

FAMILY AND PROVIDER RESOURCE GUIDE

**FOR CHILDREN WHO ARE
DEAF AND HARD OF HEARING**

**Michigan Department of Health and Human Services
Early Hearing Detection and Intervention
www.michigan.gov/ehdi
517-335-8955**



**Michigan Early Hearing Detection
and Intervention Program**

Dear Provider:

We are pleased to offer the enclosed resources, to you and families who have an infant or child who is deaf or hard of hearing. The Early Hearing Detection and Intervention (EHDI) program continues to provide services for parents and providers. Hearing loss can affect a child's ability to develop communication, language, and social skills. Unilateral, bilateral and mild to severe hearing loss can all result in speech and language delays. All of which result in developmental delay(s) and/or mild disabilities. The earlier children with hearing loss receive early intervention services, the more likely they are to reach their full potential. The following resources are available for families with infants and children diagnosed with hearing loss.

➤ **Early On® (www.1800earlyon.org or 800-Early On®)**

Early On Michigan offers early intervention services for infants and toddlers, (birth to three years of age) and their families. Permanent hearing loss is an eligible condition for enrollment. This includes children with both bilateral, unilateral and mild to severe hearing loss.

➤ The **Guide by Your Side™ (GBYS)*** is a free program for families of children who are deaf or hard of hearing. GBYS gives families time to meet with another parent of a deaf or hard of hearing child, called a Parent Guide. Families have an opportunity for a supportive relationship with another parent of a child who is deaf or hard of hearing. The parents receive special training to provide information about local, statewide and national resources, Early On, and the Intermediate School Districts, and other service providers.

➤ The **Michigan Chapter of Hands and Voices™** is a parent driven non-profit organization. The organization values diversity and honors parents while creating a safe place to explore options and receive unbiased support. Informed decisions can be made around the issues of the deaf or hard of hearing. They would like every child who is deaf or hard of hearing to have access to all the options available for communication and resources. More information can be viewed at www.mihandsandvoices.org.

➤ Other **recommended resources** for children identified as deaf or hard of hearing:

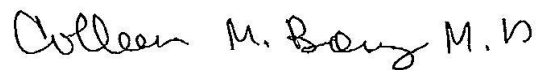
- Audiologist with pediatric experience. Diagnosing infants who are deaf or hard of hearing requires special equipment and expertise. There are audiologic centers of excellence identified in Michigan. Information on these centers, along with provider literature and forms can be accessed at www.michigan.gov/ehdi.
- Otolaryngologist with pediatric experience.
- Children's Special Health Care Services (CSHCS) can help cover future diagnostic testing, including transportation, or hearing aids. Hearing aids and cochlear implants may not be covered by commercial insurance. CSHCS is a separate program and can serve the Medicaid population, parents with commercial insurance and families without insurance. Call 800-359-3722 or visit the website at www.michigan.gov/cshcs.
- Ophthalmology. InfantSEE® www.infantsee.org.

- Genetic Services. There are over 400 syndromes associated with hearing loss. Many infants also have visual problems making genetics and ophthalmology an important part of the evaluation.

Providers' knowledge of these resources can be instrumental in linking families to the existing state infrastructure. Information and sites to assist those caring for infants and newborns with hearing screening, diagnosis, and early intervention services can be accessed at the EHDI web site. Literature for providers and families can also be found on the EHDI website.

EHDI sustains a statewide system to ensure that newborns receive timely and appropriate follow-up. Diagnostic testing to identify children with hearing loss should occur no later than 3 months of age. This system relies on your continued efforts in reporting and encouraging families to follow up. If you have questions or need more information on the above-mentioned services, please contact the Michigan Early Hearing Detection and Intervention Program at 517-335-8955. Michigan Newborn Hearing screening is part of the Universal Newborn Screenings for all babies. www.michigan.gov/newbornscreening.

Sincerely,



Dr. Colleen Barry MD,
EHDI Chapter Champion

Enclosures

Dear Family:

Congratulations on the birth of your child! The discovery of your child's deafness, or hearing loss, can lead to many questions and you may be wondering what to do next. It's a whole new journey for you and your family. You may have many questions about what it means and the different options available for your son or daughter. This guide was written to help families like yours. When you are ready, it can assist you in finding information that can help your family understand deafness and hearing loss. The resources included will help you locate people and agencies in your community, the state and the nation who can provide answers and help you obtain knowledge.



You are the key to your child's future. Learn all you can. The discovery of deafness or hearing loss brings with it many decisions. Seek information about cultural, educational choices, and medical alternatives for your child. There are several professionals who can help you get started, but you will need to determine what works best for your child and family. What might be the correct avenue for one child or family may not be what works for the next.

The resources listed in this directory can help you:

- Connect with other families of children who are deaf or hard of hearing.
- Connect with professionals.
- Learn about communication modes.
- Find out about services such as speech and language therapy, audiological evaluation, hearing aids, assistive devices, and more.
- Explore American Sign Language and other communication modes.
- Locate possible financial assistance.
- Learn how to access educational services and know your rights as a parent of a child who is deaf or hard of hearing.
- Discover community support systems and programs.

You are not alone. Michigan Hands & Voices, and their Guide by Your Side™ (GBYS) program support families of children who are deaf or hard of hearing, regardless of language or communication mode. They are a parent-led organization who believe that families make the best decisions for their children when they have all the information. You will be making many decisions in the weeks and years ahead. Please feel free to contact Michigan Hands & Voices Guide by Your Side program at 248-845-8762 (call or text).

We hope this directory will show you that there are many agencies, organizations, and support groups for families like yours. As your child grows, his or her needs will change. Some of the services listed here will be helpful right away, and some might be helpful in the future. This directory has been compiled as a service to Michigan families. Inclusion of an organization, group or agency does not constitute an endorsement by the Michigan Department of Health and Human Services and any omissions are an oversight. All information has been verified as of the publication date.

FAMILY CHECK LIST FOR BABIES/YOUNG CHILDREN DIAGNOSED WITH HEARING LOSS

Where to start? It may seem like there is much to learn and you may not know what to do first. There are certain first steps we recommend:

FIRST

If your child is between the ages of 0-3, we encourage the parent to call or visit the Early On® Hotline. The goal of the hotline is to assist families of young children with special needs statewide in identifying appropriate resources and supports. Request an evaluation for services. To contact Early On® call 800-Early-On or visit www.1800earlyon.org.

SECOND

Contact the Michigan Hands & Voices Guide by Your Side™ Program (GBYS). GBYS is a free parent-to-parent program for families with babies or children with hearing loss/deafness. If you have not yet been matched with a Parent Guide, please contact 248-845-8762 call or text.

THIRD

If your child is over age 3 you can contact Build Up Michigan or your local school district's Special Education office (see the Resources section for a list). Build Up helps parents and their children, ages 3 through 5, get additional educational support needed to enter kindergarten. Medical documentation by Ear, Nose, and Throat (ENT) provider may be required. Parents can visit BuildUpMi.org or call the Michigan special education line at 888-320-8384. Eligibility for these public school programs is based on a child's needs.

FOURTH

See that your child is enrolled into Children's Special Health Care for specialized insurance. www.michigan.gov/cshcs.

FIFTH

Follow through with an eye doctor for an exam. – InfantSEE® www.infantsee.org.

SIXTH

See child's doctor for referral to a geneticist for genetic testing (unless you know the cause).

SEVENTH

You might want to meet other families raising children who are Deaf or Hard of Hearing. Some families live in an area where a school or program exists, and they can meet other families easily. Others may be the only family they know of in their area. One organization that offers opportunities to meet other families, as well as Deaf or Hard of Hearing role models is Michigan Hands & Voices. Check out www.mihandsandvoices.org. More organizations are listed in the Resources section.

EIGHTH

Your child should have a **Shared Plan of Care (Please see following pages)**.

SHARED PLAN OF CARE

Care coordination is an important function of the family-centered medical home for children and youth with special health care needs (CYSHCN).

A shared plan of care is a summary of information, in partnership with the family, needed to support coordination of care for the needs of an individual child or youth, and his or her family.

- It includes needs and services that support the health and wellness goals of the child, family and other caregivers. Other caregivers may include: Parent Guides, Deaf and Hard of Hearing Role Models, audiologists, early interventionists, teacher consultants, and other multidisciplinary providers and services.
- Engaging diverse team members and families in the creation of a shared plan of care has the potential to support all members of the team. This will address the holistic needs of the child and family.
- The shared plan of care plays a critical role in enhancing care coordination for individuals with complex medical needs.



Your child's team should include:

1. Pediatrician/Family Practitioner (provider caring for infants and children)

- Referring you to an audiologist skilled in testing the hearing of infants and toddlers when you express concern about your child's hearing.
- Answering your questions about medical or surgical treatment of different types of hearing loss.
- Confirming the need for prompt action involving amplification and early intervention once your child has been diagnosed with hearing loss.
- Putting you in touch with early intervention programs.
- Treating your child - or referring to ear specialists - when your child has middle ear disease that increases his/her degree of hearing loss.

2. Audiologist (specialist in testing hearing and working with those with hearing loss)

- Having the appropriate equipment and the skills to test the hearing of infants and toddlers.
- Obtaining complete information about your child's hearing in each ear at a range of frequencies.
- Carrying out or referring infants or difficult-to-test children for, Otoacoustic Emissions (OAE) testing and Auditory Brainstem Response (ABR) testing, when necessary.
- Recommending appropriate amplification if chosen by the family.
- Keeping your child equipped with well-fitting earmolds.
- Testing your child while wearing amplification and asking questions about your child's responses to sounds at home.
- Giving you information about early intervention programs available to your family.
- Working in partnership with you and early intervention specialists to monitor and maintain your child's amplification systems (hearing aids, FM systems, cochlear implants).
- Helping your child learn to use amplification and make sure the hearing aids function properly.
- Keeping records of your child's progress in acquisition of listening skills.

3. Otologist, Otolaryngologist or Ear, Nose, Throat (ENT) Physician

- Confirming that there is not a medically treatable condition in your child's outer ear or middle ear that is causing the hearing loss.
- Answering your questions about medical or surgical treatment of different types of hearing loss.
- Scheduling further procedures (i.e. urinalysis, CT scan) to rule out other causes of the hearing loss.
- Signing a form authorizing use of hearing aids with your child (required by law in Michigan before hearing aids can be fit on a child).
- Placing ventilation or PE, tubes in your child's eardrums if he has chronic middle ear disease that is not resolved by antibiotics in a timely way.

4. Listening and Spoken Language Therapist (Auditory-Verbal professional trained in audiology, speech-language and education for the deaf or hard of hearing)

- Guiding and empowering parents, who have chosen this option, to teach their child to listen and speak in individual, usually weekly, therapy sessions.
- Identifying equipment problems.
- Ensure the child has good access to the full range of speech sounds; and assist the family in advocating for medical treatment or technological changes if needed.
- Guide the family in the development of speech, language, auditory, and cognitive development of the child with hearing loss.
- Helping the child with hearing loss learn to control and monitor his/her voice.

5. Speech-Language Pathologist (professional in area of speech and language)

- Assisting children with difficulty understanding and using language to improve language comprehension and production (e.g., grammar, vocabulary, and conversation, and story-telling skills.) May be spoken language or sign language.
- Helping children with articulation disorders to learn proper production of speech sounds.
- Assisting children with voice disorders to develop proper control of the vocal and respiratory systems for correct voice production and to have fluent speech.
- Identifying additional speech/language problems such as motor-speech disorders (i.e. apraxia).

6. Early Intervention Specialist of Deaf/Hard of Hearing Infants & Toddlers

- Describing the services offered in your community or area through their early intervention program and costs, if any, associated with services.
- Describing how your family members will be involved in early intervention services: defining your roles in early intervention and their expectations about your family's participation.
- Answering, when possible, your questions about how your child's hearing loss will affect his/her ability to learn, to communicate, and to participate in school and society.
- Discussing with you how both your child's and your family's strengths and needs will be assessed and when these assessments will take place.
- Giving you a time line for when services will begin and end.
- Describing the curriculum that will be used to promote your child's acquisition of listening and communication skills.
- Describing how you and other caregivers will be given opportunity to acquire information and skills that will help you promote your child's development of listening and communication/language skills.
- Listening to your observations and concerns about your child and discussing these with you.
- Giving you support during difficult times.
- Working with you to define your child's educational needs when your child is ready to "graduate" from early intervention.

7. American Sign Language (ASL) Specialist (visual language using the shape, placement and movement of the hands, as well as facial expressions and body movements)

- Assessing the level of your child's ASL communication skills.
- Determining your child's ASL grammatical knowledge.
- Assisting your child's classroom teacher to incorporate specific ASL grammar skills during the day.
- Assist you and your child's teacher when writing ASL goals for IEP.
- Plan ASL enrichment workshops & activities for school staff and children.

8. Other parents of children who are deaf or hard of hearing

- Sharing experiences, they have had with professionals and early intervention programs.
- Telling you about people and information sources they have found useful.
- Listening to you.
- Sharing with you their feelings related to parenting a child with hearing loss and how their feelings have changed over time.
- Telling you about their child's achievements.
- Getting together with you so your children can play together.
- For more information and access to other parents of deaf or hard of hearing children, contact the National Hands & Voices Website – www.handsandvoices.org or the Michigan chapter of Hands & Voices - www.mihandsandvoices.org.

9. Adults who are Deaf and Hard of Hearing

- Sharing personal experiences and information by a D/HH individual.
- Sharing educational, social, and cultural experiences and perspectives.
- Modeling different means of communication.
- Acting as a role model for the parents and D/HH child.
- Bringing hope to families about overcoming challenges and creating success.

Our best wishes are extended to you from all of the people involved in the creation of Michigan's resource guide for children who are deaf or hard of hearing.

Adapted from: Hands & Voices © 2005. These pages used in their entirety with permission from the Colorado Resource Guide for Families of Children who are Deaf/Hard of Hearing in Colorado except for the following sections which were added: Guide by Your Side, Auditory Verbal Therapist, Speech Language Pathologist, American Sign Language Specialist.

UNIVERSAL NEWBORN HEARING SCREENING

Michigan Early Hearing Detection and Intervention (EHDI) Program

The Michigan Department of Health and Human Services initiated the universal newborn hearing screening program in 1997 to promote early identification of hearing loss. Michigan has progressed dramatically. Now 100 percent of birthing hospitals in the state and midwives complete newborn hearing screening for all babies. This initiative is supported by the American Academy of Pediatrics, the Joint Committee on Infant Hearing, the Michigan Coalition for Deaf and Hard of Hearing People, and numerous other national and state organizations.



Every baby with hearing loss deserves to be identified early so that appropriate intervention can begin.

Timely diagnostic evaluation and appropriate intervention are key ingredients to the success of the newborn hearing screening program. The Early Hearing Detection and Intervention (EHDI) program staff bring together hospital administrations, health professionals, community agencies, educators, service organizations, consumers, parents, and advocates to build a comprehensive community-based system.

