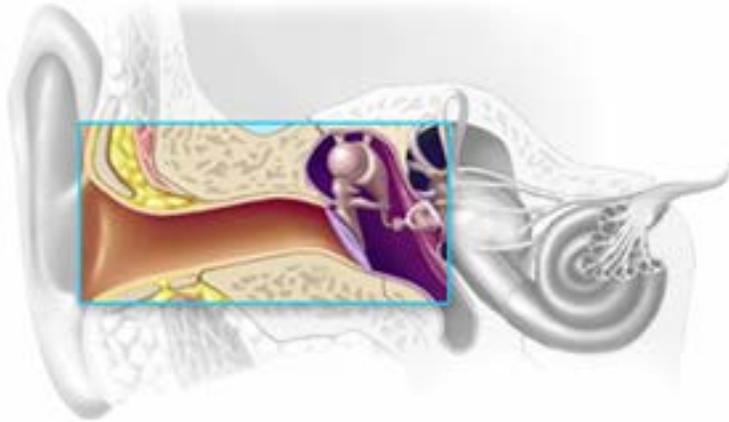


Types of Hearing Loss

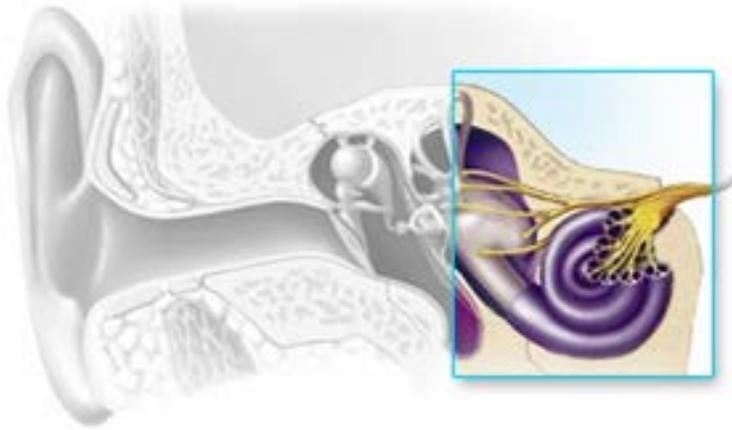
There are four types of hearing loss; Conductive, Sensorineural, Mixed and Central. If any part of the hearing system is unable to function the result is hearing loss.



Conductive hearing loss

A conductive hearing loss is caused by any condition or disease that impedes the conveyance of sound in its mechanical form through the middle ear cavity to the inner ear. A conductive hearing loss can be the result of a blockage in the external ear canal or can be caused by any disorder that unfavorably effects the middle ear's ability to transmit the mechanical energy to the stapes footplate.

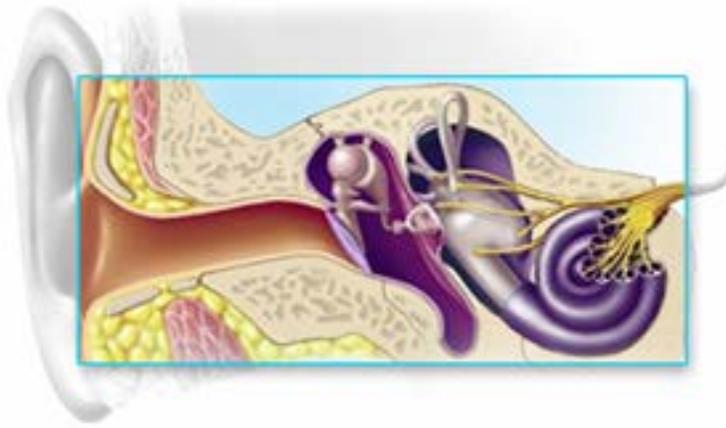
This result is the reduction of one of the physical attributes of sound called intensity (loudness), so the energy reaching the inner ear is lower or less intense than that in the original stimulus. Therefore, more energy is needed for individuals with a conductive hearing loss to hear sound, but once it's loud enough and the mechanical impediment is overcome, the ear works in a normal way. Generally, the cause of conductive hearing loss can be identified and treated resulting in a complete or partial improvement in hearing. Following the completion of medical treatment for causes of the conductive hearing loss, hearing aids are effective in correcting the remaining hearing loss.



