



Royal Berkshire
NHS Foundation Trust

Bone conduction hearing device fitting pack

Information for patients, parents
and carers

Compassionate

Aspirational

Resourceful

Excellent

Enclosed in this pack should be everything you need to know to use the bone conduction device. Please read this pack first as it will guide you through the simple steps required to set the device up and start using it.

You will have to check the sound of the device daily to determine if there are any issues, such as sound distortion. *For this reason, we strongly advise that on receipt of your child's fitting pack, you listen to the sound of the bone conduction hearing device using the flowchart on page 8 to get a baseline of what it should sound like.*

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What you'll find in your fitting pack

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• Bone conduction device with softband	
• Batteries and battery card	
• Tool to open tamper-proof battery door	
• Consent to share form	
• Satisfaction questionnaire	
• Lost hearing device leaflet	

What is a bone conduction hearing device?

A hearing aid is an amplification device, and its main aim is to amplify sounds so that your child can hear them.

A bone conduction (BC) hearing device allows the sound to be conducted to the cochlea (inner ear) through the mastoid bone rather than via the middle ear like conventional behind-the-ear hearing aids.

BC hearing devices are suitable for some children with a conductive hearing loss, resulting from recurrent ear infections or middle ear effusion (glue ear).

In BC devices the microphone on the hearing aid picks up the sound and this is then carried along the wire to the transducer, which is placed on the mastoid bone. The transducer then converts sounds into vibrations that travel through the bone to the cochlea.



How to wear a BC hearing device

The BC hearing device comes with an adjustable softband; the vibrating transducer sits on the mastoid bone behind the ear. The softband should fit snugly and should be comfortable for your child in order for the vibrations to travel through the bone effectively.

If it is too loose, you may notice that your child may not be hearing as well or that the device starts whistling.



Tips on getting young children comfortable wearing the BC hearing device

When a hearing device is fitted for the first time, many children will be happy to use it but sometimes parents report difficulties in trying to get young children to wear it. There are some useful tips listed below on how to introduce the BC hearing device and establish it in your child's life. It is essential that parents portray a positive attitude to wearing the hearing device, as their child will often reflect and adopt this attitude themselves.

The main aim will be to try to get your child to wear the hearing device all the time while the child is awake. This is to ensure that they will have full access to all sounds around them, which are essential when trying to develop everyday listening skills.

Evidence has shown that when children wear their hearing devices for more hours during the day, this increases their exposure to language, which has been directly linked with better communication. The hints and tips listed on the next page are recommended by the NDCS (National Deaf Children's Society). Further information leaflet can be found on www.ndcs.org.uk or can be provided by your audiologist.

- Many children react well to routine so introducing the BC hearing device as part of the dressing and undressing routine can help promote wearing the device while they are awake.
- Some children enjoy wearing their hearing device from the moment it is introduced.
- Other children have to build up the length of time they wear their hearing device. You can just start with a couple of minutes several times a day. If your child keeps taking the device off, try again later when you are both more relaxed. Remember to make it a positive experience.
- Try distracting your child with their favourite toy, songs or TV programme, as they will then associate the hearing device with fun activities.
- Try to establish with your child that you or a responsible adult is the person that takes the BC device off and not the child that is pulling it off their head.
- The BC hearing device will whistle if covered (e.g. if wearing a hat, if lying in bed). This is normal and happens because the microphone of the hearing aid and/or the transducer is too close to something solid.
- If your child removes the hearing device when they are subjected to loud sounds, contact the Audiology Department as it may indicate that the hearing device may require slight adjustments
- You could introduce a reward system or sticker if the child wears their hearing device.
- Some parents report their children will not wear their hearing device after school. You could try giving them a specified break, maybe for 30 minutes, and then start using the hearing device again. Communication and learning continue at home as well as at school and being able to hear conversation at the dinner table or listen to the TV at a normal volume will make life easier for everyone.
- When not worn, keep the BC device in a special and safe place. For young children, take their device off and, along with your child, take it to the special place and put it away. They will learn

to put the device in the special place when they take it off, and you won't have to go looking for it every time it disappears.

- Older children who are old enough and are developing independence should be encouraged to remove their own hearing device.

Do not force your child to wear the hearing device. It is much better to encourage your child to enjoy wearing it. It is better for them (and you) in the long run if they have a positive attitude towards their hearing device.

