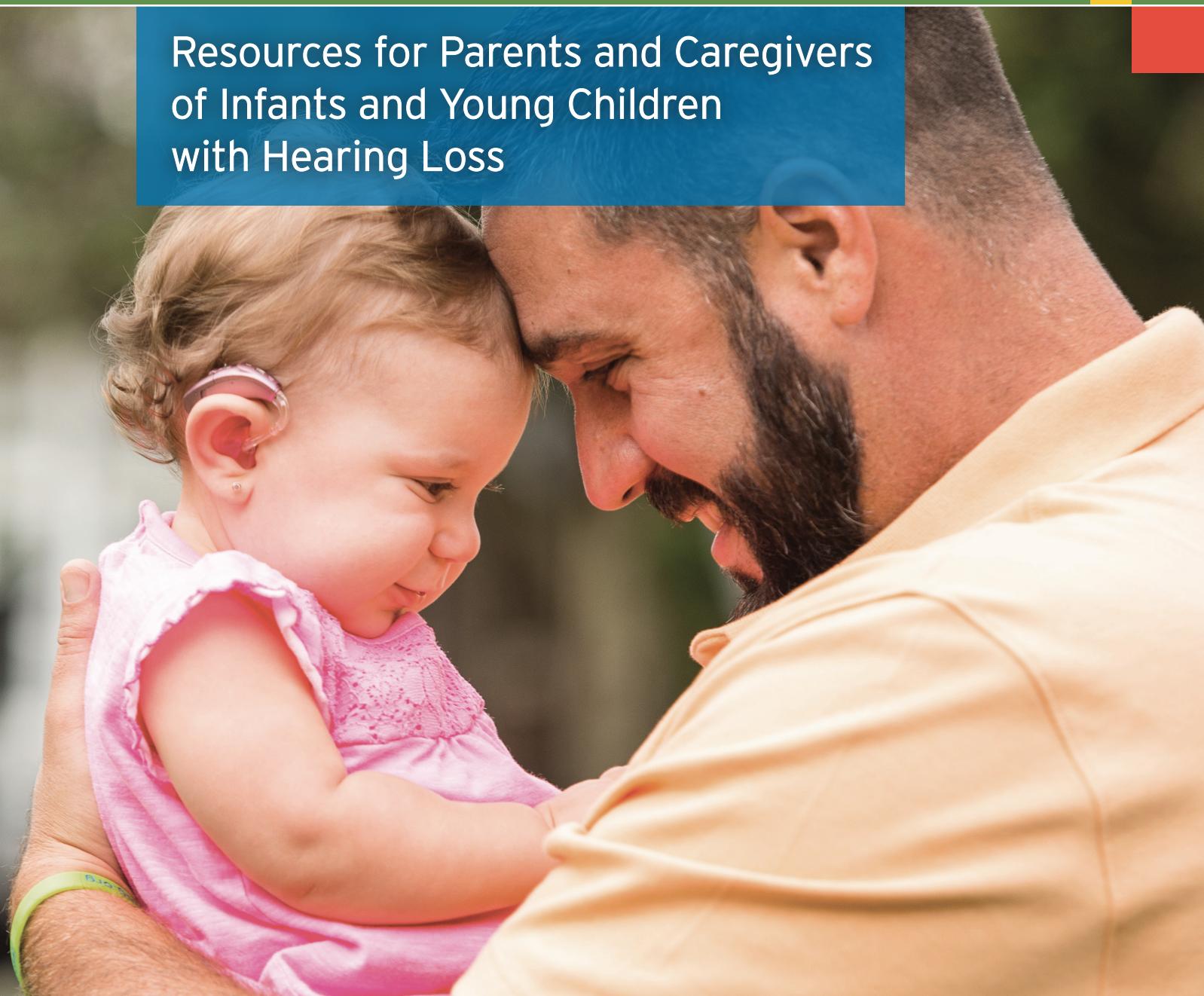


Getting Started

Resources for Parents and Caregivers
of Infants and Young Children
with Hearing Loss



Pennsylvania
Office of Child Development
and Early Learning



First Steps

- Schedule **diagnostic** hearing test with a pediatric audiologist
- **Connect with a trained Parent Mentor at 717-580-0839**
- Schedule **follow-up** appointments with a pediatric audiologist, pediatric ENT, pediatrician, and other medical professionals as needed
- Enroll in Early Intervention by calling your local program or CONNECT 1-800-692-7288
- Explore PA Medical Assistance

Table of Contents

Introduction	4
Bonding Through Early Communication	5
Background Information About Hearing Loss	7
Communication Opportunities: Options and Outcomes	11
Technology	14
Early Intervention	15
Financial Information	15
Selected Parent Resources	16



Introduction

Getting Started is intended to provide support and resources to families who have a baby or young child with hearing loss. Pennsylvania parents and caregivers contributed to this publication, representing a variety of communication methods and regions across the state. Some of these parents and caregivers are hearing and some are deaf or hard of hearing. Their children may wear one or more hearing aids or have cochlear implants. Their messages are contained in this publication.

Getting Started will introduce you to some of the important concepts and options available to you and your baby or young child.

