

## **PEDIATRICS: Speech Guidelines for Referral to Speech-Language Pathologists**

### **Most Common Etiologies:**

- Cerebral Palsy
- Craniofacial disorders (e.g., cleft lip/palate)
- Functional articulation and/or phonological disorders

### **Related Terms:**

Apraxia of speech, articulation, developmental delay, dysarthria, intonation, intubation, nasality, phonological disorder, prosody, resonance, slurred speech, sound distortion, sound omission, sound substitution, speech, speech intelligibility, structural deviation, tracheostomy, velopharyngeal incompetence.

### **Potential Consequences:**

- Difficulty expressing needs or routine information intelligibly.
- Difficulty communicating intelligibly in order to function at level of independence expected for age.
- Difficulty expressing feelings intelligibly; may be at risk for frustration or depression.
- Difficulty engaging successfully in social and/or classroom situations that require intelligible speech.
- Difficulty achieving adequate intelligible speech to reach educational potential.
- At risk for personal injury due to difficulty communicating intelligibly about a dangerous situation or calling for help.

### **Behaviors that Should Trigger an SLP Referral:**

#### ***By age 3 years cannot:***

- Be understood by family and/or caregivers.
  - Correctly produce vowels and such sounds as p, b, m, w in words.
- Repeat when not understood without becoming frustrated.

#### ***By age 4 years cannot:***

- Be understood by individuals with whom they do not associate regularly.
- Be understood by family and/or caregivers.
- Correctly produce t, d, k, g, f.
- Be asked to repeat without becoming sensitive.

#### ***By age 6 years cannot:***

- Be understood in all situations by most listeners.
- Correctly produce most speech sounds.
- Be asked to repeat without exhibiting frustration.

***Disturbance in neuromuscular control causes difficulty learning to produce sounds appropriately.***

- Speech is usually slurred, with difficulty controlling respiration for speech; exhibits abnormal loudness, rhythm, or vocal quality.
- Exhibits difficulty learning sounds to form words; may sound nasal, strangled and/or breathy.
- Exhibits frustration and/or avoidance of speech due to extreme difficulty forming sounds or difficulty being understood.

***Disturbance in programming, positioning, and sequencing of muscular movements.***

- Sound errors are prevalent but variable (i.e., “dog” could be produced “dog,” “tog,” “gog,” “god” by same child).
- Varies from rarely being able to produce sounds to ongoing speech that is rarely understood, or speech that is usually understood with frequent sound errors.
- Unaware of sound variations or exhibits varying degrees of frustration and/or anxiety regarding inability to “control speech.”

***Disturbance in performing voluntary movements with mouth and vocal mechanism.***

- Cannot produce movements for sound production or sounds are produced without voice (whispered speech).
- Varies from inability to produce any words to extreme difficulty being understood.
- Exhibits frustration and/or avoidance of speech due to difficulties.

***Deafness/severe hearing loss causes severe prosodic disturbances in intonation, duration, and rhythm in addition to sound errors.***

- Produces no meaningful words, or sounds are understood only by family.
- Speaks loudly in high-pitched voice with frequent distortion, omission, and substitutions of sounds.

***Autism, emotional disturbance, and/or mental retardation may cause very unusually prosodic variations.***

- Intonation and/or rhythm of connected speech may sound abnormal.
- Volume may be consistently or intermittently too loud or too soft.

***Deviation in structure of speech mechanism.***

- Difficulty producing specific sounds and intelligible speech.
- Exhibits frustration and/or avoidance of speech.
- Speech has excessive nasality.

***Difficulty in hearing and/or inability to differentiate between sounds inhibit child’s ability to detect and correct error sounds; usually unaware of errors.***

***Intelligibility and sound production are compromised when nasal passages, nasopharynx, and larynx are bypassed due to tracheostomy/ventilator dependence.***

***Exhibits sudden decrease in speech intelligibility.***

- Ranges from slurred, generally intelligible speech to total absence of speech, or totally unintelligible speech.
- Awareness ranges from extremely aware to totally unaware of sound errors.

***Exhibits decline in ability to be understood by family, friends, and/or caregivers in the expression of basic needs, preferences, and feelings.***