Children's Hospital of Pittsburgh of UPMC

HELPFUL Information for parents and children

Audiology and Speech-Language Pathology

Hearing Aids

AT CHILDREN'S HOSPITAL OF PITTSBURGH OF UPMC, we believe parents and guardians can contribute to the successful use of these devices and invite you to participate. Please read the following information to learn about their use and how you can help.

Fast Facts About Hearing Aids

- Hearing aids can help children who have hearing loss by making sounds louder. The most important sound for your child to hear is speech.
- If a child has hearing loss in both ears, two hearing aids are recommended.
- Earmolds are small, custom-fitted pieces that attach to the hearing aids and hold the hearing aids in place.
- Earmolds must be replaced when the child grows and the earmolds no longer fit securely.
- Daily care of hearing aids and earmolds will help to keep them working properly for a long time.

What Is A Hearing Aid?

A hearing aid is basically a small amplifier that children with hearing loss can wear to make speech and everyday sounds louder. It is one of the most important tools available to help children with hearing loss take full advantage of their remaining hearing. The basic goal of hearing aids is to make speech sounds loud enough for your child to hear.

When introduced soon after the hearing loss is diagnosed, hearing aids can help children and even babies begin to develop communication skills.

There are two different styles of hearing aids. Behind-the-ear hearing aids are worn behind the ear and connect to the ear using a custom earmold. In-the-ear style hearing aids are custom fitted and worn directly in the ear.

Behind-the-ear style hearing aids are most frequently recommended for use by young children because they:

- Are sturdy and flexible.
- Can be ordered with tamper resistant battery doors so that young children cannot open the doors and swallow the batteries.
- Use custom-fitted earmolds which can be remade quickly when the child grows.

In-the-ear style hearing aids usually are not used by children because:

- The ears of babies and young children are usually too small for in-the-ear style hearing aids.
- Even if an in-the-ear style hearing aid does fit, the hearing aid would need to be sent away to be re-cased when the child grows, leaving the child without amplification for that period of time.
- Frequently changing the size of the in-the-ear hearing aid casing would become very expensive.
- They are not made with tamper resistant battery doors, so there is risk that the child could open the battery door and swallow the batteries.

Getting A Hearing Aid

Evaluation

Once a hearing loss has been diagnosed, an audiologist will help to select the most appropriate hearing aids for your child. The audiologist uses a computer and software program called a real ear measurement system to adjust the hearing aids so that speech sounds comfortably loud. The hearing aids have loudness limits so that they will not be too loud even in small ears.

If your child has hearing loss in both ears, two hearing aids may be recommended for him or her. Two hearing aids will help your child hear better in noisy places and help your child find where sounds are coming from.

HEARING AIDS cont'd

Earmold Fitting

The audiologist makes an impression of the child's outer ear and ear canal. The impression is sent to a lab where the earmolds are made. Earmolds can be made of different materials, but soft material is used for infants and children. Earmolds need to fit tightly into the ear. If the earmolds do not fit well, the amplified sound leaks out of the ear and back into the hearing aid, causing a squealing or whistling sound called "feedback." Earmolds are remade often as a child grows. Young babies outgrow their earmolds in about 2 to 3 months and will need to be fitted for new ones. Toddlers usually can use their earmolds for about 6 months before they need new ones. Older children usually can wear their earmolds for up to a year before they outgrow them. When your child's earmold seems loose or the hearing aid starts to squeal, you should make an appointment for a new fitting **as soon as possible** because a secure fit is an important part of keeping your child's hearing aids working well.

Accessories

Hearing aid batteries, hearing aid retainer clips and care kits are available when you pick up your child's hearing aids.

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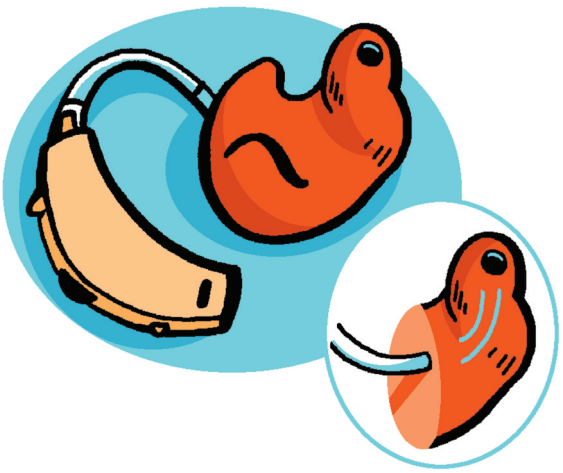
Children's Hospital of Pittsburgh of UPMC
One Children's Hospital Drive
4401 Penn Ave.
Pittsburgh, PA 15224
412-692-5580

To see the list of all available patient procedures descriptions, please visit www.chp.edu/procedures.

Components Of A Behind-the-Ear Hearing Aid

All behind-the-ear hearing aids do not have the exact same parts. The audiologist will describe the parts of your child's hearing aids and will show you how they work.



- **Battery power**—the hearing aids run on battery power. There are different sizes of hearing aid batteries. The audiologist will tell you which size is right for your child's hearing aids. The battery must be placed inside the battery compartment with the + and – signs facing the right way. The audiologist will show you how to do this. Tamper-resistant battery doors are recommended for infants and small children so that the child does not take out the batteries and swallow them.
- **Microphone**—the hearing aid's microphone picks up sounds. The sound is changed into electrical energy and then made louder.
- **Receiver**—the receiver changes the electrical energy back into sound waves.
- **Earhook**—the hard plastic piece that fits over the ear and attaches to the tubing of the earmold and directs the sound through the earmold into the ear.
- **Switches and volume controls**—some models have on/off switches and volume controls and some do not. With many modern hearing aids, settings are adjusted using a computer program and are stored inside the hearing aids.

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