Identification of hearing loss should occur by three months of age with intervention by six months of age. Screening babies shortly after birth provides an ideal opportunity to accomplish this goal.

WHAT ABOUT OTHER CONDITIONS?

Sometimes, delays in development can mean that a child has additional disabilities. A child may have a vision loss, physical disability, and/or cognitive disability, in addition to having a hearing loss. It is important to know this when making decisions about communication, supports, education, etc. If additional disabilities are diagnosed, then it is important to learn as much as possible about each disability, and what the combination of disabilities means for the child. Children, who have multiple disabilities, have different needs than those with only a hearing loss. Support from professionals, who understand multiple disabilities, **is** available to you and your family.

EARLY INTERVENTION

Learning about hearing loss is the first step toward helping the child. The next step is to begin early intervention. Early intervention is made up of family-centered services and supports that will help your child grow and learn. The goal of early intervention is to help your child reach his/her full potential. The first three years of life are a critical time for growing and learning. Hearing loss can limit your child's access to spoken language and lead to speech and language delays. For a child with hearing loss, intervention helps your child build connections between himself and the world.

There are many ways you can help your child. You may find help through hospitals, private clinics, Early On or Special Education. Early On and Special Education are systems that help all children in Michigan. These systems are funded by the state and work with children aged **birth to three years**. To find out if your child is eligible for these services, a free evaluation will be done.

Early On® works only with children aged **birth to three years** and their families. A member of the Early On staff will work with your family to find services to help your child. Typically, this is at no cost to the family. www.1800earlyon.org; 517-669-3201

Special Education works with children aged birth to 26 years. Referrals are made through Build Up. Build Up will connect your family to school programs and services. All services through Special Education are free.

Both Early On and Special Education are available throughout the state. Your child may receive services through one or both systems. The staff of Early On and Special Education will work together with you to develop the best plan for your child.

Build Up helps parents and their children, ages 3 through 5 years, get additional educational support as they begin and continue to learn the skills needed to enter kindergarten. <http://www.buildupmi.org>; 888-320-8384

It is never too soon to begin early intervention!
Call the phone number below to get started!

Voice: 800-327-5966, TTY: 517-668-2505

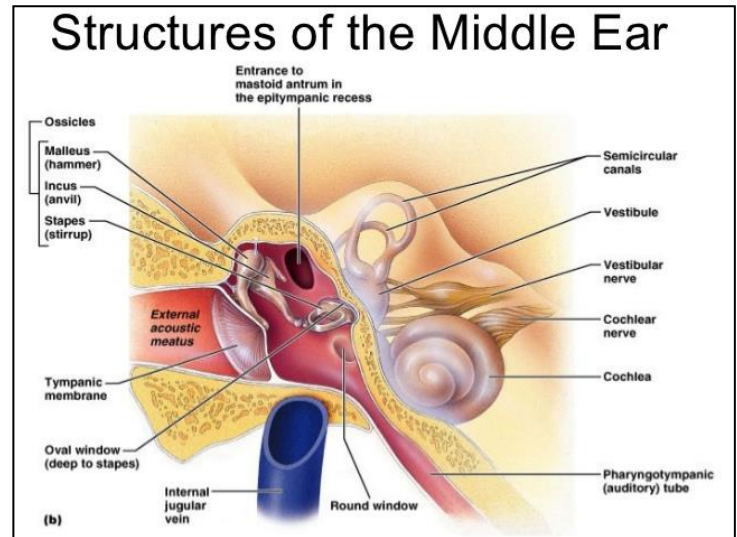


Build Up Michigan 888-320-8384

BACKGROUND INFORMATION ABOUT HEARING LOSS

The Ear and How It Works

The ear is the organ responsible for hearing and body balance. It is made up of three parts known as the outer ear, the middle ear, and the inner ear. The structures of the ear are shown in the diagram. The outer ear is responsible for collecting and channeling sound waves. It consists of the auricle (pinna) which is the visible portion, the ear canal (acoustic meatus), and the eardrum (tympanic membrane). 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 tiny bones (ossicles). The ossicles are called the malleus, incus, and stapes. The ossicles conduct sound across the middle ear and amplify it for further analysis by the inner ear. The middle ear is connected to the back of the throat by the eustachian tube. The eustachian tube allows air to pass to and from the middle ear space. The air pressure must be equal on both sides of the tympanic membrane in order for it to vibrate most efficiently. The inner ear consists of a snail-like structure called the cochlea; semi-circular canals which control balance; and the vestibule which connects the two inner ear structures.



How We Hear

In order to hear, 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 ossicles in the middle ear. From the middle ear, sound is transmitted to the cochlea of the inner ear. The cochlea changes the mechanical sound impulses into electrical impulses for transmission along a 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 or intensity of a sound is measured in a unit called a "decibel"(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 10 dB HL, conversational speech about 60 dB HL, and a shout about 90 dB HL. When sound reaches 120 dB HL, it is uncomfortable for humans.

The **degree of hearing loss** is measured in terms of the decibel. Hearing impairments range from mild to profound in degree. Even mild hearing loss can affect a child's ability to hear language and make sense of it. Remember that a baby is learning a new language and has no background on which to rely for filling in missed parts that he or she cannot hear. Different degrees of hearing loss are explained further on the following pages.

"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. Important speech sounds fall in the range of 250-6,000 Hz.

The Audiological Test Battery

An **audiogram** is a graph showing a person's response to various sounds (sample on next page). Low to high-pitched sounds at various levels of loudness are recorded. Across the top of the audiogram, the frequencies of sound (different pitches) are listed (↔). The lower the number (125 Hz), the lower the pitch from base to soprano type (8000 Hz) looking from left to right. Looking up and down the side of the audiogram, the intensities of sound needed to hear (loudness) are listed (↑). The lower the number (0 dB HL) the better the hearing; the higher the number, the greater the hearing loss.

Speech Banana

The audiogram shown in the diagram below illustrates the pitches and intensities needed to hear the sounds of speech. If your child's hearing results fall within or below what looks like the banana image shaded area, he or she will have difficulty hearing speech sounds. Assistance with hearing, such as using hearing aids, will be required. When hearing thresholds are 90 dB HL or greater, the child may also have the option of learning language via visual communication, such as cued speech or signing as the primary mode of communication. However, sometimes cued speech or signing is also used to assist with hearing and learning language even with lesser degrees of hearing loss.

If you do not understand some of the audiology terms used here, please refer to the glossary at the end of the booklet. A table explaining different degrees of hearing loss and possible expectations is also included on the next page. Your audiologist and physician can also help you understand the types and degrees of hearing loss and the impact on speech and language development.

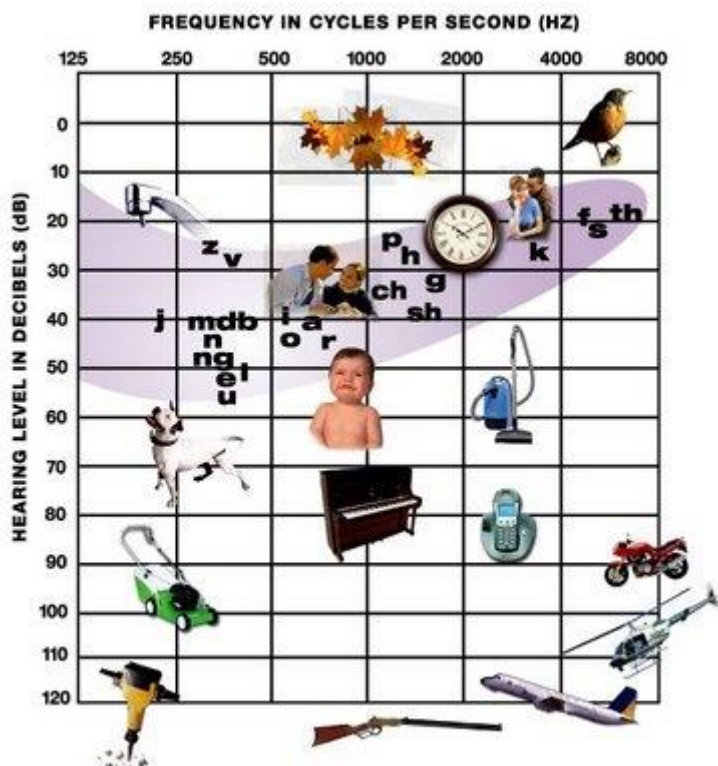


Chart Your Child's Audiogram

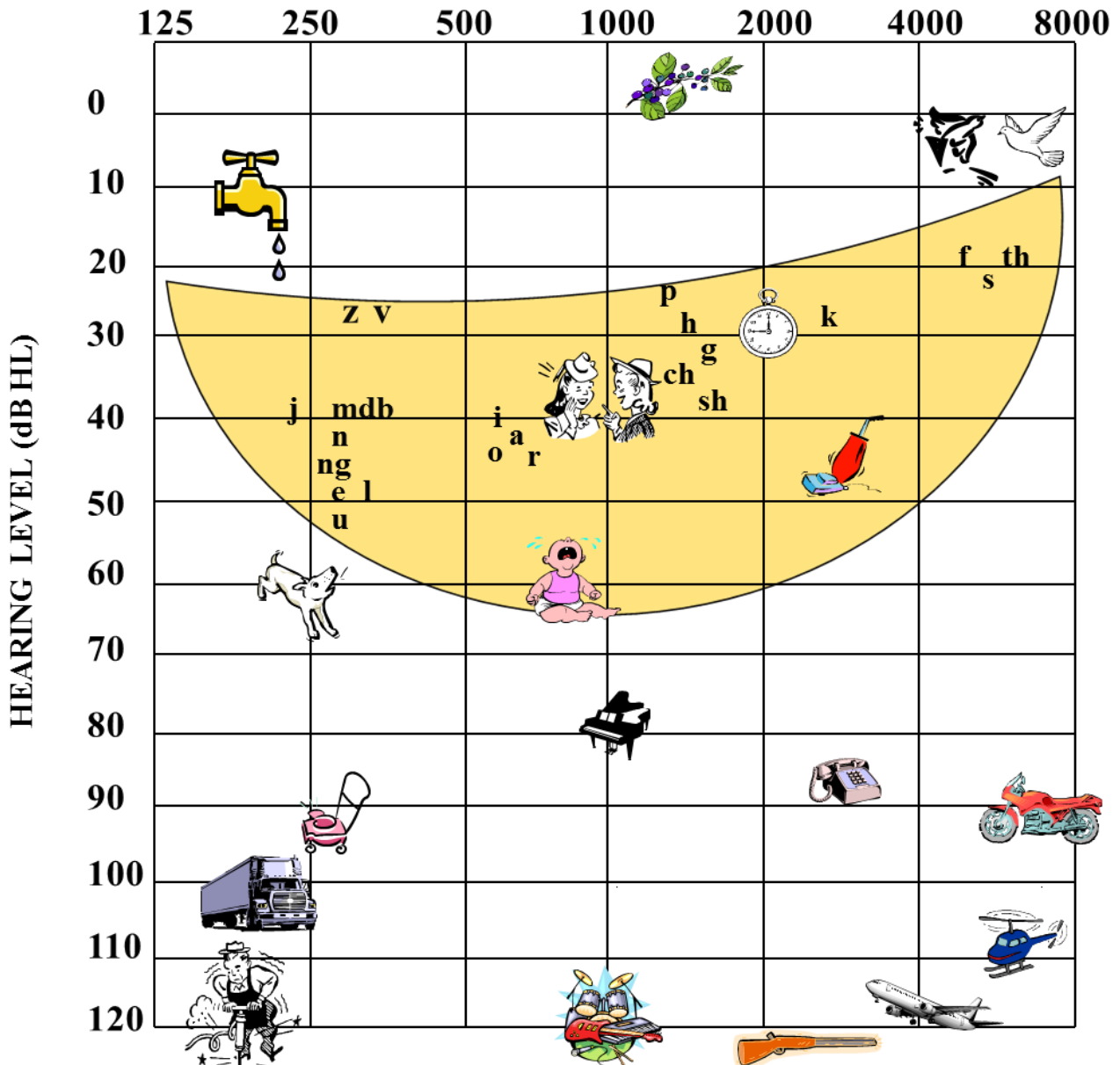
NAME: _____ DATE OF AUDIOLOGICAL REPORT(S): _____

TYPE/DEGREE OF HEARING LOSS: _____

KEY: O = Right Ear; X = Left Ear; A = Aided

** Sounds will be

difficult to hear or inaudible if they fall below the O, X, and or A lines**



AUDIOGRAM OF FAMILIAR SOUNDS

FREQUENCY IN CYCLES PER SECOND (HZ)

TYPES OF HEARING LOSS

There are several different types of hearing loss that can affect a person's ability to hear. These include:

Conductive hearing loss: The word conductive refers to the fact that sound is not able to pass through the outer and/or middle ears. There are two types of conductive hearing loss: temporary and permanent. Temporary loss may be caused by a blockage of the outer ear canal (impacted wax) or by abnormal fluid in the middle ear space. It can usually be treated successfully, and the hearing will return to normal. Sometimes fluid in the middle ear can be persistent and demands a great deal of medical care and treatment. A permanent conductive hearing loss occurs when the three bones of the middle ear do not work properly, are fused, or missing. Sometimes the outer part of the ear is missing or closed so sound cannot go through it. This type of conductive hearing loss may require corrective surgery. If the surgeon cannot repair the affected areas, a hearing aid(s) may be recommended permanently, or until surgery can be performed at an older age.

Sensorineural Hearing Loss: The word sensorineural refers to hearing loss caused by a problem in the inner ear. This type of hearing loss is usually considered to be permanent. It can be congenital (occurring at or near birth) or acquired at an older age. The reason for the hearing loss may or may not be known. Sometimes a physician specializing in the care of the ears (otologist) can identify the cause. Hearing aids are usually recommended for this type of loss. When the hearing loss is considerable (severe to profound), cochlear implants may also be an option.

Mixed Hearing Loss: This type of hearing loss is a combination of the two noted above. Part of the hearing loss may be medically correctable, but the sensorineural portion will not be. Hence, there is a need for both medical care and treatment and the use of amplification (hearing aids).

