

# Rhode Island Early Intervention

# Planning Guide for Children Who Are Deaf or Hard of Hearing and Their Families



Child's Name

Child's Date of Birth



This workbook is designed for the families of infants and toddlers who are Deaf or Hard of Hearing. We hope the information we have included will help start conversations, prompt questions, and support the exploration of the resources available to you and your child(ren).

We encourage families and their Early Intervention (EI) providers to revisit this workbook throughout your child's time in Early Intervention. It is important to remember that no two children with hearing loss are exactly alike. Your Early Intervention provider is here to support you as you gather information, review current research, and learn about what works best for your child. Of course, what works best today, might change over time. Your EI team is here to support you in that journey.

Children who are Deaf or Hard of Hearing need the help of their parents and caregivers to acquire language. What does it mean to have "access" to language?

Research tells us that approximately 90% of what very young children know about the world is from incidental learning (Moog & Geers, 2003). When children are not able to 'overhear' the naturally occurring exchange of language in the home, community and at school, gaps in language development and world knowledge are likely to occur. The more significant the hearing loss, the greater potential for a 'gap'. The challenge is that these gaps may not be recognized until the child begins grade school. The good news is, by acting early, this gap can be eliminated.

Source: "Mainstreaming the Student who is Deaf or Hard of Hearing," Hands & Voices Source: Supporting Students who are Deaf or Hard of Hearing in WI Public Schools https://dpi.wi.gov/sites/default/files/imce/sped/pdf/dhh-support-presentation.pdf

## What is Language and How is it Different from Speech?

Children need language for healthy brain development. When we are young, our brains take in lots of information to help us understand the world around us.



Here's an example of how language plays a role in our learning.

This little boy knows there is something surrounding his feet. He can feel it and see it. He can catch the drops in his mouth. It is only through language that he begins to develop an understanding that this is something called "water". With this basic information, he can develop an understanding that this "water" is all over his world in different ways – in a puddle, in the bath, in his cup, falling from the sky, and in the ocean. From that general concept of water, he starts to learn more specific concepts – some water is for drinking, some is for playing, some is outside, and so on.

It takes language to understanding these concepts. Children need to build early concepts so they enter school prepared to learn at their maximum potential.

All children learn through expressions, gestures, pictures and other visual cues. They learn how to get their needs met in a positive way. They acquire and use their knowledge and skills and form positive social relationships. Children who are Deaf or Hard of Hearing begin to miss out on opportunities to build these skills if they are not provided with a visual language upon which to build their receptive and expressive language skills. A visual language supports awareness of concepts, understanding, and problem solving. Children will look to past experiences in order to make sense of new ones, which explains why building a foundation of knowledge is critical.

#### What language(s) do you currently use in your home? (Check all that apply)

English	Spanish	ASL (American Sign Language)
Other		
A combination of lang	uages? Tell us more about them:	

### What types of communication would you like more information on? (Check all that apply)

American Sign Language (ASL)	
Listening and Spoken Language	
Using tactile symbols and object cues, manual and tactile ASL (especially for children who a Deaf and have a Visual Impairment)	ıre
Pictures/Symbols/Photographs	
Other	

## According to the American Speech Language Hearing Association (ASHA), there is an important difference between speech and language.

Language is made up of socially shared rules that include:

- What words mean and how the same word can have different meanings,
- How to make new words by adding endings and,
- How to put words together and use them to communicate an idea.

Speech is the verbal means of communicating. Speech consists of:

- Articulation (how speech sounds are made),
- Voice (using our vocal cords and breathing to produce sound) and,
- Fluency (the rhythm of speech).

Acquiring language supports healthy cognitive development.

Your EI provider can share the milestones for language development and how this development can be supported for children who are Deaf or Hard of Hearing.

The National Association for the Deaf published a Position Statement on Early Cognitive and Language Development and Education of Deaf and Hard of Hearing Children which explains that "during this period of early life, many Deaf and Hard of Hearing children are, sometimes unintentionally and unknowingly, unable to access the language of their families or peers because this language is not in a visual form." Even children with mild hearing loss can experience hearing words and sounds quite differently than those with normal hearing.

