

HEARING IMPAIRMENT

(Including Deafness)

I. DEFINITION

- A.** "Deafness" means a hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification, that adversely affects educational performance.
- B.** "Hearing impairment" means an impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance but that is not included under the definition of deafness in this part.

1. Audiological Indicators

- a.** An average pure-tone hearing loss in the speech range (500-2000Hz) of 20dB or greater in the better ear. A child with a fluctuating hearing impairment, such as one resulting from chronic otitis media, is classified as hearing impaired (HI).
- b.** An average high frequency, pure-tone hearing loss of 35dB or greater in the better ear at two or more of the following frequencies - 2000, 3000, 4000 and 6000Hz.
- c.** A permanent unilateral hearing loss of 35dB or greater in the speech range (pure-tone average of 500-2000Hz).
- d.** A diagnosis of auditory neuropathy.

II. POSSIBLE REFERRAL CHARACTERISTICS

A. Intellectual

The range of intellectual functioning follows that of the normal population. The possibility of hearing impairment should be considered in the event of a significantly weaker verbal IQ score on most standard intellectual assessments.

B. Academic

- 1.** Has poor reading comprehension skills
- 2.** Has poor word attack skills
- 3.** Has difficulty with abstract concepts (may be able to think in abstract terms, but unable to express the concept)

C. Behavior

1. Frequently uses "neutral response," "smiling," saying "yes" and periodically nodding in situations where he/she lacks understanding
2. Has difficulty following verbal directions or does not respond
3. Frequently asks to have statements repeated
4. Inattentive in group activities
5. Appears to be confused, especially in noisy situations
6. Gives inappropriate answers to simple questions
7. May isolate himself or be isolated by his peer group
8. Has complete or partial misunderstanding of conversation
9. Is overly dependent on visual cues
10. May have a low frustration tolerance
11. Often speaks too loudly or too softly

D. Communicative Abilities

1. Language

- a. Spoken and/or written language compares poorly with peer group
- b. Has difficulty expressing ideas
- c. Spoken and/or written words omitted from sentences or word order may simply be unintelligible, i.e., "Finished home" for "When he was finished, he went home."
- d. Figurative and abstract patterns of spoken and/or written language including idioms, metaphors, similes and personifications neither comprehended nor frequently used
- e. Limited vocabulary
- f. Incorrect sentence structure
- g. Difficulty following oral and written directions

2. Articulation/Voice

- a. Voice quality may be harsh, breathy, nasal, and/or monotone;
- b. Sounds may be distorted and/or omitted from words, i.e., "I caught a fish" may be spoken or written as "I cau_ fi_."
- c. May drop plural and possessive endings, i.e., he says, "The boy hat" for "The boy's hat."
- d. Pitch, rhythm, stress, inflection and/or volume are inappropriate

3. Auditory

- a. Turns head to one side to hear better
- b. Has difficulty in locating source of sounds or speech
- c. Responds better to environmental noises than to voice

- d. Has problems understanding speech even after a cold subsides
- e. Poor ability to hear or discriminate between environmental and/or speech sounds
- f. Has difficulty hearing/understanding in noisy situations

E. Physical/Medical

- 1. History of frequent earaches or ear discharge, or has nasal obstruction with associated mouth breathing or other nasal symptoms
- 2. Frequent colds, sneezing, earaches, allergies, history of viral infections, high fever, etc.
- 3. Family history of hearing loss and/or ear disease
- 4. History of dizziness and balance problems
- 5. Deformity of the outer ear
- 6. Deformity of oral facial structures (i.e., cleft palate)

III. SCREENING INFORMATION

A. Required

- 1. Hearing (should be waived if a current comprehensive audiological evaluation within the past six (6) months is available)
- 2. Vision

B. Recommended

- 1. Formal (not applicable)
- 2. Informal
 - a. Observation
 - b. Checklists
 - c. Anecdotal records

IV. REQUIRED EVALUATION DATA

A. Social History (Using language of the home, which may include American Sign Language)

B. Individual Intelligence (One required)

Only performance-based scales can be used as an indicator of intellectual capacity for the children who are hearing impaired. Scales measuring verbal or full scale IQ should never be administered unless the results are to be used for general information and not considered as an estimate of ability level.

C. Individual Achievement (One required)

Administer tests/procedures in a communication system in which the student receives instruction.

D. Adaptive Behavior (One required)

E. Communicative Abilities (Required as indicated below)

1. Language (Both receptive and expressive language assessments are required. For the child who has a hearing impairment, IQ scores should not be computed from language evaluation test scores.)
2. Phonetic Level Evaluation (One required) includes both -
 - a. Articulation; and
 - b. Suprasegmental qualities of speech (i.e., vocalization, intensity, duration, pitch, etc.
3. Auditory (Listening ability - One required)

This is NOT an assessment of receptive language, but an assessment of the child's auditory skill level. Tests of listening ability must be administered through audition only with no visual cues available.

F. Other

1. Visual Perception (One required)
2. Audiological (Required as indicated below)
 - a. Audiometric assessment administered within the past six (6) months is required upon initial determination of eligibility and thereafter when deemed necessary by the licensed managing audiologist
 - 1) Pure-tone
 - a) Air conduction
 - b) Bone conduction
 - 2) Speech audiometry
 - a) Speech reception threshold (SRT) or speech awareness threshold (SAT)
 - b) Speech discrimination (when applicable)
 - 3) Hearing aid evaluation to include electroacoustic assessment of hearing aid function, as well as evaluation

of aided hearing response and determination of appropriateness of the hearing aid

- 4) Impedance audiometry including tympanometry and stapedial reflex testing

b. Amplification Systems

- 1.) FM amplification systems should be initially recommended, selected and programmed only with the assistance of a licensed audiologist.
- 2.) A special effort must be made to ensure that amplification systems worn by the child in preschool are functioning properly. Proper maintenance includes a daily listening check with emphasis on the following -
 - a) Ear molds (Young children may require new ear molds every six months.);
 - b) A daily listening check for amplification (hearing aids and auditory trainers) must be conducted, utilizing a hearing aid stethoscope, and results documented;
 - c) Cords; and
 - d) Receivers.

V. OPTIONAL EVALUATION DATA

The following areas are also commonly considered for evaluation of students suspected of having a hearing impairment.

A. Lip-reading

B. Vocational Assessment

VI. EVALUATION DATA ANALYSIS

Some students with deafness or hearing impairment will require special education services because their hearing impairment adversely affects their educational performance. The following are points to consider when analyzing evaluation data.

- A. For a child with a hearing impairment, a special effort should be made to differentiate between articulation and language. For example, speech intelligibility is not necessarily an indication of language or intellectual abilities.

- B.** Information provided by parents of children who have hearing impairments is necessary in evaluation data analysis.
- C.** All tests must have been administered in the child's primary mode of communication (orally or through sign language, fingerspelling, cued speech, etc.) for results to be meaningful.