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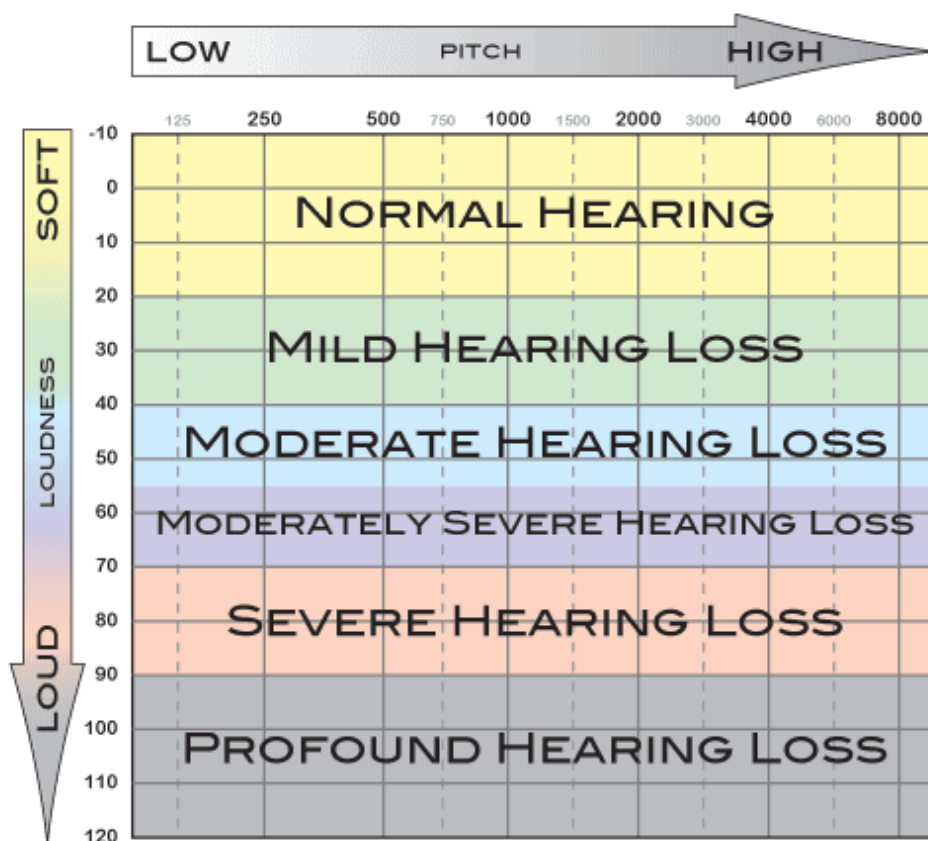
Degrees of Hearing Loss and Potential Effects

The following chart can help explain what sounds your baby may or may not hear **without amplification** based on the degree of hearing loss. It shows the potential effect hearing loss might have on your baby's ability to hear and recognize spoken conversation and environmental sounds. It also indicates whether amplification could help your baby. However, this is only a guide. Each child has unique potential. Only time will tell how your baby will use his/her hearing potential and whether amplification will work best for your baby.

Degree of Loss	Decibels	Potential Effects
Minimal Hearing Loss	16-25 dB	A minimal loss of some sounds. May have difficulty hearing quiet or distant conversations especially in noisy environments.
Mild Hearing Loss	26-40 dB	Without amplification, the child can hear most of what is said up close and in quiet environments but is likely to miss parts of words. The child may appear to be "hearing when she/he wants to". Amplification and lip-reading may supplement understanding of what is said.
Moderate Hearing Loss	41-55 dB	Without amplification, the child will have difficulty hearing spoken conversation. 50-100% of spoken conversations may be missed. Proper amplification and intervention should enable the child to hear and recognize all sounds. The child also may have difficulty hearing in a noisy environment.
Moderate to Severe	56-70 dB	Conversation must be very loud to be heard without amplification. Proper amplification will help the child to develop awareness of spoken language. Age of amplification, consistent use of hearing aids, and intervention are important to help the child learn to use his/her hearing.
Severe Hearing Loss	71-90 dB	Without amplification, the child may hear loud voices and sounds close to the ear. With early and consistent use of hearing aids, many children will be able to detect sounds such as speech. Cochlear implants may offer the most access to auditory awareness and development of speech. Unless implanted, children will likely use vision in addition to or in place of hearing.
Profound Hearing Loss	91 dB or more	Without amplification, the child will be more aware of sounds as vibrations. The child may rely on vision rather than hearing as the primary means for communication and learning. Amplification may or may not be useful in hearing spoken conversation. Cochlear implants may offer the most access to auditory awareness and development of speech.
Unilateral Hearing Loss (one ear)		May have difficulty hearing faint or distant conversations, especially in the presence of competing noise. Usually have difficulty knowing where sounds are coming from. May have difficulty understanding spoken conversations coming from the side where there is hearing loss.

For a simulation of what speech may sound like to children with different degrees of hearing loss, visit: <https://www.phonak.com/us/en/hearing-loss.html>. Videos describing hearing loss can also be found on Youtube.com, but keep in mind no simulations are perfect and are up to the interpretation of the creator.

Sometimes it is easier to understand concepts with pictures. Below is a representation of the degree of hearing loss across frequencies (the “pitch” arrow) and as volume increases (the “loudness” arrow).



Auditory Neuropathy

Auditory neuropathy (AN) is a condition in which sound enters the inner ear normally but the transmission of signals from the inner ear to the brain is impaired. People with auditory neuropathy may have normal hearing or hearing loss ranging from mild to profound. A child with AN will have trouble understanding speech clearly (i.e., speech-perception). Often, speech perception is worse than would be predicted by the degree of hearing loss. For example, a child with auditory neuropathy may be able to hear sounds but would still have a hard time recognizing spoken words. Sounds may fade in and out and seem out of sync.

Unilateral Hearing Loss

Unilateral hearing loss is a hearing loss in only one ear. It can be conductive, sensorineural or mixed. Although a child with this type of hearing loss has good hearing in one ear, he or she will have difficulty knowing where sound is coming from, hearing in noisy environments, and hearing on the affected side. A pediatric audiologist will want to monitor a unilateral loss closely to determine if your child’s hearing is changing.

COMMUNICATION CHOICES

Communicating with your child is of the utmost importance! Two-way communication, responding to your child and encouraging your child to respond to you, is the key to your child's language development. There are different ways to communicate and different philosophies about communication. As you think about how your family communicates now with your child and how you would like to communicate with him or her in the future, you are thinking about the communication methodology/mode issue.



The best way to decide which approach to communication will be best for your child and family is to be open to all the modes, ask questions, talk to adults who are Deaf and Hard of Hearing and other families with children who have a hearing loss, and discuss, read, and obtain as much information as you can about the various methods.

Consider the following factors when choosing a communication mode:

- Will the communication mode enable all of your family to communicate with your child?
- Do you feel comfortable with the amount of information you have received about all the mode/methods of communication? Have you talked to a variety of people and heard a variety of perspectives on each choice?
- Is the communication mode in the best interest of your child? Does it allow your child to have influence over his/her environment, discuss his/her feelings and concerns, and participate in the work of imagination and abstract thought?
- Does the communication enhance your relationships with each other as a family? It should promote enjoyable, meaningful communication among all family members and enable your child to feel part of your family and know what is going on.
- Has the information you have received about communication choices been delivered to you in an unbiased manner? Are you looking at your choice of communication in terms of what will be best for your child and family, and not what someone has promised you about a certain method?

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COMMUNICATION CHOICES – DEFINITIONS

AMERICAN SIGN LANGUAGE (ASL)

American Sign Language (ASL) is a fully developed, autonomous, natural language with distinct grammar, syntax, and art forms. American Sign Language can perform the same range of functions as a spoken language. “Listeners” use their eyes instead of their ears to process linguistic information. “Speakers” use their hands, arms, eyes, face, head, and body. These movements and shapes function as the “word” and “intonation” of the language. ASL training is necessary in order for the family to become proficient in the language. Parents can learn ASL thru: “SignIt”. Please see page 36 for more information.



LISTENING AND SPOKEN LANGUAGE

This approach to teaching spoken communication concentrates on the development of listening (auditory) and speaking (verbal) skills. It emphasizes teaching the child to use his or her amplified residual hearing and audition from listening devices (like hearing aids or cochlear implants) to the fullest extent possible. A high degree of parent involvement is necessary as parents learn methods to integrate listening and language throughout daily routines. www.HeartoLearn.org (See page 36.)

CUED SPEECH

This system is designed to clarify lip reading by using simple hand movements (cues) around the face to indicate the exact pronunciation of any spoken word. Since many spoken words look exactly alike on the mouth (e.g. pan, man), cues allow the child to see the difference between them. Cued speech can be learned through classes taught by trained teachers or therapists. A significant amount of time must be spent using and practicing cues to become proficient.

SIMULTANEOUS COMMUNICATION (Sim Com)

Simultaneous communication occurs when a person uses sign language and spoken English at the same time. The signs used may be an exact match to the spoken message (Manually Coded English). Or, a person may sign some, but not all, of the words in the spoken message (Pidgin Signed English). The words that are signed and the words that are spoken occur simultaneously. Parents must consistently sign while they speak to their child. Sign language courses are routinely offered through the community, local colleges, adult education, etc.

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COMMUNICATION CHOICES: FREQUENTLY ASKED QUESTIONS

What does the research say about communication methods? Has research proven that one method is better than another?

No one method of communication has been scientifically proven to be the best for ALL deaf and hard of hearing children. In “A Research Synthesis of Language Development in Children who are Deaf” by Marc Marschark, Ph.D. (2001), over 150 research studies were looked at, and the conclusion was that “...the most frustrating finding concerning language development of children who are deaf is the fact the researchers have not yet found the approach that supports development across the domains of social functioning, educational achievement, and literacy. A single such approach is unlikely....” Research studies on language development and mode of communication for deaf children can be of use to parents and professionals in understanding language development, the importance of early intervention, mother-child bonding etc. regardless of the mode of communication the child is using.



When making a choice in communication for my child, will this decision be for life?

Decisions about communication mode are flexible. In fact, it is very important for families to remain flexible and open-minded about their choices in communication. The needs of the child and family may change over time. As families gain further information and knowledge about deafness and their child's

hearing loss, choice of communication may be impacted. A child's progress should be monitored through objective assessments in order for parents to understand the growth their child is making in language development.

Is American Sign Language a true language? Is it 'universal'?

Many people mistakenly believe that American Sign Language (ASL) is English conveyed through signs. Some think that it is a manual code for English, that it can express only concrete information, or that it is one universal sign language used by deaf people around the world. It is not a form of English. It has its own grammatical structure, which must be mastered in the same way as the grammar of any other language. ASL is capable of conveying subtle, complex, and abstract ideas. Signers can discuss philosophy, literature, or politics as well as football, cars, or income taxes. Sign language can express poetry and can communicate humor, wit, and satire. As in other languages, the community in response to cultural and technological change is constantly introducing new vocabulary items. ASL is not universal. Just as hearing people in different countries speak different languages, so do deaf people around the world use different sign languages. Deaf people in Mexico use a different sign language from that used in the U.S. Because of historical circumstances, contemporary ASL is more like French Sign Language than like British Sign Language. Parents can learn SL online through “SignIt” (free if you register before 36 months old). Please see page 36.

How Can I Learn American Sign Language?

There are different ways to learn ASL. That means spending some time researching opportunities in your area. Lots of resources and information are on the internet. Resources to learn ASL start with the old school dictionary and sign language books. In print though, it can sometimes be hard to see the direction or movement of a sign. Next, there are various sign language websites, apps, and online videos and courses that can help get you started. If you prefer personal face time with an instructor, check out your local community colleges, community education programs, hospitals, and possible tutors for instruction. Summer camps, the State School for the Deaf, and Deaf and Hard of Hearing friends or mentors are other resources.

It is also important to attend as many deaf events as possible. Search the internet and ask around about Deaf Coffee Chats, Deaf Organization Fundraisers, and Deaf Outings. Although it may be intimidating at first, the Deaf community is very welcoming to families with Deaf or Hard of Hearing children. Take a friend or ask a teacher or deaf mentor to meet you there. The community will respect your effort to learn their language and many deaf adults will take the time to help you sign correctly. Take pride in the fact that you are learning a whole new language. It is a big undertaking, but one that is respected in the community. You can practice with real people online too at www.signonconnect.com.

How Can I Learn Cued Speech?

There are several ways to learn about Cued Speech. The first step is to reach out to the National Cued Speech Association (NCSA) at www.cuedspeech.org. The NCSA's website contains significant informational resources and additional contacts. There is downloadable information about workshops, events, deaf mentors, and instructors.

If you and your support system are looking to begin learning immediately, you can also register for an online course, **CS100 - Introduction to Cued American English**, at <https://cuecollege.org>.

As with any other interventional strategy, meeting other families and deaf or hard of hearing adults who cue is a large part of developing a support system. If you are on Facebook, you can join the main Cued Speech page at <https://www.facebook.com/groups/cuedspeech/> and join the conversation.

QUESTIONS ABOUT AMPLIFICATION FOR CHILDREN



WHEN SHOULD A CHILD GET A HEARING AID?

Most newborns have their hearing tested at birth and can be fitted with hearing aids within a few weeks. Research tells us that fitting a hearing aid as soon as possible helps to minimize the effect of the hearing loss on language development. Ideally, an infant will be fit before 3 months of age or as soon as possible after confirming the hearing loss.

WHAT IS A HEARING AID?

A hearing aid is an electronic device for the ear, which makes sounds louder in the range of a particular hearing loss. The goal is to provide the ability to hear speech and environmental sounds at a comfortable level.

WHAT STYLES OF HEARING AIDS ARE AVAILABLE FOR CHILDREN?

Hearing aid styles differ by how they are worn on the ear. They are based on the type and degree of hearing loss.

BEHIND-THE-EAR (BTE):

Hearing aids are positioned behind the ear and coupled to the ear with a custom fitted earmold. BTE hearing aids are utilized for infants and young children due to the following features:

- BTE earmolds are made from soft materials, which are more comfortable and less easily broken, for physically active children.
- Earmolds can be replaced as the child's ears grow. It is not necessary to recase or replace the hearing aid itself.
- BTE hearing aids are often more reliable and less easily damaged.
- BTE hearing aids are easily connected to a FM system or assistive listening device.
- BTE hearing aids and earmolds are available in colors and with accessories designed specifically for children.



IN-THE-EAR (ITE):

Other completely in-the-ear hearing aid styles may be available to older children and adults, depending on the severity of hearing loss.

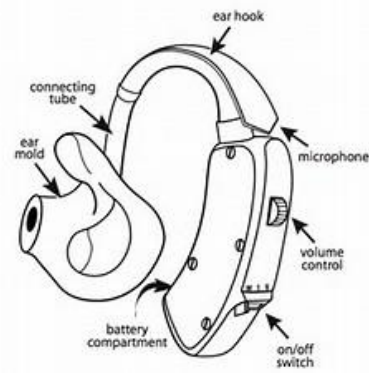
BONE CONDUCTING HEARING AIDS:

Some children with a conductive hearing loss, and/or malformed or missing outer ears may use bone conduction hearing aids. This is a specially adapted version of a behind-the-ear style of hearing aid which is held in place by a headband.

HOW DOES A HEARING AID WORK?

Sounds are picked up by a microphone and carried to a signal processor (amplifier) where they are made louder and shaped to match the hearing loss characteristics such as frequency (pitch) and intensity (loudness). The sound is then sent through the receiver and delivered by the earmold into the ear.