When your baby or young child has a hearing loss, there are steps you can take right away to support their development. A first step is to call CONNECT services. The CONNECT Helpline staff will refer your family to the appropriate local Early Intervention agency. The toll free number is 1-800-692-7288. Early Intervention is provided at no cost to families in Pennsylvania.

Family Connections for Language and Learning (FCLL)

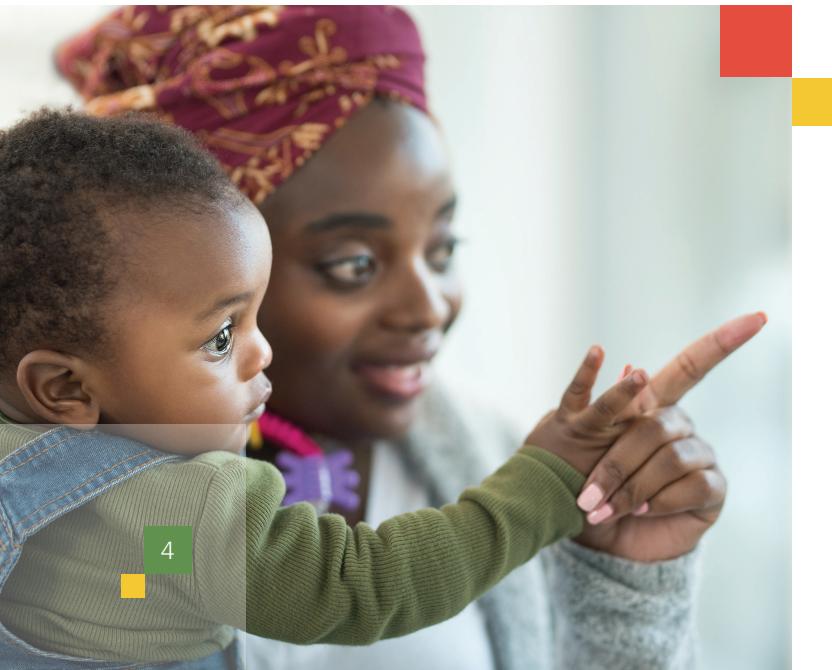
(FCLL) is a free support program made up of experienced parents of children who are deaf or hard of hearing, as well as deaf or hard of hearing adults. We're here to help you navigate the Early Intervention system and explore communication options for your child.

Our Mentors can connect with you in the way that works best – by text, email, phone, virtual meetings, or in person at home or in your community. We offer:

- Guidance on understanding hearing loss and your child's unique needs
- Information about language and communication options
- Unbiased support to help you make informed decisions
- Connections to resources, including Early Intervention services
- Advocacy support to help you speak up for your child's needs
- Strategies for working with professionals, including help creating a Care Coordination Plan
- A listening ear for your questions and concerns

All services are provided at no cost to your family.

I felt so lost and overwhelmed in the beginning, but Early Intervention has provided so much support and direction for my daughter and for our family. Our daughter has come such a long way in just the first year of her life.



Bonding Through Early Communication

For many family members without hearing loss, the early decision about how to communicate with a baby or young child with a hearing loss takes a long time and sometimes involves in-depth discussion and research. Yet, during the time this decision is being made, you still need to communicate with them. You may ask, "How can I bond with them if they can't hear my voice?" It is not only possible, it is essential. Your baby or young child may need additional help to communicate, and starting now gives them the best opportunity to learn to communicate.

Bonding means to form a connection with another. This is especially important early in your baby's life. Research has shown that babies who bond early in life will later trust other people and feel good about themselves. You, as the parent or caregiver of a baby or young child with a hearing loss, can bond in many different ways – by touch, smell, sight, and sound, when that applies. Here are some suggestions:

Gain and keep their attention.

- Face your baby and maintain eye contact.
- Get on the same eye level. If they are lying on the bed or floor, get down there with them.
- Tap them gently on the arm. Call or sign their name.
- Create visual gestures and facial expressions (to convey happiness, sleepiness, etc.) and body movements to explain the world to them.
- Point out things of interest to them. Offer books and read to them frequently.
- Encourage lots of sound for them, even if they have a hearing loss. Make noises to encourage them to look when their name is called.
- Consider reducing background sounds (such as dishwasher, TV, washers, or dryers) when communicating with your baby or young child.

- Exaggerate facial expressions and words.
- Make lots of sounds for them!
- Sing to them. This provides abundant input to the natural rhythm and rise and fall of voices. Listen to music and sway or dance with them too!
- Play games to engage them! Move their arms or legs and engage in touching behaviors such as tapping, stroking, and tickling.

Although your baby or young child may or may not be able to hear your voice, they will learn to read facial expressions. It may seem odd to talk to a baby or young child with a profound hearing loss, but it gets easier as parents and caregivers realize the benefits they receive. The most important thing to remember is to keep interacting with them, even though they may not hear you very well.

Recognize how they communicate.

