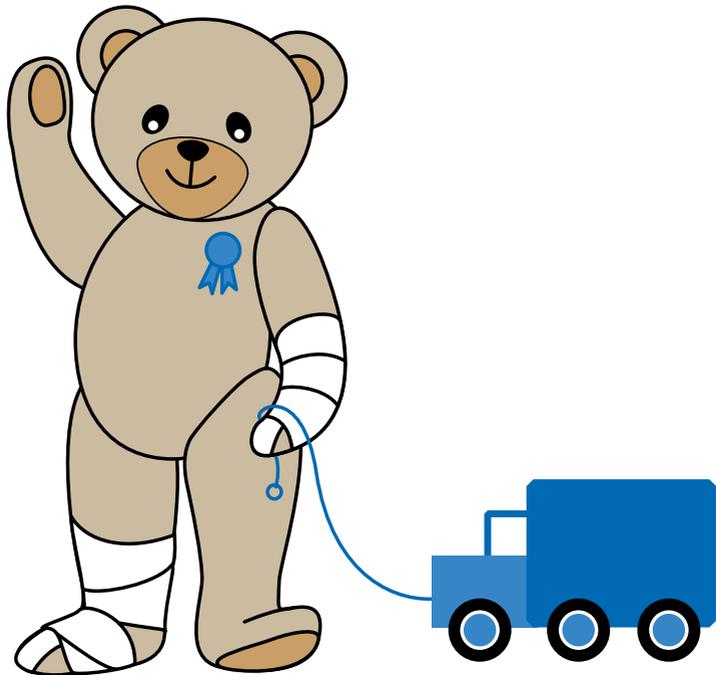


Bilateral hearing loss in children

Audiology Department



Patient information leaflet

Welcome to the Paediatric Audiology Department at the Royal Surrey County Hospital

We provide hearing care for children aged 0–18 years living in Surrey, as well as parts of Hampshire and Berkshire. Across this region 13,000 babies are born each year. About 150-170 of these are referred to us from the Newborn Hearing Screening Programme for detailed hearing assessment. We work in a team of Audiologists and administrative staff and we look forward to continuing to work with you and your family.

You probably have a lot of questions about your child's hearing impairment. We will always do our best to answer your questions honestly and openly. This information pack should answer the most frequently asked questions. We are always happy for you to contact us if you have other questions between appointments, or for you to make a note of your questions and bring them to your next appointment.

If we cannot answer your questions we will do our best to direct you to someone who can. We work closely with other support services including medical and health professionals, as well as the Physical and Sensory Support Service (Surrey) and Specialist Teacher Advisory Service (Hampshire), who provide educational support.

You might have questions that you would prefer to ask another parent. If you would like to meet other families who have a child with hearing impairment, let us know and we will try to introduce you. The Surrey Deaf Children's Society (SDCS) is our local branch of the national charity, NDCS. They often run family events which can be a nice way to meet other families. NDCS has a very friendly helpline for general enquiries, and also a Local Family Officer, Gail Collins, who is very happy to be contacted regarding family support.

If you ever have any comments or suggestions about our service, please do contact our Paediatric Audiology Service Lead.

Bilateral hearing loss in children

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 written 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 sometimes caused by problems during the pregnancy or birth. A bilateral hearing loss may also occur later in life after 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 hearing loss in both ears, and an additional 0.6-0.9 per 1000 develop such a hearing loss by 10 years of age.

What does bilateral hearing loss mean for my child?

- Without diagnosis and appropriate intervention, bilateral hearing loss can affect speech and language development, education and social interaction. Although some children with a bilateral hearing loss may appear to respond well to sounds, their listening experience 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
 - Learning speech and language
 - Progress and behaviour at school
 - 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. They may need to concentrate harder than other children. This may increase their tiredness.
- It is important to protect a child's residual hearing.
- Your child should receive a hearing test at the Audiology Department once a year, or sooner if you are worried that their hearing may have changed.
- 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 with the right help. The sooner a child receives this help the better. This can be discussed further with your audiologist.

Can hearing aids help?

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 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.

Are there different 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 your child's individual needs and preferences.

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

Many children with bilateral hearing loss will also benefit from a radio aid or FM system attached to their hearing aids. The speaker 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.

What are earmoulds?

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

What are cochlear 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 sometimes the inner ear or hearing nerve is so damaged that no matter how much the sounds are amplified, no useful signal is received by the brain. A cochlear implant is a type of hearing aid that is implanted surgically. Its job is to stimulate the hearing nerve itself. A cochlear implant referral can be made after a hearing aid trial, if the hearing aids do not appear to provide enough benefit. Your audiologist will discuss with you whether a cochlear implant referral is appropriate for your child.

How can I help my child?

Children learn about the world and language 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

- Reduce background noise as much as possible.
- Get your child's attention before you speak to them.
- Make sure they can see your face and lip movements.
- In background noise, get close to your child before you speak to your child, or introduce a radio aid.

At school

- Re-phrase sentences rather than repeating them if they have not been understood.
- Make sure the teacher knows about your child's hearing loss.
- Ask for your child to sit as close to the teacher as possible.
- Consider introducing a radio aid.

Locating a sound source

- Teach your child to look around them to find where a sound is coming from.
- Teach your child to look all around to check for traffic before crossing the road.
- Think about fitting rear-view mirrors to your child's bicycle so that they can see traffic behind them.

Protecting your child's hearing

- Your child should avoid listening to loud sounds for long periods of time. For example, loud personal stereos or concerts. It is important that your child wears ear protection when necessary.
- See your GP quickly if your child has an ear infection as this could cause his/her hearing to get worse temporarily. If an infection is severe and not treated it could permanently reduce the hearing levels.

Reference sources

- National Deaf Children's Society: www.ndcs.org.uk
- Department of Health. 2008. Transforming Services for Children with Hearing Difficulty and their Families: A Good Practice Guide. London: DoH

Our commitment to you

- To provide you with an excellent service and to meet your child's individual needs.
- To be available to you when you or your child need advice or reassurance.
- To provide support when you are coming to terms with a hearing loss.
- To ensure you and your child feel confident and happy using a hearing aid.
- To offer you a suitable date and time for appointments.
- To make every effort to see you on time for your appointments.

Your commitment to us

- To make every effort to arrive on time at appointments made for you.
- To inform us as soon as you know that you will be unable to attend an appointment.
- To help staff 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 Surrey County Hospital.

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

Contact details

Please do not hesitate to contact us if you have any questions after reading this leaflet.

Paediatric Audiology

Telephone: 01483 571122 **ext** 4880

Please leave an answerphone message if prompted.

Alternatively please email: rsc-tr.paedenquiries@nhs.net

We endeavour to respond to all messages received within 24 hours or the next working day.

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

Past review date: January 2018

Future review date: January 2021

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PIN180130–1465