- **Earmold:** Custom made, seals the ear to prevent sound leakage which then causes feedback (whistling) Earmolds will need to be re-made as the baby grows, insuring a proper fit.
- **Tubing:** Soft, flexible; connects the earmold to the hearing aid; securely attached to the earmold and detachable from the earhook; replaceable if torn, cracked or too short.
- **Earhook:** Curved, hard plastic; supports the hearing aid on top of the ear; protects the receiver and channels sound to the earmold. May have a filter to further shape the sound for the hearing loss.
- **Receiver:** Sound speaker inside the hearing aid that opens into the earhook.
- **Microphone:** Collects sound for amplification through a small opening in the hearing aid case.
- **Internal Adjustment Controls or Computer Cable Connector Port:** Accessed by the audiologist to modify the hearing aid sound response.
- **Switch:** Usually 0 = Off; T = Telephone or FM System, M = Microphone
- **Volume Control:** Usually a numbered wheel that changes the loudness of the sound. Typically, the smaller the number the lower the volume. Some hearing aids may not need this control.
- **Battery Door:** Holds the battery which is changed regularly; opening the door will turn off the hearing aid; batteries are toxic if swallowed and tamper resistant doors are recommended for children.



WHO DECIDES WHICH HEARING AID IS BEST?

Parents and the child's audiologist should come to a careful decision regarding amplification after consideration of the infant or child's individual needs, including the characteristics of the hearing loss, available technology as well as financial resources. Hearing aids are prescribed to assure the best possible fit with the information available. As more specific information about the hearing loss is obtained, the hearing aids will be adjusted. The audiologist will perform tests with the hearing aids on your child to further confirm the fitting benefit. The child's ear, nose and throat (ENT) physician will provide a medical clearance statement to permit the fitting of hearing aids on a child in compliance with the FDA (Food & Drug Administration) requirements. Binaural aids (a hearing aid worn in each ear) are usually worn by people with bilateral (both ears) hearing loss, particularly when the hearing loss is similar in each ear and there is good speech recognition ability. For children with a bilateral loss, binaural fittings are almost always used.

Is there any help available to pay for the hearing aids?

Families should check their insurance policies for hearing aid coverage benefits. In addition, families may apply for financial assistance through Children's Special Health Care Services. Eligibility for the program is based on diagnosis, not income. However, a payment agreement may be required. Please contact CSHCS at 800-359-3722 for more information regarding this program. Other resources are detailed in the "Where can I get financial help" section on page 39.

Which child can benefit from a cochlear implant?

A cochlear implant is an electronic device that is surgically implanted in the cochlea of the inner ear. It transmits auditory information directly to the brain, by-passing damaged or absent auditory nerves. Technically, it synthesizes hearing of all sounds, but the wearer requires training to attach meaning to the sounds. This is called auditory "habilitation", or "re-habilitation". Typically, cochlear implant users have severe to profound hearing losses and do not get much benefit from hearing aids. Successful cochlear implants users gain useful hearing and improved communication abilities. The FDA has approved cochlear implants for adults and children who are profoundly deaf at age 12 months, and for those with severe hearing loss at age 24 months. Please discuss with your audiologist to determine if your child is a candidate.

WHAT OTHER DEVICES MIGHT BE OPTIONS?

There are other accessories to hearing aids, which an audiologist may consider for your child. Some of these are as follows:



FM System: These devices may be connected to the hearing aid to improve the ability to hear voices from a distance or in background noise. All hearing aids are limited in their ability to differentiate individual speakers. A FM system consists of a microphone worn by the speaker and wireless sound transmission to a receiver (either an electronic box or an ear-level connector) worn by the child. The most common application is with classroom teachers, however there are significant advantages for use with very young children and their parents.

Closed Captioning: This assistive device is built in to a television to provide written text of the spoken words.

Finally, ALL hearing aids have limitations. Hearing aids cannot cure a hearing loss, they cannot amplify all frequencies across the frequency range, they cannot make sounds clearer if the inner ear (cochlea) is damaged and distorting these sounds and they cannot completely separate speech from background noise. Hearing aids will enhance a child's life and development when a close working relationship exists between the parents, their child, the audiologist and the care coordination team.

QUESTIONS YOU MIGHT WANT TO ASK AN AUDIOLOGIST:

- Is the loss permanent?
- Does the child need more testing?
- How often should the child's hearing be tested?
- Can you tell if the child's hearing loss will get worse or change?
- Do both ears have the same hearing loss?
- How will the hearing loss affect the child's speech and language development?
- What could have caused the child's hearing loss?
- Would you suggest genetic counseling for our family?
- May I have copy of the hearing test results?

Directory of Resources for Families of Children Who Are Deaf or Hard of Hearing

Where can I meet other parents? (Michigan)

<p>Carls Family Village Brooklyn, Michigan 517-592 6283 (V) 517-536 1518 (VP) www.holleyfv.org (Web)</p>	<p>The Holley Institute owns and operates Carls Family Village at De Sales Center which has offered educational and recreational programs for the Deaf, Deaf/Blind and hard of hearing since 1996.</p>
<p>Communication Access Center for Deaf and Hard of Hearing Flint, MI 810-239-3112 (V/TTY) 810-239-1606 (Fax) www.cacdhh.org (Web)</p>	<p>A non-profit agency that provides interpreter services, sign language classes, TTY relay, mentorship, public education, information/referral, and case management.</p>
<p>Deaf and Hard of Hearing Services Grand Rapids, MI 616-732-7358 (V) 616-828-0186 (VP) www.deafhhs.org (Web)</p>	<p>Offers interpreter services, KidSigns, employment training, ASL classes, equipment distribution, community relations, and advocacy.</p>
<p>Deaf Community Advocacy Network (Deaf C.A.N.!) Sylvan Lake, MI 248-332-3331 (V) 248-332-3323 (TTY) www.deafcan.org (Web)</p>	<p>Provides a wide range of services to help bridge the Deaf and hearing worlds.</p>
<p>Hearing Loss Association of America Troy, MI 248-332-3331 www.hearingloss.org (Web)</p>	<p>Hearing Loss Association of America is a non-profit consumer organization dedicated to the well-being of hard of hearing people of all ages and communication styles. Holds "Walk4Hearing" every year. Promotes education, advocacy, and self-help.</p>
<p>Michigan Chapter Alexander Graham Bell Association for the Deaf and Hard of Hearing Franklin, MI www.miagbell.org (Web)</p>	<p>Provides parents who have chosen the spoken language method of communication for their child(ren) with hearing loss with information, referral services and support from other parents.</p>
<p>Michigan Coalition for Deaf and Hard of Hearing People 586-932-6090 (V) www.michdhh.org (Web) info@michdhh.org (Email)</p>	<p>Statewide coalition of agencies and organizations working together to improve accessibility and services for Michigan's Deaf and Hard of Hearing people. Administrators of Camp Chris Williams.</p>
<p>Michigan Hands & Voices (H&V) Facebook: MI Hands & Voices mihandsandvoices@gmail.com (Email) www.mihandsandvoices.org (Web) 248-845-8762 call or text (V)</p>	<p>A parent and professional-led organization dedicated to non-biased support for families who have children who are Deaf or Hard of Hearing. We provide parent-to-parent networking, educational events, and advocacy support.</p>

<p>MI H&V Guide by Your Side™ Program www.mihandsandvoices.org/GBYS 248-845-8762 call or text mihandandvoices@gmail.com (Email)</p>	<p>A program of Michigan Hands & Voices, Guide by Your Side provides an opportunity for a family of Deaf or Hard of Hearing child to meet with another parent, called a Parent Guide. Parent Guides are trained to connect families with resources and provide support in their journey of raising a child with hearing loss.</p>
<p>Parents of Hearing Impaired Children Grand Rapids, MI 616-819-3070 (V/TTY) 616-819-3239 (Fax)</p>	<p>Serves families of students' age 0-25 in the (oral) program. Monthly meetings.</p>
<p>Sound Support Ann Arbor, MI 734-998-8119 www.med.umich.edu/childhearinginfo/ (Web)</p>	<p>Provides diagnosis, treatment, and rehabilitation of hearing loss. Includes parent education and group events for all ages.</p>

Where can I meet other parents? (National)

<p>American Society for Deaf Children Camp Hill, PA and Washington, DC 717-703-0073 (V) 717-909-5599 (Fax) 800-942-2732 (Hot Line) asdc@deafchildren.org (Email)</p>	<p>Provides advocacy, information, support and encouragement to families with deaf or hard of hearing children, as well as providing networking and referral services, publications and resources.</p>
<p>Beginnings Raleigh, NC 919-715-4092 (V/TTY) 919-715-4093 (Fax) www.ncbegin.org.com (Web)</p>	<p>Provides impartial information and referral services to parents of deaf and hard of hearing children in order to help families make their own choice about communication method.</p>
<p>Cochlear Implant Awareness Foundation Rochester, IL 800-795-0824 (Phone) www.ciafonline.org (Web)</p>	<p>Non-profit organization formed to connect people with the information and resources they need to make an educated decision about cochlear implant surgery and offer guidance and support to people who choose to be recipients.</p>
<p>Hearing Loss Association of America Bethesda, MD 301-657-2248 (Phone) 301-657-2249 (TTY) 301-913-9413 (Fax) www.hearingloss.org (Web)</p>	<p>Provides adults and children with tools for self-help; sensitizes the general population about the special needs of people who have hearing loss; promotes understanding of the nature, causes, complications, and remedies of hearing loss. Offers the annual Walk4Hearing all over the state and country to increase public awareness about hearing loss and raise funds for programs and services.</p>
<p>John Tracy Clinic 213-748-5481 www.jtc.org (Web)</p>	<p>Provides worldwide, parent-centered services to young children (ages 0-5) with a hearing loss offering families hope, guidance, and encouragement.</p>

Listen-UP! kay@listen-up.org (Email) www.listen-up.org (Web)	Provides information on parenting ideas and offers an active list-serv.
National Hands & Voices Boulder, CO 303-492-6283 (Phone) www.handandvoices.org (Web)	Supports families with children who are Deaf or Hard of Hearing without a bias around communication modes or methodology. A parent-driven, non-profit organization providing families with the resources, networks, and information they need to improve communication access and educational outcomes for their children.
Sibling Support Project Seattle, WA 206-987-2000 (Children's Hospital) 206-987-3285 (Sibling Support) www.chmc.org (Web)	Helps to establish programs for siblings of children with special needs nationwide.

Where can I find counseling for me and/or my child?

Contact your medical insurance provider

Deaf Health Clinic at Dexter Health Center Leslie Pertz LMSW, NIC Clinical Social Worker 734-426-2796 (V) 810-355-2743 (VP) lesliep@med.umich.edu (Email) https://www.uofmhealth.org/our-locations/deaf-health (Web)	Provides therapy for people of all ages who are Deaf or Hard of Hearing. Fluent in ASL and will meet online.
June Walatkiewicz, LMSW, ACSW, LMFT, BCD, PLLC 248-225-6896 (V) 248-556-3129 (VP) jawcoda@gmail.com	Marriage, Family, and Individual Counseling sessions. June is the child of Deaf parents and is fluent in sign language. Addresses effects of hearing loss.
Mel Whalen, MS, LLP Whalen.mel@gmail.com www.a2deafpsych.com	Mel is deaf. Counseling for Individuals, Married Couples, and Children. Support Groups. Culturally Deaf Psychotherapist offering counseling and psychological testing. Communicates using ASL or orally.
University Center for the Child & Family Ann Arbor, MI 734-764-9466 (Phone) mari.umich.edu/university-center-child-family (Web)	Provides a comprehensive range of quality, culturally sensitive mental health services using an integrative approach to assessing, evaluating, and treating our clients' mental health concerns through the use of evidence-based treatments.

Where do I find help educating my child?

<p>Build Up Michigan (Ages 3+) www.buildupmi.org</p>	<p>Build Up helps parents and their children, ages 3 through 5, get additional educational support as they begin and continue to learn the skills needed to enter kindergarten.</p>
<p>Early On[®] Michigan (Ages 0-3) 800-327-5966 (Toll Free) 517-668-2505 (TTY) www.1800earlyon.org</p>	<p>Early On[®] Michigan is the system of early intervention services for infants and toddlers, birth to three years of age, with developmental delays and/or disabilities. Early On supports families as their children learn and grow.</p>
<p>Family Information Exchange 517-487-5426 800-292-7851 (Toll Free) 517-487-0303 (Fax)</p>	<p>Provides information and referrals for families of children from birth through two years.</p>
<p>Gallaudet University Washington, DC 20002 202-651-5505 (Phone) 202-651-5477 (Fax) www.gallaudet.edu (Web)</p>	<p>Provides services for all ages and academic levels (elementary to doctorate) of people with hearing loss. Communication methods include sign language, fingerspelling, speech reading, oral speech, cued speech, and/or a combination. Offers a summer program for academically talented children who are Deaf. For general questions about Deafness in children birth-21, call 202-651-5051.</p>
<p>John Tracy Clinic Los Angeles, CA 800-522-4582 (V/TTY) 231-748-5481 (V) 213-749-1651 (Fax) www.jtc.org (Web)</p>	<p>An educational center for preschool children who are deaf and/or DeafBlind. Offers free correspondence courses in English and Spanish for parents to help them work with their child at home from infancy to school age. Three-week summer resident programs for parents and children are also available.</p>
<p>Low Incidence Outreach 517-241-7083 (Phone) mde-lio.cenmi.org (Web)</p>	<p>Can answer questions about Deaf and Hard of Hearing educational resources in your county.</p>
<p>Michigan School for the Deaf Flint, MI 810-257-1400 (V) 810-257-1490 (Fax) www.michiganschoolforthedeaf.org (Web)</p>	<p>Specialized statewide school in Flint for children in preschool through 12th grade who are Deaf or Blind. Students can live on campus or commute from home daily. Services include academic and vocational programs, occupational and physical therapy, sports program, social work services, sign language classes, audiological services, and community outreach.</p>
<p>Michigan State Grange Kalamazoo, MI 269-375-3247 517-339-2171 (V/TTY) www.michiganstategrange.org (Web)</p>	<p>Provides educational materials and support to individuals in the community related to noise induced hearing loss. Programs geared to 4th, 5th and 6th graders.</p>

Educational Services for Deaf and Hard of Hearing Students

Contact your Public-School District or the Michigan Department of Education Low Incidence Outreach office at 888-760-2206 or 517-841-7083 to find out what services are available.

