

THE DEVELOPING CHILD WITH UNILATERAL HEARING LOSS

A Guide to Early Intervention



**For Early Intervention Teachers of the Deaf/Hard of Hearing,
Speech Language Pathologists and Pediatric Audiologists**

By Karen L. Anderson, PhD

A Supporting Success for Children with Hearing Loss Publication

<https://successforkidswithhearinngloss.com>

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Supporting Success for Children with Hearing Loss Publications

Plymouth, MN USA

27 Downloadable Files are included at no extra cost by purchasers of this publication.

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For information on qualifications go to <https://successforkidswithhearingloss.com/about>

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Supporting Success for Children with Hearing Loss Publications

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15 Discussion Handouts

AN UNEXPECTED DIAGNOSIS
EARS WORK TOGETHER
EXPERIENCING UNILATERAL HEARING LOSS
HEARING DOES NOT ALWAYS STAY THE SAME
LISTENING FROM A DISTANCE
LISTENING IN BACKGROUND NOISE
POTENTIAL IMPACT ON LANGUAGE LEARNING
FOSTERING LANGUAGE LEARNING
POTENTIAL IMPACT ON BEHAVIOR
WHAT TO DO – CHOICES
CONSIDERING HEARING AID USE
EVALUATING HEARING AID USE
LANGUAGE EVERYDAY AND EVERYWHERE
WHAT TO DO – GET HELP!
SUMMARY

11 Additional Resources to Share with Families

Children's Home Inventory of Listening Difficulties (Family CHILD)
Early Listening Function (ELF)
Hearing Aid Listening Check Instructions
Hearing Loss in One Ear
Improving Your Child's Social Skills
Relationship of Hearing Loss to Listening and Learning Needs: Unilateral Hearing Loss
Sequence of Auditory, Language and Speech Development for Infants & Toddlers
Signs of Social and Emotional Well-Being for Infants, Toddlers, and Preschoolers with
Warning Signs for Potential Social-Emotional Concern
Starting School LIFE (Listening Inventory For Education)
Unilateral Hearing Loss Referral Pamphlet

100-slide PowerPoint pdf to share this information via a media device

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Use your unique coupon code on page 57 to obtain the files at no cost.

THE DEVELOPING CHILD WITH UNILATERAL HEARING LOSS

A Guide to Early Intervention for Early Intervention Teachers of the Deaf/Hard of Hearing, Speech Language Pathologists or Pediatric Audiologists

PURPOSE

This step-by-step guide has been developed to share with families after unilateral hearing loss has been diagnosed, typically in infancy secondary to identification through newborn hearing screening. The guide reviews background information regarding what is known about the effects of hearing loss in one ear on child development. It is divided into suggested sections to correspond with pediatric audiology appointments and with home visits by an early interventionist (teacher of the deaf/hard of hearing or speech language pathologist).

In some areas it will be the diagnosing audiologist who will share the majority of information on the developmental impact of unilateral hearing loss with parents. In other areas it will be the role of the early intervention provider. This guide has provided step-by-step guidance to support both models.

The use of different materials is specified per session however each family may absorb information more quickly or slowly than suggested. The teacher/clinician must adjust the rate of presentation of the material to best meet the needs of the family members

The format has been designed specifically for use during discussions with families to facilitate providing important information to families to aid them in their choices as well as answering their questions as appropriate to their readiness.

This material consists of:

1. Step-by-step guidance for sessions with families
2. Specific handouts to provide during each session (contained in Section 7)
3. Additional materials for families

SECTION 1 – BACKGROUND FOR THE USER

How many children are being identified with unilateral hearing loss?

According to EHDI data from the Centers for Disease Control, in 2007, over 94% of more than 4 million newborns in the US had their hearing screened. Based on 2006 CDC EHDI data, 22.5% of children identified with hearing loss had unilateral loss of either a conductive or sensorineural nature. The prevalence of unilateral hearing loss appears to be 0.8/1000 to 1/1000 screened (Vohr, Simon, McDermot, Kurtzer-White, Johnson, Topol, (2002); Dalzell, Orlando, MacDonald, Berg, Bradley, Cacace, Campbell, DeCristofaro, Gravel, Greenberg, Gross, Pinheiro, Regan, Spivak, Stevens, Prieve (2000)). In actuality this translates into something like **20%-30%** of all infants diagnosed with hearing loss experiencing it in one ear only (Italy, Colorado, Vohr RI). Depending on the criteria used to define hearing loss, by early school age the prevalence of unilateral loss rises to at least 2/1000 children (Oyler, Oyler & Matkin, 1988) and may be as many as 30 – 56 /1000 (Bess & Tharpe, 1984, 1986, 1988). Not all of these children will experience adverse educational affects as evidenced by Colorado's incidence of students with unilateral hearing loss receiving specialized services or accommodations at 1.5/1000 (Colorado Department of Education, 2002

<http://www.earfoundationaz.com/files/audiology/PediatricAndEducationalAudiologyRevisited.pdf>).

Why materials on unilateral hearing loss are needed

State EHDI programs strive to become more effective in tracking every child who fails newborn hearing screening into diagnosis and resulting in a referral to early intervention. The result of this is hundreds of families of babies with unilateral hearing loss who are seeking assistance to understand what the hearing loss may mean to their child's future and to receive direction on how they can best influence their child's success. Due to the increased in identification of infants with unilateral hearing loss, early intervention service providers who have long experience in serving children who are bilaterally deaf or hard of hearing have struggled with how to appropriately serve these children and their families as their needs are not the same as children with hearing loss in both ears (Sedey, Stredler-Brown & Carpenter, 2005)..

SUMMARY OF RESEARCH ON EDUCATIONAL AND BEHAVIORAL AFFECTS OF UNILATERAL HEARING LOSS

Language Delay Language data were gathered from a videotaped parent-child interaction and two parent-report instruments, the Minnesota Child Development Inventory and the MacArthur Communicative Development Inventories for 26 children with unilateral hearing loss. Language data were examined across time and measures for the 15 children who participated in the assessment on multiple occasions. A consistent pattern of language delay was demonstrated by 27% of the children, with an additional 7% presenting with a borderline

delay. Thus, approximately 1/3 of young children with unilateral hearing loss can be expected to exhibit language delays by the age of 15-18 months.

Social Issues Children with significant unilateral hearing losses have been identified as experiencing social, emotional and behavioral problems in school (Bess & Tharpe, 1984; Culbertson & Gilbert, 1986; Stein, 1983). When children with unilateral hearing loss were compared with normally hearing children on the Behavior Rating Scale, those with UHL had more negative ratings in the categories of dependence/independence, attention to task, emotional ability, and peer relations/social confidence. The mean percentage of negative ratings was 10.83 for the group with UHL and 4.42 for the group with normal hearing (Culbertson & Gilbert, 1986). Bess and Tharpe (1984) found that approximately 1/5 of children with UHL experienced social issues. In 1998, 6th and 9th graders were found to have greater difficulty functioning on social/emotional domains such as stress, self-esteem, behavior, energy and social support (Bess, Dodd-Murphy, & Parker).

Educational Risk Bess (1982) and his colleagues (Bess & Tharpe, 1984; Bess & Tharpe, 1986; Culbertson & Gilbert, 1986; Klee & Davis-Dansky, 1986) also brought to light the significance of unilateral hearing loss (UHL) and the challenges in the classroom related to hearing loss of greater than 20 dB in one ear. Although differences in language skills and intelligence were not found between those with UHL and normal-hearing children, slightly more behavior problems (e.g., giving up easily on new tasks; attention to task; peer relations/social confidence) were noted for the group with UHL. In 1998, Bess and colleagues found that 5.4% of school-age children whom they examined had minimal sensorineural hearing loss (MSHL), including unilateral loss. Of those children, about 37% had failed a grade in school and an additional 8% were judged not to be performing at grade level. This reflects a failure rate approximately 10 times that of the general school population. The retention rate among students with unilateral hearing loss (UHL) has been found to be 30-37% (Bess & Tharpe, 1986; Oyler, Oyler, & Matkin, 1986). A 2010 study matched 74 six-to-10-year-olds with their normal hearing siblings. They found that for children with unilateral hearing loss, scores on the Oral and Written Language Scales had about a 10-point drop. The oral composite score — which reflects children's ability to understand what is said to them and their ability to respond or express themselves — averaged 90 in children with hearing loss in one ear. The study demonstrated the strongest effect from hearing loss in one ear in children who are living below the poverty level or with mothers who have little education. Poverty levels and maternal education levels are well-established influences on language skills, and hearing loss in one ear may increase that effect. (Lieu, Tye-Murray, Karzon, & Piccirillo, 2010). In 2002–2003, Johnson also conducted a survey of 135 children from Colorado and 20 children from Michigan who had unilateral hearing loss. Data were available from children with unilateral hearing loss from preschool through high school using the Screening Instrument For Targeting Educational Risk (SIFTER).

**Percent of children with unilateral hearing loss with passing scores
on the Screening Instrument For Targeting Educational Risk (SIFTER)**

SIFTER available from <https://successforkidswithhearingloss.com/tests>

SIFTER content area	% No Service	% 504 Plans	% on IEPs
Academics	71	50	31
Attention	69	70	55
Communication	60	40	28
Class Participation	81	100	55
School Behavior	94	90	76

Dancer, Burl, and Waters (1995) also used the SIFTER in a study of children with unilateral hearing loss and found that students demonstrated lower performance in most areas but were rated as working up to their potential. These findings suggest that teachers have lower expectations for children with unilateral hearing loss. Hicks and Tharpe (2002) found that this group had increased listening effort, with greater effort reducing the cognitive resources available for understanding the information presented (Beck & Flexer, 2011).

