Child's Name: Date: 16-25 dB HEARING LOSS Possible Impact on the Understanding of **Possible Social Impact Potential Educational Accommodations** Language and Speech and Services • Impact of a hearing loss that is May be unaware of • Noise in typical classroom environments approximately 20 dB can be compared to subtle conversational impede child from having full access to ability to hear when index fingers are teacher instruction. Will benefit from cues which could cause placed in your ears. improved acoustic treatment of classroom child to be viewed as inappropriate or and sound-field amplification. • Child may have difficulty hearing faint or awkward. Favorable seating necessary. distant speech. At 16 dB student can miss up to 10% of speech signal when teacher is • May miss portions of May often have difficulty with sound/letter at a distance greater than 3 feet. fast-paced peer associations and subtle auditory interactions that could • A 20 dB or greater hearing loss in the discrimination skills necessary for reading. begin to have an impact better ear can result in absent, inconsistent on socialization and self • May need attention to vocabulary or speech, or distorted parts of speech, especially concept. especially when there has been a long history word endings (s, ed) and unemphasized of middle ear fluid. sounds. • Behavior may be confused for immaturity • Depending on loss configuration, may benefit • Percent of speech signal missed will be or inattention. from low power hearing aid with personal greater whenever there is background noise FM system. in the classroom, especially in the • May be more fatigued elementary grades when instruction is due to extra effort • Appropriate medical management necessary primarily verbal and younger children have needed for understanding for conductive losses. greater difficulty listening in noise. speech. • Inservice on impact of "minimal" 16 – 25 dB

Comments:		

hearing loss on language development,

teacher.

listening in noise and learning, required for

• Young children have the tendency to watch

and copy the movements of other students

rather than attending to auditorily

fragmented teacher directions.

Please Consider Indicated Items in the Child's Educational Program: Teacher inservice and seating close to teacher Hearing monitoring at school every mos. Amplification monitoring Contact your school district's audiologist Protect ears from noise to prevent more loss _Educational support services/evaluation Screening/evaluation of speech and language Note-taking, closed captioned films, visuals FM system trial period Educational consultation/ program supervision by specialist(s) in hearing loss Regular contact with other children who are deaf or hard of hearing Periodic educational monitoring such as October and April teacher/student completion of SIFTER, LIFE

NOTE: All children require full access to teacher instruction and educationally relevant peer communication to receive an appropriate education.

Child's name: Date: 26-40 dB HEARING LOSS Possible Impact on the Understanding of **Possible Social Impact Potential Educational** Language and Speech **Accommodations and Services** Effect of a hearing loss of approximately 20 dB Barriers begin to build with • Noise in typical class will impede can be compared to ability to hear when index negative impact on selfchild from full access to teacher fingers are placed in ears. esteem as child is accused instruction. of "hearing when he/she A 26 – 40 dB hearing loss causes greater Will benefit from hearing aid(s) and wants to," "daydreaming," listening difficulties than a "plugged ear" loss. use of a desk top or ear level FM or "not paying attention." system in the classroom. Child can "hear" but misses fragments of May believe he/she is less speech leading to misunderstanding. Needs favorable acoustics, seating and capable due to difficulties lighting. Degree of difficulty experienced in school will understanding in class. depend upon noise level in the classroom, • May need attention to auditory skills, Child begins to lose ability distance from the teacher, and configuration of speech, language for selective listening, and the hearing loss, even with hearing aids. development, speechreading and/or has increasing difficulty support in reading and self-esteem. At 30 dB can miss 25-40% of the speech signal. suppressing background noise causing the learning • Amount of attention needed typically At 40 dB may miss 50% of class discussions, environment to be more related to the degree of success of especially when voices are faint or speaker is stressful. intervention prior to 6 months of age not in line of vision. to prevent language and early learning Child is more fatigued due delays. Will miss unemphasized words and consonants, to effort needed to listen. especially when a high frequency hearing loss • Teacher inservice on impact of a 26 – is present. 40 dB hearing loss on listening and learning to convey that it is often Often experiences difficulty learning early reading skills such as letter/sound associations. greater than expected. Child's ability to understand and succeed in the classroom will be substantially diminished by speaker distance and background noise, especially in the elementary grades. Comments:

C	, in the state of		
	Please Conside	r Indicated Items in the Child's Education	nal Program:
	Teacher inservice and seating close to teacher	Hearing monitoring at school everymos.	Amplification monitoring
	Contact your school district's audiologist	Protect ears from noise to prevent more loss	Educational support services/evaluation
	Screening/evaluation of speech and language	Note-taking, closed captioned films, visuals	FM system trial period
	Educational consultation/ program supervision by	specialist(s) in hearing lossRegular contact	with other children who are deaf or hard of hearing
	Periodic educational monitoring such as October a	and April teacher/student completion of SIFTER, LIFE	
	NOTE: All abildren require full agess to topole	r instruction and advactionally relevant near comm	mination to receive an appropriate education

NOTE: All children require full access to teacher instruction and educationally relevant peer communication to receive an appropriate education.

