

DRAFT

This document is an FYI background document which is not for distribution. Please note this is a direct English translation from the Spanish version of “Guide for Families of Children with Hearing Loss/Guía para familias de niños con pérdida auditiva.” It is designed to be used as a reference for English-speaking professionals and should not be distributed.

Hi. My name is Juan and this is my wife Ana.

We have a beautiful daughter. Her name is Maria. It had been a long time since the audiologist did a full evaluation of our daughter's hearing, and this is the first time she told us that our daughter could not hear. This news caught us by surprise, because nobody in our family ever had difficulty hearing. Additionally, our baby looked fine. We wanted to know why this was happening to us. We were very concerned and did not know what to do.

The audiologist helped us very much. Although she did not speak Spanish and we spoke very little English, with the help of an interpreter, the audiologist was able to comfort us and said there were many services available for our daughter. She also said that the most important thing was to get help as soon as possible.

Juan and Ana suggest:

- If you don't speak English, ask for a professional interpreter.
- Ask to have the exam results explained in Spanish and obtain a copy of the test results.
- Time is very important! The sooner a hearing loss is diagnosed, the sooner you will be able to help your child communicate.
- If you would like to visit an audiologist or any other specialist, ask your child's pediatrician to help you find one who speaks Spanish.

For more information please consult the fact sheets at the end of this story.

We wanted to help our daughter but we were worried about the cost of the services that she was going to need. Additionally, we had another child who needed our care. We told the audiologist about our problem. She told us that there were resources that could help our family overcome these kinds of difficulties. She suggested that we visit the state program for children with special health care needs. At the program center, we met Angela, our service coordinator.

Angela spoke Spanish. With her help, we were able to schedule appointments with various specialists, find services appropriate for Maria, and find help to pay for her hearing aids.

Juan and Ana suggest:

- Ask specialists, such as your child's pediatrician or audiologist, about the services your child can qualify for.
- Do not worry! The information you share with the people who are caring for your child will be used to help your child. It will not be given to anybody else, unless you authorize it.
- Do not neglect your other children; they are also going through a difficult time and need your attention, love and support.

For more information please consult the fact sheets at the end of this story.

At first, it was hard to see our daughter wear hearing aids; we did not know babies could wear such devices. But we soon realized how helpful they were!

The specialists suggested ways to facilitate our communication with our child since she was a little baby. We taught other family members what to do so Maria could communicate with them and grow up knowing that she had our support and love.

Everybody, from the audiologist to our service coordinator, and other specialists, were very supportive. Each time we had a question or concern, we called them, and they helped us find an answer. However, no one knows our daughter better than us. Even though advice is very helpful, in the end, we must decide what to do.

Juan and Ana suggest:

- Hearing aids make sounds louder and clearer, so your baby can hear them. However, there are cases in which hearing aids are not the right method, and you may have to look for other options.
- Some health insurance plans may help you pay for your child's hearing aids. If this is not the case, you can ask the audiologist or service coordinator about other options such as the hearing aid loan bank.
- If you do not understand something or want more information ask a pediatrician or audiologist, they can answer you questions.

For more information please consult the fact sheets at the end of this story.

Thanks to Angela we met other families of children with hearing loss. At the beginning we felt isolated and thought we were the only ones in this situation. Meeting other families like ours made us feel better.

The audiologist told us that there are many communication methods. In the beginning we thought deaf people could only communicate through signs or by lip reading. We were very surprised to see that there were so many communication options available.

Before we chose the best option for Maria, we sought information and visited schools that offered different methods to educate children who are deaf or have a hearing loss. We also learned about the technology available for children with a hearing loss, such as cochlear implants, FM systems, and other resources.

Juan and Ana suggest:

- When you are doing daily activities with your child, such as bathing or feeding, take the time to communicate with your child.
- Make sure you and your family members speak to your child in the language that they know best. Children with hearing loss can learn more than one language (Spanish, English, etc.).
- People that are helping your child should know what language you use to communicate at home. This will help them choose the best method to communicate with your child.
- There are organizations that can help you contact deaf people or parents of children with hearing loss. Ask your service coordinator or other professionals helping your child about these organizations.

For more information please consult the fact sheets at the end of this story.

Maria is already 3 years old and is growing and learning more and more each day. Both Maria and her brother fill us with pride and satisfaction and have taught us that as a family we can overcome any difficulty.

We hope this short story will inspire parents like us who work for the well-being of their children.

Juan and Ana suggest:

- Watch your child. Your child will give you hints that will help you decide which communication method he or she likes best.
- You might try a communication method and realize that it is not the best for your child. That is OK. You can change your mind at any time.
- You might hear different opinions about the best communication method for your child. It is OK to listen to what people have to say, but in the end, it is the family who knows their child best, and who must choose a communication method that suits the child.
- Teach your child to be independent and confident. That is the best gift you can give to him or her.

