Types of Hearing Loss

Deaf Children Australia

There are different types of hearing loss:

- Conductive hearing loss
- Sensorineural hearing loss
- Mixed hearing loss and
- Auditory Neuropathy

Conductive hearing loss

Occurs when sound waves do not reach the inner ear. There may be a blockage or issue in the external or middle ear. This can result in the sound being unable to be conducted through the ear canal through to the eardrum, or from the eardrum via the ossicles (three bones) of the middle ear to the inner ear.
Conductive hearing losses do not cause the hearing to be lost completely but there is a loss of volume. Sounds may be quiet but there is no distortion.

Common causes of Conductive hearing loss are:

· Wax in the external ear.
· Build-up of fluid in the middle ear preventing the ossicles (three small bones) from vibrating.
· A hole or tear (perforation) in the eardrum.
· Structural differences in the development of the outer or middle ear.
· Damage to the small bones in the middle ear.
· An infection in the middle ear.
· A blockage in the Eustachian tube meaning that air cannot move into the middle ear.

Ways to improve hearing:

· Medicine.
· Surgery.
· Hearing devices including tailored devices such as bone conduction hearing aids, bone anchored hearing devices and middle ear implants.

Sensorineural hearing loss

Sensorineural hearing loss is in the inner ear or auditory nerve. This occurs when there is a problem with the sensory (hair cells) and/or neural structures (nerves) in the inner ear (cochlea). With this type of deafness, there are problems with the cochlea (damage or malfunction of the air cells in the cochlea) or the nerve, which carries sound to the brain.

Sound waves activate the tiny hair cells in the cochlea to vibrate and release chemical messengers that stimulate the auditory nerve. The auditory nerve consists of many nerve fibres that then carry signals to the brain, which are then interpreted as sound. While sensorineural hearing loss usually involves damage to the tiny hair cells, it can also result from damage to the auditory nerve. Some people call this "nerve deafness".

Sensorineural losses can range from mild to profound. Both the volume and clarity of sound are affected. Sometimes sound can be heard but it may be distorted.

Sensorineural hearing loss is the most common type of permanent hearing loss.

Common causes of sensorineural hearing loss are:

· Premature birth.
· Certain pre-natal infections.
· Lack of oxygen during birth.
· Genetic factors.
· Use of certain medications that damage the ear (ototoxic).
· Illnesses, such as meningitis, rubella, measles and certain autoimmune disorders, amongst others.

Ways to improve hearing:

· Assistive technology and hearing devices like a cochlear implant.

Mixed hearing loss

Mixed hearing loss occurs when both Conductive (issue with the outer or middle ear) and Sensorineural (issue with the inner ear) hearing loss is present. The Conductive hearing loss may be permanent or temporary, but the sensorineural hearing loss is permanent

For further information about Deaf Children Australia.

www.deafchildrenaustralia.org.au
03 9539 5300
info@deafchildren.org.au
www.facebook.com/DeafChildrenAustralia

Deaf Children Australia uses the term 'deaf' to refer to all degrees and types of hearing loss.