



HAWAII STATE
RESOURCE GUIDE
FOR FAMILIES
OF CHILDREN WITH
HEARING LOSS



Hawaii Department of Health, Genomics Section

Baby HEARS - Hawaii Project



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Questions or Comments?

For more information, please contact the Newborn Hearing Screening Program
at 808-733-9054 or you can visit our website at
<http://health.hawaii.gov/genetics/programs/nhsp/>

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INTRODUCTION

This resource guide is for families with children who have recently been diagnosed with hearing loss. We hope that it will give you information and a variety of local resources.

Children with hearing loss may have challenges in their learning, language, and social development. Early identification of hearing loss helps a child reach their fullest potential. Parent involvement also plays a big role in helping a child grow. This resource guide aims to help parents learn about communication opportunities, how hearing loss affects language development, available technologies, and other topics related to children who are deaf and hard-of-hearing.



Hawaii Newborn Hearing Screening Program

In general, 3-4 of every 1,000 children born in Hawaii have hearing loss. This means that each year in Hawaii there are about 55 infants born with hearing loss. Most babies have their hearing checked before they leave the hospital or within a few days of birth. This is called newborn hearing screening. However, even though a baby may pass the hearing screening, a hearing loss may develop later in life.

The Newborn Hearing Screening Program (NHSP) is located within the State of Hawaii Department of Health. All 50 states and the Pacific Regions perform newborn hearing screening, also called “Early Hearing Detection and Intervention (EHDI)”. The goal of EHDI is to identify children with hearing loss and begin intervention services as early as possible.

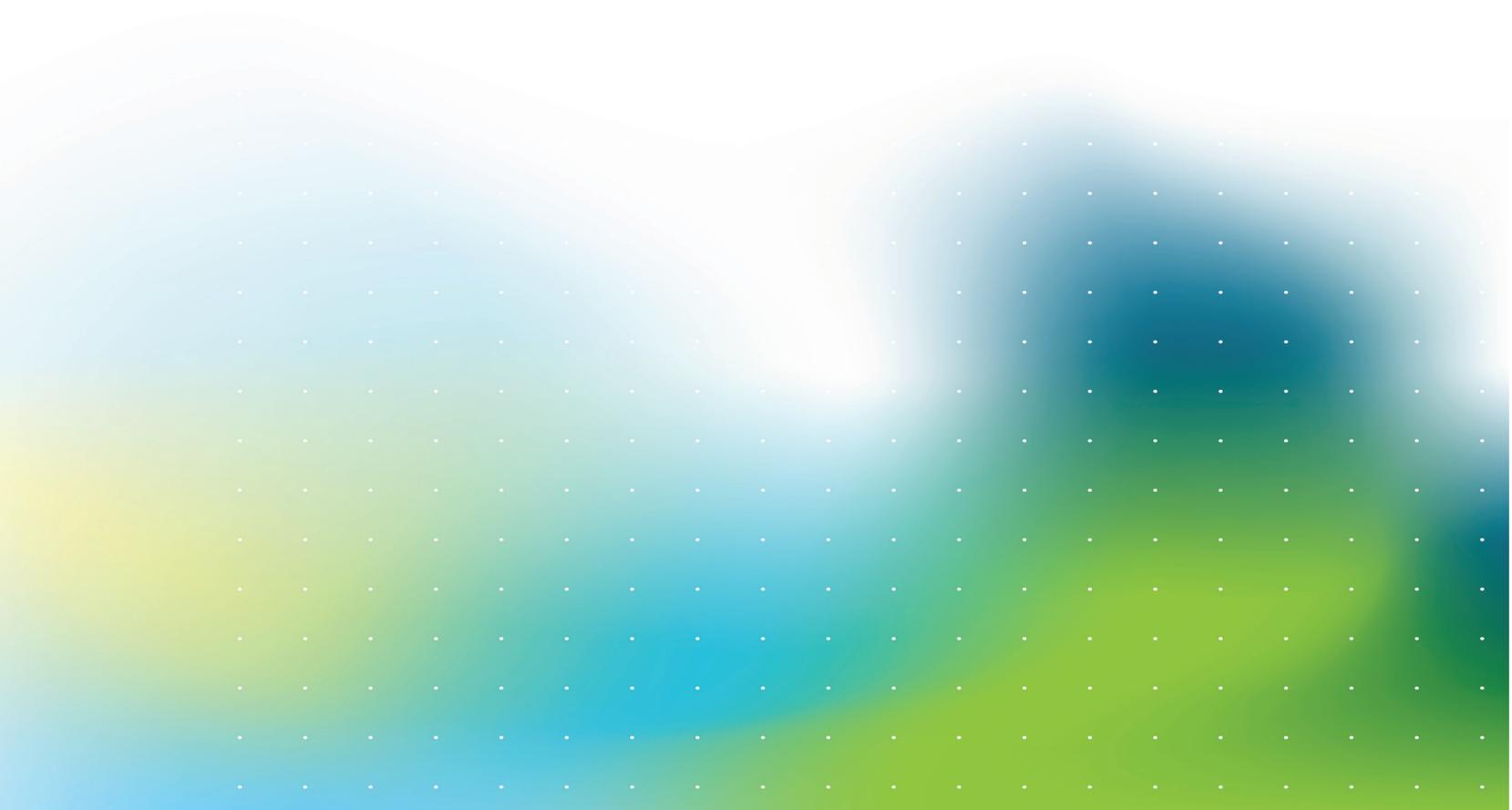
The EHDI program recommends the “1-3-6 Plan”



	1	3	6
When?	By 1 month of age...	By 3 months of age...	By 6 months of age...
What?	...all infants will have newborn hearing screening	...all infants who do not pass newborn hearing screening should have additional tests (diagnostic audiological evaluation)	...all infants with hearing loss should receive early intervention services (EIS)
Details	<ul style="list-style-type: none"> The purpose of screening is to find out if the baby needs more testing. Infants have newborn hearing screening in the hospital after birth. Infants born at home can find out where to get hearing screening through their midwife or doctor. Screening is done with an otoacoustic emissions (OAE) test and/or an automatic auditory brainstem response (AABR) test. 	<ul style="list-style-type: none"> A complete evaluation will find out the infant’s hearing status. Sometimes the baby needs to be tested several times to identify hearing status. If the baby has hearing loss, the evaluation aims to identify the type and degree of hearing loss, plus treatment options. The tests are done by an audiologist. Test results may lead to referrals to specialists (i.e., eye doctor, ear nose and throat doctor, genetics doctor). 	<ul style="list-style-type: none"> Early intervention services are available to children 0-3 years of age. Early intervention services help children with any level of hearing loss learn language and other important skills. Professionals can give in-home support that is specific to a child’s hearing and communication needs. Research shows that early intervention services are very important to a child’s development of language and communication skills.

Questions about EHDI? Refer to the National Center for Hearing Assessment and Management
www.infanthearing.org

*P*arent Support



PARENT SUPPORT

When your child was diagnosed with hearing loss, it may have been a surprise to you. You may not have other family members with hearing loss. You may not have thought much about hearing loss before. Depending on the age of your child, you may have noticed signs of hearing loss without realizing it, such as a lack of or slower speech and language development, or not responding to speech or other sounds.

A diagnosis of hearing loss in your child may cause you to have new feelings. Some parents might feel surprise, shock, grief, worry, anger, or sadness. All of these feelings are normal. Any new diagnosis will cause you to have feelings and questions as you adjust to the news.

You may have many different feelings at the same time, or you may go back and forth between feelings. This process is a normal part of adjusting to the diagnosis. It may also be challenging and stressful. Allowing yourself to feel your feelings and go through the process will result in you coming to terms with the diagnosis and your child's "new normal".

Some of the feelings you might feel during the adjustment process include:

- **Disbelief** - You may want to dismiss or refuse to believe that your child has hearing loss. This reaction can give your mind time to work through the early surprise of a diagnosis. However, it can be harmful to your child's progress if it causes you to delay follow-up or actions to meet your child's needs.
- **Anger** - You may feel angry when you hear the diagnosis. You may wonder why this happened to your child. You may be angry at the experts who were involved in finding the hearing loss. You may feel angry when you talk to other family members or healthcare providers about the diagnosis.
- **Depression or Extreme Sadness** - You may feel hopeless and may lose interest in things that you used to enjoy. These feelings can result from sadness about losing certain hopes and dreams you had for your child.
- **Fear or Anxiety or Worry** - You may be afraid of the diagnosis of hearing loss, or worry about what it means for your child. You may have unanswered questions about your child's future and worry about challenges your child may face. You may feel out of control of the situation.



- Guilt – You might wonder what caused your child’s hearing loss and feel guilt about things you did or did not do. You may feel guilty about not being able to “protect” your child from a diagnosis of hearing loss. However, it is important to keep in mind that people do not have control over diagnoses such as hearing loss.
- Acceptance – At some point, once you have gone through many emotions, you may accept your child’s diagnosis of hearing loss. This does not mean you necessarily agree with it or like it, but that you recognize it as a reality. You may still feel some of the other feelings now and then. However, you will come to focus more on appreciating and loving your child for the wonderful, unique person they are. They will still have hearing loss, but that will only be a part of what makes them your child!



Tips for you as you go through the adjustment process:

- Remember that your feelings are normal. The adjustment process may take time, and people are willing to help if you need them.
- Be open with your feelings and try to keep a positive outlook.
- Learn about hearing loss. The more you learn and are involved in your child's medical care, therapies, and education, the better.
- Take care of yourself, both mind and body.
- Ask for help and seek out experts in hearing loss, including parents of other children with hearing loss. Talking to other parents may help you learn about their experiences and provide emotional support. Resources are available for you (see appendix A).
- Your child can have a lot of success. Your child will thrive in a setting full of love, patience, and praise. Provide opportunities for your child to learn to communicate and problem-solve.

CAUSES OF HEARING LOSS

About half of all cases of childhood hearing loss are due to a genetic cause, also known as a hereditary cause. This means that the child's genetic information, or DNA, has a change that causes the body to develop a hearing loss. A genetic counselor or genetics doctor can help find out if your child's hearing loss is due to a genetic cause.

In the other half of cases of childhood hearing loss, possible causes may include: illnesses and infections, certain medications, prematurity, trauma, and birth defects.



