Has Your Baby's Hearing Been Screened?

Most children hear and listen from birth. They learn to talk by imitating the sounds around them and the voices of their parents and caregivers. But that's not true for all children. In fact, about 2 or 3 out of every 1,000 children in the United States are born deaf or hard-of-hearing. More lose their hearing later during childhood. Many of these children may need to learn speech and language differently, so it's important to detect deafness or hearing loss as early as possible.

How early should I have my baby's hearing screened?

Your baby should have a hearing screening within the first month of life. If hearing loss is suspected, make sure a hearing expert, called an **audiologist** (aw-dee-AH-luh-jist), tests your baby's hearing by 3 months of age. If hearing loss is confirmed, it's important to consider the use of hearing devices and other communication options by 6 months of age.

Where can my baby's hearing be screened?

Many hospitals automatically screen all newborns for hearing loss. Some screen only those newborns at high risk for hearing loss, such as babies with a family history of deafness or hearing problems, low birth weight, or certain other medical conditions. Even if your baby

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doesn't have risk factors, being screened is important, because many children with no risk factors have hearing loss. Even children whose parents and grandparents hear normally may be born with a hearing loss. Find out what your hospital does. If you and your baby are already home and you don't know if your baby's hearing was tested, ask the doctor or the clinic where your baby's records are.

Recently, many States have passed Early Hearing Detection and Intervention legislation. A few other States regularly screen the hearing of most newborns, but have no legislation that requires screening. To find out what your State does, visit the American Speech-Language-Hearing Association (ASHA) web site at <www.asha.org>.

How will my baby's hearing be screened?

Two hearing tests are used to screen babies. In both tests, no activity is required from your child other than lying still.

- Otoacoustic emissions (OAE) tests can show whether parts of the ear respond properly to sound. During this test, a sponge earphone is placed into the ear canal. The ear is stimulated with sound, and the "echo" is measured. The echo is found in everyone who hears normally. If there is no echo, it could indicate a hearing loss.
- Auditory brain stem response (ABR) tests check how the brain stem (the part of the nerve that carries sound from the ear to the brain) and the brain respond to sound. During this test, your child wears earphones, and electrodes are placed on the head and ears. A mild sedative may be given to help keep your child calm and quiet during the test. The nurse or doctor sends sounds through the earphones and measures the electrical activity in your child's brain when he or she should be hearing.

If your child doesn't respond consistently to the sounds presented during either of these tests, your doctor may suggest a follow up hearing screening and a referral to an audiologist for a more comprehensive hearing evaluation.

Why is it important to have my baby's hearing screened early?

The most important time for a child to be exposed to and learn language is in the first 3 years of life. In fact, children begin learning speech and language in the first 6 months of life. Research suggests that those who have hearing impairment and get intervention have better language skills than those who don't. The earlier you know about deafness or hearing loss, the sooner you can make sure your child benefits from strategies that will help him or her learn to communicate.

How can I recognize hearing loss during early childhood?

Even though screening is designed to detect hearing loss as early as possible, some children don't develop hearing loss until later in life. In those instances, parents, caregivers, or grandparents are often the first to notice. Even if you've had your baby's hearing tested, you should look for signs that your baby is hearing well.

For example, during the first year, notice whether your baby reacts to loud noises, imitates sounds, and begins to respond to his or her name. At age 2, ask yourself whether or not your child plays with his or her voice, imitates simple words, and enjoys games like peek-a-boo and pat-a-cake. Is he or she using two-word sentences to talk about and ask for things? At age 3, notice whether or not he or she begins to understand "not now" and "no more" and follows simple directions. If for any reason you think your child is not hearing well, talk to your doctor.

If my child has a hearing loss, can hearing be improved?

A variety of assistive devices and strategies are helpful for children who are hard-of-hearing. Some examples of these devices are listed here. An audiologist can help you to determine whether these or other devices can help your child.