Child's name: Date: 41-55 dB HEARING LOSS Possible Impact on the Understanding of Language **Possible Social Impact Potential Educational** and Speech Accommodations and Services • Consistent use of amplification and language intervention Barriers build with • Consistent use of amplification prior to age 6 months increases the probability that the (hearing aids + FM) is essential. negative impact on selfchild's speech, language and learning will develop at a esteem as child is • Needs favorable classroom normal rate. accused of "hearing acoustics, seating and lighting. when he/she wants to," • Without amplification, child may understand conversation "daydreaming," or "not • Consultation/program at a distance of 3-5 feet, if sentence structure and paying attention." supervision by a specialist in vocabulary are known. childhood hearing impairment • Communication will be • The amount of speech signal missed can be 50% or more to coordinate services is significantly with 40 dB loss and 80% or more with 50 dB loss. important. compromised with this • Without early amplification the child is likely to have degree of hearing loss, if • Depending on early delayed or disordered syntax, limited vocabulary, hearing aids are not intervention success in imperfect speech production and flat voice quality. worn. preventing language delays, special academic support will • Socialization with peers • Addition of a visual communication system to supplement be necessary if language and can be difficult, audition may be indicated, especially if language delays educational delays are present. and/or additional disabilities are present. especially in noisy settings such as Attention to growth of oral • Even with hearing aids, child can "hear" but may miss cooperative learning communication, reading, much of what is said if classroom is noisy or reverberant. situations, lunch or written language skills, auditory • With personal hearing aids alone, ability to perceive recess. skill development, speech speech and learn effectively in the classroom is at high therapy, self-esteem likely. • May be more fatigued risk. than classmates due to • Teacher inservice required with • A personal FM system to overcome classroom noise and effort needed to listen. attention to communication distance is typically necessary. access and peer acceptance. **Comments:** Please Consider Indicated Items in the Child's Educational Program: Teacher inservice and seating close to teacher Hearing monitoring at school every mos. Amplification monitoring Contact your school district's audiologist Protect ears from noise to prevent more loss _Educational support services/evaluation Screening/evaluation of speech and language Note-taking, closed captioned films, visuals FM system trial period Educational consultation/ program supervision by specialist(s) in hearing loss Regular contact with other children who are deaf or hard of hearing Periodic educational monitoring such as October and April teacher/student completion of SIFTER, LIFE

NOTE: All children require full access to teacher instruction and educationally relevant peer communication to receive an appropriate education.

Child's name: Date:

56_70 AR H	IEARING LOSS	
Possible Impact on the Understanding of Language and Speech	Possible Social Impact	Potential Educational Accommodations and Services
 Even with hearing aids, child will typically be aware of people talking around him/her, but will miss parts of words said resulting in difficulty in situations requiring verbal communication (both one-to-one and in groups). Without amplification, conversation must be very loud to be understood; a 55 dB loss can cause a child to miss up to 100% of speech information without functioning amplification. If hearing loss is not identified before age one year and appropriately managed, delayed spoken language, syntax, reduced speech intelligibility and flat voice quality is likely. Age when first amplified, consistency of hearing aid use and early language intervention strongly tied to success of speech, language and learning development. Addition of visual communication system often indicated if language delays and/or additional disabilities are present. Use of a personal FM system will reduce the effects of noise and distance and allow increased auditory access to verbal instruction. With hearing aids alone, ability to understand in the classroom is greatly reduced by distance and noise. 	 If hearing loss was late-identified and language delay was not prevented, communication interaction with peers will be significantly affected. Children will have greater difficulty socializing, especially in noisy settings such as lunch, cooperative learning situations, or recess. Tendency for poorer self-concept and social immaturity may contribute to a sense of rejection; peer inservice helpful. 	 Full time, consistent use of amplification (hearing aids + FM system) is essential. May benefit from frequency transposition (frequency compression) hearing aids depending upon loss configuration. May require intense support in development of auditory, language, speech, reading and writing skills. Consultation/supervision by a specialist in childhood hearing impairment to coordinate services is important. Use of sign language or a visual communication system by children with substantial language delays or additional learning needs, may be useful to access linguistically complex instruction. Note-taking, captioned films, etc. often are needed accommodations. Teacher inservice required.
Comments:		

Periodic educational monitoring such as October and April teacher/student completion of SIFTER, LIFE

NOTE: All children require full access to teacher instruction and educationally relevant peer communication to receive an appropriate education.