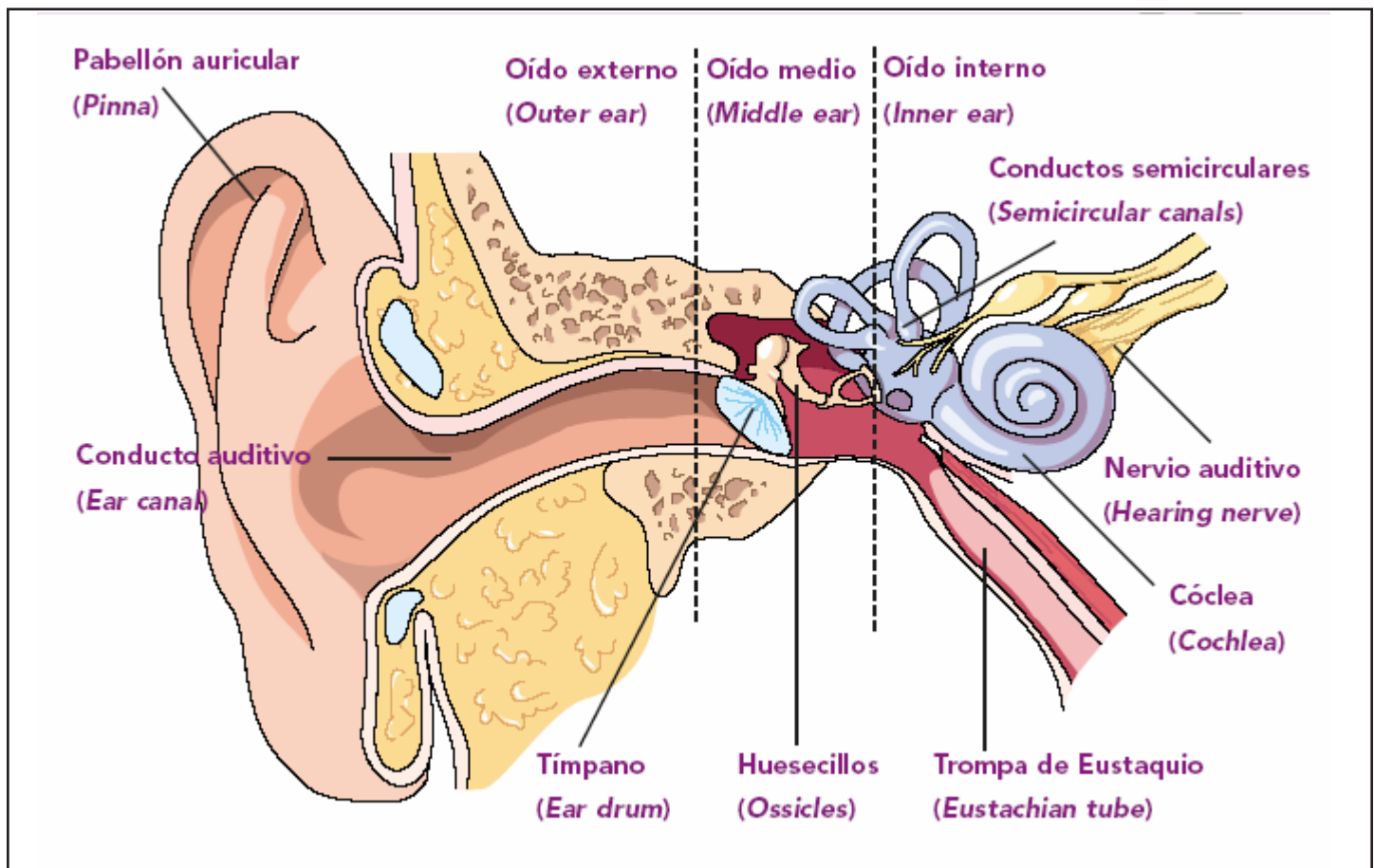
For more information please consult the fact sheets at the end of this story.

The goal of this brochure is to communicate with families of children with hearing loss and to help them search for professional services that will help their children become happy and independent adults.

For more information or to order additional copies of this document please visit the Early Hearing Detection and Intervention program website at www.cdc.gov/ncbddd/spanish/hearingloss

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Parts of the Ear



Outer ear: The outer ear includes the auricle or pinna, the ear canal, and the eardrum or tympanic membrane. Sound travels through the ear canal and moves or vibrates the eardrum.

Middle ear: The middle ear is made up of the eardrum and three small bones called ossicles (hammer, anvil, and stirrup). The eardrum vibrates causing the middle ear bones to move and send the sound through the middle ear to the inner ear. There is also a tube that runs from the middle ear space to the back of the throat called the Eustachian tube.

Inner ear: The inner ear is made up of the cochlea (a snail shaped organ), the semi-circular canals (balance mechanism), and the auditory nerve (leading from the ear to the brain). When the sound vibrations enter the inner ear from the middle ear, the cochlea sends nerve impulses to the brain through the auditory nerve. Once the brain receives the nerve impulses, there is a sensation of hearing.

Types of Hearing Loss

These terms describe hearing loss where the part of the ear is not working in a usual way

Conductive Hearing Loss: Hearing loss caused by something that stops sounds from getting through the outer or middle ear.

Sensorineural Hearing Loss: Hearing loss that occurs when there is a problem in the way the inner ear or hearing nerve works.

Mixed Hearing Loss: Hearing loss that includes a conductive and a sensorineural hearing loss.

These terms describe the degree or the amount of hearing loss a person has

Mild Hearing Loss: A person with a mild hearing loss may hear some speech sounds but soft sounds are hard to hear.

Moderate Hearing Loss: A person with a moderate hearing loss may hear almost no speech when another person is talking at a normal level.

Severe Hearing Loss: A person with severe hearing loss will hear no speech of a person talking at a normal level and only some loud sounds.

Profound Hearing Loss: A person with a profound hearing loss will not hear any speech and only very loud sounds.

These terms describe when the person with hearing loss stopped hearing

Pre-lingual Hearing Loss: The hearing loss occurred before the child learned to talk.

Post-lingual Hearing Loss: The hearing loss occurred after the child learned to talk.

These terms describe the side or sides on which the hearing loss occurs

Unilateral Hearing Loss: There is a hearing loss in one ear.

Bilateral Hearing Loss: There is a hearing loss in both ears.

Doctors and Professionals for a Child With Hearing Loss

Audiologist: A professional trained to test hearing by performing a full hearing test. The audiologist does tests to determine whether hearing aids would help a baby with hearing loss. An audiologist may also put hearing aids on your baby or provide other devices to help your baby hear better or both.

