

## Frequently Asked Questions about Hearing Loss

### 1. What types of hearing losses are found in children?

**Answer:** There are basically three types of hearing loss. **1)** The kind of hearing loss that is permanent and is the result of something affecting the inner ear, or the nerve that deals with hearing (the auditory nerve) is called sensorineural hearing loss. There are many different causes of sensorineural hearing loss, including congenital infections, medications, noise, and genetics. Congenital hearing loss is present in three to six out of every 1000 newborns and is detectable at birth. Sensorineural hearing loss can also develop later in life for various reasons, one of which is excessive exposure to loud noise. **2)** Another type of hearing loss is called conductive hearing loss. Conductive hearing loss is the result of something affecting the outer or middle ear, such as ear infections associated with fluid in the middle ear space. Middle ear infections are the second-most common reason children see physicians. Any time children have middle ear infections with fluid in their ears, they have an accompanying hearing loss. Other common causes of conductive hearing loss include excess wax, foreign bodies, or swelling of the auditory canal. In most cases, conductive hearing losses can be treated either medically or surgically, and are not permanent. **3)** Finally, mixed hearing losses are combinations of sensorineural and conductive hearing losses.

### 2. My child is a newborn. Can children that young be assessed for a hearing loss?

**Answer:** Absolutely! Children of any age can have their hearing assessed. Children even minutes old can be screened for hearing loss. Newborns can be tested by several methods (an evoked otoacoustic emissions test, or an automated auditory brainstem response test) which are non-invasive, computerized, and take only a short period of time. The earlier a child is diagnosed with a hearing loss, the earlier they can obtain appropriate treatment, and consequently develop speech and language skills along with their peers. Hearing loss is one of the most common health conditions to affect newborns, and National Institutes of Health, American Academy of Pediatrics, along with the Joint Committee on Infant Hearing, recommend that all newborns be screened for hearing loss prior to discharge from the hospital.

### 3. What should I do if I suspect that my child has a hearing loss?

**Answer:** The first thing to do if you suspect a hearing loss in your child is to have this or her hearing assessed. Begin by taking your child to their primary care physician, who should examine your child and interact with him or her. Your physician will ask you several questions regarding family history of hearing loss; your family's and your child's past medical history, and your concerns about why you believe your child has a hearing loss. Your primary care physician will then refer you to an ENT doctor (an otolaryngologist) and/or an audiologist who will perform a series of tests to assess your child's hearing. Parents are the ones who most frequently suspect hearing loss in their children, not healthcare

professionals. Trust your instincts, and if you are concerned about a hearing loss in your child, have his or her hearing tested by an audiologist.

#### **4. What are the first signs that parents should look for when they are suspicious of a hearing loss?**

**Answer:** Unless a family has reason to expect the possibility of a hearing loss, some of the early signs may be missed. You should be concerned if you notice that:

- Your infant does not startle to loud or sudden noises, or turn toward sound.
- By 8 months, the baby is not cooing, babbling, or laughing.
- By 12 months, the child is not trying to imitate sounds and actions in turn-taking games, or understanding simple commands like "come here". Babies of this age should also try to attract attention by using sounds.

It's important to test the child's hearing as soon as you suspect that there may be a problem. If there is a hearing loss, it can be assessed and when appropriate, the baby can be fitted with hearing aids.

#### **5. What are the effects of newborn screening? Is this a diagnosis? If a baby passes the screening, is everything okay? If they fail, are they deaf or hard-of-hearing?**

**Answer:** The screening is a simple test done by an audiologist which takes only a few minutes to perform. It is not a comprehensive testing of hearing. Its purpose is to identify babies that need further testing to determine the presence of a hearing loss. If a baby does not pass the screening test, more thorough hearing testing is normally done before a diagnosis is made. It is important for parents to realize that in screening, there can be "false positives." Screenings are not comprehensive. A baby may fail the screening, but follow-up testing can indicate no hearing loss. On the other hand, a baby may pass the screening, yet in time, a hearing loss may be identified.

