

Disability awareness

Hearing impairment

What is it and how many people are affected?

Hearing impairment or deafness covers are terms we use to refer to someone who has some level of hearing loss – but this level can vary greatly. Hearing loss is usually measured by the quietest sounds someone can hear in decibels (dBHL).

Mild 20–40 dBHL Quiet background noise

- ⦿ No real issues in quiet environments
- ⦿ May struggle to distinguish and follow conversation in noisy environments.

Moderate 41–70 dBHL Level of average speech

- ⦿ Will find it hard to hear conversations in quiet environments
- ⦿ More likely to mishear people or need things repeating
- ⦿ Hearing aids may be suitable at this level.

Severe 71–95 dBHL Alarm clocks, car engines etc.

- ⦿ Is likely to only just be able to hear loud speech when spoken directly into their ears
- ⦿ Conversation can be difficult to follow even with hearing aids
- ⦿ May use lipreading and need other communication devices.

Profound 95+ dBHL Music concerts, loud machinery

- ⦿ Hearing aids are likely only to help identify the direction of sounds rather distinguish conversation
- ⦿ Likely to use lipreading or BSL to communicate as well as other devices.



It is estimated that one sixth of the UK population has a hearing loss, of which 900,000 have severe or profound hearing impairment. However, this is predicted to rise considerably in the next 20 years as the population ages. Current figures (2016) show one in ten adults experience tinnitus and around 250,000 people are deafblind. Another interesting statistic is that on average people take ten years to address their hearing loss.

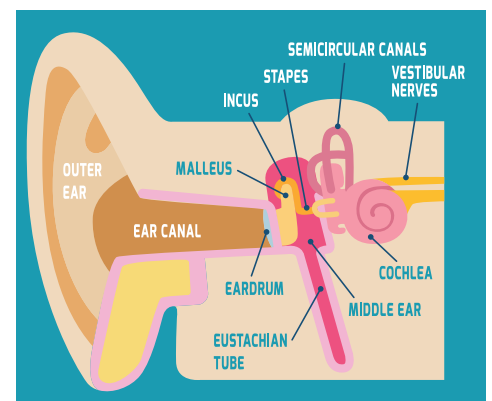
What causes hearing impairment?

The majority of people who are hearing impaired have lost their hearing through the natural ageing process. There are two main types of hearing loss:

Conductive hearing loss is when sounds cannot pass freely to the inner ear, caused by a blocked outer or middle ear, a ruptured eardrum or an abnormally formed ear structure. Sounds usually become quieter but not distorted. There are many different treatments which can help this type of hearing loss.

Sensorineural hearing loss is caused by damage to hair cells within the cochlea or the hearing nerve, or both. This damage is permanent and can be caused in a number of ways:

- ⦿ Natural ageing process
- ⦿ Prolonged exposure to loud noises
- ⦿ Some infections, such as rubella
- ⦿ Certain types of medication
- ⦿ Genetic factors
- ⦿ Complications at birth
- ⦿ Head trauma
- ⦿ Tumours.



This type of hearing loss not only affects the volume of sounds that can be heard but also how clearly the person can hear them, making speech in particular, an issue.

Conditions

Otosclerosis is a condition that affects the tiny ossicles (bones) in the middle ear. Extra bone growth limits the movement of these bones so sound waves cannot pass as easily and efficiently into the inner ear. It is a progressive condition and eventually the bones can become so fixed it causes severe hearing loss. It can affect one or both ears.

Damage to the middle ear or ossicles can be caused by a blow to the head, change in pressure or something being inserted into the ear. This can also cause hearing loss but may be able to be corrected by surgery.

Acute otitis media is when the middle ear becomes inflamed and/or infected. Often this infection will disappear without treatment or with antibiotics. But in severe cases pressure can build up and cause perforation of the ear drum, which in a small proportion of instances can fail to heal causing hearing loss. **Chronic suppurative otitis media (CSOM)** is a condition when you get an infection of the middle ear, which fails to dissipate or occurs frequently.

Atresia is a rare congenital defect when the ear canal fails to develop and remains completely closed.

Aids and support

Cochlear implants



A cochlear implant is a surgically implanted electronic device which gives a sense of sound to some people with severe hearing loss.

The quality of sound is different than that gained through natural hearing because the brain is

processing less information. Improving technology means that newer generation implants are more effective.

Loop systems

Hearing loop systems isolate the sound heard to within the confines of the loop, helping to reduce the impact of background noise. Someone wearing a hearing aid can link with the loop by turning the hearing aid to the required setting.