- All behavior is communication. Consider what your baby or young child may be telling you when they smile, cry, babble, or look around.
- Be a good observer. Watch, listen, and respond to your baby or young child and become aware of the ways they are trying to communicate.
- Act as if their signal has meaning and talk and/or sign back.
- Follow their lead. When they explore and play, comment on what is taking place and name the objects that are being played with.
- Keep the communication path clear. Make sure your baby or young child can see the person talking. Remove anything that blocks their view so they can watch faces and expressions easily.

Develop turn-taking and conversation.

- Conversation is like a game of tennis – serve and return. Your baby or young child may “serve” by babbling, pointing, or smiling. You “return” by smiling, talking, or making eye contact. These back-and-forth moments help build social, emotional, and language skills.
- Practice serve and return. Watch for your baby or young child’s cues and respond warmly. When possible, name what they see, do, or feel. For example, when they point, you may say, “That’s a big ball.”
- After responding to them, be sure to pause and give them an opportunity to respond again.

Our children are amazing and wonderful...never forget that!

Keep the conversation going.

- Use encouraging words, signs and/or gestures: yes, right, good, thank you.
- Be consistent between your use of voice, facial expression, body language and meaning. For example, when saying “No,” don’t smile. This might cause confusion.
- Imitation is a good way to respond. If you can’t understand your baby’s babble, sign, or gesture, you can imitate it and say “yes.”
- Rephrase and expand on what your baby or small child is communicating. For example, when they point at a bear, you could say and sign or gesture, “The bear is big.”
- Keep interactions fun and simple!

Communication is an important way to bond with your baby or young child. It reduces frustration and allows them to express feelings, ideas, wants and needs. It allows you to teach them about the environment and the world around them. Communication attaches meaning to things. By communicating with your baby or small child, you are helping them build a foundation for language.



Background Information About Hearing Loss

The Ear and How It Works

The ear is the organ responsible for hearing and balance. It is made up of three parts known as the outer ear, the middle ear, and the inner ear.

The **outer ear** is responsible for collecting and channeling sound waves. It consists of the pinna which is the visible portion, the ear canal, and the eardrum. The ear canal is a tunnel with tiny hairs and glands that produce a special kind of wax called cerumen. The hair and cerumen keep foreign particles from collecting on the eardrum. Some cerumen is normal; it usually migrates to the outside of the canal where it flakes off or can be wiped away. The eardrum is a thin membrane that stretches across the inner end of the ear canal. When incoming sound waves set the eardrum in motion, it serves as a bridge to stimulate the middle ear.

The **middle ear** is an air-filled cavity with three small bones called the malleus, incus, and stapes (also known as the hammer, anvil, and stirrup).

These are the smallest bones in the human body! The bones of the middle ear move sound from the outer ear to the inner ear. Inside the middle ear, there is a small tube that connects to the throat. This tube, called the Eustachian tube, makes sure that the pressure in the middle ear is the same as the pressure outside the middle ear. When this tube opens, we sometimes feel a “pop.” That means it’s working.

The **inner ear** lies just beyond the middle ear and includes two main structures: the cochlea and the semi-circular canals. The cochlea is a snail-shaped organ that is the control center for hearing. In the cochlea, there are small cells that tell our auditory nerve the different pitches of sound. The nerve then takes this information and moves it up to the brain. The semi-circular canals give us a sense of balance.

Sound travels to our **brain** from both ears on the auditory nerve. When this nerve meets from both sides, it is responsible for telling us what direction sound is coming from. Once it gets to the brain, the brain then uses the information to tell us if the sound is speech or noise. This process starts before we are even born. When a hearing loss is present, the sound cannot get all the way up to the brain, which can make it hard for the brain to figure out what the sound is. That is why it is important that hearing losses are identified early.

How We Hear

In order to hear well, all parts of the ear must be working correctly. Sound enters the outer ear and passes through the ear canal to the eardrum, causing it to vibrate. The vibration of the eardrum moves the middle ear bones. Through these bones, sound is changed from sound waves moving in air, to mechanical waves vibrating in bone. These waves are transmitted to the cochlea of the inner ear. The cochlea changes the mechanical sound impulses into electrical impulses for transmission along the auditory nerve to the brain. Finally, the sound is perceived and interpreted by the brain as speech, music, noise, etc. If any part of this pathway does not function properly, the result may be a hearing loss.

The **loudness** (intensity) of a sound is measured in units called **decibels** (dB). Decibels are used to express the level at which sound can be heard—the **hearing level** (HL). On this scale a whisper is about 20 dB, conversational speech about 60 dB, and a shout is around 80 dB. 90 dB is quite loud and generally requires noise protection.

“Hertz” (Hz) is the technical term used to measure pitch in vibrations or cycles per second. Pitch refers to how high or low a tone sounds. Speech generally falls in the 200-6000 Hz range.

The **degree of hearing loss** is measured in terms of decibels of hearing loss (dB HL). Hearing losses range from slight or minimal to profound in degree. Even a slight hearing loss can affect a baby's or young child's ability to hear language and make sense of it. Remember that they are learning a new language and have no background on which to rely for filling in missed parts that they cannot hear. When hearing loss in both ears is greater than 20-25 dB on an audiogram, a baby or young child is likely to need help hearing and learning language. If the hearing loss cannot be medically corrected, then amplification becomes an option.



