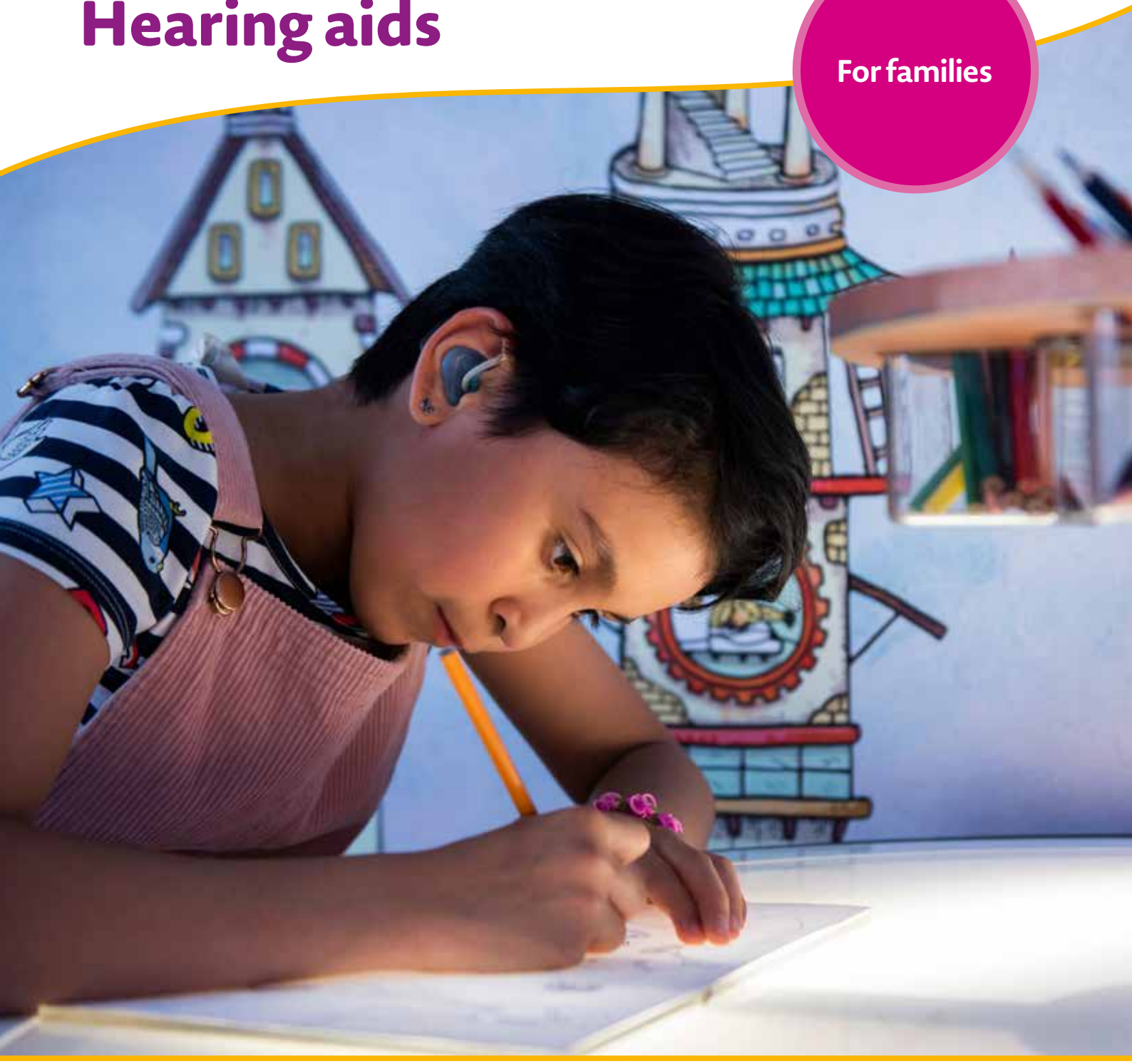
National Deaf Children's Society

Hearing aids

For families



www.ndcs.org.uk

Our vision is a world without barriers for every deaf child.



Contents

1.	Introduction	4
2.	Types of deafness	5
3.	Levels of deafness	6
4.	Frequency	7
5.	Does my child have to wear hearing aids?	8
6.	Earmoulds	10
7.	Hearing aids	11
8.	Customising your child's hearing aids	12
9.	How do hearing aids work?	13
10.	Hearing aid features	14
11.	T programme	16
12.	Using radio aids	17
13.	Keeping behind-the-ear hearing aids in place	18
14.	Encouraging your child to wear hearing aids	19
15.	Good listening environments	21
16.	Using the phone with a hearing aid	22
17.	Technology	23
18.	Looking after hearing aids	24
19.	Replacing the earmould tubing	30
20.	Hearing aid batteries	32
21.	Feedback	34
22.	Other types of hearing aid	37
23.	What to do if hearing aids are lost or damaged	41
24.	Buying hearing aids	43
25.	Useful resources	45

We use the term 'deaf' to refer to all types of hearing loss or impairment from mild to profound. This includes deafness in one ear or temporary deafness such as glue ear.

We use the term 'parent' to refer to all parents and carers of children.

1 Introduction

If an audiologist has suggested your child gets hearing aids you may have lots of questions. This resource will tell you about different types of hearing aids, how to look after them and how your child can get the best out of them.

There are more than 50,000 deaf children in the UK, with five babies born deaf every day. Most deaf children are born to hearing parents with little or no experience of deafness. With the right support there's no reason for a deaf child to develop language at a slower rate than a hearing child with similar abilities, and hearing aids can help with this.

There are lots of different hearing aids available. If you're not sure which pages of this resource apply to your child's hearing aids, ask your audiologist to point them out. Hearing aids are only one option. For some children a hearing implant such as a cochlear implant or bone conduction hearing implant may be more suitable.

Throughout this resource we'll direct you to some of our other free information resources which are available to download from our website at **www.ndcs.org.uk**. For more information and practical support or to order copies of other resources, phone our Freephone Helpline on **0808 800 8880**, email us at **helpline@ndcs.org.uk** or contact us via live chat at **www.ndcs.org.uk/livechat**.

For more information on hearing implants go to www.ndcs.org.uk/implants.

If you're unsure of any of the words we've used in this booklet, you can look them up in the glossary on our website at www.ndcs.org.uk/glossary.

2 Types of deafness

There are two types of deafness depending on which part of the ear isn't functioning as it should: conductive and sensorineural.

Conductive deafness occurs when sound is unable to pass efficiently through the outer and middle ear to the cochlea (inner ear) and auditory (hearing) nerve.

The most common cause of conductive deafness in childhood is glue ear (fluid in the middle ear) which is usually a temporary condition. Glue ear (also known as OME – otitis media with effusion) affects about one in five pre-school children at any time. For most children, glue ear clears up by itself and doesn't need any treatment. For some children with long-term or severe glue ear, hearing aids may be provided, or the child may need surgery to insert grommets. Grommets are tiny plastic tubes which are inserted into the eardrum. They allow air to circulate in the middle ear keeping the pressure on either side of the eardrum equal, thereby helping to prevent fluid from building up.

Read more about glue ear www.ndcs.org.uk/glueear.

Conductive deafness can also be caused by a perforation (hole) in the eardrum or when part of the outer or middle ear didn't form properly before birth.

Sensorineural deafness occurs when there is a fault in the cochlea or auditory nerve which carries sound signals to the brain. Sensorineural deafness is permanent.

Mixed deafness is a combination of sensorineural and conductive deafness. One example of mixed deafness is when someone has glue ear as well as sensorineural deafness.

It's very important to watch out for mixed deafness. If your child has sensorineural deafness and they develop glue ear, their hearing may reduce while they have the condition. This may mean that your child can hear fewer sounds or be less aware of background noise.

Hearing aids may be offered to children with all types, levels and causes of deafness. If you have any questions about your child's deafness, your audiologist should be able to give you more information.

For a more detailed guide to deafness, including information about hearing tests and medical tests used to determine causes of deafness, see our resource *Understanding your child's hearing tests* at www.ndcs.org.uk/understand.

3 Levels of deafness

The level of your child's deafness can be described as:

- decibel (dB) hearing level
- 'mild', 'moderate', 'severe' or 'profound'.