Battery safety and disposal

Please remember that batteries are toxic and should always be kept out of reach from children and stored safely. Batteries can cause serious injury if swallowed or placed inside the body (such as nostrils or ears). If you suspect your child has swallowed or placed a battery in their body, please seek immediate medical help.

Your child's BC hearing device has a childproof battery lock.

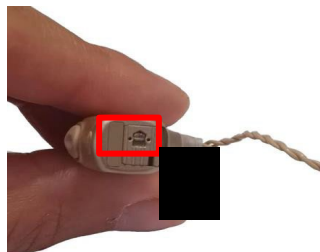
To lock the battery door: use the tool provided in the fitting pack to move the sliding bar at the bottom of the hearing aid up in the locked position, as shown in the picture below.

This must be done all the times, before placing the BC hearing device on your child's head.

To unlock the battery door: use the same tool to move the sliding bar at the bottom of the hearing aid down in the unlocked position, as shown in the picture below.



Battery door unlocked



Battery door locked

When disposing of batteries, do not put them in the bin. Please take them to a local battery recycling point or bring them in next time you visit us or the ENT Department.

Battery provision

You can request more batteries by emailing audiology.repair@royalberkshire.nhs.uk or by calling 0118 322 8219 / 0118 322 8637. Under normal circumstances, batteries may be obtained Monday to Friday from 8.30-4.30pm from Audiology 1 or 2 at the Royal Berkshire Hospital or at your local GP surgery during their opening hours.

You may be asked for a battery card, which has been included in your fitting pack.

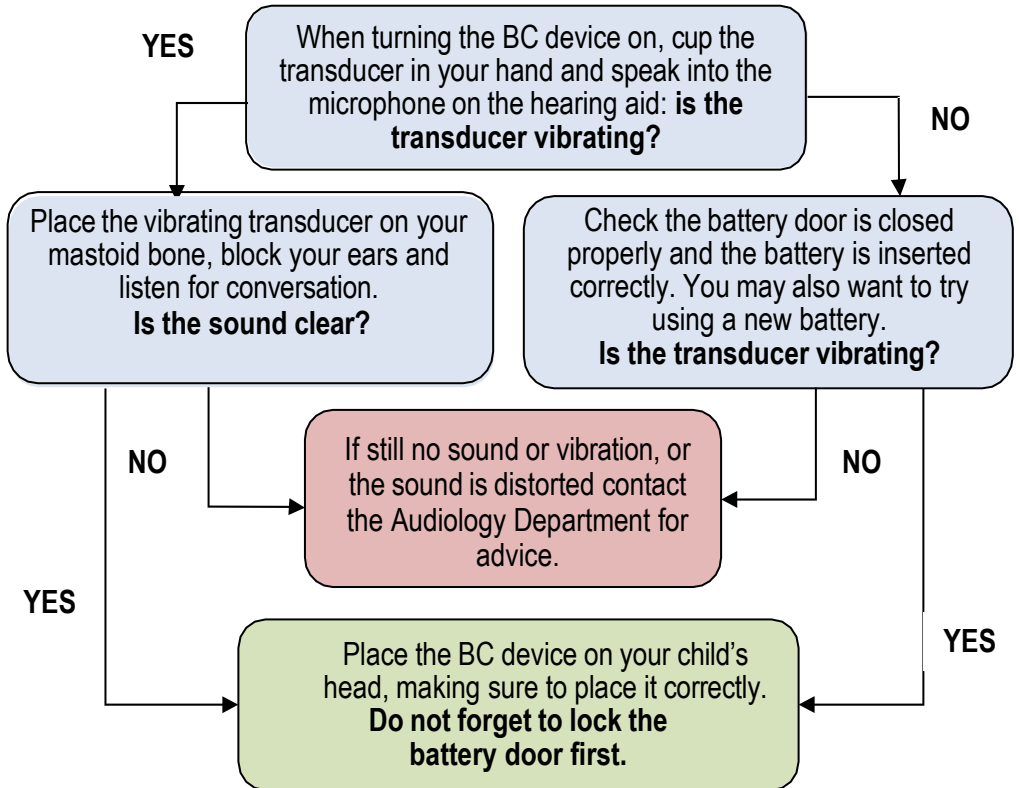
How to insert the batteries

- Using the tool provided in the fitting pack, unlock and open the battery drawer.
- Take a battery out of the packet and remove the coloured sticker from the top as shown below.
- Drop the battery in the compartment with the '+' side facing up.
- Gently clip the battery drawer shut – this should close easily. If the drawer does not close easily double check the '+' side is on the top. Never put the battery in upside down as shown below right.

