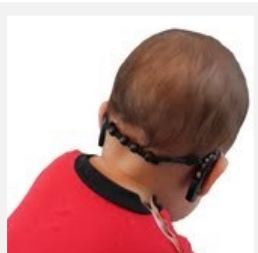


Basic problems keeping hearing aids on



If hearing aids are working well children should want to keep them on. If a child is not keeping the hearing aids on there may be a reason.

A child may reject hearing aids if they are too loud and uncomfortable, or if they are too soft and she cannot hear with them. The audiologist can check that the child's hearing thresholds with the hearing aids are 20-25 dB - not too soft or too loud. If a child with hearing aids hears at 0 dB they will uncomfortably loud. If a child hears at 40 dB she will not be able to hear soft speech, or understand speech further than a few feet away.

A child may reject hearing aids if the earmold is uncomfortable and causing a sore in the ear. Look at the ear to see if there are any red spots. If the child winces when putting the earmold in, try putting a thin coat of lubricant like Oto-ease or K-Y jelly on the earmold before putting it into the ear. Do not let any lubricant get into the earmold opening or it will block the sound.

Check the earmold to be sure that it is not clogged with wax which will prevent sound from getting through.



If a child has put something in her ear (a bean, a bug) or has a lot of wax in her ear canal, it will be uncomfortable to insert the earmold and may cause the child to reject the hearing aid.

Some children will reject hearing aids when they have ear infections. The ear infection may cause the ear canal to feel uncomfortable so it is painful when the earmold is in place.

What do hearing aids need to do?

Most of what a child learns she learns by overhearing - not by someone speaking to her directly. For this to happen, hearing aids need to provide enough sound for a child to hear soft speech. Even with hearing aids, children will not hear 'normally' and may need three times the exposure to learn new words and concepts. Hearing high frequencies is very critical (such as hearing the difference between cat, cap, calf, cast). For children to hear soft speech and high frequency speech sounds, we need to be certain that hearing thresholds with the hearing aids are at 20-25 dB for all speech sounds. Once the audiologist has set the hearing aids to provide sufficient benefit, parents need to take over and be certain hearing aids are working well every day.

Hearing aids need to be checked daily.

When a child gets a hearing aid, parents should get a listening tube. Each morning, someone needs to listen to the hearing aid to be sure it is working. Plug one end of the listening tube into the end of the earmold with the other end into your ear. Then just talk. Repeat the **Ling Sounds (ah, ee, oo, mm, sh, ss)** slowly, and then say some simple sentences. When listening every day, the sound of the hearing aid will become familiar and you will be able to hear a change if there is something wrong. If the hearing aid "sounds funny", try taking off the earmold and check the hearing aid without the earmold. If it sounds okay without the earmold, check that the earmold is not clogged with wax, and check the earmold tubing to be sure it looks fine. If it still "sounds funny" and you know it is not a simple problem with the earmold then the hearing aid needs to go back to the audiologist to be checked. Once the parent has checked the hearing aid it needs to be checked on the child. Without letting the child see your face, say the Ling sounds in a normal to soft voice, pausing between each sound, and watch the baby to see if she alerts to the sound.

Children's Hearing Aid Retention Project

Karen L. Anderson PhD & Jane R. Madell PhD

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<http://successforkidswithhearingloss.com/hearing-aids-on>

Hearing Aids and Babies

(birth-1 year)

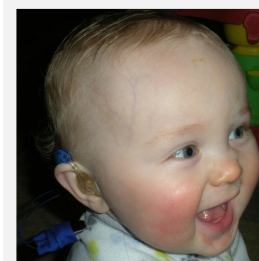
Why are hearing aids needed?

The auditory portion of the brain needs to be developed before a child can use hearing to learn speech, language, social skills and reading. To develop the auditory brain, a child needs to hear ALL DAY long, every day. The speech the child hears needs to be clear and loud enough to perceive soft speech sounds.