The table below lists the terms used to describe levels of deafness and and their corresponding decibel hearing levels.

Level of deafness	Hearing level in decibels (dB)
Mild	**20–40**
Moderate	**41–70**
Severe	**71–95**
Profound	**95+**

Your child's audiologist will be able to give you more information about the level of your child's deafness. They'll also be able to explain the sounds that your child can and can't hear. The loudness of a sound is measured in decibels, and may also be described by your audiologist as 'intensity'. If your child has recently been diagnosed as deaf your child's audiologist may need to do more tests before they can give you this information.



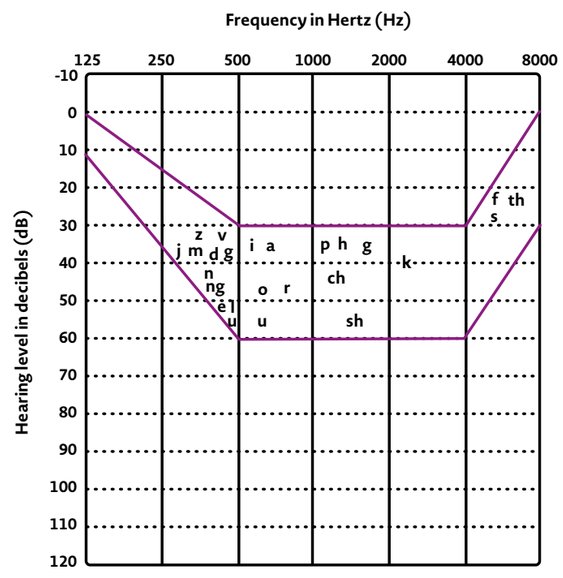
4 Frequency

All sounds are made up of different frequencies, measured in Hertz (Hz). The frequency of a sound affects the pitch at which it is heard. The high notes on the right-hand side of a piano keyboard are examples of high-frequency sounds. If your child has a hearing test where the results are plotted on an audiogram, you'll see low to high frequencies marked along the top.

It's possible to have the same level of deafness for all frequencies or to have different hearing levels at different frequencies. For example, your child may have more difficulty hearing higher frequency sounds.

Speech consists of vowels (a, e, i, o, u) and consonants (the remaining letters), which are, in turn, made up of a range of frequencies. Consonants communicate most of the information when a person speaks, and they're also what make speech understandable. Consonants appear in the higher frequencies of an audiogram chart, meaning that children need to be able to hear the full range of speech sounds at a quiet level to be able to understand speech. The speech curve on the audiogram below shows the frequencies at which different vowels and consonants are heard. This curve is sometimes referred to as the 'speech banana'.

Your audiologist will be able to explain your child's audiogram and give you information about the frequencies affected by your child's deafness.



For more information about audiograms see *Understanding your child's hearing tests* at www.ndcs.org.uk/understand.

5 Does my child have to wear hearing aids?

The ear is fully formed before birth, which means hearing babies are exposed to sound even before they are born. However, the ear is just the first part of the hearing (auditory) pathway. The hearing pathways are made up of nerves that carry sound from the ears to the brain.

The most rapid changes in brain development happen in the first three-and-a-half years of life. When hearing pathways are not stimulated in response to sound early in life, they do not develop as well as they could. This is known as auditory deprivation. Encouraging your baby to wear their hearing aids as much as possible will help them to access sound and develop their hearing pathways.

Hearing aids work by amplifying (making louder) sounds going into the ear. They can help your child to hear everyday sounds and make listening to speech as clear and easy as possible.

Your child's hearing aids will be programmed to match their deafness and take into account the different listening situations that they are in. For example, hearing aids will amplify quiet speech sounds more than they amplify louder sounds. This means that the sound from the hearing aid is always comfortable for the child.

The type of hearing aid that will be suitable for your child will depend on the type and level of deafness they have. Hearing aids can be useful for children with any level of deafness and may be recommended for your child so that they have the best chance of hearing everything going on in the world.

Speech development

Hearing babies have thousands of hours of listening experience in their first year and hear words hundreds of times before they start to make speech-like 'babbling' sounds. By the age of four, children have often heard as many as 45 million words. This helps them to develop speech. Early and consistent use of hearing aids can help deaf children to start school with similar speech and language levels to their hearing peers.

Speech development depends on hearing both your own speech and the speech of others. Hearing, self-monitoring and correcting your own speech is known as the 'auditory feedback loop'. Children must be able to hear their own speech clearly to make clear speech sounds. By hearing the speech of others, children copy sounds and words, and learn how to differentiate between sounds.

For example, 'f' and 'th' are both quiet, high-frequency (high-pitch) speech sounds. If a child is not able to make out the difference between the two sounds, they may say them incorrectly or get them mixed up when speaking.

Incidental learning

Incidental learning, also called passive learning, happens through overhearing (when children hear speech that is not directed at them). Overhearing helps children to build vocabulary, grammar and general knowledge. Very young children learn about 90% of their knowledge about the world incidentally, for example by overhearing conversations between their parents.

Deaf children who are not able to overhear may miss a significant amount of information that they need in order to learn to speak.

Children with hearing aids may appear to hear conversation well, especially in one-to-one situations and when background noise levels are low. However, children need to be able to hear soft speech to be able to overhear. If they can't, then they won't hear speech that comes from more than six feet away. They need to be able to hear conversation all around them, even though they aren't paying attention to it, or when it may be about things that don't seem important to them. Speak to your audiologist if you are concerned that your child is not hearing quieter sounds in their environment as well as face-to-face conversation.



For more information visit our webpage www.ndcs.org.uk/speakingandlistening.

6 Earmoulds

If hearing aids are recommended for your child they'll need to have earmoulds made. An earmould is made of plastic or silicone. It fits into the ear and holds the tubing in place which transfers sounds from the hearing aid into the ear.

Babies and young children grow very quickly. Because of this, their earmoulds need to be replaced regularly as their ears change size, in order to make sure that they're comfortable and fit correctly.

Before earmoulds can be made, the audiology department will take impressions. These are casts of your child's ear canals and are used to make the earmoulds. The audiologist will take into account your child's level of hearing loss, their age and any other necessary requirements. The new earmoulds should be ready about a week after the impressions are taken.

Earmoulds can be made of different types of materials. Some are very soft and some are hard. They may also have a small hole through them, called a vent.

If the earmould doesn't fit well, the hearing aid may produce feedback (a high pitched whistling sound). For more information on feedback, see page 34.

Very rarely, children can have an allergic reaction to certain earmould materials. If you think your child might have an allergy, you should discuss it with your child's audiologist or with the person who takes your child's earmould impressions.



Different views of a conventional closed earmould made for a right ear

7 Hearing aids

The audiologist will choose the correct hearing aid for your child using the results of the audiogram. Your child may be fitted with two hearing aids (known as a binaural fitting) or one hearing aid.

Digital hearing aids have advanced features that mean they can be programmed to match your child's deafness. The most common types of hearing aid worn by children are behind-the-ear (BTE) hearing aids, also known as post-aural aids. They can be fitted to people of all ages and are suitable for very young babies upwards. This type of hearing aid sits behind the ear and has a hard plastic hook (known as the elbow), coming over the top of the ear which joins the hearing aid to the earmould tubing.

Information about other types of hearing aid can be found on page 37.

Each hearing aid is attached to an earmould which is made to fit the child's ear. The earmould attaches to the hearing aid by a piece of flexible tubing, which transmits the amplified sounds from the hearing aid into the ear.

If your child is given hearing aids at your local audiology clinic, they will usually be from the National Health Service (NHS) range. The NHS uses a range of good quality digital hearing aids that are suitable for children with different types and levels of deafness. If there is no suitable NHS aid available, audiologists can choose an aid from the commercial range, in the same way as a private hearing aid dispenser.

If you're thinking about buying your child's hearing aids from a private hearing aid dispenser, we would recommend reading pages 43 and 44 of this resource first.



8 Customising your child's hearing aids

Most NHS hearing aids are available in a range of colours and designs. Ask your audiologist about the options for your child's model. If you can't get coloured or patterned versions from your audiologist, there are other ways you and your child can customise their technology.

