometry, the instrument gently pushes air in and pulls air out of the ear canal. The changes in air pressure move the eardrum. The movement of the eardrum is measured.
 - For acoustic reflex testing, sound is sent into the ear canal. The reaction of the muscles in the middle ear to sound is measured. This test gives information about the type and location of the hearing problem
 - The test takes a few minutes.

Behavioral observation audiometry

- What the test measures:
 - This test measures the response to sounds. It helps the audiologist rule out major hearing loss. The test can be done with children from birth to 4 months.
- How the test is done:
 - A sound is made by talking or with a special noisemaker. The audiologist evaluates the child's response to the sound. This may include head turning, quieting, startling, or eye widening.

Visual reinforcement audiometry

- What the test measures:
 - This test measures the response to sounds. It determines the softest sound your child can hear. The test can be done with children ages 6 months to 3 years old.
- How the test is done:
 - A sound is played for the child. Upon hearing the sound, the child is taught to turn toward the source of the sound. Then a toy or video screen lights up. The child's eye and head movements are evaluated.

Conditioned play audiometry

- What the test measures:
 - This test measures the response to sounds. It determines the softest sound the child can hear. The test can be done with children ages 2 years to 4 years old who can follow instructions.
- How the test is done:
 - The child performs a task, such as throwing a ball into a bucket, each time a sound is heard. The child's response to sounds is evaluated.

Conventional screening audiometry

- What the test measures:
 - Conventional screening audiometry tests for hearing problems. The test can be done with children age 4 years or older.

- How the test is done:
 - The child wears headphones and listens for different sounds. The child then raises their hand when a sound is heard.

Tips to prepare your child for hearing tests

Help your child get ready for their hearing test by doing the following:

- If you have earphones or headphones, let your child listen to quiet music through them to get them used to using them.
- Reassure your child that hearing tests are painless and there are no shots involved.
- Tell your child that they get to play games during the test.

© 2000-2027 The StayWell Company, LLC. All rights reserved. This information is not intended as a substitute for professional medical care. Always follow your healthcare professional's instructions
This information is not intended as a substitute for professional medical care. Always follow your Healthcare professional's instructions. Copyright Krames LLC.