- Hearing aids are instruments that make sounds louder. They are worn in or behind the ear and come in several different shapes and sizes. Hearing aids can be used for varying degrees of hearing loss, moderate or severe. An audiologist will fit a hearing aid that will work best for your child's hearing loss. Hearing aids can be expensive, so you'll want to find out whether they have a warranty or trial period. You'll also want to talk with your insurance provider to understand what is covered and what isn't.
- Cochlear (COKE-lee-ur) implants have three parts: a headpiece, a speech processor, and a receiver. The headpiece is worn just behind the ear where it picks up sound and sends it to the speech processor. The speech processor, a beeper-sized device that can fit in a pocket or on a belt, converts the sound into a special signal that is sent to the receiver. The receiver, a small round disc about the size of a quarter that a surgeon has placed under the skin behind one ear, sends a sound signal to the brain.
 - Not all children who have hearing loss should get cochlear implants. Doctors and hearing experts think they're best for children who have a profound hearing loss and won't benefit from hearing aids.
- As children get older, many other devices are available to help them hear. Some devices
 help children hear better in a classroom. Others make talking on the phone or watching
 television easier. For example, auditory training systems and loop systems can help eliminate or lower other noises and make it easier for your child to hear someone in a
 crowded room or group setting. Others, such as FM systems and personal amplifiers, are
 better for one-on-one conversations.

How can I help my child communicate?

There are a variety of ways to help children with hearing loss express themselves and interact with others. The main options are listed below. The option you choose will depend on how you want your child to learn and communicate. Find out about all of the choices and talk to lots of experts.

- Oral/Auditory options combine hearing, lip-reading, and hearing devices such as hearing aids and cochlear implants. The goals of oral/auditory options are to help children develop speech and English-language skills.
- American Sign Language (ASL) is a language used by some deaf children and their families. ASL consists of hand signs, body movements, facial expressions, and gestures. It's a language with its own grammar and syntax, which are different from English. ASL has no written form.
- Cued speech is a system that uses handshapes in different locations along with the natural mouth movements to represent speech sounds. Watching the mouth movements and the handshapes can help some children learn to speech-read English; this is especially important in discriminating between sounds that sound different but look the same on the lips.

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- Signed English is a system that uses signs to represent words or phrases in the English language. Signed English is designed to enhance the use of both spoken and written English.
- Combined options use portions of the various methods listed above. For example, some deaf children who use oral/auditory options also learn sign language. Children who use ASL also learn to read and write in English. Combined options can expose children who are deaf or hard of hearing to many different ways to communicate and express themselves.

Will my child have a tough time in school?

Just like other children, children who are deaf or hard-of-hearing can develop strong academic, social, and emotional skills and succeed in school. You can do a lot to make sure this happens. Find out how your school system helps children with hearing loss. With your input, your child's school will develop an Individualized Education Program for your child. Explore programs outside of school that may help you and your child, and talk with other parents who have already dealt with these issues. Remember, the Individuals with Disabilities Education Act (IDEA) ensures that children with hearing loss receive free, appropriate, early intervention programs from birth throughout the school years. Please see the listing under U.S. Department of Education, along with other resources below.

Where can I learn more?

The NIDCD Clearinghouse has additional information on speech and language development, communication options, cochlear implants, hearing aids, ASL, and other topics covered in this fact sheet. There are several ways to contact us:

Toll-free: (800) 241–1044

Toll-free TTY: (800) 241–1055

1 Communication Avenue

Bethesda, MD 20892

Here are some other groups that can provide information and additional publications or resources:

Alexander Graham Bell Association for the Deaf and Hard of Hearing (A.G. Bell)

Can provide you with information on hearing loss and ongoing support and advocacy. The association emphasizes the use of technology, speech, speech-reading, residual hearing, and written and spoken language.

