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# Youth and Hearing Impairments

### What is Hearing Impairment?

Hearing impairment is the loss or absence of the ability to hear some or all sounds. Hearing impairments are the most common congenital anomaly found in newborns. Approximately three in every 1,000 newborns are born with significant hearing loss. Hearing impairments can also be caused by infection, exposure to loud noise, the aging process, and other factors.

### What are the Different Types of Hearing Impairment?

Hearing impairments can be acute (occur suddenly) or insidious (occur gradually). There are three classifications of hearing loss. They include:

- 1. **Conductive Hearing Loss**—Sound waves are blocked from traveling through the auditory canal or middle ear. This can muffle sounds and create an earache. Usually this type of hearing loss is caused by a blocked ear canal, infection, punctured ear drum, or otosclerosis in which the bones in the middle ear soften and then calcify. Often this type of hearing loss is only temporary and can be treated.
- 2. **Sensorineural Hearing Loss**—This is caused by damage in the inner ear to the hair cells and/or nerve fibers. Sounds may be distorted, and high tones may be imperceptible. Tinnitus, a ringing or buzzing sound in the ears, may be present. This hearing loss is permanent and not reversible. It can occur in newborns due to genetics, oxygen deprivation during labor, exposure to viral diseases in the womb such as rubella, and herpes. After birth it can be caused by fevers, exposure to noise, heredity, reactions to drugs, head trauma, aging, and meningitis.
- 3. **Central Hearing Loss**—This occurs when there is damage to the hearing pathway to the brain. It is caused by loud noises, head trauma, high fever, or tumors. Understanding speech is difficult. This is a rare type of hearing loss.

Hearing loss can be classified as occurring prelingually (before language skills are acquired) or postlingually (after language skills have been acquired.) This has implications as to how much speech a person with hearing loss will have.

## What is the Range of Severity of Hearing Loss?

Hearing loss can range from very mild and almost imperceptible to complete loss. The ranges of hearing loss are outlined as follows:

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- 1. **Mild Hearing Loss**—some sound loss but does not dramatically affect daily life.
- 2. **Moderate Hearing Loss**—the ability to hear the surrounding environment is affected.
- 3. **Significant Bilateral Loss**—there is hearing loss in both ears and the better of the two ears has trouble hearing and understanding speech.
- 4. **Severe Hearing Loss**—many sounds, including most speech, cannot be heard.
- 5. **Profound Hearing Loss**—basically no sound can be heard.

# What are the Types of Communication with Those Who Have Significant Hearing Loss?

Communication with those who have mild or moderate hearing loss may require little alteration, especially if the person uses hearing aids. However, for those with severe hearing loss, modifications will need to be made. Here are some common types of communication styles in those people with significant hearing loss:

- 1. **Oralism**—This type of communication only allows for speaking. Hearing-impaired people read lips and learn how to speak through special training. This appears to be easier for some people than others, especially if the person has postlingual hearing loss.
- 2. **Sign Language**—There are many types of sign language. Common types are American Sign Language (ASL) and Signing Exact English (SEE). While SEE sign follows the same pattern as the English written language, ASL has its own pattern. In fact, learning ASL at the college level can be considered a foreign language in many colleges. This makes learning SEE sign easier for those who are living in a hearing society. ASL is more popular among deaf communities. ASL and SEE sign are not universal. There are different sign languages in foreign countries, just as there are different spoken and written languages.
- 3. **Total Communication**—This encompasses both sign language and speech. This method is believed by many to be the best option for many deaf people because they can participate in mainstream culture and deaf culture with the most effectiveness.
- 4. **Finger Spelling**—Each word is spelled out with the sign language alphabet. This method is very time-consuming and hard to follow because each word must be sounded out in the head and then formed into meaningful words and sentences. However, if this is all one knows, it may be preferable to lip reading and is appropriate for forming words like proper names that do not have a specific sign.
- 5. Writing—This method can be used if one person has no signing skills and needs to communicate. However, this method should be used only as a last resort. It is more respectful to use the other methods of communication.

## Important Issues for Extension Educators and 4-H Leaders to Consider:

- 1. Have contact information for parents or guardians and the member's doctor in accessible places. An example of this would be behind the child's nametag and in the medical forms box in the main office at 4-H events. This form should include information such as what kinds of medications the child is taking, allergies, if any adaptive devices are used, and other health conditions.
- 2. Hearing impairments vary in extent. It is important to ask questions of the child and his or her parents to determine how to best meet the child's needs. Questions that could be asked include: "What is the extent of your hearing loss?" and "What type of hearing aid devices do you use?"
- 3. The child may wish to use an interpreter. It is best to let the child and his or her family choose this interpreter.
- 4. Find out what method of communication the child prefers, and try to honor this type of communication.
- 5. Become familiar with the type of hearing device the child wears so the device can be maintained properly.

#### **For More Information Contact:**

National Association of the Deaf

814 Thayer Ave.

Silver Spring, MD 20910-4500

TTY: (301) 587-1789 Phone: (301) 587-1788 Web site: www.nad.org

(Web site active as of May 6, 2005)

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