Questions?

Refer to the Boys Town National
Research Hospital website:
www.babyhearing.org



TYPES OF TESTS FOR HEARING LOSS (CHILDREN UNDER AGE 3 YEARS)



Otoacoustic Emission (OAE) screening with OAE Screener

1. **Otoacoustic Emissions (OAE)** - This checks the inner ear's response to sound. During the test, the child must be calm and quiet, or asleep.
2. **Auditory Brainstem Response (ABR)** - This checks the brain's response to sound. During the test, the child must be sleeping.
3. **Pediatric Audiological Evaluation (PAE)** - This checks the child's response to sound based on the child's behavior and may be used for children who are seven months of age or older.

Questions you may want to ask about testing for hearing loss

1. *What type of test does my child need?*
2. *How do you prepare my child for the test?*

WHO DOES THE TESTING FOR HEARING LOSS?

1. **Audiologist** - a hearing professional with a Masters or Doctoral degree in Audiology. An audiologist is a hearing specialist who manages and treats patients with hearing loss, balance issues, or other ear-related concerns.
2. **Pediatric audiologist** - an audiologist who specializes in testing and treating infants and children.
3. **Otolaryngologist** - a medical doctor who specializes in diagnosing, managing, and treating patients with hearing loss and/or diseases and disorders of the structures of the head and neck. They are also called ear, nose, and throat (ENT) doctors.

WHAT SHOULD I DO IF MY CHILD IS IDENTIFIED WITH HEARING LOSS?

If your child is identified with hearing loss, speak to your child's doctor and/or audiologist about resources and a referral to Early Intervention (more information on page 43). Some examples of questions for you to ask:

- **Could my child also have other medical issues?**

Your child may be referred to specialists, such as an ear, nose, and throat (ENT) doctor or eye doctor (ophthalmologist), to find out if there are other issues related to the hearing loss.

- **Could the hearing loss be genetic?**

Your child's doctor may refer you to see a geneticist (genetics doctor) or genetic counselor. Sometimes hearing loss can affect several members in a family. This happens because a gene with a mutation (change) has been passed down through generations. Other times, a genetic mutation can happen for the first time in the egg or sperm that make a baby. In still other cases, hearing loss is one part of a larger syndrome that also involves other parts of the body.

If you would like to know if your child's hearing loss is genetic, ask your doctor to refer your child to see a geneticist. The appointment with the geneticist will include a physical exam and review of your child's medical background. This will help the geneticist and genetic counselor evaluate your child for medical issues related to hearing loss. They will also ask about your family's medical history. You could find out the chance that your future children could also have hearing loss. Your family may be offered genetic testing, which usually involves a blood sample. Some families choose this option and others do not.

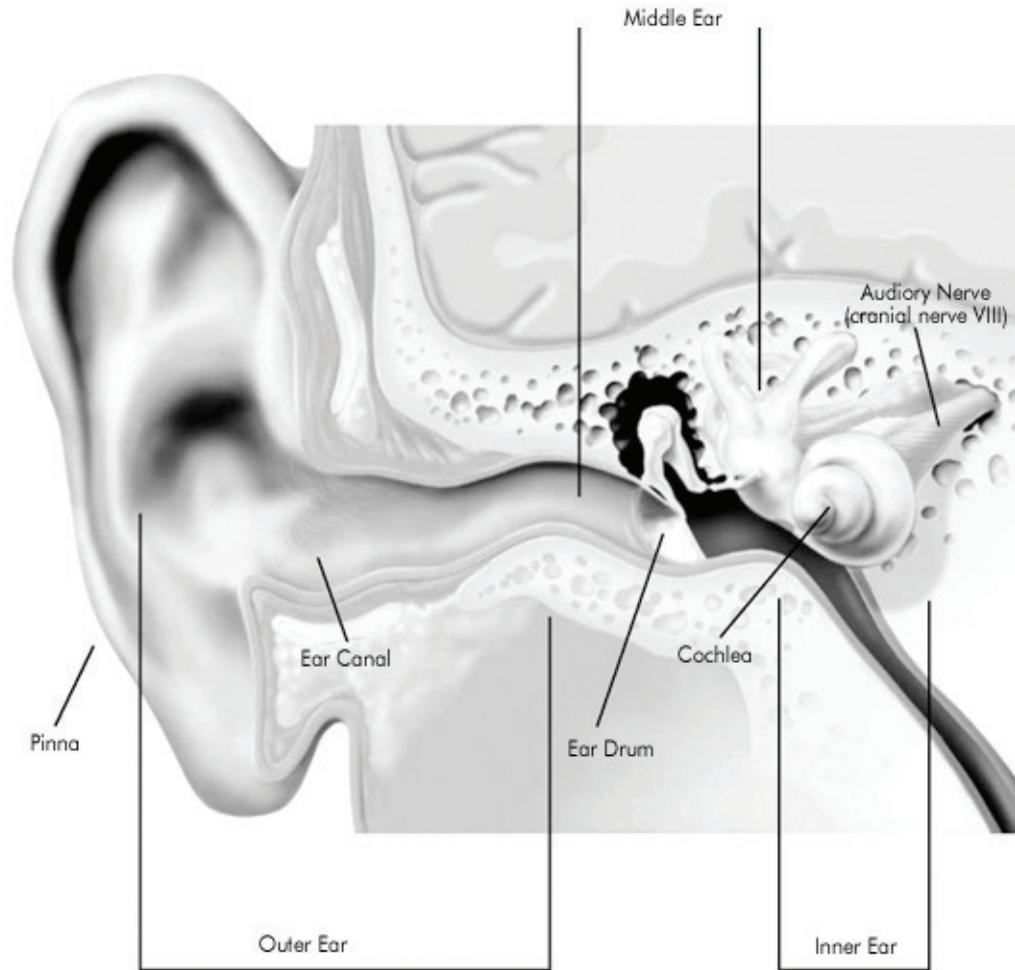
- **Would it be helpful to speak with other families with children who have hearing loss?**

Your audiologist, doctor, and the resource list at the end of this guide can help you get in contact with other families with children who have hearing loss. Some parents find this very helpful when there is a new diagnosis of hearing loss.

*T*he Ear



HOW DO WE HEAR?



Hearing is a complex process. The ears pick up sound and the brain attaches meaning to it.

The ear can be divided into three parts:

- **Outer ear** - includes the outer ear (pinna), canal, and outer side of the eardrum (tympanic membrane). When sound travels through the ear canal, it hits the eardrum and causes it to vibrate.
- **Middle ear** - is an air-filled space between the eardrum and the inner ear. It contains a chain of three tiny bones called the ossicles (malleus, incus, stapes). Sound waves hit the eardrum, travel through the ossicles, and cause the fluid in the inner ear to move.

- **Inner ear** - is a fluid-filled chamber made up of two main sections:
 - three semicircular canals: The three semi-circular canals are responsible for our body's balancing system. When we move, signals from the three canals are sent to the brain to help with our balance.
 - cochlea: Inside this snail shell-shaped organ, there are thousands of tiny sensors called hair cells. After sound waves travel through the outer and middle ear, they reach the cochlea. This causes the hair cells to send electrical impulses to the brain via the auditory nerve.
 - cochlear nerve: Also known as the hearing nerve or the 8th cranial nerve, the cochlear nerve carries sound information from the ear to the brain.
 - brain: The brain receives electrical impulses, processes sound information, and gives it meaning.

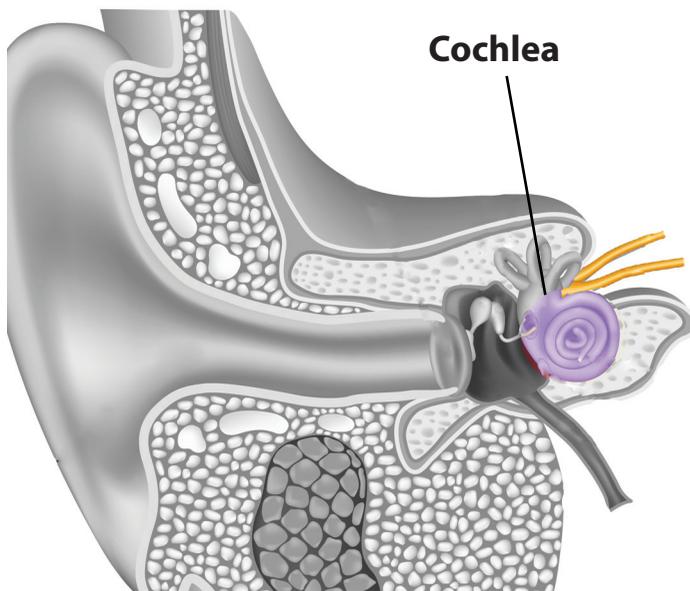
KEEP THE EARS HEALTHY

- Babies sometimes develop fluid in their ears from drinking their bottles while lying down. To prevent this, hold your child on your lap or prop them in an upright position while feeding.
- Have your child's hearing tested as recommended by your doctor or audiologist.
- If your child has an ear infection, go to your doctor right away for treatment. If left untreated, ear infections may cause hearing loss.

TYPES OF HEARING LOSS

SENSORINEURAL HEARING LOSS (SNHL)

Is a permanent type of hearing loss, ranging from mild to profound, that occurs in the inner ear. Depending on the degree of hearing loss, children with SNHL in one (unilateral) or both ears (bilateral) may need hearing aids to develop age-appropriate spoken language skills. Cochlear implants may also be an option for children who are candidates.