For the development of language, Deaf children should be exposed to good language models in a signed language as soon as deafness is detected. There is no advantage to delaying exposure to sign language, and research on the development of language has found that early exposure reduces the risks of linguistic deprivation, which is frequently associated with cognitive impairment and psychosocial isolation.<sup>1</sup>

## Many parents ask where to start. Here are some things you can do right away.

- Hold your baby close when you talk or sign to them.
- Make good eye contact, smile, use gestures, be playful.
- Your baby learns from every interaction, so keep up the lullabies, silly songs, reading and talking and/or signing. Respond to your baby's actions, moods and noises.
- Respond to your baby's actions, moods and sounds. This will show them their sounds and movements have meaning.
- Respond to your child's facial expressions with ones of your own.
- Find joy in your child's communication, movement and activities.



<sup>&</sup>lt;sup>1</sup>To read more about the importance of a visual language visit: <a href="https://www.nad.org/resources/early-intervention-for-infants-and-toddlers/">https://www.nad.org/resources/early-intervention-for-infants-and-toddlers/</a>

## The Pediatric Audiologist

It is important for children who are Deaf or Hard of Hearing to be evaluated by a pediatric audiologist on a regular basis. Visits include monitoring of hearing sensitivity, possible progression of loss and being fit for amplification or refinement of amplification.

- Is your child currently being seen by a pediatric audiologist? Yes Not Yet
- If yes, are you satisfied with the care and services your child is receiving? Yes No
- Have you received, and do you understand, the information you were given about amplification for your child's hearing?
   Yes
   No
   Not Sure

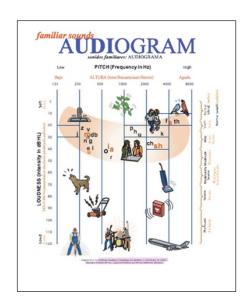
#### **Understanding Your Childs's Audiogram**

Audiograms can sometimes be confusing and difficult to understand. Many families find it useful to have their audiologist plot their child's audiogram on a graph like the one to the right.

This graph is often referred to as a "speech banana".

The area shaded in the shape of a banana indicates the level of hearing required to hear the sound produced by speech.

This graph can help parents and caregivers get a better idea about the sounds their child can or cannot hear, or hears in a different way than those with typical hearing. Your child's audiologist or Early Intervention provider, who specializes in working with children who are Deaf or Hard or Hearing, can help you understand your child's audiogram.



- Do you have a copy of your child's audiogram? Yes No
- Do you feel you have a good understanding of your child's hearing levels? Yes No
- Would you like some assistance to better understand your child's audiogram? Sure Not at this time
- What questions would you like to ask your audiologist at your next appointment?
- Jot them down here:

## **Hearing Aids and Other Amplification Technology**

With the advances in science and medicine, many children can benefit from amplification. Hearing aids, bone anchored hearing aids (BAHA) and cochlear implants offer options for many children. Even with aided hearing, it is important to remember that your child will still need a way to communicate when their hearing aids are off, as they await their implants, or for times when they take their processors off.

- Does your child already have hearing aids or another type of amplification? Yes No
- How often does he/she wear their amplification device(s)?
- Are there barriers to wearing the amplification device? If so, tell us more about that
- Do you know how to change the batteries in your child's hearing aids? Yes No
- Do you know how to clean your child's hearing aids? Yes No
- Would you like more information on ways to obtain batteries for your child's hearing aids?

Yes Not at this time

Children with hearing aids should have them on during waking hours. Sometimes this is difficult because young children often need time to adjust to how the hearing aids feel in their ears. Your Early Interventionist can share information and strategies to help you, help your child keep their aids on.

Would you like more information on any of these additional techniques? If so, check which ones.

Bonnets Clips

Head bands Toupee tape



#### **Rhode Island Based Resources**

Below is a list of some local resources. Sometimes hearing about these resources all at one time can be overwhelming, so making a plan can be helpful. Your Early Intervention provider can help you prioritize, and review this list again so you can expand your resources at your own pace. Would you like more information on?

RI School for the Deaf Parent Infant Partners Program <a href="http://www.rideaf.net/">http://www.rideaf.net/</a>

Northern RI Collaborative Auditory-Oral Foundations Program www.nric-ri.org

Rhode Island Sign Language Initiatives <a href="https://www.necc.mass.edu/gallaudet/rhode-island-sign-language-initiatives/">https://www.necc.mass.edu/gallaudet/rhode-island-sign-language-initiatives/</a>

Perspectives Corporation <a href="https://www.perspectivescorporation.com/services/youth-and-family/early-intervention/">https://www.perspectivescorporation.com/services/youth-and-family/early-intervention/</a>

Rhode Island Association of the Deaf www.riadeaf.org

Rhode Island Hands and Voices <a href="https://www.handsandvoices.org/index.htm">https://www.handsandvoices.org/index.htm</a>

