



Wyoming Family Resource Manual (A WEII Program Resource)

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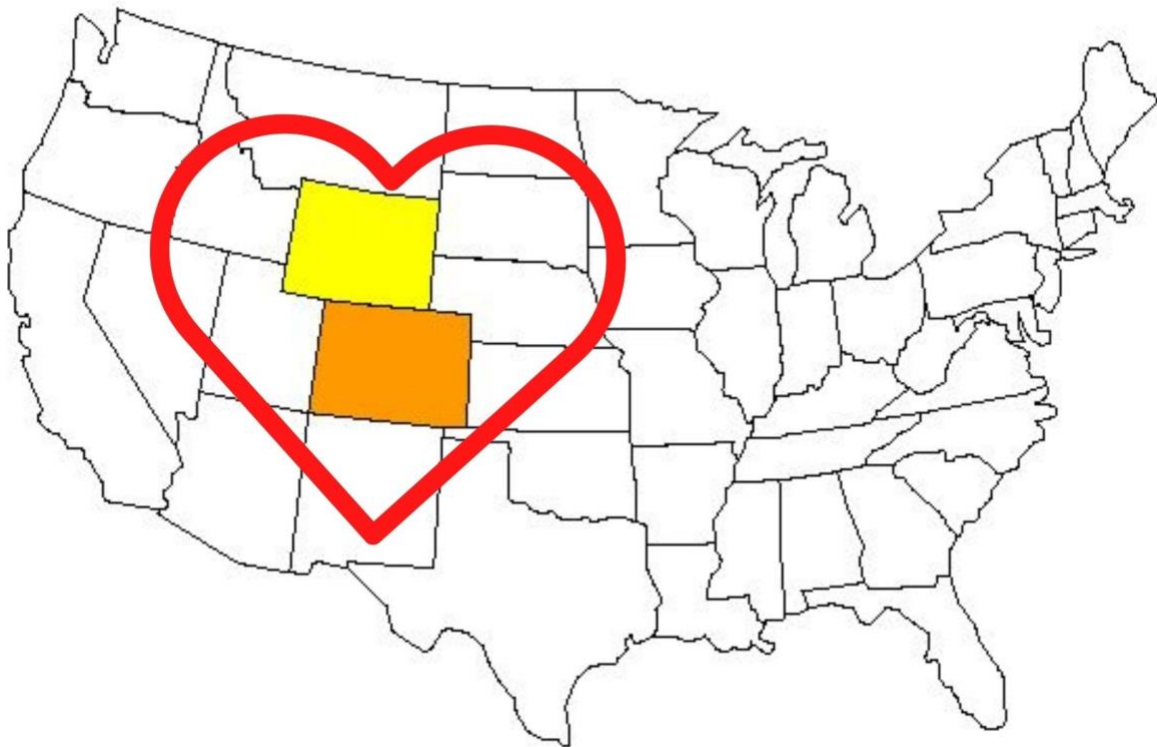
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It is with heartfelt gratitude and respect that we acknowledge the Colorado School for the Deaf and the Blind (CSDB) and the Colorado Home Intervention Program (CHIP) for granting the Wyoming Early Intervention Initiative (WEII) permission to modify and use the CHIP Resource Manual to support Wyoming families with children who are deaf or hard of hearing.

We could not ask for better neighbors.

Thank you!



This

Wyoming Family Resource Manual

Belongs To:

Family Name: _____

Phone: _____

Email: _____

If you find this manual, please contact us. Thank You!

Dedication

This manual is dedicated to Susan Davis Fischer, M.S., CCC-SLP, our colleague and cherished friend.

Susan's commitment to helping children who are deaf or hard of hearing develop communication was unparalleled. Susan was a shining light in the states of Wyoming and Colorado in working directly with infants, toddlers, and preschoolers who are deaf or hard of hearing. Susan loved both children and parents. Her natural talent for working with children and their families is known as "The Susan Fischer Effect".

Her love for her family, her humor, her fashion sense, her ability to hold a confidence, her inability to use and report numbers, and her lack of ever passing a valid driver's test are dear to us.

We have a hard time putting into words how blessed we are to have known her.



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Dear Family,

You are receiving this Wyoming Early Intervention Initiative (WEII) manual because you have a child diagnosed with hearing loss. We do not know what emotions you may currently be experiencing or the questions you may have. However, we can tell you that you are not alone! While our journeys are not identical, we have been down similar roads with our own children who have hearing loss.

We quickly learned that Early Intervention is extremely important. The first three years of life are the critical period for the human brain to learn language (spoken or signed). We also found that our connections to local Child Development Center Early Interventionists provided vital guidance to us as we supported our children with hearing loss to reach their fullest potential.

This WEII manual is yours to read through, add to and share with others. You and your child's Early Interventionist will use this manual to support early intervention services for your family. Our hope is that this manual will serve as a guide through the first few years of your child's life. Your child's Early Interventionist will have their own copy of this manual.

The individuals in the programs listed below are available to work alongside your family at no cost to you as you navigate your journey.

- The Wyoming EHDI (Early Hearing Detection and Intervention) Program
- Wyoming Families for Hands & Voices, Guide By Your Side Program
- Wyoming Department of Education Outreach Services for the Deaf/Hard of Hearing
- Your local Child Development Center for Early Intervention Services

We hope that you take advantage of the valuable resources that are offered to you, your child, and family. Looking back, we realize there are many things we wish we had known. It is our hope that you will use this manual and that it will provide information to you as you need and/or want it.

Much Hope and Gratitude,



Kim and Larry Reimann

Kim and Larry's child was diagnosed in 1999 (at 7.5 months of age) with a bilateral, sensorineural moderate to moderately severe progressive hearing loss. Gabi's hearing loss was later found to be progressive.



Betsy and Jon Tengesdal

Betsy and Jon's child was diagnosed in 2007 (at 18 months of age) with mild bilateral, sensorineural hearing loss. This hearing loss was found to be a progressive in 2008.



Introduction

Introduction

The Wyoming Early Intervention Initiative (WEII) for Families with Children who are Deaf/Hard of Hearing started as a collaborative effort in 2020. This collaborative effort involves members from the following agencies: Wyoming Department of Health/Early Intervention and Education Program (EIEP); Wyoming Department of Education Outreach Services for Deaf/Hard of Hearing (D/HH); University of Wyoming Division of Communication Disorders; Wyoming Early Hearing Detection and Intervention (EHDI); Wyoming Families for Hands & Voices including Guide By Your Side (GBYS); Child Development Centers of Wyoming (CDS of Wyoming) and the Marion Downs Center. This initiative was formed to promote collaborative efforts to increase Wyoming’s capacity to provide quality early intervention services for families and their children who are D/HH from birth to kindergarten.

Wyoming provides early intervention services for children from birth to kindergarten via fourteen (14) Child Development Center Regions. These fourteen private, non-profit child development center regions contract with the Wyoming Department of Health Early Intervention and Education Program to provide early intervention services. (See figure 1). This system provides a structure for coordination of early intervention services throughout the state.

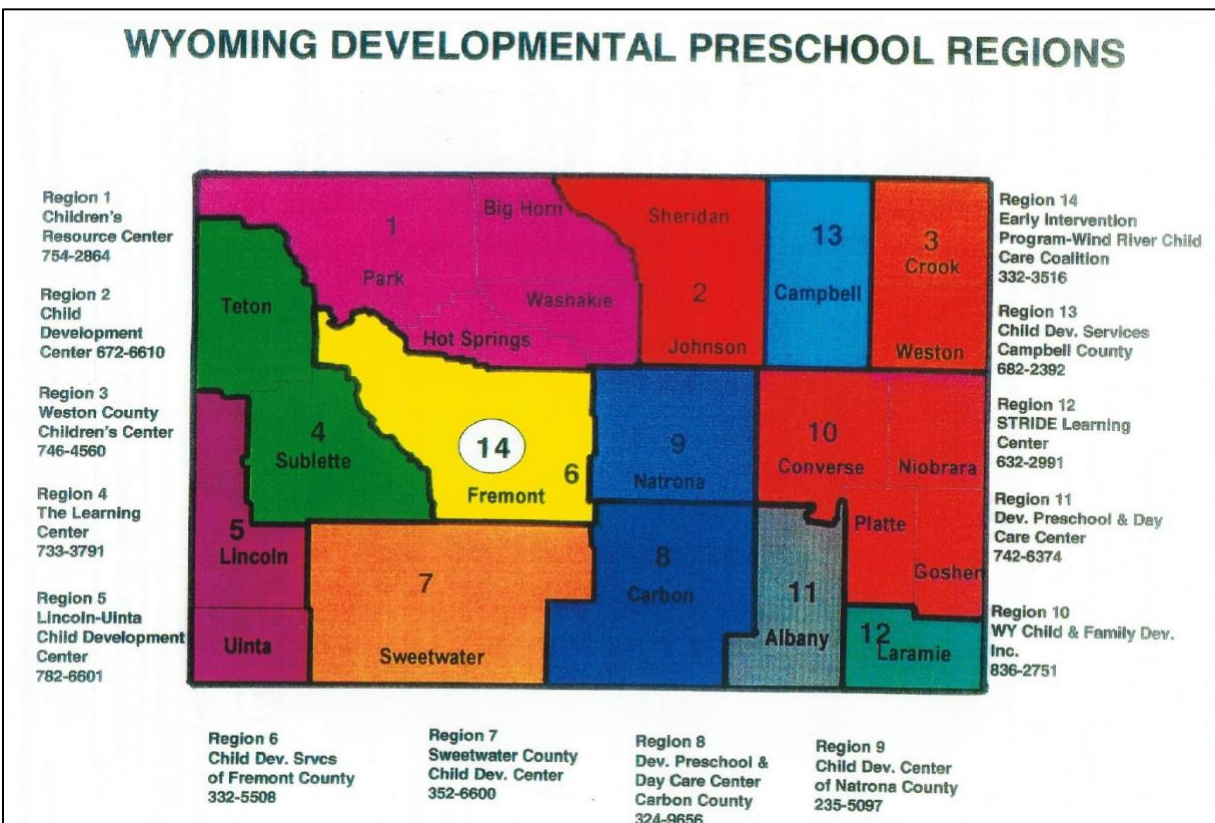


Figure 1: Map of WY Child Development Centers

WEII supports the family's involvement as central to their child's development with early interventionists serving as guides and coaches. The WEII collaborative members support early intervention services that are family centered, targeting goals designed to meet the needs of each individual child and their family. Based on the child's and family's needs, the early interventionist models and demonstrates strategies and activities to promote the child's development. The areas of language, speech, auditory skills, cognition, play, social skills, self-advocacy, sign language communication, and use of hearing technology may be supported. Skills related to these areas are supported utilizing developmentally appropriate activities connected to the child/family's daily routines. Families and early interventionists work closely with other community-based team members as well as medical care professionals who provide essential services from a distance. Together they develop an individualized program that fits the needs of the family and child's learning style.

Early intervention starts at the time of identification of the child's hearing loss. Typically, referrals to Wyoming Child Development Centers for early intervention services are received from the Wyoming EHDI Program, medical care providers, audiologists, developmental screenings, or other community screening teams. However, referrals are welcome from a variety of other sources (such as families, private therapists, community-based childcare facilities, etc.) Referrals are made to Family Service Coordinators or Special Education Coordinators, who then initiate contact with the family. These coordinators assist the family in identifying needed, appropriate services for their child.



Research shows that the most effective intervention takes place when the child is very young. The most intensive period of language development is during the first three years of life. During this critical period, the brain is growing at a phenomenal rate and language learning is easier for the child. Learning continues throughout life, but specific times seem to be prime times when the brain is particularly geared to learning certain skills. These very young years form the foundation for later educational and social success.

The philosophy of WEII is that parents are the best guides for their child's development. The most effective intervention for the child is achieved when the parent has the skills and strategies to act in this role. As parents actively participate in this early intervention process, they become powerful lifetime advocates for their child.

We understand that you might not have been expecting this diagnosis for your child. We want you to know that you are not alone. We hope you will take advantage of the support available to your family. We are eager to join you on your journey.

WEHI Plus Core Group Biographies



Kalley Ellis Au.D, CCC-A

Wyoming Early Hearing Detection and Intervention (EHDI) Program,
Program Audiologist
CDC+ Audiology, Clinical Pediatric Audiologist
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Kalley is the pediatric audiologist for the Wyoming Early Hearing Detection and Intervention (EHDI) program and CDC+ Audiology Clinic in Casper, WY, a clinic that focuses solely on pediatrics (birth-21 years of age). Kalley is originally from Idaho and Utah, earning her undergraduate degree from Utah State University and her Doctorate of Audiology from Idaho State University. Throughout her doctorate program, she focused on pediatrics, externing in a variety of settings, including private practices, school districts, ENT clinics, and hospitals. Additionally, Kalley worked at the Pediatric ENT of Atlanta (PENTA) from 2019-2020, a renowned pediatric facility where she worked with all types of hearing loss and amplification. Additionally, she has participated in Leadership and Education in Neurodevelopmental Disorders (LEND) Program both as a doctorate and post-doctorate student to further her understanding and abilities to work with children with disabilities.

Kalley has been living in Casper, Wyoming since 2019 and loves it! She believes Wyoming is such a beautiful state filled with some of the most amazing coworkers, patients, and families that she gets to work with on a daily basis. Working in pediatric audiology is Kalley's passion, and she feels thankful she gets to spend each day supporting children and families of Wyoming throughout their hearing journey.

In her free time, Kalley enjoys traveling with her husband, reading, and crafting. She also has two fur babies that keep her very busy!



Sarah Fitzgerald

Wyoming Early Hearing Detection and Intervention (EHDI) Program,
Co-Coordinator
sarah.fitzgerald@wyo.gov

Sarah Fitzgerald lives in Laramie and has served in various roles for the Wyoming Early Hearing Detection and Intervention (EHDI) Program since 2005. Since 2018, she has held the role of Co-Coordinator for Wyoming EHDI Program. Through her work, Sarah coordinates newborn

hearing screening and follow-up throughout the state to ensure that children have hearing screenings completed by one month of age, diagnosis by three months of age, and are entered into early intervention by six months of age.

Sarah is hardworking, detail oriented, and has a robust knowledge of systems and resources within Wyoming. She collaborates frequently with hospitals, midwives, audiologists, physicians, early intervention providers, and other state-level administrators and programs to help make available the opportunity for children who are deaf or hard of hearing (D/HH) to develop to their fullest potential. She provides direction and support to the WEII efforts as an administrator.

Sarah holds a Bachelor of Arts in psychology from Colorado College. Outside of work, Sarah enjoys spending time with her family, skiing, running, and reading.



Christie Fritz

Wyoming Department of Education,
Education Consultant, Deaf/Hard of Hearing Outreach
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Christie Fritz is a Teacher of the Deaf/HH (TOD) with 28 years of experience in the field of deaf education. She began her career teaching students who are Deaf/HH ages preschool-grade 12 in South Dakota, Wisconsin, Minnesota, and Wyoming. She joined the Wyoming Department of Education’s Deaf/HH Outreach team in 2008 and continues in her role there today as an outreach consultant providing technical assistance in the area of hearing loss to 48 school districts and 14 child development centers.

Christie is knowledgeable about amplification devices, impacts of hearing loss, IDEA, sign language, parent coaching, educational strategies, and auditory development, as well as other areas related to educating children who are Deaf/HH. Christie holds Bachelor of Science Degrees in both Deaf Education and Elementary Education, from Minot State University, a Post Graduate Credential in Special Education from the University of Wyoming and is currently completing a Master of Education Degree in Listening and Spoken Language, with a focus on family-centered practice, at Utah State University. Additionally, she holds an Advanced Plus rating on the Signed Language Proficiency Rating Scale (SLPI). Christie serves as a member of the TASK-12 National Board, Wyoming’s Statewide Transition Team for Deaf/HH, and the WEII Plus Program Core Team.

In her spare time, Christie enjoys being with her family, hiking, camping, home remodeling projects, animals, and photography.



Wendy Hewitt
Executive Director
Wyoming Families for Hands & Voices
wendy@wyhandsandvoices.org

Wendy Hewitt is the Executive Director of Wyoming Families for Hands & Voices and lives in the southwest corner of Wyoming in the small town of Mountain View. Wendy has three children: Dallie, Ruger, and Kassidy. Ruger and Kassidy were born with profound bilateral sensorineural hearing loss. And so, the hearing loss journey began. A path Wendy never imagined she would take. Wendy learned all about hearing aids, cochlear implants, ling sounds, speech therapy, early intervention, IEPs and more. This is just a small list that parents of children who are deaf/hard of hearing know all too well.

In May of 2006, some professionals in Wyoming talked Wendy and Deb Hovde into starting Hands & Voices in Wyoming. With the support of many organizations, Wyoming Families for Hands & Voices became an official chapter in September of 2006. It has been amazing to see the changes and growth our chapter has made over the years.

Wendy and her family enjoy camping, hunting, going on ranger rides, attending, and participating in community and high school rodeos. A considerable amount of time was spent traveling to these rodeo events along with going to basketball, wrestling, volleyball, soccer, and football games. Participating in these activities helped the Hewitt's learn many tricks and strategies to keeping cochlear implants on under football helmets, 4-wheeler helmets, cowboy hats and headbands for all their sporting activities. Wendy was even asked by National Hands & Voices program to author an article about the many ways of keeping hearing devices on while doing these activities.



Annette Landes, SLP-CCC-A
Wyoming Families for Hands & Voices,
Early Intervention Coordinator
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Annette is the Wyoming Early Intervention Initiative (WEII) Plus Coordinator. Her role as coordinator is to support families who have infants and toddlers who are deaf/hard of hearing. Through this support, families are offered resources, technical assistance, and guidance as they begin their journey through early intervention. Through Annette's experience as a speech/language pathologist and hearing coordinator in Colorado for 20 years, she understands

the importance of providing complete and unbiased information to families to support them as they make decisions for their child related to their needs and hearing abilities. In addition, she mentors and guides the early interventionists who provide the specialized services for infants and toddlers who are deaf/hard of hearing. With the implementation of the WEII Plus Program, families in Wyoming will have access to a comprehensive curriculum that will support the development of their infant or toddler who is deaf/hard of hearing. Annette is excited to join families on this journey.

In her free time, Annette enjoys horseback riding, golfing and skiing. Annette and her husband like to travel, especially to visit family around the country.



Nancy Pajak M.S, CCC-A

Consultant/Liaison

Audiologist

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Nancy graduated from the University of North Dakota in 1975 with a B.S. In Speech Pathology. She spent two years working as a speech/language therapist in Minnesota public schools before beginning her Master of Science in Audiology studies at Colorado State University. Upon completion of her Masters, Nancy accepted a position with the Colorado West Otolaryngology Practice in Grand Junction Colorado. While Nancy enjoyed the medical setting, her true love was Educational Audiology. She began work at Natrona County School District in Casper WY as the District Audiologist and enjoyed this work until moving to Seattle in 1987. It was in the Pacific Northwest that Nancy found the opportunity to spend half of her time in educational audiology settings and the other half in a medical audiology/otologist environment. Nancy blended diagnostics for all ages of patients, fitting amplification, counseling, and patient care in the medical setting and used her skills in direct intervention and case management for school age children who were Deaf/Hard of Hearing in the educational setting. Spending time in both medical and educational/developmental settings continued after Nancy and her husband, Mark, moved from the Pacific Northwest to Laramie, Wyoming in 1991 to raise their two boys.

Nancy worked as the Director of Outreach Services for the Deaf and Hard of Hearing at the Wyoming Department of Education while keeping up her medical skills up at Ivinson Memorial Hospital in Laramie. As the importance of early hearing screening came of age, Nancy accepted the opportunity of designing and implementing the Early Hearing Detection and Intervention

(EHDI) Program for the Wyoming Department of Health. She was the Wyoming EHDI Coordinator for 25 years.

Nancy is utilizing her knowledge and experience in speech pathology, audiology, program management and child development/education as she serves as the Liaison/Consultant between the Wyoming Early Intervention Initiative (WEII) Program and the Marion Downs Center.

In her free time Nancy enjoys traveling, playing tennis, hiking, reading, and spending time with her family.



Kim Reimann

Wyoming Families for Hands & Voices,
Guide By Your Side, Program Coordinator
CDC+ Audiology, Parent Advocate/Family Educator
kimr@wyhandsandvoices.org

Kim Reimann is currently the Wyoming Families for Hands & Voices, Guide By Your Side (GBYS) Program Coordinator and is a Family Educator and Second Tester at CDC+ Audiology Clinic in Casper, Wyoming. She was the former assistant director of Wyoming Families for Hands & Voices from 2011 to 2015 before stepping down to work in other roles. The oldest of her three children, Gabrielle, was born with a moderate to moderately-severe bilateral sensorineural hearing loss, thus starting her on the path to what she does today. As a former educator and preschool director, Kim Reimann carried her love of education and helping others into her current role of serving families. Kim’s passion is working with parents and their children by engaging the circle of support between parents and professionals (physicians, audiologists, early interventionists etc.). She helps to empower parents by sharing her story of raising a child with hearing loss, supporting families by connecting them with appropriate information, resources, and networks so that families can make informed, educated decision to help their child reach their fullest potential.

She never imagined that being a parent would lead to working with many different organizations to help children who are deaf and hard of hearing (D/HH) through connections with professionals, providing advocacy and support for families, and working to establish and maintain different programs for the benefit of children who are D/HH in Wyoming. Through the years, Kim has been grateful to be a part of the changes and growth of Wyoming Families for Hands & Voices and to work with so many amazing people.

Kim has two other children, Natalie and Curtis who help round out their family of five. In her free time, she enjoys spending time with her family and friends, reading, photography, hiking, traveling, and is always up to watching a good movie.



Betsy Tengesdal

Wyoming Department of Education, Behavior Consultant

Wyoming Families for Hands & Voices,

Teacher of the Deaf, Consultant

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Betsy Tengesdal has been a Teacher of Deaf/Hard of Hearing (TOD) since 2001. After graduating from the University of Tulsa with her Bachelor of Science degree in Education of the Deaf, she taught for 9 years in Minnesota. While in Minnesota, she worked with all ages of D/HH students ages birth through high school graduation. Betsy earned her Master's degree in Family Sciences from Texas Woman's University in 2004. From 2008-2014, Betsy and her family moved to Boys Town, NE where she and her husband were trained and served as Family Teachers for the Father Flanagan's Boys Town organization. While at Boys Town, Betsy was no longer teaching in the classroom; however, was learning what it meant to raise a D/HH child. While at Boys Town, Betsy and Jon's middle child was diagnosed with a progressive bilateral hearing loss. After leaving Boys Town in 2014, Betsy and her family moved to Wyoming, and she went back to teaching D/HH students.

In addition to being a TOD, Betsy is working with the Wyoming Department of Education as a Behavior Consultant. In this role, Betsy collaborates with teams across the state of Wyoming to brainstorm strategies to set students up for success and to teach prosocial skills. This collaboration has been a dream of Betsy's and seeing it come to fruition has been a privilege and an honor for her to work with IEP teams in this way.

Seeing things as both an educator, as well as a parent of a child with hearing loss, gives Betsy the ability to see situations from both sides of the table and a passion to find ways for parents to feel supported and encouraged in their parenting journey.

In her spare time, Betsy loves cooking, collecting stamps in her passport, exploring the beauty of Wyoming, and drinking tea with friends or alone with a great book!

Wyoming Early Intervention Initiative (WEII) for Families and their Children who are Deaf or Hard of Hearing

Acknowledgements

Planning Committee

- Sarah Fitzgerald – Co-Coordinator, Wyoming Early Hearing Detection and Intervention
- Sandy Gabbard, Ph.D. – Facilitator, Marion Downs Center
- Cheryl Johnson, Ed.D. – Facilitator, Marion Downs Center
- Mina Moscatelli, M.A. – Program Assistant, Wyoming Early Hearing Detection and Intervention
- Nancy Pajak, M.S., CCC-A – Audiologist, Liaison, Marion Downs

Core Team and/or Stakeholders

- Kim Caylor – Part B Coordinator, Early Intervention and Education Program Unit, Behavioral Health Division, Wyoming Department of Health
- Kalley Ellis, AuD, CCC-A – Audiologist, Wyoming Early Hearing Detection and Intervention and Child Development Center of Natrona County CDC+ Audiology Clinic
- Susan Fischer, M.S., CCC-SLP – Speech Language Pathologist, D/HH Specialist, Wyoming Families for Hands & Voices
- Christie Fritz – B.S. Deaf Education, B.S. Elementary Education, Certified Highly Qualified Teacher of the D/HH and Special Education, Education Consultant Outreach Services for the D/HH, Wyoming Department of Education
- Teresa Garcia, M.S., CCC-A – Professor/Clinical Audiologist, Division of Communication Disorders, University of Wyoming
- Wendy Hewitt – Parent, Executive Director, Wyoming Families for Hands & Voices
- Jennifer Hiler, M.A. – Early Intervention and Education Program Unit Manager, Teacher of the D/HH
- Judy Juengel, M.S. – Part C Coordinator, (former Contracts and Data Specialist), Early Intervention and Education Program Unit, Behavioral Health Division, Wyoming Department of Health
- Annette Landes, M.S., CCC-SLP – Speech Language Pathologist, D/HH Specialist, Wyoming Families for Hands & Voices
- Kim Reimann – Parent, Family Educator, Guide By Your Side Coordinator, Wyoming Families for Hands & Voices
- Jaime Stine, M.S. – Executive Director, Child Development Centers (Region 11 and Region 8)
- Betsy Tengesdal, M.S. – Parent, Teacher of the D/HH, Wyoming Families for Hands & Voices

Former Stakeholders

- Nikki Baldwin, Ph.D. (Attended initial meeting) – Professor, School of Teacher Education, University of Wyoming
- Christine DeMers – (Retired, September 2021) Part C Coordinator, Early Intervention and Education Program Unit, Behavioral Health Division, Wyoming Department of Health
- Mary Jo Cooley Hidecker, Ph.D. (Relocated out of state, August 2020) – Professor, SLP, Audiologist, Department of Communication Disorders, University of Wyoming
- Kathy Escobedo, M.S. (Retired, July 2021) – Early Intervention and Education Program Unit Manager, Behavioral Health Division, Wyoming Department of Health

Acknowledgments continued

Photographs:

A special thank you to Christie Fritz for providing the beautiful photos of Wyoming used throughout this Manual.

Acronyms

CDC	Child Development Center(s) in Wyoming
CDS	Child Development Services
D/HH	Deaf/Hard of Hearing
EHDI Program	Early Hearing Detection and Intervention Program
EI	Early Intervention
EIEP	Early Intervention and Education Program
FSC	Family Service Coordinator
GBYS	Guide By Your Side - A program of Wyoming Families for Hands & Voices that connects trained parent guides to families who have a child recently diagnosed with hearing loss
HV	Hands & Voices – Parent organization to support families who have a child with hearing loss
IEP	Individualized Education Plan (3 years of age to high school graduation)
IFSP	Individual Family Service Plan (Birth through 2 years of age)
LRE	Least Restrictive Environment
OT	Occupational Therapist
PT	Physical Therapist
SLP	Speech Language Pathologist
TOD	Teacher of the Deaf
504 Plan	A plan for accommodations only, not specialized instruction



Team Members and Professionals

Team Members & Professionals in Your Child's Life

Learning to identify and work with professionals to support you and your child is essential. The professionals need to be current with the latest technologies, have experience working with young children who are deaf/ hard of hearing (D/HH), be willing to listen, value your input as parents, and be willing to support your decisions and choices. Some of these professionals will become a regular part of your family's life, while you will see others less frequently.

Additionally, the various professionals need to communicate freely and often with each other in order to offer your family coordinated services.

Some parents benefit from seeking recommendations and support from other parents of children who are deaf/hard of hearing. Research shows that parent to parent connection is extremely valuable. We encourage you to consider becoming a member of the Wyoming Families for Hands & Voices www.wyhandsandvoices.org, a wonderful parent organization created by parents of children who are D/HH in Wyoming who provide support, resources, and information to one another through their shared experiences on this journey.

The following list identifies some of the professionals who may be part of your family's team. The needs of your child and family will drive the decision and degree as to which professionals will be involved. Your team may change as your child grows and develops. There may be professionals you do not need when your baby is 2 months old, but later you may decide it would be helpful when your child is 12 months old. Remember, the most important member of the team is you! Professionals will come and go in your child's life; but YOU, the parent, are your child's best advocate and support.

If you need help or guidance in locating a qualified professional to work with your team, please contact your local Child Development Center Family Service Coordinator (FSC) or your Special Education Coordinator. You may also contact the Wyoming EHDI Program, the Wyoming Department of Health Early Intervention and Education Program (EIEP) and/or the Wyoming Department of Education, Deaf/Hard of Hearing Outreach Services. Contact information is provided on page 2 of the WEII Resource Guide for Wyoming Families.



PEDIATRICIAN or PRIMARY CARE PHYSICIAN/MEDICAL CARE PROVIDER

- The primary care physician is the doctor responsible for coordinating your child's overall healthcare. It is important to have a doctor who will listen to your concerns and make appropriate referrals. Your doctor might not have experience working with young children who are deaf/hard of hearing. If your physician does not have experience working with children who are deaf/hard of hearing, they are encouraged to contact Jackie Nelson, MD at Jackie.Nelson@ihs.gov and ask any and all questions. Dr. Nelson has worked closely with the Wyoming EHDI Program for the past 20 years. Your medical professional may refer your child to some or all of the following specialists:
 - **Geneticist** – A professional who is trained to know about genes and the medical conditions (including hearing loss) that might be related to genetics.
 - **Ophthalmologist** – A doctor who specializes in eyes/vision.
 - **Otolaryngologist (ENT)** – A doctor who specializes in the ear, nose, and throat.
 - **Audiologist** – A professional trained to diagnose hearing loss, fit assistive hearing technology and advise families regarding the potential impact of hearing loss on development and education.
 - **Speech Language Pathologist** – A professional trained to know how children learn language and to teach children how to develop and use speech and language.
 - **Early Intervention Service Provider** – A person who is trained to provide services for families with children who are at risk for developmental delays (due to the impact of hearing loss).

If you have questions or concerns about the care your child needs, you may wish to schedule a longer appointment with your child's medical professionals. The following is a list of questions to consider asking your child's primary care physician.

Questions you may wish to ask when meeting with your child's Primary Care Physician:

1. Do you know why my child has hearing loss? Could my child's hearing loss be related to any other medical conditions? Could it be genetic?
2. Are there specialists who are knowledgeable about childhood hearing loss that my child should see?
3. How do I get the referrals for the specialists my child might need to see (e.g., speech, audiology, ENT, genetic, ophthalmology)? To get the referrals, do I need an appointment with you first or can I request them by calling your office?
4. How will the specialists we see share their findings with you? How long does that process usually take? How am I (as parent/guardian) involved in the communication between the specialists, and will I get copies of the reports?

