

# AUDIOLOGY INFORMATION SERIES

ASHA'S CONSUMER NEWSLETTER

### Asking Your Audiologist About Preventing and Identifying Hearing Loss Through Audiologic Screening and Audiology Services

It is estimated that more than 28 million individuals in the United States have a hearing loss or deafness. Many people ignore the early warning signs (ringing in the ears, turning up the television louder) because hearing loss often occurs slowly and painlessly until difficulty with speech understanding begins, interfering with work and social lives.

Prevention and early detection of hearing disorders can reduce the prevalence of hearing loss and the associated disability when hearing loss interferes with daily communication and quality of life.

The American Speech-Language-Hearing Association (ASHA) and its audiologist members are committed to the goals of prevention and early detection of hearing loss and related disorders. In keeping with Healthy People 2010, the U.S. Public Health Services health objectives for the nation initiative,<sup>1</sup> Healthy People 2010, ASHA promotes the early detection, identification and treatment of children and adults with hearing loss by qualified professionals, ASHA-certified audiologists (CCC-A).

This fact sheet gives you important information about preventing and detecting hearing loss through audiologic screening for you, your family, and friends. Who should receive audiologic screenings?



Everyone throughout their life span!!!

# What is an audiologic screening program?

An audiologic screening program supervised by an audiologist consists of 3 simple, fast procedures to determine if a person may have or is at risk for hearing loss:

screening for hearing loss (impairment)<sup>2</sup>

screening for ear disorder

screening for hearing-related disability

Most children over age 5 years in school settings and most adults, perhaps in association with a physical examination or an employment-related health screening, have had a hearing

screening. This type of hearing screening is to detect for **hearing loss (impairment)**, across

frequencies important for understanding speech. This type of procedure should be performed in a very quiet or sound-treated environment. Individuals being screened are asked to respond by raising a hand, or for example, young children can put a block in a bucket whenever they hear a tone or a beep. This is a very important component of an audiologic screening program, but it is only one aspect of hearing.

Individuals should also be screened for **ear disorder** and **hearing disability**.



In screening for **ear disorder** an audiologist obtains a history of noise exposure, medical conditions, and any symptoms of hearing loss; visually inspects the ears with an

otoscope; and uses a procedure called tympanometry to check outer and middle ear (ear canal, eardrum, ossicles) function.



Screening for **hearing disability** uses standardized self-assessment or examineradministered questionnaires that ask specific questions about the impact of a hearing

loss on communication in daily work life and social situations.

For an adult, the entire audiologic screening process doesn't usually take much longer than 10 minutes. When these three components of an audiologic screening program are completed, individuals are identified as either having normal hearing or being at risk for or suspected of having a hearing loss, and referred for comprehensive audiologic evaluation. **Ten minutes is a small investment of time and energy to help protect your ears and possibly your future communication ability!!** 

### Newborns, Infants, and Toddlers Can Be Screened, Too!



In the United States, each day approximately 33 (3–6 per 1000) babies are born with significant hearing loss. In 1999, the Newborn Infant Hearing Screening and Intervention Act was funded for states to establish early hearing detection and intervention (EHDI) programs. As of Summer 2000, 33 states have adopted early hearing detection and intervention bills. With the development of new hearing screening technology, it is possible to perform reliable hearing screenings on a newborn during the first 24 hours of life. This same technology is very useful with small children until they begin to reliably respond to



audiologic techniques that produce observable responses to sound at 6–7 months and, later, to play screening techniques at approximately 2 to 3 years of age.

Research shows that the earlier a hearing loss is identified and treatment begun, the greater the likelihood of preventing or reducing any disabling effects on development. Particularly for children, a hearing loss can interfere with the development of speech and language skills, and can affect social, emotional, cognitive, and later academic development.

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### How often should a child have an audiologic screening?



Until children reach school age the frequency of audiologic screening is based on many factors, such as chronic ear infections or a family history of hearing loss that places them at risk for hearing loss or ear disorders.