If you decide to decorate your child's hearing aids don't glue anything directly onto the casing, or use paints or nail polish. It's also important not to cover crucial parts such as additional microphone ports or direct audio input contacts.

Ear Gear (**www.gearforears.com**) is a spandex sleeve that slides onto hearing aids. As well as providing protection from moisture, dirt and wind noise they come in a range of colours.

Some manufacturers may provide sheets of stickers that fit their hearing aids. Earmoulds can come in solid colours, with marble or glitter effects, or transparent with logos or pictures inside, such as a favourite football team or cartoon character. These logos or pictures can help you to tell the difference between the left and right earmoulds. The next time your child has impressions taken for earmoulds ask what colours or effects are available. You can also add removable decorations to the earmould tubing.

Hearing aids are a long-term loan to you from the NHS and aren't your property. If you damage them, you may invalidate any warranty the aid has and be charged for the repair. It's best to check with your audiologist before customising your child's technology.



For more information about customising your child's hearing aids go to www.ndcs.org.uk/decorating.

9 How do hearing aids work?

Most hearing aids work by amplifying sounds when they go into the ear. Hearing aids have a microphone that picks up sounds, an amplifier and a receiver that sends the amplified sounds into the ear through the earmould. Modern hearing aids amplify quieter sounds more than louder sounds so that they always stay within the child's comfortable hearing range.

There are also hearing aids that work by vibration, known as bone conduction hearing aids. This type of hearing aid changes the sound from an acoustic signal into a mechanical signal (vibration). The receiver is a small vibrating pad that allows sound to be conducted through the bone rather than through the outer and middle ear. See page 39 for more information on bone conduction hearing aids.

Your audiologist will program the hearing aids using a computer, before testing them in your child's ear to make sure that the signal coming from the hearing aid matches your child's deafness as closely as possible.



10 Hearing aid features



Your audiologist will assess your child's hearing levels with and without hearing aids. Once the aids have been fitted you'll be asked for your observations about how well your child is responding to sound and the difference the hearing aids make on a day-to-day basis.

If your baby has been fitted with hearing aids for the first time, it's important to watch their reaction to sounds, especially loud sounds. For example, if you notice that your baby blinks often when they're listening to sounds around them, tell your audiologist so that adjustments can be made to the programming if necessary.

Most hearing aids are turned on and off by opening and closing the battery drawer. Modern hearing aids can have several different listening programmes for different situations (for example, in normal and noisy listening situations and when listening to music). When children are very young it's likely that they'll only have one programme and there won't be any controls or buttons to worry about. As they get older and are able to control the hearing aids themselves, programmes can be introduced.

If the hearing aids do have controls you may have a **volume control**, **programme button** or **function switch**.

Volume control: many digital hearing aids don't have a volume control or have a very limited one. This is because the hearing aid can adjust itself automatically to the listening environment. If the hearing aid does have a volume control, make sure you know whether it's active, what difference it makes and when it should be used. After hearing aids have been switched off, they usually return to their default settings whenever they're switched on again. If you aren't sure what level the volume is set at you can turn the aid off and on again to return to the normal listening level.

6 Programme button: there may be a separate button for switching between programmes or it may be part of the function switch (see below). Your audiologist will explain which programmes there are and in which situations they should be used.

7 Function switch: used to turn the hearing aid on and off and may be used to switch between listening programmes. The settings on the function switch can be called different names. Your audiologist will be able to give you information about the settings on your child's hearing aids.

5 A hearing aid will have a **microphone** that can be programmed to be **omnidirectional** or **directional**. These terms describe the focus or priority given to sounds from around the wearer.

Omnidirectional microphones pick up sounds from a wide area all around the wearer. Babies and very young children are always fitted with omnidirectional microphones to allow them to hear as wide a range of sounds as possible.

Directional microphones are designed to give priority to sounds coming from directly in front of the user. This may help older children to focus on one person speaking in a group situation. A child using a hearing aid with a directional microphone may not hear sounds well from next to or behind them (for example, when riding a bike or crossing the road).

Most hearing aids will be programmed so that they automatically switch between omnidirectional and directional settings depending on the listening environment. Most people won't notice the change. Some people prefer to be able to manually switch between programmes as needed.

4 Small elbows (also called tone hooks) may be used with very young children or those with very small ears. The smaller elbow makes sure that the hearing aid will fit snugly on the ear and sit more securely when the child is playing.

8 A **child-safe battery door lock** is a safety feature which stops children from being able to open the battery compartment and swallow the battery. The lock is usually secured with a small screwdriver. For further information on battery safety see page 33.

Some hearing aids will have an **LED visual status indicator** which when glowing, indicates that the hearing aid is working, when there may be a fault, or when the battery needs changing.

! If your child has been fitted with a new hearing aid model and you or your child feel that their old hearing aids were better, talk to your audiologist. Remember that it can take a little time to get used to the sound of the new aids. For example, some digital hearing aids will automatically change settings according to the listening conditions.

11 Using the T programme

Most modern hearing aids offer a T programme, also known as the T setting, telecoil, or just T. If activated, it can be turned on or off using the programme button or function switch

Loop systems are often found in public buildings, such as theatres, train stations, banks, shops or hospitals, usually advertised by the hearing loop symbol. Portable loop systems can also be used at home with compatible TVs, music devices and telephones.

The T programme allows the hearing aid to pick up sound from a loop system, enabling the hearing aid user to hear a person speaking or sound source more clearly. A loop system is silent to non-hearing aid wearers nearby, but sound fed through the system can be picked up by any hearing aids wirelessly, when they are turned on to the T programme and within the area covered by the loop system. This means that a deaf child, with their hearing aids set to the T programme, can immediately hear music, TV, or someone speaking much more clearly, and without any interference from background noise.

The T programme can be activated by an audiologist during programming. However, many audiologists do not activate the T programme for young children as it can be hard for them to understand how it works and when they need to change between programmes. You can talk to your child and their audiologist about when to get the T programme activated.

Depending on how the hearing aid is set up, when the T programme is switched on your child might continue to hear sounds around them as well as those through the loop system, or they might only be able to hear the sound through the loop system. Talk to your audiologist about what would be best for your child.



For more information about T programmes and the different equipment available, talk to your child's audiologist, visit www.ndcs.org.uk/technology, or read our resource *How technology can help*.

12 Using radio aids

Radio aids transmit a person's voice directly to a child's hearing aids. They make it easier to hear over background noise like construction work, music or people talking.

Radio aids are commonly used in schools, as they enable the child to hear their teacher wherever they're sitting in the classroom. This can make it easier for a child to understand the teacher and take part in classroom activities.

A radio aid system consists of:

- a transmitter (worn by the teacher)
- a receiver or receivers (worn by the child).

The transmitter sends the sound of the teacher's voice directly to the receivers. Most transmitters work across large distances and even through walls, making them especially useful for activities like PE, where the child might be moving around. The most commonly used radio aid receivers are small wireless units which attach directly to your child's hearing aid.



Radio aid transmitter

Other receivers can be:

- body-worn (attached to hearing aids with wires)
- built into a hearing aid (known as an integrated receiver)
- a neckloop (a portable loop system that sits around the wearer's neck).



Radio aid receiver

If your child has a mild or unilateral (one-sided) hearing loss, or doesn't wear a hearing aid, they might use a small ear-level receiver instead.

Radio aids can also be useful outside of school, for example when your child is travelling in the car, using public transport or enjoying out-of-school activities such as sports, Scouts or horse riding.

A radio aid transmitter can be connected to a range of other products, (for example a TV, tablet, smartphone or other entertainment device), using a cable or by placing the microphone near the speaker. Your child will then receive the sound directly to their hearing aids from their radio aid receivers.

For more information about radio aids see our resource for parents *How radio aids can help* at www.ndcs.org.uk/radioaids.

13 Keeping behind-the-ear hearing aids in place

Behind-the-ear hearing aids can be difficult to keep in place on babies and small children, or if the pinna (outer ear) is malformed. If the hearing aid is flapping around, ask your child's audiologist if a smaller elbow is available.

Your child's audiologist or hearing aid clinic may provide double-sided discs to stick the aids in place. Some parents use wig tape, which is available from chemists. However, young children may find it painful when the tape is removed or they may be allergic to it.