5. Have you already received any reports about my child's hearing loss (e.g., from audiology, ENT)?
6. Will my child need more tests because of the hearing loss? For example, brain scans (CT, MRI) or blood or urine tests? What will these tests tell you about my child's hearing loss?
7. If I have problems with the referrals, or if my insurance company has questions, what should I do? Can your office help me?
8. Are there any medications that may have harmful effects on my child's hearing?
9. Will ear infections or fluid in the ears affect my child's hearing loss? Should infections or fluid in the ears be treated differently because of my child's hearing loss?
10. Will you need to see my child more often because of the hearing loss? How often?
11. Other than my child's hearing loss, do you have other concerns about my child's development? Is he or she meeting the developmental milestones as he or she should?
12. Can you tell me about early intervention services that are available in my area?
13. Do you know of any community resources or support groups for my family?
14. Is there anything more I should know or consider about my child's hearing loss or general health?



AUDIOLOGIST

The audiologist is a professional who evaluates your child's hearing and fits your child with hearing aids if needed. Some audiologists are members of cochlear implant teams. It is very important to find an audiologist who has training, experience, knowledge, and the necessary equipment for testing infants, toddlers, and preschoolers. In addition, an audiologist familiar with the developmental and educational needs of children who are deaf/hard of hearing is optimal.

Questions you may wish to ask BEFORE making a hearing evaluation appointment for your infant or toddler:

1. What kind of training and experience does the audiologist have in conducting appropriate hearing evaluations for infants and toddlers?
2. What age groups of children and how many children in these age groups has the audiologist worked with in the past year?
3. What kind of training and experience does the audiologist have in fitting hearing aids for infants and toddlers?
4. Do you have equipment needed to do:
 - a. Click ABR
 - b. Tone Burst ABR
 - c. High Frequency Immittance with acoustic reflexes
 - d. Otoacoustic Emission (OAE)
 - e. Bone Conduction Click ABR
 - f. Visual Reinforcement (air conduction and bone conduction) to obtain ear specific information
5. If my child needs to be sedated in order to complete the evaluation, is it available at your clinic?
6. Will the audiologist who does the hearing evaluation provide me with a written report of the findings in a timely manner? What is the approximate timeline?
7. How much experience do you have fitting infants with hearing aids?
8. How soon do you recommend fitting hearing aids on an infant or young child?
9. Do you work with several different hearing aid manufacturers?



Questions you may wish to ask AFTER your child's hearing evaluation is complete:

1. Does my child have hearing loss?
2. If yes, how much hearing loss does my child have? Please explain the terms: sensorineural, conductive, mixed, mild, moderate, severe, profound, auditory neuropathy.
3. Is the hearing loss permanent?
4. Does my child need more hearing testing done?
5. Can you tell if my child's hearing loss will get worse or change?
6. Do both ears have the same hearing loss?
7. How will the hearing loss affect my child's speech and language development?
8. Where can I get my child's speech and language development assessed?
9. What could have caused my child's hearing loss?
10. Can my child hear my voice without a hearing aid?
11. Can my child hear my voice with a hearing aid?

Questions you may wish to ask about cochlear implants or hearing aids:

1. Does my child need a hearing aid? What are my choices?
2. Should he/she have a hearing aid in both ears?
3. How much do hearing aids cost?
4. Can I get help to pay for the hearing aids?
5. Can you help me contact a program that can lend me hearing aids?
6. What will my child hear with the hearing aids?
7. When should my child wear hearing aids?
8. How often will my child need new hearing aids or parts?
9. What are the parts of a hearing aid that may need to be replaced?
10. What should I do if my child does not want to wear hearing aids?
11. With my child's hearing loss, should I consider a cochlear implant?
12. Where can I go for more information regarding cochlear implants?

Other questions you may want to ask about hearing loss:

1. How do I describe the results of these hearing tests to family members?
2. What are some tips for working with my child at home?
3. Are there other resources you think I would benefit from knowing about?

**OTOLARYNGOLOGIST (EAR, NOSE, and THROAT SPECIALIST or ENT) or
OTOLOGIST (EAR SPECIALIST)**

An ear, nose, and throat (ENT) doctor, also called an otolaryngologist, can tell you if there is a medical condition in your child's outer, middle, or inner ear that is causing the hearing loss by asking questions, referring for a pediatric hearing evaluation and doing a medical examination.

The doctor can also answer your questions about medical or surgical treatments. This will help ensure that intervention occurs within the “1-3-6” timeline (hearing screening before 1 month of age, hearing diagnostic audiological evaluation before 3 months of age, and early intervention before 6 months of age).

An ENT who has training and experience to evaluate and treat **infants and young children** will offer the best care for your baby. Some ENT physicians may focus primarily on adult patients.

Questions you may wish to ask your child’s Otolaryngologist (ENT):

1. Do you have experience in evaluating and treating babies and children with hearing loss?
2. Do you have the most recent report from my child’s audiologist (hearing specialist)?
3. What type of hearing loss does my child have (Sensorineural, conductive, or mixed)? Please explain the terms.
4. Should I make appointments with other health professionals? For example, an eye doctor or a geneticist?
5. Would you suggest genetic counseling for our family?
6. Are there other tests that my child needs? For example, brain scans (CT, MRI); heart tests (EKG); and blood or urine tests, or both. What will these tests tell you about my child’s hearing loss?
7. Can you tell if my child’s hearing loss will change or get worse?
8. Is there some cause for my child’s hearing loss?
9. How do I describe these results to family members?
10. What treatments are available? For example, ear tubes, other surgery, or cochlear implants?
11. Would my child benefit from a hearing aid? If so, how?
12. Do I need a form signed by a healthcare professional to allow my child to be fitted with hearing aids?
13. Is my child a candidate for a cochlear implant? Where can I go for more information?

14. How often will we meet with you, one time or ongoing?



FAMILY SERVICE COORDINATOR - PART C (applies to children birth to three years of age)

Children with hearing loss typically need early intervention services.

The Family Service Coordinator (FSC) works for the child development center in your regional area or city. The FSC is responsible for scheduling a developmental assessment for your child at a time and place that is convenient for your family. Your FSC may or may not have specialized training or knowledge about serving children with hearing loss, but the FSC can still assist with the assessment process and coordinate with other professionals who do have expertise in hearing loss. After the developmental assessment is completed, you and the Family Service Coordinator will determine a convenient date, time and place for the Individual Family Service Plan (IFSP) team to meet and develop the IFSP for your family/child. The IFSP is a legal written document, required under the Individuals with Disability Education Act (IDEA - Part C). The IFSP describes the supports and services necessary to meet the unique needs of your family as related to your child who is deaf/hard of hearing. The IFSP document is reviewed every six months by your IFSP team. It is important to know that you are an integral part of the IFSP team. Your Family Service Coordinator is employed by your local Child Development Center.

WEII PLUS (Wyoming Early Intervention Initiative) COORDINATOR

The Wyoming Early Intervention Initiative (WEII) Plus Coordinator is a member of the Wyoming Early Intervention Initiative Core Team. The coordinator has experience and skills in the areas of hearing loss, speech/language development, auditory development, child development, sign language and literacy. The WEII Plus Coordinator provides mentoring and guidance to the WEII Plus Facilitators throughout the state. These facilitators, who are speech language pathologists, teachers of the deaf, or audiologists, deliver the on-going early intervention program (WEII Plus Program) to families with infants and toddlers (birth to 3 years of age) who are deaf/hard of hearing.

The WEII Plus Coordinator will offer mentoring and support to the facilitators in working through providing best practice strategies, resources to share with families, understanding the potential impact a hearing loss may have on development and how to journey with families, guiding and supporting their decisions. The WEII Plus Coordinator shares responsibility for providing the needed training to the facilitators as they implement the WEII Plus Program.

WEII PLUS FACILITATOR

The Family Service Coordinator will connect you with a WEII Plus facilitator. The facilitator plays a critical role in the success of the WEII Plus Program. The professional in the facilitator role will be either a speech language pathologist, teacher of the deaf/hard of hearing, or audiologist. This person will likely have experience or is interested in working with infants and toddlers who are deaf/hard of hearing and will work closely with the WEII Plus Coordinator. The facilitator will receive training, mentoring and guidance to ensure the delivery of highly qualified services to families with children birth to three years of age who are deaf or hard of hearing.

**Intervention services are provided to families at no cost.*

Questions you may wish to ask their child's Family Service Coordinator, WEII Plus Coordinator and WEII Plus Facilitator:

1. What is early intervention? What can you do for my child? What services do you provide?
2. Why is it so important for my child to start intervention this early?
3. How much will early intervention services cost?
4. How will the family service coordinator work with the Wyoming Early Intervention Initiative (WEII) Program and the WEII Plus Coordinator?
5. Does your program have staff trained to work with very young infants and toddlers with hearing loss, for all communication methods?

6. How can my child learn to communicate? Can you tell me about sign language? Can you tell me about the different ways my child can learn to talk?
7. Does your program have staff trained to work with very young infants and toddlers with hearing loss, for all communication methods?
8. How much time will we spend in early intervention activities?
9. Where will the intervention activities be provided?
10. Where can I learn more about children with hearing loss? How can I meet other families who have young children with hearing loss?
11. How should I work with my child's team of professionals (such as my child's audiologist, speech language pathologist, early childhood educator, etc.) to ensure that all our efforts are coordinated?
12. What other resources do you offer? Can you suggest any other resources in the community for our family?
13. What will happen when my child turns three years old and is too old for your program?



SPEECH / LANGUAGE PATHOLOGIST or SPEECH THERAPIST

If your child has a hearing loss, you will likely work with a speech-language pathologist/therapist (SLP). The SLP will help your family decide the best therapy approach for your child. The therapy practices used with a child who is deaf/hard of hearing differ from those used with a child who has typical hearing. Some SLP's focus on listening and spoken language only, while others focus on using both spoken language and sign language.

The SLP who has **training** and **experience** to evaluate and provide services to infants and young children who are deaf/hard of hearing will offer the most appropriate services for your child.

Of note, your child's speech, language, pathologist may also be your WEII Plus Facilitator.

Questions you may wish to ask your child's speech language pathologist/speech therapist:

1. What kind of training and experience do you have working with children who are deaf or hard of hearing? What age group of children have you worked with?
2. What communication option(s) do you use in therapy (for example: Signing Exact English (SEE), American Sign Language (ASL), Cued Speech, Auditory-Verbal, etc.)? What is your experience and comfort level using these communication options? Please explain.
3. How will you assess the progress of my child's speech and language development? How often will you monitor my child's progress? What progress monitoring tools will you use?
4. How will I participate in my child's early intervention speech language therapy sessions?
5. How do you determine the amount of speech language services my child will need/receive?
6. Can I observe a speech therapy session with another child who has hearing loss?
7. Can you tell me about other ways I can learn about the different types of communication options – books, videotapes, films, classes, websites, and courses?
8. What suggestions do you have for supporting my child's development and use of communication in all settings? (i.e., home, daycare, grandparents' home, etc.)?
9. Have you had experience working with a young child with hearing devices? (example: cochlear implant, hearing aids, bone anchored devices, remote microphones)

10. What is your personal bias regarding communication options for children who are deaf/hard of hearing?
11. Are you able to support **my** choice of communication option if it is not **your** preferred option?
12. Do you know sign language? If so, how would you describe your skill level?

GENETICIST:

A “genetics team” is made up of a clinical geneticist, a genetic counselor, and other health care professionals. A clinical geneticist is a doctor who specializes in diagnosing and caring for people with genetic conditions. A genetic counselor is a healthcare professional who talks with people about the risk for genetic conditions and provides counseling and support. Members of the genetics team work together during a genetics exam.

The purpose of a genetics exam or genetic testing is to find out if the cause of your child’s hearing loss is genetic. About half of all hearing loss in babies is genetic. This means that the hearing loss is caused by changes in genes. Genes contain the instructions that tell a person’s cells how to grow and work. Sometimes a change in a gene can cause hearing loss. Hearing loss can also be caused by infections, premature birth, and other factors in the environment. For many children, the cause of hearing loss is not known.

Members of the genetics team will ask you questions and give your child a thorough physical exam to try to identify the cause of your child’s hearing loss. They may recommend that your child have a blood test. They may also ask that you have a blood test. They may suggest that your child see another doctor or specialist to help them better understand the cause of your child’s hearing loss. Knowing the cause might help you and your child’s doctors better understand your child’s health care needs as well as assist your family’s early intervention team best serve your child. It might also give you and your family information about the chance of having other children with hearing loss. Sometimes the cause of a child’s hearing loss cannot be found, even if the child has a genetic evaluation.

The genetics team will work together to offer the best advice and care for you and your child.

Questions you may wish to ask your child’s genetics counselor:

1. Will a genetic exam and genetic testing tell me the cause of my child’s hearing loss? What are some common genetic causes of hearing loss?
2. Why should I try to find out the cause of my child’s hearing loss? How can this information help my child?

3. What will the results of genetic testing tell me? Does a negative test result mean that my child's hearing loss is not genetic?
4. Can the results of genetic testing tell me if my child's hearing loss will get better or worse?
5. How will genetic tests be done? What other kinds of tests might be done to find out the cause of my child's hearing loss?
6. Will my child need to come back to your office after testing? If so, why?
 - a. to know if members of my family have had hearing loss and what type they had? How can hearing loss be inherited?
7. If no one in my family has hearing loss, how can my child's hearing loss be genetic?
8. Should my other children have genetic testing, too? Why?
9. If I have another child, what is the chance that he or she will also have hearing loss?
10. Should I share test results with other members of my family? Could other people in my family also have children with hearing loss?
11. Where can I learn more about genetic testing for hearing loss? How can I meet other families who have children with hearing loss?



TEACHER OF THE DEAF

The role of the Teacher of the Deaf/Hard of Hearing (TOD) is to assist your family in learning strategies to meet your child's learning, communication, social, and self-advocacy needs. TODs are specially trained in the unique area of education for children with hearing loss. They can provide specialized, research-based early intervention and instruction specific to children who are deaf/hard of hearing. The role of the TOD can be tailored to your child's needs including providing early language and literacy instruction, sign language training (if this is a chosen communication approach), technology information, best practices for communication, and can serve as a connection between other team members, schools and various community agencies and professionals providing services to your child and family.

Of note, your child's teacher of the deaf/hard of hearing may also be your WEII Plus Facilitator.

GUIDE BY YOUR SIDE - PARENT GUIDE

Guide By Your Side (GBYS) is a program offered through Wyoming Families for Hands & Voices. GBYS offers unbiased parent support provided by trained parent guides whose children are also deaf/hard of hearing. GBYS began in Wyoming in June 2018 and currently serves families of newly diagnosed children. Parent Guides work directly with families who have recently learned of their child's hearing loss. Families with older children also benefit from support that comes from a parent guide who has walked a similar path and can share from direct experience. The goal of GBYS is to help engage the circle of support which includes early intervention providers/teachers, medical professionals, and parents supporting the best possible outcomes for children and families.

ADULT ROLE MODELS WHO ARE DEAF/HARD OF HEARING

Many families find it helpful to meet adults who are deaf/hard of hearing. These individuals can share personal experiences and perspectives, which can help answer some questions you may have about your child growing up deaf/hard of hearing. Parents have often reported that after meeting a role model they have a positive perspective on their child's future!

OTHER PROFESSIONALS

Your child may have other physiological impacts that require expertise of another therapist. Some of the frequently utilized services are those of an occupational therapist (OT), physical therapist (PT), social worker, or teacher of the visually impaired.

Tracking Your Team

WHO'S WHO - PROFESSIONALS IN YOUR CHILD'S LIFE

Once your child has been diagnosed with a hearing loss, you will be introduced to many people who are available to help you and your child. Keeping a list of Who's Who may help you to remember each person and their role. Some families have found it helpful to make copies of the Who's Who List and distribute it to their team members. Keep in mind not all of these professionals may be involved with your family. You and your child's needs determine the professionals who are involved.

Pediatric Audiologist	Guide By Your Side Parent Guide
Phone Number	Phone Number
Email	Email
Family Service Coordinator	WEII Plus Coordinator
Phone Number	Phone Number
Email	Email
WEII Plus Facilitator	Wyoming Early Detection and Intervention (EHDI Program)
Phone Number	Phone Number: (307) 721-6212
Email	Email: info@wyomingehdi.org

Speech Language Pathologist	Teacher of the Deaf/Hard of Hearing
Phone Number	Phone Number
Email	Email
Early Childhood Special Education Teacher	Physical Therapist
Phone Number	Phone Number
Email	Email
Occupational Therapist	Other
Phone Number	Phone Number
Email	Email

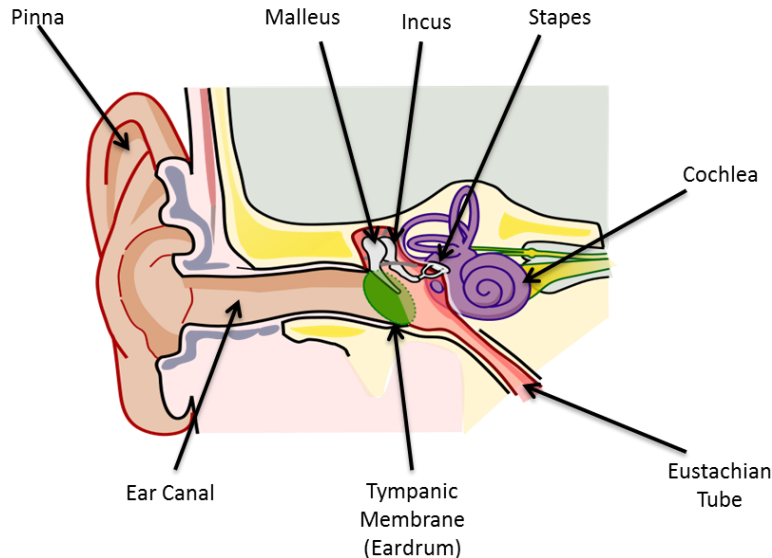
Deaf/Hard of Hearing (D/HH) Role Model	Wyoming Families for Hands & Voices
Phone Number	Phone Number: (307) 780-6476
Email	Email: wendy@wyhandsandvoice.org
Wyoming Department of Education (WDE) Outreach Services for the Deaf/Hard of Hearing (D/HH)	Primary Care Physician
Phone Number	Phone Number
Email	Email
Ear, Nose, and Throat (ENT) Physician	Other
Phone Number	Phone Number
Email	Email



Hearing & Hearing Loss

How We Hear

Hearing is one of the five senses and helps us understand the world around us. Did you know your ears are fully developed at birth? In fact, you are able to respond to sounds before you are born! After birth, babies use what they hear to help them develop speech (talking), language, social, and cognitive skills. In fact, hearing during the first three years of a child's life is the most critical period for auditory brain development. So, what makes up the ear? Well, there are three parts: the outer, middle, and inner ear.



The Outer Ear: Catch the Wave

The outer ear includes the **pinna** or auricle (**or-ih-kul**), and is the part of the ear people can see. The outer ear's main job is to collect sounds, whether they're your friend's whispers or a barking dog.

The outer ear also includes the ear canal, where earwax is produced. Earwax protects and helps clean the canal by making chemicals that fight off infections that could hurt the skin inside the ear canal and collecting dirt.

The Middle Ear: Good Vibrations

After sound waves enter the outer ear, they travel through the ear canal and make their way to the middle ear. To do it needs the eardrum, which is a thin piece of skin stretched tight like a drum. When sound waves reach the eardrum, they cause the eardrum to vibrate, which then moves the **ossicles** (**ah-sih-kulz**). What are ossicles? They are the three tiniest, most delicate bones in your body. They include:

- **malleus** (**mah-lee-us**), which is attached to the eardrum and means "hammer" in Latin
- **incus** (**in-kus**), which is attached to the malleus and means "anvil" in Latin
- **stapes** (**stay-pee-z**), the smallest bone in the body, is attached to the incus and means "stirrup" in Latin

As these bones move, they send the vibration along on its journey into the inner ear.

The Inner Ear: Nerve Signals Start Here

Sound is sent from the ossicles and into the **cochlea** (**ko-klee-uh**), a small, curled tube in the inner ear. The

cochlea is liquid-filled, which is set into motion, like a wave, when the ossicles vibrate. This then causes tiny hairs on the cells lining the cochlea to move, creating nerve signals that are then sent to the brain and processed as sound.

Fun fact! Your inner ear also helps control your balance through the **semicircular canals**, **utricle**, and **sacculle**.

Hearing Loss

Hearing loss can happen at any point in life. Did you know that 1-3 in every 1,000 babies are born with hearing loss? Some hearing loss may not develop until a child is older, and some adults lose their hearing as well.

Sometimes hearing loss is due to genetics, a virus, or when a certain part of the ear does not work or develop the way it should. Sometimes hearing loss develops from listening to loud noises, such as listening to loud music on our phones, a concert, lawn mowers, guns, etc. Sometimes hearing loss happens just because we are getting older, and sometimes we don't know what caused a hearing loss.

Hearing Evaluations

More than one audiological evaluation, or hearing test is needed to determine exactly what your child can and cannot hear. During those tests, a test battery, or many different tests, are used. Each of the individual tests provides you, your audiologist, and your physician with information about different aspects of your child's hearing. Think of this as solving a mystery; each test provides a clue or an important piece of information about your child's hearing. Below are the typical tests that may be completed on your child during their appointment(s):

1. **AUDITORY BRAINSTEM RESPONSE (ABR)** This is a non-invasive, painless test administered while the child is sleeping naturally. Electrodes are placed on the child's earlobes, forehead, and on the top of the head. An auditory signal is sent into the child's ear and the response of the brainstem to that signal is measured. An ABR provides information to estimate the degree and type of hearing loss. It tells us how efficiently sounds are transmitted through the ear to the brain.
2. **AUDITORY STEADY STATE RESPONSES (ASSR):** Like the ABR, the ASSR is a measure of the brainstem's responses to specific auditory stimuli. This non-invasive, painless test is administered while the child is sleeping naturally. ASSR technology offers the audiologist an additional way to determine your child's hearing across different frequencies (sounds). The equipment has higher upper limits than traditional ABR equipment, thus allowing the audiologist to more accurately differentiate between severe and profound hearing levels in infants.
3. **OTOACOUSTIC EMISSIONS (OAE):** This is a quick, non-invasive test to determine if the hair cells of the cochlea are responding to an auditory stimulus. These responses are known as OAEs. If there are present OAEs, that can help to rule out significant hearing

loss. If there are absent OAEs, that means hearing loss cannot be ruled out and further testing is needed.

4. **TYMPANOMETRY/IMMITTANCE:** This non-invasive test is used to identify how the middle ear is functioning. This involves putting a small probe into the child's ear canal. The results of this test give the audiologist information regarding how well the eardrum (tympanic membrane) is moving, whether or not there is negative middle ear pressure and if there are perforations in the ear drum. Infants should be evaluated using a high frequency probe tone. Acoustic reflexes should also be included while conducting immittance testing.

Tympanometry results may suggest the presence of middle ear fluid or a perforated eardrum. This test is reliable on children older than 6 months of age. Infants younger than 6 months of age, should be evaluated using a high frequency probe tone. Evaluation of acoustic reflexes should also be included while conducting immittance testing.

5. **BEHAVIORAL TESTING:** When your child is old enough to demonstrate a recognizable behavioral response to sound, the audiologist will test your child in a sound booth. The response to sound at different frequencies will be recorded on the audiogram. This test may use different sounds, speech and/or tones, and is useful in determining precisely what your child hears at specific frequencies. Additionally, testing will monitor any benefit from amplification. It is important to gather information about how your child responds to both tones and speech stimuli. There are different methods of behavioral testing that can be used, based on your child's age and development. They include the following:

- **BEHAVIORAL OBSERVATION AUDIOMETRY (BOA)** The audiologist watches for changes in the baby's behavior in response to sound.

- **VISUAL REINFORCEMENT AUDIOMETRY (VRA)** The audiologist uses a toy that lights up when the child looks at it in response to hearing a sound. This test is often used with young children between 6 months and 2 years of age.

- **PLAY AUDIOMETRY** The child responds to a sound with an action such as dropping a block in a bucket or putting a ring on a stick.

All of the individual audiologic tests discussed above may not be completed during one appointment, due to time constraints, age of the child, what is needed that day, and if the child is able to learn the task. Because of this, it is important you return for any and all follow up appointments. It is also important to monitor your child's hearing over time, so that any changes can be caught as soon as possible. If your child is found to have hearing loss, especially during the first year after their identification, there will be many hearing appointments. A typical monitoring schedule during the first year after identification ranges from three-six months. However, your audiologist should advise you as to the schedule for your child's appointments. Over time, hearing evaluations will give additional information regarding:

- What your child hears at various frequencies
- The benefit your child is receiving from amplification
- If your child's hearing level is stable
- The amount of time your child is using amplification
- Adjustment of the amplification, as needed
- Hearing aid function and programming
- Listening checks
- Checking earmold fit and taking new earmold impressions, if needed
- Functional measures to document development of auditory skills

Lastly, it is important to note, if your child is diagnosed with hearing loss, they must undergo an otologic exam with a physician specializing in the ear, such as a pediatric ear, nose, and throat (ENT) specialist. They will help to determine if, medically, your child can be fit with hearing amplification. They will also help to examine the possible cause of the hearing loss.

Types of Hearing Loss

If your child is diagnosed with a hearing loss, the audiologist will be able to identify the type of hearing loss. The list below describes the 4 different types of hearing loss:

- **SENSORINEURAL HEARING LOSS (SNHL)** This results from ineffective hair cells found in the inner ear or cochlea. A sensorineural hearing loss results in difficulty hearing loudness and even clarity of sounds and speech. This loss can range from mild to profound and can be either unilateral (one ear) or bilateral (both ears). Medical or surgical interventions are generally not able to correct this. Sensorineural hearing loss is a permanent hearing loss, however, cochlear implants may be effective.
- **CONDUCTIVE HEARING LOSS** A conductive hearing loss is associated with the functions of the outer or middle ear. This hearing loss is due to the failure of sound waves to reach the inner ear. In young children, a conductive loss is often associated with fluid in the middle ear which causes a change in hearing levels (otitis media). Another common cause of conductive hearing loss in infants is bilateral atresia and/or microtia. This condition affects the loudness or intensity of the auditory signal. Many kinds of conductive hearing loss in children can be treated medically or surgically. In some cases, a bone conduction hearing aid may be prescribed by your audiologist.
- **MIXED HEARING LOSS** A mixed hearing loss is some combination of a conductive and a sensorineural hearing loss. This could require both medical treatment and amplification.
- **AUDITORY NEUROPATHY SPECTRUM DISORDER (ANSO)** Auditory neuropathy is identified when the individual has normal outer hair cell function (as

measured by OAE) and abnormal neural function at the status of the VIIIth nerve (measured by ABR). Sound enters the inner ear typically but the transmission of signals from the inner ear to the brain is affected. This disorder is identified by a combination of OAE and ABR technology. It can affect people of all ages, from infancy to adulthood. The subsequent hearing level may fluctuate from mild to severe-profound.

Degrees of Hearing Loss and Potential Effects of Hearing Loss

<u>Degree of Loss</u>	<u>Decibels</u>	<u>Potential Effects</u>
Minimal Hearing Loss	16-25 dB	A minimal loss of some sounds. May have difficulty hearing quiet or distant speech especially in noisy environments.
Mild Hearing Loss	26-40 dB	Can hear most speech sounds but likely to miss fragments of words, especially those that contain “s”, “f”, and “th”. With proper amplification, likely to understand all spoken communication especially at close distances.
Moderate Hearing Loss	41-55 dB	Without amplification, 50-100% of speech sounds may be missed which may affect speech development unless optimally amplified. Proper amplification should enable listener to hear and discriminate all sounds.
Moderately Severe	56-70 dB	Conversation cannot be understood, unless the intensity is very loud. Age of amplification, consistency of use and intervention will determine speech intelligibility and/or language development.
Severe Hearing Loss	71-90 dB	Without amplification, may be aware of loud voices near the ear. Spoken language will not develop spontaneously unless intervention occurs.. With optimal amplification, should be able to detect all the sounds of speech and identify environmental sounds.
Profound Hearing Loss	91 db or greater	Aware of vibrations more than tonal pattern. May rely on vision rather than hearing as the primary avenue for communication and learning. Speech and oral language will not develop spontaneously without amplification and intervention. Speech intelligibility often greatly reduced and atonal voice quality likely.

The Relationship of Hearing Loss to Listening and Learning Needs

16-25 dB HEARING LOSS

Possible Impact on the Understanding of Language and Speech	Possible Social Impact	Potential Educational Accommodations and Services
<ul style="list-style-type: none"> • Impact of a hearing loss that is approximately 20 dB can be compared to ability to hear when index fingers are placed in your ears. • Child may have difficulty hearing faint or distant speech. At 16 dB student can miss up to 10% of speech signal when teacher is at a distance greater than 3 feet. • A 20 dB or greater hearing loss in the better ear can result in absent, inconsistent or distorted parts of speech, especially word endings (s, ed) and unemphasized sounds. • Percent of speech signal missed will be greater whenever there is background noise in the classroom, especially in the elementary grades when instruction is primarily verbal and younger children have greater difficulty listening in noise. • Young children have the tendency to watch and copy the movements of other students rather than attending to auditorily fragmented teacher directions. 	<ul style="list-style-type: none"> • May be unaware of subtle conversational cues which could cause child to be viewed as inappropriate or awkward. • May miss portions of fast-paced peer interactions that could begin to have an impact on socialization and self concept. • Behavior may be confused for immaturity or inattention. • May be more fatigued due to extra effort needed for understanding speech. 	<ul style="list-style-type: none"> • Noise in typical classroom environments impede child from having full access to teacher instruction. Will benefit from improved acoustic treatment of classroom and sound-field amplification. • Favorable seating necessary. • May often have difficulty with sound/letter associations and subtle auditory discrimination skills necessary for reading. • May need attention to vocabulary or speech, especially when there has been a long history of middle ear fluid. • Depending on loss configuration, may benefit from low power hearing aid with personal FM system. • Appropriate medical management necessary for conductive losses. • Inservice on impact of “minimal” 16 – 25 dB hearing loss on language development, listening in noise and learning, required for teacher.

Moderate (41-55 dB) HEARING LOSS

Possible Impact on the Understanding of Language and Speech	Possible Social Impact	Potential Educational Accommodations and Services
<ul style="list-style-type: none"> • Consistent use of amplification and language intervention prior to age 6 months increases the probability that the child's speech, language and learning will develop at a normal rate. • Without amplification, child may understand conversation at a distance of 3-5 feet, if sentence structure and vocabulary are known. • The amount of speech signal missed can be 50% or more with 40 dB loss and 80% or more with 50 dB loss. • Without early amplification the child is likely to have delayed or disordered syntax, limited vocabulary, imperfect speech production and flat voice quality. • Addition of a visual communication system to supplement audition may be indicated, especially if language delays and/or additional disabilities are present. • Even with hearing aids, child can "hear" but may miss much of what is said if classroom is noisy or reverberant. • With personal hearing aids alone, ability to perceive speech and learn effectively in the classroom is at high risk. • A personal FM system to overcome classroom noise and distance is typically necessary. 	<ul style="list-style-type: none"> • Barriers build with negative impact on self-esteem as child is accused of "hearing when he/she wants to," "daydreaming," or "not paying attention." • Communication will be significantly compromised with this degree of hearing loss, if hearing aids are not worn. • Socialization with peers can be difficult, especially in noisy settings such as cooperative learning situations, lunch or recess. • May be more fatigued than classmates due to effort needed to listen. 	<ul style="list-style-type: none"> • Consistent use of amplification (hearing aids+ FM) is essential. • Needs favorable classroom acoustics, seating and lighting. • Consultation/program supervision by a specialist in childhood hearing impairment to coordinate services is important. • Depending on early intervention success in preventing language delays, special academic support will be necessary if language and educational delays are present. • Attention to growth of oral communication, reading, written language skills, auditory skill development, speech therapy, self-esteem likely. • Teacher inservice required with attention to communication access and peer acceptance.