Typical hearing children hear 46 million words by age 4 years. Children who hear fewer words will have reduced language skills and reduced IQ scores.

Children need 20,000 hours of listening before they are ready to begin to learn how to read.

What does this mean for a child with hearing loss?



It means that to be ready to start school like other children of the same age it is essential for the child to wear hearing aids every waking hour. Without consistent, all-day use of hearing aids the child is not likely to have language and social skills

similar to age mates, nor will she be ready to learn to read at the same time. Even children with 'mild' hearing loss may have language more like 3 year olds when they are kindergarten age if they do not consistently use hearing aids. The important brain development period of the first year to two years cannot be made up later - children do not 'catch up' once they go to school.

Babies listen for about a year before they say their first word. A baby with hearing loss who wears hearing aids for 2 hours out of 8 waking hours a day may take more than 3 years to say his first word. Frustrations with not being able to communicate, often results in these children developing behavior problems.

Babies and Hearing Aids

During the first year a baby learns that wearing hearing aids means being 'closer' to the people he loves.

0-3 months

When a tiny baby has needs, being able to hear mommy coming to pick him up develops a sense of trust and security. Hearing aids help with this security. Babies are not actively exploring with their hands under 6 months of age. Although a hearing aid may be knocked off, the baby will not intentionally remove the hearing aids. As long as hearing aid battery door locks are in place it is fine for him to keep his hearing aids on throughout the day, even during naps. Although he could safely wear them at night too, moisture buildup in the earmold tube and earhook can be a problem as even a small drop of moisture can block sound from going into the ear. **Keep the "hearing aid house" (dry aid kit) next to the diaper changing table so you always know where the hearing aids are and they can be put on and off easily.**

4-6 months

At this age, the infant may be turning to try to locate sounds (i.e., Dad's voice from the side while Mom is holding him). At about 4 months, typically developing babies begin to pick up objects and put them in their mouths. Locking battery doors are critical as batteries are poisonous if swallowed. There should be a hearing aid retention accessory in place to prevent the child from getting the hearing aids to her mouth if she knocks one out of her ear. Preferably the retention accessory will also protect against moisture as food can be spread to many places as the baby learns how to eat solid food.

Starting by 9 months of age it is important for parents to consistently reinforce "only mommy or daddy takes hearing aids off – not baby". There is too much at stake for a young child to be the one to choose to remove the hearing aids (language learning, hearing your safety warnings, potential damage to hearing aids).

At about 6 months babies discover their feet and hands and may use their hands to swipe against their ears. They won't intentionally remove their hearing aids but they may explore their ears with their hands, which can dislodge the hearing aids. Tightly fitting earmolds will help prevent the baby from easily knocking the hearing aid out of his soft ear. The hearing aids should have a retention accessory in place that covers the hearing aid to prevent moisture from getting in the parts.

Closer to 9 months of age your baby may be enjoying his new ability to yank, pull, grab and push. He may grab a hat off his head or work very hard to take his socks or bib off. He may also start to enjoy pulling off his hearing aid (Look what I can do!). It is also wise to use an accessory that covers the hearing aids parts and prevents moisture from getting into the parts. If he pulls off his hearing aids smile, calmly say "Hearing aids on! Baby can hear mommy now!" and then distract him with another on/off, yank to/fro, peek-a-boo kind of activity. He is not intentionally pulling off his hearing aid – he is just practicing making changes to his immediate world. Avoid responding with no-no or uh-oh as his intention is to practice the 'taking off' skill and not to remove the aids willfully.