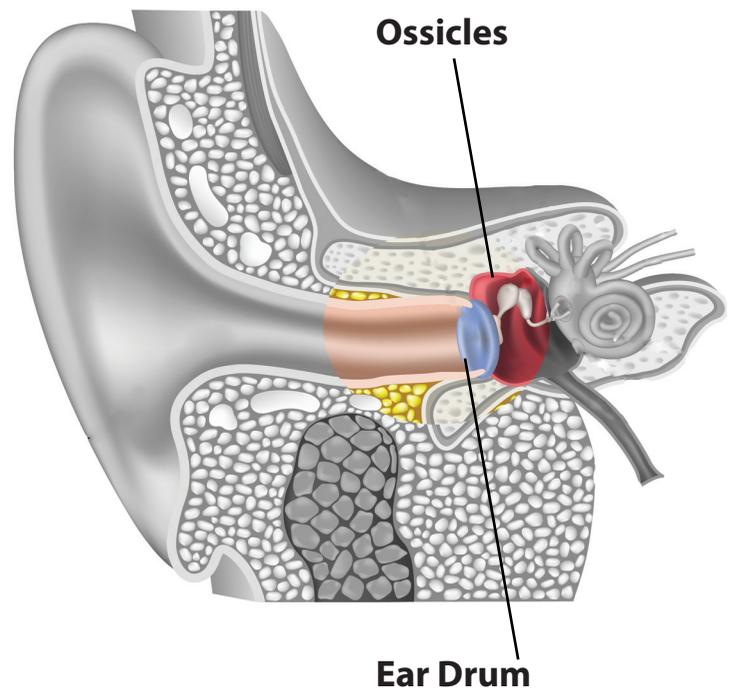


Sensorineural Hearing Loss

The cochlea does not work properly. It is not able to change sounds into the electrical pulses the auditory nerve needs.

CONDUCTIVE HEARING LOSS

Occurs when sound cannot move through the outer ear canal to the eardrum, and/or through the small bones of the middle ear. A child with a conductive hearing loss may have difficulty hearing soft to medium sounds and voices.



Conductive Hearing Loss

A blockage or deformity in the middle ear can prevent the bones from vibrating properly.

TEMPORARY CONDUCTIVE HEARING LOSS

Many young children have some amount of temporary conductive hearing loss as they grow up. This is usually treatable. Some causes include, but are not limited to:

- Foreign object in the ear: If you suspect your child has something stuck in his/her ear canal, your child should see a doctor. Never attempt to remove an object on your own because this can push the object further into the ear canal or cause damage.
- Ear infection (otitis media): Ear infections are very common in young children. Ear infections may cause hearing loss. Your child may or may not feel pain or have a fever. Sometimes fluid in the middle ear cavity can cause a temporary hearing loss. If you suspect your child may have an ear infection, make an appointment with a doctor. Early treatment is important.
- Earwax: Earwax can cause temporary hearing loss if it is not removed. Children with small ear canals or special medical needs are more likely to have extra earwax. If your child has a lot of wax, take him/her to the doctor to clean it out. Your child may need to see the doctor often if the wax keeps building up.
- Punctured eardrum (tympanic membrane): A punctured (or perforated) eardrum is a small hole in the eardrum. This can be caused by middle ear fluid or an injury to the eardrum. Symptoms may include pain, fever and/or bleeding. Take your child to the doctor as soon as possible for treatment.



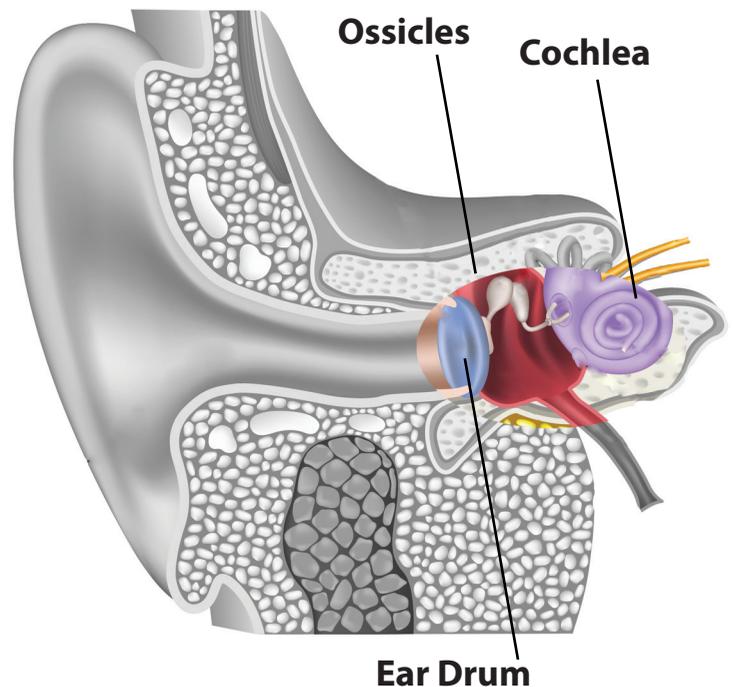
PERMANENT CONDUCTIVE HEARING LOSS

This is typically due to a malformed outer ear or middle ear. Some causes of permanent conductive hearing loss are scarring of the eardrum, middle ear bone fixation, or congenital hearing loss associated with a syndrome.

- **Malformation of the Outer Ear (microtia):** Sometimes a baby is born with an outer ear that is missing or smaller than usual. This is called microtia and can occur on one or both sides. The middle and inner ear (cochlea) are typically not affected.
- **Small or No Ear Canal (atresia):** Some babies are born with small ear canals or no opening to the ear canal. This may cause a mild-to-moderate hearing loss. Follow up with a pediatrician, ENT doctor, and audiologist is recommended.

MIXED HEARING LOSS

This means that a child has both a conductive and sensorineural type of hearing loss at the same time. For example, a child with sensorineural hearing loss who also has an ear infection can have mixed hearing loss.



Mixed Hearing Loss

A mixed hearing loss is a combination of sensorineural and conductive hearing loss.

AUDITORY NEUROPATHY SPECTRUM DISORDER (ANSD)

This is a condition that affects nervous system activity between the inner ear hair cells and/or auditory nerve, and the brain. The inner ear receives sound normally, but it becomes disorganized or lost by the time it reaches the brain. The child may hear sounds but hearing may be incomplete. Sometimes the sound is described as “choppy” or “muffled”. Little is known about the cause of ANSD. There is currently no known cure. Children with ANSD tend to have normal otoacoustic emission (OAE) results and abnormal or absent auditory brainstem response (ABR) results. Behavioral testing may show varying degrees of ANSD because of fluctuating hearing levels.

LATE OR DELAYED-ONSET HEARING LOSS

This is when a baby has normal hearing at birth but has hearing loss when they are older. A medical history and physical exam can help to find risk factors in babies who may have late onset hearing loss.

Risk factors for delayed-onset hearing loss can include the following:

- Family history of genetic childhood hearing loss.
- Infections when the mother was pregnant, such as Rubella or Cytomegalovirus (CMV).
- Structural changes of the ear, nose, or throat.
- Birth weight less than 1500 grams.
- Ototoxic medications (antibiotics that can damage the ear or auditory nerve) used for more than five days.
- Bacterial meningitis.
- Hyperbilirubinemia or jaundice that required a blood transfusion.
- Delays in speech/language and/or development.
- Head injury.
- Prolonged stay in the neonatal intensive care unit.
- Recurrent or persistent ear infections.



UNILATERAL HEARING LOSS

This is when hearing loss occurs in just one ear. Even though children with a unilateral hearing loss can hear with one ear, they may find it challenging to hear in places that are noisy. They may struggle to find out where sound is coming from (called localization of sound). They may have increased misunderstandings, be more fatigued in school due to greater effort needed to listen, and/or exhibit social or behavioral problems in school due to difficulty hearing. The more severe the hearing loss, the more difficulties the child may experience.

Research shows that children with unilateral hearing loss may struggle more in school than their classmates. For optimal learning, children with unilateral hearing loss benefit from changes in their learning environment. See below for suggestions on how parents and teachers can optimize the child's hearing.

- Position your child with their hearing ear closest to the speaker.
- Reduce environmental or background noise and make sure the house is quiet so your child will hear you better.
- Give your child time to rest. They may become more tired than their hearing peers because they have to listen twice as hard.
- Keep a close distance between you and your child when you are communicating. This will make the most of the auditory and visual cues.
- Get your child's attention before speaking. Use gestures and keep your lips visible as much as possible. Face your child so they see you when you talk. This will help to clarify information.
- Point out environmental sounds (phones ringing, cars, airplanes). It can be difficult to find a sound source when you do not hear the same in each ear.

It is important for a child with unilateral hearing loss to maintain a "healthy ear." The "healthy ear" should be kept safe from loud noises, infections should be treated right away, and hearing should be monitored regularly.

Ask your audiologist about a CROS (Contralateral Routing of Of Signals) hearing aid or bone-anchored sound processor. This is a type of aid used for unilateral hearing loss. It takes sound from the ear with hearing loss and sends it to the ear with better hearing.



FOR ALL TYPES OF HEARING LOSS:

- Parents should seek advice from a variety of professionals, including: a pediatrician; an audiologist; an ear, nose and throat doctor; an educator; a speech language pathologist; and experts in the field. See the Appendices at the end of the booklet for more resources.
- Most children with hearing loss will benefit from hearing aids or cochlear implants. Talk with an audiologist to see if your child would benefit from such devices.
- Different specialists may have different opinions about treatment and management of hearing loss. The treatment and management of your child's hearing loss should be tailored to his/her specific needs.
- Repeated hearing evaluations are recommended.

D EGREES OF HEARING LOSS

Hearing loss can range from mild to profound. How much a child can hear depends on the degree of hearing loss and what decibel level (dB) the child can hear at different frequencies. The following table refers to bilateral hearing loss (in both ears).

1 Within Normal Limits (0-20 dB)

Children are able to detect sounds that are within the speech range.

2 Minimal (15-25 dB)

Children with a minimal hearing loss may have challenges hearing soft or distant speech or responding to subtle conversation cues. These children may fatigue more easily or have immature behavior.

3 Mild (21-40 dB)

Children with a mild hearing loss may have difficulty hearing soft or distant speech. They can **miss up to 25-50% of speech** or more in a noisy environment. Children with mild hearing loss may have difficulty in school without appropriate help, such as a wireless assistive listening device or preferential seating (seating near the teacher or in the front of the class). Hearing aids may be recommended.

4 Moderate (41-55 dB) & Moderately-Severe (56-70 dB)

Children with moderate or moderately-severe hearing loss may **miss 50-100%** of speech. Hearing aids and intervention services can support a child as they learn to hear and speak. Sign language may also be recommended.

5 Severe (71-90 dB)

Children with severe hearing loss may **miss 100% of speech**. These children might be able to hear loud voices or environmental sounds. The use of amplification (hearing aids or a cochlear implant) with aural training and/or sign language can greatly increase language development.

