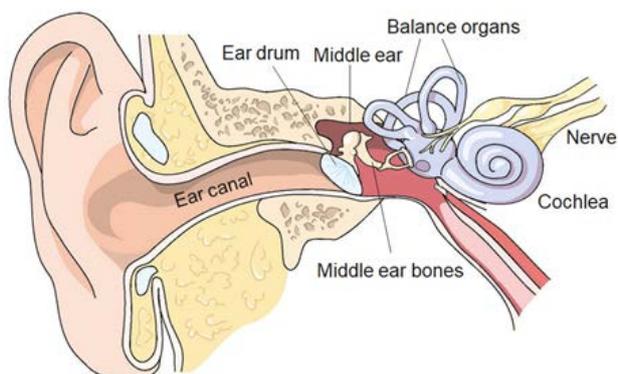


HEARING LOSS

EXPLAINED

FACT SHEET

The human ear is a complex system and there are many things that can damage our hearing.



The main parts of the ear, shown in the diagram above, are:

- The outer part of the ear (the part you see)
- The ear canal
- The eardrum
- The middle ear, containing three middle ear bones
- The inner ear, consisting of the balance organs and the organ of hearing itself, the cochlea

Even from a simple diagram like this, you can appreciate that our hearing system is made up of many different parts.

For someone to hear well, the sound needs to travel down the ear canal towards the eardrum. The eardrum needs to be able to vibrate (shake) freely in response to the sound so that it can send the sound vibration through to the three tiny middle ear bones behind it. The middle ear bones then need to move freely to pass the vibration along to the fluid-filled chambers of the cochlea.

In the cochlea, the fluid vibration moves tiny structures called stereocilia. These structures sit on top of special hair cells within the cochlea. The movement of the stereocilia is what allows us to detect different pitches (tones) of incoming sound. The nerves attached the hair cells then send the signal to the brain to be processed. All of these parts are required to hear well, and when any one of these structures doesn't work well, we may experience a hearing problem.

CONDUCTIVE HEARING LOSS

A person might have a problem with the ear canal, or the eardrum, the middle ear space, or the bones in the middle ear. The type of hearing loss that results from problems in these parts of the ear is called a conductive hearing loss because the structures required to conduct (send) the sound energy into the inner ear are not working well.

ADDRESS

1 Hamilton Place
Mount Waverley
Vic 3149

HEARING LINE

1300 242 842

For hearing, social & emotional support, & general enquiries, Monday to Friday, 9am - 5pm

LET'S CONNECT



#MoreThanJustEars
#MoreThanJustDevices

“ ”

If I had known that hearing loss wasn't just that you either hear everything or you hear nothing, if someone had told me that hearing loss is different for everybody...things would've been much better. I would have felt more comfortable and got my hearing checked earlier. It would've prevented years of not knowing what was going on or who to turn to. Just access to basic education, basic knowledge – Sarah

For people with a conductive hearing loss, the main problem is one of volume, or loudness, of the speech signal. Hearing aids are particularly helpful for people with a conductive hearing loss because hearing aids amplify sounds - they boost the volume - and that's really exactly what somebody with a conductive hearing loss needs.

SENSORINEURAL HEARING LOSS

A person might have a problem with the cochlea or the nerve of hearing, which sends information to the brain for processing. The type of hearing loss that results from problems in these parts of the ear is called a sensorineural hearing loss because the sensory parts or the nerve (neural) parts of the ear are not working well. People with a sensorineural hearing loss have a problem with both volume and clarity.

MIXED HEARING LOSS

Sometimes people have more than one problem in their hearing system, or one pathology that affects both the middle ear and the inner ear, and those kinds of complicated hearing losses are called mixed hearing losses.

CAUSES OF HEARING LOSS

There are many things that can damage our hearing. Conductive hearing loss may result from fluid in the middle ear spaces, damage to the eardrum, allergies resulting in inflammation in the middle ear spaces, or a stiffening of the middle ear bones. Sometimes conductive hearing losses can be treated medically, and hearing can be restored. For example, if there is impacted earwax (earwax build-up against the ear drum), it's usually possible to remove this and the hearing improves.

Ageing, noise exposure, the side effects of drugs or even tumours can damage the hair cells in the cochlea or the nerve of hearing, and result in a sensorineural hearing loss. Some health conditions like heart-related conditions, certain conditions of the immune system, or diabetes can also cause a sensorineural hearing loss. These types of losses are permanent, because the delicate hair cells of the cochlea can't be replaced once they are destroyed.

If you have any further questions about how hearing works generally, or about your hearing condition specifically, ask your GP or audiologist for some more information.

This factsheet is intended to be a guide of a general nature, having regard to general circumstances. The information presented should not be relied on as a substitute for medical advice, independent judgement or assessment by a healthcare professional, with consideration of the particular needs and individual circumstances. This factsheet reflects information available at the time of its preparation, but its currency should be determined having regard to other available information. Soundfair disclaims all liability to users of the information provided.

Updated: March 2022

To be reviewed: March 2025

Author: Natalie Fletcher

Version 1.0

ADDRESS

1 Hamilton Place
Mount Waverley
Vic 3149

HEARING LINE

1300 242 842

For hearing, social & emotional support, & general enquiries, Monday to Friday, 9am - 5pm

LET'S CONNECT



#MoreThanJustEars
#MoreThanJustDevices