Ear, Nose and Throat Doctor: A specialist trained to diagnose and treat children with diseases and disorders of the ear, nose, or throat. An Ear, Nose and Throat (ENT) doctor (also called an Otolaryngologist) can tell you if there is a medical condition in your child's outer, middle, or inner ear that is causing the hearing loss by asking some questions and doing a medical exam. An ENT can answer your questions about medical or surgical treatments.

Geneticist: A specialist trained to know about medical conditions that run in families and other medical problems that may occur with hearing loss. The geneticists may be able to tell you about the risk of having another child with hearing loss and help identify other medical conditions that may be associated with your child's hearing loss.

Ophthalmologist: A doctor who is trained to know about and treat conditions related to the eyes. It is important to make sure that children with hearing loss have good vision. They often depend a great deal on their ability to see. Some children with hearing loss may also have vision problems.

Pediatrician: A specialist trained to provide medical care that will help children grow and be healthy and will treat your child when they are sick.

Speech and language pathologist: A specialist who is trained to test and work with children and adults who have problems with speaking and communicating.

Early intervention specialist: A professional trained to work with infants and toddlers. This person makes sure that the baby gets all the support and stimulation needed and also makes it easier for families to access services available. The early intervention specialist will help develop a plan specially made for your child and family.

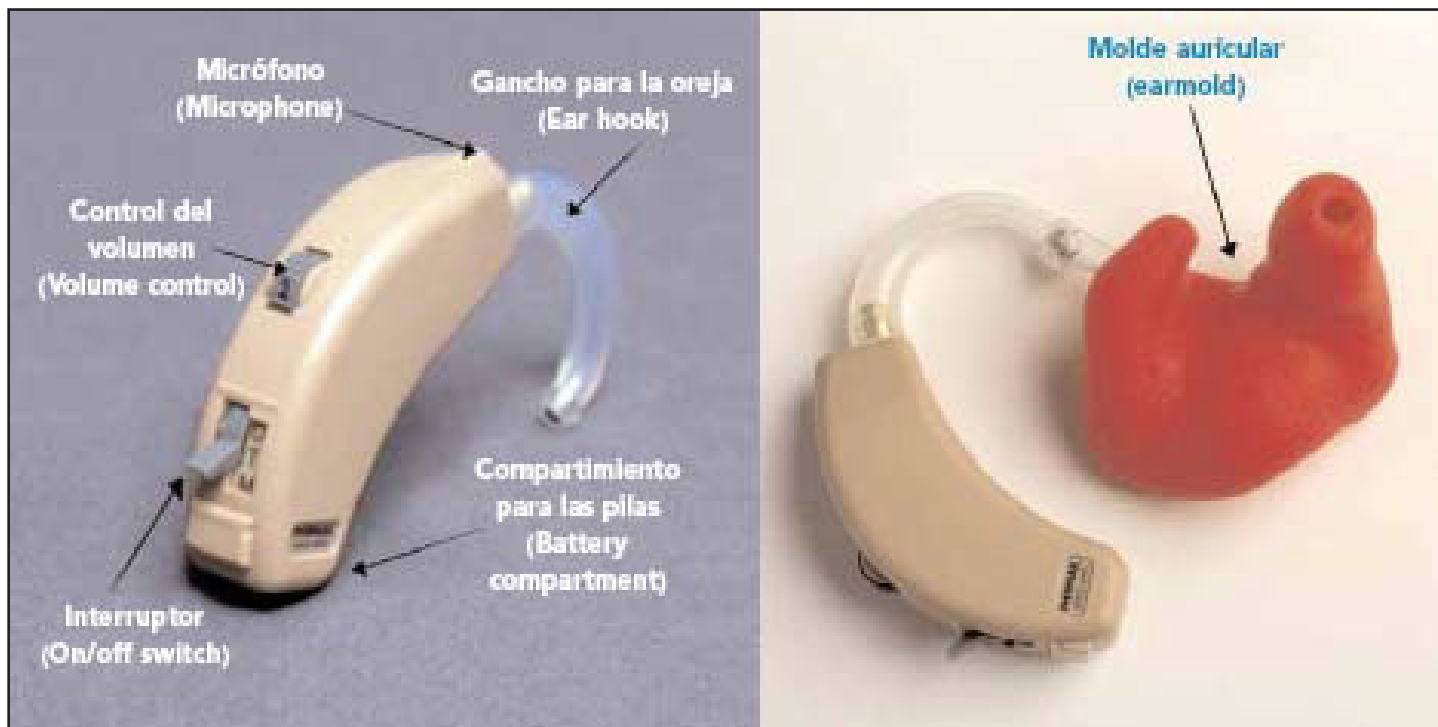
These specialists may provide information on intervention services (therapies and programs), such as hearing training and communication options (different ways of communicating for children with hearing loss).

It is important to find a “**Medical Home**” for your child. That means to find a family physician, for example a pediatrician, which can help to coordinate all services needed by the child.

Professional Interpreter: Professionally trained to understand and interpret the technical terminology that professionals use. If you don't speak English, it is best not to use a family member, a friend or a child as an interpreter. By law, you have the right to an interpreter in any institution receiving federal funds in the United States, such as hospitals and early intervention programs (services and programs for children from Birth to 3 years old).

Technology available for babies and young children with hearing loss

Hearing aids



Hearing aids make sounds louder and clearer. They can be worn by people of any age. Some young babies with hearing loss may understand sounds better using hearing aids. This gives them the chance to learn speech skills right from birth.