6 Profound (91 dB+)

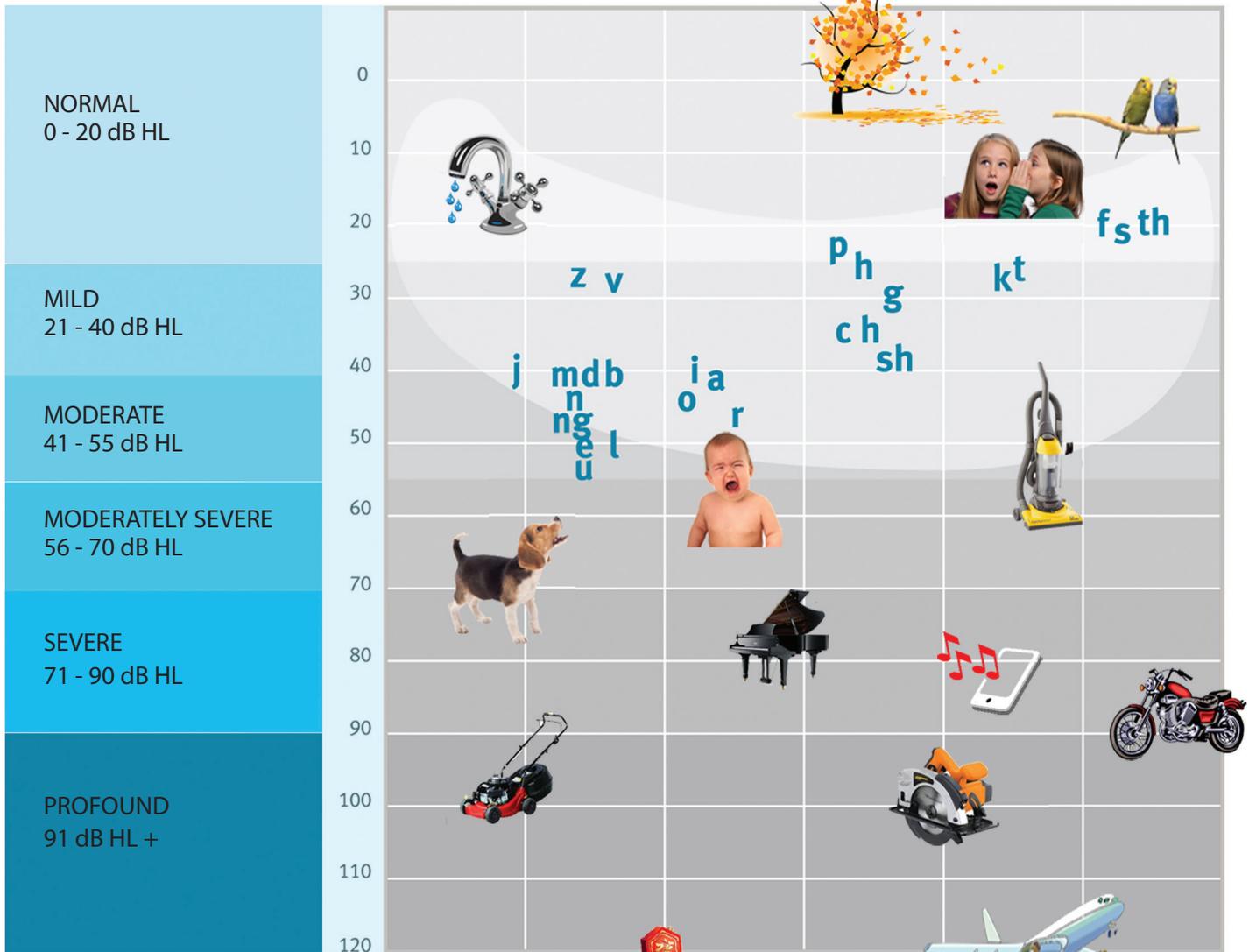
Children with profound hearing loss are usually **more aware of vibrations** than voice patterns. These children depend on vision as their main way to communicate and learn. Residual hearing with amplification may enhance speech development. These children could be candidates for cochlear implants. The use of sign language is also an option.

Degrees of Hearing Loss

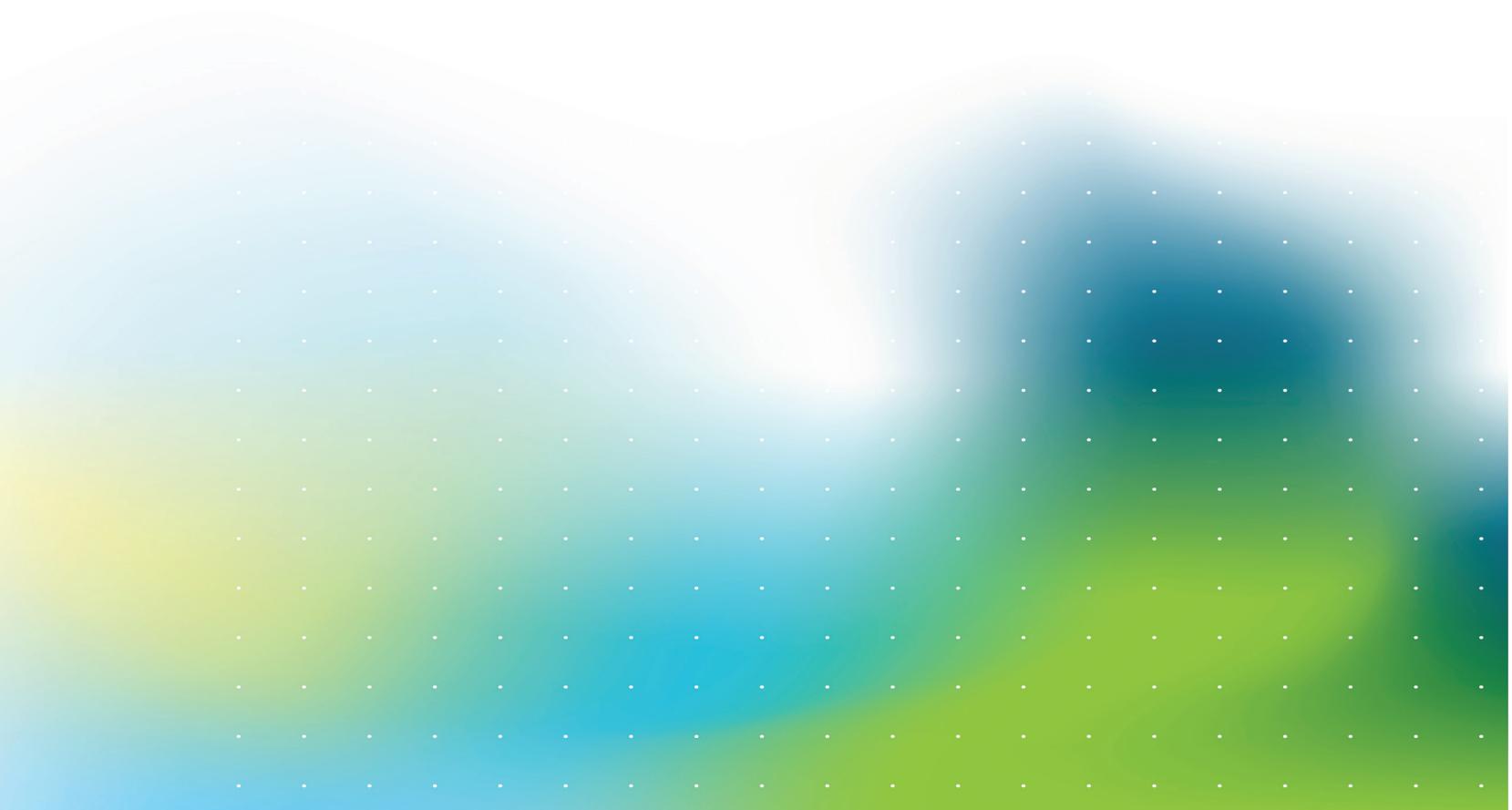
Frequency (Hz)

125 250 500 1000 2000 4000 8000

Hearing Threshold (dB HL)



*A*mplification and Other Devices



HEARING AIDS



As soon as a child is diagnosed with a hearing loss, they can be fitted with hearing aids. Before hearing aids can be fitted on your child, an otolaryngologist (ear, nose, throat doctor, or ENT) will need to give “medical clearance”. The ENT will make sure your child is medically able to wear hearing aids. Parents of a child with hearing loss should talk to an audiologist about what type of hearing aid will work the best for their child. An audiologist will do tests to find out which hearing aid is the best for your child. They will also program the aids to meet your child’s hearing needs.

The audiologist will help you understand how hearing aids work, how to operate them, and how to care for them. Consistent use of working hearing aids will help your child hear to the best of their ability and develop speech and language skills.

Since very young children cannot adjust their own hearing aids, parents and caregivers must care for and operate them. As your child grows, so will their ears and ability to engage in the testing process. Your child will be able to participate in more sophisticated hearing tests. This will give the audiologist a better understanding of exactly what they are able to hear. As your child grows, the hearing aids will be adjusted. For the earmolds to fit properly, they should be remade on a regular basis. This will happen more often when children are very young. It will happen less often as children get older and their ears grow more slowly.

TYPES OF HEARING AIDS

There are many types of hearing aids. Your audiologist will make the best choice based on your child's age, type of hearing loss, and degree of hearing loss.

BEHIND-THE-EAR HEARING AIDS (BTE)

Most babies and young children will be fitted with a behind-the-ear hearing aid because they are easier to operate. They can also be connected to an wireless assistive listening device in school. BTE hearing aids can be used for all degrees of hearing loss. Your audiologist will program the hearing aid based on your child's hearing levels.

Parts of the BTE Hearing Aid



NOTES:

EARMOLD

The earmold is specifically molded to shape to your child's ear. Soft tubing connects the earmold to the hearing aid. When sound is amplified in the hearing aid, it is sent through the tubing in the earmold, then to the ear canal. Since earmolds are custom-fit to your child's ear, as infants they will need to be remade every 3-6 months and less often as your child grows older. A snug earmold fit will help to control feedback.

At the end of each day, earmolds should be wiped with a tissue. If there is wax clogging the earmold, use a wax pick and brush to remove it. The earmold blower can be used to force wax and moisture out. Make sure the earmold dries out every night.