Figure 1: Anatomy of the Hearing System

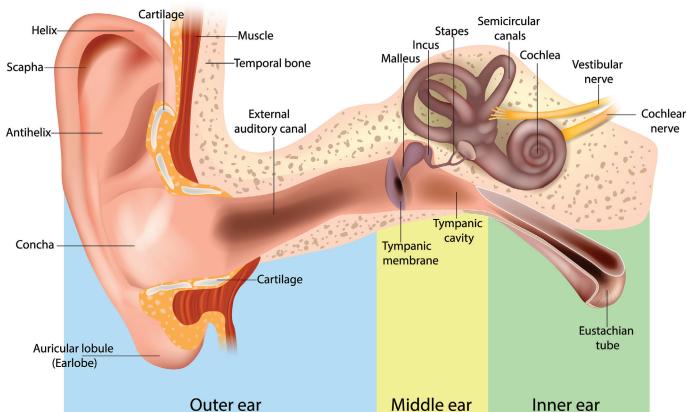


Table 1: Degree of Hearing Loss Table

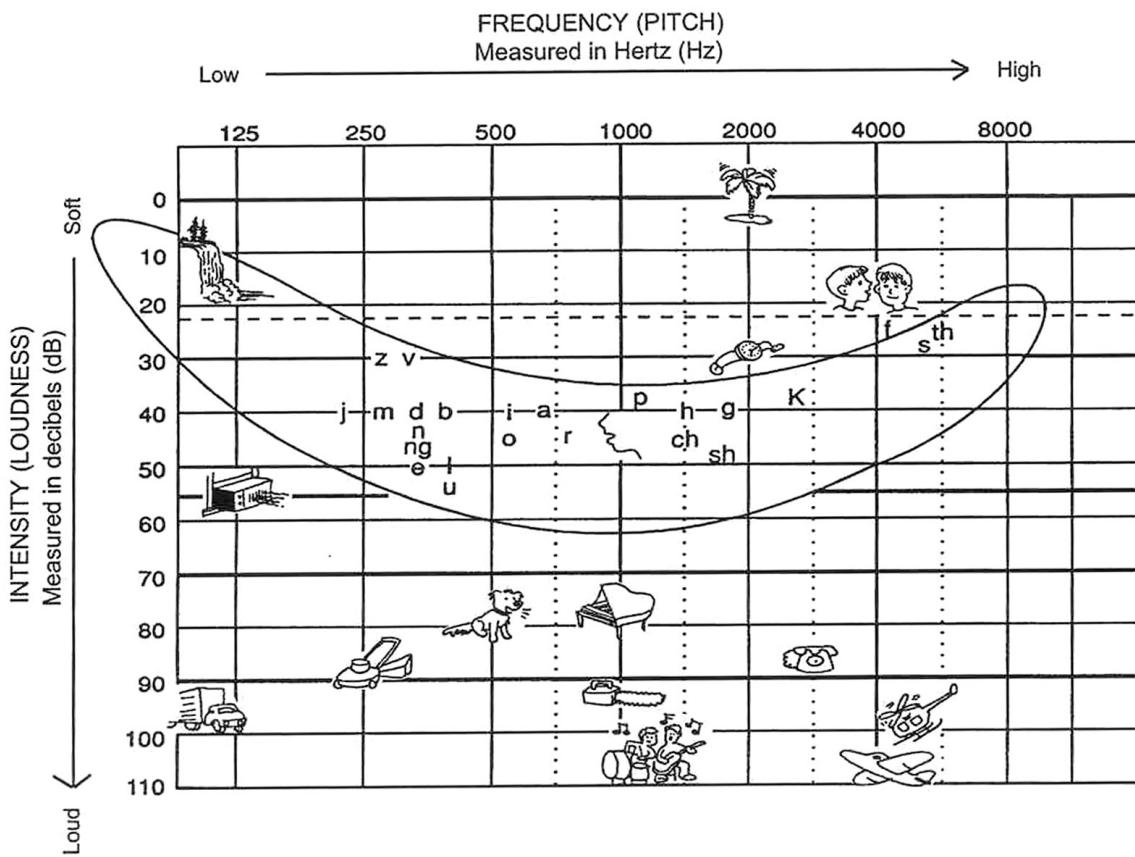
Degree of hearing loss	Hearing loss in decibels	Challenges
Mild Hearing Loss	20-40 dB HL	Difficulty in noise, finding sounds, and paying attention
Moderate Hearing Loss	41-55 dB HL	Speech delay, missed consonant sounds
Moderately Severe Hearing Loss	56-70 dB HL	Missed vowel sounds
Severe Hearing Loss	71-90 dB HL	Little to no speech perception
Profound Hearing Loss	91 dB HL or more	Little to no speech perception

The Audiogram

An **audiogram** is a graph showing a person's response to sounds ranging from low to high-pitched sounds and presented at various levels of loudness. (See Figure 2). Across the top of the audiogram, the **frequencies** of sounds (different pitches) are listed. The lower the number, the lower the pitch, from the sound of a bass drum (250 Hz) up to birds chirping (8000 Hz) looking from left to right. Looking up and down the side of the audiogram, the **intensities** (loudness) of sounds needed to hear are listed. The lower the number (0 dB HL), the quieter the sounds that the person can hear. The higher the number, the greater the hearing loss.