Your baby's audiologist will help you pick the best type of hearing aid for your baby. A young child is usually fitted with behind-the-ear (BTE) style hearing aids because they are more durable and easy to handle. This type of hearing aid has a piece that goes behind the ear and an earmold that goes inside the ear canal. In the piece that goes behind the ear you can see the microphone, volume control, on/off switch, battery compartment and the tone controls. The audiologist uses these controls to regulate the amount of sound that enters the child's ear. It also has a tone hook that keeps the hearing aid in place and transmits the sound from the piece that goes behind the ear to the earmold. Earmolds are made individually for each child and fit snugly in the ear canal. As a baby grows, earmolds need to be replaced on a regular basis.

How to take care of the hearing aids

Keeping your child safe

Batteries are very dangerous if swallowed. Hearing aids for infants and young children can come with a battery door lock. An adult can lock and unlock this door using a small screwdriver, but babies or young children cannot remove the battery.

Never let your baby or young child play with or put the hearing aids, batteries, or earmolds in his mouth. These are small devices and your child can swallow them or choke on them.

If your child does swallow any one of these, call your doctor or take your child to an emergency department right away.

Making sure the hearing aid is working correctly

Your baby's audiologist can show you how to keep the hearing aid clean, and working correctly. Here are a few things that he or she might talk about.

Whistling sounds: Babies and children outgrow earmolds quickly. If the earmold is too small, you will hear a whistling sound. Sometimes you can adjust the earmold in your child's ear and the whistling will stop. But if the whistling doesn't stop after adjusting the earmold, call your child's audiologist for an appointment so he or she can check it. Your child might need a new earmold.

Listening to the sounds from a hearing aid: Your baby's audiologist might give you a small listening tool (stethoscope) that is specially made for hearing aids. You can join the hook of the hearing aid to the tube of the stethoscope. Your audiologist will show you how it works.

Batteries: You can buy hearing aid batteries at drug stores, grocery stores, and many other stores. Most batteries have a small tab attached to them that should be removed to activate the batteries. Take this off and put the batteries in the hearing aid following the instructions from your child's audiologist or hearing aid instruction booklet. Your baby's audiologist might also give you battery testers. These will help you know if the batteries are still working.

Getting dampness (moisture) out of the hearing aid: Excess moisture can make your child's hearing aid not work. Your baby's audiologist can show you how to keep the hearing aid dry.

Keeping the hearing aids on your baby: It may be difficult for parents to keep hearing aids on their baby or young child. Ask your baby's audiologist for ideas about how to keep hearing aids on your child. Here are a few ideas:

- **Plastic rings** — These can be used to keep hearing aids on a child's ear. There are two loops which fit around the hearing aid and are connected to a larger loop which fits around the outer part of the ear.
- **Cord to attach to clothing** — A cord can be attached to the hearing aid and then clipped to your child's clothing.
- **Shorter earhooks** — An earhook is the part of the hearing aid that connects the hearing aid to the earmold. Shorter earhooks can make the hearing aid fit better and the hearing aids stay in place better.
- **Double sided tape (wig tape)** — This tape can be attached to the back of your child's ear and to the hearing aid. You will need to change this tape often. Your baby's audiologist can show you how to use the tape.



Cochlear Implant



A cochlear implant can help a person with severe to profound hearing loss. It gives that person a way to hear when a hearing aid is not enough. Unlike a hearing aid, cochlear implants do not make sounds louder. A cochlear implant sends sound signals directly to the hearing nerve. These signals go around parts of the inner ear (hair cells) that are not working right. A cochlear implant does not “cure” hearing loss, but does allow a person with hearing loss to make out sounds.

How does a cochlear implant work?

A cochlear implant has two main sections — the parts that are placed inside the ear during surgery, and the parts that are worn outside the ear after surgery. The parts outside the ear send sounds to the parts inside the ear.

How is a cochlear implant placed in the ear?

Surgery is needed to put in a cochlear implant. The surgery takes a few hours and general anesthesia is needed. Usually, children and adults getting a cochlear implant have to stay in the hospital one night after the surgery. It takes about 3 to 5 weeks for the skin over the surgery site to heal, but children usually return to normal activities in about 10 days.

If your child gets a cochlear implant, he or she will have to go back to the audiologist four to six weeks after surgery to have the cochlear implant turned on. After the cochlear implant is turned on, your child might need many more visits to make sure the cochlear implant is correctly adjusted.

Your doctors and audiologist may also recommend that your child get training with a speech-language pathologist. A speech language pathologist is a professional who is trained to know about how children learn and to teach children to learn speech and language. This training will help your child understand the new sounds that he or she hears with a cochlear implant.

Who can get a cochlear implant?

Adults and children can get a cochlear implant — even very young children and babies. A cochlear implant may be good for children and babies with severe or profound hearing loss that can't be helped by a hearing aid. For more information on what a cochlear implant can do for your baby, please talk with your baby's doctor or audiologist.

Other technology available for children with hearing loss



FM system: FM stands for *frequency modulation*. FM systems send sound from a microphone used by the person speaking to a baby wearing the receiver. This allows the baby to hear just the speech, without most of the unwanted noise.

Captioning: Many television programs, videos, and DVDs are captioned. Television sets made after 1993 are made to show the captioning. You don't have to buy anything special. Captions show the soundtrack of a program on the bottom of your television screen. If you have your child watch children's programs, you may want to turn on the captioning.

There are many other devices available for children and adults with hearing loss. Some of these include:

- Telephone amplifiers
- Flashing and vibrating alarms
- Audio loop systems
- Infra red listening devices
- Portable sound amplifiers
- TTY (Text Telephone or teletypewriter)

Please ask your baby's audiologist about these and other types of assistive listening devices

Resources and Services Available for Your Child with Hearing Loss

Many services and programs will be available to you soon after your child's hearing loss is diagnosed. These services are called early intervention services. These are some of them.

Remember, all babies with hearing loss should begin to get intervention services before they are 6 months old.