Amplification A 2010 article (Johnstone, Nabelek, & Robertson) measured the sound localization ability of twelve children with UHL who use a hearing aid in the impaired ear. A hearing aid was found to significantly improve localization acuity in 6-9 year-old children with UHL who were fit prior to age 5 and significantly impaired the localization ability of 10-14 year-old children who were fit with a hearing at age 7 or older. It was concluded that early intervention with amplification may increase the likelihood of bilateral benefit. When unaided, the older children had localization ability that was significantly better than the younger children, however, without the bilateral benefit of amplification, children with UHL will not be able to localize sound as well as their normally-hearing peers. A repeated design study (Kenworthy, Klee, & Tharpe, 1990) of 6 children with UHL found that they experienced the most listening difficulty when speech originated from a midline position. The use of a CROS hearing aid was beneficial when listening to speech at midline, but was detrimental to speech from the side of the better hearing ear. An FM system however, improved listening under all conditions. Wazen et. al, (2003) found that transcranial amplification via a bone-anchored prosthesis (i.e., BAHA) resulted in higher patient satisfaction and better speech intelligibility in noise than a CROS hearing aid. In contrast, there was limited information supporting the use of a bone-anchored prosthesis in persons with congenital unilateral aural atresia with inconsistent findings across audiometric measures although a majority of patients felt improved quality of life (Danhauer, Johnson, & Mixon, 2010).

In summary, early amplification of children with UHL has a greater likelihood of resulting in improved localization ability and may also be advantageous in the development of listening in noise, but only if a hearing aid is fit early in life. Further studies are ongoing to establish the degree of expected advantage in localization and speech perception in noise, depending upon age of fitting.

The following resource is recommended for an overview of unilateral hearing loss issues:

http://www.cdc.gov/ncbddd/ehdi/documents/unilateralhl/Mild_Uni_2005%20Workshop_Proceedings.pdf

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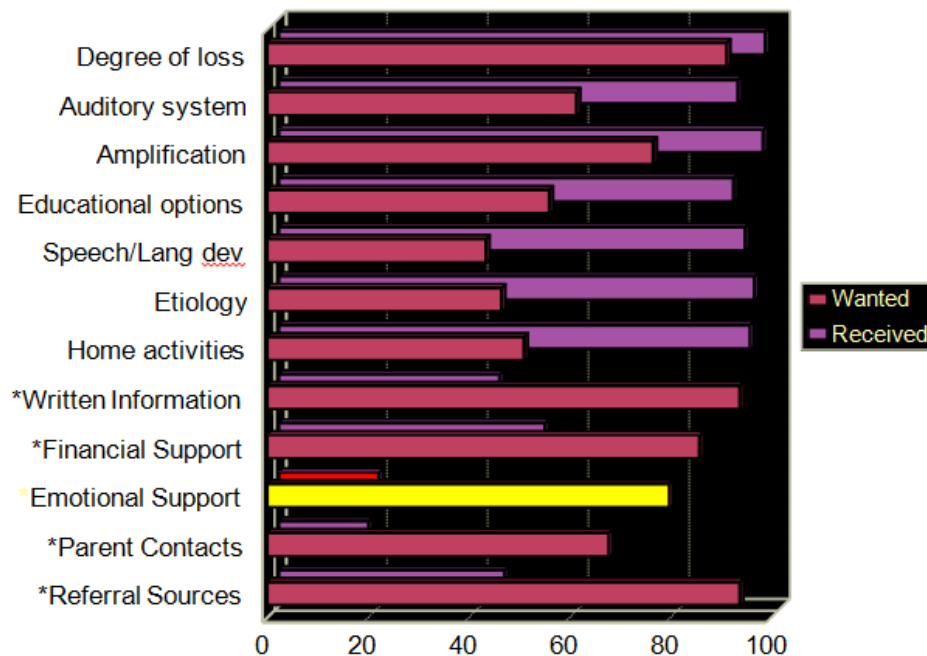
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SECTION 2 – THE DIAGNOSIS AND SOON AFTER THE DIAGNOSIS

What Families Expect from Audiologists

The diagnostic process is the first step on a long journey for most families, and an imprinting process that sets up in the parent's mind future expectations for the behavior of audiologists and the many other professionals they will deal with on their journey. Ideally the initial interactions with the audiologist (1) will have a component where feelings are acknowledged; and (2) will strive to empower the parents from the beginning as active participants in the habilitation program.

Information Wanted vs. Received by Parents at Hearing Loss Confirmation



Martin, F., George, K., O'Neil, J., & Daley, J. (1987). Audiologist's and parents' attitudes regarding counseling of families of hearing-impaired children. *ASHA*, 29, 27-33.
Sweetow, R., Barrager, D. (1990) Quality of comprehensive audiological care: A survey of parents of hearing-impaired children. *American Speech and Hearing Association Journal*, 22(10), 841-847.

The information in this section is based on the work of David Luterman (Luterman & Kurtzer-White, 1999; Luterman, 2001). As stated by Luterman, the medical model of presenting information after the diagnosis is not an effective tool, whether it is by committee or by individuals. Parents retain little of the information provided and trust issues between the parents and audiologist result. Instead of retaining much of what is said, they remember unimportant details such as the kind of glasses he or she wore.

A starting point for parents

Parents are typically anxious at the time of the diagnostic appointment. If the child is not being diagnosed with hearing loss at birth, the parents have likely compiled a list of experiences and observations of their child and they need to be allowed a chance to tell their story. It is critical for the audiologist to give them this chance. Client-centered counseling in the diagnostic process begins at this initial contact with the parent. What needs to be established at the

outset is the major concern of the parent and the expectations they have of the audiologist. It is important to let them share anything they feel may be important. After they have told their story, enlist them as co-workers, such as “I may be an expert on identifying when a child has a hearing loss, but you are certainly an expert on this child and I need your help.”

A shift from the white coat expert model

Clinical procedures that separate families from the testing process increase denial because the parents can fantasize about the testing (broken machine, questioning audiologist’s skills). Above all else, the self-report, which enlists the parents as co-diagnosticians, begins the process of empowering the parents. Active involvement of the parents in the diagnostic process diminishes the denial mechanism and strengthens the bond with the parents. Audiologists who deliver the word to the parents in the waiting room are often received with hostility. Parental satisfaction with follow up testing of children who failed newborn hearing screening was a function of parents being enabled as partners in the process and they were invited to be active participants and not passive observers.

The desired outcome is that the parents take responsibility and are active participants in the educational and hearing loss management practices.

Seven steps for a healthy, collaborative, client-centered diagnostic process

1. Allow the family to tell their story: “What brought you here?”
2. Enlist the family as co-diagnosticians: “You are the expert on this child and I’ll be the expert on the testing.”
3. Involve the family actively in the test procedure. Engage the family as much as possible in eliciting or scoring responses.
4. Have the family participate fully in the diagnosis. Ideally, they will make the diagnosis.
5. Empower them by asking: “What do you need to know?” or “How can I be helpful to you right now?” Let them guide you on how much information to provide.
6. Listen and respond to the affect (body language, tone of voice). Give the parents a chance to talk about how they feel in an unhurried, caring atmosphere. If there is a time limit, tell the family at the outset: “I have 15 minutes before my next appointment, how can I be helpful to you?”
7. Set up another appointment. Do not try to cover everything in one appointment.

Parents as co-diagnosticians

The result of identifying children with hearing loss following a failure at newborn hearing screening allows the family no time to prepare for the shock of the diagnosis. Encourage the parent to be at your side as you introduce the stimuli and look for responses on the ABR or OAE equipment. Once they know in very general terms what you are looking for ask them if they see the waveform decrease as the stimuli intensity is decreased. Their involvement both educates them on the diagnostic process and also provides them little toehold for denial. In corroborative testing in the sound booth have one parent sit with you if possible and enlist his or her help in observing the child’s responses. Ideally, the diagnosis will be made together.

Some DON'Ts for right after a diagnosis

1. Don't fill silence with information that the parent is not ready to hear – parents ask each question when they are ready for the answer.
2. Don't be afraid of tears; allow the parent to recognize that it is okay to feel badly.
3. Don't try to cheer up parents by saying their child could have a much worse hearing loss.
4. Don't agree with them if they offer an opinion that a unilateral hearing loss will not matter or that their child will probably not experience problems.

Some DOs for right after a diagnosis

1. As the test session finishes ask: "What do you need to know?" or "How can I be helpful to you now?"
2. It is okay to ask "Can you share with me how you are feeling?" or offer "Some parents at this time feel like they have been hit by a truck" – this is true, even for unilateral and mild hearing loss.
3. Listen nonjudgmentally, parents' feelings are to be respected, non-minimized.
4. It is no use to try to focus their attention on content they cannot absorb. Set up the next appointment within a week.
5. Provide the family with a copy of the Unilateral Hearing Loss: What Parents Should Know brochure and let them know that you will answer their questions at the next appointment.
6. NOTE: in some clinical settings it is not possible to set up an appointment just to counsel patients. If this is the case, activities that have been specified as occurring in the first appointment after diagnosis can be included in the diagnostic appointment, although it is not recommended.

NOTE: This information is applicable to all professionals who work with families following the diagnosis of hearing loss in their young child.

