

Hearing Tests for Children and Babies

Approximately one to three babies out of 1,000 are born with permanent hearing loss.¹ Fortunately, children are never too young for a hearing test.² It is important to have a baby's hearing tested within the first few days of his or her life. In fact, most states require universal newborn hearing screenings.

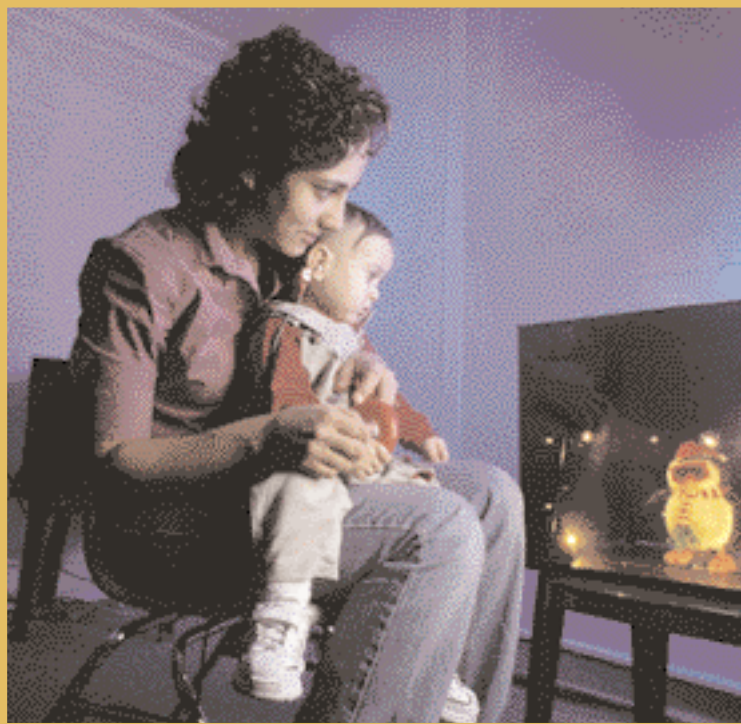
Beyond newborn screening, children need to be tested if they are having trouble hearing or if they are not developing speech and language skills as expected. If after testing a hearing loss is confirmed, a hearing aid may be used to help the child hear.

Indications

There are multiple causes for hearing loss in babies and children. Some conditions that may cause hearing loss include:

- low birth weight (less than 3.3 pounds);
- various syndromes, such as Down syndrome;
- head, face and ear deformities, like eustachian tube dysfunction;
- infections like rubella (German measles), cytomegalovirus (CMV), bacterial meningitis, or chronic otitis media; or
- ototoxicity caused by medications used to treat severe infections.¹

Additionally, parents can look for physical indications of hearing loss in babies such as failure to respond to loud sounds or to create



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babbling or cooing sounds. Parents also should monitor for a child's usage of gestures instead of speech for communication or inattentiveness at home or at school.

Testing

An audiologist or physician may recommend visual reinforcement audiometry (VRA), otoacoustic emissions (OAE) or auditory brainstem response (ABR) testing to investigate hearing loss.

Visual reinforcement audiometry is recommended to evaluate children six months of age and older. Participation is crucial. With VRA, game-like activities are used to observe a child's response to speech and various high- and low-pitch sounds.¹

Otoacoustic emissions testing is performed on babies and children, and does not require the child to participate. Pulse-type sounds are sent to the inner ear by a tiny probe placed in the ear canal.³

Auditory brainstem response is used for some children and babies, and can be performed while the child is asleep. With this test, small earphones are placed in the ear canal, and electrodes measure the response of the hearing nerve to sound.³

Treatment Options

If a child is diagnosed with hearing loss, a hearing aid may help them to hear and comprehend sound so they can communicate effectively.¹ There are different options.

It is important to keep in mind that small children and infants cannot adjust their own hearing aids, so parents may consider choosing a style that can be easily maintained and managed.

Also, parents should remember that, as children grow, so do their ears.⁴ Inquire about hearing aids with easy-to-change ear molds, as well as aids that connect to assistive listening devices (ALD).

References

1. Boys Town National Research Hospital. (2002). Information on Hearing Loss. Accessed via <http://www.boystownhospital.org/parents/info/>.
2. University of California San Francisco Audiology Clinic. (2002). Hearing Tests for Children. Accessed via <http://www.ucsf.edu/audio/hearingtests.html>.
3. KidsHealth for Parents. (2002). Hearing Evaluation in Children. Accessed via http://kidshealth.org/parent/general/eyes/hear_p4.html.
4. The American Speech-Language-Hearing Association (ASHA). (2002). Children and Hearing Aids. Accessed via http://www.asha.org/hearing/rehab/child_aids.cfm.

For More Information

American Speech-Language-Hearing Association
<http://www.asha.org>

Beginnings: For Parents of Children Who Are Deaf or Hard of Hearing
www.beginningssvcs.com

Boys Town National Research Hospital
<http://www.boystownhospital.org>

University of California San Francisco Audiology Clinic
<http://www.ucsf.edu/audio/>