The Early Intervention Program for Infants and Toddlers (Part C program)

One way to coordinate the services available for your child is through a program in your state called the "Part C Program". This is a program for children from birth up to 3 years of age who may need help to reach their full potential. Although this program is required under federal law (*IDEA, or Individuals with Disabilities Education Act*), each state has its own program qualifications. Most children with hearing loss are considered to fulfill these requirements. However, it will depend on your state's Part C Program as to whether or not your child qualifies for this program.

Every family who takes part in this program is assigned a "service coordinator," or a person who works closely with the family to set up the services in the Part C program. Each child in the program is assessed by a team of experts who work with children. The team works with the child to determine the child's strengths and needs and gives this information to the family and the service coordinator.

Individualized Family Service Plan (IFSP)

The family and the service coordinator, together with the professionals who were involved in the child's assessment, design a plan for the child called an "Individualized Family Service Plan" (IFSP). This plan outlines all of the services, programs, and resources that a family and child will need. This plan will also outline how the family will receive these services and resources.

Once the IFSP is completed, the services and resources that are written into the plan will be available. As time goes on, the family, the service coordinator, and other professionals (such as an early intervention specialist, audiologist, and speech-language pathologist) will look to the IFSP to be sure that the child is getting what was outlined in the IFSP. The IFSP will change as the child grows and his or her needs change. The service coordinator will meet with the family at least every 6 months to look at the IFSP and make necessary changes. In addition, a family can ask that the plan be looked at again any time they see the need to make changes.

Parents often find the Part C program to be an essential resource. Please ask one of the professionals (for example, a health care provider, an audiologist, or a speech-language pathologist) whom you are currently working with to tell you how to contact the program part C.

Hearing Aid Loan Bank Program

Sometimes after a child is diagnosed with hearing loss, there is a delay before hearing aids can be purchased. Some states have hearing aid bank programs that can provide immediate help. Ask your child's audiologist for this program.

Your children may be eligible for free or low-cost health insurance!

Your state, and every state in the nation, has a health insurance program for infants, children, and teens. The insurance is available to children in working families, including families that include individuals with a variety of immigration status.

To learn more, go to your state's program or make a free call to 1-877-KIDS-NOW for more information.

How to Communicate with your Newborn

You can communicate with your child through touch (for example, hugging and kissing him), eye contact (with smiling and making faces, eye contact, gestures, etc.), and through sounds (talking to and singing for him). These ways of communicating tell your child that you are there with him.

Just talk to your child the same as you would talk to a child without hearing loss. Talk to him or her in the language you know best. Your child may want to look at your face, so make sure to talk to him all the time when he is looking at you.

These are some of the things you can do:

- Hold your child in a way that he can look at your face.
- Try to minimize background noises that may distract your child so that he can use the hearing capability he has.
- Good lighting is important. Make sure that the lighting in the room is good, not too dark and not too bright.
- Looking directly in your baby's eyes is very important.
- Imitate and repeat his movements and sounds, and wait for him to repeat them. If your child looks at you, smile back and look at him in the eyes.
- Make time to communicate and talk with your child often throughout the day.
- Put your child in a place where he can see and hear you.
- Give you and your child some quiet time. If your child becomes fussy, he may be overwhelmed by all of the communication!
- Enjoy the time you and your child spend together.

Organizations That Help You Find Information about Hearing Loss and Medical Services

There are many national organizations that can help you finding information about hearing loss, medical services, and different therapies available for your child. These are some of them:

American Academy of Audiology

8300 Greensboro Dr., Suite 750

McLean, VA 22102

Voice: (703) 790-8466

TTY: (703) 790-8466

Toll-free: 1-800-AAA-2336 (1-800-222-2336)

Internet: www.audiology.org

American Speech-Language-Hearing Association (ASHA)

10801 Rockville Pike

Rockville, MD 20852

Voice: (301) 897-3279

TTY: (301) 897-0157

Toll-free: 1-800-638-8255

E-mail: actioncenter@asha.org Internet: www.asha.org

Centers for Disease Control and Prevention (CDC)

Early Hearing Detection and Intervention Program Centers for Disease Control and Prevention
National Center on Birth Defects and Developmental Disabilities Division of Human Development and Disability

Mail-Stop E-88 1600

Clifton Road Atlanta, GA 30333

Phone: 1-800-CDC-INFO TTY: 404-498-3032

E-mail: ehdi@cdc.gov

Internet: <http://www.cdc.gov/ncbddd/ehdi/spanish/default.htm>

Gallaudet University

800 Florida Avenue NE

Washington, DC 20002

Voice: (202) 651-5000

TTY: (202) 651-5000

E-mail: public.relations@gallaudet.edu

Internet: www.gallaudet.edu

John Tracy Clinic

806 W. Adams Boulevard

Los Angeles, CA 90007

Voice: (213) 748-5481 TTY: (213) 747-2924

Toll-free: 1-800-522-4582

E-mail: mmartindale@johntracyclinic.org

Internet: www.johntracyclinic.org

National Institute on Deafness and Other Communication Disorders

Office of Health Communication and Public Liaison

MSC 2320; 31 Center Drive

Bethesda, MD 20892-2320

Voice: (301) 496-7243

Toll-free voice: 1-800-241-1044 TTY: (301) 402-0252

Toll-free TTY: 1-800-241-1055

E-mail: nidcdinfo@nidcd.nih.gov

Internet: www.nidcd.nih.gov

National Center for Hearing Assessment & Management (NCHAM)

Utah State University

2880 Old Main Hill

Logan, Utah 84322

Voice: (435) 797-3584

E-mail: mail@infanthearing.org

Internet: <http://www.infanthearing.org>

Organizations That Help You Find Support Services

There are many national organizations that support families with children with hearing loss. Family support may include being given advice, information, help to understand your available options, help with transportation, or emotional support. These are some of them:

