Fact Sheet

How Do You Determine Degree Of Hearing Loss And What Does This Mean For A Child?

An audiologist plots a child's responses to sounds on a graph called an audiogram. Test sounds vary in pitch from low to high pitch, measured by frequency in cycles per second.

These sounds also vary in loudness (measured in decibels - dB). How loud a sound must be in order to be just barely heard represents the degree of hearing loss.

0 - 15 dB: Normal Hearing

Responses within this range suggest that a child can detect sound within the normal range. When understanding their ability to hear/understand speech it is important to consider their listening environment. A child with normal hearing levels can still have difficulty understanding in background noise at home or in school. Because a child is still learning language they need a quieter environment than an adult to understand speech.

16 - 25 dB: Minimal Hearing Loss

~ has difficulty with quiet or distant speech

~ can miss up to 10% of the speech signal when the speaker is more than 3 feet away or there is background noise

~ unaware of subtle conversation cues

~ tires in listening situations and becomes restless

~ has implications for learning language and following verbal instruction in the classroom can be conductive or sensorineural (temporary or permanent)

~ may require hearing aid amplification

~ may require special classroom amplification and instruction

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26 - 40 dB: Mild Hearing Loss

~ may miss 25-40% of the speech signal
~ depends on visual cues to understand speech in background noise
~ appears very inattentive, “daydreams”
~ becomes very tired in situations where just listening is involved
~ needs hearing aid amplification and classroom amplification

41 - 55 dB: Moderate Hearing Loss

~ misses 50-100% of the speech signal, depending on the listening situation
~ requires visual cues in conversation
~ will have delayed language, limited vocabulary and imperfect speech
~ communication is significantly affected and socialization becomes an issue
~ requires hearing aid amplifi cation and classroom amplifi cation
~ special education and other resources may be required depending on when the loss is identified and treated

56-70 dB: Moderate Severe Hearing Loss

~ normal conversation must be on a one - to - one basis, with no background distractions
~ visual cues essential during communication
~ child will have delayed language, poor speech intelligibility and atonal voice quality
~ requires hearing aid amplifi cation and classroom amplifi cation
~ resource help in the mainstream classroom
~ special education and other resources may be required depending on when the loss is identified and treated

71 - 90 dB: Severe Hearing Loss

~ with proper amplifi cation, should be able to identify environmental sounds and detect sounds of speech
~ speech and language will be significantly delayed
~ requires hearing aid amplification and FM system
~ special education and other resources may be required depending on when the loss is identified and treated

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91 dB - > : Profound Hearing Loss

~ more aware of vibrations than tonal patterns
~ rely heavily on visual information for learning and communication
~ adopt Total Communication or Sign Language
~ education in program for the deaf to emphasize language skills and academics
~ amplification choices include hearing aids, personal FM systems, vibrotactile hearing aids and cochlear implants

Unilateral hearing loss: One normal hearing ear and the other ear with hearing loss

~ difficulty with faint of distant speech
~ difficulty localizing sound and voices
~ difficulty in background noise
~ difficulty detecting speech from the 'bad' ear, especially in group discussion
~ tire in noisy listening situations, may appear inattentive or frustrated
~ hearing aid amplification for the affected ear is recommended
~ may benefit from personal or classroom FM system
~ need favourable seating and lighting
~ educational services as the needs arise