AG Bell <a href="https://www.agbell.org/Families/Early-Intervention">https://www.agbell.org/Families/Early-Intervention</a>

The Pediatric Cochlear Implant Program at Hasbro Children's Hospital <a href="https://www.lifespan.org/centers-services/cochlear-implant-program/pediatric-cochlear-implant-program-hasbro-childrens">https://www.lifespan.org/centers-services/cochlear-implant-program/pediatric-cochlear-implant-program-hasbro-childrens</a>

Association for Deaf Children www.deafchildren.org

RI Commission on the Deaf and Hard of Hearing http://www.cdhh.ri.gov/

Pediatric Audiologists in RI

Pediatric Otolaryngologists in RI

Other \_\_\_\_



## **Developing Child and Family Outcomes**

Early Intervention is designed to support all children to be active, successful participants in their daily activities and routines. In addition to the many other goals parents have when their child enrolls in EI, children who are Deaf or Hard of Hearing will benefit from outcomes that address the development of language and communication.

- Have you and your IFSP team developed outcomes to address language and communication?
   Yes, we have No, not yet
- What are some of the things you would like to see your child do in the next few months?

Many families of children who are Deaf and Hard of Hearing tell us that they are interested in meeting adults who are Deaf and Hard of Hearing, as well as other parents of children who are Deaf and Hard of Hearing.

- Is this something you are interested in for your child and family? Yes Not at this time
- Tell us about what resources you have already connected with?

## **Transition from Early Intervention**

As your child approaches 27 months of age, your EI provider will begin to talk with you about the process of transitioning out of Early Intervention, community resources and your child's potential eligibility for special education. RI Early Intervention has a workbook designed to prepare and support families through this process.

What questions do you have with regard to what comes after EI for your child?

As this transition approaches, and your child's independence and exploration continue to grow, your Early Intervention provider can assist you in accessing your need for household items that promote your child's daily living skills and safety in their home environment.

Examples might include smoke/fire/carbon monoxide detectors, door lights, alarm clocks, closed captioning and personal FM systems for TV and music.

What safety and supportive devices do you currently have in your home?

What safety and supportive devices would you like more information on?

In Early Intervention, we strive to support families as they develop the knowledge and skills to care for their children, and secure the resources they need to participate in family and community activities. When you and your child leave EI, we want to be sure you:

- Understand your child's strengths, abilities, and special needs,
- Know your rights and advocate effectively for their child, and
- Have the knowledge and skills to help your child develop and learn.

Raising a child is a journey. We wish you well!

The point of parenting isn't to have all the answers before
we start out but instead to figure it out on the go as our children grow,
because as they do, so will we. -Bridgett Miller

## **Glossary of Terms**

American Sign Language (ASL): a complex visual-spatial language that is used in the United States and parts of Canada. With signing, the brain processes linguistic information through the eyes. The shape, placement, and movement of the hands, as well as facial expressions and body movements, all play important parts in conveying information. Like any spoken language, ASL is a language with its own unique rules of grammar and syntax and will grow and change over time.

**Audiologist**: an audiologist is a professional who diagnoses and treats hearing and balance problems. They receive an Au.D. (Doctorate in Audiology), or a Master's or Doctoral degree from an accredited university graduate program in audiology and are trained to diagnose, manage and treat hearing or balance problems for individuals from birth through adulthood.

**Auditory/Oral Approach:** an approach that teaches infants and young children to use hearing and speech to develop spoken language for communication and learning.

**Assistive Listening Device (ALD):** devices, other than hearing aids, that improve listening for individuals with hearing loss. Some systems improve hearing in noisy situations by positioning the microphone closer to the sound source or improve the quality of amplified speech or music. Includes FM systems, infrared systems, and induction loop systems.

**Audiogram:** a graphic representation of hearing loss, showing the amount of hearing loss (in decibels or dB) at different frequencies (250 - 8000 Hertz or Hz).

Bilateral Hearing Loss: a hearing loss in both ears.

**Cochlea:** also called the "inner ear." A snail-shaped structure that contains the sensory organ of hearing and changes sound vibrations to nerve impulses that are carried to the brain along the auditory nerve. The cochlea also plays a major role in the vestibular system, which includes balance and the body's position in space.

**Cochlear Implant:** a medical device that is surgically implanted and bypasses damaged inner ear structures and directly stimulates the auditory nerve, helping individuals who have severe to profound hearing loss to interpret sounds and speech.