#### **6. How often should a child have his or her hearing tested?**

**Answer:** Initially, when a hearing loss is suspected, it is recommended that a child undergo testing using an Auditory Brain Response (ABR) which does not require the child to respond; rather it measures brain activity. If the ABR reveals a hearing loss, more testing is usually done. Most Audiologists recommend that children under three years of age be tested every six months. After that, a comprehensive evaluation once a year should be sufficient.

#### **7. What can I expect to be done for my child if she or he does have a hearing loss?**

**Answer:** There are many options available for children with hearing loss today. Children as young as three months of age can be fitted with hearing aids. Toddlers with profound hearing loss are now utilizing cochlear implants. Options

exist in terms of modes of communication as well, ranging from auditory-oral, auditory-verbal and Cued Speech approaches, to American Sign Language and Total Communication. The book [Choices of Deafness by Sue Schwartz, PhD](#) (available through AG Bell) provides parents with a solid background in each of these options.

It is crucial to diagnose hearing loss in children as early as possible so that amplification technology can be used to get sound to the child's developing brain as soon as possible. Children who are diagnosed prior to six months of age and fitted with either hearing aids or cochlear implants, along with vigorous speech, language, and aural rehabilitation, develop close to – or at the same rate – as their peers. The key is early diagnosis, early intervention and early brain development.

### **8 Can loud noises affect children's hearing?**

**Answer:** Yes, it is important to protect whatever hearing a child or an adult has. Very loud noises can damage one's hearing, and can do so permanently. Exposure to high intensity noise can permanently damage the inner ear. Headphones, rock concerts, video arcades, and very loud noises should be avoided if possible, and if unavoidable, protective earplugs should be worn during exposure.

### **9. Can my child with a hearing impairment learn to talk with hearing aids or is a cochlear implant necessary?**

**Answer:** Children with all degrees of hearing loss can use hearing aids, a cochlear implant or a combination of the two to gain access to the speech and sounds that help them learn how to talk. Strong partnerships between families, teachers, and audiologists are essential to maximizing the potential of technology to help a child with hearing loss learn how to speak.

### **10. Can my child who has a hearing impairment and has been learning sign language learn to talk?**

**Answer:** Every child and family is unique, so it is important to look at the individual situation. Some children do start learning to communicate with sign language, and that does not preclude them from making a transition to spoken language.

### **11. What is a cochlear implant?**

**Answer:** A cochlear implant is advanced technology for children and adults who do not benefit from hearing aids. Cochlear implants have several parts: An electrode array that is surgically implanted in the inner ear (cochlea); a receiver that is surgically placed behind the ear; and a microphone and processor which are worn externally. The cochlear implant takes in and converts acoustic sound energy into electrical signals that stimulate the auditory nerve in the cochlea, sending the signal to the brain where it is perceived as sound.

## **12. What is a personal FM system?**

**Answer:** A personal FM system works with a person's hearing aid or cochlear implant. The receiver is small and connects directly to the hearing device. The pager-sized transmitter and microphone are worn by the speaker, therapist or teacher, to send speech directly to the child's equipment by FM signal. FM systems help overcome the negative effects of ambient noise, distance, and reverberation, which make listening and learning more difficult for a person who has a hearing loss.

## **13. What kind of support do parents need?**

**Answer:** Mothers and fathers who when they learn that their child is deaf or hard-of-hearing are often overwhelmed by a whole range of emotions. At the same time, they must quickly learn a great deal about practical issues and begin managing their child's tests and therapy. Studies show that parents who become educated about deafness and join some type of networking or parent support group tend to better accept their child's deafness and move on to planning for their child's immediate and long-range needs. Educators and therapists can help a child get a good start in the development of spoken language and teach parents how to carry out the same training at home. The more involved parents are, while maintaining a balance within the family, the more the deaf and hard-of-hearing child will benefit.

