

Hearing Loss

BIRTH DEFECT RESEARCH FOR CHILDREN



Hearing Loss

Right from birth, babies explore their new world through sound . . . their mother's voice, household sounds, noises outside. The stimulation babies receive from the first sounds they hear helps them develop babbling, a prelude to normal speech. But children born with a hearing loss are cut off from this important connection to their environment. Children with mild to moderate hearing loss may have slow or inaccurate speech development, attention problems or may even be classified as slow learners. Children with profound hearing loss will not be able to speak or communicate at all without special intervention and education.



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How Many Children Are Born with Hearing Loss?

It is estimated that one out of every 800 children are born with some degree of hearing impairment. More than one million children in the United States today have a significant hearing handicap although not all of these children were born with a hearing loss.

What Causes Hearing Loss?

Hearing loss may be inherited or acquired. Inherited deafness is part of over 100 different genetic syndromes. Acquired hearing loss may happen because of exposures and events before the child is born or later during childhood. Prenatal causes of hearing loss include exposure during pregnancy to certain viral infections like rubella (German measles), medications including antibiotics such as streptomycin; thyroid disease in the mother; trauma during the birth process and severe jaundice right after birth. Childhood causes of hearing loss may include repeated severe ear infections; exposure to certain toxic drugs and chemicals; head injury; diseases like diabetes, low thyroid or multiple sclerosis as well as leukemia and middle ear tumors.

Types Of Hearing Loss

There are two different types of hearing loss: conductive and sensorineural.

Conductive Hearing Loss involves an abnormality in the middle or external ear that prevents sound waves from being transmitted into the inner ear. This type of hearing loss may occur when the external ear canal is blocked by an object, infections or fluid following an infection. Conductive hearing loss may also be caused by a congenital malformation or by hardening of the bone that prevents parts of the inner ear from moving freely.

Sensorineural Hearing Loss is caused by a problem in the inner ear fluid circulation and pressure or disturbances in nerve transmission. Some children who have sensorineural hearing loss cannot hear high tones as well as they can hear low tones and sounds are

distorted. Other children can hear sounds or words but have trouble understanding them. Although sensorineural hearing loss is not reversible, it does not usually cause total deafness.

Helping A Child With Hearing Loss

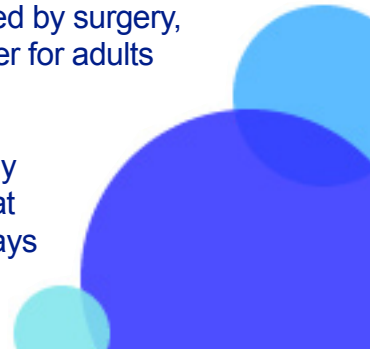
Early Identification: Even babies with profound hearing loss usually have some residual hearing. If these infants are diagnosed as early as three to six months of age, this residual hearing can often be improved to a great extent through the use of a hearing aid and special training. Early intervention will help these children develop speech skills that may be lost to children who have not received help until later. If parents have any concern that their baby may have a hearing problem, they should insist on a complete hearing evaluation immediately. Research has shown that in one of every four cases, parents are right when they suspect their child has a hearing problem.

ENT Specialists: Doctors who specialize in problems with the ear, nose and throat are called ENT's or otolaryngologists. An ENT can evaluate your baby for early detection of hearing loss through a number of tests, a complete history and careful physical examination. Your pediatrician or family doctor can refer you to an ENT specialist.

Hearing Aids: Some children have the kind of hearing loss that can be improved through the use of a hearing aid. If the hearing loss is profound, however, a hearing aid may not help unless used very early to stimulate residual hearing.

Ear Surgery: Although some types of childhood hearing loss may be improved by surgery, most ear surgery works better for adults than for children.

Language Training: For many years, there has been a great controversy over the best ways to teach hearing impaired children. Some specialists



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believe that children with hearing loss should be taught with an oral approach by learning how to speak and read lips. This approach usually works best with children who became deaf after they already learned how to speak.

Other educators believe that children with a hearing loss can learn to communicate more quickly and easily using sign language, a way of spelling out words using hands and fingers. Children and families who learn to sign can often communicate earlier than those who struggle with oral methods alone. This can prevent a great deal of frustration for children who might not be able to let their parents know when they are sick, tired or hungry. Many families have decided that a combination of both oral and sign language training works best for their child.

Special Schools: There are a number of special schools for deaf children. Public school systems also have programs designed for hearing impaired students. Parents must determine the kind of program that meets their child's needs.

Support Groups: Many national organizations and support groups exist to help parents cope with the challenge of raising a hearing impaired child. By contacting these resources as early as possible, parents can start networking with other families who have shared many of the same experiences and faced the same decisions they are making about the care and education of their hearing impaired child.

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