FIRST AUDIOLOGY APPOINTMENT AFTER DIAGNOSIS

1. Share **AN UNEXPECTED DIAGNOSIS**.
2. Acknowledge that it is hard when families find out that the perfect baby they dreamed about was born with a problem. Do NOT say that you understand unless you are a parent who has gone through it.
3. After providing **AN UNEXPECTED DIAGNOSIS** to the family members, sit respectfully silent and wait for them to ask the first question.
4. Alternatively, if the family does not speak after 30 seconds or so, acknowledge the idea of having a baby with a hearing loss in one ear is all new to them and ask what questions they would like to talk about first.
5. It can be anticipated that the families who received the Unilateral Hearing Loss: What Parents Should Know brochure will be interested in discussing this information.
6. At this point inform the family that you will be making a referral to early intervention services so that they can receive more support and information than can be provided just by the audiologist. If you have a brochure from your local early intervention program present it to the family at this time and mention:
 - a. Early intervention is at no cost to parents.
 - b. It is typically provided in the family's home at a time convenient to them.
 - c. Early intervention starts with an evaluation of all of the child's skills – sometimes hearing loss occurs in conjunction with one or more other problems and it is good to rule this out or find out about it as early as possible (30-40% of children with hearing loss have additional problems that can effect development). It can take up to 6 weeks for this evaluation to be completed.
 - d. Early intervention teachers can assist families after the evaluation is done and a plan is written. They help families to better understanding the Effect of the unilateral hearing loss on language and social development and how they can help their child develop without delays.
7. Provide **HEARING DOES NOT ALWAYS STAY THE SAME** and spend time focusing on the portion of the Unilateral Hearing Loss brochure that states that ¼ of children with unilateral hearing loss develop hearing loss in the better hearing ear (does not apply to children with microtia/atresia). Before the family leaves, set up a hearing check appointment for the child to return in 3-4 months.
8. Provide **EARS WORK TOGETHER** and talk a little bit about the analogy. Quickly follow it up with **LISTENING FROM A DISTANCE** and **LISTENING IN BACKGROUND NOISE**.

9. State that hearing loss is invisible and often hard to understand, especially at first. That is why it is important that the family spend time understanding what it means for their child to have a hearing loss.
10. Provide the family with **EXPERIENCING UNILATERAL HEARING LOSS** and review the information with them. If possible, provide them with one or two sets of ear plugs so they can experience unilateral hearing loss at home.
11. Refer to the **Unilateral Hearing Loss: What Parents Should Know** pamphlet and briefly discuss the problems that hearing in only one ear can cause with language development, behavior and overall success in school. State that you will provide them with more information at the next appointment, after they have had a chance to experience unilateral hearing loss. The early intervention teacher will also discuss this information and provide strategies for how these problems may be prevented. Emphasize again the importance of receiving early intervention services.
12. Finally, share **WHAT TO DO – CHOICES** and **CONSIDERING HEARING AID USE**. It is ideal is to start hearing aid use by age 3 months and no later than 6 months.
13. If family chooses to not pursue amplification, schedule a return after they have had a chance to get more information from early intervention; ideally before the child turns 3 months old. Hearing can be rechecked and use of a hearing aid can be further discussed.
14. Some families won't be ready to move forward until after the hearing is checked in 3-4 months – with early intervention or anything else. Urge them to follow through on the hearing check as their child may be the 1 in 4 who's hearing changes. Share **POTENTIAL IMPACT ON LANGUAGE LEARNING, FOSTERING LANGUAGE LEARNING** and **POTENTIAL IMPACT ON BEHAVIOR** with the family before they leave.

EARMOLD APPOINTMENT

1. Family returns ASAP for an earmold impression and to further discuss their questions.
2. Discuss their experiences listening with a unilateral hearing loss (exercise with ear plug).
3. Share information with them about the learning issues (**POTENTIAL IMPACT** handouts).

HEARING AID FITTING APPOINTMENT

1. Fit hearing aid. Share **EVALUATING HEARING AID USE** and the **Early Learning Function (ELF)** checklist. Discuss their concerns and activities with early intervention to address language and social development.

SUMMARY INFORMATION FOR USE AT DIAGNOSIS OR REFERRAL

- **Unilateral Hearing Loss Referral Pamphlet**
- **WHAT TO DO – GET HELP!**
- **SUMMARY**

**Suggestions for Evaluation and Management of Infants Identified by Newborn Screening:
Mild and Unilateral Sensorineural Hearing Loss**

AGE	AUDIOLOGICAL	FAMILY-CENTERED INTERVENTION
2 weeks to 3 months of age	Hearing loss indicated via universal newborn hearing screening, high-risk indicators, or referral. Confirm presence/degree of loss via OAE/ABR. Refer family to local early intervention program (Part C). Share written information with parent ¹ . If unilateral loss, consider amplification. If hearing aids are recommended, seek medical clearance and begin the necessary funding approval process.	UNHS personnel inform parents of newborns that do not pass universal hearing screening about the results of screening in a culturally sensitive and language appropriate manner and the describe the need for evaluation to rule out the presence of a hearing problem. Initial contact with family by early intervention program (EIP) following diagnosis. EIP provides information to assist family in recognizing the developmental impact of hearing loss.
3-6 months	Appropriate amplification fit to hearing loss by pediatric audiologist ² . Fit loaner hearing aids as necessary while waiting for 3 rd party payer approval. Special consideration given to instrument specifications such as noise reduction/suppression, locking battery drawer, FM capability. Communicate/consult on specific amplification considerations with early interventionist and parent to assure fit of amplification to natural environment needs.	Offer to connect the parents with other parents of children with unilateral or mild hearing loss. Discuss potential effects of hearing loss on listening, language, social development. Instruct on effective communication. Stress the importance of frequent, meaningful parent – child interactions at close proximity. Emphasize the concept of “Language is caught, not taught” and the importance of early auditory development. Early interventionist assists with establishing the amplification wear pattern, provides tips to keep hearing aid(s) on child, practice Ling 6-sound test.
6-9 months	Behavioral testing to confirm degree of hearing loss and obtain frequency specific information. Compare to early OAE/ABR confirmation for indication of possible loss progression. Coordinate with early interventionist to collaborate with family for completion of Early Listening Function ³ (ELF) or other amplification validation measure.	Coordinate with audiologist and family to complete the Early Listening Function (ELF) or other amplification validation and auditory skill development measure such as Little Ears ⁴ . Discuss the possibility of hearing loss progression and need for monitoring of hearing ability.
9-15 months	Reevaluate hearing to check stability of hearing loss. Research indicates ¼ of children with hearing loss may have loss develop in the better ear. Remake earmolds as needed. Reverify output, gain, frequency response of amplification in relation to ear canal growth ² . Cross-check appropriateness of amplification via feedback from parent and early interventionist. Now that child is mobile, consider appropriateness of use of FM in home or child care.	Check communication and cognitive milestones ⁶ . Now that child is mobile, discuss impact of listening from a distance and background noise as interfering with learning incidental language. Share information on child’s development with audiologist. Work with the family on establishing consistent behavior expectations. Provide written information describing the schedule of communication and auditory development ¹ .
16-24 months	Reevaluate hearing to check stability of hearing loss. Remake earmolds as needed. Reverify amplification performance. Cross-check appropriateness of amplification via feedback from parent and early interventionist (i.e., via ELF). Communicate any changes in hearing status with early interventionist. Discuss lifelong need to avoid overexposure to noise and for regular hearing tests.	At 24 months obtain more comprehensive assessment of child development ⁶ . Delays in expressive language may begin to be apparent by 18 months. If concerns, address the need for communication intervention services. Discuss early literacy development and emphasize the importance of reading aloud to the child on a daily basis.
25-36 months	Reevaluate hearing, including WIPI half-list at 40 dB HL. Remake earmolds as needed. Reverify amplification performance. Discuss the need to begin to train child to put on own hearing aid(s). Provide modeling on how to answer peer questions about wear of hearing aid(s). As child approaches entry into preschool, in conjunction with the early interventionist, pursue the purchase of a personal, classroom, or desk-top sound field amplification system. Consider FM need based on support from parent report (CHILD ⁷ report form) or if WIPI test results for perception of low level speech in +5 S/N are < 88% correct.	Monitor communication development at 30 months. Discuss transition to community or public school preschool setting at age 3, especially if there are deficit areas present. Discuss need for child to develop independent skills with hearing aid(s). Final communication inventory and evaluation prior to age 3. Coordinate with audiologist to complete the CHILD test. Provide information to parent on the potential need to establish a 504 plan at school-age; advocate for a special education evaluation if learning delays are present; and the potential need for FM technology in school classrooms.

Developed by Karen L. Anderson, 2001; revised 2012.

1. Example: So Your Child Has A Hearing Loss, <http://www.agbell.org>

2. ASHA Pediatric Working Group on Amplification Fitting

3. Early Listening Function (ELF), <https://successforkidswithhearingloss.com/tests>

4. Little Ears Auditory Questionnaire http://www.medel.com/US/img/download/BRIDGE_Catalog.pdf

5. Suggested Instruments: Communication and Symbolic Behavior Scales- Developmental Profile (CSBS-DP) The Mullen Scales of Early Learning; Ages and Stages Questionnaires (ASQ), <http://firstwords.fsu.edu>

6. Examples: Minnesota Inventory of Early Child Development (24-40 months), ELM; Denver Developmental Screening Test

7. Children’s Home Inventory for Listening Difficulties (CHILD) <https://successforkidswithhearingloss.com/tests>

SECTION 3 – MAKING THE CASE THAT UNILATERAL HEARING LOSS IS SIGNIFICANT TO LISTENING

THE FOLLOWING TWO EARLY INTERVENTION VISITS SHOULD OCCUR WITHIN 1-3 MONTHS AFTER DIAGNOSIS

FIRST EARLY INTERVENTION HOME VISIT APPOINTMENT

1. Start your home visit by asking families to “tell their story” including describing the diagnostic appointment.
2. Share **AN UNEXPECTED DIAGNOSIS**. After providing it to the family members, sit respectfully silent and wait for them to ask the first question.
3. Alternatively, if the family does not speak after 30 seconds or so, acknowledge the idea of having a baby with a hearing loss in one ear is all new to them and ask what questions they would like to talk about first.
4. It can be anticipated that the families who received *the Unilateral Hearing Loss: What Parents Should Know brochure* will be interested in discussing this information.
5. Be prepared to answer questions about language, learning and social delays briefly, stating that you and the family will discuss these issues in depth during future visits. They will understand more about these problems once they better understand the kind of listening problems that hearing loss in one ear causes.
6. State that hearing loss is invisible and often hard to understand, especially at first which is why it is important for them to spend time understanding what it means for their child to have a hearing loss.
7. Provide **EARS WORK TOGETHER** and talk a little bit about the analogy.
8. State that hearing loss is invisible and often hard to understand, especially at first.
 - a. That is why it is important that the family spend time understanding what it means for their child to have a hearing loss.
 - b. The best teacher is experience. Provide the family with **EXPERIENCING UNILATERAL HEARING LOSS**.
 - c. If possible, provide them with one or two sets of ear plugs. Emphasize that this is very important so that they can best understand their child’s needs in the future and how they as a family can help their child.
 - d. Let them know that you will discuss their thoughts from these experiences at the next visit.