Protect ears from noise to prevent more loss

Note-taking, closed captioned films, visuals

_Educational support services/evaluation

FM system trial period

Regular contact with other children who are deaf or hard of hearing

Contact your school district's audiologist

Screening/evaluation of speech and language

Educational consultation/ program supervision by specialist(s) in hearing loss

71-90 dB & 91+ dB HEARING LOSS

Possible Impact on the Understanding of Language and Speech

- The earlier the child wears amplification consistently with concentrated efforts by parents and caregivers to provide rich language opportunities throughout everyday activities and/or provision of intensive language intervention (sign or verbal), the greater the probability that speech, language and learning will develop at a relatively normal rate.
- Without amplification, children with 71-90 dB hearing loss may only hear loud noises about one foot from ear.
- When amplified optimally, children with hearing ability of 90 dB or better should detect many sounds of speech if presented from close distance or via FM.
- Individual ability and intensive intervention prior to 6 months of age will determine the degree that sounds detected will be discriminated and understood by the brain into meaningful input.
- Even with hearing aids children with 71-90 dB loss are typically unable to perceive all high pitch speech sounds sufficiently to discriminate them, especially without the use of FM.
- The child with hearing loss greater than 70 dB may be a candidate for cochlear implant(s) and the child with hearing loss greater than 90 dB will not be able to perceive most speech sounds with traditional hearing aids.
- For full access to language to be available visually through sign language or cued speech, family members must be involved in child's communication mode from a very young age.

Possible Social Impact

- Depending on success of intervention in infancy to address language development, the child's communication may be minimally or significantly affected.
- Socialization with hearing peers may be difficult.
- Children in general education classrooms may develop greater dependence on adults due to difficulty perceiving or comprehending oral communication.
- Children may be more comfortable interacting with deaf or hard of hearing peers due to ease of communication.
- Relationships with peers and adults who have hearing loss can make positive contributions toward the development of a healthy self-concept and a sense of cultural identity.

Potential Educational Accommodations and Services

- There is no one communication system that is right for all hard of hearing or deaf children and their families.
- Whether a visual communication approach or auditory/oral approach is used, extensive language intervention, full-time consistent amplification use and constant integration of the communication practices into the family by 6 months of age will highly increase the probability that the child will become a successful learner.
- Children with late-identified hearing loss (i.e., after 6 months of age) will have delayed language.
- This language gap is difficult to overcome and the educational program of a child with hearing loss, especially those with language and learning delays secondary to hearing loss, requires the involvement of a consultant or teacher with expertise in teaching children with hearing loss.
- Depending on the configuration of the hearing loss and individual speech perception ability, frequency transposition aids (frequency compression) or cochlear implantation may be options for better access to speech.
- If an auditory/oral approach is used, early training is needed on auditory skills, spoken language, concept development and speech.
- If culturally deaf emphasis is selected, frequent exposure to Deaf, ASL users is important.
- Educational placement with other signing deaf or hard of hearing students (special school or classes) may be a more appropriate option to access a language-rich environment and free-flowing communication.
- Support services and continual appraisal of access to communication and verbal instruction is required.
- Note-taking, captioning, captioned films and other visual enhancement strategies are necessary; training in pragmatic language use and communication repair strategies helpful.
- Inservice of general education teachers is essential.

Comments:

Please Consider Indicated Items in the Child's Educational Program:

Teacher inservice and seating close to teacher	Hearing monitoring at school everymos.	Amplification monitoring
Contact your school district's audiologist	Protect ears from noise to prevent more loss	Educational support services/evaluation
Screening/evaluation of speech and language	Note-taking, closed captioned films, visuals	FM system trial period
Educational consultation/ program supervision b	y specialist(s) in hearing lossRegular contact	t with other children who are deaf or hard of hearing
Periodic educational monitoring such as October	and April teacher/student completion of SIFTER, LIFE	

NOTE: All children require full access to teacher instruction and educationally relevant peer communication to receive an appropriate education.

