

Types of Hearing Loss

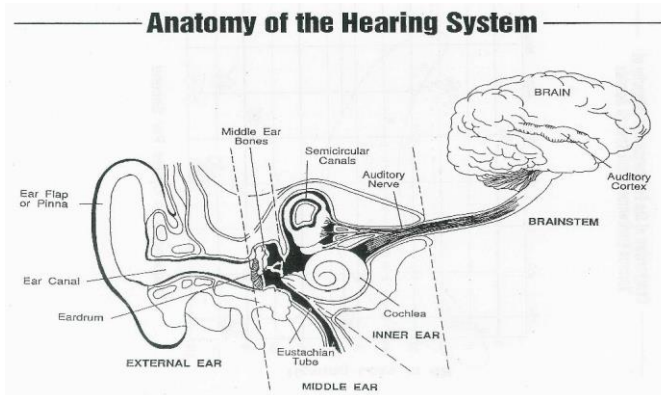


How Hearing Works:

The ear has three parts: outer, middle and inner.

Sound enters the ear through the ear canal (part of the outer ear), hits the eardrum (beginning of the middle ear) and shakes the three bones in the middle ear. These vibrations cause fluid in

the inner ear to move, stimulating hair cells in the cochlea (the inner ear). The stimulated cells send impulses to the auditory nerve which finally reach the brain. Problems in any part of the ear can cause hearing loss. Types and degrees of hearing loss vary.



Some Other Terms You Will Need to Know:

- **Unilateral Hearing Loss (UHL)** occurs in only one ear. It can be conductive, sensorineural or mixed. Although a child with UHL has good hearing in one ear, they will have difficulty knowing where sound comes from, hearing in noisy environments and hearing on the affected side. A hearing aid can be worn on the ear with the loss.
- **Bilateral Hearing Loss** occurs in both ears, it can be different types of severity in each ear.
- **Progressive Hearing Loss** is when a child loses their hearing over time. A baby may pass their new-born hearing screen but that does not ensure they will always have normal hearing. This loss can be conductive, sensorineural or mixed.
- **Fluctuating Hearing Loss** is one that changes frequently by improving or worsening. An example of this is when a child has fluid in the middle ear, caused by a cold or infection, the hearing improves when the fluid is resolved.

Conductive Hearing Loss:

If there is a problem in the outer or middle ear, sound is not being conducted properly to the inner ear. Common causes of conductive hearing loss are excessive cerumen (ear wax), fluid in the middle ear, a punctured ear drum, ear infection, birth defects or genetics. Many types of conductive hearing loss can be treated medically or surgically, though sometimes a conductive hearing loss is permanent.

Sensorineural Hearing Loss:

When there is a problem with the inner ear, it is difficult for sound to reach the auditory nerve and the brain. Common causes of sensorineural hearing loss are pre-natal and birth related problems, heredity, medications, viral and bacterial infections, trauma, exposure to loud noise and aging. Sensorineural hearing loss cannot be cured medically, but the use of hearing aids or other amplification systems can help children hear and develop speech and language.

Mixed Hearing Loss:

Mixed hearing loss is a combination of both conductive and sensorineural hearing loss, involving both the middle and inner ear. An example of a mixed loss is when a child has a sensorineural hearing loss and an ear infection with fluid in the middle ear or impacted wax in the outer ear, at the same time. This will cause the original hearing loss to become worse. Another example of mixed hearing loss is when a child could have a permanent conductive hearing loss due to a birth defect or syndrome along with a sensorineural hearing loss, resulting in a mixed hearing loss.

References

- [Hearing Loss Facts and Statistics – PDF Format](#)
- [Types of Hearing Loss](#) – BabyHearing.org
- [Mixed Hearing Loss](#)

Resources

- [National Center for Hearing Assessment and Management at Utah State University](#)
- [Boys Town National Research Hospital](#)
- [BabyHearing.org](#)
- [American Speech-Language-Hearing Association](#)

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