- e. Let them know that you will discuss their thoughts from these experiences at the next visit.
9. Refer to the ***Unilateral Hearing Loss: What Parents Should Know*** brochure and briefly discuss the problems that hearing in only one ear can cause with language development, behavior and overall success in school. State that you will provide them with more information during your future home visits. The information may have more meaning to them after they have had a chance to experience unilateral hearing loss.
10. Before you leave, emphasize the importance of returning to the audiologist for the hearing recheck within 3-4 months.
 - a. If the family does not seem to be familiar with the need for this appointment share ***HEARING DOES NOT ALWAYS STAY THE SAME*** with them.
 - b. Offer to contact the audiologist to discuss the child's hearing.
 - c. Let the family know that the information about the impact of unilateral hearing loss on learning is still new and some doctors and audiologists are not fully aware of the importance of acting early.

SUMMARY INFORMATION FOR USE AT DIAGNOSIS OR REFERRAL

- **Unilateral Hearing Loss Referral Pamphlet**
- ***WHAT TO DO – GET HELP!***
- ***SUMMARY***

SECOND EARLY INTERVENTION HOME VISIT APPOINTMENT

1. Start by asking if there are any questions or information they want to be sure to cover during the visit. You can choose to rearrange the topics below based on their level of concern and interest.
2. Begin with referring to the analogy of the ½ foot in **EARS WORK TOGETHER**. State:
 - a. Analogies can help understanding but are not perfect.
 - b. Just as our two feet work together so that we can walk smoothly on many kinds of smooth or rugged surfaces, our two ears work together to help us listen in challenging situations.
 - c. Ask the families what they think “rugged terrain” would be for listening. When is it most challenging to listen, even with two good hearing ears?
 - d. As a prompt you could say: Think of times when you are with other people, or are in different places where you really wanted to hear someone and it was difficult.
3. Family members will likely come up with noisy listening situations or when speech is distant. Those who have already experienced mild unilateral hearing loss should be encouraged to share their experiences at this time.
 - a. Discuss at length the challenges of listening to soft speech, in distance, noise, and when distracted.
 - b. Provide **LISTENING FROM A DISTANCE** and **LISTENING IN BACKGROUND NOISE**.
 - c. Link the concept of listening to proximity (**listening bubble**), interest and opportunity to hear meaningful speech.
4. If the family members have not taken the time to experience unilateral hearing loss encourage them to think about challenging listening situations. Acknowledge that the scenarios they come up with are exactly right.
 - a. The effects of having one foot that does not work as well as the other foot would cause some problems. Can they think of when that would be?
 - b. Now urge them to think of hearing. What kinds of situations would be more difficult if you had problems hearing everything well?
5. Take the time to work with family members and go through some of the listening activities on **EXPERIENCING UNILATERAL HEARING LOSS**.
6. Be sure to demonstrate listening to the activities in the table in **EXPERIENCING UNILATERAL HEARING LOSS**. These are activities from the **Early Listening Function (ELF)** test that you will soon be doing with the family to discover the child’s listening bubble.

It is important to have the reference of the listening bubble of the family members for different activities before doing the **ELF** activities with the child.

7. If the family has already experienced unilateral hearing loss, talk to them specifically about the **ELF** activities in the table and try to get them to describe their abilities to listen at a distance and then relate that to the concept of the listening bubble.
8. Be sure to talk at length about the concept of balanced hearing and how two ears work together. This is an important point for families of children with residual hearing in their poor hearing ear to recognize as they consider trying a hearing aid. At this point do not bring up a hearing aid unless the family does. Give them more time to learn and integrate this new information with what they had dreamed about their child before he or she was born.
9. Show the **ELF** to the family. Review the parent introduction information and the instructions. Answer any questions they may have about the activities. If needed, demonstrate with the parent how to watch to see if the child responded to a sound. Take turns if needed.
10. Emphasize that because the child does hear out of one ear normally, many of the loud and closer sounds will be heard easily. Having a unilateral hearing loss means subtle things can be missed – often, depending on which ear is facing noise or the person speaking. You will be talking more to them at future home visits about the effects of missing even parts of what is said.
11. Ask the family members to try to do some of the ELF activities. You will look forward to hearing what they learned and can help them do any remaining activities. Remind them that they have language already and can ‘guess’ when they only partially hear something.

THIRD EARLY INTERVENTION HOME VISIT APPOINTMENT

1. Start by asking if there are any questions or information they want to be sure to cover during the visit. You can choose to rearrange the topics below based on their level of concern and interest.
2. Review the family's **ELF** findings and/or collaborate with the family to identify the child's responses to the different **ELF** sounds. Focus on listening at 10 feet (across a large room) and 15+ feet (next room) the effect of background noise be clearly demonstrated. It is not important to do all of the sounds at every distance, as children with unilateral hearing loss will typically respond well, except in distance and noise.
3. Relate results to the concept of the listening bubble and how near the adults should be if they expect their child to really hear them under different circumstances, like the car, outside, shopping, etc. Reinforce the concept of *Language is Caught, Not Taught* as you discuss the listening bubble.
4. Now that the family has experienced unilateral hearing loss and discovered how their child's listening may be affected it is time to talk about what this means to learning.
 - a. At this visit you will just introduce the ideas of language development and social or behavioral implications.
 - b. Share the following handouts: 1) **POTENTIAL IMPACT ON LANGUAGE LEARNING**, 2) **FOSTERING LANGUAGE GROWTH** and 3) **POTENTIAL IMPACT ON BEHAVIOR**.
 - c. You will spend future home visits helping the family understand strategies they can use during everyday activities that can help the child's language and social development.
5. Discuss the advantages of 'balanced hearing' (NOTE: children who have a severe-profound hearing loss are often unable to achieve 'balanced hearing').
 - a. Review **LISTENING FROM A DISTANCE** and **LISTENING IN BACKGROUND NOISE** and how balanced hearing is important to performing better in these challenges.
6. Share **WHAT TO DO – CHOICES** and **CONSIDERING HEARING AID USE**.
 - a. Answer questions they may have about amplification use.
 - b. Assure them that you will be readily available to help them learn how to use the hearing aid.
 - c. Discuss what you and the family could look for to see if the hearing aid is helping the child.
 - d. Offer to contact the audiologist if there was no mention made to the family about using amplification.

7. If the family has not been in contact with another 'veteran family' of a child with unilateral hearing loss offer to facilitate that contact. Parents feel many different things when they think about their child wearing a hearing aid and it can be helpful to discuss these thoughts and concerns with another family that has gone through these experiences.
8. If a family chooses to try amplification, at least one home visit will be dedicated to supporting use.

EARLY INTERVENTION HOME VISIT APPOINTMENT DEDICATED TO USE OF A NEW HEARING AID

1. Start by asking if there are any questions or information they want to be sure to cover during the visit. You can choose to rearrange the topics below based on their level of concern and interest.
2. When a family has chosen to try a hearing aid it is likely that at least one home visit will be dedicated to instructing them in earmold insertion, hearing aid monitoring including the Ling 6 Sound Test, and coaching them on times that they can tune in to observe the benefit of the hearing aid. Share **EVALUATING HEARING AID USE**
3. After the child has had the hearing aid two or three weeks he or she should be wearing it most waking hours. At this point repeat the ELF activities with them to see if there has been any change in the size of the listening bubble or other observable benefits. Provide the family with the **Early Listening Function Infant and Young Child Amplification Use Checklist**.

Parents circle 1-5 scale: Agree, No Change, or Disagree

My child appears to:

1. Be more aware of my voice
2. Be more aware of environmental sounds
3. Search more readily for the location of my voice
4. Have an increased amount of babbling or talking
5. Have more interest in communicating

During ELF activities, the size of my child's listening bubble:

1. Has improved for quiet sounds voices
2. Has improved for typical sounds and voices
3. Has improved for loud sounds and voices
4. Has improved for listening in background noise

Describe specific situations when you noticed improvements in listening ability:

It is important that the family share their observations on the validity of the hearing aid fitting and its benefit with the audiologist before the end of the first 30 days (some audiologists may provide a 60-day trial period).