Alexander Graham Bell Association for the Deaf and Hard of Hearing

3417 Volta Place, NW

Washington, DC 20007-2778

Voice: (202) 337-5220

TTY: (202) 337-5221

Toll-free: 1-800-HEAR-KID (1-800-4327-543)

E-mail: info@agbell.org

Internet: www.agbell.org

American Society for Deaf Children (ASDC)

P.O. Box 3355

Gettysburg, PA 17325

Voice: (717) 334-7922

TTY: (717) 334-7922

Toll-free: 1-800-942-ASDC (1-800-942-2732)

E-mail: ASDCI@aol.com

Internet: www.deafchildren.org

Boys Town National Research

555 North 30th Street

Omaha, NE 68131

Voice (402) 498-6511

TTY: (402) 498-6543

Toll-free: 1-800-282-6657

E-mail: moeller@boystown.org

Internet: <http://www.audiciondelbebe.org/portada.asp>

Beginnings for Parents of Children Who are Deaf or Hard of Hearing, Inc. (Beginnings)

P.O. Box 17646

Raleigh, NC 27619

Voice: (919) 850 2746

TTY: (919) 571-4843

Toll-free: 1-800-541-HEAR (1-800-541-5437) (just inside the state of NC)

E-mail: info@ncbegin.org

Internet: http://www.ncbegin.org/index_s.shtml

Please note this is a direct English translation from the Spanish version of "Guide for Families of Children with Hearing Loss / Guía para familias de niños con pérdida auditiva." It is designed to be used as a tool for English speaking professionals and should not be distributed. In addition, the masculine form (he or himself) is a literal translation and is used throughout the Guide to refer to an individual child; it is meant to be inclusive of both genders.

Hands & Voices

P.O. Box 371926

Denver CO 80237

Voice: (303) 300-9763

Toll-free: (866) 422-0422

E-mail: parentadvocate@handsandvoices.org

Internet: <http://www.handsandvoices.org/index.htm>

National Information Center for Children and Youth with Disabilities (NICHCY)

Address:

P.O. Box 1492

Washington, DC 20013

Voice and TTY: (800) 695-0285

E-mail (correo electrónico): nichcy@aed.org

Internet: <http://www.nichcy.org/espanol>

Raising Deaf Kids

3535 Market St, 9th floor Philadelphia, PA 19104

Voice: (215) 590-7440

TTY: (215) 590-6817

E-mail: dfcc@www.uphs.upenn.edu

Internet: <http://www.raisingdeafkids.org/spanish/>

Most organizations that have materials in Spanish have people who can speak Spanish. You can contact them through regular mail or e-mail. You can also call them. If you call and get an answering machine leave a message. Somebody in the organization may be able to get back to you with the information you need.

There are also organizations that are dedicated to help Hispanics and they can give you information about the Early Hearing Detection and Intervention program. They may also help you to find other services for your child. This is one of these organizations:

La Alianza Nacional para la Salud de los Hispanos

Línea Telefónica Nacional para la Salud de la Familia Hispana

(866-783-2645 / 866-SU-FAMILIA).

DISCLAIMER: Information about organizations outside of CDC is included for information only. CDC has no control over the information at these sites. Views and opinions of these organizations are not necessarily those of CDC, the Department of Health and Human Services (HHS), or the U.S. Public Health Service (PHS).

Communication Options for Children with Hearing Loss

There are many ways that children with hearing loss can communicate that include using the hands, body language, speech, and listening. The family of a child with hearing loss often needs to learn different ways of communicating in order to be able to understand each other. Some families use only one way to communicate and some use many ways.

First, we describe the five different educational programs for children with hearing loss in the United States. After that, there is a list of definitions that might help you understand these different educational programs.

Educational Programs in United States Schools

In the United States there are five basic educational programs that emphasize the use of different languages or different ways to communicate (for example: using hearing aids, sign language, lip-reading, etc.). The following is a brief explanation of these educational programs.

Auditory-Oral: This program emphasizes the use of any “residual hearing” the child has. The amount of hearing that a person with a hearing loss still has is called residual hearing. They may use visual cues (such as lip-reading and natural gestures), listening and speech to understand and use spoken language.

Auditory-Verbal: This program stresses the use of listening to speech sounds for the development of spoken language. The use of technology (for example, hearing aids or cochlear implants) is very important for this approach. The focus is on listening and, therefore, is different from auditory-oral because it does not foster the use of visual cues such as speechreading or natural gestures.

If you are using one of the methods mentioned above and English is not spoken at home all the time, let your child know what language you are speaking.

Bilingual-Bicultural English (bi-bi): This program stresses the development of two languages: In the USA these are American Sign Language and English. Usually ASL is taught to the child as his first language, and English is taught as the second language through reading, writing, speech and use of residual hearing. Some programs also reinforce the native language of the family (for example. Spanish)

Cued Speech: This program helps children who are deaf or hard-of-hearing better understand spoken languages. Many speech sounds look the same on the face even though they sound different. When “cuing” in English or Spanish, the person communicating uses different hand shapes and positions around the mouth, this helps the person that is observing to differentiate the sounds.

Total Communication: This program uses a combination of communication methods to help each individual child make the most of his or her strengths for learning speech and language. Speech,

speechreading, residual hearing, coding systems (or sign language), reading and writing, and natural gestures can all be used in this approach. Which ones are stressed depends on the child's strengths and weaknesses. Most Total Communication programs in U.S.A use some form of Simultaneous Communication (speaking in English and a coding system at the same time).

Definitions

Here are some definitions that might help you understand these educational programs for children with hearing loss:

Fingerspelling: Began as part of ASL. Fingerspelling is the spelling of words by using the hands and fingers. It is also used with English coding systems. Each country has its own alphabet signs, but it is also possible to fingerspell other languages words using English alphabet signs.