Many people are confused when they first look at an audiogram. You should review your child's audiogram with a professional, such as an audiologist or teacher of the deaf.

Figure 2: The “Speech Banana” and Common Sounds



(Adapted from Indiana State Department of Health. (2002). *Indiana Family Resource Guide for Children with Hearing Loss*. Indiana State Department of Health.)

The “Speech Banana” and Common Sounds

The “speech banana,” also known as the **speech zone**, is where the energy of the sounds of speech register on an audiogram.

Your baby’s or young child’s audiogram, showing hearing thresholds, can be plotted on this chart in order to help you and others determine which sounds may be problematic for them to hear, and perhaps also to articulate.

If their hearing sensitivity is below the volumes used in normal conversations, the hearing thresholds will fall below the “banana.” This would show which sounds and noises a baby or young child with a hearing loss would not hear without proper amplification. For example: an “s” sound has most of its energy between 4000 and 8000 hertz (Hz) at an intensity of approximately 35 dB hearing level (HL). A person with hearing thresholds greater than 35 dB at 4000-8000 Hz may not hear the “s” sound.

Types of Hearing Losses

A problem in any of the three parts of the ear reduces the amount and may change the quality of sound getting through to the brain, causing a hearing loss. Hearing losses can be **permanent** or **temporary**. There are three types of hearing loss: conductive, sensorineural and mixed, depending on where the problem occurs along the outer, middle or inner ear.

Conductive hearing losses can reach up to 60 dB HL, which is considered a moderately-severe hearing loss.

A **sensorineural** hearing loss is a problem in the inner ear or cochlea, or the auditory nerve. The sensory nerves may be damaged or missing. This type of hearing loss can range from slight to profound.

A **mixed** hearing loss may result if there is a problem in the outer or middle and inner ear. The conductive problem in the middle ear may be medically treatable. A mixed hearing loss can range from slight to profound in degree.

As a result of recurring ear infections or other causes, the child may experience a **fluctuating** hearing loss.

A hearing loss that gets worse over time may be **progressive**.

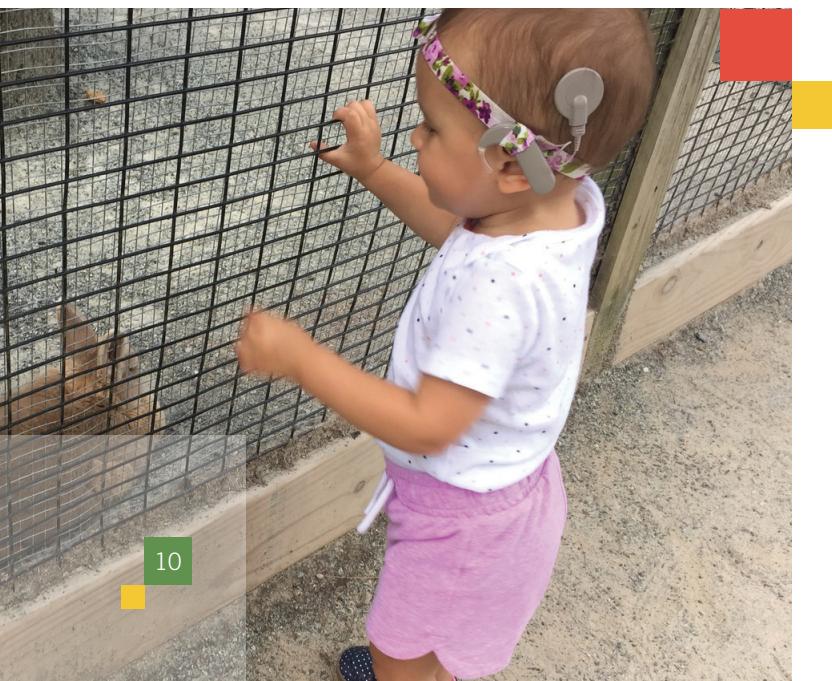
A **congenital** hearing loss can either be present at birth or progressive and present later in childhood.

A **bilateral** hearing loss is a hearing loss in both ears; a **unilateral** hearing loss occurs in only one ear.

Many people underestimate the impact of a unilateral hearing loss; it can be conductive, sensorineural or mixed. Although a baby or young child with this loss has good hearing in one ear, they will have difficulty knowing where sound is coming from and hearing in noisy environments.

