

Conductive hearing loss in children

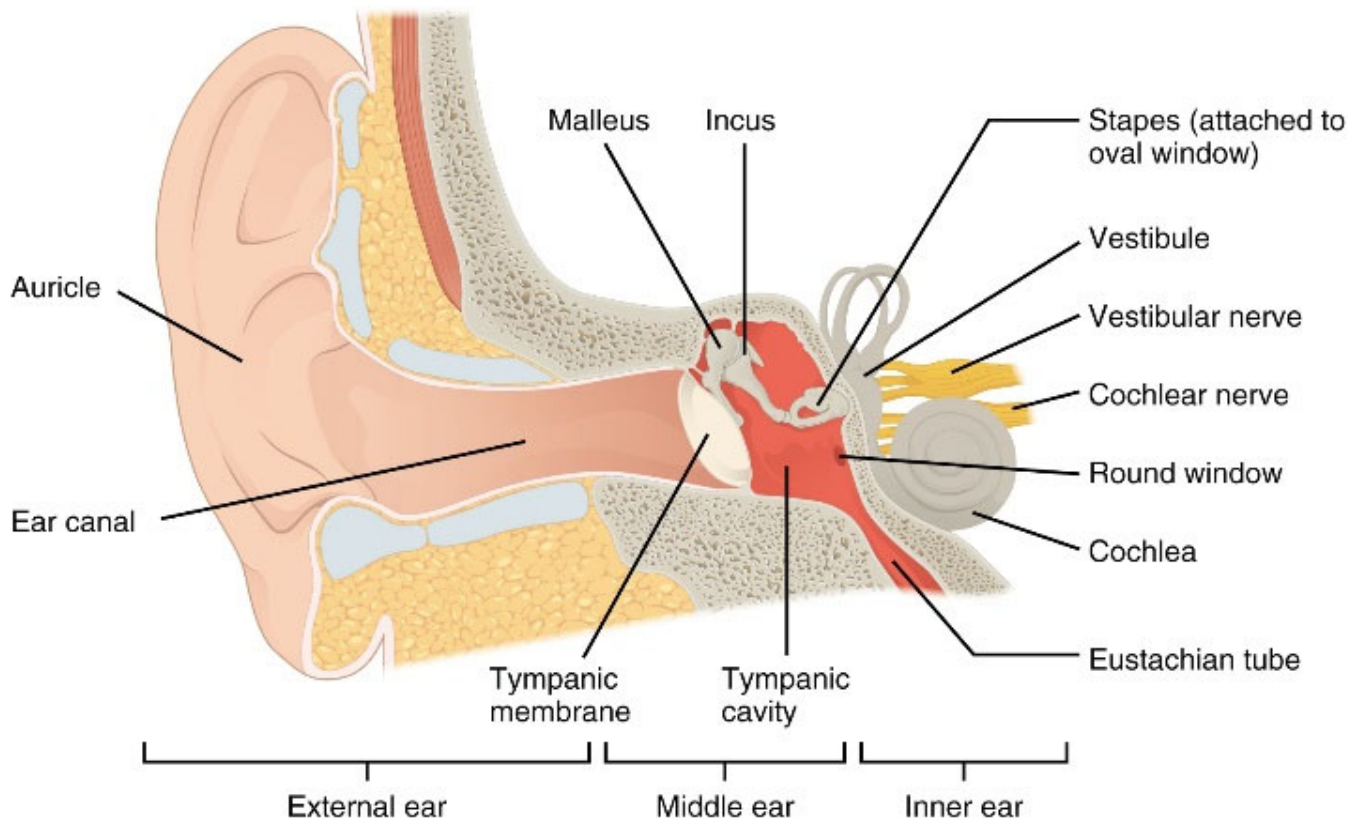
Our hearing system is comprised of three main parts: the outer ear, middle ear, and inner ear. The outer ear directs sounds down our ear canal to the middle ear.

The middle ear transfers this sound to the inner ear (cochlea), where the auditory nerve is stimulated, sending an electrical signal to the brain, where we 'hear' sound.

Damage to any of the three parts of our hearing system can cause hearing loss.

A **conductive hearing loss** occurs when sound can't travel through the outer and/or middle ear properly and so, can't reach the brain clearly and consistently.

Conductive hearing loss can be permanent or temporary.



https://commons.wikimedia.org/wiki/File:1404_The_Structures_of_the_Ear.jpg

About conductive hearing loss

Conductive hearing loss can be present in **one ear** (unilateral loss) or in **both ears** (bilateral loss). The **degree** or **severity** of hearing loss tells us what the person can and can't hear.

The level of hearing loss can stay the same over time, get worse over time, or go up and down over time depending on the cause of the conductive hearing loss.

It's important to **identify conductive hearing loss early**. Children with conductive hearing loss can have difficulty learning to communicate as sounds aren't reaching the brain clearly or consistently.

The earlier the hearing loss is identified, the earlier the person can access hearing technology and therapeutic supports if they're needed.

Causes of conductive hearing loss

Some causes of conductive hearing loss include:

- ear infections, called 'otitis media' when the infection is in the middle ear, and 'otitis externa' when the infection is in the outer ear,
- build-up fluid in the middle ear, sometimes called 'swimmers' ear' or 'glue ear',
- your Eustachian tube not working correctly,
- having a hole in your eardrum,
- build-up of ear wax in the ear canal,
- damage to the small bones inside the middle ear,
- getting small objects stuck in the ear canal,
- differences in the anatomy of the outer and middle ear that are present from birth

The most common type of conductive hearing loss is otitis media, middle ear fluid; it's also known as "glue ear".

The middle ear is linked to the back of the nose and throat via the eustachian tube. The eustachian tube is there to make sure the air pressure in the middle ear is the same as the air pressure in the ear canal.

The eustachian tube in children is more horizontal than in adults. This is why children tend to get more ear infections than adults.

Conductive hearing loss caused by otitis media or fluid in the middle ear can sometimes get better by itself over a few weeks, but if it doesn't get better or keeps happening again and again, then your GP and/or ENT might need to get involved.

Your GP might prescribe medicine to help if the ear is infected, and an ENT might decide that your child needs grommets, which are small tubes placed into the child's ear drum, to help the fluid drain and relieve the pain and pressure in the middle ear.

Effects of conductive hearing loss

If a child does not hear clearly and consistently, they are likely to have difficulties learning to listen, understand, and develop spoken language.

It follows, that if a conductive hearing loss in children is not identified early, and appropriately managed, that their communication development may be delayed.

What you can do

Treatment for conductive hearing loss will depend on the cause of the problem, and whether it's permanent or temporary.

If you're worried that your child's ears aren't healthy, or that your child isn't hearing you well, you can see your GP.

Your GP might recommend your child has a hearing test with an audiologist and that you see a speech pathologist.

You don't need a referral to see a speech pathologist or an audiologist, but you may be able to access Medicare or private health rebates if you do have a referral – talk to your GP to find out more.

How speech pathologists help

Speech pathologists can help children with conductive hearing loss by monitoring their communication development and providing early intervention if needed.

Find out more

For more information, visit:

- Hearing Australia: <https://www.hearing.com.au/>
- How do we hear: <https://www.asha.org/public/hearing/how-we-hear/>
- Aussie Deaf Kids: <https://www.aussiedeafkids.org.au/>
- Audiology Australia <https://audiology.asn.au/Home>
- Conductive hearing loss: <https://www.asha.org/public/hearing/conductive-hearing-loss/>
- Otitis media: <https://www.asha.org/public/hearing/causes-of-hearing-loss-in-children/>