

Understanding your child's hearing loss

Hearing difficulties can be: i) Temporary or Permanent

ii) Conductive or Sensorineural

iii) Mild, Moderate, Severe or Profound

iv) Unilateral or bilateral

Each of these are explained in more detail below:

i) Hearing difficulties can be temporary or permanent.

Temporary hearing difficulties can be caused by a number of things including:

- -Build up of ear wax
- -Ear Infections
- -Glue ear (build up of fluid in the middle part of the ear which stops sound waves passing through)
- -An object stuck in the ear

If your child is diagnosed as having any of the above, your doctor will prescribe treatments as appropriate e.g. removal of anything blocking the ear; antibiotics to combat infections; or treatments to allow air to circulate into the ear preventing fluid build-up (e.g. grommets). In some cases, hearing aids may be recommended, even though the difficulty is temporary, in order to allow your child to hear environmental sounds and support ongoing speech and language development.

Hopefully these treatments will be quickly successful and your child will go on to have normal hearing in future. In some cases, children suffer from recurrent difficulties with ear wax, ear infections or glue ear. Often children grow out of these but, it is important for treatment to be sought as soon as possible if difficulties reoccur as prolonged difficulties with hearing can affect development of attention/language and, albeit rarely, recurrent difficulties can lead to more long-term hearing difficulties.

Permanent hearing difficulties can be caused by:

- -Being born with differences in the structure of the ear (can be due to a genetic condition, prematurity or lack of development of certain structures before the child is born)
- -Infections or illnesses causing damage to the ear

- -Medical conditions causing progressive hearing loss
- -Side-effect of medications
- -Noise damage
- -Trauma

In some cases, the hearing difficulty is progressive and will get gradually worse over time. Early assessment is important to diagnose the type of hearing difficulty and get the correct support.

The vast majority of children with hearing difficulties are born to parents with no hearing difficulties themselves (approximately 90%).

ii) Hearing difficulties can be classed as 'conductive' or 'sensorineural'

A 'Conductive' difficulty refers to a problem with outer or middle part of the ear, the most common type is 'glue ear'. As many as one in four children may have conductive hearing difficulties in their early years. It is most often temporary.

A 'sensorineural' difficulty is caused by a problem in the inner ear resulting in failure of the process of converting sound signals into nerve impulses, it is usually, but not always, permanent.

Children can have a 'mixed' hearing loss so could have, for example, they could be born with a sensorineural hearing loss and then get glue ear (temporary conductive hearing loss) as well.

iii) Hearing Difficulties can be mild, moderate, severe or profound

All children are different but, as a broad rule of thumb, the following are the sort of difficulties you **may** see with each level of hearing difficulty. Please be aware that hearing difficulties can fluctuate and children's responses and adaptations to their hearing difficulty can vary considerably.

<u>Mild</u> – A child with mild hearing difficulties may have difficulties following speech in noisy situations or hearing faint or distant speech. They may not hear quiet noises such as whispering, leaves rustling or a clock ticking. They may mis-hear words and ask for things to be repeated often. They may have difficulty following instructions and sustaining attention. You may notice difficulties with development of speech, reading, attention and learning skills before you realise there is a difficulty with hearing, as, often, the hearing difficulty is not immediately apparent. Even a mild difficulty can have an impact on learning and education and advice should be sought as soon as you think there may be a problem as aids/modifications can really make a difference.

<u>Moderate</u> – A child with moderate hearing difficulties is likely to have difficulty hearing conversational speech without the use of a hearing aid. They will only hear conversation from very close distances and will need to be face-to-face with the speaker. They will show the difficulties as above but parents and teachers will begin to realise a hearing problem is likely.

<u>Severe</u> – A child with severe hearing difficulties without any hearing aids would not be able to hear average conversation but may be able to hear some speech sounds only if they are very loud and very close to their ear. When looking at the speaker, they will be able to use lip-reading to help them understand some speech and may develop some speech but this is likely to be significantly reduced in clarity. They are unlikely to be able to hear environmental noises such as a lawn mower, phone ringing or a baby crying. Sign language would be an appropriate method of communication for these children. However, this will not interfere with the acquisition of verbal language. With amplification (hearing aids or cochlear implants, if appropriate), a child should be able to hear the full range of sounds of speech and therefore have a much higher likelihood of developing clear speech.

<u>Profound</u> — Without amplification, the child will be unable to hear any speech but, if they learn to lipread, will be able to learn to understand some of what other people are saying using the visual cues. Sign language is likely to be the preferred language as they are unlikely to develop speech that can be understood by others. They will struggle to hear most environmental sounds apart from, perhaps, very loud sounds, for example, a chain saw, rock band or jet plane. With hearing aids, the child may be able to hear some of the sounds of speech and communication and, with cochlear implants, if appropriate, they would be able to hear a wide range of environmental noises and the full range of sounds in speech.

Children are rarely unable to hear anything at all and can, most often, hear some noises if they are loud enough. The term 'deaf' or 'deafness' is used to represent all types and levels of hearing difficulty.

iv) Hearing Difficulties can be unilateral or bilateral

'Unilateral' means only one ear or side is affected; 'bilateral' means both ears or sides are affected. Children's hearing may be different on each side, for example, they may have a mild loss on one side but a severe loss on the other side. The child overall hearing level will be that of their better ear however they may have difficulties with localising sounds and may have increased difficulties with distant speech, background noise or reverberant (echoey) rooms.

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