Hearing aid retainers, sometimes known as 'huggies', are also available. These are thin plastic tubes that go around the pinna. Attached to this tube are two circular bands of soft plastic which are pushed over the hearing aid to keep it in place.

Hearing aid retainers are available from outlets such as:

- Connevans: **www.deafequipment.co.uk**
- Ear Gear: **www.gearforears.com**
- My Little Ears: **www.mylittleears.com**
- Hearing Aid Headbands: **www.hearingaidheadbands.co.uk**.

Hearing aid clips

If you're worried about your child losing their hearing aids, you could try using special hearing aid clips. These include plastic bands that go onto the hearing aids attached to an elastic cord. On the other end of the cord is a clip that you attach to your child's clothing. Some of these clips come in fun animal shapes, such as dinosaurs.



14 Encouraging your child to wear their hearing aids

When your child first starts wearing hearing aids, it's important that you encourage them to wear their aids regularly. The more your child wears their hearing aids, the easier it is to find out how much they're helping.

If you're positive about the hearing aids, your child is more likely to feel positive about wearing them. This is especially true of older children who are wearing aids for the first time.

It's common for babies to take their hearing aids out themselves. Often this is just a developmental stage and soon other things will occupy their attention. You may need to take their hearing aids away for a short time before trying them again while they are distracted by something else.

Sometimes babies and young children will take out their hearing aids when they feel there is nothing of interest to listen to, or because they are bored. Occasionally the hearing aids may be causing genuine discomfort, either from the earmould or from the sound. If your child taking out their hearing aids is an ongoing problem, talk to your audiologist or Teacher of the Deaf.

Useful tips from other parents

- Hold the earmoulds in your hand for a couple of minutes before trying to put them in. This makes them warmer and less of a shock for your child. It also makes them softer, easier to put in and more comfortable. You can also try putting the hearing aids in before your baby or young child normally wakes up, so that they're already in place. Never leave babies and young children alone with hearing aids as they may put them in their mouths.
- Slowly build up the length of time that your child wears their hearing aids. Depending on how your child is taking to the hearing aids, you could startwith just a couple of minutes several times a day. If your child keeps taking them out, stop trying and have a rest. Try again later or the next day when you're both feeling more relaxed.
- Have something ready to distract your child, such as a favourite toy. Perhaps you could even have a special toy that they have only when you're putting the hearing aids in.
- Keep the hearing aids in a special and safe place. If your child takes their hearing aids out, take your child and the hearing aids to the special place and put the aids away. They'll learn to put the hearing aids in the special place when they take them out and you won't have to go looking for them every time they disappear.
- Try to make wearing hearing aids part of your child's dressing and undressing routine. Put the hearing aids in when they get up and take them out when they go to bed. It'll become normal for your child to wear hearing aids when they're awake.



- If you notice your child removing their hearing aids after loud noises or because their ears hurt, or if your baby blinks often when they're listening to sounds around them, check the settings on the aids and talk to your child's audiologist or Teacher of the Deaf.
- Your baby's aids may whistle when you feed them or when they're lying down. This is called feedback, and it happens because the microphone onthe aids is close to something solid. Arranging pillows behind your baby, holding them in a different position or temporarily turning their aids down while they're feeding can help.
- Try to meet other parents of deaf children so they can share their experiences with you. Your child may also get the chance to see another child wearing hearing aids so they feel that they aren't the only one. It may also be useful to meet adults with hearing aids so that your child can see that people of all ages wear them.
- Decorate the aids with stickers and personalise them.
- Let your child have choices. Ask them if they're going to wear the hearing aids. Perhaps offer them two of their favourite things to choose from as a reward when they wear their hearing aids.

These tips are only a starting point. We have more advice at www.ndcs.org.uk/wearinghearingaids.

15 Good listening environments

Hearing aids are programmed mainly to help the wearer hear speech frequencies. Although modern hearing aids are better at reducing interfering background noise, it's important to remember that a lot of background noise is also made up of speech sounds. This may mean your child will find it hard to understand speech when they wear their hearing aids in group situations (for example, at a birthday party, in a noisy restaurant or in an open-plan classroom). Also, sounds 'bounce' off hard surfaces making it harder for your child to listen to individual voices. So they may have problems hearing in a school classroom, gym or dining hall with wooden floors and hard surfaces.

Taking a few simple steps to create a good listening environment will help your child to get the most from their hearing aids. A room with soft furnishings, carpets and curtains will absorb sound instead of bouncing it back. You can also help by turning down any background noise (such as the TV or radio) when you're having a conversation with your child. If you're talking in the car, turn off the radio and close the windows. Try calling your child's name to get their attention before speaking and make sure they can see your face clearly.

In noisy places or difficult listening environments, such as at school, many children find it helpful to use a radio aid or soundfield system, which amplifies sound evenly across a room. There are lots of accessories that can be used with hearing aids to help wearers hear more clearly when they're using the phone, watching TV, using the computer or listening to music.



Read about radio aids and soundfield systems at www.ndcs.org.uk/technology or in our resource for parents *How radio aids can help*. Our resource *How technology can help* has more information on the accessories available.

16 Using the phone with a hearing aid

Many deaf children can use both landline and mobile phones. To use the phone with a hearing aid the wearer needs to hold the phone receiver near the hearing aid microphone. The microphone on behind-the-ear hearing aids is positioned at the top of the ear so a child will need to hold the phone slightly higher than usual. They'll also need to angle the phone receiver so that it faces the microphone. That way the listener can benefit from the hearing aid when using the phone. Occasionally, hearing aid wearers notice a buzzing (interference) when using a mobile phone with their hearing aid so it can be a good idea to try out different models of phone before buying to check compatibility.

Many of the latest mobile phones and smartphones are compatible with hearing aids and are rated as to how well they work with a hearing aid on the T (telecoil) and M (microphone) programmes. The scale is from 1–4, with 4 being the best. A phone rated T3/M3 or T4/M4 will generally produce little or no interference with a hearing aid and so give good sound quality.

Adaptations are available to help your child hear more clearly on the phone. For example, phones that have an in-built inductive coupler can be used with the hearing aid's T programme. If feedback is a problem or if you need to improve clarity when using the phone in noisy situations, children can use a neck or ear loop so they can use the phone while holding it away from their ears.

Made for smartphone hearing aids can be paired with compatible smartphones and tablets, meaning audio travels wirelessly from the paired device directly to the hearing aids. These hearing aids can be managed from an app on the device, allowing users to choose volume and balance, view the battery life, or activate environmental presets (for example they can be adjusted for a noisy environment).

Made for smartphone hearing aids aren't currently available from the NHS, but can be purchased privately.



17 Technology

Your child's hearing aids can be connected to many different products (including TVs, entertainment devices, tablets, smartphones, landline phones and radio aids) by using the following technologies.

Direct input shoes attach to the bottom of a hearing aid and will allow your child to attach other products directly to their hearing aid. You may need to visit the audiologist to make sure that your child's hearing aid is set up to work with a shoe. Each hearing aid model will have a specific model of shoe that works with them. If your child gets new hearing aids, they may also need to be fitted with a different model of shoe.

When the shoe is attached to the hearing aid you can use it to connect to a radio aid receiver or audio direct input lead. Direct input leads connect an entertainment device directly to your child's hearing aids using a cable. Again, your child's hearing aids must be set up by their audiologist to accept these leads.

If your child has a radio aid, they can connect their ear-level receivers to their hearing aid using the shoe. This means that any sounds sent from the radio aid transmitter (teacher's voice or sounds/music from a tablet, smartphone or entertainment device) will go straight to their hearing aids and they should be able to hear them clearly.

Streamers send signals digitally to your child's hearing aids and link with other products that use Bluetooth, such as smartphones, laptops or tablets. They can also work with your TV or home phone using a special adaptor. A streamer is generally worn around the neck or clipped to clothing.

Bluetooth technology is a wireless communication technology which allows devices such as mobile phones, smartphones, tablets and laptops to communicate with each other over short distances. Because Bluetooth transmissions 'hop' between frequencies they don't suffer from interference. You do need to 'pair' devices before they can communicate but this is quick and easy to do. Some hearing aids have built-in Bluetooth technology (e.g. made for smartphone hearing aids), but these aren't currently standard issue from the NHS.