**Moderately-Severe (56-70
dB) HEARING LOSS**

Possible Impact on the Understanding of Language and Speech	Possible Social Impact	Potential Educational Accommodations and Services
<ul style="list-style-type: none"> • Even with hearing aids, child will typically be aware of people talking around him/her, but will miss parts of words said resulting in difficulty in situations requiring verbal communication (both one-to-one and in groups). • Without amplification, conversation must be very loud to be understood; a 55 dB loss can cause a child to miss up to 100% of speech information without functioning amplification. • If hearing loss is not identified before age one year and appropriately managed, delayed spoken language, syntax, reduced speech intelligibility and flat voice quality is likely. • Age when first amplified, consistency of hearing aid use and early language intervention strongly tied to success of speech, language and learning development. • Addition of visual communication system often indicated if language delays and/or additional disabilities are present. • Use of a personal FM system will reduce the effects of noise and distance and allow increased auditory access to verbal instruction. • With hearing aids alone, ability to understand in the classroom is greatly reduced by distance and noise. 	<ul style="list-style-type: none"> • If hearing loss was late- identified and language delay was not prevented, communication interaction with peers will be significantly affected. • Children will have greater difficulty socializing, especially in noisy settings such as lunch, cooperative learning situations, or recess. • Tendency for poorer self-concept and social immaturity may contribute to a sense of rejection; peer inservice helpful. 	<ul style="list-style-type: none"> • Full time, consistent use of amplification (hearing aids+ FM system) is essential. • May benefit from frequency transposition (frequency compression) hearing aids depending upon loss configuration. • May require intense support in development of auditory, language, speech , reading and writing skills. • Consultation/supervision by a specialist in childhood hearing impairment to coordinate services is important. • Use of sign language or a visual communication system by children with substantial language delays or additional learning needs, may be useful to access linguistically complex instruction. • Note-taking, captioned films, etc. often are needed accommodations. • Teacher inservice required.

Severe to Profound (71-90 dB & 91+ dB) HEARING LOSS

Possible Impact on the Understanding of Language and Speech	Possible Social Impact	Potential Educational Accommodations and Services
<ul style="list-style-type: none"> • The earlier the child wears amplification consistently with concentrated efforts by parents and caregivers to provide rich language opportunities throughout everyday activities and/or provision of intensive language intervention (sign or verbal), the greater the probability that speech, language and learning will develop at a relatively normal rate. • Without amplification, children with 71- 90 dB hearing loss may only hear loud noises about one foot from ear. • When amplified optimally, children with hearing ability of 90 dB or better should detect many sounds of speech if presented from close distance or via FM. • Individual ability and intensive intervention prior to 6 months of age will determine the degree that sounds detected will be discriminated and understood by the brain into meaningful input. • Even with hearing aids children with 71- 90 dB loss are typically unable to perceive all high pitch speech sounds sufficiently to discriminate them, especially without the use of FM. • The child with hearing loss greater than 70 dB may be a candidate for cochlear implant(s) and the child with hearing loss greater than 90 dB will not be able to perceive most speech sounds with traditional hearing aids. • For full access to language to be available visually through sign language or cued speech, family members must be involved in child's communication mode from a very young age. 	<ul style="list-style-type: none"> • Depending on success of intervention in infancy to address language development, the child's communication may be minimally or significantly affected. • Socialization with hearing peers may be difficult. • Children in general education classrooms may develop greater dependence on adults due to difficulty perceiving or comprehending oral communication. • Children may be more comfortable interacting with deaf or hard of hearing peers due to ease of communication. • Relationships with peers and adults who have hearing loss can make positive contributions toward the development of a healthy self-concept and a sense of cultural identity. 	<ul style="list-style-type: none"> • There is no one communication system that is right for all hard of hearing or deaf children and their families. • Whether a visual communication approach or auditory/oral approach is used, extensive language intervention, full-time consistent amplification use and constant integration of the communication practices into the family by 6 months of age will highly increase the probability that the child will become a successful learner. • Children with late-identified hearing loss (i.e., after 6 months of age) will have delayed language. • This language gap is difficult to overcome and the educational program of a child with hearing loss, especially those with language and learning delays secondary to hearing loss, requires the involvement of a consultant or teacher with expertise in teaching children with hearing loss. • Depending on the configuration of the hearing loss and individual speech perception ability, frequency transposition aids (frequency compression) or cochlear implantation may be options for better access to speech. • If an auditory/oral approach is used, early training is needed on auditory skills, spoken language, concept development and speech. • If culturally deaf emphasis is selected, frequent exposure to Deaf, ASL users is important. • Educational placement with other signing deaf or hard of hearing students (special school or classes) may be a more appropriate option to access a language-rich environment and free-flowing communication. • Support services and continual appraisal of access to communication and verbal instruction is required. • Note-taking, captioning, captioned films and other visual enhancement strategies are necessary; training in pragmatic language use and communication repair strategies helpful. • Inservice of general education teachers is essential.

71-90 dB & 91+ dB HEARING LOSS (continued)

Possible Impact on the Understanding of Language and Speech	Possible Social Impact	Potential Educational Accommodations and Services
<ul style="list-style-type: none"> • Child can "hear" but can have difficulty understanding in certain situations, such as hearing faint or distant speech, especially if poor ear is aimed toward the person speaking. • Will typically have difficulty localizing sounds and voices using hearing alone. • The unilateral listener will have greater difficulty understanding speech when environment is noisy and/or reverberant, especially when normal ear is towards the overhead projector or other competing sound source and poor hearing ear is towards the teacher. • Exhibits difficulty detecting or understanding soft speech from the side of the poor hearing ear, especially in a group discussion. 	<ul style="list-style-type: none"> • Child may be accused of selective hearing due to discrepancies in speech understanding in quiet versus noise. • Social problems may arise as child experiences difficulty understanding in noisy cooperative learning, or recess situations. • May misconstrue peer conversations and feel rejected or ridiculed. • Child may be more fatigued in classroom due to greater effort needed to listen, if class is noisy or has poor acoustics. • May appear inattentive, distractible or frustrated, with behavior or social problems sometimes evident. 	<ul style="list-style-type: none"> • Allow child to change seat locations to direct the normal hearing ear toward the primary speaker. • Student is at 10 times the risk for educational difficulties as children with 2 normal hearing ears and 1/3 to 1/2 of students with unilateral hearing loss experience significant learning problems. • Children often have difficulty learning sound/letter associations in typically noisy kindergarten and grade I settings. • Educational and audiological monitoring is warranted. • Teacher inservice is beneficial. • Typically will benefit from a personal FM system with low gain/power or a sound-field FM system in the classroom, especially in the lower grades. • Depending on the hearing loss, may benefit from a hearing aid in the impaired ear.

MID-FREQUENCY HEARING LOSS or REVERSE SLOPE HEARING LOSS

MID-FREQUENCY HEARING LOSS or REVERSE SLOPE

Possible Impact on the Understanding of Language and Speech	Possible Social Impact	Potential Educational Accommodations and Services
<ul style="list-style-type: none"> • Child can "hear" whenever speech is present but will <i>have</i> difficulty understanding in certain situations. • May have difficulty understanding faint or distant speech, such as a student with a quiet voice speaking from across the classroom. • The "cookie bite" or reverse slope listener will have greater difficulty understanding speech when environment is noisy and/or reverberant, such as a typical classroom setting. • A 25 - 40 dB degree of loss in the low to mid-frequency range may cause the child to miss approximately 30% of speech information, if unamplified; some consonant and vowel sounds may be heard inconsistently, especially when background noise is present. • Speech production of these sounds may be affected. 	<ul style="list-style-type: none"> • Child may be accused of selective hearing or "hearing when he wants to" due to discrepancies in speech understanding in quiet versus noise. • Social problems may arise as child experiences difficulty understanding in noisy cooperative learning situations, lunch or recess. • May misconstrue peer conversations, believing that other children are talking about him or her. • Child may be more fatigued in classroom setting due to greater effort needed to listen. • May appear inattentive, distractible or frustrated. 	<ul style="list-style-type: none"> • Personal hearing aids important but must be precisely fit to hearing loss. • Child likely to benefit from a sound-field FM system, a personal FM system or assistive listening device in the classroom. • Student is at risk for educational difficulties. • Can experience some difficulty learning sound/letter associations in kindergarten and 1st grade classes. • Depending upon degree and configuration of loss, child may experience delayed language development and articulation problems. • Educational monitoring and teacher inservice warranted. • Annual hearing evaluation to monitor for hearing loss progression is important.

HIGH FREQUENCY HEARING LOSS

Possible Impact on the Understanding of Language and Speech	Possible Social Impact	Potential Educational Accommodations and Services
<ul style="list-style-type: none"> • Child can "hear" but can miss important fragments of speech. • Even a 26 – 40 dB loss in high frequency hearing may cause the child to miss 20%-30% of vital speech information if unamplified. • Consonant sounds t, s, f, th, k, sh, ch likely heard inconsistently, especially in the presence of noise. • May have difficulty understanding faint or distant speech, such as a student with a quiet voice speaking from across the classroom and will have much greater difficulty understanding speech when in low background noise and/or reverberation is present. • Many of the critical sounds for understanding speech are high pitched, quiet sounds, making them difficult to perceive; the words: cat, cap, calf, cast could be perceived as "ca," word endings, possessives, plurals and unstressed brief words are difficult to perceive and understand. • Speech production may be affected. • Use of amplification often indicated to learn language at a typical rate and ease learning. 	<ul style="list-style-type: none"> • May be accused of selective hearing due to discrepancies in speech understanding in quiet versus noise. • Social problems may arise as child experiences difficulty understanding in noisy cooperative learning situations, lunch or recess. • May misinterpret peer conversations. • Child may be fatigued in classroom due to greater listening effort. • May appear inattentive, distractible or frustrated. • Could affect self concept. 	<ul style="list-style-type: none"> • Student is at risk for educational difficulties. • Depending upon onset, degree and configuration of loss, child may experience delayed language and syntax development and articulation problems. • Possible difficulty learning some sound/letter associations in kindergarten and 1st grade classes. • Early evaluation of speech and language skills is suggested. • Educational monitoring and teacher inservice is warranted. • Will typically benefit from personal hearing aids and use of a sound-field or a personal FM system in the classroom. • Use of ear protection in noisy situations is imperative to prevent damage to inner ear structures and resulting progression of the hearing loss.

FLUCTUATING HEARING LOSS

Possible Impact on the Understanding of Language and Speech	Possible Social Impact	Potential Educational Accommodations and Services
<ul style="list-style-type: none"> • Of greatest concern are children who have experienced hearing fluctuations over many months in early childhood (multiple episodes with fluid lasting three months or longer). • Listening with a hearing loss that is approximately 20 dB can be compared to hearing when index fingers are placed in ears. • This loss or worse is typical of listening with fluid or infection behind the eardrums. • Child can "hear" but misses fragments of what is said. Degree of difficulty experienced in school will depend upon the classroom noise level, the distance from the teacher and the current degree of hearing loss. • At 30 dB can miss 25-40% of the speech signal. • A child with a 40 dB loss associated with "glue ear" may miss 50% of class discussions, especially when voices are faint or speaker is not in line of vision. • Child with this degree of hearing loss will frequently miss unstressed words, consonants and word endings. 	<ul style="list-style-type: none"> • Barriers begin to build with negative impact on self esteem as the child is accused of "hearing when he/she wants to," "daydreaming," or "not paying attention." • Child may believe he/she is less capable due to understanding difficulties in class. • Typically poor at identifying changes in own hearing ability. With inconsistent hearing, the child learns to "tune out" the speech signal. • Children are judged to have greater attention problems, insecurity, distractibility and lack self esteem. • Tend to be non-participative and distract themselves from classroom tasks; often socially immature. 	<ul style="list-style-type: none"> • Impact is primarily on acquisition of early reading skills and attention in class. • Screening for language delays is suggested from a young age. • Ongoing monitoring for hearing loss in school, communication between parent and teacher about listening difficulties and aggressive medical management is needed. • Will benefit from sound-field FM or an assistive listening device in class. • May need attention to development of speech, reading, self esteem, or listening skills. • Teacher inservice is beneficial.

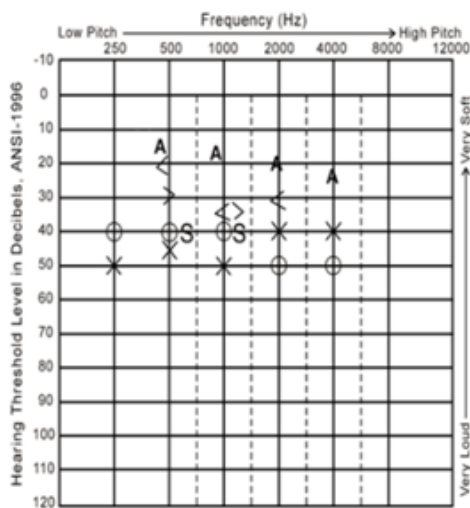
What Is An Audiogram?

An audiogram is a graph that is used to plot the results of your child's hearing evaluation. The softest level of loudness (intensity) your child responds to for each sound (frequency) tested is recorded on the audiogram. The symbols plotted on the audiogram shows the degree (amount) and configuration (shape) of the hearing loss. Audiograms will be available after each audiological evaluation completed with your child. The results on the audiogram may be obtained using electroacoustical responses (your child does not have to respond behaviorally i.e., turn their head). The results on the audiogram may be obtained using behavioral audiometry (your child DOES respond to a sound i.e., head turn).

Electroacoustical audiometry is used for infants. Behavioral audiometry is attempted when your child is approximately six months old. It is important for parents to understand that both electroacoustical and behavioral responses can be trusted for accuracy when the results are obtained by an audiologist who has training, experience and necessary equipment in working with infant, toddlers and preschoolers.

A clearer picture of your child's audiogram will be the result of testing sessions that occur over time. Infants, toddlers and preschoolers may fatigue during hearing evaluations, requiring multiple appointments. A comparison of your child's audiograms can be used to determine if your child's hearing loss is stable, progressive and the benefit received from amplification.

Below is an example of an audiogram with all of the possible symbols represented. Typically, only some of these symbols will appear on each of your child's audiograms.



- SYMBOLS ON AN AUDIOGRAM**
- X Hearing of the left ear without hearing aids
 - O Hearing of the right ear without hearing aids
 - S Represents the unaided hearing of the better ear
 - A Represents the hearing of the better ear with hearing aids on
 - < Bone conduction (sounds received through the bones of the skull) of the left ear
 - > Bone conduction of the right ear

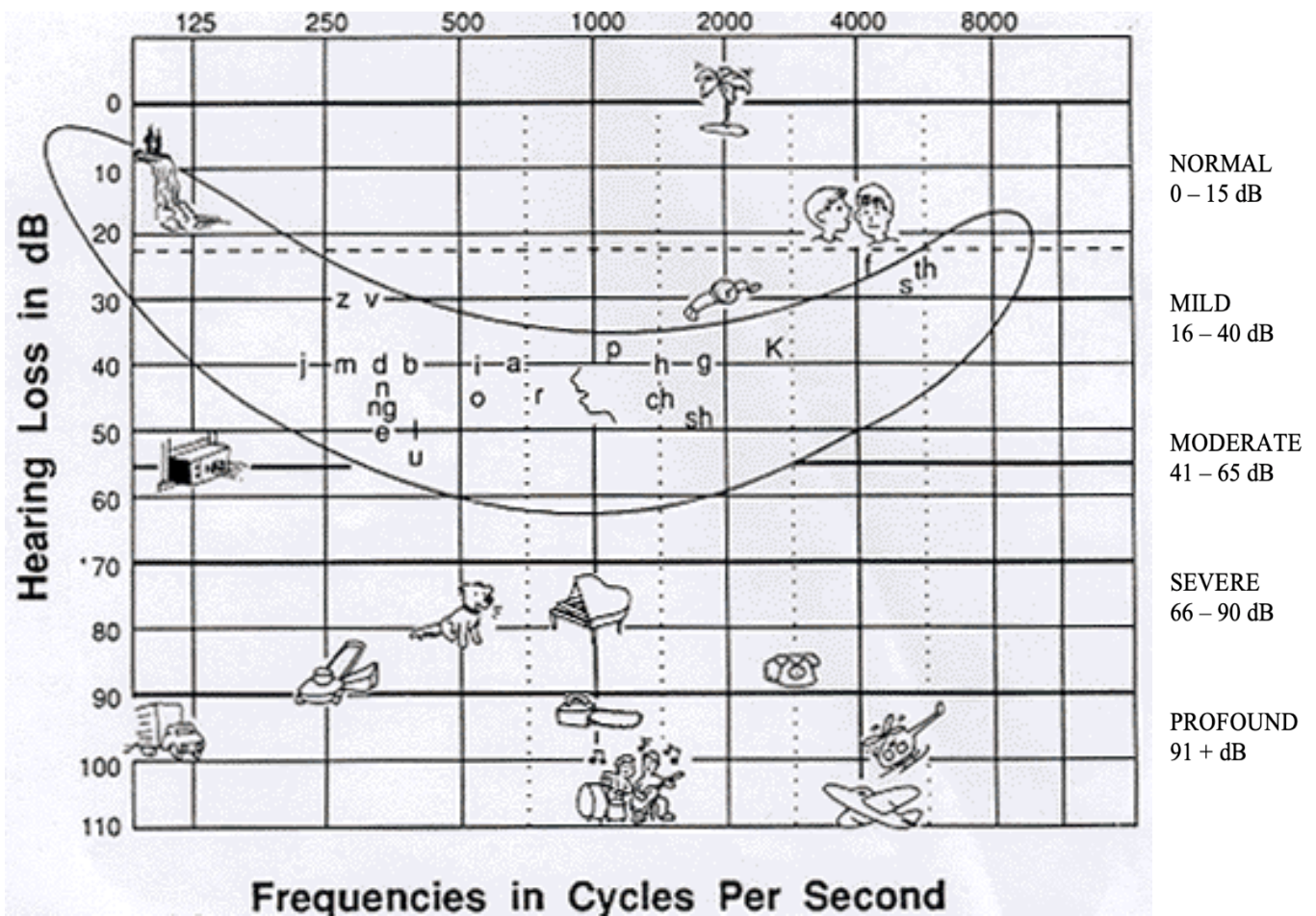
Familiar Sounds Audiogram: Speech Banana

The sounds we use to produce speech in conversation have frequencies and decibels. The most typical frequency and decibel for each speech sound has been graphed on an audiogram to provide information about what sounds can be heard at specific degrees of hearing loss. A child that can hear the sounds of speech will have a much easier time imitating, understanding and learning spoken language.

When all the sounds necessary for speech were initially graphed and a line was drawn

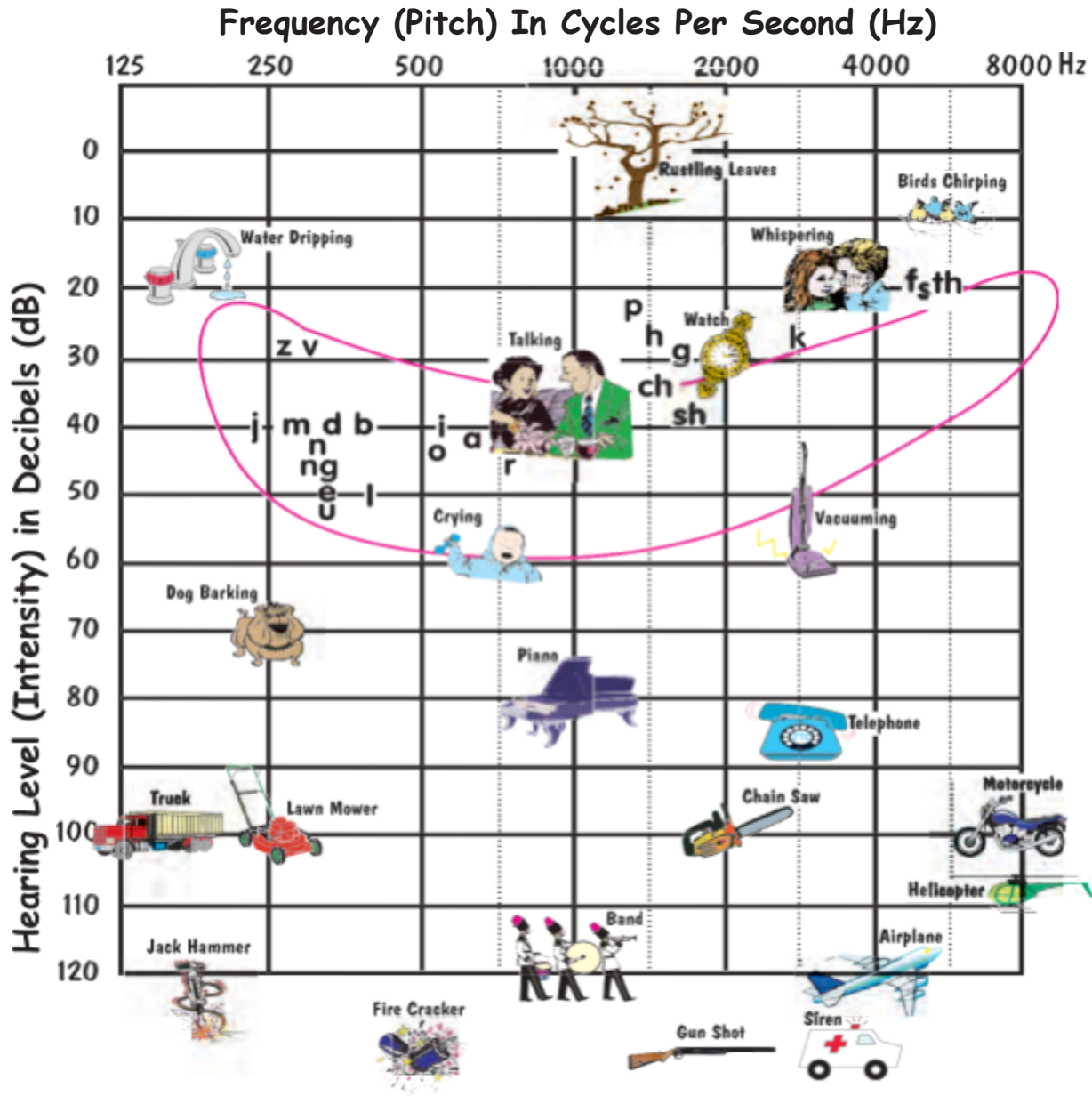
around them, the shape looked like a banana. The term "speech banana" was coined. This area is the target hearing area for children with hearing loss. If they are able to hear sounds within the speech banana when they are aided with hearing aids, there is a better chance they will understand that sound and be able to reproduce it in their speech.

The audiogram below contains drawings depicting typical sounds and where they fall on the audiogram. Jet planes, for instance, are loud, high frequency sounds, while wind rustling leaves is a much lower decibel sound. A child may be able to hear certain low frequency sounds such as [m] but not hear higher frequency sounds such as [s] and [sh]. Missing those sounds may change their understanding of what is being said.



Adapted from American Academy of Audiology, 2009.

Frequency Spectrum of Familiar Sounds



The speech sounds on this chart are only approximations. Speech sounds become loud or soft (intensity) depending on the distance between the speaker and listener. The low or high sound of a voice (pitch) will change depending on whether a man, woman or child is speaking.

Adapted from: American Academy of Audiology, www.audiology.org and Northern, J. & Downs, M. (2002).

Audiogram of familiar sounds; and Ling, D. & Ling, A (1978). **Aural Habilitation**



John Tracy Clinic, 806 West Adams Boulevard, Los Angeles CA 90007 2005

EXAMPLES OF SOUNDS	DECIBEL STATUS
Shotgun Blast	140 dB
Amplified Rock Band, Jet Airplane	120 dB
Noisy Kitchen, Subway Train	100 dB
Power Lawn Mower	95 dB
Food Blender, Noisy Exhaust Fan	90 dB
Vacuum Cleaner	87 dB
Garbage Disposal, Cocktail Party	80 dB
Dishwasher	70 dB
Refrigerator	45 dB
Normal Conversation	40 dB
Whisper	20 dB
Breathing	10 dB

The above chart will give you an idea of some of the sounds your child can hear without amplification. It is important to limit exposure to extremely loud sounds as they may cause additional damage to your child's hearing.

Devices Used By Children Who Are Deaf/Hard of Hearing

Hearing aids are designed to make sounds louder. How much your child benefits from hearing aid use depends on a variety of factors: degree of hearing loss, age of identification, how much and how often your child wears the hearing aids, etc. Even if your child is not showing a response to sound when hearing aids are first fitted, it does not mean that there is no benefit. It may take time for your child to learn what to do with this new found auditory information.

The hearing aid consists of a microphone, amplifier, and a receiver that boosts the loudness of sounds. There are different kinds of hearing aids, but most babies are fit with behind-the-ear (BTE) aids. BTEs are uniquely suited to the needs of young children as the earmold can be separated from the hearing aids and thus can easily be replaced to accommodate the needs of rapidly growing outer ears. BTEs are not easily damaged and come in bright colors for young children. Your audiologist will make recommendations for the most appropriate hearing aids for your child's hearing levels.

A **cochlear implant** is a small electronic device that can help provide a sense of sound to those who are profoundly deaf. A cochlear implant is a surgically implanted hearing device. The implant has an external portion that sits behind the ear. The external parts include a microphone, speech processor, and transmitter. Additionally, there is a second portion that is surgically placed under the skin. These internal parts include a receiver/stimulator and an electrode array. An

implant does not restore normal hearing, but can give a deaf person a useful representation of sounds in the environment and help that person to understand some speech. (NIDCD, 2017)



Behind the Ear Hearing Aid



Cochlear Implant



Bone Conduction Hearing Device

Bone Conduction Hearing Devices are used with some children with a conductive hearing loss or a mixed hearing loss. Additionally, some children with Unilateral Hearing Loss may be candidates to consider this technology. A Bone Conduction Hearing Device is an alternative to a regular hearing aid, and works by transferring the sound by bone vibration directly to the cochlea bypassing the outer and middle ear. Not all children with hearing loss are candidates for a Bone Conduction Hearing Device.

There are a variety of options and devices available to assist your child in gaining access to sounds and speech. Your child's individual needs should be discussed with your child's audiologist.

The Wyoming Early Intervention Initiative (WEII) supports the family's chosen mode of communication (i.e.: use of sign language, auditory verbal, total communication, etc.) The chosen mode of communication may impact whether or not the child is fitted with devices to help him or her to hear. The chosen mode of communication should be reviewed regularly with your child's Early intervention team when reviewing the Individual Family Service Plan (IFSP) (ages 0-2) or with the IEP team when reviewing your child's Individual Education Plan (IEP) (ages 3-21)..

If your family chooses to have your child fitted with an amplification device(s) to help your child gain access to sounds and speech, the more your child wears the device(s), the more opportunities he/she will be able to learn from the sounds your child hears. If chosen, the use of amplification is particularly important during these early years when the brain is developing rapidly. Infants benefit most when amplification is accessed as soon as possible after identification.

Typically hearing infants begin listening to sound while in utero. They hear spoken language all day every day. Babies with varying degrees of hearing loss need to have many opportunities to learn speech and language. Hearing devices can play a vital role in providing this access to your baby. Appropriately fitted device(s) allow your baby the opportunity to maximize the use of residual or usable hearing.

Hearing Aids and Feedback

Acoustic feedback is the squealing or whistling sound that you sometimes hear when something comes close to the hearing aid microphone. This causes amplified sound to be "fed back" into the hearing aid microphone. This is a frequent problem with infants as they are often in a position where their head is against another surface (i.e.: mom or dad's chest or car seat) Although sometimes annoying, feedback can alert you to several things. Feedback may occur when your child has outgrown the earmolds and the sound is leaking from behind the earmolds. Infants and toddlers grow at a rapid pace and you may find yourself replacing earmolds every few months (or sometimes every few weeks). Feedback can also be caused by cracks in the

earmold tubing. Feedback compromises the quality of sound your child is hearing and therefore needs to be eliminated as quickly as possible.



Here are a few suggestions for managing feedback:

- When nursing or feeding your baby, remove the hearing aid on the side closest to you
- When your baby is sleeping, remove the aids
- Replace the earmolds as your baby outgrows them
- Use an earmold cream to help in the retention of the mold in the ear canal (ex: Oto-firm)

If feedback problems persist, consult your audiologist.

How do I keep my child's hearing aid(s) on?

Parents understand the importance of keeping the hearing aids on and giving their child every opportunity to listen and learn. However, a one-year-old often times has a different opinion! Keeping hearing aids on can be challenging for parents. The hearing aids may “flop” forward because the baby's ears are so small or your baby may remove them as motor skills develop. These issues are largely developmental and will pass with time. However, in the interim, keeping the hearing aids on can be frustrating or stressful. This is normal and should improve with consistency and time. Take a deep breath and use the suggestions below.

- If the hearing aids are “flopping”, try two-sided wig or toupee tape to secure them behind your child’s ear. If the aids continue to flop, ask your audiologist to check the length of the earmold tubing.
- Try distracting your child with a toy or book when you put the hearing aids on.
- “Critter clips” can be purchased from your audiologist or online.. These clip onto the hearing aid and then onto your child’s clothing. If your child pulls the aids out, they will stay secured to the clothing and not end up in the car seat, the parking lot or under the couch.
- “Huggies”, consisting of small plastic tubing that wraps around the ear, can be purchased from your audiologist or online. Parents report that these are more effective with toddlers than with infants.
- Wearing caps with ties under the chin, helps keep hearing aids in place. For details or specific vendors, ask your child’s audiologist.
- Headbands with “pockets” for the hearing device to slip into, also help keep hearing aids in place. For details or specific vendors, ask your child’s audiologist.
- You may need to try several different items or tricks to help keep the hearing devices on your child before you find the right one that works for you and your child. .