**Communication:** The exchange of information with intent (can be verbal, nonverbal, gestural, primitive, or iconic).

Conductive Hearing Loss: a loss of sensitivity to sound, resulting from an abnormality or blockage of the outer ear or the middle ear. The most common cause of conductive hearing loss is middle ear fluid or infection. Other causes include wax buildup in the ear canal, a hole in the eardrum, or damage to the tiny bones of the middle ear.

**Congenital Hearing Loss:** a hearing loss that is present from birth and which may or may not be hereditary.

**Deaf:** a term used to describe persons who have a hearing loss greater than 90 dB HL. It also may be used to refer to those who consider themselves part of the Deaf community or culture regardless of the level of hearing loss or language used.

**Decibel (dB):** the unit that measures the intensity of sound.

**Earmold:** a custom-made mold, used with a behind-the-ear hearing aid, which delivers amplified sounds into the ear.

**Educational Audiologist:** an audiologist with special training and experience to provide auditory rehabilitation services to children in school settings.

**FM System:** an assistive listening device that improves listening in noise. Signals are transmitted from a talker to the listener by FM radio waves.

**Hair Cells:** hair-like structures in the inner ear that transform the mechanical energy of sound waves into nerve impulses.

**Hard of Hearing:** a term to describe those with mild to severe hearing loss.

**Hearing Aid:** an electronic device that brings amplified sound to the ear. A hearing aid usually consists of a microphone, amplifier, and receiver.

**Language:** a set of socially shared rules about what words mean and how to put them together to communicate ideas. Language includes the idea that words can have different meanings and that we can make new words by adding endings and pre-fixes. ASL does not use prefixes or suffixes but has other grammatical rules that achieve the same result.

**Modality:** The sensory channels (e.g. vision, touch, or hearing, or a combination of these) through which individuals communicate.

**Otolaryngologist:** a physician/surgeon who specializes in diseases of the ear, nose, throat, head and neck. Otolaryngologists are often referred to as ENT's or ear, nose and throat physicians.

**Otologist:** a physician/surgeon who specializes in the treatment of ear problems.

Part C of the Individuals with Disabilities Education Act (IDEA): Part C is the section of Public Law 105-17 (IDEA) that refers to early intervention services available to eligible children from birth to three years of age and their families.

Residual Hearing: the amount of measurable, usable hearing.

**Sensorineural Hearing Loss:** a hearing loss caused by damage to the inner ear (cochlea) and/or the hearing nerve.

**Shared Plan of Care:** a document designed for parents and caregivers to record information related to their child's medical care, including audiology, in order to support coordination of care for the multiple needs of an individual child and their family. This includes clinical and nonclinical needs and services.

**Teacher of the Deaf and Hard of Hearing:** an educator who holds a degree in deaf education and is specially trained to work with deaf and hard of hearing children.

**Total Communication:** a philosophy of educating children with hearing loss that incorporates all means of communication; formal signs, natural gestures, fingerspelling, body language, listening, lipreading and speech. Children using Total Communication typically wear hearing aids or cochlear implants. Total Communication is truly a philosophy rather than a methodology. As a result, the implementation of the Total Communication philosophy with one child may look entirely different than its implementation with another child.

Glossary Sources: www.babyhearing.org, www.clarkschools.org, www.nad.org, www.agbell.org, https://www.audiology.org/consumers-and-patients/what-is-an-audiologist/, https://www.handsandvoices.org/

#### **Local Websites**

The Rhode Island Department of Health http://health.ri.gov/newbornscreening/hearing/for/parents

Rhode Island Parent Information Network (RIPIN) www.ripin.org

#### **National Websites**

Boys Town National Research Hospital and National Institute on Deafness and Other Communication Disorders (NIDCD)

www.babyhearing.org

Early Hearing Detection and Intervention Program at Centers for Disease Control and Prevention <a href="https://www.cdc.gov/hearingloss/default.html">https://www.cdc.gov/hearingloss/default.html</a> <a href="https://www.cdc.gov/ncbdd/hearingloss/parentsguide/index.html">https://www.cdc.gov/ncbdd/hearingloss/parentsguide/index.html</a>

Hands & Voices www.handsandvoices.org

National Center for Hearing Assessment and Management <a href="https://www.infanthearing.org">www.infanthearing.org</a>

Centers for Disease Control and Prevention website <a href="https://www.cdc.gov/ncbddd/hearingloss/freematerials.html">https://www.cdc.gov/ncbddd/hearingloss/freematerials.html</a>

Most materials are available in Spanish.

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