SECTION 4 –

DEVELOPING EFFECTIVE INTERACTION SKILLS IN EVERYDAY ACTIVITIES

FOURTH AND FIFTH EARLY INTERVENTION HOME VISIT APPOINTMENTS

1. Start by asking if there are any questions or information they want to be sure to cover during the visit. You can choose to rearrange the topics below based on their level of concern and interest.
2. Help the family check the hearing aid and discuss any issues with daily wear.
3. Call the family's attention to **POTENTIAL IMPACT ON LANGUAGE LEARNING**. Say that you will be talking more with them during this home visit about 'keeping the language teacup full.'
4. To get across the importance of quantity of language used share **LANGUAGE EVERYDAY AND EVERYWHERE**.
5. The early intervention teacher or speech language pathologist can then use their customary materials for helping families learn about communication strategies such as:
 - a. SKI-HI Curriculum (<http://hopepubl.com/proddetail.php?prod=103>)
 - b. Hanen Program
(<http://www.hanen.org/web/Home/HanenPrograms/ItTakesTwoToTalk/tabid/76/Default.aspx>)
 - c. Abecedarian Curriculum
(<http://www.kidsgrowth.com/resources/articledetail.cfm?id=992>)
6. Share the handout **Sequence of Development for Infants and Toddlers: Auditory, Language, and Speech** from the Appendices section.
7. The early intervention teacher or speech language pathologist can then use their customary materials for helping families learn to foster early literacy skills such as:
 - a. Gallaudet Shared Reading Project
(http://clerccenter.gallaudet.edu/Clerc_Center/Information_and_Resources/Info_to_Go/Language_and_Literacy/Literacy_at_the_Clerc_Center/Welcome_to_Shared_Reading_Project.html)
 - b. Early Literacy Fun CD (<http://hopepubl.com/proddetail.php?prod=296>)
 - c. Initiatives through your local library or state initiative like Iowa's
(<http://www.ilsa.lib.ia.us/ECL/awareness.htm>)
8. The early intervention teacher or speech language pathologist can share information on the importance of music to the children's development of auditory processing abilities (i.e., ([Ho, Cheung & Chan, 2003 in her article Auditory-Processing Malleability: Focus on Language and Music pp. 106](#)) and [Parbery-Clark A, Skoe E, Lam C, Kraus N. \(2009\)](#))

[Musician enhancement for speech in noise. Ear and Hearing 30\(6\): 653-661.](#)) or see Nina Kraus research at <http://www.soc.northwestern.edu/brainvolts/>

9. Introduce the concept of monitoring the child's language development to the family. Provide them with a list of words, such as those found on the MacArthur Communication Development Inventories Checklists (<https://successforkidswithhearingloss.com/resources-for-professionals/early-intervention-for-children-with-hearing-loss>) and encourage them to hang the list on the refrigerator.
10. Communication monitoring should occur at least at 6 months intervals, starting at 9 months of age. Remind the parents that children with unilateral hearing loss who end up with language delays often do not have problems until they reach 15-18 months old.

SUMMARY INFORMATION FOR USE AT DIAGNOSIS OR REFERRAL

- **Unilateral Hearing Loss Referral Pamphlet**
- ***WHAT TO DO – GET HELP!***
- ***SUMMARY***

SECTION 5 – ADDRESSING BEHAVIOR AND SOCIAL DEVELOPMENT

Social interactions that assist in learning increase a child's level of thinking as well as developing their knowledge, values, and attitudes. In his theory of cognitive socialization, Vygotsky believed that learning was dependent on sharing through language and continual cooperation among learners. Social skills are needed not only for developing friendships, but as a modality for cooperative interaction and learning in small and large groups. Social skills help children become independent, productive adults. Vygotsky postulated that cognitive development and language are shaped by a person's interaction with others.

Social skills include:

- Rules of conversation
- Responding to social cues
- Making eye contact
- Smiling
- Saying hello and goodbye
- Being polite
- Cooperating by taking turns
- Responding appropriately to questions
- Being sensitive to the feelings of others
- Problem solving
- Supporting others by giving them attention and helping
- Having interesting things to say
- Reinforcing and acknowledging other's comments
- Controlling aggression and other inappropriate behaviors

How do we learn 'rules of behavior'?

Think about it – how do we learn to not touch something that is hot? A parent tells us not to touch, shows us what 'hot' means, and repeats it often. Children need to know the expectations, why it is wrong (hurt, dirty, impolite, mean), and to be praised when they are behaving well. Children can also learn by overhearing when another child is scolded or warned.

Children with unilateral hearing loss

1. Children with typical hearing in only one ear may miss early warnings (Don't touch it Marie).
2. They may need more explanation or more times in which expectations are explained (*plants grow in dirt, dirt is messy, plants can be hurt if you pull on them, sometimes leaves are sharp, etc.*).
3. They may not learn by example as quickly as children with two typically hearing ears. For example, the child may see another child warned or scolded but missed what the child did or said, so was unable to learn through that example.

4. Warnings should be given in situations when the child is close, when there is no background noise, and when the child is paying attention. If another child is being warned or scolded the reason should be made clear to the child with one hearing ear.
5. Explain again and again – the why of expectations (*this builds language too!*).
6. Make sure the child really heard *and understood* the warning before s/he is punished.
7. Children in ‘rugged listening conditions’ often miss subtle social exchanges. They may hear two children close by speaking, look up and see the other children looking at him. The child who wasn’t able to catch part of what the others were saying may think that he was being talked about. He may feel self-conscious or even angry.
8. Social scenarios should be role played.

Information about early social skills and warning signs have been included in the ***Materials for Families***.

Vygotsky, L.S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard Univ. Press.

SECTION 6 – PREPARING FOR SCHOOL SUCCESS

Even children who have age appropriate language and typical behavior will still be at a disadvantage when it is time to start school because classrooms for young children are typically active and noisy places and the teacher is often across the room.

Families should consider how much of a challenge their child has functioning in noisy, active environments. Parents can identify situations in which their child may be having more trouble listening. These situations can be useful to identify as the parents start thinking about preschool or kindergarten. A child who has challenges at home in noise and at a distance is likely to in school as well. One way that families can consider how a child is functioning in different listening situations is to complete the ***Children’s Home Inventory of Listening Difficulties (CHILD)*** test. There are 15 different listening situations and families rate how well they think their child is able to listen and understand in each setting. The CHILD is for children ages 3 years to approximately 12 years (young child must be playing with others, not parallel play). There is an Understand-O-Meter that helps to define how well a child is able to comprehend.

The Starting School LIFE is an appraisal of the listening access needs for children entering school. The family is requested to complete the CHILD (Children’s Home Inventory of Listening Difficulties). A Listening Situation Breakdown is on page two of the CHILD and coordinates with the Starting School LIFE. It breaks the home listening situations down into the areas of Quiet, Noise, Distance, Social and Media, which the school team can consider as an indication of how the student is most likely to perform in similar situations encountered in school. The family then completes 6 questions about their child related to *Being a Communication Partner* and another 6 questions related to *Independence*. A guide is included on the form to assist in interpretation. On the reverse side, information from the school listening and communication assessments is summarized. The team comments section provides lines for brief statements after educational program/setting; technology; accommodations; and skill development (with check boxes for specific areas).

If the child has language and other skill development within the normal range by school age the family can take it as an indication that their helping him or her as a young child was successful! Only children that demonstrate ‘adverse educational affect’ will be eligible for specialized instruction (special education) services as deaf or hard of hearing. As a child with normal hearing in only one ear, he or she will be at a learning disadvantage throughout the school years. This is a ‘limitation to a life skill’ that will usually make the child eligible to be considered for accommodations in the classroom. This can include special seating, amplification, and other daily supports. For more information refer to the *Relationship of Hearing Loss to Listening and Learning: Unilateral Hearing Loss* downloadable handout

Summary

- The child has a hearing loss that will affect him throughout his life.
- The child's hearing *may* change.
- Try amplification as early as possible!
- Without early assistance your child may develop language delay and/or social or behavioral issues.
- Children with unilateral hearing loss are at 10 times the risk for school problems.
- Get help from early intervention ASAP!
- Monitor language growth regularly.
- Plan for your child's transition to school.



Section 7: Discussion handouts to share with families

Page	Handout
27	AN UNEXPECTED DIAGNOSIS
29	EARS WORK TOGETHER
31	EXPERIENCING UNILATERAL HEARING LOSS
33	HEARING DOES NOT ALWAYS STAY THE SAME
35	LISTENING FROM A DISTANCE
37	LISTENING IN BACKGROUND NOISE
39	POTENTIAL IMPACT ON LANGUAGE LEARNING
41	FOSTERING LANGUAGE LEARNING
43	POTENTIAL IMPACT ON BEHAVIOR
45	WHAT TO DO - CHOICES
47	CONSIDERING HEARING AID USE
49	EVALUATING HEARING AID USE
51	LANGUAGE EVERYDAY AND EVERYWHERE
53	WHAT TO DO – GET HELP!
55	SUMMARY

Other Resources for Families

Hands & Voices: Unilateral Loss & Family Support

http://www.handsandvoices.org/articles/GoOn/V13-2_unifamsupport.htm

Unilateral Hearing Loss in Children: Guidance for Parents, ASHA:

<http://www.asha.org/public/hearing/disorders/UHLchildren.htm>

The Developing Child with Unilateral Hearing Loss: AN UNEXPECTED DIAGNOSIS

You expected your baby to be perfect

Parents dream of who their babies will be, the joy they will bring and their possible futures, all before they are ever born.

Your baby came with a surprise you never expected or thought about – hearing loss.

You don't want to believe it.

It doesn't seem real that you have any problem.



You want to believe your baby is perfect

It is real. You have a baby with a hearing loss in one ear that will never go away.

Maybe that ear looks different. Maybe it looks perfect – just like the other ear.

The hearing loss will be a part of him every day of his life.

You are thankful that hearing loss is only in one ear but don't want him to have it at all.



It is hard to accept your baby is not perfect

When a baby is so young, it is hard to believe that hearing tests can be accurate.

Hearing tests are very accurate, even when babies are only days or weeks old.

Whether your child has some hearing in that ear or no hearing, there is a hearing loss that is part of who she is now and part of the child and adult she will become.



Your child is who she or he is.

Hearing loss in one ear is as much a part of who she is as her eye and hair color.

She will need your love, care and guidance just as if she had no hearing loss.



She is a whole person, even if she has a hearing loss in one ear.

As parents, you will want to understand what it means to have good hearing in only one ear.

Having a child with a hearing loss in one ear is still very new to you.

What questions do you have?

What would you like to talk about first?

SUGGESTED FOR HOME VISIT 1

The Developing Child with Unilateral Hearing Loss: EARS WORK TOGETHER

How bad can it be? The good ear will compensate for the bad ear, won't it?

Hearing loss is invisible and difficult to understand, especially when someone seems to hear most sounds or most times but not always.



It is very common to think that because we have two ears that if something is wrong with one ear, the other ear will do the work of two ears.

In reality, we need both ears to perform well in all listening situations.



An analogy to help us understand

Think about a child who was born with only $\frac{1}{2}$ of one foot. We require two feet to equally support the weight of our bodies as we walk.



With only one normal foot, a child will still learn to walk and run, but likely not as fast or smoothly as children with 2 normal feet; especially in rough terrain or when competing in a race.