REASONS A CHILD MIGHT REJECT HEARING AIDS

REASONS	SOLUTION
Are the aids working properly?	Get aids checked and repaired
Is the aid set properly? Are the batteries good?	Consult your audiologist Check and replace batteries
Do the earmolds fit properly? Do the aids fall off?	Use Oto-ease or Otofirm Experiment with different retention devices
Is the child sick? Is there an ear infection?	Leave the aids off until your child is well
Is the child too tired or excited when you put the aids in?	Wait until you are both calmer and not in a hurry
Do you have mixed emotions about the aids?	Your attitude about the aids may influence your child's willingness to wear them
Has hearing aid usage become a power struggle?	Talk to other parents for suggestions about how to handle this struggle

Lane, et al, 1997

How to do a Listening Check

If you listen to your child's hearing aids on a daily basis, you will become familiar with how they should sound and you will be able to detect any differences that would mean the hearing aids are in need of repair. If your child's hearing aids are not functioning properly, your child will not receive the much-needed benefits of amplification.

It is important that you check the hearing aids daily. You probably received a maintenance kit from your audiologist that included a dry aid kit, battery tester, stethoscope, and instruction book. Become familiar with the contents and uses of the items in this kit. Your baby cannot tell you if the hearing aid(s) is/are functioning properly, so it is important to get in the habit of listening to your child's hearing aids every day. You will want to check the battery every day. Even if the battery is working, there may be other problems with the aid that can only be detected with a listening check.

Listening Check Steps: Rechargeable Hearing Aids

1. Turn on the hearing aid by pressing down on the toggle switch and holding until you see a green/orange light flashing. The hearing aid is fully on when you hearing a jingle or the light goes solid.
2. Attach the hearing aid stethoscope to the opening of the earmold/dome
3. Hold the aid about 6" from your mouth and say a few words in the microphone.
4. If the hearing aid is linked to a phone, or the volume button is activated on the hearing aid, turn the volume up and down while saying some words.
5. Complete the Ling Six-Sound Test. This will allow you to listen to the sounds across the speech frequencies.
6. Place the hearing aid(s) in your child's ear(s).

Listening Check Steps: Battery-Operated Hearing Aids

1. Check the battery (If you are using a battery tester, it should register higher than 1.0).
2. Turn on the hearing aid by closing the battery door.
3. Attach the hearing aid stethoscope to the opening of the earmold/dome
4. Hold the aid about 6" from your mouth and say a few words into the microphone.
5. If the volume button is activated on the hearing aid, turn the volume up and down while saying some words.
6. Complete the Ling Six-Sound Test. This will allow you to listen to the sounds.
7. Place the hearing aid(s) in your child's ear(s).

Ling Six-Sound Test Instructions

1. Say the following sounds into the microphone of the hearing aid:
 - a. "oooo" as in boo
 - b. "ah" as in mama
 - c. "eee" as in bee
 - d. "sh" as in she
 - e. "s" as in snake
 - f. "mmm" as in me

What You Are Listening For:

1. The hearing aid should turn on
2. You should hear no scratch sound(s) or static.
3. The signal (your voice) should be clear, with no distortion
4. As you turn the volume up and down, you should hear the signal (your voice) get louder and quieter.

When performing a Listening Check or if you have questions or concerns about your child’s hearing aids, contact your child’s audiologist immediately.

SAMPLE: Hearing Aid Listening Check Chart

Use this chart to record your child's hearing aid use.

DAY	HOURS WORN	CHILD'S BEHAVIOR WITH AIDS	DAILY AID CHECK
SUNDAY			
MONDAY			
TUESDAY			
WEDNESDAY			
THURSDAY			
FRIDAY			
SATURDAY			

DAY	# OF HOURS WORN	CHILD'S BEHAVIOR W/ AMPLIFICATION	DAILY AID CHECK
Sunday	Wore aids 2 hours	Pulled left aid off about 4 times	Yes
Monday	2 hours in the am 2 hours in the pm	Still pulling aid out - frustrating!	Replaced battery
Tuesday	Did not wear aids - sick		
Wednesday	Still sick - no aids worn		
Thursday	3 hours in the morning 3 hours in the afternoon	Tolerated better - pulled out 3x	Yes - sounds great
Friday			
Saturday			

NOTES



Communication & Language

Communication

“Deafness is not about hearing; deafness is about communication.” Paul Ogden, *The Silent Garden* (1996)

Communication is much more than talking or signing. It involves crying, facial expressions, body language, gestures, eye gaze, vocalizations, babbling, words, and signs.

Communication means learning to recognize feelings and learning to understand thoughts. It means learning to connect with another person and involves expressing needs, wants, emotions, thoughts, and ideas.

All parents eagerly await their child’s first word, whether spoken or signed. However, long before the first word, children are communicating! These early communication signals are important first steps and this communication occurs before a child says or signs their first word. Responding to your child’s early communication will encourage your child to communicate even more! Remember, your child does not learn to communicate independently. Communication requires interaction – it requires you, your smile, your face, your commitment.

In order to enhance the development of early communication skills, you must be prepared to do several things:

- recognize your child’s early communication attempts (face, body, and voice)
- understand that your child is trying to tell you something
- respond to your child’s communication attempt in a way that encourages the communication to continue.

When using their body to communicate, your child may use eye gaze (looking at you, looking at an object, then looking back to you) or may use their whole body. They may smile or frown, or may use their hands to get your attention. They may use early gestures such as waving or pointing, and may also begin to do some hand babbling, if there has been exposure to sign language.

A child may use vocalizations to let you know their needs (such as a baby crying when hungry). Laughing may express pleasure and cooing vocalizations may be used to get your attention. As the child gets older vocal babbling may begin.

It is important to honor all of these early communication attempts. When you respond to your child in a positive way, you encourage more communication and lay the foundation for language learning.

Fostering Effective Communication	
Face to Face	Get on your child's level, or bring your child to your level. Face-to-face communication helps you gain your child's attention, makes your voice louder than background noise, allows your child to see your face, and promotes bonding.
Proximity	Close (with-in 3 feet) communication makes your voice louder than the background noise
Appropriate Rate of Speech or Sign	Parentese or motherese is a special way to talk to infants. It involves a slower rate of speech or sign, directs communication to the child, includes repetition, and uses short, simple phrases. To help any child learn language, adults must speak or sign clearly. This gives your child the opportunity to process language



Parent-Infant Bonding

Parent-infant bonding and the very earliest forms of communication are closely linked. Attachment, the feelings that bind one person to another, provides the foundation for early communication between you and your child. When you hold your baby, you are communicating your love and affection. This bonding of parent to child is the first and most basic attachment in life. It sets the stage for all attachments that follow. Most parents want their baby to grow up to be a happy, secure, healthy, eager to learn, loving, and caring person. The environment you provide will have a profound impact on how your baby develops. Babies need to experience warm, loving, interactive, attentive caring from mom, dad, and/or other caregivers. A nurturing environment provides more than food and clothing for your baby, it also provides the necessary emotional support. Your baby needs eye contact, cuddling and caressing so that they may grow

into an emotionally healthy person. When your baby experiences your affection, they respond! This bonding leads to trust and closeness, which becomes the foundation for emotional development and learning.

Approaches Used to Communicate

Many parents use a variety of approaches to meet their child's communication needs. It is important to remain flexible, observe your child, and make adjustments in your communication approach as needed. All methods of communicating require a commitment on the part of the parent. The commitment to communicating throughout your daily routines is vital to your child's language development.

Remember, no one way is best for all! Take the time you need to investigate options, ask questions, gather information, meet Deaf and Hard of Hearing adults, and discuss options with other parents.



Questions to ask when considering a communication mode:

- Have I considered my child's unique abilities and characteristics?
- Do I know and understand all of the communication opportunities available?
- What resources are available in my community to support my current decision?
- Is this approach a good "fit" for my child and my family at this time?

Language

Language is a socially-shared code that allows us to communicate with others who know the same code (Bloom, 1988). It can be expressed through spoken language (speech), written language, or sign language. Language and speech are not the same thing.

Language provides a way for us to express our ideas, share our feelings, acquire knowledge, communicate our values, share information, understand our world, and connect with others.

Language learning begins very early. Babies are born with the tools to learn language. Probably nothing is more exciting to a parent than their child's first word – whether spoken or signed.

Language is both receptive (understanding what is said) and expressive (the ability to produce a word or sign). Receptive skills always develop before expressive skills.

Your child must understand language before wants, needs, thoughts, and feelings can be expressed.

Language is best learned during meaningful interactions. Babies must hear a word or see a sign used in context many times before the word or sign has meaning for them. The child will begin to use gestures or actions to demonstrate what they understand. A child's first word or sign will follow soon after these early gestures or actions.

Both nature (the innate abilities of the child) and nurture (the impact of the environment on the child) play important roles in language acquisition (Streng, Kretschmer, & Kretschmer, 1978; Ogden, 1996).



Language Development

Language learning is a complex process. It is one of the most important skills children learn during their first years of life. Young children can learn language at an astonishing rate. In order to better understand this rapid language development, it is helpful to think of a range for the typical number of words or signs a child produces. The following chart shows an approximate number of words a child says or signs at specific ages. Please remember, all children develop at their own rate. Please use this chart as a guide to reference the number of words you child says or signs.

Chart of Typical Language Development in Hearing Children (English-speaking)	
MacArthur Communicative Developmental Inventory: Words and Sentences	
Words Produced (25%ile – 75%ile)	
16 months	22-108 words
21 months	79-229 words
27 months	275-553 words
33 months	412-620 words



The following chart shows typical stages of language development. There is always a range of typical development for any skill your child is learning. For example, a two-year-old could have anywhere from 75 to 250 words and still be developing within the “normal age range”.

Pre-linguistic	Babies begin to communicate when they cry. When mom or dad responds, the interactive communication begins. As a child grows, vocal play will increase in complexity. At about 6 months, a child will begin to babble (repetitive combinations of sounds or hand movements). Combining of consonants and vowels begins ("mama" or "baba"). These sound combinations may be used to refer to something specific or merely be random combinations in vocal or signed play.
First Word	As a child approaches one year, receptive language skills will increase. "Show me" games appear. Approaching the first birthday, the first true word or sign will appear and babbling increases. By 18 months of age the child may have 25 word or signs.
Two Word utterances	Starting at or near 18 months, the child will begin to combine words or signs in short sentences such as "more juice" or "Daddy work". By two years of age a child will be able to express a variety of ideas.
Sentences	Between two and three years of age a child's language will explode. Questions develop, the vocabulary grows at a tremendous rate, and longer, more complex sentences will develop. Many grammatical errors are still apparent, but the child is making sense of the language being heard or seen.



Neuroscience Research and the Development of Language

Babies are naturally equipped and “hard-wired” to acquire language. Human language is comprised of a series of patterns, and language patterns are key to the brain. Dr. Laura-Ann Pettito researched the biological foundations of language. Her research resulted in a revolution of thought. Dr. Pettito’s research demonstrated that the areas of the brain that process both spoken and visual languages are largely the same. She has concluded that neurologically, the auditory cortex responds no differently to the patterns inherent in spoken language and the patterns inherent in a visual language. “The human brain does not discriminate between the hands and the tongue,” said Pettito, summarizing her research in 2012.

A young child’s brain has the capacity to simultaneously develop a visual and spoken language without harm to the development of either language.

Thus, the benefits of a child’s exposure to a visual language during a certain developmental window enhances a young child’s language acquisition. Rather than the old theory that a child will be “confused” by this early exposure to two languages, children with early exposure to both a visual and spoken language are actually creating greater and denser neural connections.

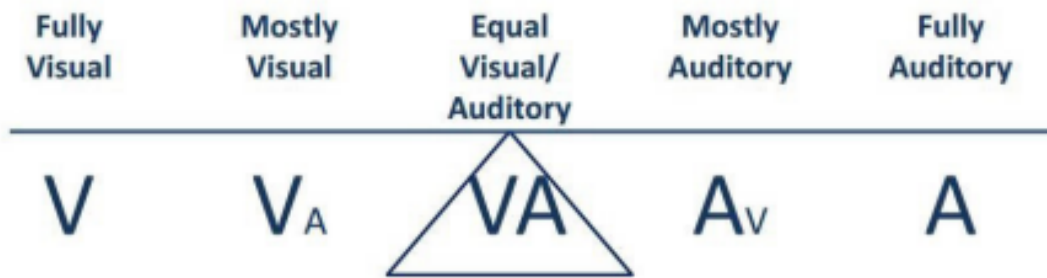
There is also mounting evidence documenting that, regardless of the child’s hearing level, early bilingual language exposure to both a visual and a spoken language can change the brain’s neural circuitry in advantageous ways; these changes positively impact the child’s linguistic and other higher cognitive capacities (Morford, 2011).



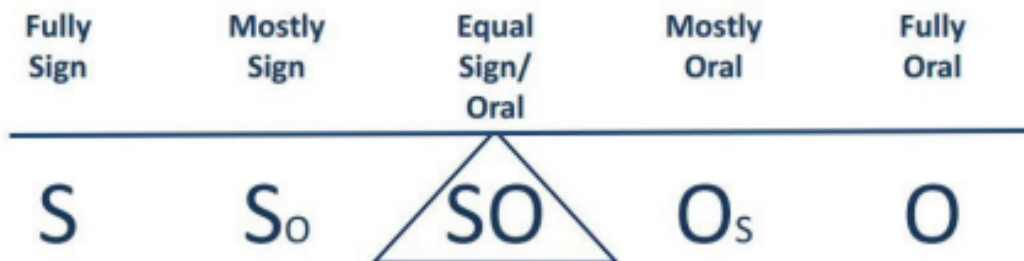
Early competence in a visual language can be effectively used to support and facilitate a child’s spoken language development. There is no evidence that this early exposure in a visual language inhibits long-range spoken language outcomes.

The graphic below shows the receptive and expressive communication continuum. Children may move back and forth along this continuum at any point in their childhood. For example - a child may be “mostly visual” on the receptive continuum and “mostly oral” on the expressive continuum during preschool; then 3 years later may be “mostly auditory” on the receptive continuum and “fully oral” on the expressive continuum. Furthermore, this same child may be “equal visual/auditory” on the receptive continuum and “mostly sign” on the expressive continuum in high school.

Receptive Communication Continuum



Expressive Communication Continuum



The Potential Impact

In a recent study, children who are deaf and hard of hearing, who received early intervention services prior to three months of age had better language outcomes. Certainly, during infancy and early childhood, sensitive periods for language acquisition correlate with the brain's development. Additionally, early identification has been found to moderate factors that previously had negative effects on language development: for example, socioeconomic status, family ethnicity, and the presence of additional disabilities.

The ability to access sound auditorily can have a profound impact on the language learning process for children who are deaf and hard of hearing. Exactly what that impact will be depends on a variety of factors: age of onset, degree of hearing loss, age of identification, early intervention participation, consistent use and benefit of amplification, other disabilities, cognitive delays, and parental involvement. Language delays, if they are present, can then impact other areas of the child's life, particularly academic, social, and emotional development.

Children who have full access to a comprehensible language as well as quality intervention services provided by qualified professionals have a high probability they will begin school with a good foundation in language and effective communication skills (Yoshinaga-Itano, Sedey, Coulter, & Mehl, 1998; Moeller, 2000).

Speech, even with hearing aids, is not as clear to a child, who is deaf and hard of hearing. This in turn makes the process of learning spoken language more difficult for the child. Sometimes a child who is deaf or hard of hearing will miss particular sounds in speech and, because of this, hear an incomplete message. The child might miss important vocabulary or grammatical information about sentence structure (Anderson & Matkin, 1991; revised 2007).



If a child has typical hearing, much of the language learning occurs as they overhear conversations. We often refer to this as “incidental learning”. The learning is occurring from the information that is overheard. This skill is also evident when you read a book to your hearing child. They can look at the pictures and still hear clearly what you are reading. Your child, who is deaf and hard of hearing, may rely more on visual cues to obtain the same information. Vision may be the primary means of communication or it may only be used to fill in the gaps.

On the whole, bilingual research has shown that fluency in a first language is a strong predictor of second language skill; competence in a second language is a function of proficiency in a first language (Visual Language and Visual Learning, Research Brief 2).

All children need a complete language model to learn language. Your child must be immersed in language, and provided with many language rich opportunities to learn the language of the family and culture. As your child grows and develops, you will discover the components of communication that are most useful and beneficial for your family. Remember, no one way is best for all, and you can update your language plan at any time.

“Communication is not only the essence of being human, but also a vital property of life.” ~John A. Piece



Language Learning Strategies

Listed below are some strategies to promote the acquisition of language by children. Use these strategies as you play with your child and during your daily routines. Discuss additional ideas with your child's early intervention provider or therapist.

Follow Your Child's Lead:

Observe what your child is interested in and communicate about that object or experience. Join your child in an activity of their choosing. Language learning is more effective when the parent follows the child's lead rather than imposing the parent's agenda on the child. Notice what your child is interested in, looking at, or playing with and then supply your child with the language to communicate about that topic. If your child is "finished" with an activity, it is okay to stop that activity and move on to a new one that is of interest. Listen to what your child is saying or signing. Watch what they are doing. Remember that being overly directive or controlling does not foster language development.

Play Turn-Taking Games:

Turn-taking involves the use of actions, gestures, signs, or words in a way that responds to the words, actions, and signs of another person. Turn-taking can be encouraged through both verbal and non-verbal games. It is an important skill for conversation and for socialization. Without turn-taking, the conversation or game will quickly end. Turn-taking behaviors may include looking, pointing, and imitating.

Imitate Your Child's Language:

Imitate and expand what your child says or signs. This demonstrates that you are listening and that you value what is being said.

Use Short, Simple Sentences:

It is important to use an appropriate rate of speech or sign so that your child has opportunities to process the message and respond to you.

Respond Positively

Responding to your child's communication attempts will encourage more communication. Smile at your child, imitate what is being said, and reinforce communication.

Establish Face-To-Face Communication:

Communication is easier when it is face-to-face. This involves getting down to your child's eye level and allows you to get your child's attention. It decreases the distance between the sound source (your voice) and the hearing aids, thus increasing the ability to hear what you are saying. Your child can see your facial expressions as well.

Limit the Number of Questions Asked:

Try not to inundate your child with too many questions. It is better to comment about what your child is doing. This will keep the conversation flowing and lead to the development of more natural language. Aim for a healthy balance of making a minimum of 3 statements/comments for each question you ask.

Choices:

Give your child many choices throughout daily routines. By presenting your child with choices such as “Do you want cheese or an apple?”, you create an opportunity for your child to communicate.

Wait Time:

Allow your child time to formulate thoughts and then communicate with you. Do not rush the process. Sometimes adults forget to pause long enough to let a child have a turn. Waiting is important!

Self-Talk:

Talk to your child about what you are doing, seeing, hearing, thinking, etc. For example, “I’m cleaning the dirty table. First, I spray on the cleaner and then I wipe it with a paper towel. Now the table is clean!”

Parallel-Talk:

Talk to your child about what he/she is doing, seeing, hearing, thinking, feeling, experiencing, etc. For example, “You took a big bite of your peanut butter sandwich! You are so hungry.”

Language Expansion:

Language expansion involves responding to your child with language that is slightly above the level of the language that is being used. You are teaching a slightly more sophisticated language model. For example, if your child is using one word “more”, you can respond with two-word utterances “more crackers”.

Sabotage:

Set up a scenario that requires your child to communicate to request your assistance. For example, if your child can’t open his yogurt without your help, don’t open it before giving it to him. Or intentionally “forget” to give your child a necessary item. For example, give your child his plate of macaroni and cheese but forget to give him a fork/spoon.

Read Daily:

Strive to read out loud to your child at least 15 minutes a day. Explore books in developmentally appropriate ways with your child.

Every day is filled with opportunities to learn language. Many activities occur naturally. A selection of activities is divided into three categories:

- Childcare Activities • Parental Tasks • Parent-Directed Activities

Childcare Activities	
While taking care of your child, you can talk or sign. Talk about what you will do next. Describe the activity. Notice what they are looking at and comment about that.	
dressing/undressing bathing diapering caring for hurts and illnesses washing face and hands bedtime calming fears, anger	getting settled in car seat birthdays trips to church, school, doctor visiting grandparents and friends going outside meals and snacks identifying emotions

Parental Tasks	
As you complete your tasks around the house, talk to your child. Involve them in the process. Explain what you are doing. Let them help, as appropriate.	
washing/drying dishes loading/unloading dishwasher setting/clearing table mopping floor dusting/polishing cooking vacuuming making beds picking up toys	sweeping picking up clutter sorting/washing clothes loading/unloading dryer folding clothes mowing/watering the lawn washing/waxing car ironing gardening/weeding

Parent-Directed Activities	
You will have many opportunities to share favorite books, songs, and games with your child. These are great opportunities to expand your child's language while having fun.	
singing together creative play looking at books, pictures puppets	looking at family photos magazines cutting, pasting, coloring and drawing working puzzles

VISUAL COMMUNICATION DEVELOPMENT

The earliest forms of visual communication occur when babies are “tuned in” to our faces. By emphasizing facial expressions, natural gestures, body language, and signs, parents can enhance their child’s overall communication. Babies and young children learn gestures and signs by being exposed to them in their daily lives. Early meaningful exposure to sign language can be helpful to children who are deaf/hard of hearing as it is an accessible visual means of communication.

There is a great deal of information available regarding using visual communication with your child. At the very core of visual communication is learning and using signs. Work with your WEII Plus facilitator to identify resources that can help you, your family, and other interventionists working with your child to learn and use meaningful signs to support your child’s language development.

Earliest Visual Communication

Pre-Sign Signals: What is your baby trying to tell you?

Before your child uses true signs, your baby may communicate using pre-sign signals. These signals can indicate to you what your baby is thinking. Try to make a point to notice what your baby’s signals are saying to you.

Examples of Pre-Sign Signals and What They Might Mean?	
● Eyes widening or smiling	“I am alert and watching you!”
● Eyes drooping, looking away, nodding off	“I am tired.”
● Back arch, wiggling	“I want up”
● Kicking, wiggling	“Please move me”
● Looking around, lethargic	“I need more input”
● Fussy, crying, pushing away	“I need less input”
● Smiling, laughing, cooing	“I am happy and enjoying this”
● Whimper, cry, stiffen up	“I am scared”
● Look away	“I am no longer interested”

Responding to Your Child's Pre-Sign Communication: Responding to your child's early communication signals is an important part of helping your baby develop visual communication and language. If you respond to your child's early communication signals, your baby will learn that things happen as a result of his attempts to communicate! Your baby learns to get what he or she wants using this early form of pre-sign communication. You can respond by showing excitement and/or responding with meaningful gestures or signs.

Ideas for Responding to Your Child's Pre-Sign Communication Signals

- Imitate what your child is attempting to communicate.
- Keep it simple: Example: Baby tries to sign "eat". You imitate and add on: "*Eat cracker*"
- Use gestures, body language, facial expressions to respond meaningfully.
- Pretend you understand or make a guess if you are not sure. This helps your baby still connect attempts at communication with meaningful results.
- Be warm and positive when responding. This will be motivating to your child and encourage him to attempt more communication with you!
- Enjoy the interactions with your baby. Have fun and be playful as you connect with each other.

Babbling in Sign:

Just as hearing babies babble with their voices, signing babies who are exposed to signs and fingerspelling will also go through a babbling stage with their hands. This manual babbling includes meaningless handshapes and motions like opening and closing their hands, using their index finger to tap on their body, moving their hand up and down or towards and away from their bodies.

Responding to Babbling to Build Language

- Watch your baby moving her hands around as if babbling.
- Engage your child by responding, maybe even signing back the sign you think your child might be attempting.
- Example: You notice your baby opening and closing her hands.
- This is not a true sign but respond as if she is communicating with you.
- You might respond: "*Are you telling mommy that you want milk? You want milk? Milk is yummy*"
- Don't worry if you don't know all the signs- just sign the words you know to respond to your child's manual babbling.
- This provides a model for your baby in sign - just as you would provide a model with your voice for a baby babbling with her voice.

Using Gestures:

Gestures are another meaningful way that your child can communicate with you. Your child may point to a pacifier to indicate, “*I want that!*” or reach his arms up high to indicate, “*I want to be picked up please!*” Gesturing can develop into more meaningful signing by using both gestures and signs together.

Tip: Use Gestures and Signs Together to Build Language

Gesture by pointing to what you want your child to look at then sign about what you are drawing his attention to.

- Example: You point to the dog. Your child looks at the dog. You sign: “*Dog. Brown dog. Cute Dog.*”

Sign Language

Types of Sign Communication:

Note: The following information offers a basic overview of the types of sign communication. There is much more in depth research and information available for all of these sign communication approaches. Work with your WEII Plus Coordinator or Facilitator to gain additional information about the sign communication approach(es) you would like to explore further.

1. American Sign Language (ASL):

ASL is a visual language and it follows visual principles. ASL is the native language of the American Deaf community and the fourth most used language in the United States. There are unique characteristics of ASL including:

- **Syntax (sign order):** ASL is based on a visual presentation. It is a topicalized language where the topic is presented first with details following.
- **Time and Temporal Aspects:** The time or day is signed first and not repeated once the time frame is established. Verb tenses are shown by the time frame. The “finish” sign may be used to show that an action has been completed.
- **Classifiers:** Classifiers are not signs themselves. Rather, they are handshapes used to describe shape, size, placement, quantity, actions, motions, etc.
- **Facial Expressions and Body Language:** Both of these are used to express emotions and meaning. They are similar to the different ways we use intonation patterns when we speak using our voices to make speech interesting to hear.
- **Non-Manual Markers:** Facial expressions, head tilting, shoulder raising, mouthing, and similar signals are all non-manual markers that we add to signs to create meaning.
- **Fingerspelling:** Fingerspelling is used to indicate places, names, or ideas for which there is no official sign.

- Directionality: The direction (movement) of the sign shows both the subject and the object without the use of pronouns.

2. Pidgin Signed English (PSE)/Contact Signing:

Pidgin (PSE) or Contact Signing is an English based use of signing. Characteristics of Pidgin/Contact Signing include:

- A combination of using ASL signs in English word order
- It is NOT a complete and separate language in itself like ASL.
 - May not support strong reading or writing skills
- Doesn't include word endings
- Includes ASL features such as facial expressions and idioms.
- Many people see it as a stepping stone to becoming fluent in ASL.
- Can bridge communication between ASL signers and non ASL signers.
- Conceptually accurate - which means that the meaning of the word is emphasized rather than signing each individual word as is done in Manually Coded English)

3. Simultaneous Communication (SIM/COM)/Total Communication:

SIM/COM is also known as Total Communication. It usually means talking and signing at the same time. Additional information about SIM/COM includes:

- This is a method that many parents report is most comfortable to them as a hearing parent because both hearing and deaf people can have access to the information.
- Offers the opportunity for a deaf/hh child to both see and hear the information when using amplification.
- Wearing of amplification and developing listening and spoken language skills are important when using SIM/COM..
- It can be used with either Pidgin or English Based Signing.
- It is more difficult to sign and speak at the same time vs speaking only or signing only.



4. Manually Coded English (MCE) also known as Signing Exact English (SEE):

Manually Coded English is complete signing of the English Language in English word order. Developers of MCE invented new signs that are not part of ASL, to represent words that do not have specific signs. For example: *is, are, was, were* as well as prefixes and suffixes. It was designed for children who are deaf/hh to have visual access to all of the components of the English language. Additional information about MCE:

- It attempts to make spoken English visual.

Tips for Learning Sign Language

- Keep a written or electronic list of common words you use when communicating with your child.
- Learn the signs for a few of these common words each day.
- Use these signs several times a day in several different ways to help you remember.
 - Example: *"I see your SHOES. Let's get your SHOES on. You have blue SHOES."*
- Try putting together common phrases you use with your child.
- Again try using these phrases each day - focus on one phrase a day.
 - Example: *"Time to eat!" "You hungry?" "Let's go" "Ready, set, go!" "Help me"*
- Don't worry about signing every single word.
- Start using the signs you DO know and build from there.
- Keep a sign language App, a website link, or a sign language book handy to look up signs easily.
- Spend time with other people who use sign language, including Deaf people. This is the best way to learn and practice sign language.
- Even if you are talking to others and not directly to your baby, use the signs that you know. It allows your baby to overhear it (the same as a listening baby overhears).
- Watch sign language videos online (ex: Youtube).
- Sing simple songs or nursery rhymes and sign the words you know.
- Look up the signs for simple books you read to your child. Don't be afraid to read them over and over if your child enjoys that book.
- Be patient with yourself! Learning sign language takes time and practice. The more you do it - the better you will get and the more language your child will learn!
- Whatever signing you use with your child is GOOD and is helping your child to learn language!

Using Sign in Your Daily Lives

Many parents want to know what to sign about. You will want to sign information that is important to your child.

Sign about things like:

- What your child is doing: (playing, crawling, eating, crying, bathing, etc)
- What your child is interested in: (princesses, animals, trucks, etc.)
- What your child wants or feels: (hurt, hungry, etc.)
- People in your child's life: (mommy, daddy, etc.)
- Where people or objects are: (where's daddy? let's find your shoes)
- Asking for needs to be met: (more juice, wet diaper, you hungry)
- When something belongs to someone: (mine, mommy's coat)
- Daily Routines: (diaper, wash hands, eat, time for bed, bath time, dressing)



Visual Communication Strategies

Tips for Using Signs With Your Young Child:

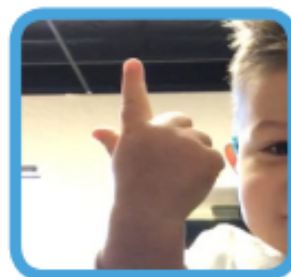
- When signing to your young child, be on the child's level visually if possible.
- Signing close to your child encourages the child to look at you.
- If your young child looks away, that's ok, stop signing then start again when your child looks back at you.
- Use body language and facial expressions when signing with your child (*example: if you sign "happy" your body language and facial expressions should reflect "happy"*).
- Use Wait Time: Waiting allows enough time for your child to explore before trying to gain attention. Waiting enables your child to shift eye gaze and visual attention before communicating. Long pauses between signs enable your child to think about and process the information. .
- Feel comfortable repeating signs to your child. Sign the words you know, and keep building on that. Keep your signs simple and brief.
- Use dramatic facial expressions and non-manual markers to capture your child's attention and use large and clear signs. When you sign in a rhythmic fashion, you maintain your child's interest.

