Why Do We Need Hearing Aids

Children learn almost everything by hearing. Without using hearing aids all day, every day, your child's learning will likely be significantly delayed by the time they start Kindergarten. They might never catch up!

• The part of the brain that makes sense of sounds needs to be developed before hearing can be used to learn. The goal of hearing aids is to make sound louder. This allows the auditory part of the brain to grow. This brain growth happens before the child can use hearing to learn to understand words, to talk and to read.

• Early growth of the brain in the first two years of life cannot be made up later. To develop the auditory part of the brain, a child must hear his best ALL DAY long, every day.

• Your child can't learn words he or she doesn't hear. Typically hearing children hear 46 million words by 4 years old. To learn new words from what people are saying around them, your child's hearing devices need to make speech clear and loud to hear the quiet speech sounds from more than a few feet away.

• Children need to listen for 20,000 hours before their brains are ready to learn how to read.

When Do We Need Hearing Aids

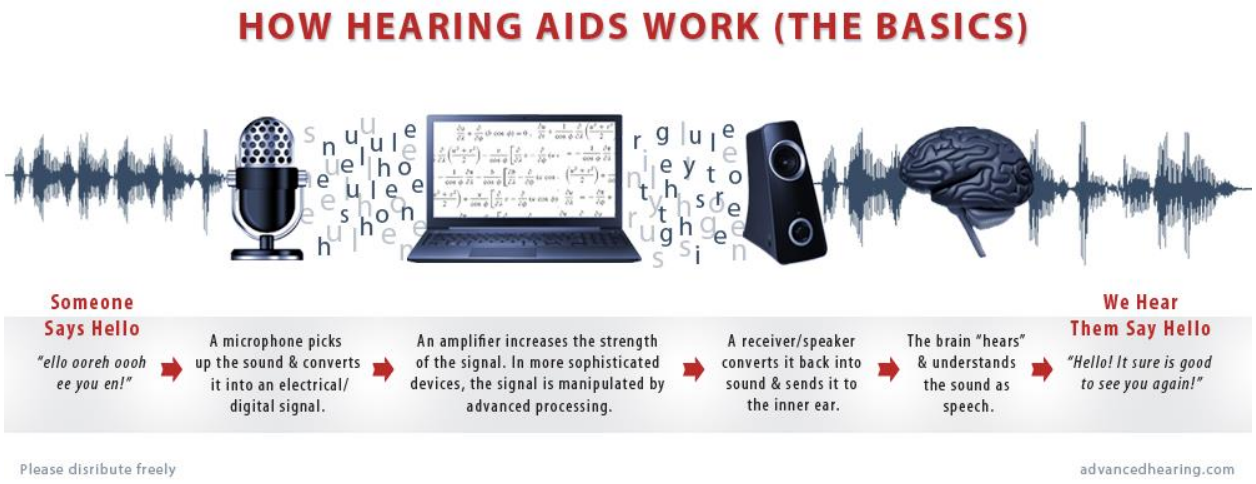
To be ready to start school like other children, your child needs to wear hearings aids every waking hour from infancy.

•A child needs to use hearing aids all day, every day to develop speech, language and social skills like other children his or her age.

• Children who have used hearing aids all day, every day may have been able to listen to 20,000 hours needed to be ready to learn to read at the same time as other children his or her age.

• Even children with a `mild' hearing loss may talk and understand more like 3-year-olds when they enter kindergarten if they do not use hearing aids every waking hour.

• The important time for brain growth during the first two years cannot be made up late. Almost all children who enter school with learning delays so not `catch up' once they go to school.



CARE TIPS FOR HEARING AIDS

1. Clean your child's hearing aid daily Clean the housing with a lint-free cloth or use the small brush provided in the hearing aid hard case. Detergents, alcohol, and soaps should never be used for cleaning. Cleaning using water only is recommended for the earmolds when they are disconnected from the hearing aid.

2. Protect the hearing aids against extremely low and high temperatures Extreme temperatures can damage the internal components of a hearing aid. Therefore, avoid longer exposure to colder weather and to sources of heat, such as hair dryers, the stove, heaters, open flames, hot cars and even direct sunlight

3. Don't let your child swim or shower with the hearing aid Hearing aids often have some level of water resistance. However, extended periods of water submersion on a continual basis will lead to a high level of moisture and water condensation, which over time damages the electronic components.

4. Keep your child's hearing aid away from dirt Ensure you and your child have clean fingers when touching the hearing aid, so that the tiny microphone input does not get blocked with dirt.