Closer to 12 months Most children are practicing how to become mobile and expressing themselves – you are waiting for their first step and their first word! It may seem like your child is getting into everything. It isn't unusual for babies of this age to go through a 'yanking off the hearing aids' stage. Temperament plays a big role during this period and throughout toddlerhood. Babies who are more laid back, have predictable schedules and are easy to shift from their moments of unhappiness are likely to be easier to train to leave the hearing aids alone than a child who is very active, sensitive to changes and easily upset. Soothe your baby's upsets but do not let the hearing aids become the focus of how he can be sure to get your attention! As your baby develops the motor skills to remove the hearing aids and becomes interested in them, it is important for you to teach him and that only adults can take them off – not baby. Hearing aids on all waking hours (except for water-play) is necessary for brain, language and social development.



How to keep hearing aids out of your baby's mouth

Make sure that the hearing aid battery doors are locked to prevent possible swallowing of the battery. Use a hearing aid retention accessory that will prevent

him from putting the hearing aid in his mouth, such as short cords that clip to the baby's collar behind his neck. For safety reasons, be careful to use clips without sharp points (i.e., some plastic animal figures, safety pin with dental floss). Using a hearing aid retention accessory that also covers the hearing aid to prevent moisture or dirt from getting into the parts will add piece of mind when messy times occur as your baby learns to feed himself.

How to discourage his practicing the skill of yanking off the hearing aids

For babies who are exploring what they can do with their hands but are not intentionally yanking off hearing aids, something like toupee/wig/skin tape between the hearing aid and the back of your child's ear will provide a firmer attachment. When your child starts to pull on the aid, the sticky tape pulling off the skin will be a sensation that, while not painful, is something he may not like. Another alternative is a cap that has ties that can cross under the chin so you can tie the strings behind her neck. For those unsupervised times in the car seat or stroller inflatable

'water wings' or small Pringle cans positioned over the young child's elbow can give you peace of mind that the hearing aids will remain on.



Toddlers and Hearing Aids

From 12-24 months a child learns to depend on the hearing aids - they are a part of who s/he is.

During the Second Year

During the second year, the exploring toddler learns to do many things independent of his parents ("Me do!"). It may seem like your child is getting into everything. It isn't unusual for toddlers to go through a 'yanking off the hearing aids' stage. It is an especially important time to consider what the baby is getting out of the action of taking off the hearing aids. Is he learning a new skill? Is he trying to get your attention? Is he trying to get you to do the fun thing you did last time he took out his hearing aid?

Whatever you choose to do in response to his taking off his hearing aid, be calm and try to control your facial expression so that it is neutral. Your baby may be going through a stage where he is learning to control his environment and is 'testing the waters' in a variety of ways. Cause and effect is learned through much experimentation! You don't want your baby to learn to associate the hearing aids with your anger, as this may ultimately make him want to avoid them.

Temperament plays a big role throughout toddlerhood. Babies who are more laid back, have predictable schedules and are easy to shift from their moments of unhappiness are likely to be easier to train to leave the hearing aids alone as compared to a child who is very active, sensitive to changes and easily upset. Soothe your baby's upsets but do not let the hearing aids become the focus of how he can be sure to get your attention! Wearing the aids is non-negotiable!

At about 20 months many children are learning the skill of undressing. The child is not willfully removing the hearing aids because he does not want to use them. He is practicing the skill of removing everything on his body. This stage will take extra time and patience. Once he accomplishes learning this skill to the best of his ability, praise him and then lovingly put his hearing aids back on and dress him. The novelty of his newfound undressing ability will soon wear off, only to be replaced by greater toddler independence.

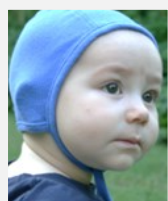
How to discourage your child from yanking off the hearing aids

Non-negotiable: Be persistent. Toddlers must learn that wearing hearing aids is non-negotiable. Unless you suspect that he is in pain (i.e., ear infection, broken hearing aid), ALWAYS replace them if they have been pulled out. The behavior will eventually stop. You may need to wait for a temper tantrum to pass. Wait quietly with a neutral expression on your face, holding the hearing aids. When he tires,



smile, put on the hearing aids and distract him into what comes next. During this period of ramped up activity, the hearing aid retention accessories you have been using may not be enough to keep him from pulling out a hearing aid. Many families use different retention strategies or use two strategies together.