ASL Development in Infants and Toddlers

	Receptive Visual Language	Expressive Visual Language
Birth to 6 months	<ul style="list-style-type: none"> · Looks attentively at a person's face · Smiles/makes eye contact · Plays with hands and fingers · Enjoys shared play · Looks alertly at visual environment · Imitates facial expressions · Attends to signed parentese 	
6 to 12 months	<ul style="list-style-type: none"> · Hand babbling emerges · First signs- vocabulary of 10 or more signs · Eyes track following movement · Looks in direction of a point · Joint attention · Distinguishes facial expression · Understands simple signs · Points to others and things 	<p>Canonical (reduplicated) hand babbling appears at 6-7 months, similar to vocal babbling. The reduplicated syllabic units "babababa" is a typical example in vocal canonical babbling. This parallels to "BABABA" (opening-and-closing movement of the hand) in manual babbling. Another common movement is batting -- moving up and down repeatedly, and clapping. The manual babbling sequence "BABABA" is often mistaken for the first ASL word "milk". Manual babbling follows its own syllabic organization of a signed language. The first handshapes in manual babbling that are predominate in infants' early ASL productions are 5, 1, B, O, A, and S. Transition from manual babbling to first signed words occur at around 10 months, as early as 8 months or as late as 16 months.</p>

<p>12 to 24 months</p>	<ul style="list-style-type: none"> · Acquires new signs - 40 or more · Vocabulary for more than 200 signs · Repeats what others sign · Uses name signs · Uses simple ASL hand shapes · Uses questions and negation · Begins to combine signs · Responds to simple commands · Begins to use non-manual markers · Answers "wh" questions 	<p>The baby "O" where their index finger and thumb touch one another, appears. B, A, O, S, 1, 5 handshapes are more refined. These are the whole hand letters and numbers that are easiest to use. Begins to use point (1-handshape) as pronouns Later begins to use the C handshape</p>
<p>24 to 36 months</p>	<ul style="list-style-type: none"> · Begins to use object and descriptive classifiers · Understands simple fingerspelled words · Expanded use of handshapes to more complex handshapes · Uses possessives · Uses pronouns · Expands vocabulary · 350 or more signs · Begins to use inflected verb forms · Enjoys signed stories 	<p>Uses more complex handshapes L, G, F, Q handshapes appear, which involves using only the thumb and index finger. D, Z, handshapes appear, where the index finger is isolated. I, J, Y appears later, in which the little finger (pinky) or the little finger and thumb are isolated from the other fingers</p>

Fingerspelling



Fingerspelling is a critical part of American Sign Language (ASL), as well as other forms of visual language. It is spelling words using specific handshapes that represent each letter of the alphabet.

Fingerspelling and ASL should be introduced to babies at the same time. This may sound odd as infants are not known to be able to spell. However, the goal is to develop language. Fingerspelling plays an important role in language development and literacy. Fingerspelling provides a link to English vocabulary and syntax. (Grushkin, 1998).

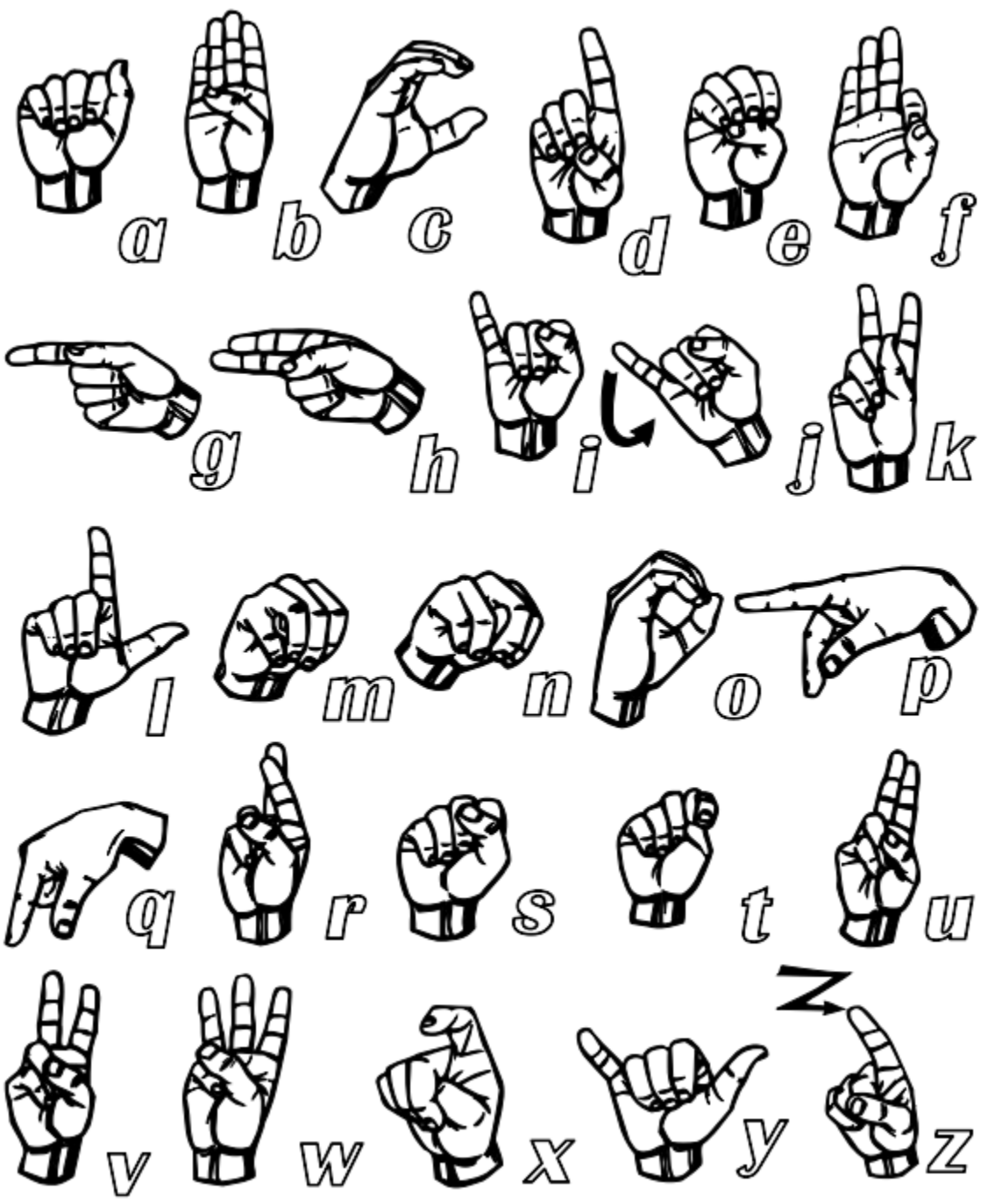
Families who are Deaf use fingerspelling with their young children, both Deaf and hearing, from birth. They fingerspell simple, relatively short words that are meaningful for the baby, such as family names, objects the baby interacts with often, or exclamations such as, "ow!", "boo!" or

“wow!”. Children who are exposed to fingerspelling from the start, have been known to try fingerspelling themselves around 13 months of age. The first true fingerspelled word typically appears around the age of two (Erting, Thumann-Prezioso, & Benedict, 2000).

Tips for Learning and Using Fingerspelling

- Learn the manual alphabet and don't worry about the speed. Just be clear.
- Practice fingerspelling with other people.
- Make sure your palm is facing out towards the other person.
- Fingerspell throughout your day! (words you hear, signs, when reading, etc)
- When signing with your child, focus on simple and meaningful words.
- Fingerspell words that are meaningful to your child early on like “ow” or “boo!” or names of family members, or favorite characters.
- Play fingerspelling games with other family members. (ex: 20 questions)
- Pause briefly between words.
- Be responsive to your child's early play with handshapes and attempts.
- Fingerspell words your child already knows in sign.





Online Sign Language Supports

The following are some online sign language resources that are available to support you to learn sign language.

- ASLU (Bill Vicars) on YouTube: <https://www.youtube.com/user/billvicars>
- ASLU- <https://www.lifeprint.com/>
- Baby Sign Language: <https://www.babysignlanguage.com>
- Colorado School for the Deaf and Blind (sign instruction): <https://www.youtube.com/user/csdbchannel>
- Gallaudet: (free online ASL classes) <https://www.gallaudet.edu/asl-connect/asl-for-free>
- HandSpeak: <https://www.handspeak.com>
- Rocky Mountain Deaf School (stories in sign) <https://www.youtube.com/user/RMDSCO>
- Sign It! (free online sign classes) www.infanthearing.org/signit
- Signing Savvy: <https://www.signingsavvy.com/>
- Signing Time: <https://www.signingtime.com>
- We Play Along Songs with Signs: <https://weplayalong.com>

SIGN CHART

Use this chart to list signs your child knows and/or uses. You can list the words you want to learn also.

Signs my child understands

Signs my child uses

Signs I want to learn

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Auditory Development & Speech Development

Auditory Skill Development

Hearing is not the same as listening. Hearing means only that the sound was perceived by the ear. Listening implies actively doing something with what you hear. Listening is something that we LEARN to do. When your child first receives amplification, they have to learn about sound. Hearing aids or cochlear implants provide your child with the opportunity to hear. However, your child needs time, experience, and repeated opportunities to make sound a meaningful experience; to learn to listen.

Auditory skill development does not progress in order of stages. Your child may be working on several skills at the same time. For example, they may be learning that certain sounds have meaning, while at the same time, learning to localize sound. Learning to listen is, however, hierarchical. Some skills will need to be mastered before your child can master skills in other areas.



The following are ways you can help your child develop auditory skills.

- Help your child use amplification consistently (all waking hours)
- Make sure amplification is in good working order
- Provide opportunities for your child to attend to environmental sounds, music, and speech sounds
- Reduce background noise when possible (TV, dishwasher, music, etc) Use auditory cues (point to the ear, ask "did you hear?", cue to "listen")
- Show your child where the sound is coming from (sink, clock, doorbell, person speaking)
- Observe and identify your child's responses to sound, be positive, use lots of praise
- Help your child find the sound source (walk to where the sound is coming from)
- Model various patterns of duration, intensity, and pitch in your speech
- Help your child locate the sound in difficult listening environments (inside, outside, gym, store, etc)
-

The following chart shows the progression of skills for you to follow. As your child masters a particular skill in an optimum setting (in the left column), you can increase the difficulty by using the conditions in the column on the right.

EASIER CONDITIONS	MORE DIFFICULT CONDITIONS
Response is cued (pointing to ear)	Response is spontaneous
Sound is close (3 feet or less)	Sound is more than 5 feet away
Environment is quiet	Background noise is present
Sound is combined with visual cues (gestures, sign, or speechreading)	Sound is presented as an auditory stimulus only
Choices are limited (closed set)	There are unlimited choices (open set)
Familiar words are used	Unfamiliar words are used
Words	Sentences
Single Activity	Competing activities
One-to-one interactions	Group or family settings



You may hear/see the terms below in reference to development of auditory skills.

- Awareness – ability to detect sound
- Attending – focus on and interest in sound
- Localization – locates sound
- Auditory Feedback – changes productions based on hearing themselves
- Discrimination – recognizes differences in sounds
- Comprehension – understanding messages
- Linguistic Processing – interpret, retain, organize and manipulate spoken language

The graph below identifies “typical” auditory development skills.

AGE	SKILL	OBSERVABLE BEHAVIORS
Birth-3 months	Awareness Attending Localization Auditory Feedback	Startles to loud noises Quieted by mother's voice Listens to soft sounds Listens to music Searches for sound Hears own voice and vocalizes
3-6 months	Awareness Attending Localization Auditory Feedback	Cries to frightening noises Listens to interesting sound Coos or stops babbling to music Searches for sound Turns to sound Hearing gives spatial awareness Enjoys own voice
6-9 months	Attending Localization Auditory Feedback Discrimination	Listens to conversation Listens to interesting sounds Finds the sound source Vocal play Responds to name
9-12 months	Discrimination	Sequences of sounds are associated with specific experiences First words (after one year of listening) Reacts vocally to music
1-2 years	Discrimination Comprehension	Recognizes familiar phrases Follows simple one-step directions Says one or two critical elements (ex. "blue ball")
2-3 years	Linguistic Processing	Large intelligible vocabulary



Auditory Strategies

Each of these strategies makes listening a little bit easier. So, be sure to use them as your child is learning to listen. As your child develops listening skills, you will gradually stop using these strategies. The long-term goal is for your child to be able to listen in typical, unmodified listening situations.

- Give your child a “signal” to listen
- Provide acoustic highlighting (a technique used to enhance the audibility of a spoken message)
- Place spoken emphasis on keywords
- Use pauses to draw attention to important phrases
- Reduce the rate of speech
- Emphasize particular aspects of speech (ex: pitch, intensity and/or duration)
- Use exaggerated intonation
- Use visual cues
- Allow time to process
- Repeat the sound and encourage the child to repeat themselves

The following activities can promote active listening skills, but remember, your child must have access to sound for these activities to be successful.

SOUND AWARENESS/ATTENTION ACTIVITIES:

- Lean over your baby and call his/her name. With your baby watching your face, make a variety of interesting sounds like whistling, lip smacking, and tongue clicking. Make one sound at a time. The baby may try to locate the sound when they have used amplification for at least 6 months. (A fussy baby can be momentarily distracted by an interesting sound or lip movement.)
- If your baby responds to your voice when you are close and while watching you, try vocalizing when baby is not watching your face (continue to present the sound at a close range). Notice if your child responds to the sound without the visual cue.
- While holding your baby close to you with their head on your chest, start to sing. This provides both vibration and rhythm. Sing a simple song. Sway to emphasize the rhythm.
- Put a small noisemaker in your pocket. Periodically throughout the day, approach the child and say “listen” while making the noise with the noisemaker. Get your child’s attention, visually, using the noisemaker. Allow your baby to hold the toy. Help them make the sound independently.
- Provide noisy toys for your child to play with. Remember these do not need to be expensive toys that you purchase. You have lots of great noisemakers in your kitchen. Watch to see if your baby has favorites. (This activity is appropriate starting when your baby is about 4 months old.)
- A baby who is 5 months of age may reach for an object hanging within reach over his or her crib. Hang something that makes a sound when touched (e.g. a bell, wind chimes).



- During your busy times, move your baby about every 10 minutes to a new location near a new sound source. Keep them close. Call their name and talk. Give your baby new sounds to hear and new environments to see.
- When your baby is aware of sound, react positively by smiling, clapping, and hugging your baby.
- Imitate and repeat the sounds your baby makes (for example, “cooing” or “gurgling”).
- Smile and talk to your baby. Wait for them to vocalize. When they do, let them finish, then repeat the vocalizations.
- Dangle a safe object in front of your baby. When reaching for it, say “reeeach” elongating the vowel sound. When the reach is successful, say “yay!”
- Sit with your baby on your lap facing you. Vocalize with a selected vowel sound. Bring your face closer and closer to the baby’s until you are touching his nose. You can do the same activity with your finger, bringing your finger closer and closer to your baby until your finger touches your baby’s nose.



- Create an auditory cue for each daily routine. For example, when it is time to eat, you can say “mmmmm”. When it is time to go, you can rattle your keys. You might want to ring the doorbell or knock each time Dad or Mom comes home.
- Turn on the water faucet and alert your child to the sound the water makes. Turn the water off and on. Shake your head “no” when the water is off, indicating there is no sound. Smile, point to your ear and say “I can hear the water” when the water is running. (Water in the bathtub is louder and lower in pitch and may be easier to hear.)

- Get your child’s attention by making sounds (for example: banging, clapping, calling their name). Remember to reward attention with praise and excitement.
- Your child will babble or become active in response to novel sounds at about 6 months of age. Introduce a new sound and watch for responses. At about 9 months your child may become bored and begin to “tune out” repetitions of the same sound.
- Turn the radio and other appliances “on” and “off”. Call your child’s attention to the presence or absence of sound.
- Call your child’s attention to environmental sounds, such as the telephone or doorbell. Help them to attach meaning to these sounds.
- When your baby is sitting in a highchair, move your hand, or a toy, through the air like an airplane. Attach a vowel sound to this movement. Play with the sound, matching it to the movement of your hand or the toy. For example, say “ahhhhh” while moving the toy airplane through the air.



- Play music – Move with your child, following the rhythm of the music. Clap, dance, or march when the music is on. Stop moving when the music is turned off. Adapt your movement to the rhythm of the song.

- Make your child’s favorite stuffed animal dance or march to the music and stop when the music stops.
- Have “instrument parades” around the house. (This could be done with pots and wooden spoons if you don’t have musical instruments.) When the music stops, everyone freezes.
- Hide a toy or stuffed animal under a blanket. When you present a sound, uncover the toy.
- Place your baby in a laundry basket. While pulling (or pushing) the basket, say “aaahhhh”. Stop the movement when you stop the vocalization.
- Gently bicycle baby’s legs while resting on their back - repeat a familiar vocal sound.
- As you rub your baby with lotion or oil, repeat a special sound - match your vocalization to the movement of your hands.
- As your baby begins to follow objects with their eyes, move an object from side to side, slowly trying to encourage following with their eyes. As you do this, vocalize using a selected vowel sound.



LOCALIZATION ACTIVITIES:

- Using a noise maker, move the noisemaker close to your baby's head. Watch as your baby searches to find the sound. Praise your child when they turn to the sound.
- Play hide and seek. One person can hide and call your child. Another can help find the hidden person by localizing to the voice.
- Hide an alarm clock and make it ring. Have your child locate the ringing alarm.
- Have adults stand in different parts of the room. Encourage the child to turn to the adult who is calling their name.
- Focus on real life opportunities to localize to sound; ex: when taking a walk, help your child find the dog that is barking.

AUDITORY FEEDBACK ACTIVITIES:

- Engage in vocal turn-taking games. When your child makes a sound, imitate that sound and encourage your child to imitate what you said.
- When you put the hearing aids in, say the Six Ling Sounds (AH, OO, EE, SH, S, M). Look for your child to indicate they heard the sounds. Notice which were easier and which were more difficult.
- As your child gets older, encourage them to imitate the Six Ling Sounds.
- Notice how your child's speech changes when they are wearing amplification. Is there more vocalization? Does the quality change? Does the volume change?

AUDITORY DISCRIMINATION ACTIVITIES:

- When using your voice, use different pitches to create interesting sounds.
- Say "ahhhh" to get your baby to open their mouth during feeding. Then say "mmm yummy" while rubbing your tummy.
- When coloring or scribbling, make a speech sound and encourage your child to match the movement with the crayon to the speech sound they hear; ex: say "oooo" to draw circles and "p-p-p" to make dots.
- When reading a children's book, change the pitch of your voice to make the

voice of the characters interesting. Stories such as Goldilocks and The Three Bears are ideal for this. You can point to the different size of the bears and use a different voice for each.

- Help your child notice loud and soft sounds. Take two boxes. On top of one box, cut a big mouth and on another a small mouth. When the child hears a loud sound, have them drop a marble into the big mouth. When the child hears a soft sound; drop a marble in the small mouth.



My Child Responds to Sound

Use this chart to keep track of your child's early responses to sound. List the sounds your child responds to as well as behavioral responses to the sound. You can also indicate how you reinforced your child.

TYPE OF SOUND	MY CHILD'S RESPONSE	MY RESPONSE
<i>Dog Barking</i>	<i>Looks at the dog</i>	<i>You heard the doggie</i>

Localization Chart

Use this chart to keep track of your child's attempts to find sounds.

SOUND	HOW FAR	WITH CUES?	WITHOUT
<i>Dog Barking</i>	<i>7 feet</i>	<i>I pointed to my ear to help my child know how to listen</i>	-
<i>Dog Barking</i>	<i>2 feet</i>	-	✓

Discrimination Record

Discrimination is the ability to tell the difference between two or more sounds or words.

My child hears the difference between two environmental sounds:

SOUNDS *microwave timer vs can opener*

My child hears the difference between a few words that sound very different:

WORDS *mommy vs dog*

My child hears the difference between a few words that sound similar:

WORDS *boy vs toy*

Understanding Phases

Use this to write the phrases your child understands.

Everyday Phrases

Give it to Mommy

Everyday Vocabulary

bottle

Basic Directions

Go get your shoes

AUDITORY COMPREHENSION ACTIVITIES:

- Play “Red Light, Green Light”. Your child listens to the auditory cue and follows directions.
- Once your child knows the names of family members, say “Where’s Mommy?” or “Where’s Daddy?”. Wait for the child to tell you the answer.
- Give your child simple commands. Praise them for following the directions. As these simple commands are mastered, give more complex commands.
- Say simple nursery rhymes. Help your child listen for a specific word then act out that word; ex: while playing Ring Around the Rosie, help your child listen for the word “fall”. When they hear it, they fall down.
- Play a simple I Spy game. Ask your child to identify an item based on two or three critical elements that you describe.
- Bake cookies with your child. You can repeat the same words frequently during the activity; ex: “roll, roll the dough”; “stir, stir, stir”; “yum yum”.



AUDITORY MEMORY ACTIVITIES:

- Give your child short lists to remember; ex: when going to the store, give two or three items to remember.
- Ask your child to repeat simple messages; ex: “go tell Dad.....”

- Ask your child to retrieve two or three books from another room.
- Role-play restaurant and have your child remember what you ordered.

Another way to encourage listening, and to have fun at the same time is to share nursery rhymes and songs with your infant or toddler. Traditional children’s songs and fingerplays are great fun for young children. They are repetitive and easy to listen to. Using rhymes can help your child understand the rhythm of spoken words. When you begin, you can teach your child the traditional finger or body movements that accompany the songs.

The itsy bitsy spider went up the waterspout, down came the rain and washed the spider out. Out came the sun and dried up all the rain. And the itsy bitsy spider went up the spout again.

One little monkey swinging in a tree, Saying Mr. Crocodile can’t catch me!
Along comes Mr. Crocodile quiet as can be...
Snap! Snap! Snap! Ha ha! You missed me!

This little piggy went to market,
This little piggy stayed home. This little piggy had roast beef. This little piggy had none.
And this little piggy went “Weee weee weeeeeee”, all the way home.

Five little monkeys jumping on a bed, one fell off and bumped his head.
Momma called the doctor and the doctor said, “No more monkeys jumping on the bed!”

Hickory, dickory, dock,
The mouse went up the clock;
The clock struck “One”, the mouse ran down,
Hickory dickory dock.

I’m a little bunny, watch me hop. Here are my ears, see them flop. Here is my cottontail, here is my nose. I’m covered with fur, from my head to my toes.

Humpty Dumpty sat on a wall,
Humpty Dumpty had a great fall.
All the king’s horses and all the king’s men,
Couldn’t put Humpty together again.

If you’re happy and you know it, clap your hands.
If you’re happy and you know it, clap your hands.
If you’re happy and you know it, then your face will surely show it.
If you’re happy and you know it, clap your hands.

*Ask your WEII Plus Facilitator for more ideas.



Speech Development

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

- Articulation - How speech sounds are made (e.g., children must learn how to produce the "r" sound in order to say "rabbit" instead of "wabbit").
- Voice - Use of the vocal folds and breathing to produce sound (e.g., the voice can be abused from overuse or misuse and can lead to hoarseness or loss of voice).
- Fluency - The rhythm of speech (e.g., hesitations or stuttering can affect fluency).

(www.asha.org)

0-2 years

Speech sounds that are developing:



m, b, p,

**w, n, t,
d**

By age 2, speech will be 75-90% intelligible

2-4 years

Speech sounds that are developing:



**h, z,
y, ch,
g, k,
f, l,
sh,
ng**

By age 4, speech will be approximately 50% intelligible

4-6 years

Speech sounds that are developing:



j, s, z,

r, v

By age 6, speech will be nearly by 100% intelligible to an unfamiliar listener

6-8 years

Speech sound that is developing:



th

By age 8, speech will be 100% to all listeners

The following is a list of the speech sounds in the English language. This chart is presented to give you a basic idea about the acquisition of various speech sounds.

These sounds are generally grouped according to ease of production or the age of development. Your child will not necessarily produce all of the sounds in each group and is not expected to master all of the sounds in one group before moving on to the next.

Remember, children who are hearing do not master all of these sounds at the same time. They acquire them over the course of several years. Consonant blends are listed at the end of this chart because they are more difficult to produce. The amount of residual hearing your child has and your child's use of amplification will impact the ability to hear and produce these sounds.

Long Vowels	ee as in team oo as in food aw as in law oa as in home a-e as in take ou as in house i-e as in mine oi as in toy
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Short Vowels	e as in ten oo as in book i as in bit a as in cat u as in sun
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Consonants Level 1	b as in bat p as in pet w as in wash wh as in whale h as in hat f as in four v as in van th as in thick th as in the m as in me
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Consonants Level 2	d	as in doll
	t	as in top
	n	as in no
	y	as in yes
	l	as in lamb
	sh	as in she
	zh	as in garage
	s	as in sit
	z	as in zip

Consonants Level 3	g	as in girl
	k	as in kite
	ng	as in ring
	r	as in run
	ch	as in chair
	j	as in jump

Vowels with "r"	ur	as in earn
	er	as in mother



Consonant Blends Beginning of the Word	bl	as in blue	tr	as in try
	sl	as in slow	spr	as in spring
	fl	as in flew	str	as in strong
	pl	as in play	sw	as in swing
	gl	as in glue	kw	as in quick
	kl	as in clean	tw	as in twin
	thr	as in three	skw	as in squeal
	br	as in break	sm	as in smell
	fr	as in frog	sp	as in speak
	pr	as in prize	sk	as in sky
	dr	as in drive	sl	as in sleep
	gr	as in grape	sn	as in sneeze
	kr	as in creep	st	as in stay
	shr	as in shriek	skr	as in scream

Consonant Blends End of the Word	nd	as in and	pt	as in try
	st	as in west	gd	as in wagged
	fs	as in laughs	sl	as in whistle
	lm	as in calm	ths	as in baths
	lz	as in calls	zn	as in raisin
	mz	as in gums	sn	as in loosen
	nz	as in wins	vz	as in loves
	ngz	as in things	sk	as in ask
	ft	as in laughed	sp	as in grasp
	ld	as in called	vd	as in loved
	lp	as in gulp	zd	as in dazed

Speech Strategies

- Provide appropriate and consistent use of amplification
- Speak to your baby frequently
- Use normal conversational tones and natural gestures
- Speak clearly
- Repeat key words
- Use an appropriate rate of speech (You may speak a little slower)
- Encourage vocal play
- Use intonation to emphasize key words
- Give your child time to respond
- Talk about what your child is interested in
- Let your child lead the conversation
- Comment about what your child is experiencing
- Sing songs
- Read to your baby



The following are a few suggestions that emphasize the production of certain speech sounds. Remember to make the activity fun! Babies and young children love to play with their parents and family members. By pairing the sound with an activity, you provide opportunities to listen and imitate.

If you are trying to encourage auditory skill development and speech development, it is important to add vocal play to your daily activities.

"b" sound	<ul style="list-style-type: none"> • "Bye-bye": Wave and say "bye" to people and to favorite toys as they are being put away • Bubbles: Repeat "bu, bu, bu, bubbles" • Bus: Play with a toy bus, saying "brrrrr" and "bus" • "Beep-beep" : While playing with a toy car or truck, say "beep-beep" • Bounce the ball: "bounce, bounce, bounce" or "ba,ba,ba, ball" • Baby: Engage in lots of different activities with the baby doll, "feed the baby", "rock the baby", etc. • "Boo!": Play "peek-a-boo". Let your child be in control and say "boo!"
"m" sound	<ul style="list-style-type: none"> • "Moo": Play with a toy cow and repeat "moo" • Mommy: Play "Where's mommy?" • "Mmmmm": While eating, rub your tummy and say "mmmmmm". When your child moves into imaginative play you can encourage him to say "mmmmmm" while he feeds the doll or stuffed animal • "More ": While eating, encourage your child to say "more"
"p" sound	<ul style="list-style-type: none"> • Pop the bubbles • Pull the wagon • Painting • Play with a toy pig in the farm set • Push the toy
"s" sound	<ul style="list-style-type: none"> • Kiss: "Kiss the baby" "Give Mommy a kiss!" • Sing: Twinkle twinkle • Snake: Say "sssssss" as you move the stuffed snake across the floor
"w" sound	<ul style="list-style-type: none"> • "Weeeee": Swing or play on a slide • Wash: Sing a song such as "This is the way we wash our hands...." • Wind-up toys: As you wind the toy up say, "wind, wind, wind"
"t" sound	<ul style="list-style-type: none"> • "Tick, tock": While playing with a clock or looking at your watch • Turtle • "Turn it": While playing with a shape sorter or puzzle • "Tap, tap ,tap": While tapping your feet, or a cup, or the table
"d" sound	<ul style="list-style-type: none"> • "Down ": Repeat "down" as you go down the stairs. Or use a toy doll and say " down" as the toy goes down the slide • "Daddy ": Play "where's daddy?" • Dig, dig, dig
"f" sound	<ul style="list-style-type: none"> • "Woof": Playing with a doggie • "Fish fish": Playing with toy fish in the bathtub • "Off"



My Child Has A Hearing Loss: A Family Journey

MY CHILD HAS A HEARING LOSS

“Our lives have been turned upside down”

“WHEN WE FIRST FOUND OUT OUR CHILD HAD A HEARING LOSS, WE WERE DEVASTATED.”



“WE DEFINITELY REACTED DIFFERENTLY. I WANTED TO TALK ABOUT AND READ AS MUCH AS WE COULD ABOUT HEARING LOSS, WHEREAS MY HUSBAND INTERNALIZED HIS FEELINGS MUCH MORE.”

Your child has been diagnosed with a hearing loss. You may feel confused, isolated, overwhelmed, and devastated by the diagnosis. Often parents feel guilty that they may have caused their child’s hearing loss. These are common reactions that you are feeling and you are not alone!

Communication and Emotional Support Between Spouses/Partners

Your spouse or partner may react differently than you about your child’s hearing loss. It is not uncommon for one partner to deal with his or her emotions by talking, while the other may cope by searching for solutions to help their child. You both love your child and you should not feel ashamed of feeling sad about your child’s hearing loss. It is helpful to talk about your feelings with each other during this time. One person may need more time to work through their feelings of sadness and depression, while the other may focus on getting information on various medical treatments and intervention options for their child.

Individuals process their feelings differently. On an emotional level both of you do “feel” the same feelings but may respond and react differently.

This is a time when you will need to be patient and understanding with each other. One partner may feel that the other’s reaction is uncaring or over reactive, resulting in withdrawing or judgement, instead of support and concern. Allow each other your own time to process and deal with the diagnosis in your own way. You can help each other by talking, venting, and sharing your feelings and frustrations with one another. This is an important time for couples to support each other and work together to find assistance for their child.

Grieving Process

It is common for parents to go through some stages of grieving for the loss of their child’s hearing, or the “typical” child that they expected to have. You may go through some or all of these stages of grieving:

- **Denial/Shock** – “This can’t be happening to me!” You may feel you’re going to “wake-up” from this dream and feel everything is going to be alright with your child.

“WHEN I LEARNED OF MY CHILD’S HEARING LOSS, I WAS IN DENIAL BECAUSE MY CHILD ACTED LIKE A ‘NORMAL HEARING’ BABY.”

- **Anger**– You may feel angry at yourself, your spouse, and others. You may blame God that this is happening to you.
- **Guilt** – You may blame yourself and feel that you “caused” your child to be hard of hearing or deaf.
- **Depression** – You may feel helpless, alone, and hopeless about the future.
- **Acceptance** – Once you have experienced the various stages of grieving, you can learn to accept and realize that your child’s hearing loss *will not* go away and that you must find appropriate medical treatment and intervention to help your child.
- **Hope** – It is the driving force that provides you the means to make a plan of action to help your child. There is “light” at the end of the tunnel!

If either one of you feel that you are “stuck” in any of these stages, and think you are not getting enough support, it’s okay to seek help from a trained counselor to help you through this process.