For information about the **T programme** see page 16.

The type of device your child can use will be determined by their hearing aid. For example, if your child has a Phonak hearing aid they will only be able to use the Phonal streamer. This means that if your child's hearing aids are changed they may not be able to use their current streamer.

18 Looking after your hearing aids

When your child first gets their hearing aids you should be given a hearing aid record book. You'll need to show this book when collecting replacement batteries.In the book there's room for the audiologist to write down information about each hearing aid and details of any repairs.

Checking hearing aids

You should check your child's hearing aids regularly. For babies and young children you should check them every day before they wear them. A daily check and listening test can help you find any faults in your child's hearing aids, many of which can be put right easily.

If your child is old enough, you can ask them how the aid is sounding and encourage them to tell you about any changes. Your child's Teacher of the Deaf, school staff and audiologist should also be carrying out tests.

Your child's audiologist or Teacher of the Deaf should show you how to check that your child's hearing aids are working and give you a hearing aid care kit.

A short video demonstrating how to perform a daily check of your child's hearing aids and how to use your care kit is available at www.ndcs.org.uk/hearingaidswork.



Hearing aid care kit

There are items that will help you keep your child's hearing aids in good working order and as hygienic as possible. You should be able to get most of these from your child's audiologist.

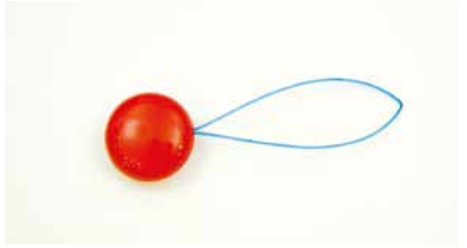
A typical care kit will contain the following items.



Stetoclip and attenuator: a stetoclip is a plastic headset that lets you listen to your child's hearing aid and check that it's working properly. If your child wears powerful hearing aids you should always use an attenuator which reduces the level of the sound and allows you to listen at a safe and comfortable volume.



Earmould puffer: this blows moisture out of the earmould and tubing. Condensation can build up quickly in the earmould tubing and it's important to remove it as it can reduce the sound that your child hears through their hearing aid.



Earmould threader: this is a handy tool when it's difficult to thread the tubing through the earmould.



Drill: you can use a small drill to help remove old tubing from an earmould.



Spare pre-bent tubing: it's useful to have some spare tubing to replace any tubing that becomes cracked or damaged. Different types of tubing are available so you should check with your audiologist to make sure you're using the correct type.



Battery tester and spare batteries: a battery tester checks how much power is left in a battery.



Earmould cream: a small amount of petroleum jelly or a special earmould cream (such as Otoferm) on a conventional earmould makes it easier to put into your child's ear and can create a better seal, helping to prevent feedback.



Drying tablets: special kits are available which you can use to dry out hearing aids overnight. The aids are placed in a small case together with a special moisture-absorbing tablet. Moisture can damage a hearing aid so using a drying kit can help make sure it continues to work properly.

Visual checks of the hearing aids

- Is the hearing aid's casing cracked or damaged?
- If a microphone cover is fitted (which is sometimes part of the elbow), is it secure and free from blockage?
- Is there any obvious damage to the elbow (look for holes, dents or cracks)? If a filter was fitted, make sure it's still there.
- Is the elbow wobbling about?
- Has the flap that covers the programming controls been opened or lost?
- Is there a problem with the battery compartment?
- Is there any obvious damage to the battery contacts inside the battery compartment?
- Are there any signs of rust (or rust staining) inside the battery compartment?
- Hold the hearing aid firmly between the thumb and index finger and shake it gently. If there's a rattling sound, a part inside the hearing aid could be loose.
- Is there any condensation or moisture in the tubing or elbow?

Listening test of the hearing aids

Fit the stetoclip over the meatal tip (the part of the earmould that goes furthest into the ear canal) or remove the earmould tubing from the elbow and push the end of the elbow into the stetoclip tubing.

If you remove the earmould, make sure you return it to the correct hearing aid.

Hearing aids usually have a small red or blue marker to indicate which ear they've been programmed for: red = right, blue = left. This marker is usually on the bottom of the hearing aid casing or inside the battery drawer. If you have good hearing, you can do the listening test below every day. If your child wears powerful hearing aids you should always use an attenuator. If you are deaf and cannot do the listening test yourself, ask a hearing family member or Teacher of the Deaf to test the hearing aids regularly.

- Turn on the hearing aid and talk to the aid throughout the listening test. There will be noises created by handling and moving the hearing aid. Be careful not to rub your fingers or clothes across the microphone. If you can't hear your own voice through the aid, you may have a faulty battery or battery contacts, or you could have the batteries in the wrong way round. Check that the stetoclip tube is not kinked and blocking the sound. If you still hear nothing, there's probably a fault with the hearing aid and you'll need to take it back to your child's audiologist or hearing aid clinic.
- You shouldn't hear any crackles or jumps in volume when you listen to your own voice. If the hearing aid has a volume control gently press it – the sound should not turn off. If the hearing aid does any of these, you need to take it back to your child's audiologist or hearing aid clinic.

- While listening, gently squeeze the hearing aid case, particularly near the battery compartment. Doing this shouldn't stop you from hearing your own voice. If it does, you need to take the aid back to your child's audiologist or hearing aid clinic.
- Most hearing aids incorporate the on/off switch with the battery door. Open and close the battery door to make sure that the aid switches on and off.
- If your child's hearing aid has a T programme, it's possible to do a quick test. Use the programme button or function switch to select the T programme. At this stage you won't be able to hear your own voice through the hearing aid. Switch on your TV and hold the hearing aid near to it – you should hear a buzzing sound. Alternatively, if you have a battery operated watch with a second hand, hold the hearing aid against the watch and you'll hear the ticking of the second hand. This will tell you that the T programme is working. The test won't tell you how clear the sound is. If your child is old enough, regularly ask them about the quality of the sound that they hear with the aids in the T programme.

Even hearing aids that are working can sound a little strange to people with good hearing. If you listen to them regularly, you'll become familiar with how your child's hearing aids sound and how loud they usually are. If you're in any doubt or think that the sound or loudness has changed, get the hearing aids checked by your child's audiologist or Teacher of the Deaf.

Cleaning hearing aids

Although many hearing aids are now described as water resistant you should never immerse them in water. Make sure they're taken out of your child's ear when swimming or having a bath or shower. You can wipe over the casing with a **dry** cloth if needed.

If a hearing aid does accidentally get wet you should open the battery drawer, remove the battery and place the hearing aid in a drying pot which usually comes with your care kit. If the hearing aid still doesn't work you'll need to return it to your audiologist.

Cleaning conventional earmoulds

Conventional earmoulds can be cleaned thoroughly using soap and water. First detach the earmould's flexible tubing from the hearing aid's hard plastic elbow. The earmould can then be washed in warm soapy water. Run water through the tubing to remove debris. If there's wax build-up in the end of the tubing, use a small brush or the eye of a sewing needle to remove it. Make sure the earmould is completely dry before reattaching to the hearing aid by using the earmould puffer and/or leaving overnight.

Don't clean earmoulds with disinfectant or bleaches, or leave them in warm places,such as on radiators or in airing cupboards, as the chemicals and heat will damage the earmould material.



If you notice a strong or unusual smell from an earmould, your child may have an ear infection. You should take your child to your family doctor (GP) as soon as possible and tell your audiologist. The hearing aid shouldn't be used while the ear is infected and a new earmould should be made as soon as the infection has cleared up.

While you're washing the earmould, have a close look at it to check that:

- the tubing isn't kinked
- there are no holes or splits in the tubing or mould
- the tubing is soft and flexible and hasn't become hard, brittle, or discoloured
- the tube is secure in the mould.

The tubing should be changed on a regular basis , usually every 4-6 months. If the tubing needs to be replaced, your child's audiologist has shown you how to do it and you feel confident to do so, make sure you replace the tubing with the same size and type as the old tubing. There are step-by-step instructions on pages 30 and 31. Otherwise, take the hearing aids back to your child's audiologist and ask them to do it.