Allegan	www.alleganaesa.org
Alpena-Montmorency Alcona	www.amaesd.org
Bay-Arenac	www.baisd.net
Berrien	www.berrienresa.org
Branch	www.branch-isd.org
Calhoun	www.calhounisd.org
Charlevoix-Emmet	www.charemisd.org
Cheboygan-Otsego-Presque Isle	www.copesd.org
Clare Gladwin	www.cgresd.net
Clinton	www.ccresta.org
Coor	www.coorisd.net
Copper Country	www.copperisd.org
Delta Schoolcraft	www.dsisd.net
Dickinson-Iron	www.diisd.org
Eastern Upper Peninsula	www.eupschools.org
Eaton	www.eatonresa.org
Genesee	www.geneseeisd.org
Gogebic-Ontonagon	www.goisd.org
Gratiot-Isabella	www.giresd.net
Hillsdale	www.hillsdale-isd.org
Huron	www.hisd.k12.mi.us
Ingham	www.inghamisd.org
Ionia	www.ioniaisd.org
Iosco	www.ioscoresa.net
Jackson	www.jpsk12.org
Kalamazoo	www.kresa.org
Kent	www.kentisd.org
Lapeer	www.lcisd.k12.mi.us
Lenawee	www.lisd.us
Lewis Cass	www.lewiscassisd.org
Livingston	www.lesa.k12.mi.us
Macomb	www.misd.net
Manistee	www.manistee.org
Marquette-Alger	www.maresa.org
Mason-Lake/West Shore	www.wsesd.org
Mecosta-Osceola	www.moisd.org
Menominee	www.mc-isd.org
Michigan School for the Deaf	www.michiganschoolforthe deaf.org
Midland	www.midlandesa.org
Monroe	www.monroeisd.us
Montcalm	www.maisd.com

Muskegon	www.muskegonisd.org
Newaygo	www.ncresa.org
Oakland	www.oakland.k12.mi.us
Ottawa	www.oaisd.org
Saginaw	www.sisd.cc
St. Clair	www.sccresa.org
St. Joseph	www.sjcisd.org
Sanilac	www.sanilac.k12.mi.us
Shiawassee	www.sresd.org
Traverse Bay	www.tbaisd.org
Tuscola	www.tuscolaisd.org
Van Buren	www.vbisd.org
Washtenaw	www.washtenawisd.org
Wayne	www.resa.net
Wexford-Missaukee	www.wmisd.org

Who can teach me how to work with the schools to get my child's needs met?

<p>Division on Deaf, DeafBlind, and Hard of Hearing (DODDBHH) 313-456-3700 (Voice) 313-456-3701 (Fax) 800-482-3604 (Toll Free) 877-877-878-8464 (TTY) MDCRServiceCenter@michigan.gov www.michigan.gov/mdcr (Web)</p>	<p>Provides advocacy for deaf and hard of hearing persons through referrals to public or private agencies; provides information about deafness and services for the deaf, including TTY/Interpreter directory and assistive devices.</p>
<p>Michigan Alliance for Families ** Regional offices around the state ** 800-552-4821 (Phone) www.michiganallianceforfamilies.org (Web)</p>	<p>Provides resources, support, and education for families of children receiving early intervention or special education.</p>
<p>Michigan Developmental Disabilities Council 517-335-3158 (V) 517-335-3171 (TTY) www.michigan.gov/ddcouncil (Web)</p>	<p>Assists individuals and families with access to appropriate treatment, services and habilitation.</p>
<p>Michigan Hands & Voices ASTra Advocacy Support & Training 248-245-8762 call or text mihandsandvoices@gmail.com (Email) www.mihandsandvoices.org</p>	<p>Provides ASTRA Educational Advocacy Training and free advocate services for parents to help one another with Special Education specific to DHH children.</p>
<p>Michigan Protection and Advocacy Service Lansing, MI 517-487-1755 (V/TTY) 517-487-0827 (Fax) www.mpas.org (Web)</p>	<p>An information and referral service that provides advocacy and legal services for people with developmental disabilities and/or mental health issues, in areas such as SSI, education and employment. Also offers special education parent advocacy training program.</p>
<p>National Association of the Deaf Silver Springs, MD 301-587-1788 (V) 301-587-1789 (TTY) www.nad.org (Web)</p>	<p>The mission of the National Association of the Deaf is to preserve, protect and promote the civil, human and linguistic rights of deaf and hard of hearing people in the United States of America.</p>
<p>The Arc of Michigan 800-292-7851 (Toll Free) 517-487-5426 (Phone) www.arcmi.org (Web)</p>	<p>Provides parent training and can help with educational advocacy.</p>
<p>Wrightslaw webmaster@wrightslaw.com (Email) www.wrightslaw.com (Web)</p>	<p>Provides parents, advocates, educators, and attorneys with accurate, up-to-date information about special education law and advocacy so they can be effective catalysts. Hosts ongoing conferences to help families with the I.E.P. process.</p>

Where can I learn more about the cause of my child's hearing loss?

<p>Hereditary Disorders Program Lansing, MI 517-335-8887 (V) 517-335-9419 (Fax) www.michigan.gov/newbornscreening.gov (Web)</p>	<p>Families who have questions about whether their child's hearing loss is inherited or part of a genetic syndrome might benefit from genetic counseling. The genetics consultant can provide information about services available throughout the state.</p>
<p>MI Genetics Resource Center Lansing, MI 866-852-1247 (Toll Free) genetics@michigan.gov (Email) www.migrc.org (Web)</p>	<p>The Genetics Program provides information about services and resources to families. The Birth Defects Program Coordinator can give information about genetic diagnosis, genetic counseling services and support groups available throughout the state.</p>
<p>Newborn Screening – Blood Lansing, MI 517-335-8887 (V) 517-335-9419 (Fax) 866-673-9939 (Toll Free) www.michigan.gov/newbornscreening.gov (Web)</p>	<p>Supports, monitors, and facilitates follow-up diagnostic and treatment services for infants and young children with a presumptive or confirmed diagnosis identified by newborn screening.</p>

Where can I learn how to communicate with my child?

**Check your local community education institutions for
'baby signing' and ASL classes.**

<p>Alternatives for the Hearing Impaired Mt. Prospect, IL 847-297-3206 (Phone) www.aehi.org (Web)</p>	<p>Hosts cued speech classes every second Saturday of each month.</p>
<p>Carls Family Village Brooklyn, MI 517-592-6283 (Phone) 517-536-1518 (VP) www.holleyfv.org</p>	<p>The Carls Family Village at De Sales Center has offered educational and recreational programs for the Deaf, DeafBlind and Hard of Hearing since 1996. Owned by Holley Institute.</p>
<p>Deaf and Hard of Hearing Services Grand Rapids, MI. 49503 616-732-7358 (Phone) 616-732-7362 (TTY) 616-732-7365 (Fax) www.deafhhs.org</p>	<p>Programs include ASL courses for kids and families, day camps, advocacy help, and support for the family and the individual.</p>

<p>Global Interpreting Services, LLC Clinton, Township, MI 586-778-4188 (Phone) 526-580-8345 (Fax) interpreter@myterps.com (Email) www.myterps.com (Web) Signlanguageservicesofmichigan.com</p>	<p>Global Interpreting Services (formerly known as Sign Language Services of Michigan) has provided sign and foreign language interpreters to Michigan for nearly 20 years. Online ASL Classes available.</p>
<p>Hear to Learn www.heartolearn.org</p>	<p>This user-friendly resource is for parents and professionals to support spoken language learning for young children who are deaf or hard of hearing.</p>
<p>Holley Institute Detroit, MI 313-343-3165 (Phone) 313-332-4953 (VP) www.stjohnprovidence.org/holley/ (Web)</p>	<p>Assists Deaf, Hard of Hearing, and DeafBlind individuals with improving their quality of life. Offers ASL classes all over the metro-area.</p>
<p>Lansing Community College Lansing, MI 517-483-1957 (Phone) www.lcc.edu (Web)</p>	<p>Sign Language classes for all levels from beginner signers to an interpreter preparation program. Classes introduce different aspects of the lives of those in the Deaf Community.</p>
<p>Michigan Chapter Alexander Graham Bell Association for the Deaf Franklin, MI 313-737-0309 (Phone) 313-331-2378 (V/TTY) www.miagbell.org (Web)</p>	<p>Listening and Spoken Language</p>
<p>Michigan School for the Deaf Flint, MI 800-622-6730 (V/TTY) 810-257-1400 (V/TTY) 810-257-1490 (Fax) www.michiganschoolforthedeaf.org (Web)</p>	<p>Services include academic and vocational programs, occupational and physical therapy, sports program, social work services, sign language classes, audiological services, and community outreach.</p>
<p>National Cued Speech Association Washington DC 800-459-3529 (Phone) www.cuedspeech.org</p>	<p>Supports effective communication, language development and literacy in individuals, families and children alike through the use of cued speech.</p>
<p>Sign It http://signitasl.com/</p>	<p>Start learning ASL today with the stars of Signing Time (Alex, Leah and Rachel Coleman), and ASL comedian Keith Wann. SignIt ASL is ideal for anyone with an interest in learning beginning sign language. Learn ASL vocabulary, phrases, sentences, grammar, deaf culture, and much more! Includes:</p> <ul style="list-style-type: none"> • fun chapter videos with voice on/off feature • fingerspelling, vocabulary and sentence practice • chapter quizzes with scoring and progress tracking • receptive conversation practice and tests • comprehensive ASL dictionary

V.O.I.C.E. Saginaw, MI 989-607-2291 (VP) 888-748-6423 (Phone) www.voiceinc-mi.org (Web)	Offers beginner and intermediate sign language classes in the Saginaw office throughout the year; if you have a group of five or more people that want to take a course together, we can do it on-site at your location, such as a school, church, business, etc.
www.SignOnConnect.com	Practice signing with deaf adults.

Resources for families of children with a combined hearing and vision loss?

DB Central Mount Pleasant, MI 989-774-2725 (Voice & TTY) 989-774-2553 (Fax) www.dbcentral.org (Web)	Provides family support, educational support and a resource lending library to children from birth through twenty-five years of age who are suspected of having both a hearing AND a visual impairment. Students who have additional disabilities are also eligible for services.
DeafBlind International 586-778-4188 (Phone) www.deafblindinternational.org (Web)	An international association that works to promote and improve quality in services for deafblind people by encouraging research, staff development and training, policies that lead to good practice and the dissemination of information.
Bureau of Services for Blind Persons Lansing, MI 800-335-7124 (V) www.michigan.gov/bsbp (Web)	A vocational rehabilitation agency that works with school systems to provide consultative services and transition from school to adult services beginning at age 14. The deafblind Unit serves deafblind individuals statewide.
Carls Family Village Brooklyn, Michigan 517-592-6283 (Phone) 517-536-1518 (VP) www.holleyfv.org (Web)	The Holley Institute owns and operates Carls Family Village at De Sales Center which has offered educational and recreational programs for the Deaf, deafblind and hard of hearing since 1996.
Helen Keller National Center For DeafBlind Youths and Adults Sands Point, NY 516-944-7302 (Fax) 516-944-8637 (TTY) 516-944-8900 (Main Switchboard) www.helenkeller.org/hksb (Web)	The mission of the Helen Keller National Center for DeafBlind Youths and Adults is to enable each person who is deafblind to live and work in his or her community of choice.
National Consortium on Deaf-Blindness Monmouth, OR 800-438-9376 (V) 800-854-7013 (TTY) 503-838-8150 (Fax) www.nationaldb.org (Web)	National technical assistance and dissemination center for children and youth who are DeafBlind. DB-LINK can respond to questions related to a broad spectrum of topics and provide referrals to other organizations.

<p>National Family Association for Deaf-Blind Sands Point, NY 800-255-0411 516-883-9060 (Fax) www.nfadb.org (Web)</p>	<p>Supports persons of any age who are deaf-blind through advocacy, national policy development, information, referrals, development of training materials, and seminars for family members. Newsletter published tri-annually.</p>
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Who can help with Assistive Technology?

<p>ABLEDATA Silver Spring, MD 800-227-0216 (V) 301-608-8912 (TTY) www.abledata.com (Web)</p>	<p>Provides information on assistive technology, rehabilitation equipment and other products for people with disabilities.</p>
<p>Described and Captioned Media Program 800-237-6213 (Phone) 800-538-5636 (Fax) 800-237-6819 (TTY) info@dcmp.org (Email) www.dcmp.org (Web)</p>	<p>Loans educational and entertainment captioned films and videos to deaf and hard of hearing individuals free of charge.</p>
<p>Division on Deaf, DeafBlind, and Hard of Hearing (DODDBHH) Detroit, MI 313-437-7035 (Toll Free and TTY) 313-437-7035 (VP) 313-456-3721 (Fax) DODDBHH@michigan.gov www.michigan.gov/mdcr (Web)</p>	<p>Provides advocacy for deaf and hard of hearing persons through referrals to public or private agencies; provides information about deafness and services for the deaf, including assistive devices, and an online sign language interpreter directory.</p>
<p>Hearing Aid Helpline Livonia, MI 734-522-7200 (V) 734-522-0200 (Fax) www.ihsinfo.org (Web)</p>	<p>A service of the International Hearing Society which provides information on hearing aids and hearing loss to consumers</p>
<p>Michigan's Assistive Technology Program 517-333-2477 (Phone) www.copower.org/assistive-tech (Web)</p>	<p>Provides resources and funding to build opportunities for people with disabilities.</p>
<p>United Cerebral Palsy of Michigan 800-828-2714 (V)</p>	<p>Assistive technology loan fund. UCP works to advance the independence, productivity and full citizenship of people with disabilities. Allows people with any disability and their families to purchase assistive technology, devices, services, or modification of vehicles or homes. Loans may also cover the costs of training to use the purchased equipment, warranties, and services agreements. Applications are available from the website.</p>

Where can I get financial help?

Check your homeowner's or renter's insurance to see if the policy covers the unintentional loss or damage of hearing aids/assistive listening devices.