Understanding the Diagnosis and Information Gathering

- Learn as much as possible about your child’s diagnosis. Read and gather as much information that you can.
- Write down and ask questions for the professionals before you go to an appointment for your child.
- The professionals are there to answer your questions and to help your child. They are used to speaking to many parents about hearing loss and they understand that this is your *first* time hearing the news. Because of this, they understand that you may not have “heard” the information or explanations that they gave to you and that they may have to repeat it to you several times.
- This is a learning process. As your child grows and develops you will get to know your child better than anyone, you will become an “expert” on your child.
- The professionals are knowledgeable in their specialty area and you are the expert on your child. Work together to get appropriate medical treatment options and intervention services for your child.



Making a Plan of Action Through Informed Decisions

It is important to learn all about your child’s diagnosis so that you can make *informed decisions* on what medical treatment and intervention options are best for your child and family.

Time is critical when you as parents, need to make a plan of action through informed decisions.

Critical developments in the brain's ability to hear and speak occur especially during the first year of life. The longer the infant is deprived of hearing speech sounds, the more difficult it is for the child to catch up in language when he or she finally gets some sound input.

If a child born with severe to profound hearing loss does not receive any sound input into his or her brain by age 3, research has shown that his or her chance of optimal hearing and speaking decreases considerably.

- **Medical Treatment Options** – What amplification and hearing technology treatment options: hearing aids or implantable hearing aids, and/or the possibility of cochlear implant(s) or other surgical procedures will benefit your child to optimize their hearing?
- **Communication Options** – What are the primary communication goals for your child; spoken language, simultaneous communication (total communication), or American Sign Language?

The communication option you choose for your child will dictate the intervention required to accomplish your child's goals.

You will be learning and collecting a lot of information, and at times it may feel overwhelming. It's okay to take some time to relax and process the information.

Remember, you have a child that needs its parents to do all the things they normally would do. Cuddle, talk, sing, and play with your child!

It is important to bond with your child in a natural and loving manner. Your child needs to feel your love! Even though your child may be deaf or hard of hearing, your voice may be seen and felt. Talk to your child so that they can watch your facial expressions as you naturally communicate to them.





Taking Care of Myself and My Family

Being parents of a child with hearing loss has many challenges. You will be making important decisions for the future of your child and your family so it is important to *take care of yourself, first*.

- Take time for yourself. Maintain your health, eat well and get plenty of rest. Continue to do the things that you enjoy; read a book for pleasure, listen to your favorite music, cook, if that's something you enjoy, or take a walk.
- Keep an open line of communication with your partner. Talk to each other openly and discuss your concerns. Remember you are both different individuals that may react and handle situations in different ways. Allow for those differences.
- Laugh and enjoy some time together with your partner and family without always thinking about your child's hearing loss.
- Be sensitive to the needs and actions/reactions of sibling(s) of your child with hearing loss. *Just as parents need support, siblings of children with hearing loss need your support.*
- Continue to connect with good friends. These times will allow you to re-energize so that you can focus better on your child.

Siblings (Brothers and Sisters) of Children with Hearing Loss

Having a child with a hearing loss affects the *whole* family. Just as parents process their feelings differently and need support, siblings of children with hearing loss need their parents' support. Some siblings are able to express their feelings through words and others may react through their behaviors. You may find that your child is more needy or clingy, or may have mood swings. Your child most likely does not understand the changes in their parents' behaviors and family routines and may feel confused.

Changes in parents' behaviors and family routines are noticed and felt by all the children in the family. Seeing a parent tearful at times, as well as, parents spending more time with the child with hearing loss in numerous medical and therapy appointments, may make them feel uncomfortable. Changes in your child's behaviors or moods are signs that they are reacting to the changes in the family. They are seeking your attention and your support.

The following is important to consider for siblings:

- **Communication** – Allow your child to talk and ask questions about their concerns regarding their brother or sister who has a hearing loss. Your discussions should be at their level of understanding.

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- **Support** – Your child needs your support and understanding. They also need to be able to talk to other siblings about what it is like to have a brother or sister that has a hearing loss. A sibling support group may be helpful for an older child. See below for information on the Sibling Support Project. Ask your professionals for sibling support groups in your community.
 - **Individual Time** – Parents spend more time with the child with hearing loss due to appointments, maintenance on amplification technology devices, and therapy at home. Your child may feel “left out” due to all the attention their sibling is getting. They may feel “jealous” of their brother or sister. Schedule a regular “me and mommy or daddy time” with your child. They need to feel that the special time is just for them with their parent.
 - **Respect for Uniqueness** – Other people may ask questions or react in different ways to your child with hearing loss. Your child will understand that their sibling is “different” than other children. As parents it is an opportunity to talk to your child that everyone is “unique” and “special” in their own way. Learning about differences and tolerance in others is an important life lesson for all.
 - **Typical Behaviors** – Your child with hearing loss may need more guidance, but siblings may think parents give “special” treatment to their brother or sister. Do not expect your typically hearing children to “know better or understand”. Remember, they are children also.
 - **Family Life** – Siblings need to feel that they are not limited by their brother or sister who has a hearing loss. They need to feel that they live a life that is as “typical” as any other family.



The *Sibling Support Project* is dedicated to the life-long concerns of brothers and sisters of people who have special health, developmental, or mental health concerns.

For more information on Sibling Support Project, see website:
<http://www.siblingsupport.org/>

“THE GREATEST SUPPORT WE FOUND IS OTHER PARENTS. THEY KNOW WHAT YOU ARE GOING THROUGH.”



“FINDING A FAMILY WITH A CHILD 2 TO 3 YEARS OLDER THAN YOURS WILL GIVE YOU VALUABLE INSIGHT WITH CURRENT INFORMATION.”

Your Support System

A support system includes and provides everything from emotional comfort, helpful information, and professional services. Your support system will be of great value to you while you are going through this process. The professionals that are helping your child and family, your relatives, and friends are part of your **support team** and your support system. Allow family and friends the opportunity to learn about hearing loss, share websites, and resources so they can engage in conversations with you and be part of your support team.

The **support team** members in your support system include:

- **Professionals** – that are helping you and your family. They include: your child’s primary care doctor, ENT doctor, audiologist, speech-language therapist, psychologist, nurse, occupational and/or physical therapist, social worker, early intervention specialists, and educators.
- **Family and Relatives** – spouse/partner, parents, siblings, aunts, uncles, and grandparents can be a great source of support.
- **Good Friends** – that you can share what you are going through.
- **Religious Organizations** – can help provide spiritual support.
- **Parent Support Groups** – meeting with other parents of children with hearing loss can be supportive because they’ve “been there” and can truly empathize with you.
Parent-to-parent support can provide information on everyday practical issues that are specific to raising a child with hearing loss, such as how to keep hearing aids on your child or the care of a cochlear implant, etc. It provides an opportunity for families to socialize and have their children be with other children like themselves. Exchanging information and resources about services in the community can be very helpful. Ask your professionals for a list of parent support groups in the community.
- **Internet** – can provide you with much information. Make sure that you are looking at sources that have accurate and up-to-date information. Many parents chat on-line and have blogs that can be helpful to you. Helpful websites on specific topics are provided throughout this parent’s guide
- **Community/Local, State, & National Organizations** – can provide more information, resources, parent support, and educational workshops/conferences in the area or nationally. See below for a list of resources in central Ohio and for a directory of organizations.

Keep a list of your “support team”, including professionals and others on the forms provided in *the RESOURCES SECTION*.

Working Together as a Team

In order to provide the best care for your child, both parents and professionals must work together as a team. Parents know their child best and are a vital member of the professional team. Your input regarding your child is very important and helpful to the professionals.

Parents and professionals should:

- Be open-minded to each other’s expertise; parents know their child best and professionals know their specialty area.
- Maintain an open line of communication; trust and mutual respect for each other will help you develop a working relationship.
- Work together as a team; share any concerns that may affect the care of the child; both parents and professionals should be open to suggestions.

If you have concerns regarding the care of your child, it is important to *speak directly* with the professional working with your child. If your concerns are not resolved, then you may want to speak with that professional’s supervisor. You are your child’s advocate and you need to do what you feel is right for your child.

Advocacy

Advocating for your child is:

- researching hearing loss and how it will effect your child’s development
- learning about appropriate medical treatment options
- accessing resources available within and outside your community
- working with professionals to make informed decisions on appropriate medical treatment options



Board Members from Wyoming Hands & Voices, parents, and Deaf/Hard of Hearing adults meeting at the annual parent training held each summer to encourage, connect, and equip families of children who are D/HH.

MY CHILD HAS A HEARING LOSS



- carrying out the plan of actions the you and your professionals have chosen
- obtaining information and emotional support through parent-to-parent support groups
- joining organizations that provide information through educational workshops and conferences
- learning the process of developing your child's IFSP and IEP
- being a role model for your child so that they can learn how to advocate for them self

Some of the above strategies and additional practical applications will be provided in more detail during the Hands & Voices ASTra Training.

NOTES

NOTES



Child Development

Child Development

Young children grow very quickly. Most children will triple their birth weight by their first birthday. The first year of life brings changes in many areas including independence, mobility, and communication. The most important thing a parent can do is to provide their child with a safe, loving, responsive and nurturing environment.

It is important to understand how your child develops. This information will allow you to provide appropriate opportunities and experiences to support and nurture your child's development. It is also important to monitor your child's development so you know if a particular skill is being achieved within the expected time frame. Hearing loss often impacts developmental milestones, including the areas of auditory, speech, language, cognitive and social development.

Developmental skills can be monitored in many ways including developmental checklists, formal assessments/progress monitoring tools and with your child's early intervention team and primary medical care provider. An example of a progress monitoring tool currently available in Wyoming is the Outcomes and Developmental Data Assistance Center for EHDI Programs (ODDACE). The ODDACE assessment ensures a comprehensive developmental assessment is completed and provides you the information needed to determine if your child is developing as expected for their age. The Wyoming Early Intervention Initiative (WEII) recommends a complete developmental assessment (such as the ODDACE) be completed at the following ages: 9 months, 15 months, 21 months, 27 months, 33 months, 4 years and 5 years. Each child is unique and will move through the developmental hierarchy at their own speed. If your child is not making the expected progress within a particular developmental area, you need to be aware of this delay and address it with your child's early intervention team.



Newborn Reflexes

Reflexes direct your newborn's movements. These movements are automatic responses. Over time, reflexes will be replaced with purposeful movement. It is important to be aware of your newborn's reflexes. If a specific reflex is absent or if you have any concerns regarding newborn reflexes, please visit with your child's early intervention team or your child's primary care provider.

IF YOU	THEN THE BABY WILL
tap the bridge of the nose shine a bright light into the eyes clap about 18" from baby's head	startle (eyes close tightly)
make sudden contact or noise	drop the head back, fling their arms and legs (Moro reflex)
pull baby to a sitting position	quickly open eyes, tense shoulders, try to balance the head
put the baby on their tummy on a flat surface	turn their head to the side and lift it
stroke the foot or hand on top	withdraw the hand or foot; arch their back
stroke the palm or the sole of the foot at the base of the digits	curl the fingers or toes
tap the upper lip	protrude their lips
stroke the palm of the hand	flex the arm and put the hand in their mouth
rotate baby to one side	turn their head and move their eyes in the direction of the rotation

Developmental Checklists

The following graphs represent a summary of developmental milestones for children between 1 – 36 months of age.

The skills have been grouped into the following developmental areas: cognitive, motor, speech and language, and personal/social. Since each child develops at their own rate, this graph is a guideline to assist you in monitoring your child’s development.

If you have any concerns about your child’s development, please consult your early intervention providers and/or your primary medical care provider.

	COGNITIVE	MOTOR	SPEECH AND LANGUAGE	PERSONAL/SOCIAL
1 month	<ul style="list-style-type: none"> Prefers patterns Alert 2-3 hours each day Quiets to being held or when seeing faces 	<ul style="list-style-type: none"> Movements are reflexive Coordinates eyes 	<ul style="list-style-type: none"> Responds to voice 	<ul style="list-style-type: none"> Responds to a smile
2 months	<ul style="list-style-type: none"> Stares at surroundings Prefers people to objects Becomes excited in anticipation of getting objects Does one thing at a time 	<ul style="list-style-type: none"> On back, turns head Startles 	<ul style="list-style-type: none"> Small, throaty cooing sounds 	<ul style="list-style-type: none"> Quiets self with sucking Smiles at people Watches person Stays awake longer if someone is interacting with them
3 months	<ul style="list-style-type: none"> Improved visual tracking Begins to recognize common objects Watches own hands Searches for sound 	<ul style="list-style-type: none"> Sits supported Begins to swipe at objects Upper body more active; wiggles and kicks 	<ul style="list-style-type: none"> Coos with vowel sounds Squeals Vocal response to mom's smile 	<ul style="list-style-type: none"> Crying decreases Responds to face of familiar person Vocalizes when spoken to

	COGNITIVE	MOTOR	SPEECH AND LANGUAGE	PERSONAL/SOCIAL
4 months	<p>Imitates gestures</p> <p>Keeps toy in motion by repeating movement that started motion</p> <p>Explores objects with mouth; enjoys "gumming" things</p>	<p>Grasps objects</p> <p>Upper body more active; wiggles and kicks</p> <p>Begins to roll</p> <p>Enjoys sitting with support</p> <p>When pulled to stand, presses feet against surface and stands briefly</p> <p>Turns head in all directions</p>	<p>Babbles or coos when smiled at</p> <p>Laughs</p> <p>Vocal responses</p>	<p>Plays with fingers and toes</p> <p>Enjoys familiar routines</p> <p>Turns toward or away from person</p>
5 months	<p>Alert up to two hours</p> <p>Wants to touch, hold, turn, and mouth objects</p> <p>Visually searches for fast-moving objects</p> <p>Recognizes familiar objects</p> <p>Imitates sounds and movements</p> <p>Drops first item in hand to take second item</p>	<p>When on tummy, tilts head & raises chest</p> <p>Easily pulls to stand</p> <p>Sits supported for 30 minutes</p> <p>May hold bottle</p> <p>Grabs or waves object with either hand</p> <p>Brings feet to mouth</p>	<p>Tries to imitate inflections</p> <p>Vocalizes with vowel sounds – ee, ah, oo</p> <p>Vocalizes some consonants – b,d,m</p>	<p>Smiles and vocalizes to mirror image</p> <p>Bangs playfully</p> <p>Protests when adult tries to take away toy</p> <p>Plays with rattle</p> <p>Shows anticipation</p>

	COGNITIVE	MOTOR	SPEECH AND LANGUAGE	PERSONAL/SOCIAL
6 months	<p>Reaches to grab dropped object</p> <p>Visually alert almost half of daylight hours</p> <p>Reaches for what is seen</p> <p>Picks up blocks easily</p> <p>Coos or stops crying to music</p>	<p>Stands with support</p> <p>Bounces</p> <p>Sits with slight support or unsupported</p> <p>Holds bottle</p>	<p>Grunts, growls, squeals, giggles</p> <p>Vowels begin to combine with consonants</p> <p>Looks in response to own name</p> <p>Hand babbling emerges</p>	<p>Smiles at mirror image</p> <p>Responds to facial expressions</p> <p>Grasps foot in play</p> <p>Plays peek-a-boo</p> <p>Sleeps through the night</p> <p>Plays 2-3 minutes with a toy</p> <p>Looks for family members when they are named</p>
7 months	<p>Imitates gestures</p> <p>Looks at pictures when named</p> <p>Interested in detail</p>	<p>Pushes on hands and knees and rocks back and forth</p> <p>Holds objects in each hand and bangs together</p> <p>Hands are free while sitting</p>	<p>May say "da-da" or "ma-ma" without referring to specific parents</p> <p>Uses vowels and consonants</p>	<p>May fear strangers</p> <p>Distinguishes friendly vs angry tones</p> <p>Manipulates a cup or spoon in play</p> <p>Finger feeding begins</p>
8 months	<p>Puts small objects in and out of a receptacle</p> <p>Solves simple problems (purposeful actions)</p> <p>Searches for an object that was seen to be hidden</p>	<p>Pincer grasp (forefinger and thumb come together) is used to pick up an object</p> <p>Pulls on furniture to stand</p> <p>Crawls backward</p> <p>Makes stepping movements</p>	<p>Uses two-syllable utterances</p> <p>Shouts</p> <p>Babbles with a variety of sounds</p>	<p>Pushes away things that aren't wanted</p> <p>Reaches persistently for toys</p> <p>Attached to mother</p>

	COGNITIVE	MOTOR	SPEECH AND LANGUAGE	PERSONAL/SOCIAL
9-12 months	<p>Continues exploration – still puts objects into mouth</p> <p>Begins to put objects inside other objects</p> <p>Enjoys stacking objects</p>	<p>Crawls well</p> <p>Pulls to a stand</p> <p>Walks with support</p> <p>Eats finger foods</p> <p>"Dances" to music</p> <p>Drops or throws objects, cannot put objects down</p> <p>Searches for partially hidden toy</p> <p>Takes socks off</p>	<p>First word, spoken or signed</p> <p>Waves "bye-bye" with prompt</p> <p>Vocalizes to get adult attention</p> <p>Imitates non-speech sounds</p> <p>Language-like inflection/ tone</p> <p>Follows simple instructions</p> <p>Understands "no"</p> <p>Responds to "give me" command</p>	<p>Pushes away unwanted items</p> <p>Offers toy to others</p> <p>Imitates adult actions</p> <p>May have favorite toy/blanket</p> <p>Plays "pat-a-cake", "peek-a-boo"</p> <p>Stranger anxiety</p> <p>Indicates desire to "get down"</p>
13-15 months	<p>Looks at picture in book for a few seconds</p> <p>Puts small objects in container</p> <p>Does not understand danger</p> <p>Begins to understand things happen with own actions</p> <p>Searches for hidden toys</p>	<p>Stoops to pick up object</p> <p>Backs down stairs</p> <p>Pivots while sitting</p> <p>Walks</p> <p>Holds two objects in one hand</p> <p>Pokes, turns, pulls, etc</p> <p>Holds cup with assistance</p> <p>Bounces to music</p> <p>Scribbles</p> <p>Very Active!</p>	<p>Vocabulary of 3-8 words</p> <p>Gives toy on request</p> <p>Responds to name</p> <p>Understands the name of important people and things</p> <p>Responds to "where is_____?" (doggy, shoe, etc)</p> <p>Understands concepts of "up" and "down"</p> <p>Imitates words/signs</p> <p>Points to one body part</p>	<p>Imitates adults actions</p> <p>Enjoys applause and praise</p> <p>Demands attention</p> <p>Wants mom and dad in sight</p> <p>Prefers certain people</p> <p>Tries to use spoon</p>

	COGNITIVE	MOTOR	SPEECH AND LANGUAGE	PERSONAL/SOCIAL
16-18 months	<p>Enjoys picture books</p> <p>Hugs soft doll or teddy bear</p>	<p>Walks well</p> <p>Manages cup well</p> <p>Seats self on chair</p> <p>Throws ball</p> <p>Attempts to kick ball</p>	<p>Long "babbling" conversations</p> <p>10-20 word vocabulary</p> <p>Begins to use two word phrases/signs</p> <p>Words used to express some wants</p> <p>Points to pictures in books</p> <p>Shows refusal with body movement</p>	<p>Enjoys bath</p> <p>Likes to turn on water</p> <p>Plays with food</p> <p>Tries to put shoes on</p> <p>Enjoys playing with dad</p> <p>Waves "bye-bye"</p> <p>Begins to show independence</p> <p>Likes to play "hide-and-seek"</p> <p>Plays ball</p>
19-21 months	<p>May express fear</p> <p>Completes simple puzzle with two or three pieces</p> <p>Identifies pictures in a book</p>	<p>Runs</p> <p>Builds tower of four or five blocks</p> <p>Slides into small chair</p> <p>Kicks ball</p>	<p>Points to several named body parts</p> <p>Combines two different words</p> <p>Says or signs "on" or "up"</p>	<p>Feeds self</p> <p>Likes to take off clothes and run around naked</p> <p>Enjoys car rides and walks</p> <p>Plays alone if adults are close by</p>

	COGNITIVE	MOTOR	SPEECH AND LANGUAGE	PERSONAL/SOCIAL
22-24 months	<ul style="list-style-type: none"> Builds and knocks down Beginning to show a sense of humor Curious about people and objects Throws object overhand 	<ul style="list-style-type: none"> Climbs on a chair Jumps with both feet Picks up object from floor without falling Can string large beads 	<ul style="list-style-type: none"> Asks for things by name Likes repetition in books Uses simple 1 or 2 word questions Likes simple stories Knows three - five body parts Vocabulary of 20 - 50 words Names familiar objects 	<ul style="list-style-type: none"> Comes when called Likes to help with housework Tests limits Feels hurt by criticism Likes to please others
25-30 months	<ul style="list-style-type: none"> Enjoys books, turns pages Awareness of self as a person Understands simple cause and effect Enjoys signed stories 	<ul style="list-style-type: none"> Can stand on one foot Climbs with a purpose Likes action toys Turns doorknob Takes lids off Enjoys rough and tumble play Walks on tiptoe Dislikes being pushed in a stroller - wants to do it himself 	<ul style="list-style-type: none"> Understands longer sentences Says "I want" Can sing phrases of some songs Begins to use negatives Begins to use classifiers Understands simple fingerspelled words 	<ul style="list-style-type: none"> Likes being looked at Increasing sense of independence Strong attachment to mother Parallel play - two children playing near each other, but not together Likes to scribble
31-36 months	<ul style="list-style-type: none"> Understands concept of "one" Matches some colors Remembers simple two and three step directions 	<ul style="list-style-type: none"> Pedals small tricycle Builds tower of 8 blocks Walks up stairs, alternating feet Runs well 	<ul style="list-style-type: none"> Rapid increase in vocabulary Three or four word sentences Asks "what" and "where" questions 	<ul style="list-style-type: none"> Likes helping others Some daytime bowel and bladder control Uses spoon and cup Undresses himself Beginning to play with other children Fantasy and pretend play

Developmentally Appropriate Toys:

The graph below provides ideas of developmentally appropriate toys for children of different ages. This list is not all inclusive. You get to choose the toys with which your child plays. Don't be afraid to use items available in your home as toys such as boxes, cups, pots/pans, etc.

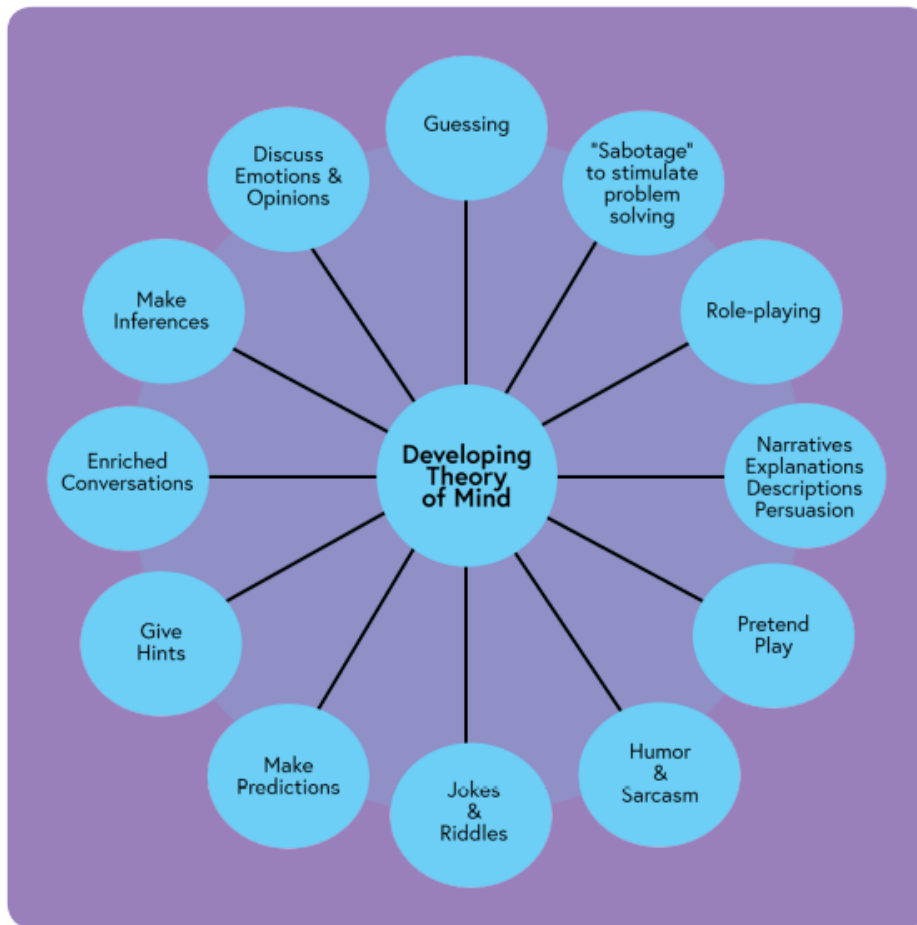
Birth - Three Months	
Mobiles	Rattles
Mirrors	Books
Toys for squeezing and sucking	Bright pictures of faces
Four - Six Months	
Mobiles	Cradle gym
Mirrors	Texture ball/toy
Toys for teething	Soft blocks
Books	
Six - Nine Months	
Sorting cups	Balls
Small stuffed animals	Push and pull toys
Small blocks	Books
Nine - Twelve Months	
Wooden blocks	Things to fill up and empty
Tub toys	Boxes with lids
Drum	Books
Stacking and sorting toys	Simple puzzles
Pots and pans	
Thirteen - Twenty-four Months	
Pop-up farm	Indoor slides
Push and pull toys	Shape sorter
See 'n say	Little people house
Vacuum cleaner	Balls
Puzzles	Bubbles
Blocks	Books
Twenty-five - Thirty-six Months	
Duplo blocks	Puzzles
Play kitchen	Crayons and paper
Mr. Potato Head	Cars and trucks
Dolls	Books
Balls	

Theory of Mind

A vital piece of early childhood social cognition is the development of Theory of Mind. Theory of Mind develops in the first five years of life. Theory of Mind is the ability to understand the mental states of ourselves and others. In other words, a child understands that what they think, want, or feel may not be the same as what another person thinks, wants or feels. A child's language changes to reflect their growing awareness of thought. Early skills for development of Theory of Mind include your child recognizing and expressing emotions, understanding the causes of emotions, and recognizing that their unique likes and dislikes are different from other people's likes and dislikes.

Children who are deaf and/or hard of hearing are at risk for Theory of Mind deficits. For more information, please visit with your child early intervention team.

Below are examples of strategies to support Theory of Mind development:





Behavior

Behavior

Teaching children expected behaviors appropriate for various environments is just one of the areas in which parents can experience frustration and concern. Children often learn about expectations for behavior from watching and listening to what is happening around them. The ability to overhear what is said around us, and learn from what we have heard, is called Incidental Learning or Incidental Listening. Children who are deaf/hard of hearing (D/HH) do not always have the benefit of Incidental Learning or Listening. Therefore, teaching them expected behaviors may need to be more specific and intentional.

Before children can express **HOW** they are feeling, they will need to be able to identify **WHAT** they are feeling. Becoming a two-way mirror for your child will help them to understand you, their environment and themselves. This can feel awkward at first, but the more you practice, the less uncomfortable it will feel. This could look like *"I see you are crying; do you feel sad that Grandma left?"* or *"You are bouncing in your highchair, it looks like you are excited for your breakfast!"*

Strategies:

Here are strategies that may help you as you give your child tools that are important for understanding and expressing emotions so that behaviors that are concerning you do not snowball into more difficult behaviors.

- **Share your own feelings with your child:**
 - This may feel uncomfortable at first, but this will normalize all of what they are noticing in their own little bodies.
 - Try to use a variety of words. Mad/sad/happy are good starts but helping your child use a variety of words for his/her own feelings will help as they communicate with you and as they become involved in more social situations, learn more language, and begin to read.
- **Help your child understand his/her emotions are normal. Express/name/narrate your emotions so that your child can express his/her own thoughts.**

"Today I was frustrated. I had a list of things to do, but when I took the car to get the oil changed, it took so long that I did not get to do my other things. It was not anyone's fault, but I felt grumpy."
- **Give your child the language for the feeling.**

Narrate what is happening. *"Oh no! Your ice cream fell and now it is dirty. You are so disappointed you cannot eat it anymore!"* or *"You missed Grandma and Grandpa so much, your big smile tells me that you are so excited to see them again!"*

Issues arise from children not knowing how to express their feelings.

 - The more information you can connect to how they are feeling and their reaction to their feelings, the better job they will do telling you how they feel in the future.

- **There are no bad emotions.**

Feeling angry is not the problem. Anger is a normal emotion. Do not punish a child because they feel and express their emotions. Breaking mom's favorite headphones is the problem. Try to think creatively about how to help your child express his/her emotions. For example, when your child is feeling nervous- does your child need to take a deep breath, run in place, or dance? Find ways to encourage their expression of emotions. You know your child best!

- **Facial reactions/body language are important to explain.**

Children who are D/HH need as much of the whole picture as possible to figure out their world. This includes understanding visual cues like facial expressions and body language. Look at the pictures below. Imagine trying to understand what is happening and you do not have any words to go with the picture.

Think about just making a face at a child. There can be different feelings/interpretations of each expression. This could lead to frustration and even anxiety when your child is trying to understand what you are communicating. Make sure that your child knows how you are feeling because learning to read facial expressions/body language is a skill they will benefit from learning.



- **Connect your child's emotions to a feeling. Issues arise from children not knowing how to express their feelings.**

The more often you can connect information for your child's feelings and their subsequent reactions, the better he/she will be able to express feelings in the future. *"You felt excited about the park, and you unbuckled your car seat. That was not safe." or "You felt angry you had to take a nap, so you threw all your blankets out of your bed."*

- **Give your child background knowledge.**
 - Background knowledge can help them get/understand information. Picture books are a wonderful place for these kinds of conversation starters.
 - *"Oh no... this little girl just got into trouble for hitting her brother. It looks like she was mad. What will happen? Is her brother sad? Look how he feels."*
 - Oh look! All the bear's friends are going to surprise him for his birthday! How do you think he will feel?
- **Set clear expectations.**
 - *"We are going to the grocery store. When we are there, stay with me and hold onto the cart so I know where you are."*
- **Follow up and give your child feedback about what he/she did RIGHT.**
 - *"You stayed with me the whole time we were at the store! Thank you!"*
- **Fewer words are better.**
 - The more concise you are, the clearer the expectations will be for your child.

"We are going to go to the grocery store by Grandma's house. They just finished a big remodel and so it is going to take us a little bit longer. Make sure you stay with me because last time you ran away and then I got so worried about you, and I had to take extra time at the store..."

Did you stop reading the above paragraph? Your child may have stopped listening!

 - Instead try: *"At the grocery store, hold onto the cart. It will make our trip faster!"*
- **Listening fatigue is real.**
 - One way that children who are D/HH let adults around them know they need a break is to take out (or throw) their hearing aids. In those moments, it may work for your child to set a timer. *"I can see you are tired. I will set the timer for 2 minutes and then we will put them back in."*
 - If you notice this happening more frequently, start a timer and say, *"We will keep your hearing aids in for 15 minutes, then take them out for 1 minute"* or whatever you feel your child can tolerate without it becoming a power struggle.