Can the one good foot really compensate for the $\frac{1}{2}$ foot? No, but having only one good foot works fine in many situations.

What to expect at home

Your baby can hear normally with one ear. As you diaper him, feed him, play with him you will see him respond to sound.

He CAN hear.

You are close to him. It is quiet. He is interested in what you are doing.

Thinking about our analogy, this is like walking on flat ground with plenty of time to get where you want to go.



Rugged terrain

Think again of the child with $\frac{1}{2}$ foot playing with other children in a large park with grassy areas, rocky climbing areas, and an obstacle course to jump, skip and hop.

She can play anywhere she likes with the other children, have fun and get exercise.

She will have difficulty experiencing some of the things to do at the park.

She may need to work harder, may avoid some, or may be able to do it all, only at a slower pace.

Analogies can help understanding but are not perfect

- What do you think "rugged terrain" would be for listening?
- When is it most challenging to listen, even with 2 ears?
- When one foot does not work as well as the other foot there would be times when a child may have some problems. Can you think of when that would be?
- Now think of hearing. What kinds of situations would it be more difficult if you had problem hearing everything well?



A foot and ear are not the same

The analogy of the child with $\frac{1}{2}$ foot is a starting place to understand that 2 ears are really needed, and one ear cannot do the job of two ears.

There is at least one big difference as we think about the child with only one normal foot and your child with only one normal ear – listening is strongly tied to the ability to learn at home and at school! A foot problem will likely not impact learning.



SUGGESTED FOR HOME VISIT 1

The Developing Child with Unilateral Hearing Loss: EXPERIENCING UNILATERAL HEARING LOSS

You need to experience hearing loss in only one ear yourself

- Buy foam ear plugs at the hardware or drug department of a large store.
- Be sure to insert it correctly so it causes a mild (30-35 dB) hearing loss.
- Be ready to record your thoughts as you try the different activities.
- Make a commitment to yourself to wear one earplug **for at least 3 hours**.

Activities to take turns doing with one or more people in your 3 hours:

1. Spend time talking quietly with someone with the television on in the background.
2. Use some of the listening activities below from another room or from across a large room

QUIET Activities	TYPICAL Loudness Activities	LOUD Activities
Whispered voice	Water running full on	"moo, moo" in loud voice
Rubbing palms together briskly	Song (Mary had a little lamb)	Loud door knock (knuckles)
Quiet clucking tongue	Clapping hands, quiet applause	Clacking spoons on hand
"buh buh buh" said quietly	"ship, ship, ship" said normally	Hit fry pan with metal spoon

- a. when you are not looking at the other person
 - b. when you are reading or doing something you really enjoy or that interests you
 - c. in quiet
 - d. when there is background noise.
3. Listen to a TV show or radio show – don't turn up the volume.
 4. Have a conversation sitting close with no background noise.
 5. Talk in the car with your 'bad ear' toward the person speaking while driving
 6. Talk to someone outside at a distance.

Your thoughts and reactions: (*Think in terms of Listening Bubble size*)

What was your amount of effort to understand all speech in:

Quiet _____

Across room _____

Another room _____

Noise (TV) _____

Sounds that were harder to hear _____

In car _____ Outside distance _____

How much effort did it take you to listen? _____

How did background noise affect your ability to pay attention and easily understand what was said?

What was the difference between having a conversation within a few feet and from across the room, outside or in the car? _____

Other thoughts? _____

Remember – you already have developed language and have the ability to 'fill in the blanks' if you miss part of a word. Your child is still developing language and does not have this same ability to "guess".

The Developing Child with Unilateral Hearing Loss: HEARING DOES NOT ALWAYS STAY THE SAME

Families need to know... Hearing does not always stay the same.  It appears that one out of every four children with one normal hearing ear will develop hearing loss in their better hearing ear. This appears true for the children normal looking ears, not those born with a deformed ear. We cannot predict which children will end up having permanent loss in both ears!	Any additional hearing loss... - In the better hearing ear - Or in the poor hearing ear WILL increase the child's chance of developing greater listening, language, behavior and learning issues. This does NOT mean that ¼ of these children become deaf in both ears, just that some amount of additional hearing loss – <i>great or small</i> - will develop. 
Something families need to know! Hearing does not always stay the same. Children can have ear infection that can cause hearing loss in both ears. This additional hearing loss will affect them more than other children because they are relying so heavily on their one better hearing ear for listening and learning. 	Something families need to know! Hearing does not always stay the same. Hearing can be damaged by loud noises, even when they occur only once. A child with hearing in only one ear must rely on that ear to hear for their whole lives – they can't afford to damage this hearing! Keep your child away from loud sounds or protect their hearing with ear plugs. 
What to do about permanent hearing loss: Changes in permanent hearing loss: • Return to the audiologist for a hearing check-up every 3-4 months until the child is 3 years old or the audiologist says that testing this often is no longer necessary. Next appointment _____ Noise induced hearing loss: • Prevention is job #1. Keep your child away from noisy settings. If he or she must be there (i.e., family celebration with fireworks) be sure that the child wears ear plugs. 	What to do about ear infections About 1 child in every 6 children has serious problems with recurring ear infections before they start school. Fluctuating hearing loss – or hearing loss that comes and goes – happens with ear problems.  Because your child relies on one ear, this inconsistent hearing may have a much greater affect on their listening and eventual learning. If you think your child may have an ear infection seek medical care promptly!

SUGGESTED FOR HOME VISIT 1

The Developing Child with Unilateral Hearing Loss:

LISTENING FROM A DISTANCE

Rugged listening terrain So “rugged listening terrain” would be any situation in which listening is not easy, specifically:  DISTANCE & BACKGROUND NOISE	Every day listening with 2 ears  Hearing is a distance sense We monitor what is going on around us with our hearing. Think about all you hear right now – in the room you are in, sounds from other places in the building, sound from outside. 1. Two ears working together hear just a bit better than one ear working alone. 2. We turn our heads to use both ears to locate where sound is coming from.
Distance The concept of the listening bubble  Not in range, not listening  In range and listening Mommy has a cookie for you! Mommy has a cookie for you!	Language is caught, not taught! For language to be ‘caught’ it needs 1) be in the child’s listening bubble, 2) be of interest to the child, 3) interactive and meaningful if a child is going to learn new words and concepts. 
Scenario 1 – young child Mama is folding laundry on the bed while John crawls on the floor. Mama gives John 2 socks as she is folding. She talks about the pants, colors of the shirts, two socks and socks going on John’s feet.  After a bit John sees the cat and crawls away into the next room. Mama can still see him and she now talks about the cat. John may not hear every word clearly, but has many opportunities to catch language. 	Scenario 2 – young child Mama is folding laundry on the bed while John crawls on the floor. After a bit John sees the cat and crawls away into the next room. Mama sees him and tells him to leave the cat alone.   John did not have many opportunities to catch new language that describe things that interest him. He would have greater consequence if he missed any words due to hearing with only 1 ear.

SUGGESTED FOR HOME VISIT 2

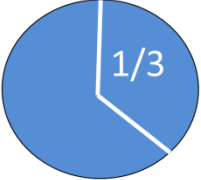
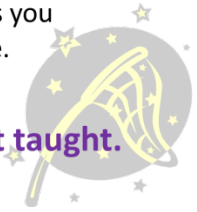
The Developing Child with Unilateral Hearing Loss:

LISTENING IN BACKGROUND NOISE

 Hearing 'through' noise People have 2 ears to help them locate sound and also to help listen in noise. Without even being aware of it we use both ears when we are listening in noise by pointing one ear a bit more to the person we are trying to listen to and the other ear a bit more toward the noise. Our heads actually help to block out a bit of the noise so the one ear can 'tune in' better to the speaker or preferred sound.	Listening in noise with one ear Children with only one normal hearing ear have greater difficulty locating where sounds are coming from and understanding speech or recognizing sounds when there is competing noise. Children with one hearing ear will need <u>more time</u> to locate sounds and it will take <u>more effort</u> to focus on sounds in background noise. They are more likely to '<u>tune out</u>' in noise. 
Background noise scenario 1 Mama is doing dishes and Marie is on the kitchen floor playing with plastic containers and a large wooden spoon. Except for when she is running water, mama talks about the big dish and the little dish; the red top and the green top; the spoon going bang, bang - providing the language that describes what Marie is interested in at the moment. 	Background noise scenario 2 Mama is doing dishes and Marie is on the kitchen floor playing with plastic containers and a large wooden spoon. Mama is running water, and the television is on. Mama tells Marie to play. Marie soon stops in a few minutes and Mama wonders why she bothered getting out things for Marie to play with. 
Background noise scenario 3 Mama is doing dishes and the television is on. Marie is on the kitchen floor playing with plastic containers and a large wooden spoon. Mama tells Marie to play with the dishes. Marie soon stops playing and crawls away toward a house plant. Mama tells her to not touch. Marie pulls the plant. Mama rushes over and tells her she is a bad girl. Marie tuned out in background noise. She had no warning before seeing Mama mad. 	How 'far' can a child hear?  It depends! How interested is the child in the sound? How much background noise? She may hear the cookie jar opening from the next room because she loves cookies. He may not seem to hear when spoken to from the same room if he is very interested in what he is doing. BUT children with only one ear do not hear as well as children who have 2 ears that work together. What can you hear right now? How 'far' can you hear? What would be the size of your Listening Bubble right now? What do you think would happen if it was quiet? Noisy?