<p>Association of Assistive Technology Act Programs (A.T.A.P.) Springfield, IL 518-439-1263 www.ataporg.org (Web)</p>	<p>ATAP facilitates the coordination of state A.T. Programs nationally and provides technical assistance and support to its members.</p>
<p>Children's Special Health Care Services Lansing, MI 800-359-3722 517-335-8983 (V) 517-335-9491 (Fax) www.michigan.gov/cshcs</p>	<p>Provides insurance coverage for children with hearing loss who meet the criteria for joining the plan regardless of income. Diagnostic evaluations, medical care and treatment, hearing aids, cochlear implants and appropriate therapies can be covered by this program. Information also available at your local public health office.</p>
<p>ESCO (Ear Service Corporation) Plymouth, MN 800-992-3726 (V) info@earserv.com (Email) www.earserv.com (Web)</p>	<p>An insurance company that offers protection against loss, theft, and or fire for hearing instruments. Extended warranty coverage is also available. Information can be obtained directly from the company or where the amplification device was purchased.</p>
<p>Hearing Aids for Kids & Adults Wellsville, UT 801-572-5437 (V) 801-565-6578 (Fax)</p>	<p>A private business run by a pediatric audiologist that dispenses hearing aids, FM systems, and related products at deeply discounted prices to children who have a managing audiologist in a school system or other agency that does not dispense hearing aids.</p>
<p>Hearing Impaired Kids Endowment (The H.I.K.E. Fund) Council Bluffs, IA 712-325-0812 (Phone) www.thehikefund.org (Web)</p>	<p>The HIKE Fund, Inc. collects funds to award to children who are in need of hearing aids or other assistive listening devices whose parents or guardians are unable to meet this specific need.</p>
<p>Kiwanis International Indianapolis, IN (Headquarters) 800-875-8755 dial 411 (Toll Free) www.kiwanis.org</p>	<p>The mission of the Kiwanis International Foundation is to financially assist Kiwanis International in serving the children of the world.</p>
<p>Lions Hearing Center Detroit, MI 313-745-1924</p>	<p>Free hearing aids for those with no insurance and who fall within income guidelines.</p>
<p>Lions of Michigan Lansing, MI 517-887-6640 517-887-6642 (Fax) www.lionsofmi.com (Web)</p>	<p>May provide financial support, transportation and other community services. Contact state office to find a local community representative</p>

<p>Michigan Chapter A.G. Bell Association for the Deaf and Hard of Hearing Grosse Pointe Park, MI 313-331-2378 (Phone) www.miagbell.org (Web)</p>	<p>Hearing aid loaner banks are a resource that can provide immediate, though temporary, access to appropriate amplification for young children with hearing loss whose parents choose that option.</p>
<p>Michigan Medicaid www.michigan.gov/medicaid</p>	<p>The goal of these health care programs is to ensure that essential health care services are made available to those who otherwise do not have the financial resources to purchase them.</p>
<p>Midwest Hearing Industries, Inc. Minneapolis, MN 800-821-5471 952-835-9481 (Fax) www.mwhi.com (Web)</p>	<p>An insurance company that offers protection against loss and theft of hearing devices including ITE, BTE, CIC, programmable aids, ALDs, and auditory trainers. Some policies cover repair of the hearing aids or assistive devices.</p>
<p>Miracle Ear Children's Foundation Minneapolis, MN 877-268-4264 (V) www.miracle-ear.com (Web)</p>	<p>Provides amplification devices for children who need them and whose families could not otherwise afford them.</p>
<p>Quota www.quotagr.com</p>	<p>Quota serves people who are deaf or hard of hearing.</p>
<p>Starkey Hearing Foundation Eden Prairie, MN 800-648-4357 800-328-8602 ext.2581 www.starkeyhearingfoundation.org (Web)</p>	<p>A non-profit organization which provides amplification for people who could not otherwise afford hearing aids and cochlear implants. (There is a non-refundable processing fee.)</p>
<p>Supplemental Security Income (SSI) Program 800-772-1213 (Toll Free) www.ssa.gov (Web)</p>	<p>A federal needs-based benefit program for children with disabilities. Must meet certain disability criteria in order to receive benefits which include cash payments and Medicaid eligibility.</p>

I need speech and language therapy for my child. Where do I go?

<p>Build Up DeWitt, MI 888-320-8384 517-668-2505 (TTY) 517-668-0446 (Fax) www.buildupmi.org</p>	<p>Build Up is devoted to helping individuals, parents, and people who work with families, to connect with the special educational services that may be needed. In Michigan, eligible children, youth, and young adults may receive special educational services from birth through 25 years of age.</p>
<p>Early On[®] Michigan DeWitt, MI 800-327-5966 (Toll Free) 517-668-2505 (TTY) www.1800earlyon.org</p>	<p>Early On[®] Michigan is the system of early intervention services for infants and toddlers, birth to three years of age, with developmental delays and/or disabilities. Early On supports families as their children learn and grow.</p>
<p>Easter Seals – Michigan, Inc. Waterford, MI 800-775-7335 (V) www.mi-ws.easter-seals.org (Web)</p>	<p>Offers speech/language therapy sessions throughout the year and during the summer for children ages 3 and up.</p>
<p>Easter Seals – Michigan West Michigan Therapy Center Grand Rapids, MI 616-942-2081(V) www.easterseals.com/michigan/who-we-are/locations (Web)</p>	<p>Offers summer speech/language therapy programs for pre-school and school-age children. Parent support group and playgroup with speech/language pathologists for 2-5 year old's in Grand Rapids.</p>
<p>Lifetrack Resources St. Paul, MN mail@lifetrackresources.org (Web) 651-227-8471 (Phone) 651-227-3779 (TTY) 651-227-0621 (Fax)</p>	<p>Its Mission is to work together to develop the strengths within children, families, and adults facing the greatest life challenges.</p>
<p>Sound Support Ann Arbor, MI 866-595-5585 (Toll Free) 734-936-4934 (Phone) www.med.umich.edu/childhearinginfo (Web)</p>	<p>Its mission is to improve the quality and timeliness of clinical care for pediatric patients with hearing loss, including diagnosis, treatment and rehabilitation of hearing loss.</p>
<p>The Listening Room www.hearingjourney.com (Web)</p>	<p>Website that provides resources for promoting listening skills. Visit website and look for The Listening Room link</p>

Where can I get help with Children’s Special Healthcare Services, to cover medical costs?

LOCAL HEALTH DEPARTMENTS

Local public health departments offer a wide range of health services and supports for families. Some of the programs include family planning; prenatal care; health screening; Women, Infants and Children (WIC) nutrition program; home nurse visits; support services for mothers and infants; vision and hearing screening for school age children. They can also provide information on the Children’s Special Health Care Services Plan.

Allegan County Health Department 3255 122 nd Ave Suite 200 Allegan, Michigan 49010	Ph: 269-673-5411 Fax: 269-673-4172
Barry-Eaton District Health Dept. 1033 Health Care Dr. Charlotte, Michigan 48813	Ph: 517-543-2430 Fax: 517-543-2656 or 517-543-0451
Bay County Health Department 1200 Washington Avenue Bay City, Michigan 48708	Ph: 989-895-4009 Fax: 989-895-4014
Benzie-Leelanau District H. D. 6051 Frankfort Highway, Ste. 100 Benzonia, MI 49616	Ph: 231-882-4409 Fax: 231-882-2204
Berrien County Health Department 2149 E. Napier Ave., P.O. Box 706 Benton Harbor, Michigan 49022	Ph: 269-926-7121 Fax: 269-926-8129
Branch-Hillsdale-St. Joseph Community Health Agency Human Services Building 570 Marshall Road Coldwater, Michigan 49036	Ph: 517-279-9561 Fax: 517-278-2923
Calhoun County Health Dept. 190 E. Michigan Avenue, Ste A-100 Battle Creek, Michigan 49014	Ph: 269-969-6370 Fax: 269-969-6470
Central Michigan District Health Dept 2012 E. Preston Avenue Mt. Pleasant, Michigan 48858 (Arenac, Clare, Gladwin, Isabella, Osceola, Roscommon)	Ph: 989-773-5921 Fax: 989-773-4319
Chippewa County Health Dept. 508 Ashmun Street, Suite 120 Sault Ste. Marie, Michigan 49783	Ph: 906-635-1566 Fax: 906-253-1466
City of Detroit Health Department 3245 E Jefferson Avenue Detroit, Michigan 48207	Ph: 313-876-4000 Fax: 313-876-0475

Public Health Delta & Menominee Counties 2920 College Avenue Escanaba, Michigan 49829-9597	Ph: 906-786-4111 Fax: 906-786-7004
Dickinson-Iron District Health Dept. 601 Washington Avenue Iron River, Michigan 49935	Ph: 906-265-9913 Fax: 906-265-2950
District Health Department #2 630 Progress St. West Branch, MI 48661 (Alcona, Iosco, Ogemaw, Oscoda)	Ph: 989-345-5020 Fax: 989-343-1899
District Health Department #4 100 Woods Circle Alpena, Michigan 49707 (Alpena, Cheboygan, Montmorency, Presque Isle)	Ph: 989-356-4507 - 989-354-4230 Fax: 989-356-3529 - 989-354-0855
District Health Department #10 521 Cobbs St. Cadillac, MI 49601 (Crawford, Kalkaska, Lake, Manistee, Mason, Mecosta, Missaukee, Newaygo, Oceana)	Ph: 231-775-9942 Fax: 231-775-5372
Genesee County Health Dept. 630 S. Saginaw Street Flint, Michigan 48502-1540	Ph: 810-257-3612 Fax: 810-257-3147
Grand Traverse Co. Health Dept. 2600 LaFranier Rd., Suite A Traverse City, Michigan 49686	Ph: 231-995-6100 Fax: 231-995-6109
Huron County Health Department 1142 S. Van Dyke Bad Axe, Michigan 48413	Ph: 989-269-9721 Fax: 989-269-4181
Ingham County Health Department 5303 S. Cedar, PO Box 30161 Lansing, Michigan 48909	Ph: 517-887-4311 Fax: 517-887-4310
Ionia County Health Department 175 East Adams Street Ionia, Michigan 48846	Ph: 616-527-5341 Fax: 616-527-5361
Jackson County Health Department 1715 Lansing Avenue, Suite 221 Jackson, Michigan 49202	Ph: 517-788-4420 Fax: 517-788-4373
Kalamazoo County Health and Community Services Dept. 3299 Gull Road Kalamazoo, Michigan 49074-0042	Ph: 269-373-5200 Fax: 269-373-5363
Kent County Health Department 700 Fuller Avenue Grand Rapids, Michigan 49503	Ph: 616-632-7100 Fax: 616-632-7083
Lapeer County Health Department 1800 Imlay City Road Lapeer, Michigan 48446	Ph: 810-667-0391x7 Fax: 810-245-4525

Lenawee County Health Department 1040 S. Winter, Suite 2328 Adrian, Michigan 49221-3871	Ph: 517-264-5226 Fax: 517-264-0790
Livingston County Health Dept. 2300 East Grand River, Suite #102 Howell, Michigan 48843-7578	Ph: 517-546-9850 Fax: 517-546-9111
Luce-Mackinac-Alger-Schoolcraft 14150 Hamilton Lake Road Newberry, Michigan 49868	Ph: 906-293-5107 Fax: 906-293-5453
Macomb County Health Dept. 43525 Elizabeth Road Mt. Clemens, Michigan 48043	Ph: 586-469-5235 Fax: 586-469-5885
Marquette County Health Dept. 184 U.S. 41 Highway Negaunee, Michigan 49866	Ph: 906-475-9977 Fax: 906-475-9312
Mid-Michigan District Health Dept. 615 N. State Road, Suite 2 Stanton, Michigan 48888 (Clinton, Gratiot, Montcalm)	Ph: 989-831-5237 Fax: 989-831-5522
Midland County Health Department 220 W. Ellsworth Street Midland, Michigan 48640-5194	Ph: 989-832-6380 Fax: 989-832-6628
Monroe County Health Department 2353 S. Custer Road Monroe, Michigan 48161	Ph: 734-240-7800 Fax: 734-240-7816
Public Health – Muskegon County 209 East Apple, Suite D104 Muskegon, Michigan 49442	Ph: 231-724-6246 Fax: 231-724-6674
Health Dept. of Northwest Michigan 220 W. Garfield Charlevoix, Michigan 49720 (Antrim, Charlevoix, Emmet, Otsego)	Ph: 231-547-6523 Fax: 231-547-6238
Oakland County Health Dept. 1200 N. Telegraph Road, Dept.432 Pontiac, Michigan 48341-0432	Ph: 248-858-1280 Fax: 248-858-5428
Ottawa County Health Department 12251 James Street, Suite 400 Holland, Michigan 49424	Ph: 616-396-5266 Fax: 616-393-5624
Saginaw County Health Department 1600 N. Michigan Avenue Saginaw, Michigan 48602	Ph: 989-758-3800 Fax: 989-758-3750
St. Clair County Health Department 3415 28th Street Port Huron, Michigan 48060	Ph: 810-987-5300 Fax: 810-985-2150
Sanilac County Health Department 171 Dawson Street Sandusky, Michigan 48471	Ph: 810-648-4098 Fax: 810-648-2646
Shiawassee County Health Dept. 149 E Corunna Ave., 2 nd Floor Corunna, Michigan 48817	Ph: 989-743-2318 Fax: 989-743-2357

<p>Tuscola County Health Department 1309 Cleaver Road Caro, Michigan 48723-8114</p>	Ph: 989-673-8114 Fax: 989-673-7490
<p>Van Buren-Cass District Health Dept 57418 County Road 681, Suite A Hartford, Michigan 49057</p>	Ph: 269-621-3143 Fax: 269-621-2725
<p>Washtenaw County Health Dept. 555 Towner, PO Box 915 Ypsilanti, Michigan 48197-0915</p>	Ph: 734-544-6700 Fax: 734-544-6704
<p>Wayne County Health Department, Veterans and Community Wellness 33030 Van Born Road Wayne, Michigan 48184</p>	Ph: 734-727-7000 Fax: 734-727-7043
<p>Western Upper Peninsula Health 540 Depot Hancock, Michigan 49930 (Baraga, Gogebic, Houghton, Keweenaw, Ontonagon)</p>	Ph: 906-482-7382 Fax: 906-482-9410

My child is older. Are there camps in Michigan for children who are deaf or hard of hearing?

<p>Aspen Camp of the Deaf & Hard of Hearing - Year-round Programs Aspen, CO 970-923-2511 (Voice) office@aspencamp.org (Email) www.aspencamp.org (Web)</p>	<p>Aspen Camp's programs offer a variety of activities: outdoor education, cooking, creative arts, drama, photography, horseback riding, river rafting, swimming, Native American studies, cooperation games, computer/newsletters, sign language classes for adult and babies, winter program (skiing/snowboarding), vocational training, adult retreat programs such as snowshoe and red cross medical classes.</p>
<p>Bay Cliff Health Camp Big Bay, MI 906-345-9314 (Phone) 906-345-9890 (Fax) www.baycliff.org (Web)</p>	<p>Bay Cliff is primarily a therapy camp for children ages 6-17, with physical, speech, hearing, and vision impairments who live in Michigan. Children receive therapy and participate in activities to learn independent living skills.</p>
<p>Camp Chris Location varies campchris@michdhh.org (Email) www.michdhh.org/youth/campchris.html (Web)</p>	<p>Camp Chris Williams is an exciting summer camp experience for Deaf and Hard of Hearing youth (ages 11-17). Camp Chris is hosted by the Michigan Coalition for Deaf, Hard of Hearing, and DeafBlind People.</p>
<p>Carls Family Village 517-592-6283 (Voice) 517-536-1518 (VP) www.holleyfv.org (Web)</p>	<p>Programs for Deaf, Deaf/Blind, and HOH people and their families.</p>
<p>Gallaudet University's Summer Youth Programs Washington DC 202-250-2160 (VP) 202-448-7272 (Phone) www.youthprograms.gallaudet.edu (Web)</p>	<p>Offers a number of exciting, empowering, and dynamic programs for Deaf, Hard of Hearing, and Hearing high school teenagers. Designed for middle school and high school youth up to age 18, these programs provide stimulating summer experiential and learning opportunities that blend excitement, education, and enjoyment in a bilingual environment rich in cultural diversity.</p>
<p>Lions Bear Lake Camp Lapeer, MI www.bearlakecamp.org (Web) 810-245-0726</p>	<p>Both Youth Camp and Family Camp are offered. The program is developed by teachers of the deaf and hard of hearing. Must use listening and spoken language to attend.</p>

MCAGBAD Speech & Language Summer Camp

Grosse Pointe Park, MI
313-331-2378 TTY/V

Michigan Chapter of Alexander Graham Bell Association for the Deaf (MCAGBAD) Speech & Language Summer Camp provides a summer fun opportunity for oral Deaf and Hard of Hearing youths in grades 4 to 12. It is located at YMCA Storer Camp in Napoleon, Michigan.