BATTERY

Battery - Hearing aids run on battery power. The life of the battery depends on the size and the number of hours of use. You can expect to get a few days to two weeks of use from each battery. The battery should be placed inside the hearing aid with the (+) and (-) signs facing the correct way. Your audiologist will show you how.

Hearing aids for young children usually come with a tamper-proof battery door. You need a special tool to open it. Your child will not be able to open the battery door on their own. Batteries should be kept away from children and pets since they are small enough to be swallowed. If your child swallows a battery, you should immediately take them to the emergency room.

MICROPHONE

The microphone picks up sound.

EARHOOK

The earhook is a hard plastic piece that curves over the top of the ear. It protects the microphone and receiver. It also directs the sound from the hearing aid into the earmold. The earhook may contain a filter to change how a sound is heard by your child. The filter can look like rubbish. Do not remove any object from the earhook without first checking with your audiologist.



BINAURAL HEARING AIDS

If hearing aids are recommended for a child with bilateral hearing loss (hearing loss in both ears), they will be fitted with binaural hearing aids (a hearing aid for each ear). A monaural hearing aid is in one ear only.

Reasons why binaural hearing aid fitting is helpful:

1. Finding the sound (localization) - To figure out where a sound is coming from, it is best if the sound is heard in both ears. The brain figures out where the sound started by considering the loudness at each ear, the timing of when the sound arrives at each ear, and how the pitch varies at each ear.
2. Hearing better in noise - The auditory system has an easier time blocking out background noise and picking up the main signal if sounds are heard by both ears.
3. Loudness with two hearing aids versus one - Your child will hear sounds more loudly when wearing two hearing aids compared to wearing just one.



NOTES:

LIMITATIONS OF HEARING AIDS

1 Distance

A sound gets softer when the distance between the hearing aid microphone and the sound gets greater. In other words, the further away your child is from a person who is speaking, the softer the speech is when it reaches your child's ear and hearing aid microphone.

2 Background Noise

Background noise can interfere with your child's understanding of the sounds they hear. Hearing aids amplify all sounds, including background noise. A person with normal hearing is better able to ignore background noises than a child who uses hearing aids. For a person with hearing loss, it is harder to pick out the important sounds from the background noise. No hearing aid can make the background noise softer without also making the sound source softer.



A quiet room will help your child get the most out of their hearing aids. There are things you can do in your home to reduce background noise. You can place rugs on the floors, rubber or felt pieces on the legs of chairs and tables, turn off the television, close the windows, and put soft matting under the tablecloth to reduce the sounds of dishes and silverware on the table.

HEARING AID ACOUSTIC FEEDBACK

Feedback from a hearing aid sounds like a loud high-pitched whistle. It occurs when sound escapes out of the gap between the child's ear (pinna) and the earmold. Feedback can be annoying to the user and to people nearby, but it does not hurt your child.

Feedback can occur when a child with hearing aids covers the aid with a hand or hat or presses their head against a surface. When holding your baby or young child, if the child's ear rests against you, feedback may occur and the hearing aid may whistle. Snuggle time is important, so just move your child's head slightly to stop the noise.

Another possible cause of feedback is an earmold that does not fit tightly enough. Or, it could be because of a malfunction inside the hearing aid. If your child experiences feedback, contact your audiologist. A new earmold or repairs may be needed.

HEARING AID CARE AND MAINTENANCE

When your child is fitted with hearing aids, the audiologist will explain the different parts and their functions. You will learn how to properly put the hearing aid on your child, change the batteries, check the tubing and earmold, and check the sound coming from the hearing aid.

You will be given a Hearing Aid Care Kit. It should include a wax pick/brush, earmold blower, listening tube, battery tester, and dehumidifier. When your child is in school, the school staff should also check the hearing aids daily for proper function during school hours. As your child gets older, they can be responsible for some of the hearing aid maintenance.



Care & Maintenance for the Hearing Aid: Care Kit



Dehumidifier - At the end of each day and whenever the hearing aid is not in use, place it in the dehumidifier to dry it out. Remove the battery first.



Size 10



Size 312



Size 13



Size 675

Batteries - Check batteries every day. A battery can last from a few days to two weeks, depending on use. It is a good idea to carry spare batteries in case the battery runs out while wearing the hearing aid. Do not remove stickers until you are ready to use the battery.



Listening tube - Use the listening tube to listen to your child's hearing aid to make sure it is working before putting it on your child. Talk into the hearing aid microphone and listen for static, distortion, and broken or no sound. You can change the batteries to see if this will fix any problems. If a problem is still there, contact your audiologist for a hearing aid check. For young children who are not able to tell you that their hearing aid is not working, you should listen to the hearing aid often each day to make sure it is working.



Superseals™ wrap around the hearing aid and keep moisture from perspiration out of the hearing aid. This is good for children who play sports. Superseals are generally not used in Hawaii because there is too much moisture.

TROUBLESHOOTING THE BEHIND-THE-EAR (BTE) HEARING AID

Problem = No sound or distorted sound

- Replace the battery.
- Check for corrosion on the battery contacts inside the hearing aid. Your audiologist can clean corrosion off.
- Check that the hearing aid is set to the correct program setting.
- Check that the volume is set to the recommended loudness.
- Clean wax from the earmold.
- Clear moisture from the earmold and tubing.

Problem = Whistling or feedback

- Check that the earmold is correctly in the ear, snug.
- Clean wax from the earmold.
- Clear moisture from the earmold and tubing.
- Turn down the volume. This is a short-term fix until you can see the audiologist.
- Check the tubing to see if it is cracked or loose from the earmold. See your audiologist.
- Wax may be blocking the ear canal. See your audiologist or doctor.

If problems continue, call your audiologist to make an appointment for a hearing aid check.



DAILY LISTENING CHECKS AND MAINTENANCE

- Check for cracks or dents. Check the tubing for holes, especially where it joins to the earmold. If found, see an audiologist.
- Check the tubing for moisture. If found, blow it out with the blower.
- Check the earmold for wax. If found, remove wax.
- Check the battery compartment for “rust”. If found, see an audiologist.
- Use the battery tester to check the battery strength and replace if needed.
- Listen to the sound coming out of the hearing aid using the listening tube. This should be done at least twice a day. Listen for static, distortions, or unclear sound. If found, call your audiologist.

HOW CAN YOU HELP YOUR CHILD ADJUST TO HEARING AIDS?

Your child should wear their hearing aids for all waking hours. If your child will not keep the hearing aids on, check if they are causing soreness (redness or other signs that the hearing aids do not fit properly). Also, watch your child’s response to loud sounds. Contact your audiologist if you think the hearing aids are too loud or hurting your child in any way.

If your child will not keep the hearing aids on, talk with your audiologist. You can try different strategies for keeping the hearing aids on. One example is to pair time spent wearing the hearing aids with things that your child likes, like reading stories or playing with a special toy. Then, slowly work up to longer wearing times. Wearing times should be controlled by you and not by your child. The goal is for your child to wear their hearing aids for all waking hours. Be matter-of-fact and not apologetic when putting hearing aids into your child’s ears. Think of putting the hearing aids on as you would eyeglasses.

You should tell your audiologist about your child’s response to sound. This is helpful because you see your child the most. Write things down so that you don’t forget to discuss your concerns or what you have seen. Adjustments to the hearing aids can be made based on test results and on your reports about how your child responds to sound while wearing the hearing aids. When changes are made, you may find that it takes time for your child to adjust to the latest sound from the hearing aids.



IDEAS FOR KEEPING HEARING AIDS ON THE EARS

It can be difficult to keep an infant or toddler from pulling hearing aids out of their ears or to prevent the hearing aid from flopping around on the ear. There are some ways to deal with these problems.



Huggies™ is a brand name for a ring of tubing that fits over a hearing aid and circles the outer ear. It helps to hold the hearing aid in place. This is useful if your child is active, like climbing monkey bars/trees or doing gymnastics. Huggies™ do not help if your child has a tendency to pull their hearing aids off.



Headbands can also be used. They go around the forehead and over the outer ears and hearing aids. You need to make sure the headband does not cover the microphone.



Double-sided tape that is used for wigs and toupees can also help keep the hearing aid from flopping around the ear.



Retainer clips (Ear Gear™ and Critter Clips™ are name brands) can be clipped to the back of the shirt with a cord that attaches to the hearing aid. If the hearing aid is pulled off or falls off, it will dangle from the clip at the back of the child's shirt. The hearing aid will not be dropped or thrown and is less likely to be chewed on.



Pilot Caps Some parents use soft cotton pilot caps to keep the child from pulling the hearing aids off and to hold them in place.



COCHLEAR IMPLANTS

A cochlear implant is a surgically implanted electronic hearing device. It provides direct electrical stimulation to the hair cells in the inner ear (cochlea). Sound signals are sent straight to the hearing nerve.

There are two parts to a cochlear implant system: the internal implant and the external processor. The processor, which looks like a behind-the-ear hearing aid, can be worn behind the ear or attached to the child's clothing. The processor is held in place by magnets on the implant, which is under the skin. The cochlear implant does not "restore" or "cure" hearing. It does allow a person to identify the sensation of sound.

WHO IS BEST SUITED FOR A COCHLEAR IMPLANT?

In general, the best child candidates are those who:

- have severe-profound hearing loss in both ears;
- have had limited benefit from hearing aids;
- are healthy and have no medical conditions that would make the surgery risky;
- are involved (when able), along with their parents, in all steps in the process;
- understand (when able), along with their parents, their role in the successful use of cochlear implants;
- have (when able), along with their parents, realistic expectations for cochlear implant use;
- are willing to be actively involved in their treatment and services; and
- have support from their educational program to emphasize the development of auditory skills.

Not all children will benefit from cochlear implants. Speak to your child's audiologist and ENT doctor to get more information and to find out if your child is a good candidate.



WHERE CAN I GET INFORMATION ON COCHLEAR IMPLANTS?

For more information on cochlear implant technology, ask your child's audiologist or surgeon/Otolaryngologist (ENT doctor). These professionals can work with families to decide if a child would benefit from an implant, determine eligibility, perform the surgery, and provide follow-up care.

WHAT HAPPENS WHEN MY CHILD GETS A COCHLEAR IMPLANT?