Table 2: Degree of Hearing Loss Table

Type	Description	Range
Conductive Hearing Loss	A problem in the outer/middle ear stops sound from reaching inner ear	Mild to moderately-severe
Sensorineural Hearing Loss	A problem in the cochlea/auditory nerve stops sound from reaching the brain	Mild to profound
Mixed Hearing Loss	There are problems in the multiple parts of the hearing system including both the outer/middle and inner ears	Mild to profound



Communication Opportunities: Options and Outcomes

When a baby or young child is diagnosed with a hearing loss, their family and caregivers have many options for communication. It may be confusing at first because you will hear so many terms, teaching methods, and philosophies! You need to know that there is not one “right way” for your family to communicate with your baby. Investigate all the options in order to make your choice, and remember that choices can be changed. Talking to other parents, your team, including deaf or hard of hearing adults, may also assist you in making communication decisions for your child.

Children with hearing loss use visual, auditory, or a combination of visual and auditory approaches along a continuum to communicate.

When considering communication for your baby or young child with hearing loss, it is important to consider all possible language options and approaches.

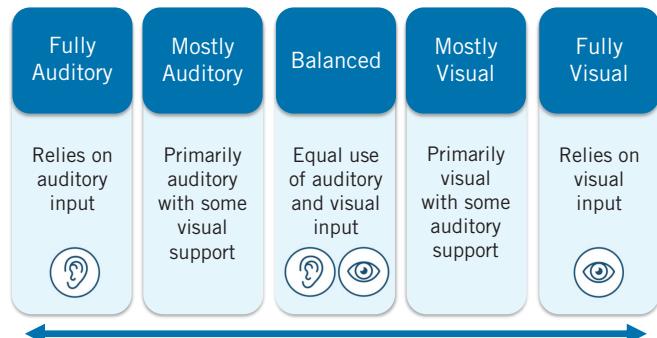
When family members and caregivers want instruction in communication methods, there are a number of resources available. Contact your Early Intervention providers for resources. Classes are offered in person and virtually by school districts, intermediate units, schools for the deaf, colleges, community groups, and agencies. Parents and caregivers can also learn through tutoring by a deaf or hard of hearing person who uses sign language. Family Connections Deaf or Hard of Hearing Mentors are available to teach the first 100 signs.

American Sign Language

American Sign Language (ASL) is a complete, complex language that employs signs made by moving the hands combined with facial expressions and postures of the body. It is the primary language of many North Americans who are deaf and is one of several communication options used by people who are deaf or hard of hearing.

ASL is a language. It contains all the fundamental features of language. It has its own rules for pronunciation, word order, and complex grammar. While every language has ways of signaling different

Auditory-to-Visual Communication Continuum



A child's place on the continuum may change over time and in different environments.

Adapted from McConkey Robbins, 2001; Nussbaum, Scott, Waddy-Smith, Koch, 2004

functions, such as asking a question rather than making a statement, languages differ in how this is done. For example, English speakers ask a question by raising the pitch of their voice; ASL users ask a question by raising their eyebrows, widening their eyes, and tilting their bodies forward.

www.nidcd.nih.gov/health/american-sign-language

Listening and Spoken Language

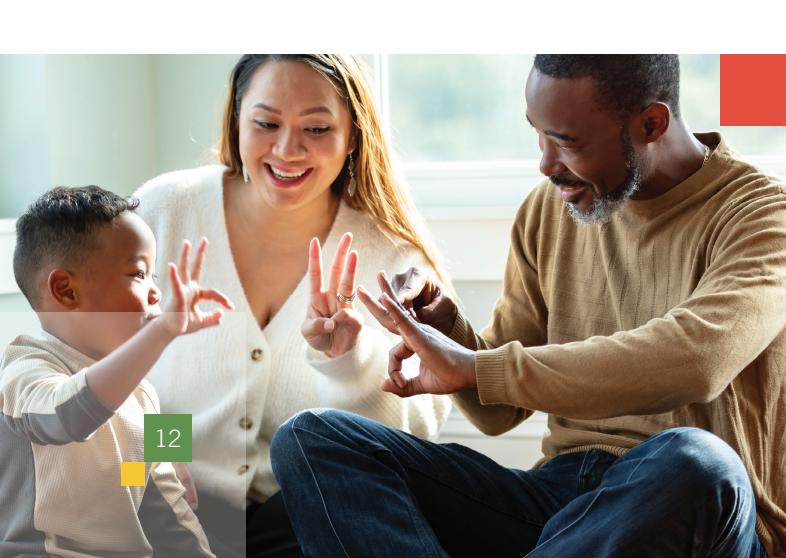
The Listening and Spoken Language (LSL) approach teaches a child spoken language through listening. You may be thinking: How is this possible for a child who is deaf? First, think about how a baby with normal hearing learns to talk. They learn by listening to the speech and spoken language of their parents, caregivers, and family members. Little brains are built to learn spoken language in this way – it's developmental.