We recommend changing the battery weekly



Daily checks



Troubleshooting

Sometimes a hearing device becomes faulty or may appear to be faulty. Here is a list of common problems, possible causes and remedies you can try. If you are unable to solve the problem yourself, please contact the Audiology Department, as the device may need to be sent off for repair.

To check the sound of the BC hearing device, you can put it on your head and listen to conversation while you block your ears with your fingers; or you can cup the transducer in your hand and speak into the microphone on the hearing aid, the transducer should vibrate as you talk.

No sound from the BC device:

- If you have already tried a new battery and the BC hearing device is still not working it may be that the hearing aid, the vibrating transducer or the wire may be damaged or faulty. If you think this is the case contact the Audiology Department for advice. You may be asked to post the BC aid to the Department so that it can be checked for any fault. If we cannot fix it, it will be sent to the manufacturer to be repaired.

Sound from the BC aid is not clear/not loud enough/sound distorted/feedback (whistling):

- When positioning the headband on your child's head make sure that the vibrating transducer is lying flush on the skin behind the ear (without touching the ear) and try to remove as much hair as possible from underneath
- The headband is too loose. Adjust the headband so that it is tighter but still comfortable for your child. You should be able to put one finger underneath the headband.
- Issues with quality or volume of sound may be caused by a weak battery; try replacing the battery with a new one.

Cleaning

The hearing aid and the vibrating transducer can be cleaned daily with a dry cloth or wet wipe.

The BC hearing aid has some water resistance but should not be fully submerged in water and it is generally advisable to take it off if your child is swimming or in the bath or shower.

The soft band can be hand washed with warm soapy water.

Berkshire Sensory Consortium Service (BSCS)

The Berkshire Sensory Consortium Service (BSCS) is a teaching and advisory service available for children and young people in Berkshire with any type of diagnosed hearing and/or visual loss. Specialist teachers for the visually and/or hearing impaired work across the age range in schools and with families of very young children.

Your child has been identified as having a hearing difficulty and you have chosen to move forward with using a BC hearing device. With your permission, the Audiology Department will make a referral to the BSCS and we will make contact with you/your child's school to arrange a home/school visit as appropriate.

The specialist teacher from the BSCS will be able to offer initial advice and recommendations to you/your child's school on:

- Speech and language development.
- Functional listening (the speech sounds that your child may struggle with – particularly important around the teaching of phonics).
- The acoustic environment and optimal listening conditions.
- The hearing device itself.

The BSCS specialist teacher will continue to liaise with Audiology after any further appointments that your child may have in order to keep fully appraised of their situation and if appropriate, will continue to offer advice and support.

Within this fitting pack you will find a 'Consent to share' form. If you would like for your child to receive support from the BSCS, please

sign this form and post it back to us using the freepost address provided.

For more information, visit www.berkshirescs.btck.co.uk

FAQs

Is there an 'on and off' button?

No. The hearing aid is switched on and off by closing and opening the battery door. Remember to keep the BC hearing device out of reach of children when switched off and make sure the battery door is locked when the hearing aid is being worn.

Is the hearing aid waterproof?

No. The BC device needs to be removed before your child has a bath or a shower, before they go swimming or in heavy rain.

How long do the batteries last?

Batteries last on average 7 days when the BC hearing device is worn during all waking hours and when switched off at night. The hearing aid will give a warning sound when the battery has to be replaced. For young children who cannot alert an adult when the battery is flat, we recommend changing the battery weekly.

My child does not need the BC hearing device anymore, what happens now?

If you feel that your child is no longer using or gaining benefit from the BC hearing device, please contact Audiology to discuss this in the first instance. The device is provided on long-term loan and remains the property of the NHS. It may be therefore that we ask you to return it.

Royal Berkshire Audiology website

Our website provides information regarding our services and links to our supporting materials. It can be accessed here:

<https://www.royalberkshire.nhs.uk/wards-and-services/audiology.htm>

We hope that your child enjoys their new bone conduction hearing device. If you do have any questions that have not been addressed by this fitting pack, you can contact us on Audiology.Repair@RoyalBerkshire.nhs.uk. If you do not have access to email, you can call us on 0118 322 8219 / 8637.

To find out more about our Trust visit www.royalberkshire.nhs.uk

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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