

Hearing Loss and Your Child

Hearing loss is the reduced ability to detect and hear sound.

There are different types of loss which can be permanent or temporary. Hearing loss can be of different degrees, from slight to profound. It can occur in one or both ears. It can be present at birth or occur later.

What Causes Hearing Loss In Children?

Hearing loss present at birth is called congenital. It can be caused by:

- ~ illness or infection the mother had during pregnancy
- ~ medicines taken by the mother during pregnancy
- ~ associated with other medical problems (syndromes)
- ~ physical abnormality of any part of the ear
- ~ hereditary factors

Hearing loss which develops later is called acquired. It can be caused by:

- ~ difficulty during the birth
- ~ jaundice
- ~ meningitis, scarlet fever, mumps or other illnesses associated with high fever
- ~ neurodegenerative disorders
- ~ medications which are toxic to the inner ear
- ~ head injury or trauma to the ear
- ~ repeated or constant ear infections

How Do You Know If A Hearing Loss Is Permanent Or Temporary?

The part of the ear affected, the cause, and how quickly it is identified or treated will determine if a loss is temporary or permanent.



Fact Sheet

Conductive Hearing Loss

This is any physical abnormality, blockage, or damage to the outer or middle ear which prevents sound from reaching the inner ear. It results in a reduction of sound loudness. When sound is made loud enough, children with conductive hearing loss have minimal difficulty understanding speech.

Possible Causes:

- ~ excessive amounts of wax blocking the ear canal
- ~ blockage of the eustachian tube (caused by colds or infection) causing fluid in the middle ear
- ~ puncturing of the eardrum, resulting from trauma or infection
- ~ disconnection or fixation of the middle ear bones
- ~ foreign body in the ear canal
- ~ deformity of the outer or middle ear

With the exception of physical deformity, most conductive hearing losses can be treated medically or surgically. Conductive hearing losses can re-occur so monitoring is necessary. (Recurring middle ear fluid is particularly common in children.) Also, if left untreated, conductive hearing loss can become permanent. Treatment then becomes hearing aid amplification with assistive devices as necessary.

Sensorineural Hearing Loss

This is caused by damage to the cochlea creating an inability to change mechanical energy from the middle ear to electrical impulses to the auditory nerve. It results in a reduction of sound quality. Not only is sound not loud enough to detect, when it is made loud enough there is significant distortion which will effect a child's ability to understand speech.

Possible Causes:

- ~ hereditary
- ~ associated with other medical conditions
- ~ infection
- ~ medication toxic to the ear
- ~ breathing problems at birth
- ~ jaundice
- ~ noise exposure

Fact Sheet

Sensorineural hearing losses cannot be corrected medically or surgically. When an individual is diagnosed with sensorineural hearing loss it is essential that they be fitted with hearing aid amplification as quickly as possible. Further, they will need to be seen by a Speech - Language Pathologist to assess language and communication needs. Assistive listening devices may also be necessary.

Auditory Nerve Impairment:

This is caused by disease or damage to the central auditory nervous system preventing the interpretation of speech. Depending on where the disorder occurs, there can be a slight inability to hear in background noise or a total inability to understand speech.

Possible Causes:

- ~ delayed or disordered auditory nerve development
- ~ infection
- ~ lesions on the auditory nerve
- ~ neurodegenerative disorders

Mixed Hearing Loss:

Conductive, sensorineural and auditory nerve impairment can occur simultaneously which can cause delays in appropriate diagnosis and long term treatment.

How Is Hearing Loss Treated?

Depending on the cause of a hearing loss treatment can vary greatly.

A middle ear infection sometimes clears on its own, but should be monitored to make sure it clears completely. It can sometimes be treated with antibiotics. If not, it can be treated with pressure-equalization tubes placed through the eardrum to allow fluid to drain from the middle ear space.

Problems with the outer and middle ear such as punctured eardrum or deformity of the middle ear bones can often be corrected surgically.

Wax or foreign bodies blocking the ear canal can be removed by a doctor.

Disorders affecting the inner ear or auditory nerve cannot be corrected medically or surgically. When a child is diagnosed with a sensorineural hearing loss they will require hearing aid amplification and a referral for a complete speech-language evaluation. Other listening devices will be recommended as necessary on an individual basis.