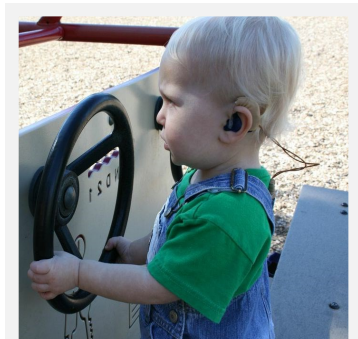
Combination 'clip and stick': Try a combination of the cord and behind-the-neck clip and wig/toupee` tape on the back of the hearing aid (tape designed to stick on skin). It makes it harder to pull off the aid easily and also gives a 'pull' that may feel uncomfortable but not hurt. Each time the hearing aid comes off the tape needs to be replaced, meaning more expense and a bit more time. An option for girls would be to clip the cord that attaches to the hearing aid retention accessory into a barrette in the child's hair. It may be uncomfortable when the hearing aid is yanked off but would be painless when mommy removes the hearing aid.



Wear a cap: Wearing a cap for a few weeks may help both of you persevere through this stage. Use a thin cap that fits over the child's hair and ears during this period. A cap is most effective when it has ties long enough to cross under the chin and tie behind the child's neck. A cap is an especially good idea for those situations when you cannot constantly be watching your child, such as in his car seat, stroller or while grocery shopping.

<http://successforkidswithhearingloss.com/hearing-aids-on>

When a child is in a stroller or back seat of a car little fingers can get busy with hearing aids, no matter what the hearing aid retention accessory used. Addressing the challenge of keep-



ing hearing aids on in the car is a must for most families. A terrific solution is for you to use an FM system where the parent wears a microphone that transmits a signal to a small receiver attached to the child's hearing aids. This allows the child to hear the parent's voice as though they are only a few inches apart and helps to overcome the 'lost listening' from a distance or in noise. Ask your audiologist about FM systems.

Short term non-technical solutions to unsupervised time in the car include 'water wings' or the shorter size Pringles chips can slipped over the child's elbow/upper arm that prevent her from reaching her ears. These solutions should be used in the short term, each time with great praise when the hearing aids are still on when you arrive.

Checking hearing aids daily with toddlers:

Once the parent has checked the hearing aid it needs to be checked on the child. Put the hearing aid onto the infant's ear. Without letting the child see your face, present the Ling sounds in a normal to soft voice, pausing between each sound, and watch the baby to see if she alerts to the sound. You may see quieting, eye widening, or general alerting. You may see that the infant responds to some of the sounds but not others. Check to see if the infant alerts when close to you, and repeat the test standing across the room (10 feet away). If she is consistently not alerting to certain sounds, or only when close to you, tell your audiologist so the hearing aid settings can be adjusted. It is important to check each hearing aid separately to be sure that both are working.

Preschoolers and Hearing Aids

From 2-4 years a child is learning independence—including listening and taking action!

Up to age 3, a child is actively working toward independence. During the second year, the exploring toddler, with the encouragement of parents, learns to do many things independent of parents (“I do it myself!”). The most mature stage is typically reached between 2-3; “We do it”. The child has the drive to accomplish a feat by himself but has the wisdom to ask for help to do it better.

The Terrible Twos

Two-year olds may resist the ‘only mommy do it’ approach and demonstrate their independence by taking off their hearing aids. This continues to be non-negotiable - continue to be persistent. Only adults take off the hearing aids however at age 2 the parent can work with the child to change from independently removing his hearing aids to learning to ask for help (i.e., “Ears off please”). This provides the opportunity to ask why he wants the hearing aids removed. Is it too noisy? If so, you can model moving away from the noise. Is he tired? If so he can help you put the hearing aids in the “hearing aid house” before his nap. Does he want your attention? Take a minute to help him begin to put his own hearing aids on (he should have this skill by age 3) or offer to read a book to him, but of course he will need to have his hearing aids on to hear the story!