Child's name: Date:

UNILATERAL HEARING LOSS

Possible Impact on the Possible Social Impact Potential Educational Understanding of Language and **Accommodations and Services** Speech • Child can "hear" but can have difficulty Child may be accused of selective • Allow child to change seat locations to understanding in certain situations, such hearing due to discrepancies in direct the normal hearing ear toward the as hearing faint or distant speech, speech understanding in quiet primary speaker. especially if poor ear is aimed toward the versus noise. Student is at 10 times the risk for • Social problems may arise as educational difficulties as children with 2 person speaking. • Will typically have difficulty localizing child experiences difficulty normal hearing ears and 1/3 to 1/2 of sounds and voices using hearing alone. understanding in noisy cooperative students with unilateral hearing loss • The unilateral listener will have greater learning, or recess situations. experience significant learning problems. difficulty understanding speech when • May misconstrue peer • Children often have difficulty learning conversations and feel rejected or environment is noisy and/or reverberant, sound/letter associations in typically especially when normal ear is towards ridiculed. noisy kindergarten and grade 1 settings. • Child may be more fatigued in Educational and audiological monitoring the overhead projector or other competing sound source and poor classroom due to greater effort is warranted. hearing ear is towards the teacher. needed to listen, if class is noisy or Teacher inservice is beneficial. • Exhibits difficulty detecting or has poor acoustics. • Typically will benefit from a personal understanding soft speech from the side • May appear inattentive, FM system with low gain/power or a of the poor hearing ear, especially in a distractible or frustrated, with sound-field FM system in the classroom, group discussion. behavior or social problems especially in the lower grades. sometimes evident. Depending on the hearing loss, may benefit from a hearing aid in the impaired

Comments:			
Please Consider Indicated Items in the Child's Educational Program:			
Teacher inservice and seating close to teacherHearing monitoring at school everymosAmplification monitoring			

Contact your school district's audiologist Protect ears from noise to prevent more loss Educational support services/evaluation

Screening/evaluation of speech and language Note-taking, closed captioned films, visuals FM system trial period

Educational consultation/ program supervision by specialist(s) in hearing loss Regular contact with other children who are deaf or hard of hearing

Periodic educational monitoring such as October and April teacher/student completion of SIFTER, LIFE

NOTE: All children require full access to teacher instruction and educationally relevant peer communication to receive an appropriate education.

Child's name: Date:

MID-FREQUENCY HEARING LOSS or REVERSE SLOPE HEARING LOSS

MID-FREQUENCY HEARING LOSS or REVERSE SLOPE

Possible Impact on the Understanding of **Possible Social Impact Potential Educational** Language and Speech **Accommodations and Services** • Child can "hear" whenever speech is present • Child may be accused of • Personal hearing aids important but but will have difficulty understanding in selective hearing or "hearing must be precisely fit to hearing loss. when he wants to" due to certain situations. • Child likely to benefit from a sounddiscrepancies in speech • May have difficulty understanding faint or field FM system, a personal FM understanding in quiet versus distant speech, such as a student with a quiet system or assistive listening device in noise. voice speaking from across the classroom. the classroom. Social problems may arise as • The "cookie bite" or reverse slope listener Student is at risk for educational child experiences difficulty will have greater difficulty understanding difficulties. understanding in noisy speech when environment is noisy and/or cooperative learning situations, • Can experience some difficulty reverberant, such as a typical classroom lunch or recess. learning sound/letter associations in setting. kindergarten and 1st grade classes. May misconstrue peer conver-• A 25 – 40 dB degree of loss in the low to sations, believing that other • Depending upon degree and mid-frequency range may cause the child to children are talking about him configuration of loss, child may miss approximately 30% of speech or her. experience delayed language information, if unamplified; some consonant development and articulation and vowel sounds may be heard • Child may be more fatigued in problems. inconsistently, especially when background classroom setting due to greater effort needed to listen. noise is present. • Educational monitoring and teacher inservice warranted. • Speech production of these sounds may be • May appear inattentive, distractible or frustrated. affected. • Annual hearing evaluation to monitor for hearing loss progression is

Comments:		

important.

Please Consider	Indicated	Items in t	the Child's	Educational P	rogram:
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Teacher inservice and seating close to teacher	Hearing monitoring at school e	verymos.	Amplification monitoring
Contact your school district's audiologist	Protect ears from noise to preve	ent more loss	Educational support services/evaluation
Screening/evaluation of speech and language	Note-taking, closed captioned f	ilms, visuals	FM system trial period
Educational consultation/program supervision	by specialist(s) in hearing loss	Regular contact	with other children who are deaf or hard of hearing

Periodic educational monitoring such as October and April teacher/student completion of SIFTER, LIFE NOTE: All children require full access to teacher instruction and educationally relevant peer communication to receive an appropriate education.