INTERNET SITES & MULTIMEDIA

Listed below are some Internet sites that may provide helpful information or links to further resources for families of children who are deaf or hard of hearing. The list has been compiled as a service to readers of this booklet and does not constitute an endorsement of any particular site. The Michigan Department of Health and Human Services does not assume responsibility for the content included in these World Wide Web home pages. Before making any educational or health care decision based on information obtained from the Internet, always consult your child's own audiologist, physician, and/or education consultant.

Able Data	www.abledata.com
A.D.A.R.A. National	www.adara.org
Advanced Bionics	www.advancedbionics.com
Alexander Graham Bell Association for the Deaf	www.agbell.org
American Academy of Audiology	www.audiology.org
American Academy of Family Physicians	www.aafp.org
American Academy of Pediatrics	www.aap.org
American Association of the DeafBlind	www.aadb.org
American School for the Deaf	www.asd-1817.org
American Society for Deaf Children	www.deafchildren.org
American Speech-Language-Hearing Association	www.asha.org
ASL Pro	www.aslpro.com
Boys Town - My baby's hearing	www.babyhearing.org
Beginnings for Parents of Children who are Deaf of Hard of Hearing	www.ncbegin.org
Build-Up Michigan	www.buildupmi.org
Described and Captioned Media Program	www.dcmp.org
Center for Parent Information and Resources	www.parentcenterhub.org
Central Institute for Deaf	www.cid.edu
Children's Special Health Care Services	www.michigan.gov/cshcs
Clerc Center	http://www3.gallaudet.edu/clerc-center.html
Cochlear Corporation	www.cochlear.com
DB Central (DeafBlind)	www.dbcentral.org
Deaf Linx Resources	www.deaflinx.com
Early Hearing Detection and Intervention Program	www.michigan.gov/ehdi

Easter Seals Society	www.easter-seals.org
Educational Audiology Association	www.edaud.org
Federal Communications Commission	www.fcc.gov
Genetics Resource Center	www.migrc.org/
Hands & Voices	www.handsandvoices.org
Hearing Health Foundation	www.hearinghealthfoundation.org
Hearing Loss Association of America	www.hearingloss.org
Hearing Exchange	www.hearingexchange.com.au
Hearing Journey	www.hearingjourney.com
Hearing Health Magazine	www.hearinghealthfoundation.org
House Ear Institute	www.hei.org
John Tracy Clinic	www.jtc.org
Kresge Hearing Research Institute	www.khri.med.umich.edu
Listen Foundation	www.listenfoundation.org
Marion Downs National Center for Infant Hearing	www.mariondowns.com
Michigan Alliance for Families	www.michiganallianceforfamilies.org
Michigan School Professionals for Students who are Deaf or Hard of Hearing	www.mspsdhh.org
My Baby's Hearing	www.babyhearing.org
National Association of the Deaf	www.nad.org
National Center for Hearing Assessment and Management	www.infanthearing.org
National Cued Speech Association	www.cuedspeech.org
National Institute on Deafness and Other Communication Disorders (N.I.D.C.D.)	www.nidcd.nih.gov
Paws with a Cause	www.pawswithacause.org
Raising Deaf Kids	www.raisingdeafkids.org
Sibling Support Project	www.siblingsupport.org
The Deaf Magazine	www.deaflife.com
The EAR Foundation	www.earfoundation.org.uk
USA Deaf Sports Federation	www.usdeafsports.org

Facebook Pages/Groups:

Michigan Hands & Voices
Michigan Parents of Children with a Hearing Loss
Hands & Voices
Michigan Deaf and ASL Social Events
Michigan Deaf Association
Deaf Lansing Events
DeafLINK – Michigan
Michigan Deaf Community Issues
Hearing Parents of Deaf Children
Early On Michigan
Cued Speech
Alexander Graham Bell Association for the Deaf and Hard of Hearing
Parents of Deaf and Hard of Hearing Children
Deaf and Hard of Hearing
Michigan Coalition for Deaf and Hard of Hearing People
Inclusive Deaf Community

Twitter Pages:

Deaf News Today	@DeafNewsToday
Deaf Action	@DeafAction
Deaf Politics	@deafpolitics
NAD Official Site	@NADtweets
Deaf Youth USA	@deafyouthusa
Deaf Support	@deafsupport
Deaf Gadgets	@deafgadgets
Sign Casts	@signcasts
Deaf Around the World	@aslworld
Hands & Voices	@HandsandVoices
Mich Deaf Community	@MIDeafCommunity
Early On Michigan	@ChildfindMich

PHONE APPLICATIONS (APPS)

Disclaimer: *Michigan Department of Health and Human Services does not endorse any of the apps provided within the following list. Some applications are free, and some will require purchase.*

iASL - iPhone and or iPad app that easily converts English to American Sign Language (ASL).

SignShine - Baby sign language videos of your favorite children's songs all in one app!

Vibrifications - Set up custom vibrations for different actions (SMS versus mail versus Twitter / Facebook notifications). Vibrations can be of different patterns and lengths. You can even set up custom vibrations for different people!

Tap Tap - Tap Tap is designed to produce alerts when loud noises are made around the phone. With Tap on, the iPhone will vibrate and flash to alert you that there's been a loud noise or that someone has spoken in your direction.

Tango - This video chat is so easy and one of the best video chats out there. All you need is a smartphone and a number, and you can Tango with anyone who has a smartphone with a camera.

Alphabet Tracer - Learn the shapes, signs (in ASL and British), and sounds of the alphabet

Play It Down – Measure the volume of everything from concerts to earbuds and find out the frequencies of noises or play a song from your music library and find out what it sounds like to someone with a hearing loss.

My Smart Hands - Our mission is to bring a better understanding to parents, educators and children of the value of visual communication early in life. Promoting ASL as part of a dual language to the hearing community can act as a bridge to more meaningful communication in our homes, our schools and our communities.

AutismXpress - While this app was developed to help autistic children communicate their feelings through cartoon facial expressions. Deaf or Hard of Hearing children and health educators can also benefit from this fun and useful iPad app.

ConvoMobile - Enjoy video chat wherever you're comfortable! ConvoMobile lets you call any videophone and features one-click Video Relay calling. Also has a 911 hot button.

Adapted Book - 5 Pumpkins - an interactive book using a Sign Language Interpreter to tell and model the story of the five little pumpkins sitting on a gate.

ASL Dictionary - An ASL sign language dictionary that has 4,800 signs, common English phrases, and numerical system.

ASL Word Match - ASL Word Match tests your knowledge of five basic and five more advanced ASL handshapes. The challenge is to match an English word with the handshape used when producing the signed equivalent in ASL. This game is appropriate for students in ASL II or above. It is also a great game for families learning ASL together.

Captionfish – Captioned movie search engine that gives information about open captioned, Rear Window ® captioned, foreign/subtitled, and descriptively narrated movies showing in the United States.

Captionfish Trailers – Shows trailers of movies with captioning.

Danny the Dragon Meets Jimmy - A children’s book illustrated and narrated, and also has an interpreter signing the story.

Decibel Ultra – Measures the volume and helps you figure out how big the noise level compared to same values. Ultra decibel measures the sound pressure level with built in microphone.

Ear Trumpet - The hearing enhancer amplifies and adjusts sound to discretely improve hearing via the earphones attached to an iPhone or iPod.

iSign - Expanded version of iSign Lite. Animated phrase book of 800 ASL gestures.

Tongue Twisters - A collection of 150 tongue twisters for speech practice.

iSign Lite – Small and free version of iSign. Has simple sign language vocabulary. This one has animated 3D characters demonstrating the signs. Signs can be added and removed from list of favorites. Also has a quiz feature.

Sign 4 Me for iPad – A Signed English Translator by Vcom3D: Featuring a full-body avatar, this app for the Deaf or Hard of Hearing contains over 11,500 sign language words.

Sign Language! - This free iPad app features a deaf instructor on video who will teach you the alphabet, numbers and colors in sign language.

Dragon Dictation - Voice recognition application that allows you to speak and instantly see your text.

Speak it Text to Speech - Text to speech app. Reads e-mails, favorites, news articles documents and more.

Speaking and Listening Games HD - Help preschool and primary kids develop listening and attention skills, understand language and develop expressive language.

Marlee Signs - This app will teach you the fundamentals of ASL – from the signed alphabet and basic vocabulary through to common expressions in everyday life – using high-quality video demonstrations starring Marlee Matlin herself.

Articulate It - Articulate it! is an application designed to help children practice their pronunciation skills. Articulate it! is Smarty Ears' brand new app that allows speech therapists and parents work towards improving the speech of children with speech delays.

Smart Oral Motor - Application for children who need to practice oral motor skills. Includes 15 oral motor exercises, auditory information and fun animations.

Speech Therapy to Go - A handy pocket guide to pronunciation of common English-language consonants, for patients and therapists alike. Just touch the letters for pronunciation.

Word SlapPs - Word SlapPs is used to teach vocabulary words specific to your child's world with images that you choose. Upload and save your images into customizable categories and pair them with your own recorded questions. Word SlapPs is recommended for SLP's, teachers or parents.

Sound Match - Classic memory game for the ears instead of the eyes

Sounds! - Sound effect app with over 50 sounds to practice identifying sounds

ICDL Free Books for Children - The International Children's Digital Library (ICDL) brings a worldwide collection of free children's books to the iPad. The largest collection of its kind, the ICDL spans the globe with thousands of children's books from more than 60 countries, in a wide assortment of beautiful languages with captivating illustrations.

Signing Savvy – Provides translations and signs of the day.

BOOKS

A Button in Her Ear – Albert Whitman

A Journey into the Deaf-World – Harlan Lane

Anything but Silent – Mark Drolsbaugh

Breaking the Sound Barriers – Julie Postance

Choices in Deafness: A Parents' Guide to Communication Options – Sue Schwartz

Deaf Again – Mark Drolsbaugh

Educating Deaf Students: From Research to Practice – Marc Marschark

Educational Advocacy for Students Who Are Deaf or Hard of Hearing: The Hands & Voices Guidebook – Cheryl DeConde Johnson, Janet DesGeorges, and LeeAnne Seaver

How Deaf Children Learn: What Parents and Teachers Need to Know – Marc Marschark

I'm the Boss of my Hearing Loss! – Amy Kroll

Kid Friendly Parenting with Deaf or Hard-of-Hearing Children – Denise Chapman Weston and Daria Medwid

Language and Literacy Development: What Educators Need to Know – James Byrnes and Barbara Schirmer

Listen with the Heart – Michael A. Harvey

Literacy and Your Deaf Child: What Every Parent Should Know – David A. Stewart

Literacy Learning for Children Who Are Deaf or Hard of Hearing – Lyn Robertson and Carol Flexer

My First Book of Sign Language – Joan Holub

Never the Twain Shall Meet: Bell, Gallaudet, and the Communications Debate – Richard Winefield

Oliver Gets Hearing Aids – Maureen Cassidy Riski, Nikolas Klakow

Parenting Advice When Your Child is Deaf: A Guide for Parents – David Luterman and Mark Ross

Parents and Their Deaf Children – Kathryn Meadow-Orlans

Patrick Gets Hearing Aids – Nikolas Klakow Maureen C. Riski

Raising and Educating a Deaf Child – Marc Marschark

Samantha's Fun FM And Hearing Aid Book – Samantha Brownlee

Seeing Voices – Oliver Sacks

Silent Garden – Paul Ogden

The Parenting Journey – Karen Putz

The Silent Garden: Raising Your Deaf Child – Paul Ogden

The Young Deaf or Hard of Hearing Child – Barbara Bodner-Johnson

Train Go Sorry: Inside a Deaf World – Leah Hager Cohen

When Your Child is Deaf: A Guide for Parents – David Luterman

Your Child's Hearing Loss – Debby Waldman and Jackson Roush (This is especially good for milder hearing loss.)

GLOSSARY

ABR/Auditory Brainstem Response: A non-invasive test that measures responses to auditory stimuli through the brainstem level. The test shows whether or not sound is being detected and is often used for assessing infants and other difficult-to-test individuals. AABR (automated auditory brainstem response) is an adapted test methodology which is often used for screening newborns. This type of test can also be referred to as BAER, BSEP, and BSER.

Acoustics: Pertaining to sound, the sense of hearing, or the science of sound. The term is often used to describe the sound quality in a room.

Acquired hearing loss: Having a hearing loss that which was not present at birth. Also, may be called adventitious loss.

Advocacy: Refers to the role parents or guardians play in developing and monitoring their child's educational program or working to make sure other needs are met by appropriate agencies. Advocating means knowing what your rights are by law and actively participating in the decision-making process to assure that services.

Americans with Disabilities Act (ADA): A law that prohibits discrimination against people with disabilities, including deaf and hard of hearing individuals. The four sections of this law cover employment, government, public accommodations, and telecommunications.

Ambient noise: Any unwanted sound that competes with being able to hear the main or desired speech or sound.

Amplification: The use of hearing aids or other electronic devices to increase the loudness of a sound so that it can be more easily received and understood.

Assistive communication device: Any and all types of electronic devices including hearing aids, FM systems, infrared systems, tactile aids, special inputs for the television or radio, amplified/visual alarm systems, and teletypewriters that are used by people with hearing impairments or deafness. Some of these devices might also be referred to as assistive listening devices.

Audiogram: A graph on which a person's auditory results are plotted. The frequencies (pitch) are on the horizontal axis and the intensities (volume) are vertical. The top of the audiogram represents soft intensity and the bottom of the graph indicates greater loudness needed to perceive sound. Results toward the bottom of the graph indicate poorer hearing ability.

Audiological assessment: A combination of hearing tests used to describe the type and degree of hearing loss. This can also mean a test in the aided condition to determine the benefit of amplification and might be called an aided assessment.

Audiologist: A person with a master's degree or doctorate degree in audiology who is a specialist in testing hearing and working with those who have hearing loss. The person has a certification from the American Speech-Language-Hearing Association or the American Academy of Audiology. The person may have CCCA or FAAA after the signature block. An audiologist's evaluation often results in recommendations about appropriate hearing aids and referrals to physicians and/or other professionals.

Auditory training: The process of training a person's residual (the amount of hearing which is present) hearing in the awareness, identification, and interpretation of sound.

Auditory-Verbal Therapist: A qualified professional who has cross-trained in the areas of audiology, speech-language pathology, and education of the deaf or hard of hearing. This professional has chosen to support the principles of Listening and Spoken Language in working with families with children who are Deaf or Hard of Hearing.

Aural habilitation: Training that helps a person with hearing loss develop speech and spoken language.