Faulty hearing aids

If you find a fault with the hearing aid that you can't easily fix yourself, contact your child's audiologist who will arrange to replace the hearing aid with the same model or will loan your child a similar hearing aid while theirs is sent for repair. If you bought the hearing aids privately you'll need to contact your hearing aid dispenser.

19 Replacing the earmould tubing

Ask your child's audiologist or hearing aid clinic to show you how to replace the tubing in your child's hearing aids.

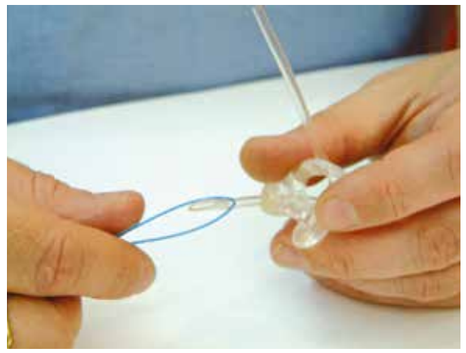
The following steps will help you to change the tubing yourself. You can ask your child's audiologist for some spare tubing so you can practice changing it. Tubing comes in different sizes, so make sure the spare tubing is the same size as the tubing your audiologist has fitted.



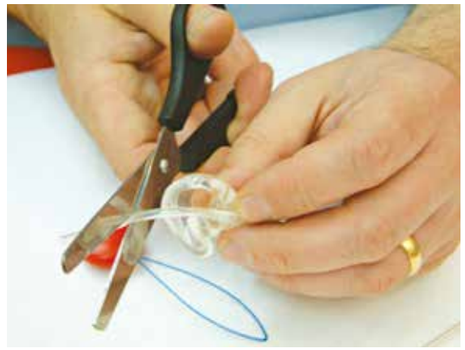
1 Remove the old tubing from the elbow of the hearing aid. Using gentle force, pull the tubing from the outside face (the side that faces out when you look at the earmould in your child's ears) of the earmould. If the tubing has been glued in place, you may have to use something like a tiny screwdriver blade to ease the tube away from the earmould. Take great care not to damage the earmould. If you're unsure, take it to the hearing aid clinic for them to remove.



2 Take your earmould threader and feed the nylon loop through the hole in the earmould from the meatal tip through to the outside face. Using the right size of tubing, cut the end of the new tubing at an angle and feed it through the loop of the threader. Fold the tubing over the loop and pull the loop back out of the earmould. The tubing should come with it.



3 Pull the tubing through. Make sure that it's in the same position as the old tubing so that the bend in the tubing is pulled up to the mould, meaning the tube stands upright to meet the hearing aid at the top of the ear.



4 When you're happy with the position of the tube, cut it off flush with the face of the meatal tip of the earmould. Then pull the tube back about half a millimetre.



5 Fit the earmould into your child's ear and put the hearing aid in position on the ear. This will help you to see how much you need to cut off the end of the tubing to get a good fit. Make sure the tubing is not crushed or kinked on the bend where it leaves the earmould.

If you're retubing earmoulds which use 'libby' tubing, these should be retubed from the meatal tip. This is the reverse of normal retubing.

A short video demonstrating how to change earmould tubing is available at www.ndcs.org.uk/hearingaidswork.

20 Hearing aid batteries

Hearing aid batteries are sometimes called cells or button cells. They come in different sizes and are given different code numbers by different manufacturers and distributors. However, all hearing aid batteries share a colour code system, so the coloured sticker or tab on the battery will be the same regardless of the manufacturer.

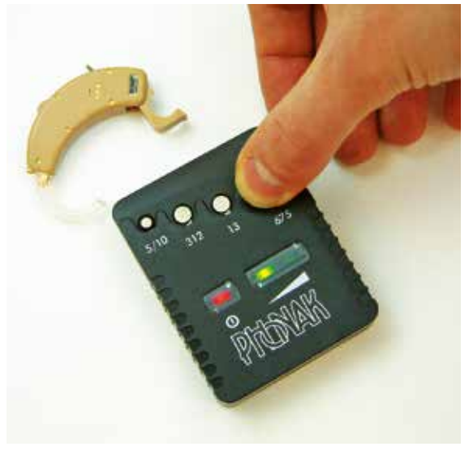
Hearing aid batteries are 'zinc-air' and will be supplied with small sticky tabs on one side. You need to remove the sticker just before you put the batteries into the hearing aid.

If a new battery isn't working, check that it's been put in correctly. Look for the '+' sign on the battery and the compartment, and match them up. If it's still not working, use a battery tester to check whether there's any power left in the battery.

A battery tester can tell you whether the battery is working and some can tell you how much power is left. They'll usually have lights or a meter. How long a battery lasts will depend on the type and power of the hearing aid and how often it's used. Batteries can last a few days or several weeks. Your child's audiologist should be able to tell you roughly how long the batteries should last.

Batteries often run out suddenly rather than losing power gradually. If children wear their hearing aids regularly, many parents get to know how long a battery will last. They then change the battery regularly and don't wait for it to fully run out. You could put the battery sticker on the calendar each time the battery is changed to give you a visual record. For older children the hearing aid may be programmed to make regular beeps that will warn them that the battery is running out.

Batteries are issued free of charge with NHS hearing aids. Replacements should be available from your child's audiology service or other local GP and health clinics. You may be asked to take your child's hearing aid record book when collecting batteries. This book will hold information on what hearing aids have been fitted and the type of battery issued.





If you've bought your child's hearing aids privately, you'll need to pay for the batteries which are available from most chemists or large supermarkets. Sometimes you can arrange for your local hearing aid clinic to provide batteries for free.

Battery safety

It's potentially dangerous for a child to swallow any battery. If this happens, immediately contact your nearest accident and emergency department (Accident and Emergency) and let them know what type of battery has been swallowed and how long ago. Take a similar battery and the packaging with you so that the hospital staff can identify the type of battery and know what action they need to take.

Young children can also get small batteries stuck in their nose and ears and you may not notice until they start to cause ulcers or other problems. It's important to keep a check on your batteries and store them out of reach of young children.

Get rid of used batteries carefully as they contain chemicals that could be harmful. Some audiology services will ask you to return old batteries so that they can be recycled.

It's good practice to keep your used batteries in the original packaging so that you can keep them safe and make sure that no old batteries have gone missing. If you aren't asked to return old batteries you can safely dispose of them in your household rubbish. However, many local councils now have recycling schemes for batteries including household collection. Alternatively, many large stores offer boxes to keep old batteries in as well as recycling schemes.

! Never leave batteries in hearing aids when they're being stored for a long time. If your child has a spare hearing aid, it's important to remove the battery when it's not being used. Batteries can leak and cause expensive damage to the hearing aid.

Batteries need to be stored correctly so that they don't touch each other. If the batteries still have power in them, they can get hot if their terminals touch.

Try not to let young children see batteries being changed. It's safer if they don't know that the battery compartment opens. Young children should have childproof battery locks (also known as tamper-proof battery doors) fitted to their hearing aids. Ask your audiologist to confirm that your child's hearing aids have these if you're in any doubt.

! Even if your child's hearing aids have a childproof battery lock you should never leave babies or young children alone with their hearing aids. Hearing aids and moulds are small items that could be a choking hazard if removed and put in the mouth.

21 Feedback

Most hearing aids will whistle at some time or another. This is known as feedback. Feedback occurs when the microphone picks up the sound coming out of the hearing aid and amplifies it. Modern hearing aids use a range of internal feedback management systems that the audiologist will set when necessary to help reduce the amount of whistling.

The most likely reason for feedback is that the earmould isn't a good fit. This allows sounds to 'leak' from around the earmould and be picked up by the hearing aid's microphone. Because young children grow quickly, new impressions should be taken and earmoulds replaced regularly. For very young babies this may be at least every month.

There are other causes of feedback and some can be solved more easily than others. Possible causes include:

Earwax

Earwax can cause feedback as more sound is reflected back out of the ear. If an earmould is a good fit but it has started to produce feedback, this could be an early sign of earwax. It's important not to try and remove the wax yourself as putting cotton buds into the ear can push the wax deeper into the ear canal. Ask your audiologist or family doctor (GP) to check the ears for wax instead.

