Relationship of Hearing Loss to Listening and Learning Needs 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.

Starkey's online Hearing Loss Simulator

http://www.starkey.com/hearing-loss-simulator

UCSF Children's Communication Center Video Outreach ListenUp! Program

www.ohns.ucsf.edu/listenup

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

1 eacher inservice and seating close to teacher	Hearing monitoring at school everymos.	Ampinication 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	y specialist(s) in hearing lossRegular conta	ct 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.

Distance, noise in classroom and fragmentation caused by hearing loss prevent full access to spoken instruction. Appropriate acoustics, use of visuals, FM amplification, sign language, notetakers, communication partners, etc. increase access to instruction. Needs periodic hearing evaluation, rigorous amplification checks, and regular monitoring of access to instruction and classroom function (monitoring tools at www.SIFTERanderson.com).