Acoustic neuroma is a rare, benign, slow-growing tumour that develops on the vestibulo-cochlear nerve (known as the eighth cranial nerve) which carries messages on hearing and balance. As the tumour grows, hearing becomes progressively worse and is often distorted.

People experiencing **hyperacusis** are sensitive to normal everyday sounds above a certain volume level, finding them uncomfortable and even painful. Some people also have a feeling of pressure in their ears as well.

Ménière's disease is a long-term condition of the inner ear. People experience episodes of symptoms including dizziness, nausea, vomiting, 'blocked' feeling or pressure, hearing loss, tinnitus and sometimes sensitivity to loud noises. Although it is a progressive condition, there are a wide range of treatments available.

Tinnitus is a condition which causes people to hear sounds which have no outside source. Examples include roaring, rushing, ringing, buzzing, humming or whistling. For some people, it can have a big impact on their lives, leading to sleep disruption and even depression or anxiety.

There are three main types of hearing loop system:

1. Room loops surround entire rooms, found in large public places such as lecture halls, places of worship, cinemas and theatres
2. Counter loops cover conversations over a counter, found in shops, banks and post offices and ticket offices
3. Portable loops only cover a small area and are usually used for one-to-one conversations. They can be moved around eg. in reception for welcoming visitors but then moved to desk for a meeting.

Hearing aids

Hearing aids don't give the person perfect hearing but are designed to make speech and everyday sounds louder and clearer. Many types also reduce certain dull background noises as well making it easier for

people to hear the sound they are focusing on with less straining to hear. It is, however, likely that in a crowd the user will still find it hard to distinguish one voice from another.

Conversation listeners

These devices work by making sounds louder and clearer to hear as well as reducing background noise.

There are two types for everyday use:

1. Standard conversation listeners pick up sounds up to one metre away usually. They can plug into headphones or link to any hearing aids through a neck loop as long as they are switched to the hearing loop setting
2. Advanced conversation listeners have both transmitter and receiver units. The transmitter can be linked to a lapel microphone for an individual speaker or a table microphone to pick a group discussion.

British Sign Language (BSL)

BSL is the predominant sign language used in the UK and it is classed as a separate language. It has very different grammar and structure from English eg. in a sentence you start with the subject or topic then refer back to it. Different countries have their own unique sign language, and sign language can also vary across the country in the same way accents do in spoken languages.



Working with an interpreter

BSL interpreters take many years to qualify and different levels are required for different activities. Signers qualify at levels 1, 2, 3 and 6 before they register as trainee interpreters. It is good practice to use a qualified interpreter for 'official' meetings eg. court appearances, police interviews or employment meetings about redundancy or disciplinary matters. A Communication Support Worker qualified to level 2 or 3 can be used to support other meetings.

Here are some tips for booking and using interpreters:

- ⦿ Book them well in advance
- ⦿ Try to use interpreters who have some experience in the field you are working in
- ⦿ They will need to take a break after an hour
- ⦿ Give them some information in advance so they can be prepared eg. documents, training material or videos
- ⦿ Consider the room layout. They need to be facing the hearing impaired person and have a clear view and also need to be able to hear you clearly and be close to any equipment, video, slides you are using
- ⦿ Try to ensure only one person speaks at a time
- ⦿ Encourage people to talk at normal speed and avoid jargon and abbreviations
- ⦿ Be aware there will be a slight delay as the interpreter has to understand and then translate the content
- ⦿ Always speak directly to the hearing impaired person not the interpreter.

For short, less important or last minute appointments consider video interpreting services.

Lipreading

Some people who have hearing impairments rely on lipreading rather than using BSL. The way we form our words can lead to confusion for the person who is lipreading. Therefore the lipreader depends heavily on environmental clues and understanding the context of the conversation.

Tips when talking to someone who lipreads:

- ⦿ Look directly at the person who is lipreading and if possible sit or stand on the same level
- ⦿ Do not cover your mouth in any way or turn your head to one side
- ⦿ Introduce the topic of conversation first
- ⦿ Avoid being in a dark environment or silhouetted against the light – facing the light is best.

Hearing Dogs

A hearing dog is an assistance dog which is trained to alert their handler to a variety of sounds eg. a fire or smoke alarm, the telephone ringing or someone calling their name.