Children with hearing loss can learn spoken language the same way when they are identified early, have appropriate hearing devices, and are taught to listen through special LSL techniques. LSL is a developmental approach which follows typical developmental milestones by introducing skills at the ages and stages when little brains are primed to learn. <https://hearingfirst.org/lsl/what-is-lsl>

Table 3: Communication Opportunities

Language	American Sign Language	English or other Spoken Language		
Approach	Visual Approach	More Visual < ----- Combined Visual & Auditory Approaches ----- > More Auditory		
Options	American Sign Language (ASL)	Total Communication /Simultaneous Communication (SimCom)	Cued Speech (CS)	Listening and Spoken Language (LSL)
Definitions	ASL is a visual language which is totally accessible to children who are deaf. It is a unique, signed language that is different from English with its own grammar and syntax. Children who learn ASL as their first language are also taught English as a second language. This is called a Bilingual approach.	Total Communication combines a sign language system with spoken language. Children are encouraged to use their eyes (speech reading), ears (use of residual hearing), voices (speech) and hands (natural gestures, sign language, fingerspelling).	Cued Speech helps children hear and "see" speech. Teachers and parents use a combination of hand cues with the natural mouth movements of speech, specifying each sound (phoneme) of spoken language clearly. This helps children tell the difference between words that can sound or look alike as parents coo, babble and talk.	Listening and Spoken Language approaches teach children to rely on residual hearing as they learn to speak. Methods may be called "auditory oral" or "auditory verbal". Today, as a result of advances in newborn hearing screening, hearing technologies, early intervention programs and the specialty skills of professionals, these two approaches have more similarities than differences and they lead to similar outcomes. The use of any sign language communication is not encouraged.
Goals	To acquire an age-appropriate internal language as a basis for learning a second language (written and, when possible, spoken English); and to provide access to opportunities for academic achievement. To develop a positive self-image and cultural identity providing access to the Deaf community.	To provide a bridge to the development of spoken language in the very young child. To provide communication between the child and his/her family, teachers and peers using sign language. To support integration into both the hearing and the Deaf communities.	To provide clear communication in the spoken language of the home. To develop the phonemic language base to achieve full literacy in conversation, reading and writing. To support speech reading, speech and auditory skill development.	To teach the child to use his/her listening and spoken language to interact with the community and the hearing world. To guide parents and caretakers to provide children with optimal hearing, speech and language stimulation. To provide children with hearing loss with an inclusive education in the regular classroom environment when appropriate.

Table 3 was prepared in order to assist parents to discern the differences and similarities among communication opportunities.



All families should be as fortunate as I was to have a meeting about all the options before being asked to make a decision as to our preferred methodology.

Table 3: Communication Opportunities- *continued*

Language	American Sign Language	English or other Spoken Language		
Approach	Visual Approach	More Visual < ----- Combined Visual & Auditory Approaches ----- > More Auditory		
Options	American Sign Language (ASL)	Total Communication /Simultaneous Communication (SimCom)	Cued Speech (CS)	Listening and Spoken Language (LSL)
Language Development/Methods	<p>The child develops early language as well as concepts and higher order thinking skills through the use of ASL and fingerspelling. Written English is added in the early years. ASL users can also develop spoken English.</p> <p>They develop the ability to code switch from ASL to English (signed, spoken or written) as needed.</p> <p>Individual decisions about hearing aids and cochlear implants are encouraged.</p>	<p>The child develops language through speech reading, listening and exposure to a combination of spoken English and signing in English word order.</p> <p>Written English is added in the early years.</p> <p>Hearing technology (hearing aids, cochlear implants, FM systems) is strongly encouraged.</p>	<p>The child develops language through the use of Cued Speech, speech reading and hearing.</p> <p>Cueing has been adapted to 60+ cued languages.</p> <p>Cueing boosts auditory awareness, discrimination and understanding.</p> <p>Hearing technology (hearing aids, cochlear implants, FM systems) is strongly encouraged.</p>	<p>The child develops language through listening and talking with the support of hearing technology, such as hearing aids and/or cochlear implants.</p> <p>Children learn to listen and to talk with a therapist guiding their parents through individual 1 -1 sessions (Auditory Verbal).</p> <p>Hearing technology (hearing aids, cochlear implants, FM systems) is strongly encouraged</p>
Family Responsibilities	<p>Parents are committed to learning and using ASL consistently. ASL is learned through classes, media, websites, and interaction with members of the Deaf community.</p>	<p>Families are expected to learn and consistently use the chosen English -based sign language system.</p> <p>Parents need to work with the child's teacher(s) and/or therapist(s) to learn strategies that promote language expansion.</p>	<p>Parents are expected to learn to speak -and -cue at all times in order for children to absorb the phonemes critical to language and reading readiness.</p> <p>The system is taught through multi -media, classes, and Family Cue Camps.</p> <p>Consistent daily use and practice lead to conversational ease within a year.</p>	<p>Use of amplification 100% of the child's waking hours should occur within two to three weeks of the initial fitting. Hearing is something we do all the time and it is critical for a baby's learning brain to have constant, meaningful access to sound.</p> <p>Families and professionals observe the child's response to sound and determine how well he or she is learning through hearing. These observations will help determine whether the hearing aids need adjustments, or if a cochlear implant may be pursued.</p> <p>Families are expected to carry over established goals in the child's daily routines and play activities.</p> <p>Therapist and parent help the child develop skills comparable to their hearing peers.</p> <p>As a child learns to listen he/she will benefit from listening to typical hearing peers.</p>

Adapted from Beginnings for Parents of Children Who Are Deaf or Hard of Hearing, Inc. "Communication Approaches: What Parents Should Know About Communication Approaches." BEGINNINGS, P.O. Box 17646, Raleigh, North Carolina, 27619.