3417 Volta Place, NW. Washington, DC 20007

Voice: (800) HEAR-KID or

(202) 337–5220

TTY: (202) 337–5220 Fax: (202) 337–8314 E-mail: info@aol.com Internet: www.agbell.org

American Academy of Audiology (AAA)

Is a professional organization of individuals dedicated to providing quality hearing care to the public. AAA emphasizes professional development, education, research, and increased public awareness of hearing disorders and audiologic services.

8300 Greensboro Drive, Suite 750

McLean, VA 22102

Voice/TTY: (703) 790–8466 Toll Free: (800) 222–2336

Fax: (703) 790–8631

Internet: www.audiology.org

American Academy of Otolaryngology–Head and Neck Surgery (AAO–HNS)

Sponsors an on-line patient information center and can provide you with leaflets and geographic lists of physicians.

One Prince Street Alexandria, VA 22314 Voice: (703) 836–4444 TTY: (703) 519–1585

Fax: (703) 683–5100

E-mail: webmaster@entnet.org Internet: www.entnet.org

American Society for Deaf Children (ASDC)

Is committed to educating, empowering, and supporting parents and families of children who are deaf or hard-of-hearing. The society helps families find meaningful communication options, particularly through the competent use of sign language, in the home, school, and community.

P.O. Box 3355

Gettysburg, PA 17325

Voice/TTY: (717) 334–7922 Toll-free: (800) 942–ASDC E-mail: ASDC1@aol.com Internet: www.deafchildren.org

American Speech–Language–Hearing Association (ASHA)

Offers a series of brochures, fact sheets, and information packets available to the general public at no cost. A computerized referral database of audiology and speech-language pathology programs is available to meet individual consumer needs.

10801 Rockville Pike Rockville, MD 20852

Voice: (301) 897–3279 Fax: (301) 897–7355

Toll-free: (800) 638–8255

E-mail: actioncenter@asha.org

Internet: www.asha.org

Beginnings for Parents of Children Who Are Deaf or Hard of Hearing, Inc.

Provides support and impartial information on communication options, placement, and educational programs; workshops for professional personnel who work with children who are deaf and hard-of-hearing; and advocacy and support for young people.

P.O. Box 17646 Raleigh, NC 27619

Voice/TTY: (919) 850-2746

Fax: (919) 850-2804

E-mail: beginnings@beginningssvcs.com

Internet: www.beginningssvcs.com

Laurent Clerc National Deaf Education Center at Gallaudet University

Serves deaf and hard-of-hearing students pre–K to 12 and shares best practices in deaf education.

KDES PAS-6, 800 Florida Avenue, NE.

Washington, DC 20002-3695

Voice: (202) 651–5051 TTY: (202) 651–5052 Fax: (202) 651–5054

E-mail: clearinghouse.infotogo@gallaudet.edu

Internet: clerccenter.gallaudet.edu

National Association of the Deaf (NAD)

Focuses on grassroots advocacy and empowerment, captioned media, deafness-related information and publications, legal assistance, policy development and research, public awareness, certification of interpreters, and youth leadership development.

814 Thayer Avenue

Silver Spring, MD 20910-4500

Voice: (301) 587–1788 TTY: (301) 587–1789 Fax: (301) 587–1791 E-mail: nadinfo@nad.org Internet: www.nad.org

National Cued Speech Association (NCSA)

Provides awareness and education through instructional programs, publications, exhibits, and conferences on the use of cued speech. The association provides information and support for families with speech, hearing, and language needs and the professionals who serve them.

23970 Hermitage Road Shaker Heights, OH 44122

Toll-free Voice/TTY: (800) 459–3529

Fax: (216) 360–0359

E-mail: cuedspdisc@aol.com Internet: www.cuedspeech.org

U.S. Department of Education

Can provide more information on the Individuals with Disabilities Education Act (IDEA)

400 Maryland Avenue, SW. Washington, DC 20202–0498 Toll-free: (800) USA–LEARN

E-mail: usa learn@ed.gov

Internet: www.ed.gov/offices/OSERS/IDEA/index.html

NIH Publication No. 01–4968 May 2001