

Childhood Hearing Loss

Introduction

Three million children under the age of 18 have some hearing loss, including four out of every thousand newborns. So, every parent and caregiver should be watchful of the signs of hearing loss in his/her child and seek a professional diagnosis. Hearing loss can increase the risk of speech and language developmental delays.

Risk factors for hearing loss in children:

During pregnancy:

- Mother had German measles, a viral infection or flu.
- Mother drank alcoholic beverages.

Newborn (birth to 28 days of age):

- Weighed less than 3.5 pounds at birth.
- Has an unusual appearance of the face or ears.
- Was jaundiced (yellow skin) at birth and had an exchange blood transfusion.
- Was in neonatal intensive care unit (NICU) for more than five days.
- Received an antibiotic medication given through a needle in a vein.
- Had meningitis.
- Failed newborn hearing screening test.
- Does not startle, move, cry or react in any way to unexpected loud noises.
- Does not awaken to loud noises.
- Does not freely imitate sound.
- Cannot be soothed by voice alone.
- Does not turn his/her head in the direction of your voice.

Infant (29 days to 2 years)

- Received an antibiotic medication given through a needle in a vein.
- Had meningitis.
- Has a neurological disorder.
- Had a severe injury with a fracture of the skull with or without bleeding from the ear.
- Has recurring ear infections with fluid in ears for more than three months.
- Does not point to familiar persons or objects when asked.
- Does not babble, or babbling has stopped.
- By 12 months does not understand simple phrases by listening alone such as "wave bye-bye," or "clap hands."

Older Infant (9 months to 2 years)

- Does not respond on first call.
- Does not respond to sounds or does not locate where sound is coming from.
- Does not sound like or use speech like other children of similar age.
- Does not listen to TV at a normal volume.
- Does not show consistent growth in the understanding and the use of words.

Family

- Has one or more individuals with permanent or progressive hearing loss that was present or developed early in life.

Hearing tests: How, when, and why

If you suspect that your child may have hearing loss, discuss it with your doctor. Children of any age can be professionally tested.

Tests for newborns and infants under one year

Hearing tests are painless, and they normally take less than half-an-hour. Newborns are usually tested with the otoacoustic emissions (OAE) test. During the OAE test, a microphone is placed in the baby's ear. It sends soft clicking sounds, and a computer then records the inner ear's response to the sounds.

Tests for older children and adults

Children between two and four years old are tested through conditioned play audiometry (CPA). The children are asked to perform a simple play activity, such as placing a ring on a peg, when they hear a sound. Older children and adults may be asked to press a button or raise their hand.

All children should have their hearing tested before they start school. This could reveal mild hearing losses that the parent or child cannot detect. Loss of hearing in one ear may also be determined in this way. Such a loss, although not obvious, may affect speech and language.

Hearing loss can even result from earwax or fluid in the ears. Many children with this type of temporary hearing loss can have their hearing restored through medical treatment or minor surgery.

In contrast to temporary hearing loss, some children have nerve deafness, which is permanent. Most of these children have some usable hearing. Few are totally deaf. Early diagnosis, early fitting of hearing aids, and an early start on special programs can help maximize the child's existing hearing.

Please note that this information is not a substitute for an ear examination or a hearing test.

What you should do

If your child has one or more of these risk factors, he or she might have hearing loss and should be taken for an ear examination and a hearing test. This can be done at any age, as early as just after birth.

If your child does not have any of the above risk factors, but you feel that he or she is not hearing normally, even if your child's doctor is not concerned, have your child's hearing tested by an audiologist and when appropriate, his or her speech evaluated by a speech and language pathologist. These tests will not hurt your child.