From 5 through 18 years of age, children should receive hearing screenings on initial entry to school and annually in kindergarten through 3rd grade, as well as in 7th and 11th grades. Children in middle and high schools often are exposed to loud music at concerts or via headsets or noise in recreational sports that affects their hearing permanently. Children in this age range who have other hearing lossrelated risk factors should receive hearing screenings in other years, too.

Identifying and treating school-age children with hearing loss offsets the possible adverse effects of a hearing loss. Research shows that one-third of children with mild hearing loss fail one grade and children with hearing loss only in one ear are also vulnerable to academic problems.

# How often should adults have an audiologic screening?

Hearing screening should continue through adulthood at least once every decade through age 50 and at 3-year intervals thereafter. If

adults have any risk factors, particularly occupational or recreational noise exposure, they should be screened as needed, required by law in the workplace (OSHA, 1983), or if they suspect that they

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might have a hearing loss. In addition to noise exposure, other risk factors for hearing loss in adults can include heredity; viral or bacterial infections; medications, such as aspirin and chemotherapy drugs; and head injuries.

### What steps may be recommended following an audiologic screening?

For infants and children up to 5 years of age who fail their screening and rescreening or for those with risk factors, an audiologic assessment should be performed by a certified (CCC-A) audiologist within 1 month but no later than within 3 months after the initial screening. Children with risk factors should receive regular audiologic monitoring. Similarly, school-age children (5–18 years of age) should receive an audiologic assessment within 1 to 3 months from the initial screening. Audiologic screening for school-age children may result in a referral for further evaluations by an audiologist, speech-language pathologist, early intervention specialist, physician or health care practitioner, local education agency, and/or other professionals, based on family preferences.

Adults who do not pass screening are counseled regarding hearing loss, and may receive a recommendation for a comprehensive audiologic assessment by a certified audiologist.

A medical evaluation may be

recommended if the screening indicates a medical condition requiring evaluation, monitoring, and/or treatment. A medical referral will be made, for example, if the visual inspection of the ear reveals that the ear canal is blocked by cerumen (ear wax), or if pain or drainage is present.

Your ears are one of your most important "natural resources" to protect and conserve. Have all of your family members' hearing screened today!!!

# What services does an audiologist provide?

Audiologists are the professionals who evaluate and treat hearing loss, tinnitus, balance, and related disorders, and recommend and provide appropriate treatment including hearing aids, audiologic rehabilitation, and hearing assistive technology systems.

## Where to Get Help and Advice

### Audiologist

Audiologists are professionals who administer and conduct hearing screening programs; evaluate and treat hearing loss, balance, and related disorders; recommend and provide appropriate technology, including hearing aids and hearing assistive devices and systems; and provide audiologic rehabilitation.

### Speech-Language Pathologists

Speech-language pathologists are professionals who evaluate and treat disorders of speech, language, voice, and swallowing. Using evaluation results, the speech-language pathologist designs and implements specific intervention programs to meet the communication needs of individuals.

#### Qualified audiologists and speechlanguage pathologists have:

- a master's or doctoral degree
- the Certificate of Clinical Competence (CCC-A or CCC-SLP) from the American Speech-Language-Hearing Association (ASHA)
- a state license, where required

#### To find an ASHA-certified audiologist near you, and for more information:

American Speech-Language-Hearing Association (ASHA) 10801 Rockville Pike Rockville, MD 20852 1-800-638-8255 Email: actioncenter@asha.org Web site: www.asha.org

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#### References

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<sup>&</sup>lt;sup>1</sup> U.S. Department of Health and Human Services (2000). Healthy People 2010. Chapter 28. Vision and Hearing. (www.health.gov/healthy people)

<sup>&</sup>lt;sup>2</sup> The use of the term "impairment" as referring to a hearing or auditory impairment "implies that there is a dimension of the auditory system that is outside the normal range, but does not necessarily imply any restrictions in the level of performance of the individual in activities involving that dimension." This definition is taken from the Report on Audiologic Screening, *American Journal of Audiology* (December, 1993), and is similar to that used in the Americans With Disabilities Act.