



COMMUNICATION CONSIDERATIONS A-Z™

Conductive Hearing Loss

1. What is auditory conductive hearing loss?

Conductive hearing loss is the most common cause of hearing impairment- especially in children. The “conductive” component of the problem describes the blockage of sounds from reaching the sensory cells of the inner ear. In conductive hearing loss, the inner ear functions normally, but sound vibrations are blocked from passage through the ear canal, ear drum or across the tiny bones located in the middle ear. Patients with conductive hearing loss hear bone-conducted sounds presented with a small vibrator to the skull better (louder) than sounds presented through earphones. Conductive hearing loss is usually mild to moderate in degree, may occur in one or both ears at the same time, and in most cases is correctable by relatively minor medical or surgical treatments. More significant conductive hearing loss may be associated with skull and/or facial malformations which require technical surgery to correct.

2. What issues are at the forefront of conductive hearing loss?

Diagnosis of conductive hearing loss is not difficult in the experienced hands of an audiologist or otolaryngologist (Ear-Nose-Throat Physician). Special hearing test techniques are available to quantify the degree of the conductive hearing loss such as comparing bone-conduction thresholds with air-conduction thresholds, tympanometry and acoustic reflex measurements, and otoacoustic emissions testing. Your audiologist should use all these techniques to verify and delineate the conductive hearing. These tests are more difficult to administer to very young children and require

an experienced audiologist experienced with pediatric patients. There exists considerable debate within the medical community as to the best means of treating children who have middle ear fluid and there is concern that too many unnecessary antibiotics are prescribed for this condition. Pediatricians tend to support medicinal treatment for extended periods of time, while otolaryngologists will often suggest surgical placement of tiny aeration tubes in the ear drum to immediately ventilate and drain the middle ear fluids.

3. What should every parent or professional know about conductive hearing loss?

Almost all conductive hearing loss is temporary or transitory and can be cured with hearing returning to normal levels. Conductive components can overlay all degrees of permanent sensorineural-type hearing loss. In these cases, eliminating the conductive component of the hearing loss will only improve the hearing to the levels of the permanent nerve-type hearing loss. The most common causes of conductive hearing loss are sterile fluid in the middle ear, ear infections of the middle ear and ear wax that blocks the ear canal or inhibits the vibrations of the ear drum. Foreign objects (i.e., pop beads, crayons, insects, etc.) that inadvertently find their way into the ear canal can also cause conductive hearing loss and must be removed. Ear fluid and ear infections generally require medical examination and treatment, although some fluid conditions are transitory and self healing. Ear wax should be removed only by someone with proper experience and safe instruments. **DO NOT USE Q-tips** to remove ear wax as this technique generally makes the situation worse by pushing the wax deeper into the ear canal while depositing shreds of cotton fibers from the Q-tip into the wax itself.

4. Where else can I find information about conductive hearing loss?

J. Northern and M. Downs. *Hearing in Children* (5th Edition). Chapter 3: Otitis Media and Chapter 4: Medical Aspects of Hearing Loss. Published in 2002 by Lippincott Williams and Wilkins, Baltimore, MD.

Stach, B.A. *Clinical Audiology: An Introduction*. Chapter 3: The Nature of Hearing Impairment. Published by Plural Publishing Group, Inc. San Diego, CA, 2008.

American Speech-Language-Hearing Association. Type, Degree and Configuration of Hearing Losses. <http://www.asha.org/public/hearing/disorders/types.htm>

eHealthMD. Different types of Hearing Loss. http://www.ehealthmd.com/library/hearingloss/HL_types.html

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Communication Considerations A to Z™ is a series from Hands & Voices that's designed to help families and the professionals working with them access information and further resources to assist them in raising and educating children who are deaf or hard of hearing. We've recruited some of the best in the business to share their insights on the many diverse considerations that play into communication modes & methods, and so many other variables that are part of informed decision making. We hope you find the time to read them all!