

HEARING IMPAIRMENT IN NEWBORNS AND YOUNG CHILDREN Q&A

Who becomes hearing impaired?

Every day, 33 babies (or 12,000 each year) are born in the United States with permanent hearing loss. With between 3 and 6 of every 1,000 newborns having a hearing loss, it is the most frequently occurring birth defect.

How is hearing impairment detected?

Infant hearing screening is quick, safe, and painless; most babies sleep through the hearing screening test. There are two types of hearing screening tests for babies: 1) Automated Auditory Brainstem Response (AABR) which tests the baby's ability to hear soft sounds through small earphones. The baby's brain waves are measured to find out whether the sounds are processed normally and 2) Automated Otoacoustic Emissions (AOAE) which measure a baby's response to sound directly, using a small microphone and a special computer.

Who should be tested?

The American Academy of Pediatrics; the American Speech-Language Hearing Association; the American Academy of Audiology; and the American Academy of Otolaryngology, Head and Neck Surgery have all endorsed the implementation of universal newborn hearing screening (screening all newborns, not just those determined to be "at risk") and recommended that such screening be performed in all birthing hospitals and coordinated by state departments of health. All of Georgia's birthing hospitals are now equipped with the most current technology to perform hearing screening on newborn infants, or have a system in place for access to such screening.

Georgia's goal is to develop and sustain a comprehensive coordinated system for Universal Newborn Hearing Screening and Intervention (UNHSI) in which hospitals, primary health care providers, and Public Health work together to ensure that every newborn is screened for hearing loss before hospital discharge; infants not passing the initial and a repeat screening receive appropriate diagnostic evaluation before three months of age and, when appropriate, are referred to intervention by six months of age.

How can hearing impairment be managed?

Eighty percent of the language ability of a child is established by the age of 18 months; hearing is vitally important to the healthy development of spoken language skills. Early detection of hearing loss in a child and early intervention and treatment has been demonstrated to be highly effective in facilitating a child's healthy development in a manner consistent with the child's age and cognitive ability. Appropriate testing and identification of newborn infants with hearing loss will facilitate early intervention and treatment and may therefore serve the public purposes of promoting the healthy development of children and reducing public expenditure. Children with hearing loss who do not receive early intervention and treatment may require extensive special education services. These services are publicly funded for the vast majority of children with hearing needs in the state.

What intervention services do public health departments provide?

A critical component of the UNHSI is intervention. An individual plan for follow-up services for families whose child is diagnosed with hearing loss must be developed by the primary care physician/provider and the parent. There are a number of public and private intervention resources that can assist in this process.

Public Resources

- **Children 1st**, Georgia Department of Human Resources, can assist hospitals and primary care physicians in ensuring that children who are referred for follow-up actually receive follow-up screening, diagnostics, and intervention. Children 1st serves as the single system point of entry for all child health programs in the Division of Public Health. Children 1st

makes referrals to public health programs and can also help families gain access to other appropriate health and community services. Children ages birth to five years who are identified to be at risk due to medical conditions (such as hearing loss) and/or socio-environmental factors are screened, assessed, and referred to appropriate services. Children 1st can coordinate follow-up services for infants who do not pass the hospital inpatient screening and are referred to a local Children 1st Coordinator. To make a referral, contact your health district Children 1st Coordinator (see Children 1st web pages at <http://health.state.ga.us/programs/childrenfirst> for listing).

- Programs in the **Office of Children with Special Needs**, including **Babies Can't Wait** and **Children's Medical Services**, offer a variety of resources for families of infants and children with hearing loss or deafness. These resources include hearing aids, other assistive technology devices and services, service coordination, and family support and training. Referrals to public health programs for children with special needs can be made through Children 1st or by calling Parent-to-Parent of Georgia (1-800-229-2038 or 770-451-5484 in metro Atlanta).
- **Georgia PINES (Georgia Parent Infant Network for Educational Service)**, Georgia Department of Education, is a free statewide home intervention program available to families of children ages birth to five years who have hearing or vision impairments. Using the SKI-HI model from Utah State University, service delivery is focused on family training, based on both the needs of the family and the child. The training promotes understanding of the child's disability and provides functional strategies to stimulate the child's auditory, speech and language development in the home environment. There are trained SKI-HI parent advisors in each

of the 19 health districts. Parent advisors are professionals (audiologists, speech therapists and teachers of the hearing impaired) with additional training in the SKI-HI curriculum. The role of the parent advisor is to understand the child and their family and provide the family with information, training, resources and support. Georgia PINES collaborates with other agencies involved with the family. Georgia PINES also has a loaner equipment bank, which includes hearing aids. The Georgia PINES state office is located at 890 North Indian Creek Drive, Clarkston, Georgia 30021. For more information or to make a referral, call 1-800-522-8652 or 404-298-4882 in metro Atlanta, visit the web page at <http://www.gapines.net>.

Private Resources

- **There are a variety of private resources available across the state, including audiologists, speech-language pathologists, and programs that specialize in the development of a particular mode of communication.**

Where can I get additional information on Newborn Hearing Screening and Intervention?

You may contact the Georgia Universal Newborn Hearing Screening and Intervention Program at 404-657-4143. Another important source of information is the National Center for Hearing Assessment and Management, Utah State University, at 435-797-3584. The following web sites are dedicated to providing information for families of infants and children diagnosed with a hearing loss and the professionals who work with these individuals.

- Alexander Graham Bell Association for the Deaf and Hard of Hearing – <http://www.agbell.org>
- American Academy of Audiology – <http://www.audiology.com>
- Center for Hearing Loss in Children – <http://www.boystown.org/btnrh/chlc/index.htm>
- Deaf / Hard of Hearing Resources – http://www.familyvillage.wisc.edu/lib_deaf.htm
- DeafNet - Links for Parents of Deaf Children – <http://www.deaf.net/deafchild.htm>
- Oral Deaf Education - www.oraldeafed.org
- OtiKids: Recognizing That Your Child Has a Hearing Loss – <http://www.oticonus.com/OtiKids/1-0-understanding/index.htm>
- National Association of the Deaf – <http://www.nad.org>
- Self Help for Hard of Hearing People – <http://www.shhh.org>
- The National Campaign for Hearing Health – <http://www.hearinghealth.net>
- Where do we go from hear? – <http://www.gohear.org>
- National Deaf Education Network and Clearinghouse – <http://clerccenter.gallaudet.edu>
- NICHCY, National Information Center for Children and Youth with Disabilities – <http://www.nichcy.org>
- DB-LINK, The National Information Clearinghouse on Children Who Are Deaf-Blind – <http://www.tr.wou.edu/dblink>
- HEATH Resource Center, The National Clearinghouse on Postsecondary Education for Individuals with Disabilities – <http://www.heath-resource-center.org>
- National Clearinghouse for Professions in Special Education – <http://www.special-ed-careers.org>
- CENTe-R (Collaborative Early Intervention National Training e-Resource) – <http://center.uncg.edu>