Aural rehabilitation: Therapy to help a child or adult with hearing loss regain and/or improve their speech and language after the development of a hearing loss.

Behavioral observation audiometry: An audiological assessment which assesses a baby's or young child's behaviors (startle, eye movement, head movement, sucking cessation) in response to calibrated sound by means of observation of those responses. Stimuli may include warble and pure tones, speech, and/or calibrated noisemakers/ types of noise.

Bilateral hearing loss: Hearing loss in both ears.

Bilingual/Bicultural: Being fluent in two languages and/or membership in two cultures.

Binaural amplification: Use of hearing aids in both ears simultaneously.

Bone conduction: Sound received via the bones of the skull.

Certified Auditory-Verbal Therapist®: This professional holds a master's degree in one of three disciplines (audiology, speech-language pathology, or education of the deaf or hard of hearing) and has completed a certification process. Certification requires completion of specific course work, mentoring with a certified professional, and passing the exam.

Cerumen: An oily glandular substance found in the outer ear canal; sometimes it becomes hard and can block the ear canal and the transmission of sound (impacted), also called ear wax.

Children’s Special Health Care Services (CSHCS): A Michigan program that covers medical care for over 2,500 eligible diagnoses including hearing loss. Information about this program can be obtained from your physician or audiologist or by calling your local/county health department.

Chronological/Adjusted Age: Chronological is the baby’s age based on the date of birth. If a baby was born prematurely, his/her development is measured in terms of adjusted age. Adjusted age takes into account the time between premature birth and the actual due date of a full-term pregnancy. Using this calculation gives a more accurate picture of what the baby’s developmental progress should be. Hearing age may be adjusted to the time when a child was first amplified with hearing aids (i.e., a three year old may have a hearing age that is only two years, if he or she was fitted with hearing aids at one year of age).

Closed captioned: Typed words on TV or video which allows the viewer to read the spoken words.

Cochlea: This is the end organ of hearing and is located in the inner ear. Damage to the cochlea is usually irreversible.

Cochlear implant: An electronic device surgically implanted to stimulate the nerve endings of the inner ear (cochlea) in order to receive and process sounds. A cochlear implant system also includes external components: the speech processor and the headset (microphone, magnet, coil, cords).

Cognitive: Refers to the ability to think, learn, and remember.

Conductive hearing loss: Dysfunction of the auditory mechanism in the outer or middle ear. Conductive hearing loss is often medically treatable or correctable and is commonly caused by otitis media (fluid in the normally air filled cavity of the middle ear).

Congenital hearing loss: Hearing loss that is present at birth or associated with the birth process; occurring within the first few days of life.

Deaf: Hearing loss so profound that the child is unable to process linguistic (language) information through hearing alone. When capitalized (Deaf), it refers to the cultural heritage and community of deaf individuals. They communicate bilingually, ASL/English.

DeafBlind: A combined loss of vision and hearing.

Deaf community: A group of people who share common interests and a common heritage. The primary mode of communication is American Sign Language (ASL). The Deaf community is comprised of individuals, both deaf and hearing, who respond with varying intensity to particular community goals which derive from Deaf cultural influences. The Deaf community in the United States may have a wide range of perspectives on issues, but emphasis remains on deafness as a positive state of being.

Deaf culture: A view of life manifested by the mores, beliefs, artistic expression, understanding and language (ASL) particular to Deaf people. A capital “D” is often used in the word *Deaf* when it refers to community or cultural aspects of deafness.

Decibel: (dB) The unit of measurement for the perceived loudness of sound. The higher the dB, the louder the sound; the poorer the hearing. On an audiogram, dB is the vertical axis.

Decoder: An electronic device or computer chip that can display closed captions encoded in television programs or videos. Also called a telecaption adaptor.

Ear: The organ used for hearing. The ear has three main parts: the outer ear, the middle ear, and the inner ear.

Eardrum: Part of the ear which separates the outer ear from the middle ear. Also known as the tympanic membrane; part of the ear that can become ruptured.

Early On[®] Michigan: The name for Michigan’s early intervention system which is mandated by the Individuals with Disabilities Education Act (IDEA) amendments of 1997-Part C; covers children at risk for disabilities from birth through two years of age. This program can provide coordination of early identification, screening, and assessment as well as intervention services.

Ear mold: A custom made plastic or vinyl piece that fits into the ear to connect a hearing aid to the user.

Educational interpreter: A person who performs conventional interpreting of verbal language to a signed system and also has special skills for working in the educational environment.

ENT: A medical doctor who specializes in the care and treatment of the Ears, Nose, and Throat (also referred to as an otolaryngologist).

Eustachian tube: A tube that connects the middle ear with the throat and allows air to move back and forth into the middle ear. This tube can become swollen closed and cause middle ear dysfunction.

Finger spelling: Representation of the alphabet by finger positions in order to spell words.

FM system: An assistive listening device worn by the speaker to amplify his/her voice and transmit it directly into the listener’s ears via a special receiver on the listener’s hearing aids. The device reduces the problem of background noise interference and the problem of distance between speaker and the listener.

Frequency: The number of vibrations per second of a sound. Frequency, expressed in Hertz (Hz) determines the pitch of a sound. On an audiogram, frequency is the horizontal axis (←). Frequencies typically shown on an audiogram are 250, 500, 1000, 2000, 4000 and 8000 Hz.

Gain: The range that describes how well the amplification is performing. For example, a child with unaided hearing at 80 dB who, when wearing amplification hears at 40 dB, is experiencing a gain of 40 dB via the hearing aid function.

Genetic counseling: A medical specialty that helps families understand the cause of a child's disability, the chance of recurrence in other relatives or future children, and whether the condition is part of a syndrome that should be watched for other medical complications.

Hard of hearing: A hearing loss, either permanent or fluctuating, which adversely affects an individual's ability to detect and decipher some sounds. The term is preferred over hearing impaired by the deaf and hard of hearing communities to refer to individuals who have some hearing loss, but also use residual hearing.

Hearing aid: An electronic device that conducts and amplifies sound to the ear.
**There are also several different types of hearing aid circuits available in each style of hearing aid. Speak with your audiologist about the availability and most appropriate technology in hearing aids for your child.*

Hearing loss: The following hearing levels (HL) are typically characterized as follows:

Normal hearing	0-15 dB HL (child)	0-25 dB HL (adult)
Mild	16-35 dB HL	
Moderate	36-50 dB HL	
Moderate/severe	51-70 dB HL	
Severe	71-90 dB HL	
Profound	91 dB HL or greater	

Hearing screening: An audiometric procedure to assess the ability to hear a set range of intensities and frequencies; separates those whose hearing is within the normal range from those who do not respond and are in need of further assessment. Failure to respond to a screening protocol does not mean a hearing problem exists, but that there should be further evaluation.

Huggies: The brand name of a plastic-ringed device designed to "hug" the hearing aid to the ear. Popular for infants and toddlers whose ears may be too small to hold the hearing aid snugly in place.

IDEA: The Individuals with Disabilities Education Act, Public Law 101-476; currently known as Part C. In Michigan, the *Early On* system carries out the mandates of IDEA, part C.

Inclusion: Often used synonymously with “mainstreaming,” this term refers to the concept that students with disabilities should be integrated and included in the educational setting with their non-disabled peers to the maximum extent possible.

Individualized Educational Plan (IEP): A team-developed, written program which identifies therapeutic and educational goals and objectives for addressing the educational needs of a school-aged student with a disability. An IEP for a child with hearing loss should take into account such factors as

- 1) communication needs and the child’s and family’s preferred mode of communication
- 2) linguistic needs
- 3) severity of the hearing loss
- 4) academic progress
- 5) social, emotional needs, including opportunities for peer interaction and communication, and
- 6) appropriate accommodations to facilitate learning.

Individual Family Service Plan (IFSP): The IFSP is a written plan developed by parents or guardians with input from a multi-disciplinary team. It addresses 1) family strengths, needs, concerns, and priorities 2) identifies support services available to meet those needs and 3) empowers the family to meet the developmental needs of their infant or toddler with a disability.

Inner ear: The innermost part of the ear composed of the cochlea and the semi-circular canal (end organ of balance). Damage to the inner ear results in a sensorineural type of loss.

Intensity: The loudness of a sound measured in decibels (dB); vertical (↑) axis of the audiogram.

Intermediate School District (ISD): Educational agency within a county or geographic area that can assist with specialized educational needs. Intermediate school districts are usually listed in your local telephone book under “schools”.

Interpreter: A person who facilitates communication between hearing and deaf or hard of hearing persons through interpretation into a signed language; refers to translation of a language into a visual and/or a phonemic code by an oral interpreter, an ASL interpreter, or cued speech translator.

Intonation: The aspect of speech made up of changes in stress and pitch in voice.

Least Restrictive Environment (LRE): A basic principle of Public Law 101-476 (IDEA) which requires public agencies to establish procedures to ensure that to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled; special classes, separate schooling, or other removal of children with disabilities from

the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes, even with the use of supplementary aids and services, cannot be achieved satisfactorily. Since Deaf people regard themselves as non-disabled and members of a linguistic/cultural minority, some of them view Least Restrictive Environment as Deaf Schools (where access to communication isn't as restrictive).

Mainstreaming: The concept that students with disabilities should be integrated with their non-disabled peers to the maximum extent possible, when appropriate to the needs of the child with a disability. Mainstreaming is one point on a continuum of educational options. The term is sometimes used synonymously with "inclusion."

Middle ear: Located between the outer ear and the inner ear. It contains three tiny bones (ossicles) and is an air-filled cavity. It is connected to the throat by the Eustachian tube. The middle ear can become filled abnormally with fluid which, in turn, may cause temporary hearing loss.

Mixed hearing loss: A hearing loss that is partially sensorineural and partially conductive in nature.

Monaural amplification: The use of one hearing aid.

Morpheme: A linguistic unit of relatively stable meaning that cannot be divided into smaller meaningful parts.

Multidisciplinary assessment and evaluation: The assessment and evaluation of a child by qualified persons representing two or more disciplines or professions, i.e., a speech-language pathologist and an audiologist. The child's development is evaluated to determine if there are any delays or conditions that might indicate the need for special services.

Otitis media: Fluid in the middle ear (normally an air-filled cavity). This fluid may cause fluctuating hearing loss and, therefore, delays in speech and language development for young children who experience otitis media with hearing impairment. Fluid can be present with or without infection and may cause temporary and fluctuating degrees of hearing loss; otitis media can turn into a permanent hearing problem without proper medical attention.

Otoacoustic emissions (OAE): A passive audiological test that verifies cochlear activity. It is often used as a screening tool or to evaluate infants suspected of hearing loss. A probe is placed in the ear canal to measure auditory response.

Otolaryngologist: (Also called an ENT): A physician who specializes in medical problems of the Ear, Nose and Throat. This specialist provides diagnosis and approval for hearing aids.

Outer ear: The pinna (part of the ear outside the head) and the ear canal.

Output: Refers to how much amplification is being put out by a hearing aid.

Part B: Part B is the section of Public Law 101-476 (IDEA) that refers to intervention services available in the public schools to eligible children ages three years through twenty-one years.

Part C: This is the section of Public Law 102-119 that refers to early intervention services available to eligible children from birth through two years of age and their families. In Michigan, the implementation of Part C is called *Early On*.

Peri-lingual hearing loss: Refers to hearing loss acquired while learning a first language.

Play audiometry: The audiologist teaches a child to respond to sound with some type of action such as dropping a block in a pail when he/she hears a sound (peg into pegboard, ring on peg).

Post-lingual hearing loss: Refers to hearing loss acquired after learning a first language.

Pragmatics: The branch of linguistics dealing with language in use and the contexts in which it is used, including such matters as deixis, taking turns in conversation, text organization, presupposition, and implicature.

Pre-lingual hearing loss: Refers to hearing loss which is congenital or acquired before acquisition of language.

Real-ear measurements: An audiological test that measures the actual output of the hearing aid while placed in the ear. This test uses a probe microphone that is placed into the ear canal along with the ear mold and hearing aid coupling. It assesses how effectively sound is being amplified by the hearing aids in the ear. It is considered a very important measurement because everyone's ear canals are shaped differently, and this will affect how a hearing aid functions.

Residual hearing: The amount of measurable, usable hearing a person has that may be able to be amplified.

Semantics: The use of language in meaningful referents, both in word and sentence structures.

Sensorineural: A type of hearing loss caused by damage that occurs to the inner ear (cochlea). Sensorineural hearing loss is usually irreversible.

Speech awareness threshold (SAT): This is the faintest level at which anyone detects speech 50 percent of the time. SAT is measured during audiological evaluation with and/or without hearing aids.

Speech reading: The interpretation of lip and mouth movements, facial expressions, gestures, prosodic and melodic aspects of speech, structural characteristics of language, and topical and contextual clues.

Speech intelligibility: The ability to hear and understand spoken speech.

Speech-language pathologist: A master's or doctorate level trained professional who works with individuals in the areas of speech and language. Speech-language pathologists are certified by American Speech-Language-Hearing Association (ASHA) and will typically use the initials CCC-SLP as a credential after their signature.

Speech zone: On an audiological graph measured in decibels and frequencies, the area wherein most conversational sounds of spoken language occur. Sometimes called the "speech banana" because of the shape this area depicts on the graph. The purpose of wearing hearing aids is to amplify sound into this zone.

Syntax: Defines the word classes of language, i.e., nouns, verbs, adjectives, etc. and the rules for their combination, i.e., how words occur in order.

Tactile aids: A type of assistive communication device that emits a vibration or "tactile" signal to indicate the presence of sound. It is worn on the body and triggers the sense of touch or feeling to draw attention to information that cannot be heard by the individual with hearing loss.

Telecommunication devices for the deaf (TDD): Originally and often still referred to as TTY (teletypewriters), these electronic devices allow the deaf and hard of hearing to communicate via a text telephone system. This term appears in ADA regulations and legislation.

Threshold: The softest level of sound an individual can hear 50 percent of the time. Term can be used in reference to speech or pure tones.

Tympanic membrane: Eardrum.

Tympanogram: A pressure test that indicates the function of the ear canal, eardrum, Eustachian tube, and middle ear. It measures how air travels through the outer and middle ears and can indicate dysfunction of these parts of the ear. It does not measure hearing ability.

Unilateral hearing loss: A hearing loss in one ear only.

Visual reinforcement audiometry: A method of assessment in which the child is conditioned to respond to sound by coupling a response (head or eye turn) with a visual reward. After the child learns that when he/she looks toward the sound there is a reward, the coupling of the reward is terminated. The child then needs to respond appropriately to a sound stimulus, at which time the visual reward is given.

Vocational Rehabilitation: A state program which may assist with special needs in assuring an individual's employability. Typically, services are available to people 16 years of age and older. In Michigan, contact Michigan Rehabilitation Services or Bureau of Services for Blind People for DeafBlind Individuals.

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MDHHS-Pub-1245 (3-19)