Sensorineural Hearing Loss

Sensorineural hearing loss results from inner ear or auditory nerve dysfunction. The sensory component may be from damage to the organ of Corti, an inability of the hair cells to stimulate the nerves of hearing or a metabolic problem in the fluids of the inner ear. The neural or retrocochlear component can be the result of severe damage to the organ of Corti that causes the nerves of hearing to degenerate or it can be an inability of the hearing nerves themselves to convey neuro chemical information through the central auditory pathways.

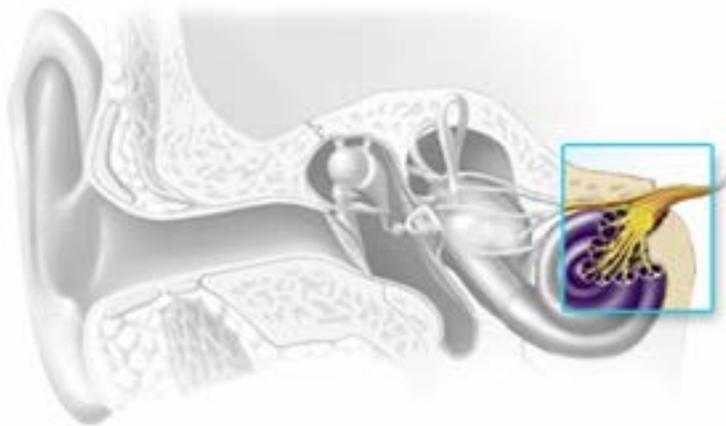
The reason for sensorineural hearing loss sometimes cannot be determined, it does not typically respond favorably to medical treatment, and it is typically described as an irreversible, permanent condition. Like conductive hearing loss, sensorineural hearing loss reduces the intensity of sound, but it might also introduce an element of distortion into what is heard resulting in sounds being unclear even when they are loud enough. Once any medically treatable conditions have been ruled out, individuals with a sensorineural hearing loss can be fit with hearing aids to give them access to speech and other important sounds.



Mixed Hearing Loss

A mixed hearing loss can be thought of as a sensorineural hearing loss with a conductive component overlaying all or part of the audiometric range tested. So, in addition to some irreversible hearing loss caused by an inner ear or auditory nerve disorder, there is also a dysfunction of the middle ear mechanism that makes the hearing worse than the sensorineural loss alone.

The conductive component may be amenable to medical treatment and reversal of the associated hearing loss, but the sensorineural component will most likely be permanent. Hearing aids can be beneficial for individuals with a mixed hearing loss, but caution must be exercised by the hearing care professional if the conductive component is due to an active ear infection.



Central Hearing Loss

Central hearing loss is caused by a problem with the auditory nerve or sound centres. Sounds waves may travel through the ear but this nerve pathway is unable to send electrical impulses to the brain. As a result the hearing centres do not

receive the signals correctly. Central hearing loss can be a result of a head injury or disease. A common symptom is the ability to detect sound but not being able to understand it.

What is Tinnitus?

Tinnitus is described as any sensation of sound in the absence of any external stimulation. It is often described as a ringing, buzzing or pulsing sensation in the ears.

Tinnitus is thought to be caused by damage to the outer, middle or inner ear or the hearing nerve in the brain. The damage to the hearing system can result from a number of different sources, such as; noise exposure, age-related changes in the inner ear, certain medications, head injuries, wax, etc. If you experience ongoing tinnitus contact our clinic to schedule an appointment for a complete audiological assessment. Be sure to indicate that you are booking the test because of your tinnitus.

Dizziness

Dizziness is a common complaint from many clients, especially those over the age of 70. Benign paroxysmal positional vertigo (BPPV) is the most common cause of positional vertigo. Vertigo refers to the perception of movement (i.e. spinning or turning).

The words: benign, paroxysmal and positional all describe the type of vertigo. 'Benign' refers to the idea that it is not life-threatening and there is no known cause; 'paroxysmal' suggests that there is a common cycle to the response and that it goes away and 'positional' refers to the fact that the vertigo is a result of a particular head or body movement. Symptoms of BPPV include dizziness when lying down, rolling over or changing head positions.

The perception of movement usually lasts less than a minute and is sometimes accompanied by a longer lasting feeling of nausea. do not receive the signals correctly. Central hearing loss can be a result of a head injury or disease. A common symptom is the ability to detect sound but not being able to understand it.