- **Time Out does not work for every child.**
 - Keep in mind the purpose of a time out is to redirect a child's behavior. Sometimes you can achieve the same goal with deep breaths or counting to 5 or 10 and then fixing the behavior (if your child dumps something/she needs to clean it up, if your child rips something/he should help tape it together, if she hurts someone/she needs to apologize).

- **Follow-up with your child after experiences.**
 - As adults it is easy to move on from one experience to the next. If you have started with clear expectations and given the language for the experience; spend a minute wrapping up the experience. This will help your child to connect the experiences and emotions.
 - Example:
 - *"Tonight, you will try one bite of broccoli."* (**Clear Expectation**)
 - *"You are putting your hand over your mouth. That tells me you think it will be something you do not like."* (**Two Way Mirror**)
 - *"There are some foods that I don't like but I try at least one bite first."* (**Share your emotions**)
 - *"I know you didn't want to try that vegetable on your plate..."* (**Acknowledge that you heard your child and that you understand what he/she was saying.**)
 - **(Child's Chance to think back and express)**
 - *"What did you think?"*
 - *"What was something you LIKED about it?"*
(color/texture/flavor/temperature/etc)
 - *"What was something you DIDN'T LIKE about it?"*
(color/texture/flavor/temperature/etc.)
 - *"Next time you have something you don't want to try, let's agree you will only have to take one bite."* (**Final Wrap Up + Setting Future Expectations**)

- **Every day has good in it.**
 - Try to remember, even on the hardest days, that a broken clock is right twice a day. If your child typically screams and throws things when he becomes upset and this time he only screams, praise him for not throwing something.

The better your child can communicate with you, the fewer frustrations you may encounter and the easier it will be for you and your family to have tools to be prepared for a variety of environments and situations.



Getting The Most Out Of Early Intervention

Getting the Most out of Early Intervention

It's Tuesday morning and your early interventionist is coming today. What's going through your mind? Maybe you're looking forward to sharing what your baby has recently started doing. Perhaps you're busy sweeping up crumbs from breakfast. Hopefully you're not thinking about canceling the visit!

Things are going through your early interventionist's mind, too. She is thinking about you and your child. She has planned what to discuss based on your interests and your child's development. She keeps in mind questions you've asked or goals you've expressed and has gathered materials to give you the information you need to be your child's best first teacher. You and your early interventionist are partners in making the most out of your time together. Here are some things you can do to get the most out of participating in early intervention.

YOUR CHILD

You see your child every day; your early interventionist visits for a short time. Be ready to share what's new—it may be helpful to keep a list of new milestones or changes in your child's routine.

DON'T WORRY ABOUT HOUSEKEEPING

Your early interventionist is looking forward to seeing you and your child. Certainly, it is helpful to have a clean space for your time together, but your early interventionist won't mind if there are dishes in the sink or towels on the bathroom floor. She knows how to focus on you and your family. Relax and enjoy your personal visit without being overly concerned about housekeeping.

MINIMIZE DISTRACTIONS

If your pet longs for attention, take him out of the room. A television or radio playing in the background can make it hard for everyone to concentrate. If you receive a phone call, try to end it quickly. Save chores such as laundry or dishes for later—both you and your early interventionist will be able to make the most out of your time together if you give your full attention.

LET YOUR EARLY INTERVENTIONIST KNOW ABOUT YOUR THOUGHTS AND FEELINGS

Fully participate in the partnership with your early interventionist by sharing your thoughts and feelings. Don't be embarrassed to ask any questions you might have. You may think a question

is trivial, but your early interventionist won't. Ask for additional information on a topic that interests you. Tell her your goals for your child or concerns you may have about your child's services. Feel free to share fears or things that worry you. Your early interventionist will keep your comments confidential. She will help you find the resources you need to feel confident about your child's development and your parenting.

FOLLOW UP ON RECOMMENDATIONS

Your early interventionist may suggest activities for you to do with your child between visits or may recommend other steps for you to take to meet his or her needs. Enjoy doing these things with your child, follow through with recommendations and observe his development. You will help your child reach her full potential.

*Taken from <https://www.tiny-k.org/getting-the-most-out-of-early-intervention.html>
(Adapted from a Summer, 2005 article at www.ParentsAsTeachers.org).*



Quick Start Guides



A QUICK START GUIDE - PRACTICAL STRATEGIES FOR FAMILIES OF INFANTS WHO ARE DEAF/HARD OF HEARING (D/HH)

CREATED BY THE WYOMING EARLY INTERVENTION INITIATIVE (WEII)*

Support Daily Full-Time Use of Hearing Devices

- If your child's eyes are open then hearing devices (hearing aids, cochlear implants, BAHAs etc.) need on your child's ears and turned on.
- Retention devices may help keep hearing devices on your child's ears and reduce frustration: headbands, caps, critter clips, toupee tape, pilot caps etc.

Draw Attention to Environmental Sounds Throughout the Day

- When a sound occurs, point to your ear, draw attention to the sound source, name the sound and imitate the sound.

Be Aware of and Reduce Background Noise

- TV/radio, electronic noise, fans, noise sources from outside and inside the room, etc. should be reduced or eliminated as much as possible.

Complete Daily Hearing Device Check

- Use items in the child's hearing device check kit (provided by your audiologist) such as hearing aid stethoscope to complete the hearing device check.
- Family members should be trained by their child's audiologist to learn how to check the child's hearing device to be certain the device is on, working properly, and the child has access to sound.
- Ask your audiologist or child's early interventionists about the Six Ling Sounds that are used during the device check (Ling Sounds: ah, oo, ee, sh, s, m).
- Change or charge device batteries as needed.
- Be certain the earmold/tubing is not clogged with wax, cracked, is free from moisture and has not become brittle.
- If your child's hearing aids are squealing, check to be certain the ear molds are properly inserted. If they are properly inserted and the squealing continues, your child may need new ear molds.
- For soft band BAHAs, make sure the device is fit properly and worn at the recommended position on your child's head.

Make/Gain Eye Contact When Speaking to Your Child

- Prior to speaking, get your child's visual attention.
- Don't look away while talking.
- Keep your lips visible while talking.
- Beards and mustaches can interfere with lip reading.
- To the extent possible, please do not block the view of your face with hands and objects.
- When masks are used, be aware that visual cues will be reduced.

Be Aware of the Impact of Distance Between the Person Who is Talking and the Child Who is Deaf/Hard of Hearing.

- The greater the distance between the person speaking and your child, the harder it is for your child to understand what is being said.

Keep High Expectations for Your Child who is Deaf/Hard of Hearing

- Expect your child who is D/HH to follow the same rules as a hearing child. Be prepared to clarify rules.
- Be certain your child understands your expectations. Prior to new experiences, it may help to talk about or role play social rules.
- Offer your child who is D/HH the same experiences as other children of the same age.

Remember you are not alone....

- Explore supports and resources available to your family and child.
- Reach out to other parents, Parent Guides™, D/HH Role Models, Facebook/Parent Groups.

Provide a Language Rich Environment for Your Child

- Use a "Radio Commentator" strategy: narrate your child's day. Tell your child what you are doing, why, and how.
- Talk about your and your child's emotions using a variety of words throughout the day (ex. I feel excited).
- Encourage all family members to sing songs, recite nursery rhymes and read books with your child daily.
- Use your voice to make the story exciting and interesting.

Support the Use of Sign Language

- Sign language may help support language development and decrease communication frustration.
- If you are using sign language with your child, encourage all family members, your child's friends and key people in your family's life to learn and use sign language.
- Seek training for family sign language development.
- Provide opportunities for your child and family to interact with other people who use sign language.
- Consistently use sign language in your daily routines.
- Remember, you don't need to be fluent in sign language to communicate with your child. Start where you're at and grow together.

*Members of the WEI include representatives from the following: Wyoming Early Hearing Detection and Intervention (EHDI) Program; Wyoming Families for Hands & Voices, Guide By Your Side (GBYS); Wyoming Department of Education, Outreach Services for the Deaf/Hard of Hearing (D/HH); Wyoming Department of Health, Early Intervention and Education Program (EIEP); University of Wyoming, Communication Disorders Division; Child Development Services of Wyoming; and The Marion Downs Center.

If you are interested in additional information, support, or training, please contact the Wyoming EHDI Program at (307) 721-6214 or info@wyomingehdi.org or Wyoming Families for Hands & Voices at kim@wyhandsandvoices.org.



A QUICK START GUIDE - ASSISTIVE LISTENING DEVICES CREATED BY THE WYOMING EARLY INTERVENTION INITIATIVE (WEII) FOR FAMILIES AND THEIR CHILDREN WHO ARE DEAF OR HARD OF HEARING (D/HH)*

What Are Assistive Listening Devices (ALD)

- Remote Microphones (RM) and personal Frequency Modulation (FM) systems are examples of assistive listening devices. They are small devices available to help children who are D/HH.
- These devices allow the voice of the person wearing the microphone to be sent directly to a child's hearing device(s) via Bluetooth.
- These devices help overcome the problem of distance between the person speaking (teacher/parent/day care provider/family members) and the child.



Why Use an ALD

- For every 3 feet away you are from your child, the volume of your voice decreases by 6 decibels. This means, the further away you are from your child, the more your voice becomes a whisper.
- Improved speech clarity.
- Improved quantity and quality of communication.
- RMs help diminish the effect of noise, distance, and reverberation (i.e. room echo) on a child's ability to hear and understand speech.



How to Use ALD

- Daycare Providers/Teachers etc. please note that the parent has been trained, by the audiologist, on how to use and maintain the ALD. Ask the parent to teach you how to use the ALD following the steps below.
 - Turn on the ALD.
 - Ensure the ALD is paired to the child's hearing device(s).
 - Perform a listening check BEFORE and AFTER the ALD is activated.
 - Position the microphone (use a clip/lanyard) no more than 8 inches below the mouth of the person speaking.
 - Talk away! Be sure to MUTE the ALD when you don't want the child to hear what is going on (i.e. you going to the bathroom).
 - At the end of the day, turn off the ALD and plug it in to the charger for a minimum 2-3 hours.
 - Make sure clothing, jewelry etc. does not cover or touch the microphone while you are speaking. It will cause scraping or muffled sounds.
 - As you are speaking, when you turn your head also turn your upper body. This supports a consistent mouth to mic distance and ensures the child has consistent access to the voice of the person speaking.

Where to Use ALD

- Noisy, reverberating environments, such as classrooms, restaurants, the car etc.
- Whenever the person (teacher/parent/day care provider/family members) wearing the microphone will be more than 3 feet away from the child (i.e. in another room, outside).
- Anywhere and everywhere there are problems with noise and distance (day care, outside, restaurants, grocery store, stroller rides etc.).



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If you are interested in additional information, support, or training provided at **no cost** regarding this quick start guide, please contact the Wyoming EHDI Program at (307) 721-6212, info@wyomingehdi.org for an appropriate referral.



QUICK START - PRACTICAL STRATEGIES FOR DAYCARE PROVIDERS OF INFANTS WITH HEARING LOSS

Support Daily Full-time Use of Amplification Devices

- If the child's eyes are open then hearing aids, cochlear implants, etc. need to be turned on and on the child's ears
- Use retention devices: headbands, caps, critter clips, toupee tape, etc.

Complete Daily Hearing Aid/Cochlear Implant Equipment Check

- Use items in the child's hearing aid check kit such as hearing aid stethoscope
- All family members should be trained by their child's audiologist to learn how to check the child's hearing aid, cochlear implant, etc. to be certain the device is working and the child has access to sound
- -ask your audiologist about the Ling sounds (ah, oo, ee, sh, s, m)
- change batteries/charge batteries as needed
- check to be certain the earmold/tubing is not clogged with wax, is cracked, or is too hard
- Make sure the device is worn properly

Draw Attention to Environmental Sounds

- When a sound occurs, point to your ear, label the sound and imitate the sound



Be Aware of the Negative Impact of Distance On the Child's Access to Sound/Speech

- 3 feet of distance or less is optimal for access to communication
- Voice volume decreases by 6 decibels of loudness every 3 feet of distance from the child

Make/Gain Eye Contact

- Before speaking to the child, get the child's attention
- Don't look away while talking
- Keep your lips visible while talking

Be Aware of and Reduce Background Noise

- For example: TV/electronic noise, computer noise, fans, noise sources from outside of the room, etc

Provide a Language Rich Environment for the Child

- Use a radio commentator strategy: narrate the child's day/emotions - tell the child what you are doing, why, and how
- Sing songs and read books with the child
- Use a variety of intonation patterns - change your tone of voice

Support the Use of Sign Language

- Sign language may help to support language development and decrease frustration levels.

FOR FURTHER SUPPORT, INFORMATION OR TO OBTAIN A HEARING AID CHECK KIT, PLEASE CONTACT THE CHILD'S AUDIOLOGIST OR THE WYOMING EHI PROGRAM (307) 721-6212 OR INFO@WYOMINGEHI.ORG



A QUICK START GUIDE - PRACTICAL STRATEGIES FOR PRESCHOOL CLASSROOM TEACHERS AND EARLY INTERVENTION PROVIDERS OF CHILDREN WHO ARE DEAF/HARD OF HEARING

CREATED BY THE WYOMING EARLY INTERVENTION INITIATIVE (WEII) FOR FAMILIES AND THEIR CHILDREN WHO ARE DEAF OR HARD OF HEARING (D/HH)*

Understand and Support the Critical Impact of Full-time Use of Hearing Devices

- Full time use of hearing devices gives the child critical access to spoken language and learning.
- Collaborate with the child's family to ensure that the child arrives to school with hearing devices on and functioning appropriately.

Ensure Amplification Devices are Working Properly

- Complete a daily check of hearing devices (Hearing Aid, Cochlear Implant (CI), BAHA).
- Complete a daily check of Remote Mic (RM), Personal Frequency Modulation (FM) System, and Classroom Soundfield System.
- Position the microphone (use a clip/lanyard) no more than 8 inches below the mouth of the person speaking.

Make Transitions Overt

- Provide a visual cue with each transition, such as flicking the overhead light on/off.
- The use of a visual classroom schedule is beneficial. Consistently engage children with the visual schedule at each transition throughout each day.

Restate and Rephrase Adult and Peer Comments/Questions

- It is difficult for children who are D/HH to hear peer or adult voices in group settings, large rooms, gyms, outside, and in all noisy environments.
- Children who are D/HH don't have access to incidental learning at the same rate as their hearing peers.
- Restating adult and peer comments/questions gives the child who is D/HH critical access to language that is beyond their listening bubble.
- Start with the name of the person who spoke, ex: "Jenny said....." (This strategy also helps the child who is D/HH learn peer names).

Make/Gain Eye Contact with the Child Who is D/HH

- Prior to speaking/signing to the child
- Prior to giving group directions
- Prior to initiating transitions
- Avoid turning away from child who is D/HH during group activities (i.e. circle time). This provides the child with consistent visual information.

Provide Visual Access to the Face of the Person Speaking

- Avoid covering or putting things in front of the mouth.
- If masks are used for any reason, they should be transparent if possible.
- Avoid turning your back when speaking to the child.
- Make sure your face is well lit, not in front of windows with backlighting.

Check with the Child to Ensure Understanding

- Ask the child who is D/HH open ended questions - avoid yes/no questions.
- Instead of "Do you understand?" ask, "Tell me what will happen next."
- Beware that it may 'appear' the child understands' when he/she may not.

Use Horseshoe Arrangement for Large Group Seating

- Place the child who is D/HH at the top of the curve.
 - This allows visual access to peers and the teacher.
- When appropriate, allow peers to use the Remote Mic (RM), Personal Frequency Modulation (FM) System mic, and/or Classroom Soundfield System mic when speaking (ex: during sharing time).

Support the Use of Sign Language

- When family is using sign language as a communication approach:
 - seek training for staff sign language development
 - incorporate sign language in your classroom

Be Aware of the Negative Impact of Distance on the Child's Access to Sound/Speech

- 3 feet of distance or less between the person speaking and the child who is D/HH optimal for access to sound, speech and learning.
- For every 3 feet the person speaking is away from the child, the volume of the person's voice decreases by 6 decibels of loudness. This means, the further away you are from the child, the more your voice is heard as a whisper.
- The adult is responsible for closing the distance gap in preschool.

Be Aware of and Reduce Background Noise

- For example noise generated by electronics, heating and cooling systems, fans, classroom chatter, hallway traffic, open windows
- When not in use turn off electronics, close doors/windows if possible etc.
- Use carpet and other sound absorbing items in the classroom to absorb excess sound.
- Noise generated by multiple small groups can negatively impact the child's auditory comprehension.
 - Idea: move the group to a quieter location, distance groups/tables further from each other.
- Listening with hearing devices is hard work - hearing fatigue is real. Background noise compounds listening fatigue. A child who is D/HH might exhibit different behaviors due listening fatigue (off task behaviors, temper tantrums, headaches, irritability, sleepiness, moodiness, zoning out, unable to communicate their needs, decreased/increased sensitivity etc.).

Use Strategic Seating

- Point to and say the name of the peer or adult speaking, ex: "Mr. Jones, our custodian, said the toilet is broken."
- Give the child who is D/HH time to locate the person speaking to gain visual cues.
- Children who are D/HH often require extra support to learn people's names and their roles.

Utilize Pre-teaching/Post-teaching

- Pre-teaching of vocabulary and concepts helps children who are D/HH gain prior knowledge for increased success in the preschool classroom.
 - = Examples: explicit previewing of books, songs, concepts, vocabulary, games, etc.
- Post-teaching helps children who are D/HH gain extra practice and fill in missed information.
 - = Examples: explicit reviewing of books, songs, concepts, vocabulary, games, etc.
- The family and educational team can make decisions as to how and when the pre/post teaching will occur.
 - Families can be involved in pre and post teaching.

Support Theory of Mind Development

- Children who are D/HH often need extra input to understand the thoughts and feelings of others.
- Use language like, “He’s thinking that…” and “She feels _____ because…” to help children who are D/HH understand inferential thinking and point of view.

Support the Use of Sign Language When the Family Has Chosen This Communication Mode

- Seek training for staff and family sign language development.
- Encourage all staff members to learn sign language.
- Consistently incorporate sign language in your classroom.
- Encourage peers to learn and use sign language.



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Use Verbal Strategies to Support the Child's Understanding

- Develop the habit of rephrasing and repeating spoken information from both peers and adults.
- Use a variety of intonation and pitch patterns to acoustically highlight target vocabulary
 - Purposeful pausing
 - Increased repetition
- Provide increased wait time for responses from the child who is D/HH.
- Using a slower rate of speech provides the child who is D/HH easier access to speech and language.
- Note: avoid slowing down so much that it distorts speech.

Point to and Name the Person Speaking

- Point to and say the name of the peer or adult speaking, ex: “Mr. Jones, our custodian, said the toilet is broken.”
- Give the child who is D/HH time to locate the person speaking to gain visual cues.
- Children who are D/HH often require extra support to learn people’s names and their roles.

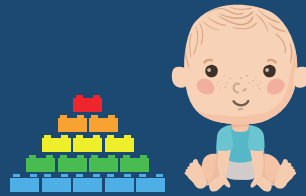
Support the Development of Self-Advocacy Skills

- Foster the child’s independence with the use of hearing devices.
- Support the child to alert adults when the batteries are dead or the device is not functioning.
- Support the child to independently put on hearing devices.
- Encourage the child to use the correct term for the hearing device such as hearing aid, cochlear implant, etc.
- Foster the child’s independence when there is a communication breakdown (i.e. child uses repair strategies or independently requests clarification of information when needed).

What Is Early Intervention?

EARLY INTERVENTION - PART C (BIRTH TO 3 YEARS OF AGE)

Early Intervention (EI) is a system of services designed to support your child, birth to age 3, with developmental delays or who may be at risk for developmental delays. Early Intervention is focused on helping families help their infants and toddlers learn basic developmental skills that typically develop during the first three years of life. Early Intervention is offered at NO COST to families.



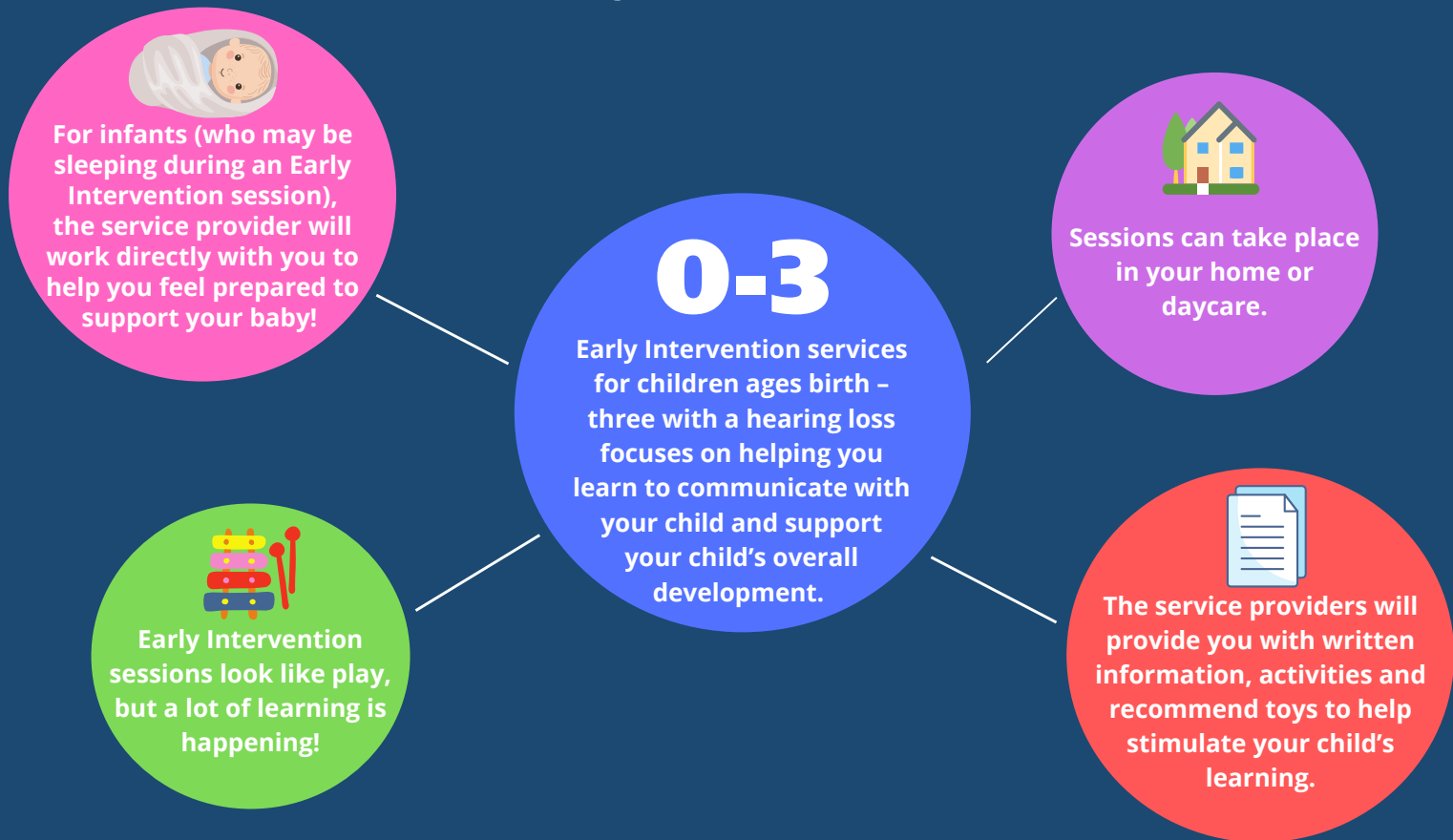
In Wyoming, infants/toddlers (birth to 3 years of age) with a diagnosed hearing loss (unilateral, bilateral, mild, moderate, severe, profound hearing loss) are categorically (automatically) eligible for early intervention services.



Early Intervention is provided through your local child development center in the least restrictive environment (your child's natural environment) – wherever your child spends time. This can include the home, child care center, school setting, a relative's home etc.



What Does Early Intervention Look Like?



Why is Early Intervention So Important?



Language Development

Early Intervention for infants and young children who are deaf or hard of hearing should begin as close to birth or identification as possible – ideally before 6 months of age. For children, language development (spoken or signed) begins the day a child is born.

The Early Intervention program takes advantage of the earliest months of life for optimal language development to make sure the child who has a hearing loss is developing language along with their peers.



Brain Development



Decades of research shows that children's earliest experiences play a critical role in brain development. The Center on the Developing Child at Harvard University has summarized this research.¹

- o Neural circuits, which create the foundation for learning, behavior and health, are more flexible or "plastic" during the first three years of life. Over time, they become increasingly difficult to change.
- o High quality Early Intervention services can help a child's development and improve outcomes for children, families, and communities.
- o Intervention is likely to be more effective and less costly when it is provided earlier in life rather than later.

¹National Center on Substance Abuse and Child Welfare.

(2009) Substance-Exposed Infants: State Response to the Problem. <http://www.ncsacw.samhsa.gov/giles/substance-exposed-infants.pdf>



Minimize Developmental Delays



Early Intervention is critical to your child's learning speech and/or language (communication). It is instrumental in helping to minimize the impact of any delays to help your child reach his/her full potential.

Early Intervention services can change a child's developmental path and improve outcomes for children, families, and communities. Families benefit from Early Intervention by being able to better meet their children's needs from an early age and throughout their lives. The first 3 years are vital to your child's lifelong learning ability.



Long Term Success



Hearing loss is invisible. Early Intervention helps to give a child the best tools for their success (these may be only realized/seen as your child ages). You may see the benefits of all the hard work when your child is older.

TIPS FOR PREPARING FOR YOUR INFANT'S/TODDLER'S INDIVIDUALIZED FAMILY SERVICE PLAN (IFSP) MEETING

- While at the meeting it is normal to feel overwhelmed. Be willing and prepared to listen, learn, ask questions, and actively participate at the meeting. Your input is necessary, needed and valuable.
- Write a parent report about your child: Think about and write down goals for your child; think about what you wish for your child, right now and in the future. This information will be discussed at your child's IFSP meeting.
- Think about your child's strengths, likes, and weaknesses, routines, transition times, times of frustration.
- Goals should be considered for your "whole" child: social emotional, communication, physical abilities, academics.
- Talk with other parents about their IFSP services.
- Think about your day- where are your questions/frustrations? What areas are the hardest/easiest?
- Invite your GBYS Guide/Core EI Group (EI, Audiologist, TOD/Parent) to the meeting - let your Family Service Coordinator know to invite your Guide/Core EI Group to the IFSP Meeting.
- Dress for success! Wear "Power Clothes."
- Arrive early to the meeting so you don't feel rushed.



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At Your IFSP Meeting, Consider the following:

- Any question is OK to ask at the IFSP Meeting.
- Ask about socialization opportunities for your child and your family.
- Make sure you understand all the goals and are comfortable with what is being put into your child's IFSP.
- It's ok to not understand what someone is saying in a meeting and ask for clarification.
- It's ok to ask your team what kind of experience they have with D/HH children and to ask if they are comfortable/knowledgeable providing services for child.
- Parent training is part of the IFSP. It's ok to ask what kind of training is available for families.
- If you need time to think about the written goals, ask for a copy of the IFSP and take it home to review, then sign and return to your child's Family Service Coordinator there is no requirement that you sign it at the meeting.
- These are just a start! You are an important member of the team and need to make sure you understand and agree with the plan for your child.

After Your Child's IFSP

- If you don't agree with the IFSP as written, you can request an additional meeting.
- Share your concerns in writing.
- If everything is acceptable and you do not communicate your concerns/objections/changes with the team, it will begin to be implemented.
- You should be getting progress reports on a regular basis this would include.
- Communicate regularly with your child's IFSP team.
- Communicate home progress.
- Communicate with your child's teacher/team members any questions/concerns you have.
- Communicate positive feedback (say "thank you") when possible.

Takeaways

- Parents have a role and responsibility in the development of your child's IFSP and should participate as an equal member of the team.
- Building trusting relationship with your child's team is important.
- Keep in mind that parents/professionals experience the IFSP process differently.



What Are All Those Acronyms?

- **IFSP** – Individual Family Service Plan (Birth to 3 years of age)
- **IEP** – Individualized Education Plan (3 to high school graduation)
- **504 Plan** – A plan for accommodations only, not just specialized instruction
- **EI** – Early Intervention
- **FSC** – Family Service Coordinator
- **SLP** – Speech Language Pathologist
- **OT** – Occupational Therapist
- **PT** – Physical Therapist
- **TOD** – Teacher of the Deaf
- **WDE Outreach Consultant** – Wyoming Department of Education Outreach Consultant for the Deaf/Hard of Hearing
- **D/HH** – Deaf/Hard of Hearing
- **EHDI Program** – Early Hearing Detection and Intervention Program
- **CDC** – Term for Child Development Center(s) in Wyoming
- **CDS** – Child Development Services (another term for CDC)
- **HV** – Hands & Voices – Parent organization to support families who have a child with hearing loss
- **GBYS** – Guide By Your Side - A program of Hands & Voices that connects trained parent guides to families who have a child recently diagnosed with hearing loss
- **R.E.A.D. Plus Program** (Reading Early Accelerates Development) - A literacy based program of Wyoming Families for Hands & Voices that supports and incorporates book learning strategies (and sing language if chosen) for children who have hearing loss birth through kindergarten age



Transition Planning From Part C Services To Part B Services

Transition from Part C Services to Part B Services for Children Who are Deaf/HH

Part C Services

Between the ages of 0 to 3 years old, your child and family are likely taking part in what is called Early Intervention Services, also known as Part C Services. These Part C or Early Intervention services support families to help their children reach their full potential. These services are offered through public or private agencies. Your child may receive Part C services at your home, a clinic, a daycare center, a hospital, or the local child development center. States decide which children can receive services, but they follow rules under a federal law called “Part C” of the Individuals with Disabilities Education Act (IDEA). These services are offered at no cost to your family.

Individualized Family Service Plan (IFSP)

If your family is involved in Part C services, you will participate with your child’s service providers in the development of an Individualized Family Service Plan (IFSP). The IFSP is a legal written document, required under the Individuals with Disability Education Act (IDEA - Part C). The IFSP outlines goals, also called “outcomes”, that your family has for your child’s growth and development. It describes the supports and services necessary to meet the unique needs of your family as related to your child who is deaf/hard of hearing. The IFSP requires that services be provided in your child’s natural environment. This means that qualified providers such as Speech Language Pathologists, Teacher of the Deaf/Hard of Hearing, Family Service Coordinators, etc, may come to your home or childcare center to partner in providing services and guidance as you work together to meet the needs of your child. Throughout the Part C years, ages 0 to 3 years of age, families such as yours are taught and encouraged to provide and advocate for their children’s needs. Remember, all Part C services are provided at no cost to your family.

Will my child always be eligible to receive Part C services?