If your child does get a cochlear implant, they will receive services from a team of professionals. Doctors, audiologists, speech-language pathologists, teachers, and counselors will work with children as they get the implant, receive follow-up care, learn to listen, improve speech, use speech reading, and handle communication. You will be taught how to use the implant, how to support your child in understanding the sounds they hear, and how to use those sounds to promote listening and spoken language skills.

BONE-ANCHORED SOUND PROCESSOR

A bone-anchored sound processor may be used for children who have microtia or a blocked/damaged middle ear (i.e., no ear canal or ossicles bones in the middle ear). This hearing device can be surgically implanted (anchored to the bone) or non-surgically attached (fastened with a softband). With this technology, sound bypasses the outer ear and middle ear. It is sent directly to the cochlea. Bone-anchored sound processors can also be used by children who have a unilateral hearing loss (in only one ear.) You can ask your audiologist if the bone-anchored sound processor is right for your child.

WIRELESS ASSISTIVE LISTENING DEVICES (ALDs)

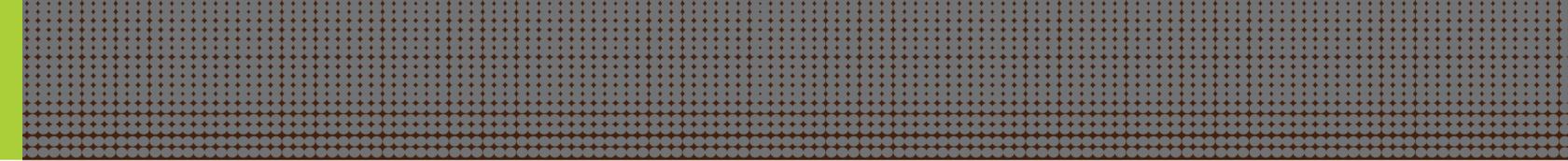
Children with hearing loss can have a difficult time hearing in noisy environments such as cars or classrooms. In these settings, hearing aids may not be enough. Wireless ALDs can help your child hear better in these difficult listening environments. These may also be called Frequency Modulation (FM) systems.

How do Wireless ALDs Support Hearing Aids?

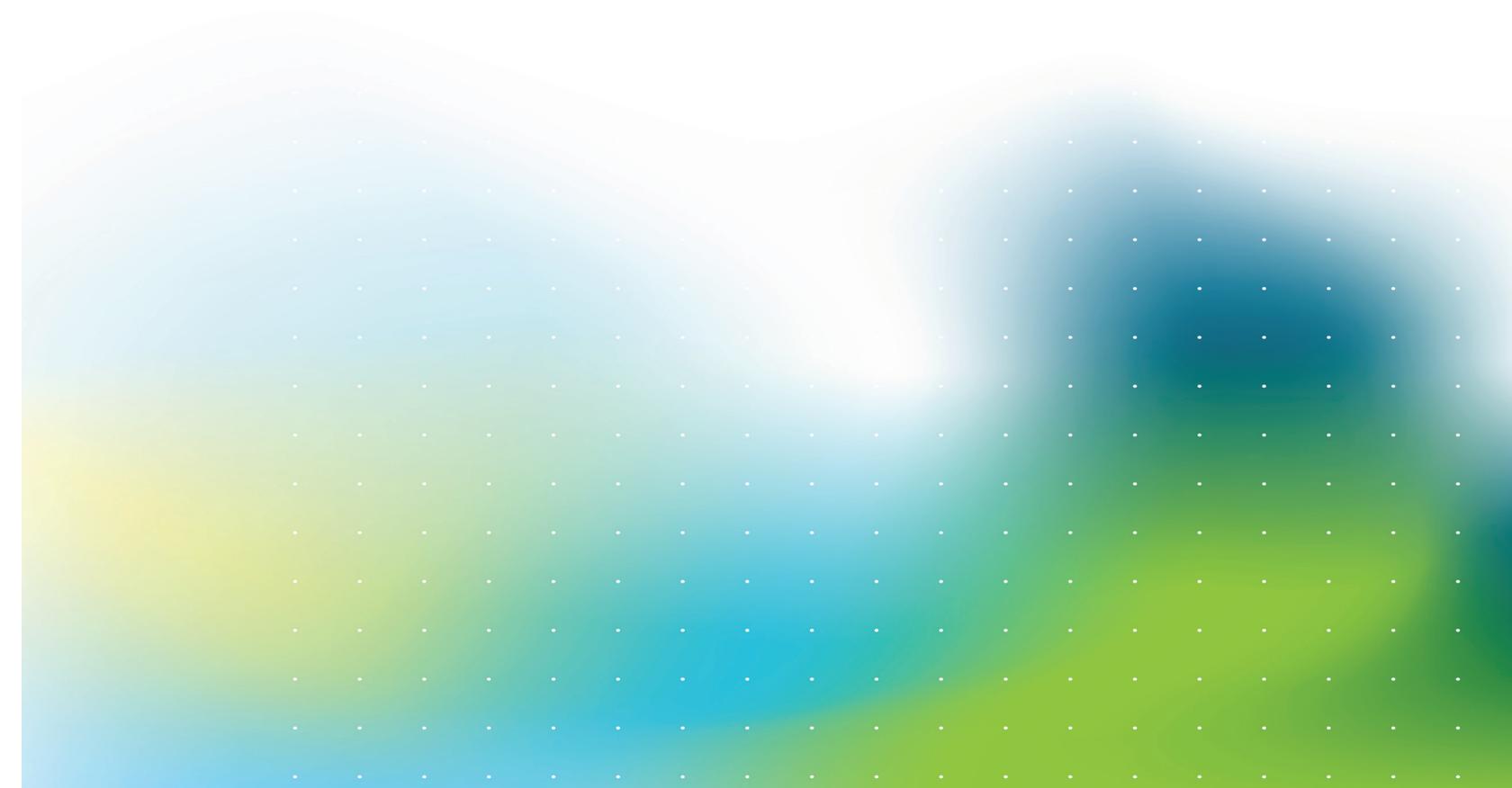
Hearing aids and cochlear implants have many benefits for children with hearing loss. However, those technologies are limited by the distance from the speaker, background noise, and sounds in the environment.

The further the child is from a speaker, the softer the sound is by the time it reaches the microphone on the child's hearing aid or cochlear implant. In noisy environments, it is difficult to tell a speaker's voice apart from background noise. A child with hearing loss can become confused by all of the sounds they are hearing. A wireless ALD has a microphone that sends a speaker's voice straight to the child's hearing aid or cochlear implant. This cuts down background noise and reverberation. The speaker wears a wireless microphone that sends their voice directly to the child's hearing aid or cochlear implant and is not limited by distance or positioning in the classroom/home. Even with a wireless ALD, it is still best to have children with hearing loss seated close to the person speaking to them in order to take full advantage of visual cues plus sound input.





*C*ommunication Opportunities





MILESTONES FOR LANGUAGE DEVELOPMENT

Children go through developmental stages and reach milestones as they develop speech and language. The following table outlines typical language milestones at different ages.

0-3 Months

- Startles or cries at unexpected sounds; wakens at loud noises.
- Quiets down in response to new sounds.
- Turns to people, especially caregivers, when they speak.
- Stops activity and pays attention to a new voice.
- Quiets or smiles when spoken to.
- Makes pleasure sounds (cooing).
- Cries differently for different needs.

3-12 Months

- Watches your face when you speak or your hands when you sign.
- Points to people, objects, and places but not at self.
- Responds to their name being said or signed.
- Follows simple instructions such as “no” or “stop”.
- Imitates facial expressions and mouth movements.
- Can say/sign 1-3 words with meaning.

12-24 Months

- Has a vocabulary of 50-100 words.
- Vocabulary is mainly nouns, such as people, places, animals, or things.
- Tries to imitate easy words (signed or spoken).
- Points to and names simple objects and body parts.
- Begins saying two to three word phrases such as “more milk”.
- Understands and answers simple sentences such as “show me your eyes (nose, mouth, hair)” or “Where is dad?”.

24-36 Months

- Uses three to four word sentences.
- Speech is more accurate and they can be understood by familiar adults.
- Uses pronouns “I”, “you” and “me” correctly.
- Knows a couple of colors when named/signed.
- Asks and answers questions beginning with “what”, “where” and “when”.
- Knows around three prepositions such as “in”, “on” or “under”.
- Uses some plurals such as “socks” or “shoes”.

L LANGUAGE CHOICES



- **American Sign Language (ASL)** - ASL is a visual language. It uses signs made by moving the hands, combined with facial expressions and body postures. Like a spoken language, ASL is a complete language with unique rules of grammar and syntax. It is an evolving language that grows and changes over time.
- **Listening and Spoken Language** - Verbal communication uses listening and spoken language. This is also known as oral language.
- **Total Communication** - Total Communication includes a variety of communication approaches: signed, oral/verbal, auditory, written, and visual aids. The approach usually depends on what works best for the child, the environment, and with whom the child is communicating. The sign system commonly used is "Simultaneous Communication". This is artificially constructed, with signs from ASL in typical English word order.
- **Cued Speech** - Cued speech is a visual communication system. It is not a complete language by itself. Cued speech supports spoken language by combining natural mouth movements with visual cues. Visual cues include hand shapes, movements, and placements that represent different speech sounds. Cues help people tell apart speech sounds that look the same on the lips, such as "p" and "b", but are pronounced differently.

Early Intervention Services





The State Department of Health (DOH) Early Intervention Section (EIS) is a federal and state-mandated program that provides services to support the development of infants and toddlers from birth to three years of age. Information and support are provided to parents to increase their knowledge and ability to support their child's development. The EIS is responsible for the implementation of Part C of the federal mandate called Individuals with Disabilities Education Act (IDEA). The EIS makes sure that Hawaii meets the requirements and regulations of Part C of IDEA. For information about Part C, IDEA, please go to <http://idea.ed.gov/part-c/search/new>.

EARLY INTERVENTION REFERRALS

Parents, family members, healthcare providers, or caregivers who are concerned about the development or special health care needs of a child, age 0-3 years, can make a referral to Early Intervention (EI) by calling any EI Program or the Early Intervention Referral line at:

- (808) 594-0066 (Oahu), or
- 1-800-235-5477 (toll-free on Neighbor Islands).