SUGGESTED FOR HOME VISIT 2

The Developing Child with Unilateral Hearing Loss: POTENTIAL IMPACT ON LANGUAGE LEARNING

Potential impact of hearing loss in one ear on language learning  One out of every three children with only one good hearing ear develop delays in the number of words they say by the time they are 15 – 18 months old. Not keeping a child's daily 'cup of language' full <u>will</u> have consequences! 	Language learning, every hour a child is awake, every day, everywhere. Babies learn language by hearing it around them every day. Parents don't 'teach' children to learn how to talk. Your child will learn language whenever you interact with him and as he sees you communicate with other people. Language is caught, not taught. 
What is incidental learning? With a unilateral hearing loss background noise and distance are barriers to children 'catching' all the language that occurs around them. Children learn much of what they know from over hearing other people talking or attaching a new word and concept together. Picture your child seeing a brown truck, hearing a knock on the door, and then seeing a package that is for them – suddenly 'truck' or 'UPS' or 'present' has real meaning! This is called incidental learning. 	Potential for many missed language opportunities over time • Picture a child learning language as a cup that family members fill up drop by drop, spoon by spoon, every day. • With every drop and spoonful a child has the potential to 'catch' new words. • EVERYDAY children with only one good hearing ear will miss part of the language that is said around them. • Children exposed to <u>many</u> words will be less affected by missing some
For language to be 'caught... Language needs to: 1) be in the child's listening bubble, 2) be of interest to the child, 3) interactive and meaningful if a child is going to learn new words and concepts. Your early intervention teacher will help you learn more about how you can easily do this during every day activities. 	Times during the day when you talk to your child: 1. 2. 3. 4. 5. 6. 7.

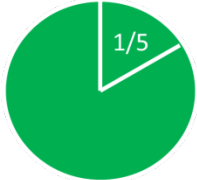
SUGGESTED FOR HOME VISIT 3

The Developing Child with Unilateral Hearing Loss: FOSTERING LANGUAGE LEARNING

Born and ready to grow! • Children’s brains are ready to start to learn language as soon as they are born. • Picture your child’s brain as an acre of rich soil that is read to grow an incredible garden. • A beautiful garden needs seeds planted, a plan for a variety of colors and types, it needs to be watered, tended and carefully cared for to be sure it is all growing well.	Your Child’s ‘Language Garden’ • Your child’s garden of language – this acre of rich soil – needs to be filled with blooms and thriving plants by the time he or she is 3 years old. A whole acre! • The more people who try to spread seeds and tend the garden will help. • Having good GARDENERS – people who really know how to grow plants – will help. Having many gardeners in the child’s life will really help! 
Planting the Language Garden • Your child will ‘catch’ new language and concepts that he can hear throughout every day. Each chance for him to hear you talk about what he is interested in and what is going on around him is a chance to plant new seeds. • To grow a rich garden you need to work at it! Know that you are planting seeds and your daily effort will tend this garden. Your early intervention teacher can help you with a plan for growing words. 	Time to sprout! • Sometimes a child will seem to pick up a word immediately, other times it seems like all you will do is talk, talk, talk with no new words from your child. • Know that it takes time, especially for new seeds to sprout. Once your child has some words and concepts and sees that he can get what he wants from using words, the garden will grow more quickly and start to spread. It still needs many moments of daily care! You have a whole acre to fill! 
Language activities you can do every day to help your child’s language grow:	

SUGGESTED FOR HOME VISIT 3

The Developing Child with Unilateral Hearing Loss: POTENTIAL IMPACT ON BEHAVIOR

Potential behavior & social issues  Children with unilateral hearing loss may find it hard to hear directions and soft or distant speech. That can lead to frustration and poor behavior. One out of five children develop behavior or social issues. As children get older they may think that other people are talking about them when they really just did not hear what was said, especially by peers. 	How we learn 'rules of behavior'  Think about it – how did you learn to not touch something that is hot? A parent told you to not touch, showed you what 'hot' meant, and repeated it often. Children need to know the expectations, why it is wrong (hurt, dirty, impolite, mean), and to be praised when they are behaving well. They also can learn by overhearing when another child is scolded or warned.
Learning to behave with 1 ear SCENARIO: <i>The television is on. Marie crawls toward a house plant. Mama tells her not to touch. Marie keeps crawling. Mama tells her not to touch again. Marie pulls the plant. Mama rushes over and tells her she is a bad girl. Marie tuned out in background noise. She had no warning before seeing Mama mad.</i> Children may: • Miss early warnings (<i>don't touch it Marie</i>) • Need more times in which <u>expectations</u> are explained (<i>plants grow in dirt, dirt is messy, plants can be hurt if you pull on them, sometimes leaves are sharp, etc</i>) • Not learn by example as quickly (<i>see another child warned but missed what the child did or said</i>) 	Fair chances to good behavior • Warnings should be given in close, no background noise, when the child is paying attention • If another child is being warned or scolded the reason why should be made clear to the child with one hearing ear • Explain again and again – the why of expectations (<i>this builds language too!</i>) • Make sure your child really heard <i>and understood</i> the warning before you punish 
Those subtle social rules Children in 'rugged listening conditions' often miss subtle social exchanges. A child may hear 2 children close by speaking. When the child looks up he sees the other children looking at him. The child who wasn't able to catch part of what the others were saying may think that he was being talked about. He may feel self-conscious or even angry. Social scenarios should be role-played.	Shaping appropriate behavior • Families working with early intervention teachers learn how to reinforce and shape appropriate behavior while they play and take care of their child during every day activities. • Your early intervention teacher can share interaction strategies with families that may assist in behavior management and result in children who find their world predictable and feel good about themselves. 

SUGGESTED FOR HOME VISIT 3

The Developing Child with Unilateral Hearing Loss: WHAT TO DO - CHOICES

WHAT TO DO to help your child's future? If your child has two perfect ears no one will know about the hearing loss unless you tell them. If he or she wears a hearing aid then everyone will see that your child is not perfect. Most people do not understand that a hearing loss in one ear can cause significant learning problems in about 1/3 of these children. Now you know that "he will get by just fine" may not be true at all for your child. 	WHAT TO DO – Advocate! The most important thing to do is to advocate for your child's needs. Some physicians and audiologists may not be aware of the research we have about the potential learning consequences to 1/3 to 1/2 of children with unilateral hearing loss. We do not know how to predict which children will be effected – it could be <u>your</u> child. You may prevent issues from developing by helping your child now! 
WHAT TO DO – Test & Retest! Since one out of every four children with unilateral hearing loss develops hearing loss in the better ear it is critical for your child to have his or her hearing checked by the audiologist regularly. • Every 3 months to age 1 year • Every 6 months from 1-3 years • Get prompt medical care for suspected ear infections • Teach him to avoid loud noise! 	What are your real choices? a. Do what you can to help prevent listening, learning and social problems by allowing your child to hear his or her best – every day, in every situation. He has a <i>right</i> to hear and to learn like other children. 
What are your real choices? b. Hope that he will get by, realizing that language, self esteem, and behavior are likely to be affected by the hearing loss. Will he still "be all that he can be"? Probably not, but maybe that is acceptable to you. 	What are your real choices? c. Wait and see if he will be affected, even though this will lose learning time that can never be made up. Children who wait to get hearing aid(s) until closer to school age typically do not adjust very well (see b). WHAT WILL YOU DO? 

SUGGESTED FOR HOME VISIT 3

The Developing Child with Unilateral Hearing Loss: CONSIDERING HEARING AID USE

Try a hearing aid. If your child has hearing in the worse ear (i.e., thresholds between 35 – 75 dB) then it may be possible for a hearing aid to ‘balance out’ the child’s hearing ability – meaning provide near normal hearing in the poor hearing ear. Amplification could help with sound location and listening in noise! Children who are deaf in one ear <i>may</i> have too much hearing loss to cause improvement with a standard hearing aid . Ask your child’s audiologist for more information. 	A hearing aid! But he hears fine in one ear! Think back to our analogy with the child who was born with ½ foot. If there was a prosthesis (like a ‘strap on foot’) that would allow the child to walk gracefully with a normal gait, to run similar to, but maybe not as fast, as other children - would it make sense for the child to use it? Would it help him as he is learning to walk? Would it help him fit in better when playing with other children because he could keep up more easily? 
Hearing aid = a brain access tool Brains develop due to constant stimulation. With ¼ of children developing hearing loss in both ears, early stimulation of the poor ear may end up making a real difference in the child’s ability to compensate if all or most hearing is lost in both ears. Think of it as ‘keeping an ear in reserve if the worst happens (and it may!).’ 	How soon should we try a hearing aid? The earlier a child tries amplification and gets used to ‘balanced hearing’ the easier it will be for him or her to adjust to hearing with both ears and want to wear the hearing aid all the time. Waiting until school-age is too late! 
Parent comments on hearing aid use Other parents of children with unilateral hearing loss have tried hearing aids and said: • <i>He doesn’t talk so loud when wearing his aid.</i> • <i>He was missing one half of everything before got his aid.</i> • <i>He hears sounds he never heard before.</i> • <i>He doesn’t interrupt people in group situations now.</i> • <i>It is a very positive thing.</i> • <i>Audiologists and doctors say children with only one good hearing ear will be fine—they are not fine!</i> 	Try it and see.... A hearing aid usually helps a child with unilateral hearing loss, but not always. Adults report that “balanced” hearing makes it easier to listen and overhear when others are talking around them, resulting in less stressful conversations. The only way to tell if it will help is to try a hearing aid and watch for improved listening – the difference may be subtle <i>but important!</i> • Does the hearing aid help the child “catch language” and “keep the teacup full”? Locating sound sources? Listening at a distance or in background noise? 

