

Audiology

Hearing Loss

What to expect with hearing tests

The following are some of the tests your child may need:

Tympanometry: Tympanometry gives information about the outer and middle ear. A rubber probe is put into the ear canal and sends sound in the ear. This helps to tell if there is fluid in the middle ear, a hole in the eardrum, or a blocked ear canal.

Optoacoustic Emissions (OAE): OAEs are echoes of a sound when it hits the inner ear. This sound is measured with a tiny probe put into the ear canal. If OAEs are present, there is likely no blockage in the outer or middle ear and the outer hair cells in the inner ear are working. When there are no OAEs, more testing is needed.

These tests can take two hours or more. Your child will need to be asleep for the whole time. Many times, medicine is used to keep the baby asleep.



Vision

A Native Community that enjoys physical, mental, emotional and spiritual wellness.

Mission

Working together with the Native Community to achieve wellness through health and related services.

Audiology

(907) 729-1400
3801 University Lake Dr Ste. 210
Anchorage
southcentralfoundation.com



The Alaska Native Tribal Health Consortium and Southcentral Foundation jointly own and manage the Alaska Native Medical Center under the terms of Public Law 105-83. These parent organizations have established a Joint Operating Board to ensure unified operation of health services provided by the Medical Center.



Types of hearing loss:

Sensorineural hearing loss is permanent and is the result of something affecting the cochlea or the auditory nerve, which affects hearing.

Conductive hearing loss is the result of something affecting the outer or middle ear, such as infections with fluid in the middle ear space or malformation of the ear canal or ear bones.

Mixed hearing loss is a combination of sensorineural and conductive hearing loss.

Degrees of hearing loss:

The degree of hearing loss is measured by decibels (dB), which is the loudness or intensity of sounds from very soft (5 dB) to very loud (110 dB).

Slight (16 - 25 dB) May have difficulty hearing speech at a distance or in noisy situations; may have some difficulty in school settings and need adjustments in the classroom to hear well.

Mild (26 - 40 dB) Will have difficulty hearing speech that is soft, distant, or in noisy environments. Likely to have some difficulty in communication and school settings; may need hearing aid and speech or learning help.

Moderate (41 - 55 dB) Will have trouble hearing any speech at a distance of 3 - 5 feet. Hearing aids will help child hear all sounds. Without hearing aids, 50 - 100 percent of speech signal may be missed. Speech will probably not be normal without hearing aids; may need speech and learning help.

Moderately-Severe (56 - 70 dB) Conversation must be very loud to be heard without hearing aids. A 56 db loss can mean 100 percent of the speech signal is missed. Delays in spoken language and reduced speech clearness will happen without hearing aids and speech and learning help.

Severe (71 - 90 dB) If hearing loss is present at birth, speech will not develop, or could be severely delayed unless the child gets early help. With good hearing aids, child should be able to hear most sounds of speech and environmental sounds; without hearing aids, may only be aware of loud voices about one foot from the ear and will probably use vision for communication.

Profound (91 dB or greater) Aware of vibrations, not sound; will usually use lip reading or sign language rather than hearing for communication and learning. Speech and oral language will not develop without early hearing aids and learning help. Speech clearness and voice quality may be affected; even a little bit of hearing can benefit from hearing aids; possible candidate for cochlear implant; use of a signed language may help language development.

What to know

Parents who are familiar with hearing and hearing loss can better help their child. About six of every 1,000 children born have some amount of hearing loss. Children may also develop hearing loss after birth from illness, trauma, ototoxic medications, and genetic factors. Any degree of hearing loss can affect a child's language and progress in school.

Diagnostic team

Your child will need a complete diagnostic evaluation by different professionals, which will help you to determine what is best for your child. The diagnostic team includes:

Audiologist:

- Determines the type and degree of hearing loss
- Decides if the child will need hearing aids
- Fits hearing aid if needed
- Hearing aid care education
- Performs regular hearing tests on child in order to adjust hearing aid as the child grows

Primary care provider:

- Checks child for general health problems, and refers for any necessary medical tests

Otologist or otolaryngologist:

- Determines medical cause of hearing loss
- Decides if hearing loss can be surgically or medically treated
- Gives clearance for hearing aid fitting

Early learning teacher:

- Provides help in areas of speech, communication, language and hearing