Telephones, mobile phones and other technology

Telephones can be linked to a telephone alerter which has a loud ring and also vibrates and flashes. If it is difficult to hear the conversation, an amplified telephone might help. You can also get an amplifier which fits over the existing handset and increases call volume. Some phones are also compatible with hearing aids.

A textphone enables the person to type what they want to say using the keyboard and display screen. This is either sent to another textphone user or a telephone user through a separate voice relay service.

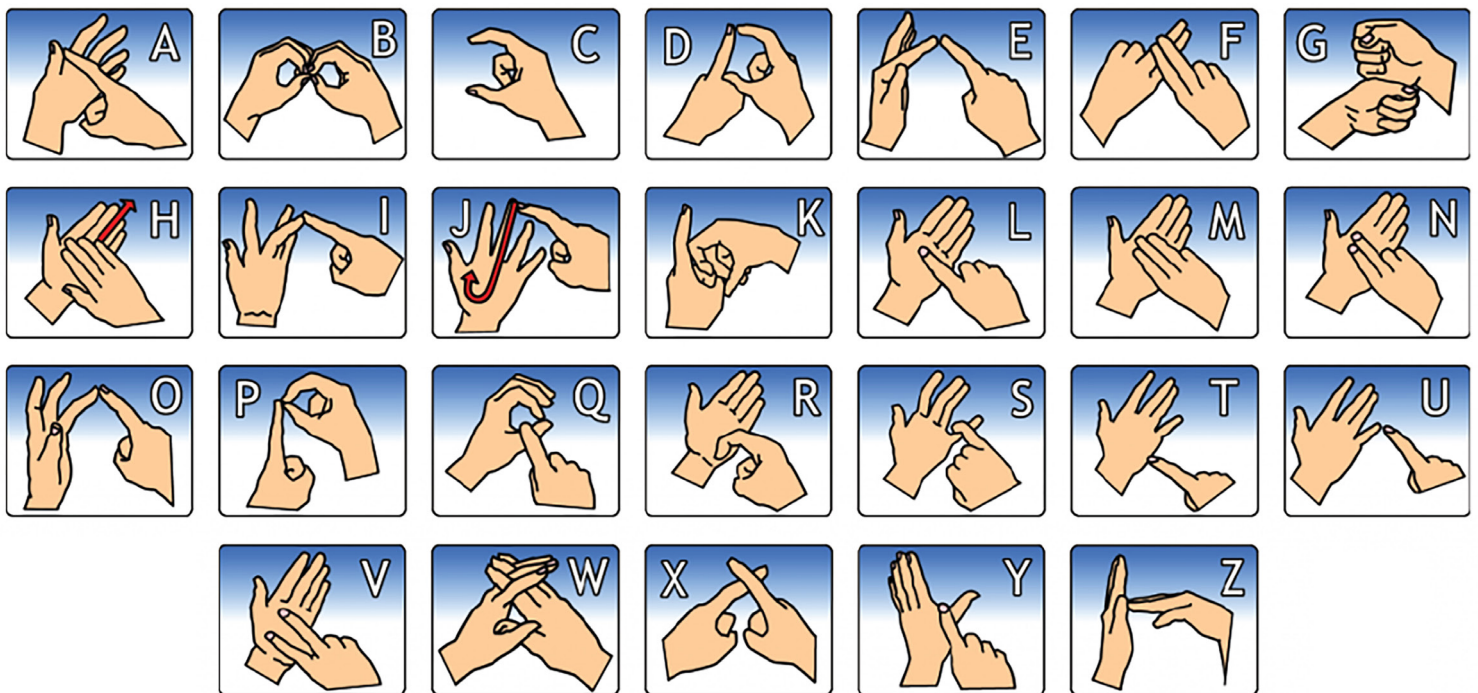
Some mobile phones can be used with hearing aids.

Most smartphones have accessibility features built in which can help. There are many apps available to download and people may find instant messaging helpful. Video-calling can be used in combination with BSL signing.

Alarms/Pagers

Ordinary smoke alarms may not be loud enough for people to hear. In the workplace, it is possible for the building fire alarm to be linked to a vibrating pager and/or flashing red lights to alert a hearing impaired person if goes off. Access to Work can provide advice and funding for this.

British Sign Language (BSL) Alphabet



Contact us:

If you would like further information on how we can help you, please get in touch with us:
 t: 0300 456 8113 e: training@remploy.co.uk w: www.remploy.co.uk/training

If you require this information in an alternative format, please email communications@remploy.co.uk quoting Ref.R94-Aug18