5. Store and ventilate the hearing aids in a safe place when not in use Before bedtime, put the aids in their storage box, remove the batteries and open the battery door for some ventilation overnight. If your child is old enough, get them used to doing this task daily.

6. Keep batteries and devices out of reach from babies, toddlers, and Pets. Smaller children and pets are often very curious and quite often tiny batteries and the aids end up in their mouths and hands. In fact, one of the most common accidents with hearing aids is a pet thinking it's lunch. Therefore, besides getting hearing aids with tamperproof battery doors and mini earhooks

for smaller children, it’s important that hearing instruments and their batteries are always stored in a safe place.

7. Avoid dropping the hearing aids Yes, this is a hard rule when it comes to children. Hearing aids can get damaged if they hit hard surfaces. When cleaning or changing batteries, hold the hearing aids over a soft surface. Explain to your child the importance of taking good care of their devices and attach them to a pediatric clip to hold them in the ears.

8. Consider getting a hearing aid dehumidifier Children usually lead a much more active life than adults – playing on the school yards, having their sports lessons, or jumping in mud puddles. Therefore sweat, humidity from their surroundings and ear wax build up moist, which can easily be removed by a dehumidifier.

9. Visit the hearing care professional regularly Seeing a hearing care professional on a regular basis does offer some advantages: as a parent you can be confident that the hearing aids get checked and cleaned properly, prolonging their life span, and your questions can be answered by a professional.

Babies : 0-12 months.

Meeting the Challenge
Keeping Hearing Devices on Young Children

Earmolds must fit properly to keep hearing aids on the child's head. Young babies may need new earmolds every few weeks. Do NOT wait – get the earmolds remade when the hearing aids start to whistle or when the earmolds start to slip out with a light tug. Ask your child's audiologist about Comply Soft Wraps to help keep the earmolds in your child's ears while waiting for an appointment to get earmolds remade.

0-3 months

- When a tiny baby has needs, being able to hear mommy coming to pick him up develops a sense to 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, even during naps. Although he could safely wear them at night too, moisture buildup in the earmold tube can be a problem as even a small drop of moisture can block sound from going into the ear. This moisture problem can be remedied by using a dry aid kit.
- Keep a dry aid kit (the "hearing aid house") in a place you can always find it, such as 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.
- A hearing aid retention accessory can help to prevent the child from getting the hearing aids to her mouth if she knocks one out of her ear. The retention accessory should have no sharp edges that could hurt baby, and also protect against moisture as food can be spread to many places as the baby learns how to eat solid food.

Caps

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.

About 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!).
- 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.

About 12 months Most children are practicing how to walk and trying to talk - 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 regular schedules and are easy to soothe when they are unhappy are easier to train to leave the hearing aids alone than a child who is very active, sensitive to changes and is 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.

Ear Gear

WHY DO WE NEED HEARING AIDS

Children learn almost everything by hearing. Without using hearing aids all day, every day, your child's learning will likely be significantly delayed by the time they start Kindergarten. They might never catch up!

- The part of the brain that makes sense of sound needs to be developed before hearing can be used to learn. The goal of hearing aids is to make sound louder. This allows the auditory part of the brain to grow. This brain growth has to happen before a child can use hearing to learn to understand words, to talk and to read.
- Early growth of the brain in the first two years of life cannot be made up later. To develop the auditory part of the brain, a child must hear his or her best ALL DAY long, every day.
- Your child can't learn words he or she doesn't hear. Typically hearing children hear 46 million words by 4 years old. To learn new words from what people are saying around them, your child's hearing devices need to make speech clear and loud so hear the quiet speech sounds (like s, f, t) from more than a few feet away.
- Children need to listen for 20,000 hours before their brains are ready to learn how to read.

WHEN DO WE NEED HEARING AIDS

To be ready to start school like other children, your child needs to wear hearing aids every waking hour from infancy.

- A child needs to use hearing aids all day, every day to develop speech, language and social skills like other children his or her age.
- Children who have used hearing aids all day, every day may have been able to listen the 20,000 hours needed to be ready to learn to read at the same time as other children his or her age.
- Even children with 'mild' hearing loss may talk and understand more like 3 year olds when they enter kindergarten if they do not use hearing aids every waking hour.
- The important time for brain growth during the first two years cannot be made up later. Almost all children who enter school with learning delays do not 'catch up' once they go to school.

Children's Hearing Aid Retention Project
Karen L. Anderson PhD & Jane R. Madell PhD

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Our sincere thanks to those who donated funds for printing this brochure

Did you know?