Faulty elbow (tone hook)

The elbow is the plastic hook that fits between the hearing aid and the earmould tubing. If it's faulty (for example, if it has a hole or is cracked, split or chewed) it's very important to replace it with exactly the same type of elbow. You can get a replacement from the clinic that issued your child's hearing aid.

Feedback from the aid itself

Take apart the hearing aid and the earmould. You can do this by gently pulling apart the soft tubing of the earmould from the hard plastic elbow of the hearing aid. After checking that the elbow is in good condition, press a finger over the end making a good seal. When the hearing aid is turned on you shouldn't get any feedback. This means that the aid is working properly. If you can hear whistling, there's a problem inside the hearing aid and it should be returned to the clinic for repair.



Jaw movement

Jaw movement may make the earmould come out slightly and cause feedback.Using a different earmould material or a new earmould with a different length meatal tip (part that goes inside the ear canal) might help, as could using a different length of earmould tubing. Try using petroleum jelly or a special cream, such as Otoferm. A small amount can help to make a seal between the earmould and the ear itself. In some cases this can help to reduce feedback and slide the earmould more smoothly into the ear.

Poor earmould

Problems can start when the earmould becomes hardened and cracked due to age. In this case, a new earmould would need to be fitted as soon as possible.

Small ear canal

Children with particularly narrow ear canals can sometimes have problems with feedback as sound reflects off the ear canal walls more easily. Certain groups of children are more likely to have narrow ear canals, such as children with Down's syndrome.

Feeding young babies

If you have a young baby who's wearing behind-the-ear hearing aids, you may find that feedback occurs when you hold your baby close, for example, while feeding. Feedback may also happen when your baby is lying down with their hearing aids on. You may need to hold your baby in a different position or take the hearing aid out for a short time. If feedback becomes a problem, talk to your child's audiologist or Teacher of the Deaf.

22 Other types of hearing aid

Hearing aids can be worn on the body, behind the ear or in the ear. The most common types of hearing aid used by children are behind-the-ear models. However, there are occasions when other types of hearing aid may be more suitable for a child.



Open fit hearing aids

Open fit hearing aids are behind-the-ear hearing aids that are worn on special 'open' earmoulds or soft ear tips (known as a dome or mushroom tip). Open earmoulds are made to fit from ear impressions in the same way as conventional earmoulds. They hold standard tubing that carries sound from the hearing aid and into the ear. They're designed to channel sound into the ear canal without blocking external sounds around the wearer.

They're most suitable for children with mild or moderate high frequency deafness as they allow natural hearing of the low frequencies while amplifying the higher frequencies. They aren't suitable for more severe deafness as the amplified sound will leak from around the open mould and re-enter the hearing aid causing feedback (see pages 34 and 35 for more information on feedback).

Alternatively, soft ear tips in a range of sizes may be used. The sound is channelled from the hearing aid to the ear canal using a very thin tube (microtube). This design is more cosmetically appealing to some wearers but may not be as secure in the ear as an earmould. This makes them suitable for older children or teenagers.

Receiver-in-the-ear hearing aids are also suitable for open fit technology, see below.

Receiver-in-the-ear hearing aids

Receiver-in-the-ear (RITE) or receiver-in-the-canal (RITC) hearing aids look similar to other behind-the-ear hearing aids. However, the 'receiver' (or speaker) that's normally housed within the casing of behind-the-ear hearing aids is instead placed inside the ear canal. The receiver takes the electrical signals and turns them into sound waves.

Instead of a typical earmould, a thin electrical wire replaces the flexible tubing and connects the hearing aid to a small earpiece in the ear canal, housing the receiver. An advantage of receiver-in-the-ear hearing aids is that the microphone and receiver are further apart so there's less chance of feedback. Also, because the receiver is removed from the hearing aid, the behind-the-ear part can be smaller, making it less noticeable on the ear. However, they may be less secure to wear than a behind-the-ear hearing aid, and the wearer will need to check the earpiece and receiver daily for wax to stop faults occurring. They aren't suitable for people who have problems with discharging ears.

Receiver-in-the ear hearing aids don't have a direct audio input facility although some do have the T (telecoil) programme. For these reasons they are most likely to be used by older children or teenagers and are usually suitable for mild and moderate to severe deafness.



In-the-ear hearing aids

In-the-ear (ITE) hearing aids are more likely to be suitable for older children who have a mild to moderate hearing loss. Your child's audiologist will be able to tell you whether one would be suitable for your child. All of the parts of an in-the-ear hearing aid are enclosed in the shell, which is custom-made to the user's ear and looks similar to an ordinary earmould. Most of the shell fits inside the ear leaving the faceplate facing outwards.

Because all the parts need to fit inside the shell, the child's ear canal needs to be large enough to take an in-the-ear hearing aid. These hearing aids produce feedback, just like behind-the-ear hearing aids, when the shell becomes too small. When this happens, the audiologist needs to take a new impression and send the hearing aid away to be re-cased.

Because of their small size, in-the-ear hearing aids don't always have enough room for a telecoil and therefore have no access to a T programme. For children who use a radio aid with direct audio input, (see page 17 for details), in-the-ear hearing aids aren't usually the most appropriate choice as there's no direct audio input facility. However, they may be able to use direct audio input using a neckloop and the T programme (if this is available). For these reasons, in-the-ear hearing aids aren't usually considered suitable for young children, and are not routinely provided by NHS audiology services. Talk to your child's audiologist about the options, and make sure they are aware of any additional technology your child uses with their hearing aids, such as digital streamers and radio aids.



In-the-canal aids

Generally, in-the-canal (ITC) hearing aids are smaller and less noticeable than in-the-ear aids. The shell (which is custom-made for each user) fits into the canal part of the ear. Because of their small size, in-the-canal hearing aids aren't suitable for young children.

In-the-canal aids may have fewer controls than other hearing aids and don't have a direct audio input facility. However, some do have a T programme. Some in-the-canal hearing aids are described as 'completely in the canal (CITC)', 'deep', 'semi-deep' or 'peritympanic' canal aids. The hearing aid itself goes deeper into the ear, reducing the air space between the meatal tip of the aid and the eardrum. In-the-canal hearing aids aren't normally provided by the NHS.

Open fit, receiver-in-the-ear, in-the-ear and in-the-canal hearing aids all need to be cleaned and cared for in different ways. Ask your audiologist to show you how best to do this.



CROS and BiCROS hearing aids

Children with a profound unilateral (one-sided) deafness may benefit from a special type of hearing aid known as a CROS aid (contralateral routing of signal).

Although it's described as a hearing aid, a CROS aid doesn't amplify sound. It simply transfers sound from the deaf ear to the side of the hearing ear. The main advantage of using a CROS aid is that it can help the child to hear sounds from all directions.

A CROS aid includes two units which both look like ordinary behind-the-ear hearing aids. However, the unit worn on the deaf ear just contains a microphone. It's connected to the other unit, usually by a wireless radio link. The child listens to the sounds picked up by the microphone through the second unit, which they wear on their hearing ear.

BiCROS aids combine CROS technology with a regular hearing aid. They are suitable when there's no useful hearing in one ear and the other ear has some deafness.

Spectacle aids

Spectacle aids are rarely used by children. They combine a hearing aid into the arms of a pair of glasses. These aids are produced for the convenience of people who need to wear hearing aids, as well as glasses, all of the time. Two types of spectacle aids are available:

- **acoustic aids**, where the aid is placed in the arm of the glasses and the sound is carried to the ear by tubing and the earmould
- **bone conduction aids**, where the arms of the glasses provide pressure to maintain contact between a vibrating transducer and the mastoid bone.

Bone conduction hearing aids

Bone conduction hearing aids (BC hearing aids) are suitable for children who have conductive deafness. This could be caused by microtia (malformation of the outer ear), atresia (malformation of the ear canal), chronic ear infections or longstanding glue ear. They're also suitable for mixed deafness or unilateral deafness.

Unlike behind-the-ear hearing aids, BC hearing aids vibrate in response to sound received by the microphone. These vibrations are then transmitted through the bones of the skull to the cochlea where they're converted into sound in the usual way, bypassing the outer and middle ear.