Your child missing out on auditory stimulation IS harmful to his brain development. “Taking a break” from wearing hearing aids for a morning, day or weekend, is just setting your child further behind in developing a brain that will process speech and sounds effectively. Unless you suspect that he is in pain, ALWAYS make sure the hearing aids are put back in his or her ears as soon as possible. Listening breaks from the hearing aids should occur no longer than it would take the child to eat a cookie. Responding to hearing aid removal during tantrums is a challenge. The consistent message in your response should be that the hearing aids will go back on. Bad behavior is not ‘rewarded’ by his not wearing the hearing aids.

The Curious Threes

Three-year-olds like to know how things work. Left alone, your child may take off a hearing aid and take it apart to have a close look at each of the parts. As you perform the listening check each morning, involve your three-year-old, using the names for each of the parts and describing how they work. Emphasize that it is fun to know about how the hearing aids work, but it is important to keep the hearing aids on his ears so they can work to help him hear what people say. By this time he should know that hearing aids are meant to be kept on and that he is not allowed to take them off. Treat his doing so as you would any other poor behavior choice so that he clearly knows the rule stands.



Allowing the older-2 or preschool-age child to make choices such as the color of hearing aid retention accessory or Tube Rider (www.hearmore.com) to wear can transform the hearing aid from

something to challenge into a cute or fun accessory that makes the child ‘pretty’ or ‘cool’.

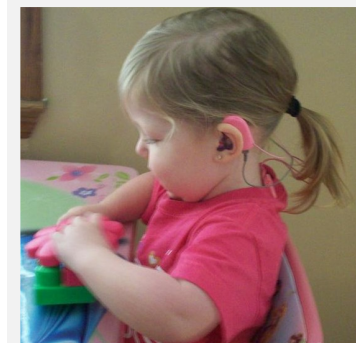
The Sensitive Fours

Sensitive fours: At 4-5 years old children begin learning the attitudes of their age peers and want their approval. If your child’s classmates have a learning opportunity (i.e., heard a story about hearing loss/hearing aids) to better understand what they do and why the child benefits from wearing them, the age peers will be less likely to view the hearing aids negatively. Brightly colored earmolds, fun hearing aid stickers, Tube Rider ear tube jewelry or even having a doll/bear with toy hearing aids will help the child feel good about wearing hearing aids and be the envy of his age peers. Help him practice how to respond to questions about the hearing aids - he (and you) are ambassadors for helping others learn about hearing loss and hearing aids (they are amazing ear computers!).



Checking hearing aids daily with preschoolers:

Once the parent has checked the hearing aid it needs to be checked on the child. Put the hearing aid onto the child’s ear. Without letting the child see your face, present the Ling sounds in a normal to soft voice, pausing between each sound, and wait for the child to imitate it. Be sure to mix up the order of the sounds so the child cannot guess what you will say. Present the Ling sounds close to the child and at a distance (i.e., 3 and 10 feet away). As the child develops auditory skills, expect the child to repeat the sounds correctly. You may see that the child responds to some of the sounds but not others. If she consistently repeats certain sounds incorrectly, or only correctly repeats sound presented close, tell your audiologist who will adjust the hearing aid settings. You should also present simple sentences for your child to repeat. It is important to check each hearing aid separately to be sure that both are working.



Inconsistent hearing aid wear – What messages are parents giving to their child?

Children know if their parents are angry, worried, concerned, or uncomfortable. If a parent does not want the child to wear hearing aids, or is feeling sorry that the child has to wear hearing aids, the child will pick up on those attitudes. Young children may internalize the message that they are less loved because of the hearing aids. Parents need to be very clear that they think hearing is a good idea and want the child to wear the hearing aids. Parents may need to talk with other relatives to make sure that everyone is giving the same message to the child.