Child's Name: Date:

HIGH FREQUENCY HEARING LOSS				
Possible Impact on the Understanding of Language and Speech	Possible Social Impact	Potential Educational Accommodations and Services		
 Child can "hear" but can miss important fragments of speech. Even a 26 – 40 dB loss in high frequency hearing may cause the child to miss 20%-30% of vital speech information if unamplified. Consonant sounds t, s, f, th, k, sh, ch likely heard inconsistently, especially in the presence of noise. May have difficulty understanding faint or distant speech, such as a student with a quiet voice speaking from across the classroom and will have much greater difficulty understanding speech when in low background noise and/or reverberation is present. Many of the critical sounds for understanding speech are high pitched, quiet sounds, making them difficult to perceive; the words: cat, cap, calf, cast could be perceived as "ca," word endings, possessives, plurals and unstressed brief words are difficult to perceive and understand. Speech production may be affected. Use of amplification often indicated to learn language at a typical rate and ease learning. 	 May be accused of selective hearing due to discrepancies in speech understanding in quiet versus noise. Social problems may arise as child experiences difficulty understanding in noisy cooperative learning situations, lunch or recess. May misinterpret peer conversations. Child may be fatigued in classroom due to greater listening effort. May appear inattentive, distractible or frustrated. Could affect self concept. 	 Student is at risk for educational difficulties. Depending upon onset, degree and configuration of loss, child may experience delayed language and syntax development and articulation problems. Possible difficulty learning some sound/letter associations in kindergarten and 1st grade classes. Early evaluation of speech and language skills is suggested. Educational monitoring and teacher inservice is warranted. Will typically benefit from personal hearing aids and use of a sound-field or a personal FM system in the classroom. Use of ear protection in noisy situations is imperative to prevent damage to inner ear structures and resulting progression of the hearing loss. 		
Please Consider Indicated Items in the Child's Educational Program:				

NOTE: All children require full access to teacher instruction and educationally relevant peer communication to receive an appropriate education.

Child's name:		Date:		
FLUCTUATING HEARING LOSS				
Possible Impact on the Understanding of Language and Speech	Possible Social Impact	Potential Educational Accommodations and Services		
 Of greatest concern are children who have experienced hearing fluctuations over many months in early childhood (multiple episodes with fluid lasting three months or longer). Listening with a hearing loss that is approximately 20 dB can be compared to hearing when index fingers are placed in ears. This loss or worse is typical of listening with fluid or infection behind the eardrums. Child can "hear" but misses fragments of what is said. Degree of difficulty experienced in school will depend upon the classroom noise level, the distance from the teacher and the current degree of hearing loss. At 30 dB can miss 25-40% of the speech signal. A child with a 40 dB loss associated with "glue ear" may miss 50% of class discussions, especially when voices are faint or speaker is not in line of vision. Child with this degree of hearing loss will frequently miss unstressed words, consonants and word endings. 	 Barriers begin to build with negative impact on self esteem as the child is accused of "hearing when he/she wants to," "daydreaming," or "not paying attention." Child may believe he/she is less capable due to understanding difficulties in class. Typically poor at identifying changes in own hearing ability. With inconsistent hearing, the child learns to "tune out" the speech signal. Children are judged to have greater attention problems, insecurity, distractibility and lack self esteem. Tend to be non-participative and distract themselves from classroom tasks; often socially immature. 	 Impact is primarily on acquisition of early reading skills and attention in class. Screening for language delays is suggested from a young age. Ongoing monitoring for hearing loss in school, communication between parent and teacher about listening difficulties and aggressive medical management is needed. Will benefit from soundfield FM or an assistive listening device in class. May need attention to development of speech, reading, self esteem, or listening skills. Teacher inservice is beneficial. 		
Comments:				

Comments:		
Please Conside	r Indicated Items in the Child's Education	nal Program:
Teacher inservice and seating close to teacher	Hearing monitoring at school everymos.	Amplification monitoring
Contact your school district's audiologist	Protect ears from noise to prevent more loss	Educational support services/evaluation
Screening/evaluation of speech and language	Note-taking, closed captioned films, visuals	FM system trial period
Educational consultation/ program supervision by	specialist(s) in hearing loss Regular contact	t with other children who are deaf or hard of hearing

Periodic educational monitoring such as October and April teacher/student completion of SIFTER, LIFE

NOTE: All children require full access to teacher instruction and educationally relevant peer communication to receive an appropriate education.