Auditory Training or Listening: Auditory training is a strategy by which a child or adult relies on listening for communication and language. It takes advantage of “*residual hearing*” (the amount of hearing that a person with a hearing loss still has) by using amplification devices such as hearing aids among others. Auditory training is also used for children and adults who have a surgical implanted device called cochlear implant.

Speech: Is the process of using the mouth, lips, tongue, and vocal cords or voice to produce sounds that are used to communicate. Speech and auditory training or listening are often used together. For a child who is deaf or has a hearing loss, speaking is often hard without proper training; the skill of speaking must be learned. Often a speech language pathologist must work with the baby and family.

Cued Speech (sometimes called “cueing”): Helps children who are deaf or hard-of-hearing better understand spoken languages. Many speech sounds look the same on the face even though they sound different. When “cueing” in English or Spanish, the person communicating uses different hand shapes and positions around the mouth, this helps the person that is observing to differentiate the sounds.

Speechreading: (also known as lipreading) is a technique by which a deaf or hard-of-hearing person watches a speaker's mouth and facial expressions in order to understand what is being said. Children and adults can use speechreading in combination with other approaches or skills such as auditory training or listening, but this technique should not be used alone.

Contact Language or Pidgin: Language born as a result of the mix of other two languages that existed previously to this one. It's a way to communicate that deaf and hearing people sometimes use together. The Pidgin language that is a mix of English and American Sign Language (ASL) is called Conceptually Accurate Signed English (CASE); sometimes it is also called PSE or Pidgin Sign English.

Sign Language: is like any other language (for example: Spanish and English), the difference is that to be able to express and understand the ideas the eyes, hands and body are used instead of using speech and hearing. Sign language has its own vocabulary and grammatical rules. Each country has its own sign language; the one used in United States is called American Sign Language (ASL). It is not necessary to know English in order to learn ASL; there are classes and resources that allow Spanish speakers to learn ASL.

Code Systems: This type of language also uses the hands, body and eyes to be able to communicate, but unlike sign language, the signs and gestures that are made with the hands and body reflect the language that is being spoken, for example, Spanish speakers can use Spanish code systems and English speakers can use English code systems. The code systems used in United States are known as **Manually Coded English**.

Glossary

These are some of the terms that will help you understand the information about hearing loss. All terms have their definitions and equivalents in Spanish.

Hearing (*audición*): Capacity to perceive sounds

Residual hearing (*audición residual*): The amount of hearing that a person with hearing loss still has, even if it is very minimal.

Hearing aid (*Audífono*): Devices that make sounds louder and clearer.

Behind-the-ear hearing aid (*audífono retroauricular*): A style of hearing aid that is placed behind the ear and it's the best type for babies and young children

Audiogram (*audiograma*): It's a test that evaluates the capacity to listen to sounds.

Audiologist (*audiólogo*): A professional trained to test hearing and treat hearing losses.

Auditory-Oral (*Auditivo-oral*): See communication methods.

Auditory-verbal (*Auditivo-verbal*): See communication methods.

Pediatric audiologist (*audiólogo pediatra*): An audiologist trained to give audiology evaluations to babies and young children.

Bilingual-bicultural (*Bilingüe-bicultural*): See communication methods.

Hertz, Hz (*ciclos por Segundo*): This is the unit that is used to measure the sound's tone (sound wave's vibration speed)

Cochlea (*coclea o caracol*): It's a snail-shaped tube that is located in the inner ear.

Communication (*comunicación*): The act of expressing and sharing ideas, desires, and feelings

Total communication (*comunicación total*): See communication methods.

Service coordinator (*coordinador de servicios*): Professional that helps to prepare an “Individualized Plan” for the child with hearing loss and his/her family. This professional also coordinates the services the family needs in the Part C program.

Finger Spelling (*deletreo con los dedos*): it’s the use of hands and fingers to spell out words.

Decibels, dB (*Decibeles*): This is the unit that is used to measure the sound’s intensity (volume or strength).

Assistive Listening Devices (*Dispositivos de ayuda auditiva*): These devices help people with hearing loss to communicate. These are some of them:

- Hearing aids (audífonos),
- Cochlear implants (implantes cocleares),
- FM systems (sistemas de frecuencia modulada),
- Captioning (subtítulos),
- Telephone amplifiers (teléfonos con amplificación),
- Flashing and vibrating alarms (alarmas que vibran y/o producen luces intermitentes),
- Portable sound amplifiers (amplificadores del sonido portátiles),
- Infra red listening devices (dispositivos infrarrojos para la audición),
- Text telephone, TTY (teléfonos de texto)
- Telecommunications device for the deaf, TDD (dispositivo de telecomunicaciones para el sordo).

Otoacoustic emissions, OAE (*emisiones otoacústicas*): a test that measures the ear’s response to sound.

Birth defect (*enfermedad congénita*): medical condition acquired at any time during fetal development or at birth

Genetic disease (*enfermedad genética*): Disease caused by genes alterations, but is not necessarily acquired from the parents.

Hereditary disease (*Enfermedades hereditarias*): Disease that can be transmitted from parents to offspring.

Early intervention specialist (*especialista en intervención temprana*): This is a specialist trained to work with infants and toddlers.

Audiological evaluation (*evaluación de la audición*): This is a full hearing test done by an audiologist.

Geneticist (*genetista*): This specialist is trained to know about genetic and hereditary conditions.

Speech (*habla*): It's the process of using the mouth, lips, tongue, and vocal cords to produce sounds that are used to communicate.

Hypoacusia (*hipoacusia*): see hearing loss.

Medical home (*hogar medico*): it's a way to assure that a child has access to all medical services he needs.