Technology

Whether your baby or young child learns from visual input, auditory input, or both, sophisticated technological devices exist to facilitate the communication process. Because technology is constantly changing, you should be aware of advancements in equipment. You should be prepared to share information with others who regularly interact with your child. This information may include basic instruction on your child's technology.

Hearing Aids

A hearing aid is an electronic device that is worn in or behind the ear. They work by amplifying sounds in the frequencies where a hearing loss is identified to provide your baby or young child with the most access to sound possible. Young children are typically fitted with behind the ear hearing aids by a licensed audiologist.

Despite the many variations in hearing aids, all hearing aids have the following basic parts:

- microphone
- amplifier
- speaker
- battery

Earmolds are often part of hearing technology and are made specifically for your child. Earmolds should be checked every few months. As your baby or young child grows, new earmolds will be needed to accommodate growing ears and maintain an appropriate fit.

Your audiologist is your primary resource for information about hearing aids. They will work with you to select specific hearing aids, adjust them to meet your child's unique needs, teach you how to take care of them, and help you to monitor your child's use of amplification.

Cochlear Implants

Cochlear implants may be considered for children who do not benefit from hearing aids alone. Unlike hearing aids, a cochlear implant is a device that is implanted through surgery and directly stimulates the auditory nerve. There are two main parts of a cochlear implant: the internal component, which is surgically implanted into the cochlea, and an external component, which is worn on the ear and on the head and includes a microphone, speech processor, and transmitter. These two components communicate between each other, giving your child access to sound. If your child is a cochlear implant candidate, it is important that they are implanted early.

A variety of factors contribute to the level of success that a young child experiences with cochlear implantation. To determine if a child is an eligible candidate, a specialized pediatric cochlear implant team conducts a series of evaluations.

Bone Conduction Technology

For some babies and young children, bone conduction technology may be recommended. For them, amplification can be achieved through bone conduction, where sound travels through bone instead of directly through the ear. Bone conduction amplification can either be worn on a head band or surgically implanted. If you think your child may benefit from amplification through bone conduction, speak with your audiologist or pediatric Otolaryngologist to learn more.



Early Intervention

Early Intervention (EI) in Pennsylvania consists of coaching supports and services designed to help families with children who have developmental delays or disabilities. Early Intervention promotes collaboration among families, EI service personnel/providers, and Early Childhood Education professionals involved with your child.

Early Intervention supports and services are provided at no cost to families. When a child attends an early childhood education setting, Early Intervention can help the early childhood staff with strategies to promote the child's development. Early Intervention can also assist families to link to a variety of community services and supports.

Early Intervention:

- Supports families and caregivers in their role as the child's first teacher.
- Helps children with disabilities develop and learn through everyday routines – at home, in the community, or in early childhood education settings.
- Is individualized to reflect the values, culture, and priorities of each child and family.
- Is provided at no cost to families.

Financial Information

Many commercial health insurance companies do not cover hearing aids or other assistive listening devices in their policies. However, any child who lives in Pennsylvania and is identified with a permanent hearing loss may apply for Medical Assistance (MA, the state's Medicaid program). The Department of Health and Human Services has expanded eligibility for MA benefits to include children with a qualifying disability such as a hearing loss. Your Parent Mentor from Family Connections for Language and Learning, or your Early Intervention Service Coordinator, can

help you enroll in programs your child is eligible for such as MA, Medication Assistance Transportation Program, and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).



Selected Parent Resources

Family Connections for Language and Learning

717-580-0839

Email: FamilyConnections@tiu11.org

Early Hearing Detection and Intervention (EHDI) of PA

PA Dept. of Health, Bureau of Family Health Division of Newborn Screening & Genetics
7th Floor East Wing, 625 Forster Street Harrisburg, PA 17020-0701

717-783-8143 (Voice)

717-705-9386 (Fax)

www.pa.gov/agencies/health/programs/maternal-health-and-infant-care/newborn-screening/hearing

A.G. Bell Association for the Deaf and Hard of Hearing

www.agbell.org

American Society for Deaf Children (ASDC)

www.deafchildren.org

Boys Town National Research Hospital

www.babyhearing.org (English)

www.audiciondelbebbe.org/ (Español)

Laurent Clerc National Deaf Education Center

<http://clerccenter.gallaudet.edu/>

National Association of the Deaf (NAD)

www.nad.org

National Center for Hearing Assessment and Management (NCHAM)

www.infantheating.org

National Cued Speech Association (NCSA)

www.cuedspeech.org

The Described and Captioned Media Program

A free loan library of accessible materials for use by teachers and families. Cued speech and ASL instructional videos are available.

www.dcmp.org

John Tracy Clinic offers worldwide parent education to develop speech, language and listening skills.

www.jtc.org

CDC Centers for Disease Control and Prevention

www.cdc.gov/ncbddd/hearingloss/

Hearing First

www.hearingfirst.org/



Pennsylvania
Office of Child Development
and Early Learning