Babies listen for about a year before they say their first word. A baby who wears hearing aids for only 2 hours a day may take 3 years to say his first word. Frustrations with not being able to communicate effectively can result in behavior and social problems.

Toddlers: 12-24 months.

Meeting the Challenge
Keeping Hearing Devices on Young Children

12-18 months 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. Your baby may be going through a stage where he is learning to control his environment and is 'testing the waters' in many ways.
- It is an especially important time to consider what the baby is getting out 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. You don't want your baby to learn to associate the hearing aids with your anger, as this may make him want to avoid them.
- Temperament plays a big role throughout toddlerhood. Babies who are more laid back, have regular schedules and are easy to soothe from being unhappy are 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!

Safe-n-Sound

Caps

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 to undress 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.

Oto / Critter Clips

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.
- Sticky tape plus the hearing aid retention accessory or wearing a cap for a few weeks may help both of you get through this stage.

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- Early growth of the brain in the first two years of life cannot be made up later. To develop the auditory part of the brain, a child must hear his or her best ALL DAY long, every day.
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Preschoolers: 2-5 years.

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 dry aid kit ("hearing aid house") before his nap.
  - Does he want your attention? Take a minute to help him begin to learn how to put his own hearing aids on (he should be able to do this by himself by age 3). 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 an hour, 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. His tantrum behavior is not 'rewarded' by his not wearing the hearing aids.

Ear Gear

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 her ears so they can work to help her hear what people say.
- By this time she should know that hearing aids are meant to be kept on and that she is not allowed to take them off. Treat her doing so as you would any other poor behavior choice so that she clearly knows the rule stands in every situation.

The Sensitive Fours: and Fabulous Fives
At 4-5 years old children begin learning the attitudes of their age peers and want their approval.

- It usually works well if the children in your child's preschool or kindergarten class have a learning opportunity (i.e., heard a story about hearing loss/hearing aids). They will then better understand what hearing aids do, will not ask your child as many questions will be more likely to view the hearing aids positively.
- This is an age where the child becomes fashion conscious, so being allowed to choose brightly colored earmolds or fun hearing aid stickers will help the child feel good about wearing hearing aids and be the envy of his age peers. This can help transform the hearing aid from something 'different' into a cute or fun accessory that makes the child 'pretty' or 'cool'.
- Most people ask about hearing aids because they do not know about them – not to be mean. Help your child 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!).

Meeting the Challenge

Keeping Hearing Devices on Young Children

WHY DO WE NEED HEARING AIDS

Most of what children learn is learned through hearing. Without hearing his or her best through hearing aids used all day, every day, your child's learning is likely to be retarded by the time he is old enough to start school. These learning delays may never be made up.

- Hearing aids make sound louder and allow the auditory part of the brain to grow. This early brain growth lets children to use hearing to learn to language that spoken within their hearing range, to talk and to read.
- The auditory part of the brain must have input all day, every day for the child to learn the language needed to get along with others. Delays in speech understanding and talking make it harder for a child to be accepted by other children.
- Your child can't learn words he or she doesn't hear. Typically hearing children hear 46 million words by 4 years old. To learn new words from what people are saying around them, your child's hearing devices need to make speech clear and loud so hear the quiet speech sounds (like s, f, t) from more than a few feet away.
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Did you know?
Children learn most of the 'social rules' of getting along with others between 2-5 years old. Children who can understand speech and talk like their age peers are more likely to be accepted and fit in.

Hearing Device Retention Accessory Information

Hearing aid retention accessories not included below were rated as less effective.
More information on survey results can be found at http://successforkidswithhearingloss.com/hearing-aids-on
Ratings based on the results of the Children's Hearing Aid Retention Survey completed by 286 parents (Anderson & Madell, 2012).

Ear Gear

Spandex sleeve slips over hearing device. Has stretch cord and plastic locking clip.

PROS: Stretchy cord, allows for full range of head motion. Spandex sleeve protects from mess/damage and from hearing aids being swallowed by infants. Plastic clip to clothing has no sharp edges, is hypoallergenic and locks to make it extremely difficult for a child to remove. Spandex sleeve increases comfort of device wear; prevents and assists in healing from chafing; also diminishes wind noise. Comes in many different colors to increase child's interest and pride in wearing hearing aids. Use with hearing aids, cochlear implants and BAHA for individuals of all ages. Models can attach to one or two hearing devices.

CONS: Some difficulty installing, because earmold must be removed and then reattached.

www.gearforears.com

#1 Rated

Caps

Caps cover hearing devices securing them from busy or yanking fingers.