Ossicles (*huesecillos*): The chain of three tiny bones in the middle ear (malleus, incus, stapes).

Manually Coded English, MCE (*inglés codificado manualmente*): Language made of signs that work as English words.

Cochlear implant (*implante coclear*): Surgically placed device that can help a person with severe to profound hearing loss to perceive sounds.

Professional interpreter (*Interprete profesional*): Person trained to provide oral translation from one language to another and understand the technical terminology that professionals use in other areas.

Early intervention (*Intervención temprana*): services and programs available for babies and children from birth to 3 years of age and their families.

Speech reading (*lectura del habla*): Also known as lip reading, is a technique by which a person watches a speaker's mouth and facial expressions in order to understand what is being said.

Contact Language or Pidging (*lengua Pidgin*): Pidging is a language born as a result of the mix of other two languages that existed previously to this one. It is a way to communicate that deaf and hearing people sometimes use together.

American Sign Language, ASL (*Lenguaje por señas Americano*): It's a visual language with its own vocabulary and grammatical rules.

Tympanic membrane, eardrum (*membrana timpánica o tímpano*): The eardrum is in the middle ear. It vibrates when the sound enters the ear.

Communication methods (*metodos de comunicación*): Methods that allow people with hearing loss to communicate:

- **Auditory-Oral (*Auditivo-oral*):** Emphasizes the use of whatever hearing the child has to understand and use spoken language.
- **Auditory-verbal (*Aditivo-verbal*):** Stresses maximum use of residual hearing through hearing aids and other devices for development of spoken language.
- **Bilingual-bicultural (*bilangüe-bicultural*):** Stresses the development of two languages: the American Sign Language and English.
- **Total communication (*comunicación total*):** This approach uses a combination of code systems (some cases ASL), speech, and use of residual hearing through hearing aids and other devices.
- **Cued speech (*la palabra completada*):** It's a system that makes possible to differentiate, with the help of the hands, the sounds that look the same when they are pronounced.

Earmold (*molde auricular*): small piece that goes inside the child's ear canal and connects to the Behind-the-ear hearing aid.

Auditory nerve (*nervio auditivo*): This nerve carries electrical signals from the cochlea in the inner ear to the brain

Outer ear (*oído externo*): The outer ear is made up of three parts; the part we see on the sides of our heads (pinna), the ear canal, and the eardrum (tympanic membrane).

Inner ear (*oído interno*): The inner ear is made up of the cochlea and the nerves that go to the brain.

Middle ear (*oído medio*): The middle ear is made up of the eardrum and three small bones called ossicles (hammer, anvil, and stirrup).

Ophthalmologist (*oftalmólogo*): A physician that is trained to know about and treat conditions related to the eyes.

Pinna or auricle (*oreja o pabellón auricular*): It's the part of the outer ear that we see on the sides of our heads.

Otolaryngologist, ENT doctor (*Otorrinolaringólogo*): A physician who specializes to diagnose and treat persons with diseases and disorders of the ear, nose and throat. This doctor is also known as ear, nose and throat doctor.

Cued speech (*la palabra completada*): See communication methods.

Speech and language pathologist (*patólogo del habla y el lenguaje*): This person is trained to test and work with people who have problems with talking and communicating.

Pediatrician (*pediatra*): doctor who is trained to provide medical care that will help children grow and be healthy.

Hearing loss (*pérdida auditiva*): The capacity to perceive sounds is decreased.

Conductive hearing loss (*pérdida auditiva conductiva*): hearing loss caused by something that stops sounds from getting through the outer or middle ear.

Sensorineural hearing loss (*pérdida auditiva neurosensorial*): hearing loss that occurs when there is a problem in the way the inner ear or hearing nerve works.

Mixed hearing loss (*pérdida auditiva mixta*): hearing loss that includes both a conductive and a sensorineural hearing loss.

Mild hearing loss (*pérdida auditiva leve*): a person with a mild hearing loss may hear some speech sounds but soft sounds are hard to hear.

Moderate hearing loss (*pérdida auditiva moderada*): a person with a moderate hearing loss may hear almost no speech when another person is talking at a normal level.

Severe hearing loss (*pérdida auditiva severa*): a person with severe hearing loss will hear no speech of a person talking at a normal level and only some loud sounds.

Profound hearing loss (*pérdida auditiva profunda*): a person with a profound hearing loss will not hear any speech and only very loud sounds.

Pre-lingual hearing loss (*pérdida auditiva prelingüística o prelocutiva*): the hearing loss occurred before the child learned to talk.

Post-lingual hearing loss (*pérdida auditiva postlingüística postlocutiva*): the hearing loss occurred after the child learned to talk.

Unilateral hearing loss (*pérdida auditiva unilateral*): there is a hearing loss in one ear.

Bilateral hearing loss (*pérdida auditiva bilateral*): there is a hearing loss in both ears.

Individualized Family Service Plan, IFSP (*plan individualizado para la familia*): The plan outlines all of the services, programs, and equipment that a family and child will need.

Program part C (*programa Parte C*): program for children from birth to 3 years of age with special health needs.

Newborn Hearing Screening (*prueba de la audición para el recién nacido*): An initial hearing check for newborn babies is usually performed while the mother and baby are still in the hospital.

Automated Auditory Brainstem Response, AABR (*respuesta auditiva del tronco cerebral*): A test that uses electrodes placed on the baby's head to measure the brain's response to sound.

FM System (*sistema FM*): The FM (Modulate Frequency) system allows sending the sound from a microphone that the speaker uses to the person's hearing aid.

Deafness (*sordera*): Incapacity to perceive sounds.

Text telephone, TTY (*teléfonos de texto*): Telecommunication device that allows communication through text messages sent by phone.