When your child turns 3 years of age, your child’s Part C Early Intervention services will come to an end. No need to worry, your child may then become eligible for and transition to what is called Part B Services. Part B services are provided to children who have disabilities between the ages of 3 to 21 years old at no cost to the family.

Overview of Part B Services

Part B services are special education and related services, provided by qualified professionals that might include, a speech language pathologist, teacher of the deaf/hard of hearing, sign language interpreter, audiologist, early childhood special education teacher, among other providers. While Part C services are provided through an IFSP (Individualized Family Service Plan), Part B services are provided through an Individualized Education Plan (IEP). IEPs require that special education and related services be delivered in the *least restrictive environment*, meaning the child who is deaf or hard of hearing remains with his or her hearing peers as much as possible during the delivery of these services. These services are generally provided in a preschool setting within your community preschool or at one of the 14 Regional Child Development Centers located across Wyoming. For more information on these centers see the following link:

<https://health.wyo.gov/behavioralhealth/early-intervention-education-program-eiep/find-a-center/>

Please know Part B services are also provided at no cost to your family.

How do I know if my child will be eligible for Part B services?

The state of Wyoming requires that a transition planning conference be held sometime between the ages of 2 years, 3 months and 2 years, 9 months. At this meeting, your child's team, which includes you, will discuss an initial evaluation for Part B eligibility. Then at least 60 days prior to your child's 3rd birthday, the team will begin the process of determining if your child is eligible for Part B services. This means that with your signed permission, the providers will begin what is called a comprehensive evaluation. The team will gather information about your child in a variety of ways including formal or informal testing, observations of your child and conversations with you in order to evaluate all areas of need for your child. Plan to be involved in this process by making sure your child is available for the evaluations, by attending meetings, sharing your input, concerns, and providing any information about your child's progress. Don't be afraid to ask questions throughout the process! Remember, you know your child best and are the most valuable person on the team!



Transition from Part C to Part B Services

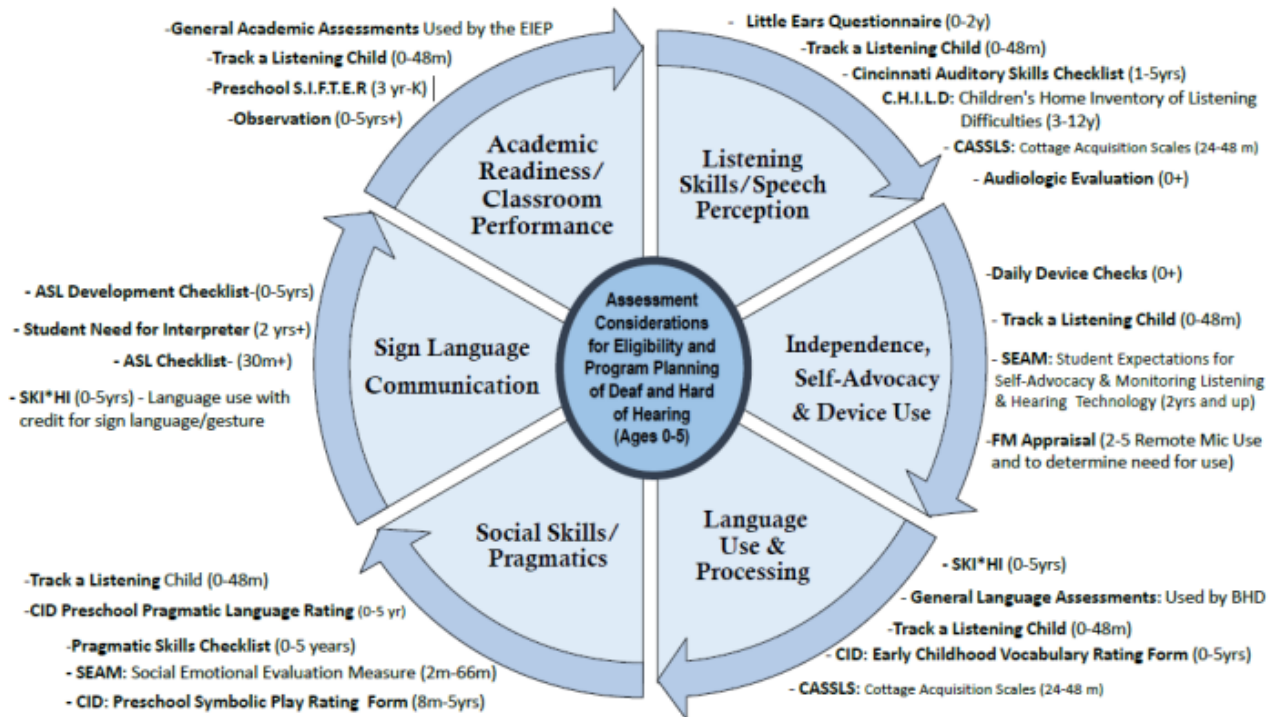
When your child's team is conducting the comprehensive evaluation to determine eligibility for Part B services, they should evaluate a variety of developmental areas including those areas specific to children who are D/HH. This includes speech and language, self advocacy, social/emotional, pragmatics, cognitive skills, sign language communication (if your child's mode of communication involves the use of sign language), listening skills, and the child's use of technology. Share this assessment wheel with your child's team early on in the evaluation process so it can serve as a guide to ensuring these evaluations are being completed.

<https://wyominginstructionalnetwork.com/wp-content/uploads/2021/05/EC-Assessment-Wheel-with-updates-5.4.21.pdf>

Assessment Wheel for Children with Hearing Loss Ages 0-5

This wheel identifies six areas of assessment consideration for children who are deaf/hard of hearing.

*See resource list (page 2-3) for links to the assessments identified on this wheel.



Contact WDE Deaf/HH Outreach Services Team for more information about this assessment wheel.
christie.fritz@wyo.gov or billiewortham@wyo.gov

Adapted by Wyoming Department of Education's Outreach for Deaf/Hard of Hearing Team 2021, from Karen L. Anderson's, Supporting Success for Children with Hearing Loss

Part C to Part B Transition Flowchart:

The following document is a flowchart outlining the transition from Part C to Part B process. Share this with your child’s Part C team prior to the team beginning the evaluation process for Part B eligibility. It can serve as a guide for them in ensuring a comprehensive evaluation is completed and the process moves forward as smoothly as possible.

Quick Start Guide for Professionals: Transitioning Children Who Are Deaf/Hard of Hearing From Part C to Part B

Step 1: Prepare and Evaluate

Connect With Support Resources
Example: Wyoming Early Hearing Detection & Intervention (EHDI), Wyoming Department of Education Deaf Outreach Services (WDE), Wyoming Families for Hands and Voices (WYH&V)
*see resource list with links here <https://bit.ly/3vKKonT>



Assemble Team of Qualified Professionals
Example: Parent, Teacher of the Deaf/HH (TOD), Speech/Language Pathologist (SLP), Audiologist, Early Childhood Special Educator (ECSE), Family Service Coordinator (FSC), or other professionals based on the child’s needs.



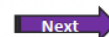
Obtain Child’s Current Hearing Levels and Hearing Device(s) Status
It is critical that the team work with a qualified audiologist to obtain the child’s current hearing levels, verify the devices are fitted and functioning properly, and an aided hearing evaluation is completed. (Sound field responses to speech and tones with hearing devices on, in quiet and noise).



Determine Areas of Need to Assess
It is best practice to consider assessing the following in addition to typical assessment areas: Self Advocacy, Articulation/Language, Sign Language (if appropriate) Social Emotional/Pragmatic Skills, Listening Skills/Speech Perception, Device Use, Cognitive, Behavior. *See Assessment Wheel for Support: <https://bit.ly/2S8tGjv>



Conduct Comprehensive Evaluation
For the evaluation to be comprehensive, all areas of suspected need identified must be evaluated. This could include the assessment areas listed above and other pertinent areas of need, as well as observations of the child, review of current data from Part C, family input, audiology, etc. *See Assessment Wheel for Support: <https://bit.ly/2S8tGjv>



Step 2: Determine Eligibility

Were Deficit Areas Identified Through the Comprehensive Evaluation?

↓ YES

↓ NO

Is Specially Designed Instruction Required to Address These Areas of Need?

*Example areas: Cognition, Self- Advocacy, Sign Language, Social Emotional/Pragmatic Skills, Behavior, Listening Skills/Speech Perception or Hearing Device Use, etc.

*A child could qualify in any one of these areas singularly.

Note: Specially designed instruction means, "adapting, as appropriate, to the needs of an eligible child, the content, methodology, or delivery of INSTRUCTION to address the unique needs of the child that result from the child's disability and ensure access to the general curriculum".

Remember a child does not require a delay in typical assessment areas (ex: cognitive or speech-language) to qualify for Part B services! Consider all deficit areas identified through the comprehensive evaluation.

→ NO

Consider a 504 Plan

Include accommodations specific to children who are D/HH (ex: strategic seating, hearing device checks, repeat peer answers, visual access, etc.). Resource for accommodations: https://www.handsandvoices.org/pdf/IEP_Checklist.pdf

↓

Monitor Student

Consider an evaluation in one year, or sooner if concerns arise regarding the child's development in any area.

↓ YES

Step 3: Develop the IEP

Considerations When Creating IEPs For Children Who Are Deaf/HH (not all apply to every child)

PLAAFP

Include hearing loss & technology information. Explain impacts of the hearing loss.

IEP Goals

Goals address deficit areas identified in the assessment. (ex: Self-Advocacy, Language, Listening, etc.)

Special Education Services

These are based on a child's needs as identified in the comprehensive evaluation. May include: Self- Advocacy, Language, Communication (sign language), Articulation, Social Emotional, Pragmatic Skills, Behavior, Listening Skills/Speech Perception, Device Use, etc.

Related Services

Might include Speech, Audiology, Counseling, Sign Lang. Interpreter, Transportation, PT/OT, etc. (based on data in the comprehensive evaluation)

Note: Progress Monitoring is Critical!

Least Restrictive Environment

Consider all placements on the continuum of services based on child's communication, educational, and functional needs.

Special Factors

Ex: AT, Communication, Behavior etc. **NOTE:** if a box is checked in special factors it must be addressed in the IEP.

Supplementary Aids & Services:

Might include: Hearing Device Checks, AT (Remote Mics, Personal FM, Classroom FM), Sign Support, Visual Aids, Parent Training

Personnel Supports/ Program Modifications

May include: Staff Training, Modified Materials or Language, etc.

What happens when the comprehensive evaluation is complete?

When the comprehensive evaluation is complete, your child's early interventionist will schedule a meeting with you and all of the involved team members to discuss the results of the evaluation. The team, which includes you, will determine if your child meets both of the following requirements: a.) your child is a child with a disability (hearing loss) and b.) your child is in need of specially designed instruction. (Specially designed instruction is defined as *instruction provided to meet the unique needs of a student with a disability.*) If the team determines that your child meets both of these requirements, then your child is eligible for Part B services and an IEP will be developed.

Creating the Individualized Education Plan (IEP):

An IEP is a legal written document that outlines the special education services your child needs to make progress in his or her educational program. It will be critical that you be involved in offering input during the team's creation of your child's IEP. You know your child best and can help design what goals you have for your child and what kinds of support will be needed for your child to reach the goals as outlined in the IEP. You are your child's best advocate!

Additional Resource:

Part C - Part B Comparison Chart

Pages 3 and 4 of this helpful document clearly outlines the differences between Part C and Part B services. https://www.handsandvoices.org/pdf/trans_cheryl.pdf



Online Resources

Online Resources to Empower Families of Children who are Deaf/HH Birth-5

Parent Resources:

Wyoming Resources:

- Wyoming Early Hearing Detection and Intervention (EHDI), <https://www.wyomingehdi.org/>
 - [Sarah Fitzgerald](#): 307-399-2889 or [Bradley Hartman Bakken](#): 307-721-6212
 - CDC+ Audiology Clinic: 307-421-5765
 - [Kalley Ellis](#), Au. D CCC-A – Audiologist Specializing in Pediatrics
- Wyoming Families for Hands and Voices: [Wendy Hewitt: Executive Director](#) 307-780-6476
 - Wyoming Early Intervention Initiative (WEII) Plus.
 - [Annette Landes](#), WEII Plus Coordinator: 970-217-9532
 - Guide by Your Side: Coordinator, [Kim Reimann](#): 307-258-0967
- Wyoming Department of Education Outreach Services for Deaf/HH: <https://wyominginstructionalnetwork.com/outreach-services/outreach-services-for-deafhard-of-hearing/>
 - [Billie Wortham](#), D/HH Program Supervisor: 307-274-1391
 - [Christie Fritz](#), D/HH Outreach Consultant: 307-286-6282
- University of Wyoming, Communication Disorders Division: <http://www.uwyo.edu/comdis/uw-speech-and-hearing-clinic/index.html>
 - [Teresa Garcia](#), MS, CCC-A, Clinical Professor: 307-766-5779
- Wyoming Deaf Outreach Library: https://wyld.ent.sirsi.net/client/en_US/wSDL/
 - [Brenda Ariosto](#), Deaf Outreach Library Aide: 307-265-8818

Informational Organizations:

- Beginnings: <https://ncbegin.org/>
- Better Hearing Institute: <http://www.betterhearing.org>
- National Institute on Deafness and Other Communication Disorders (NIDCD): <https://www.nidcd.nih.gov/>
- NCHAM: <http://www.infanthearing.org/>

Parenting Supports:

- Boys Town: <https://www.babyhearing.org/>
- Choices for Parents: <http://www.choicesforparents.org>
- Family Supports and Early Intervention: <https://www.gallaudet.edu/clerc-center-sites/setting-language-in-motion.html>
- Hearing Like Me: <https://www.hearinglikeme.com/>
- Raising Deaf Kids: <http://www.raisingdeafkids.org/>
- Supporting Success for Kids with Hearing Loss: <https://successforkidswithhearingloss.com>
- National Families for Hands and Voices: <http://www.handsandvoices.org/>

Child Development and Milestones:

- Center for Disease Control and Prevention Milestone Tracker
<https://www.cdc.gov/ncbddd/actearly/milestones/>
- Child Development Services of Wyoming: <https://wyqualitycounts.org/child-development/development-milestones/>
- Parenting Counts: A bilingual (English/Spanish) resource on development
<https://www.parentingcounts.org/parent-handouts/>
- Zero to Three <https://www.zerotothree.org/resources/series/your-child-s-development-age-based-tips-from-birth-to-36-months>

Listening and Spoken Language:

- AG Bell: <https://www.agbell.org/>
- Communication Corner: <https://www.cochlear.com/us/communication-corner/program-selection/young-children-families.htm>
- Hear to Learn (English & Spanish): <http://www.heartolearn.org/>
- Hearing First: <https://www.hearingfirst.org>
- John Tracy Clinic: <https://www.jtc.org/>
- Listen Foundation: <http://www.listenfoundation.org>
- The Listening Room: <https://thelisteningroom.com>

Sign Language:

- ASLU (Bill Vicars) on YouTube: <https://www.youtube.com/user/billvicars>
- ASLU- <https://www.lifeprint.com/>
- Baby Sign Language: <https://www.babysignlanguage.com>
- Colorado School for the Deaf and Blind (sign instruction):
<https://www.youtube.com/user/csdbchannel>
- Gallaudet: (free online ASL classes) <https://www.gallaudet.edu/asl-connect/asl-for-free>
- HandSpeak: <https://www.handspeak.com>
- Rocky Mountain Deaf School (stories in sign) <https://www.youtube.com/user/RMDSCO>
- Sign It! (Online sign classes) www.infantheating.org/signit
- Signing Savvy: <https://www.signingsavvy.com/>
- Signing Time: <https://www.signingtime.com>
- We Play Along Songs with Signs: <https://weplayalong.com>

Cued Speech:

- National Cued Speech Association: <http://www.cuedspeech.org/>
- Cue College: (Learn Cued Speech free online) <https://cuecollege.org/cue-family-program/>

Materials

Apps for Families of Children who are Deaf/HH:

Sign Language:

- ASL Dictionary 5,200 Signs: Over 5200 ASL videos for adult learners.
<https://apps.apple.com/us/app/asl-dictionary/id353574642>

- ASL Dictionary HD Sign Language: App offers over 50,000 ASL videos for adult learners. <https://apps.apple.com/us/app/asl-dictionary-sign-language/id682472857>
- ASL with Care Bears: <https://theaslapp.com/aslwithcarebears>
- Baby Sign and Learn: App features cute, animated video demonstrations of signs, an interactive quiz, and colorful flashcards. <https://apps.apple.com/us/app/baby-sign-and-learn/id414830310>
- Baby Sign and Sing: ASL Nursery Rhymes: App is divided into three sections: Play Song (animated characters sing and sign key vocabulary words), Explore Signs, and Watch Tutorial (for adults). <https://apps.apple.com/us/app/baby-sign-and-sing/id528964648>
- Baby Sign Dictionary ASL: App includes approx. 340 signs and over 1 hour of real-life video demonstrations. <https://apps.apple.com/us/app/baby-sign-dictionary-asl/id527817092>
<https://apps.apple.com/us/app/my-signing-time/id1467819201>
- My Signing Time: This app requires a subscription to Signing Time. The app gives you access to any video, book, or song in the entire Signing Time collection.
- Signed Stories: <https://apps.apple.com/us/app/signed-stories/id550966811>
- The ASL App: Teaches Conversational Sign Language. <https://theaslapp.com/>

Sound Exploration:

- First Sounds for Toddlers: <https://apps.apple.com/us/app/first-sounds-for-toddlers/id590383479>
- I Hear Ewe Animal & Vehicle Sounds for Toddlers: <https://apps.apple.com/us/app/i-hear-ewe/id304093970>
- Peekaboo HD (Farm, Rides, Forest, Jungle, etc.): <https://apps.apple.com/us/app/peekaboo-hd/id418475159>
- Peekaboo-barn by Night & Day Studios: <https://apps.apple.com/us/app/peekaboo-barn-farm-day/id913731304>
- Preschool Games: Farm Animals: <https://apps.apple.com/us/app/preschool-games-farm-animals/id439478226>
- Sound Touch Toddler & Baby Flash Cards: <https://apps.apple.com/ca/app/sound-touch/id348094440>
- Video Touch: <https://apps.apple.com/us/app/video-touch-animals/id463417930>
- What is that sound? <https://apps.apple.com/us/app/whats-that-sound/id1051910636>

Music Exploration:

- BabyBeats Advanced Bionics: Discover how to use music to stimulate; bonding, brain development, early communication, listening skills and early literacy skills. <https://apps.apple.com/us/app/babybeats-resource/id1258901720>
- Fisher Price Storybook Rhymes Volume 1 & 2: These interactive apps encourage early learning with dynamic characters, engaging music, sung songs, and animations for One, Two, Buckle My Shoe, Itsy Bitsy Spider, Row, Row, Row Your Boat, and Animal Fair. <https://apps.apple.com/us/app/storybook-rhymes-volume-1/id573623609>
- Songs for Listening and Language (Royal Institute for Deaf and Blind Children): <https://apps.apple.com/us/app-bundle/songs-for-listening-language/id1185344386>
- Wheels on the Bus by Duck Duck Moose: <https://apps.apple.com/us/app/wheels-on-the-bus/id303076295>

Listening/Language:

- Advanced Bionics Listening Adventures: Designed to help children with hearing loss ages 4 to 10 practice listening for words in sentences. <https://apps.apple.com/us/app/ab-listening-adventures/id898695069>
- Advanced Bionics VocAB Scenes: designed to help children with hearing loss ages 4 to 10 learn common vocabulary and question forms through listening with caregiver or therapist guidance. <https://apps.apple.com/us/app/vocab-scenes/id905143070>
- Bamba Pizza by Mezmedia: This interactive pizza making app offers abundant listening and spoken language opportunities, role playing, turn taking, critical thinking, creativity, and imaginary play for children. <https://apps.apple.com/us/app/bamba-pizza/id529035121>
- Fun With Directions HD: This app is designed to provide a fun and engaging way to practice listening, following directions, colors, spatial concepts, auditory memory, and auditory processing. <https://apps.apple.com/us/app/fun-with-directions-hd/id475972703>
- Funny Directions by Speecharoo: Designed to target listening and following directions. <https://apps.apple.com/us/app/funny-directions-by-speecharoo/id934770978>
- Monster Truck Doodle by Shoe the Goose: This app allows your child to design their own monster truck. <https://apps.apple.com/us/app/monster-truck-doodle/id794631371>
- My PlayHome: <http://www.myplayhomeapp.com/>
- Pepi Bath 2: Expanded version of the original Pepi Bath. <https://apps.apple.com/us/app/pepi-bath-2/id957345067>
- Pepi Bath: Role-play game to help children learn about hygiene including washing hands, brushing teeth, using the toilet, taking a bath, etc. This app provides opportunities for vocabulary development, sequencing, and exposure to /wh/ questions. <https://apps.apple.com/us/app/pepi-bath/id505124220>
- Pepi Doctor: This app is like Pepi Bath but with a doctor/dentist theme. <https://apps.apple.com/us/app/pepi-doctor/id733788136>
- Phonak Leo: Story About a lion named Leo who gets hearing aids and a Roger system. <https://apps.apple.com/us/app/phonak-leo/id786516889>
- Starkey Hearing Loss Simulator. <https://apps.apple.com/us/app/hearing-loss-simulator/id398352094>

Pre-Academic Skills:

- Gummies Playground: https://play.google.com/store/apps/details?id=com.squinkgames.gummiesPlayground&hl=en_US
- Homer Reading: Learn to Read: <https://apps.apple.com/us/app/homer-reading-learn-to-read/id601437586>
- Khan Academy Kids: <https://apps.apple.com/us/app/khan-academy-kids/id1378467217>
- Little Matchups Little Matchups ABC - Alphabet Letters and Phonics: <http://www.myplayhomeapp.com/>
- Tiny Tap: Kids Learning Games: <https://apps.apple.com/us/app/tinytap-kids-learning-games/id493868874>

Reading/Literacy:

Digital Books to Read to Children: (not specific to children with hearing loss)

- Epic: (30-day free trial) <https://www.getepic.com/>
- Hoopla: (free) <https://www.hoopladigital.com/>
- Storyline Online: <https://www.storylineonline.net/library/>
- Vooks: (30-day free trial) <https://www.vooks.com/>

Note: This is not an all-inclusive list of resources and materials. We welcome [feedback](#).



Wyoming Child Development Centers

Wyoming Child Development Centers

Wyoming has 14 Child Development Center Regions with 42 sites throughout the state. These Child Development Centers provide hearing screenings and intervention programs free of charge for children ages birth through five. If your child's hearing needs to be screened or you have any questions regarding the services the Child Development Centers in Wyoming provide, please contact one in your area.

Region 1:

Children's Resource Center
2531 Cougar Avenue
Cody, WY 82414
307-527-7784

Children's Resource Center
558 East 2nd Street
Powell, WY 82435
307-754-2864

Children's Resource Center
115 South 4th Street
Basin, WY 82401
307-568-2914

Children's Resource Center
435 East 5th Street
Lovell, WY 82431
307-548-6722

Children's Resource Center
130 Highway 20
Thermopolis, WY 82443
307-864-9227

Children's Resource Center
502 North Rd 11
Worland, WY 82401
307-347-8677

Region 2:

Child Development Center
345 South Linden Avenue
Sheridan, WY 82801
307-672-6610

Child Development Center
1 North Desmet Street
Buffalo, WY 82834
307-684-9271

Region 3:

Tot Time Preschool
105 S Yellowstone Avenue
Moorcroft, WY 82721
307-299-6423

Weston County
Children's Center
104 Stampede
Newcastle, WY 82701
307-746-4560

Weston County
Children's Center
629 Sheridan
Upton, WY 82730
307-468-2200

Region 4:

The Learning Center
145 Mercill Avenue
Jackson, WY 83001
307-733-1616

The Big Piney
Learning Center
650 Piney Drive
Big Piney, WY 83113
307-276-5415

The Pinedale Learning Center
191 South Franklin
Pinedale, WY 82941
307-367-6306

Region 5:

Star Valley Child
Development Center
675 S Washington Street
Afton, WY 83110
307-885-9286

Alpine Child
Development Center
247 Snake River Drive
Alpine, WY 83128
307-654-4116

Kemmerer Child
Development Center
1208 Elk Street
Kemmerer, WY 83101
307-877-6984

Star Valley Child
Development Center
265 Van Noy Parkway
Thayne, WY 83127
307-883-4116

Bridger Valley Child
Development Center
1001 Highway 414 North
Mountain View, WY 82939
307-782-6601

LUCDA
1013 W Cheyenne Drive #1
Evanston, WY 82930
307-789-7384

Region 6:

Child Development Services
of Fremont County
9 South 1st Street
Dubois, WY 82513
307-455-3341

Child Development Services
of Fremont County
100 Pushroot Court
Lander, WY 82520
307-332-5508

Child Development Services
of Fremont County (birth-3)
150 Chase Drive, Suite B
Riverton, WY 82501
307-332-0430

Child Development Services
of Fremont County (3-5)
1202 East Jackson Avenue
Riverton, WY 82501
307-856-4337

Region 7:

Sweetwater County Child
Development Center
1715 Hitching Post Drive
Green River, WY 82935
307-875-3805

Sweetwater County Child
Development Center
4509 Foothill Boulevard
Rock Springs, WY 82901
307-352-6873

Region 8:

Project Reach
1801 Edinburgh Street, #2
Rawlins, WY 82301
307-324-9656

Excel Preschool
204 West Spring
Saratoga, WY 82831
307-326-5839

Region 9:

Child Development Center of
Natrona County
2020 East 12th Street
Casper, WY 82601
307-235-5097

Region 10:

Douglas Child & Family
Development Center
630 Erwin Street
Douglas, WY 82633
307-358-3901

Glenrock Child & Family
Development Center
929 West Birch Street
Glenrock, WY 82637
307-436-5357

Lusk Early Childhood Center
802 South Maple Street
Lusk, WY 82225
307-334-2252

Wyoming Child & Family
Development Center
126 South Wyoming Avenue
Guernsey, WY 82214
307-836-2751

Guernsey Early
Childhood Center
371 W Burlington Street
Guernsey, WY 82214
307-836-2838

Wheatland Early
Childhood Center
28 Rompoon Road
Wheatland, WY 82201
307-322-3385

Torrington Learning Center
3110 West C Street
Torrington, WY 82240
307-532-7068

Region 11:

Developmental Preschool
& Daycare
1771 Centennial Drive
Laramie, WY 82072
307-742-6374

Region 12:

STRIDE Learning Center
326 Parsley Boulevard
Cheyenne, WY 82007
307-632-2991

Region 13:

Children's Development
Services of Campbell County
1801 South 4-J Road
Gillette, WY 82716
307-682-2392

Region 14:

Early intervention Program
#9 Shipton Lane
Fort Washakie, WY 82514
307-332-3516



Wyoming Public Health Nurses

Wyoming Public Health Nursing Offices

City	Facility	Address	Telephone Number	Fax Number
AFTON	Lincoln County Public Health	421 Jefferson Street, Suite 401	(307) 885-9598	(307) 885-0175
BIG PINEY	Sublette County Public Health	429 E. 1st. Street Marbleton, 82113	(307) 276-3575	(307) 276-3605
BUFFALO	Johnson County Public Health	85 Klondike Drive	(307) 684-2564	(-307) 684-0744
CASPER	Casper-Natrona County Health Department	475 South Spruce	(307) 235-9340	(307) 577-9774
CHEYENNE	City-County Health Department	100 Central Avenue	(307) 633-4000	(307) 633-4066
CODY	Park County Public Health	1002 Sheridan Avenue	(307) 527-8570	(307) 527-8575
DOUGLAS	Converse County Health Department	255 North Russell	(307) 358-2536	(307) 358-3941
EVANSTON	Uinta County Public Health	350 City View Drive, Suite 101	(307) 789-9203	(307) 789-6635
GILLETTE	Campbell County Health Department	2301 S. 4J Rd.	(307) 682-7275	(307) 682-0374
GLENROCK	Converse County Health Department	925 W. Birch	(307) 436-3474	(307) 436-6045
GREEN RIVER	Sweetwater County Public Health	115 E. Flaming Gorge Way	(307) 922-5390	
GREYBULL	Big Horn County Public Health	417 South 2nd Street	(307) 765-2371	(307) 765-2381
JACKSON	Teton County Public Health	460 East Pearl Avenue	(307) 733-6401	(307) 733-8747
KAYCEE	Johnson County Public Health/Kaycee	268 Nolan Avenue	(307) 684-2564	
KEMMERER	Lincoln County Public Health	520 Topaz, Suite 109	(307) 877-3780	(307) 828-3114
LANDER	Fremont County Public Health	450 North 2nd Street, Room 350	(307) 332-1073	(307) 332-1064
LARAMIE	Albany County Community Health	609 South 2nd Street	(307) 721-2561	(307) 721-2565

LOVELL	Big Horn County Public Health	213 East 3rd. Street	(307) 548-6591	(307) 548-6591
LUSK	Niobrara County Public Health	911 S. Ballancee Ave.	(307) 334-4032	
LYMAN	Uinta County Public Health	128 East Owen Street	(307) 787-3800	(307) 787-3804
NEWCASTLE	Weston County Public Health	400 Stampede	(307) 746-4775	(307) 746-4774
PINEDALE	Sublette County Public Health	619 East Hennick	(307) 367-2157	(307) 367-2689
POWELL	Park County Public Health	109 West 14th Street	(307) 754-8870	(307) 754-8875
RAWLINS	Carbon County Public Health	812 E. Murray St.	(307) 328-2607	(307) 328-2602
RIVERTON	Fremont County Public Health	818 S. Federal Blvd Suite 700	(307) 856-6979	(307) 856-6850
ROCK SPRINGS	Sweetwater County Public Health	333 Broadway Suite 110	(307) 922-5390	(307) 922-5496
SARATOGA	Carbon County Public Health	201 South River Street	(307) 326-5371	(307) 326-5735
SHERIDAN	Sheridan County Community Health Services	297 South Main Street	(307) 672-5169	(307) 672-5186
SUNDANCE	Crook County Public Health	420 1/2 East Main Street	(307) 283-1142	(307) 283-1143
THERMOPOLIS	Hot Springs County Public Health	117 North 4th St.	(307) 864-3311	(307) 864-3453
TORRINGTON	Goshen County Public Health	2025 Campbell Drive, Suite 1	(307) 532-4069	(307) 532-2052
WHEATLAND	Platte County Public Health	718 9th Street	(307) 322-2540	(307) 322-2846
WORLAND	Washakie County Public Health	1007 Robertson Avenue	(307) 347-3278	(307) 347-3270

Updated: April, 2022

<http://wdh.state.wy.us/familyhealth/nursing/offices.html>



Individual Family Service Plans (IFSP)

This section can be used to keep all your child's Individual Family Service Plan (IFSP) documents.



Audiology Reports and Audiograms

This section can be used to keep all your child's
Audiology Reports and Audiograms.



Technology Information

This section can be used to keep information about hearing technology for your child (can include information about: hearing aids, cochlear implants, bone anchored hearing aids, room FM amplification, personal FM system, remote microphone systems, etc.).