PROS: Effective at discouraging toddlers from yanking hearing aids off. Washable and durable. Hanna Andersson and Hearing Henry caps are cotton and have ties long enough to cross in front of neck and tie behind. Silkawear caps have mesh side panels and fasten securely under chin via Velcro. Discontinue after toddler 'yanking' phase subsides so child can practice putting on hearing aids (should be independently putting hearing aids on by age 3). Use with hearing aids, cochlear implants and BAHA. Come in various colors.

CONS: Warm for summer or southern climates.

www.silkawear.com
www.hannaandersson.com
www.hearinghenry.com

#2 Rated

Safe-N-Sound

Plastic loop slips over hearing device. Has poly cotton cord and metal alligator clip.

PROS: Easy to Install. One size fits all hearing aid and cochlear implant models. Flexible cotton cord comes in many different colors to increase child's interest and pride in wearing hearing aids. Option with barrette can be effective to discourage young child yanking out the hearing aid, while not causing discomfort when removed by parent. Used by children of all ages. Models can attach to one or two hearing devices or be used with eyeglasses. Works with hearing aids, cochlear implants, and BAHA.

CONS: Nonstretch cord. One size loop may not tightly fit all hearing instruments. The Alligator clip has nickel content, and can cause allergic reactions.

www.getsafensound.com

#3 Rated

Wig / Toupee Tape

Tape specifically made for use on skin. Attaches to both hearing device and skin. Must replace tape on a regular basis to maintdin security.

PROS: Good short-term strategy. Tape does not require much of a 'tug' to remove hearing aid, but is helpful in preventing dislodging when child is just starting to use his hands to explore or when the device is large/heavy for the child's ear. Used primarily when child is young or very active. Use on all hearing devices.

CONS: The tape discourages child from pulling the hearing aid off due to possible discomfort when removed – by child or by parent. Child could learn to shy away from hearing aid because it is not comfortable when it is removed. If used frequently, tape can be expensive over time.

#4 Rated

Oto / Critter Clips

Plastic loop security system, with thin poly cotton cord and metal alligator type clip. Models that attach to one or two hearing devices.

PROS: Low cost, easy to install solution. One size fits all hearing aid models and implants. Cords come in many colors, and some models are available with cute animals on the face of the clip - encouraging small children to wear their aids. Used by children of all ages wearing hearing aids, cochlear implants or BAHA.

CONS: Breaks easily / not very durable. Cute animals can come off and be swallowed. Security level varies due to one-size fitting for all hearing instruments. The Alligator clip has sharp teeth and may pinch child's skin. Clip has nickel content, and can cause allergic reactions.

www.westone.com

#5 Rated

POSSIBLE ISSUES WITH HEARING AIDS

Be sure to talk with your child's audiologist if you have questions or any of the problems listed below.

FEEDBACK

Feedback is a high-pitched squealing or a fluttering sound. Talk to your audiologist if there are problems with feedback. Some causes of feedback can be:

- An earmold that is not inserted all the way into your child's ear.
- An earmold that fits poorly or that your child has outgrown.
- An earmold, tubing, or earhook that is damaged.
- A hat or blanket that covers the hearing aid and microphone (feedback will stop when you remove the hat or blanket).
- A hearing aid that is damaged.
- An earmold or an ear canal blocked by wax or discharge from an ear infection.

SORE SPOTS

Sometimes new earmolds have uneven areas that can cause redness or a sore spot in your child's ear. If this happens, your audiologist can often file the earmold smooth. Check your child's ears for redness whenever she gets new earmolds. A sore spot may be the reason your child doesn't want to wear his hearing aids.

EAR INFECTIONS

If your child has an ear infection they may not want to wear their hearing aids because their ears hurt. If you think your child has an ear infection, be sure to talk to your child's doctor or audiologist. They may recommend that your child doesn't wear their hearing aids until the infection clears. If your child's ears are actively draining, remove the hearing aids until the ear infection clears. Be sure to wash and dry the earmold before using again. Hearing Aids do not cause ear infections.

OVER AMPLIFICATION

Over amplification means a hearing aid is too loud. Your audiologist should use a technique called real ear measures to find the settings that are appropriate for your child. If your child repeatedly pulls the hearing aids out of his ears, or blinks more than normal with his hearing aids on, they may be too loud. Loud sounds should be loud with hearing aids, but they shouldn't cause discomfort for your child. Talk to your child's audiologist if you think he is being over amplified.