After a referral is made, the nearest EI program will contact and meet with the family. A developmental evaluation will be done to determine if a child is eligible for services. If the child qualifies, an Individualized Family Support Plan (IFSP) will be developed. The child and family will then receive services through the EI program.

E VALUATION

The Battelle Developmental Inventory (BDI) is a tool used to measure a child's development. The examiner interacts with a child using toys, games, and tasks. The examiner observes a child's ability to follow instructions, interact with others, and perform tasks. Parent interview is also used. The child's performance is scored based on standard criteria.

The BDI allows EI staff to identify a child's strengths and areas of need. It is also used to decide if a child is eligible for services. The BDI looks at five areas of development: adaptive behaviors, personal/social skills, communication (expressive and receptive language), gross and fine motor abilities, and cognitive skills. The results show a child's development compared to other children of the same age, and also whether or not there are developmental delays.

***Please note: Children with permanent hearing loss qualify for EI services regardless of BDI Result.**

INDIVIDUALIZED FAMILY SUPPORT PLAN (IFSP)



An Individualized Family Support Plan (IFSP) is a document that is based on the strengths and needs of a child and their family. Parents, Early Intervention (EI) service providers, specialists, and doctors can be part of the IFSP team. The IFSP lays out a plan of action with goals and objectives. This plan guides the services for the child and their family. The family will be assigned a care coordinator who will help to navigate the family through the IFSP process.

*T*RANSITION

Children receive Early Intervention (EI) services until their third birthday, as long as they meet eligibility criteria. At age three, children may transition to the Department of Education (DOE), a private or public preschool, Head Start, or other programs in their community. Families are supported through the transition by their child's care coordinator and the IFSP team.

A family may have their child evaluated by the DOE for eligibility for a special education program. The child and family will attend a series of meetings.



Transition Meeting

- Meetings typically occur six months before the child's third birthday.
- Meetings are optional.
- Families can ask questions and get information from different programs, such as DOE, Head Start, or community preschools. These programs may be options for their child's placement at age three.



Student Focus Group Meeting

- The DOE will gather information to determine whether or not to do an evaluation.
- The DOE will have the data and assessments done through EI, if the family has consented.
- If the team feels more testing is needed, they will discuss which tests to do.
- DOE meetings will be held at the child's home school. This is usually the school closest to the child's home.



Eligibility Meeting

- Parents should be given copies of the evaluation reports before the eligibility meeting.
- The DOE will present results from their evaluations. Data from the assessments and input of the family and the EI representatives will be considered.
- Parents may ask questions and share insights.
- The home school team will determine eligibility based on DOE criteria.

4

Individualized Education Plan (IEP)

- If a child is eligible for special education services through the DOE under the Individuals with Disabilities Education Act (IDEA), the IEP team will then develop an IEP based on the unique needs of the child.
- The IEP team must include the child's parents and various staff from the home school. This should include one general education teacher, one special education teacher, and one administrator. Other IEP team members may include: specialists such as speech language pathologists or physical therapists, EI representatives, or other persons invited by the parents or DOE.
- The IEP is done yearly. The annual IEP will include educational goals, objectives, and supplemental aids and services.
- These are related items from the IDEA:
 - 2004 IDEA Reauthorization: Sections 300.343(c)(iii) and 300.346(a)(1) and (b) "Parents are considered equal partners with school personnel in making these decisions, and the IEP team must consider the parents' concerns and the information that they provide about their child in developing and implementing the IEP".
 - 2004 IDEA Reauthorization: Sec. 614 (3) Development of IEP; (B) Consideration of Special Factors. The IEP team shall: "(iv) Consider the communication needs of the child, and in the case of the child who is deaf or hard of hearing, consider the child's language and communication needs, opportunities for direct communications with peers and professional personnel in the child's language and communication mode, academic level, and full range of needs, including opportunities for direct instruction in the child's language and communication mode; and (v) Consider whether the child requires assistive technology devices and services".

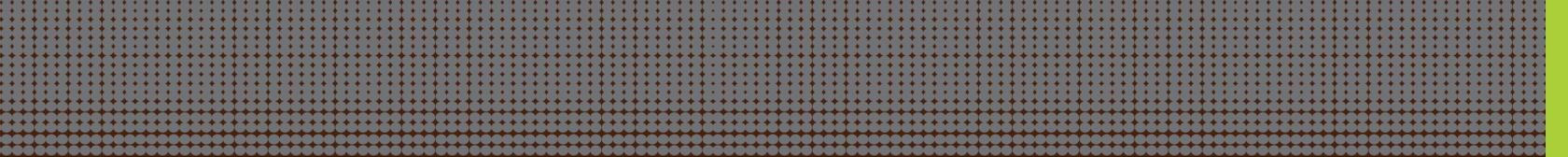
5 PLACEMENT

- Parents have ten days to look over and approve the IEP.
- Based on the IEP, the team decides the school placement to meet the child's needs. The child's "home school" may not necessarily be chosen.
- Several factors impact the placement decision, such as if the child needs specialized instruction, or if the child's needs are greater than the resources available at their home school.



CONCLUSION

We hope that this resource guide is useful for you and your family. We encourage you to seek out more resources, as listed in the Appendices of this guide. Finally, we wish you and your child the best as you grow and learn together.



*A*ppendix A

APPENDIX A HAWAII ORGANIZATIONS AND ASSOCIATIONS

Please note: TTY, also known as Text Telephone Device or Telecommunication Device for the Deaf (TDD), is a device required at both ends of the conversation that allows people who are deaf or have hearing loss to use the telephone to communicate. TTY lets people type messages back and forth to one another instead of talking and listening.

ALOHA STATE ASSOCIATION OF THE DEAF (ASAD)

Website: <http://asadhawaii.org>

Facebook: <https://www.facebook.com/ASAD.Hawaii>

A non-profit association of and for Deaf citizens, ASAD sponsors the Miss Deaf Hawai'i Pageant and Kuli Senior Citizens Club, publishes the *Ka Po'e Kuli o Hawaii* bimonthly newsletter, sponsors cultural and social events of interest to the Deaf Community, and holds a biennial statewide conference. ASAD is a state organization affiliated with the National Association of the Deaf.

ASSISTIVE TECHNOLOGY RESOURCE CENTERS OF HAWAII (ATRC) AND CAREER EXPLORATIONS OF HAWAII

200 North Vineyard Blvd, Suite 430, Honolulu, HI 96817

Toll Free: 1-800-645-3007 Phone: 808-532-7110 Fax: 808-532-7120

Website: <http://www.atrc.org/>

Email: atrc-info@atrc.org

A non-profit organization providing information, training, outreach, and policy development on assistive technology for persons with any type of disability. Operates assistive technology equipment loan banks on four islands. Provides low interest financial loans to purchase assistive technology devices and services.

DEAF MENTAL HEALTH SERVICES INC.

Licensed Clinical Social Worker: Roxanne Mie Tomita, LSW, DCSW

P.O. Box 26258, Honolulu, HI 96825

Phone: 808-372-3984

Email: DMHSI@hotmail.com

Offers Deaf and hard of Hearing individuals comprehensive mental health treatment, sensitive to the culture and communication needs of the Deaf community. Staff includes professionals who are fluent in American Sign Language.

DEAF NEWS HAWAII / ASL Hawaii

Website: www.ASLHI.com

Helping people on Oahu learn American Sign Language and about Deaf culture.

DEPARTMENT OF EDUCATION (DOE)

HAWAII SCHOOL FOR THE DEAF AND THE BLIND (HSDB)

3440 Leahi Avenue, Honolulu, HI 96815

Phone: 808-733-4999 (TTY/Voice)

Library Phone: 808-733-4831, Fax: 808-733-4824

Website: www.hcdb.k12.hi.us

The Hawaii School for the Deaf and Blind is a public education facility that provides services to the islands' deaf, blind, and deaf-blind students. One of the main functions of HSDB is providing an ASL immersion program that follows the tenets of a bi-cultural, bi-lingual philosophy.

DEPARTMENT OF HEALTH (DOH)

CHILDREN AND YOUTH WITH SPECIAL HEALTH NEEDS PROGRAM

741 Sunset Avenue, Honolulu, HI 96816

Phone: 808-733-9055 (TTY/Voice) Fax: 808-733-9068

Provides care coordination, social work, nutrition services, financial assistance, outreach, and advocacy for children with hearing loss ages 0 to 21 years who meet financial and medical eligibility requirements. Services may include ENT and audiologist visits and hearing aid purchase and related services.

DEPARTMENT OF HEALTH (DOH)

EARLY INTERVENTION SECTION

1350 South King Street, Suite 200, Honolulu, HI 96815

Phone: 808-594-0000 (Voice) Fax: 808-594-0015

The Early Intervention Section (EIS) is Hawaii's lead agency for Part C of I.D.E.A. (Individuals with Disabilities Education Act). EIS supports families of children from birth to age three, who are developmentally delayed and/or biologically at-risk. EIS also supports the many public and private agencies that provide prevention and intervention services. Infants and toddlers may receive evaluation services, care coordination, and an Individualized Family Support Plan (IFSP). An IFSP is a plan that identifies the services and support needed by both the child and the family. These services are available at no cost to families. Care coordination links the family to programs that can meet the needs of the family.

DISABILITY AND COMMUNICATION ACCESS BOARD (DCAB)

919 Ala Moana Boulevard, Room 101, Honolulu, HI 96814

Phone: 808-586-8121 (TTY/Voice)

Fax: 808-586-8129

Website : <http://health.hawaii.gov/dcab/>

A state agency that serves as a central clearinghouse of information on resources and services to people with disabilities and makes policy recommendations on their behalf. Publishes *Ha`ilono Kina* quarterly newsletter. Establish guidelines and recommended fee schedules for sign language interpreters and other communication assistants utilizing state services. Coordinates the Hawaii Quality Assurance Screening and credentials sign language interpreters who do not possess national certification. Neighbor island offices in Lihue and Kahului.

HANDS & VOICES, HAWAII

Phone: 808-223-9229

Email: HV.hawaii@gmail.com

website: <http://hvhawaii.weebly.com/>

Hands and Voices Hawaii is dedicated to supporting families with children who are deaf or hard of hearing, without bias towards communication modes or methodology. This is a parent-driven, non-profit organization that provides families with the resources, networks, and information they need to improve communication access and educational outcomes for their children.