SUGGESTED FOR HOME VISIT 3

The Developing Child with Unilateral Hearing Loss: EVALUATING HEARING AID USE

Reasonable Expectations for Hearing Aid Wear How much should my child wear his hearing aids at first? During the first few days of use, put the hearing aids on your child <i>3-4 times a day for 15 - 30 minutes each time. Goal is full-time use within 3 weeks of hearing aid fitting.</i> If your baby wears hearing aids only four hours each day, it will take six years to give him as much listening experience as a normally hearing infant accumulates in one year.	Checking the Hearing Aid – Every Day! TEST BATTERY: Batteries only last 1-2 weeks when used daily. Because the child cannot tell you when the battery has died you need to check the batteries in a tester provided. Battery life begins when the tape is removed from the top of the battery surface. BATTERIES ARE POISONOUS ! KEEP OUT OF REACH OF CHILDREN. LISTEN TO HEARING AID: You will soon become skilled at knowing what your child's hearing aid should sound like. Report changes you perceive to your audiologist who can test the aid further. Place the tip of the earmold in the tan colored cup at the end of the stethoset and put the eartips in your ears. Listen for any loud background hiss or scratchy sounds as you move the volume wheel. Jiggle the hearing aid and listen for any cutting in and out of sound. Say the sounds oo, aw, ee, sh, s, m and listen to how clear the sounds are. Each sound represents a different pitch range so clarity of the sounds is critical!
Checking the Hearing Aid – Every Day! PUT THE HEARING AID ON THE CHILD: Turn it on and to the correct volume setting. Say the sounds oo, aw, ee, sh, s, m and watch your child for a response from 6-12 inches and again from 6 feet or at your child's maximum listening distance. Encourage your child to repeat these sounds and participate in hearing aid checks. You can use this quick hearing aid check method for years! If you know the earmold is in the correct position and you hear any feedback (whistling) when the child chews, vocalizes, or moves around, immediately make an appointment with the audiologist for a new earmold impression to be made. Babies grow fast and so do their ears! A hearing aid that is whistling is not providing your child with the amount of amplification he or she needs to perceive and attend as well as needed to speech and sounds in the environment. 	Checking the Hearing Aid – Every Day! CARE AND CLEANING: Hearing aids should NOT get wet or be in moist places. If you see drops of water in the earmold tubing, remove the earmold and use the blower to dry out the tube. If the earmold looks dirty, clean it with the wax loop tool or remove it and let it soak in warm dishwater. Earwax will eventually discolor the earmold. Do not boil or use harsh cleaners on earmolds. Let dry overnight before attaching to hearing aids. In a moist climate the hearing aids should be kept in the DriAid kit nightly. Remove the battery, open the battery door, seal tightly in the DriAid jar. One drop of moisture in the earmold tube or hearing aid can prevent a child from receiving amplified sound. ASK QUESTIONS: Tell your audiologist or early intervention services provider if your child does not seem to be hearing as well as usual or the hearing aid(s) do not produce the same quality of sound as usual. 
Observing for changes with the hearing aid Changes may be subtle and can improve over time as the child learns to listen with 2 ears and gets practice in challenging situations such as listening across distance and in background noise. The Early Listening Function activities when presented at a distance may help identify changes.  http://successforkidswithhearingloss.com/tests	ELF Infant & Young Child Amplification Use Checklist COMPLETING THE ELF CHECKLIST MAY ALSO HELP IDENTIFY SUBTLE CHANGES IN LISTENING AFTER A NEW HEARING AID Parents circle 1-5 scale: Agree, No Change, or Disagree My child appears to: - Be more aware of my voice - Be more aware of environmental sounds - Search more readily for the location of my voice - Have an increased amount of babbling or talking - Have more interest in communicating During ELF listening activities, the size of my child's listening bubble: - Has improved for quiet sounds voices - Has improved for typical sounds and voices - Has improved for loud sounds and voices - Has improved for listening in background noise Describe specific situations when you noticed improvements in listening ability: 

SUGGESTED FOR HOME VISIT ON HEARING AIDS

The Developing Child with Unilateral Hearing Loss: LANGUAGE EVERYDAY AND EVERYWHERE

30 Million Word Gap

1995: Betty Hart and Todd Risley spent 2 1/2 years intensely observing the language of 42 families. Research in the following years found a high correlation between vocabulary size at age 3 and language test scores at ages 9 and 10 in vocabulary, listening, syntax, and reading comprehension. There was a 30 million word gap between the vocabularies of welfare and professional families by age three.



http://archive.aft.org/pubs-reports/american_educator/spring2003/catastrophe.html

More language used, more language learned!

Families' Language and Use Differ Across Income Groups

Measures & Scores	Families					
	Professional		Working-class		Welfare	
	Parent	Child	Parent	Child	Parent	Child
Recorded vocabulary size	2,176	1,116	1,498	749	974	525
Average utterances/hour	487	310	301	223	176	168
Average different words/hour	382	297	251	216	167	149

20,000 hours of listening

- To learn to read, children's brains need to be exposed to 20,000 listening hours (5+ years).
- All of this input is needed before the brain makes the connection between the sounds and their corresponding letters of the alphabet.
- Without those 20,000 hours of listening children are less ready to read at the same rate as other children their age – and they may never catch up.



ANY FAMILY CAN DO IT!

EVERYDAY YOUR CHILD NEEDS YOU TO:

- Talk about what he is interested in – giving him the words the go with his exploration of the world.
- Talk about everyday happenings, activities, questions, problem solving, planning ahead, I wonder....
- Read – young children love the same books again and again.
- Say rhymes, focus on letter sounds (big blue ball, buh, buh, buh), sing songs



Do language checkups regularly

Customized MacArthur Vocabulary Checklist: Level II (Toddler Form A)

Copyright 1993 All Rights Reserved Child is age 19-24 months

Child's Name: _____		Child's Birthdate: _____																																																																																																																																																																																																																																																																																																																																																																															
VOCABULARY CHECKLIST Children understand many more words than they say. It is particularly important in the words your child SAYS or SIGNS. Please circle the words you have heard your child use. If your child uses a different pronunciation of a word, mark it as such.																																																																																																																																																																																																																																																																																																																																																																																	
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Every 6 months see how many words your child is using. Remember, he or she may not develop a gap in learning until after age 15-18 months. Forms are available for 8-36 months.

Activities you will do in the next week to help build better listening, language and early reading skills:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

SUGGESTED FOR HOME VISIT 4-5

The Developing Child with Unilateral Hearing Loss: WHAT TO DO – GET HELP!

Hearing in only one ear IS a big deal Children with issues related to hearing loss in only one ear do <u>not</u> outgrow them by school-age. Children with unilateral hearing loss are at 10 times the risk for school problems as those with 2 good ears. 1/3 – 1/2 of children with unilateral hearing loss repeat a grade or require special education services in school. We do not know what predicts problems! 	There is help! Get help. Most states provide services to families of infants and toddlers (to age 3) who have unilateral hearing loss. These early intervention services would include someone coming to your home and/or the child's day care to talk about the child's hearing needs and what can be done to help learning. They may also help you find out how to obtain a hearing aid trial. 
Work to 'keep the language cup full' Families are a child's first and most important teachers. Early intervention teachers can help families to learn how they can communicate with children in ways to really stimulate language learning during everyday activities. Some families use simple signs with their very young children to boost early language growth – you may find this fun too.  	Track how your child's language is growing At least every 6 months your early intervention teacher will check how your child's language is growing. Ask for a list of typical vocabulary to hang on your refrigerator as a reminder. An example: MacArthur checklists at https://successforkidswithhearingloss.com/resources-for-professionals/early-intervention-for-children-with-hearing-loss Remember, children with normal hearing in one ear can develop language at a normal rate until 15-18 months.  
Behavior and social rule learning The early intervention teachers can also help you to teach proper behavior to your child – consistency and being sure the child really understands is the key! Describing and role playing social interactions can start very early and really help a child's self esteem and understanding by the time he or she starts school. 	Help when trying a hearing aid Most people have not used hearing aids or ever seen one on a young child. Early intervention professionals typically include teachers of the deaf and hard of hearing or speech language pathologists who can help you learn how to accomplish daily hearing aid wear. They can also help you to watch for improvement in listening behavior. Do the ELF with the help of the EI teacher. 

The Developing Child with Unilateral Hearing Loss: SUMMARY

- Your child has a hearing loss that will affect him throughout his life.
- Your child's hearing *may* change.
- Try amplification as early as possible.
- Without early assistance your child may develop language delay and/or social or behavioral issues.
- Children with unilateral hearing loss are at 10 times the risk for school problems.
- Get help from early intervention ASAP!
- Monitor language growth regularly.
- Plan for your child's transition to school.



Section 8: List of Downloadable Files: Resources to share with families

Downloadable Files: Discussion Handouts

AN UNEXPECTED DIAGNOSIS
EARS WORK TOGETHER
EXPERIENCING UNILATERAL HEARING LOSS
HEARING DOES NOT ALWAYS STAY THE SAME
LISTENING FROM A DISTANCE
LISTENING IN BACKGROUND NOISE
POTENTIAL IMPACT ON LANGUAGE LEARNING
FOSTERING LANGUAGE LEARNING
POTENTIAL IMPACT ON BEHAVIOR
WHAT TO DO – CHOICES
CONSIDERING HEARING AID USE
EVALUATING HEARING AID USE
LANGUAGE EVERYDAY AND EVERYWHERE
WHAT TO DO – GET HELP!
SUMMARY

Downloadable Files : Additional Resources to Share with Families

11 Additional Resources to Share with Families

Children’s Home Inventory of Listening Difficulties (Family CHILD)
Early Listening Function (ELF)
Hearing Aid Listening Check Instructions
Hearing Loss in One Ear
Improving Your Child’s Social Skills
Relationship of Hearing Loss to Listening and Learning Needs: Unilateral Hearing Loss
Sequence of Auditory, Language and Speech Development for Infants & Toddlers
Signs of Social and Emotional Well-Being for Infants, Toddlers, and Preschoolers with
Warning Signs for Potential Social-Emotional Concern
Starting School LIFE (Listening Inventory For Education)
Unilateral Hearing Loss Referral Pamphlet

100-slide PowerPoint (pdf) to share this information via a media device

The above Downloadable Files are included at no extra cost by purchasers of this publication.

This is not freeware. Sharing files with non-purchasers is a violation of copyright law.

To redeem these files if you have purchased a printed copy of this publication go to:

https://successforkidswithhearingloss.com/unilateral_child_downloads.

Use your unique coupon code below to obtain the files at no cost.



