

Bilateral hearing loss – information pack

You have been given this leaflet because a hearing test has shown that your child has a bilateral hearing loss. This leaflet will tell you about what bilateral hearing loss means and what help is available.

What is bilateral hearing loss?

Bilateral hearing loss is any degree of permanent hearing loss that affects both ears. This information pack is designed for families of children with moderate to profound levels of hearing loss.

Bilateral hearing loss can be present from birth. It may have been inherited or maybe caused by problems during the pregnancy or birth. A bilateral hearing loss may also occur later in life as a result of an infection, for example mumps or meningitis, or because of a head injury. In many cases the actual cause of the bilateral hearing loss may not be identified.

1.1 out of every 1000 children in England are born with permanent moderate-to-profound bilateral hearing loss, and an additional 0.6-0.9 per 1000 develop such a hearing loss by 10 years of age.

Facts about bilateral hearing loss

- Without diagnosis and appropriate intervention, bilateral hearing loss can affect speech and language development, educational attainment and social interaction. Although some children with a bilateral hearing loss may appear to respond appropriately to sounds, their listening experience on which learning is based will not be complete.
- Depending upon the degree of the hearing loss, children with bilateral hearing loss may experience difficulties with:
 - Hearing quiet or loud sounds.
 - Differentiating between similar sounds.
 - Understanding speech clearly without lip-reading.
 - Hearing speech when there is background noise.
 - Hearing warning signals such as alarms.
 - Speech and language difficulties.
 - Difficulties at school including slower progress and behavioural problems.
 - More difficulty interacting with others.
 - Road safety.
 - Locating where a sound is coming from.

- In situations where there is background noise, for example at school, a child with bilateral hearing loss may be more easily distracted. In order to participate fully in the tasks he/she will have to maintain good levels of concentration that may increase their tiredness.
- It is important to protect a child's residual hearing.
- Your child should receive at least an annual hearing test at the Audiology department or sooner if you suspect any changes in their hearing.
- A child with a bilateral hearing loss relies more on visual information than a child with normal hearing. It is important that your child's eyesight is regularly checked.

What help is available?

For most degrees of bilateral hearing loss, fitting a hearing aid to both ears is likely to benefit your child. Using hearing aids can give the wearer a lot of useful information about speech and environmental sound. This can help minimise the difficulties experienced due to a hearing loss and also help with communication. Babies who are born with permanent bilateral hearing loss can develop normal speech and language skills, when appropriate help is given before 8 months of age. The sooner a child receives this help the better. This can be discussed further with your audiologist.

Hearing aids

A hearing aid is a special type of small amplifier. Its job is to make the sounds we hear louder. For many people a hearing aid can make the sound vibrations entering the ear canal strong enough so that the impaired cochlea can send a signal to the brain. The signal will not be perfect as the hearing aid does not make the hearing become normal, but amplifies sounds so that your child can hear them and make sense of them.

Types of hearing aid

There are many different models of hearing aid available in various shapes, sizes, colours and ways in which they process the sound. Your audiology team will discuss with you the most appropriate options to suit individual needs and preferences.

Most hearing aids fit behind the ear. All behind the ear hearing aids basically consist of a microphone and an amplifier and are powered by a small battery. Special earmoulds are manufactured to carry the sound into the ear canal.

Most children with bilateral hearing loss will also benefit from a radio aid or FM system attached to their hearing aids. A person speaking wears an FM transmitter, and the radio signal is received in the child's hearing aids. This can give a better quality sound in situations where there is background noise, for example, when a hearing aid alone does not maximise a child's access to the most important speech sounds.

Earmoulds

Earmoulds are made from an impression of the ear taken by your audiologist. To do this they will usually place a small sponge in the ear and then insert a specially mixed plasticine-type material to fill the ear completely. Once this has hardened after 1-2 minutes it can gently be removed.

Auditory implants

For some people with a permanent severe-profound bilateral hearing loss even the strongest hearing aid sometimes cannot provide enough sound information. This is because so many of the ear hair cells are not working that no matter how strong the vibrations which reach the cochlea, no useful signal is sent to the brain. A cochlear implant is a sophisticated hearing aid that can instead be implanted surgically. Its job is to do the work for the impaired hair cells by actively stimulating the auditory nerve itself.

In other instances of a complex hearing loss, other auditory implants may be appropriate and would be discussed by your audiologist.

Hints to help with a bilateral hearing loss

Children learn about the world and how language goes with it through everyday routine and activities. Although your child has a hearing loss you should continue to play, talk and communicate with your child as you would with any young child. Do what feels comfortable and right for you and your child.

To help your child get the most from your time together it may be useful to think about some of the following:

Communication

- Keep background noise to a minimum as much as possible.
- Get your child's attention before speaking to them.
- Ensure they can see your face and lip movements well.
- In background noise, speak to your child at close range or introduce a radio aid.
- Re-phrase sentences rather than repeating them if they have not been understood.

At school

- Make the teacher aware that your child has a bilateral hearing loss.
- Ask for your child to be seated as near to the teacher as possible.
- Consider introducing the use of a radio aid.

Locating a sound source

- Teach your child to look around them to locate where a sound is coming from.
- Before crossing the road it is particularly important that your child looks around to visually check for traffic.
- You may wish to install rear-view mirrors to your child's bicycle so that they can visually locate where traffic is behind them.

Protecting your child's hearing

- Your child should avoid listening to loud sounds for long periods of time, for example loud music, and as they grow older from personal stereos, concerts, pubs, bars or night-clubs. It is important that your child wears ear-protection when necessary.

- See your GP as soon as possible if your child has an ear-infection as this may cause his/her hearing to temporarily deteriorate. Furthermore if the infection is severe and left untreated it may permanently reduce the hearing levels.

Our commitment to you

- To provide you with an excellent service to meet your individual needs and those of your child.
- To give you and your child individual attention.
- To be available to you should you or your child need advice or reassurance.
- To provide support when you are coming to terms with a hearing loss.
- To offer help if a hearing loss causes problems when yours or your child's lifestyle changes.
- To ensure you and your child feel confident and happy using a hearing aid.
- To make every effort to offer you a suitable date and time for appointments.
- To make every effort to see you for an appointment on time.

Your commitment to us

- To make every effort to attend and be punctual at the appointments made for you.
- To inform us as soon as you know that you will be unable to attend an appointment.
- To help staff assigned to you or your child's care to help you by cooperating with them.
- To respect and care for any devices loaned to your child as best you can, as they remain the property of the Royal Berkshire NHS Foundation Trust.

Further information

If you are interested in accessing any further information on hearing loss, please ask your Audiologist or Teacher of the Deaf.

For further information about the Trust, visit www.royalberkshire.nhs.uk

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If you would like this leaflet in other languages or formats (e.g. large print, Braille or audio), please contact the Audiology department.

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