HAWAII COMMUNITY GENETICS

1441 Kapiolani Blvd, suite 1800, Honolulu, HI, 96814

Phone: 808-973-3403

Fax: 808-973-3401

Hawaii Community Genetics provides genetics services for children with developmental and/or medical issues, including hearing loss. A visit will include an evaluation by a geneticist (genetics doctor) and genetic counselor, and may include genetic testing. Your child's pediatrician can make a referral for you to see the specialists at Hawaii Community Genetics.

HAWAII DEAF AND BLIND PROJECT

Pacific Outreach Initiative, University of Hawai'i at Manoa

1776 University Avenue, UA 4-6, Honolulu, HI 96822

Phone: 808-956-5861

Fax: 808-956-7878

Website: <http://www.pdb.hawaii.edu/>

The Hawaii Deaf-Blind Project provides technical assistance to children and youth who are deaf-blind, birth through 21 years of age, and to their families and service providers. This may include in-home consultation, school consultation, family support, networking, in-service, biannual statewide trainings, referrals to other agencies, and resources.

HAWAII INTERPRETING SERVICES

Interpreter Referral Service

Assignment: Legal, Medical, Mental Health, Performance, Education

P.O. Box 734, Kaneohe, HI 96744

Phone: 808-394-7706

Email: info@interpretinghawaii.com

Hawaii Interpreting Services connects you to quality sign language interpreters and real-time captioners providing communication access for Deaf, hard of hearing, and Deaf-blind people statewide.

ISLAND SKILL GATHERING (ISG)

3472 Kanaina Avenue, Honolulu, HI 96815

Phone: 808-732-4622 (Voice/TTY)

Fax: 808-739-5464

Email: isg@aloha.net

Website: <http://www.isghawaii.com/>

ISG provides support services and product sales for people with disabilities, including individual and group training and counseling of independent living skills; job development /placement/coaching; and assistive technology—assessments, evaluation, product acquisition, computer technology delivery, set up, and demonstration. ISG is the sole dealer of Ultratec text telephones in Hawaii and offers repairs and servicing of TTYs. ISG sells assistive listening & alerting devices, closed circuit televisions, and hand-held magnifiers.

ISG focuses upon technology for people who are blind, experience low vision, who are deaf, hard of hearing, or have speech or learning disabilities. ISG also provides ASL/English Sign Language interpreting services. ISG has dealerships with major distributors of products for deaf/hh, blind/low vision, and specific learning disabilities.



ISLE INTERPRET

Interpreter Referral Service

Assignment: Legal, Medical, Mental Health, Performance, Education

Voice/Fax: 855-475-3874

Video Phone: 808-791-0505

P.O. Box 1380, Kaneohe, HI 96744

Email: info@isleinterpret.com

Isle Interpret promotes successful communication with deaf and hard of hearing persons throughout the state of Hawaii by offering affordable, convenient, and secure onsite American Sign Language (ASL) interpreting services, video remote interpreting services in ASL, real time captioning (RTC or CART) services, and computer assisted note taking (CAN) services.

KAPIOLANI DEAF CENTER (KDC)

4303 Diamond Head Road, Manono 102, Honolulu, HI 96816

Phone: 808-734-9210 (TTY/Voice)

Fax: 808-734-9238

Website: kdc.kapiolani.hawaii.edu/

The Kapiolani Deaf Center (KDC) provides services for Kapiolani Community College students and other members of the deaf community in Hawaii and the Pacific Rim. The KDC provides ASL classes and academic support services for Deaf and Hard of hearing students at Kapi`olani Community College.

LEARNING DISABILITIES ASSOCIATION OF HAWAII

245 N. Kukui Street, Suite 205, Honolulu, HI 96817

Phone: 808-536-9684

Outer Islands toll-free 1-800-533-9684

Fax: 808-537-6780

Website: www.LDAHawaii.org

Learning Disabilities Association of Hawaii (LDAH) is a non-profit organization founded in 1968 by parents of children with disabilities. The mission of the Parent Training & Information Center (PTI) for Hawaii is to enhance education, work, and life opportunities for children and youth with disabilities by empowering them and their families through information, training and mentoring, and by public outreach and advocacy. LDAH supports parents of children with any disability and the professionals who serve them in the following ways: information/referral, education and training, mentoring and advocacy, small grant awards to benefit children with disabilities, School Readiness Project, and Sharing the Commitment (STC)-- *Po`okela* Project.

LIBRARY FOR THE BLIND & PHYSICALLY HANDICAPPED (LBPH)

402 Kapahulu Ave., Honolulu, HI 96815

Phone: 808-733-8444 (TTY/TDD) Fax: 808-733-8449

Provides talking books, talking book machines, large-print books, audiocassettes, braille books, and cassette book machines for blind and physically handicapped persons. Provides radio reading service and transcribing services.

RELAY HAWAII (TRS)

420 Waiakamilo Road, Suite 405, Honolulu, HI 96817

Phone: 808-847-9012 TTY

Website: www.relayhawaii.com

Sprint Hawaii operates a 24-hour Telecommunications Relay Service (TRS) for telephone customers throughout the Islands and internationally, allowing people who use TTY's to communicate with non-TTY phone users and vice versa. Anyone who needs to use the service can call 711.

SPECIAL PARENT INFORMATION NETWORK (SPIN)

919 Ala Moana Blvd., Room 101, Honolulu, Hawaii 96814

Oahu: 808-586-8126 VoiceTTY Fax: 808-586-8129

Kauai: 808-274-3141, ext. 6-8126 Hawai'i – 808-974-4000, ext. 6-8126

Maui – 808-984-2400, ext. 6-8126 Molokai & Lanai – 1-800-468-4644, ext. 6-8126

Email: spin@doh.hawaii.gov Website: www.spinhawaii.org

A parent to parent organization in Hawaii that provides information, support, and referral to parents of children and young adults with disabilities, and the professionals who serve them.

UNIVERSITY OF HAWAII SCHOOL OF MEDICINE

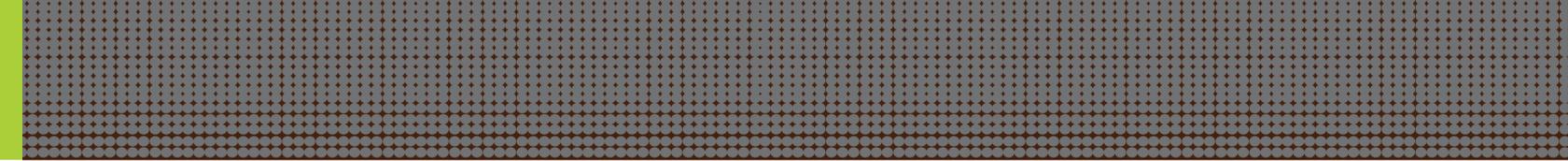
SPEECH AND HEARING CLINIC (UHSHC)

677 Ala Moana Blvd. Suite 625, Honolulu, HI 96813

Phone: 808-692-1580 Fax: 808-566-6292

Website: <http://manoa.hawaii.edu/csd/uhshc/>

The UHSHC serves as a teaching facility for speech pathology graduate students enrolled in the Department of Communication Sciences and Disorders. Graduate students work directly with patients under the close supervision of an instructor. The UHSHC provides speech, language, and hearing services to the Hawaii community. The clinic provides multi-disciplinary diagnostic evaluations and therapeutic services to children and adults on an outpatient basis.

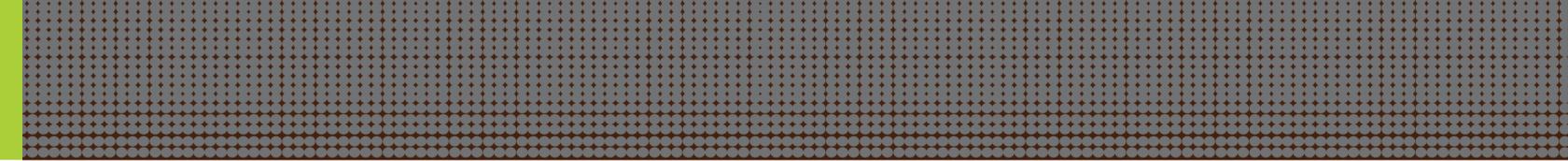


*A*ppendix B

APPENDIX B INTERNET RESOURCES



1. AMERICAN SOCIETY FOR DEAF CHILDREN
www.deafchildren.org
2. AMERICAN SPEECH LANGUAGE HEARING ASSOCIATION
www.asha.org
3. BEGINNINGS FOR PARENTS OF CHILDREN WHO ARE DEAF OR HARD-OF-HEARING, INC.
www.ncbegin.org
4. BOYS TOWN NATIONAL RESEARCH HOSPITAL
www.babyhearing.org
5. CHOICES FOR PARENTS
www.choicesforparents.org
6. CLERC CENTER
www.gallaudet.edu/clerc_center.html
7. HANDS & VOICES
www.handsandvoices.org
8. HAWAII DEAF-BLIND PROJECT
www.cds.hawaii.edu/hdb/
9. NATIONAL ASSOCIATION OF THE DEAF
www.nad.org
10. SPECIAL PARENT INFORMATION NETWORK
www.spinhawaii.org
11. VL2- VISUAL LANGUAGE AND LEARNING
www.vl2.gallaudet.edu



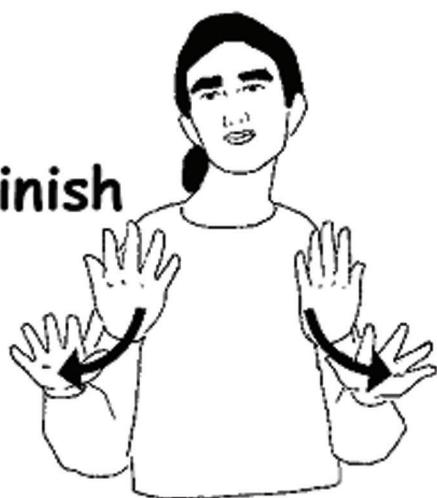
*A*ppendix C



APPENDIX C
SIGN LANGUAGE SAMPLES



finish



play



more

diaper



please