## **14. What role will parents play in the education of their child who is deaf or hard-of-hearing?**

**Answer:** Parents and guardians have a major role in the education of their child, because they are the ones who will choose the type of education and support it at home. Parents must become educated about different communication options in order to make their own informed decision of what is best for their child who is deaf or hard-of-hearing and their family. Once parents decide to choose the oral option, they can and should expect excellent support from teachers and therapists. If you are a parent of a child who is deaf or hard-of-hearing, you will quickly become adept in the skills and techniques that work with your child, and become the best expert of what's best for him or her. While you will rely on your educators, you'll always remain the primary advocate and teacher for your own child. The Individuals with Disabilities Education Act of 1997 (IDEA '97: PL 105-17) is very clear on the role and rights of parents in the life of their child.

## **15. How and when do you tell a child that he or she is deaf or hard-of-hearing? Is this an ongoing process? What types of reactions should a parent expect?**

**Answer:** A child usually realizes at a young age that he or she is different from her peers, often because of his or her hearing aids or cochlear implant, and will ask about being deaf. It's best to wait until your child asks; which is the signal that he or she is ready to hear the answers. The best way for parents to respond is to be brief, direct, and matter of fact.

**16. How long will it be before you can expect to see results from intensive educational and speech training? How long until a child begins to talk?**

**Answer:** In a good listening therapy setting, progress should be obvious to parents in the first six months. Learning to listen with the child's available residual hearing is a slow and steady process. When a child begins to listen and make sense of what he is hearing, speech usually follows.

**17. What types of modifications can be made in a classroom for children with hearing loss?**

**Answer:** There are many modifications that can be made in a classroom to help children with hearing loss. In conjunction with hearing aids or cochlear implants, there are modifications that can be made to the classroom itself to make it a more acoustically favorable environment. Minor modifications such as wall-to-wall carpeting, acoustically treated tiles on the ceilings and walls, well-fitted and closed windows and doors and quiet heating/ventilation systems are helpful. Additionally, there are assistive listening devices such as personal FM systems and sound field amplification systems that amplify the teacher's voice over the background noise, and are quite helpful in classroom settings for children with hearing loss. In fact, amplifying the entire classroom with a sound field amplification system benefits every child in the class – not just the child with hearing loss.

**18. Why is it easier to understand some deaf children and not others?**

**Answer:** Usually the speech of children who are deaf who are making good use of their auditory potential is easier to understand. This is because good listening helps the child hear his or her own speech, as well as helping him or her to pick up on the natural rhythm and inflection of normal speech patterns. This is one major reason that early listening and speech intervention is important for a child who is deaf.

**19. Will my child be happy?**

**Answer:** Most children are happy and enthusiastic about life. Children who feel secure, who have a good self-image, and who are loved as well as loving, are happy children. Parents must ensure that their deaf or hard-of-hearing child is not treated differently, that she or he learns to take responsibility for his or her behaviors, that he or she learns the give and take of life, and that she or he is not the center of everyone's attention.

**20. Can deaf children play sports?**

**Answer:** Many children who are deaf or hard-of-hearing love sports the same way as their hearing peers. If the child enjoys sports, he or she will most likely want to play; if not, a child who is deaf will avoid sports just as other hearing children would. Not every hearing child excels in sports and the same holds true for children who are deaf or hard-of-hearing.

**21. What types of jobs will my child be able to get?**

**Answer:** People who are deaf or hard-of-hearing become doctors, lawyers, teachers, computer programmers, dentists, nurses, medical technologists, factory workers, mechanics, Mr. Moms, stay-at-home moms, designers, and so forth. People with normal hearing are able to get good jobs usually because they have the appropriate education, work ethic, and/or training. The same holds true with people who are deaf and hard-of-hearing.

**22. Will he or she be a "normal" kid?**

**Answer:** Children who are deaf or hard-of-hearing, like many other kids, will be as "normal" as they are allowed and encouraged to be. Kids will not be "normal" if they are treated differently, if they do not feel secure, or if they are not accepted as a vital part of a family.

**23. With whom will my child be able to communicate? When will my child be able to communicate with his peers?**

**Answer:** Most children who are deaf or hard-of-hearing who are orally trained will be able to communicate very successfully with whomever he or she chooses, using normal listening and spoken language, much like their hearing peers. The process takes time, and requires more deliberate care, but the outcome is communication with the world!