The transducer (vibrating part of the BC aid) sits behind the ear, usually on the mastoid bone (the large bone you can feel behind the ear) and vibrates in response to sound entering the microphone. The transducer is held against the mastoid bone by a soft headband, a metal-sprung headband or, very occasionally, spectacle arms. The headband needs to hold the transducer firmly in place to allow the vibrations to pass efficiently through the skull, otherwise the levels of sound your child hears may vary. If you aren't sure what the correct position is, check with your child's audiologist.

There are different makes of BC aids and the soft headbands are available in a range of sizes and colours.

Checking bone conduction hearing aids

The types of checks that you can carry out on a bone conduction hearing aid are limited. The most common problems occur with the cords and transducer.

If you hold the transducer between your thumb and index finger while making a long 'laaaaa' note into the hearing aid's microphone, you should feel a vibration. While doing this, gently squeeze the device at different points. The vibration should be continuous.

Pay particular attention to the ends of any cord where they enter the hearing aid if your model has one. If the vibration starts and stops, you probably need a new cord.

You can also hold the transducer up to your own mastoid bone while wearing earplugs and listen to the sounds produced. If you find any problems while doing these checks, take the hearing aid back to your child's audiologist.

Hearing implants

For some children, a hearing implant may be more suitable. These include:

- bone conduction hearing implants
- active middle ear implants
- cochlear implants
- auditory brainstem implants (ABI).

For more information on hearing implants contact our helpline or go to www.ndcs.org.uk/implants.

23 What to do if hearing aids are lost or damaged

If your child wears NHS hearing aids, your child's audiologist should be able to offer an immediate replacement for a lost NHS hearing aid. If the earmould has been lost as well, a new one will need to be made. New earmoulds should be ready within one working week.

If the hearing aid was bought through the NHS, your child's audiologist will have to order a new hearing aid from the manufacturer, unless they already have one in stock. They should replace the aid with one of the same make and model as the lost aid and, if necessary, offer to lend a different hearing aid while you're waiting for a replacement.

If the hearing aids were bought privately, you're responsible for replacing them. If you have them insured, you'll need to contact your insurance company for details of how to claim on your insurance policy.

Charges for lost or damaged hearing aids

The NHS provides all hearing aid equipment on a permanent loan basis and it always remains the property of the NHS rather than the wearer. NHS equipment should always be returned when it's no longer needed.

It's expected that parents will take reasonable care of their child's hearing aids. However, should loss or damage occur, there are guidelines that the NHS should follow before charges are made.

Very occasionally, aids are fitted and supplied by your local education service or provided by schools. In these circumstances, you need to be clear about:

- who owns the aids
- whether they can be taken home from school
- whether you'll have to contribute to the cost of any replacement
- the procedure for repairs and maintenance
- who needs to be told about tubing and earmould problems.

The rules governing NHS aids may not apply to hearing aids issued by education services or schools.

Insuring hearing aids

NHS hearing aids can't be insured as they're the property of the NHS. However, it may be possible to insure against the risk of being charged for their loss or damage. Private hearing aids are your property and you're responsible for the full cost of any repair or replacement.

In either case, if you do decide to take out insurance, you should shop around for the cheapest 'all risks' policy. The easiest way to insure hearing aids is to add them to the 'all risks' section of your household insurance policy, if you have one. You'll need to check if the cost of replacing one hearing aid is less than the maximum allowed for one item. You'll also need to check if the equipment is covered by your insurance policy while you're on holiday. If your insurance company won't cover your child's hearing aids, either free of charge or for a small extra fee, you may want to consider changing your household policy to one that meets your needs.



24 Buying hearing aids

The NHS supplies a range of good quality digital hearing aids and all deaf children who live in the UK are entitled to free hearing aids through their local audiology service. You may choose to buy your child's hearing aids privately but try to keep in touch with your child's NHS audiologist where possible. This means your child can use NHS audiology services as and when they need them.

Buying hearing aids privately can be very expensive and most private hearing aid dispensers don't work with children. If you decide to buy your child's hearing aids, make sure your hearing aid dispenser has been trained to fit hearing aids to children and is registered with the Health and Care Professions Council (HCPC).

The HCPC regulates health professionals in the UK in order to protect the public and make sure that the professional is working to current standards.

Some hearing aid dispensers have a money-back guarantee so that you can return the hearing aids within a set time if they aren't suitable. It may take your child a while to get used to the sound levels of the new aid, so the guarantee period should be at least six weeks. You'll need to ask whether a follow-up service is included in the price or if you have to pay separately. For example, the hearing aids may need to be fine-tuned after several weeks. Growing children also need new earmoulds at regular intervals and batteries will need to be replaced regularly. You'll need to know whether the aids have a warranty, how long this lasts for and what repairs are covered, and how quickly you can get replacement hearing aids from the hearing aid dispenser.

You can check if your hearing aid dispenser is registered by going to www.hcpc-uk.co.uk and using the 'check the register' tool.



You'll need to think about asking for the T programme facility if your child uses a loop system and/or the direct audio input facility if your child uses a radio aid.

You may also need to consider whether any support services that you use, such as a Teacher of the Deaf, have experience of supporting children with different types of hearing aids.

You may want to insure the hearing aids. You can sometimes do this under your household contents insurance but, as one digital aid can cost up to £2,000, you'll need to check that your household insurance will cover this for a single item. You'll also need to know how quickly your insurance company could process an insurance claim if your child lost or damaged their hearing aids.

Some people buy hearing aids abroad. If you decide to do this, you'll need to know whether a follow-up service is provided in the UK and what would happen if the hearing aid broke down. Bear in mind that the hearing aids might need to be fine-tuned after they're fitted, so you may have to return for another visit a few weeks or months later.

Be careful of hearing aid adverts and promotional literature, as these may make claims about features or performance that aren't relevant for your child. If you are considering buying hearing aids privately, talk to your child's audiologist or Teacher of the Deaf or call our helpline.

You may find the checklist below helpful.

Checklist for parents buying hearing aids

- [ ] The hearing aid dispenser is registered with the Health and Care Professions Council.
- [ ] The hearing aids can be used with a loop system and have a direct audio input facility (if needed).
- [ ] The hearing aid dispenser has given me written details of the prices and the warranty period.
- [ ] The hearing aid dispenser has given me written details of the trial period.
- [ ] The hearing aid dispenser has given me written details of the follow-up service, including the cost of new earmoulds and batteries.
- [ ] The hearing aid dispenser has told me who to contact if the hearing aids need repairing or servicing.
- [ ] The support services that my child uses will be able to support my child using these hearing aids.
- [ ] I have insured the aids against accidental damage and loss.
- [ ] I have checked how quickly the aids can be replaced if they're lost or broken

25 Our information and support

Joining the National Deaf Children's Society gives you access to a wide range of services that can support you at different stages of your journey and your child's development. We want to do all we can to give you the confidence to support your child and make decisions.

The right information, at the right time

We offer free, balanced information about all aspects of childhood deafness, both on our website **www.ndcs.org.uk** and in our publications. Our online content and information booklets can help you make some of the difficult decisions you'll be faced with.

Helping you make informed choices

Every deaf child is different and families should be able to make decisions that are right for them. That's why we give independent support, setting out all the options, so families can make informed choices about how they want to communicate, or which type of hearing technology is best for them. We never promote a particular approach, and we're always clear about the impact it will have on a child's life.

Support when you need it

Any questions? We're here to help.

Freephone Helpline: **0808 800 8880**

helpline@ndcs.org.uk

www.ndcs.org.uk/live-chat





About us

We're here for every deaf child who needs us – no matter what their level or type of deafness or how they communicate.

Visit our website **www.ndcs.org.uk** or contact our Freephone Helpline to find out how we can support your child at every stage of their life.

Join us for free and you'll be able to:

- download or order our free information
- come to our events
- be a part of our online community
- borrow equipment through our technology loan service
- read about other families' experiences in our quarterly magazine and email updates
- access support.

National Deaf Children's Society

We are the National Deaf Children's Society, the leading charity for deaf children.

Freephone Helpline:

0808 800 8880 (voice and text)
helpline@ndcs.org.uk

www.ndcs.org.uk

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For resource references or to give us your feedback email informationteam@ndcs.org.uk.

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