

Information on Severe Speech Sound Disorders for Medical Professionals

A child should be referred to a speech-language pathologist:

If the child at age 1-2

- Does not have first words
- Has lost previously used words
- Does not add new words monthly
- Is not beginning to use two words together in short phrases
- Has few sounds
- Is frustrated by inability to communicate
- Does not respond to their name, one step commands, simple questions or point to pictures when named

If the child at age 2-3

- Does not have many sounds or words
- Is not using 2-3 word phrases
- Speech is not understood by familiar adults
- Is frustrated by inability to communicate
- Uses elaborate gesturing instead of speech
- Does not follow 2 step commands, learn the meaning of new words quickly or respond appropriately to questions

If the child at age 3-4

- Is not using most sounds
- Does not have many words
- Is not using sentences to communicate
- Speech is not understood by unfamiliar listeners most of the time
- Does not follow conversation, identify colors and shapes or understand stories

Myths to Debunk

MYTH: Boys learn to talk later than girls.

FACT: While boys may start talking a little later than girls, they are both still within the typical age range of saying words. Boys may be on the lower end of the range while girls may tend to be on the higher end of the range. If a boy is slower than the developmentally appropriate range, an evaluation is needed.

MYTH: Late talkers will catch up to their peers.

FACT: Nearly half of "late talkers" do not catch up with their peers and often have difficulties in literacy and academics later in school.

MYTH: Multilingual or non-English monolingual households should only use one language or only use English at home with a child with CAS.

FACT: Families should continue to use their native language with the child with CAS as having a good model of language in the home will help the child develop their language skills in both their native language and in English.

MYTH: Augmentative/Alternative Communication (AAC), such as sign language or speech generating devices, inhibits verbal speech development and should be discouraged.

FACT: Use of AAC methods with a child with minimal verbal skills will help their verbal language skills develop and reduce frustration that is due to not having an effective way to communicate.

MYTH: We should "wait and see" as kids will develop at their own pace.

FACT: Although some children are "late talkers," a child who is not meeting developmental milestones should be evaluated as early as possible by a speech-language pathologist (SLP) to see if early intervention is needed.

Where can I learn more about childhood apraxia of speech (CAS)?

Apraxia Kids is the leading nonprofit organization on childhood apraxia of speech (CAS).

Our website (www.apraxia-kids.org) has a wealth of information for both parents and professionals on assessment, diagnosis, and treatment of CAS. Apraxia Kids strives to provide the most updated evidence-based information on apraxia and proudly serves as a trusted community resource and support. We offer support groups, webinars, printed materials, a national conference, and much more for the apraxia community.

Characteristics of Severe Speech Sound Disorders and When to Refer

There can be several different things happening that could cause a child to not meet the expressive speech markers.

Hearing Loss Be sure that the child has hearing that is within the normal thresholds. A child should be assessed by an audiologist to rule out any hearing deficits.

Language Delay or Disorder A child who does not seem to meet typical milestones for understanding and responding to language in his first language. The following link gives specific skills children need to do at various ages. If a child does not meet those markers, then a speech language pathologist should complete a full evaluation to determine appropriate recommendations. <https://www.asha.org/public/speech/development/chart/>

Articulation Disorder A child has only a few sounds that are not produced accurately like /r/ or /s/ which are sounds that can often not be used correctly until age 5 years or later. An articulation disorder can include having a lisp where the tongue protrudes on sounds like /s/, /z/, and /sh/ or distortion of the /s/ and /z/ sounds. The child will usually be understandable, but the errors will be noticeable. A screening should be completed by a speech language pathologist to determine if the errors are age appropriate or if therapy is recommended.

Phonological Processing Disorder A child has difficulty using the speech sounds in the correct place in words. They will have a variety of vowel and consonant sounds when they speak, but there are patterns to the errors. The final sound might be missing in words or there are consistent substitutions of sounds like /t/ for /s/ or /d/ for /g/. The speech can range from mildly to severely unintelligible to a novel listener. If a child is at least three years old and is less than 75% intelligible by someone outside the immediate family, an evaluation should be completed by a speech language pathologist.

Dysarthria A child usually has a diagnosed neurological disorder such as cerebral palsy that causes a change in their muscle tone (hypertonia or hypotonia) which affects their ability to do gross and fine motor movements like walking, eating, and speech. Often there is drooling present, and their speech sounds very slow, labored, distorted and difficult to understand depending on the severity of it which can be mild to severe. A speech language pathologist should complete a full speech and language evaluation.

Childhood Apraxia of Speech (CAS) A child has difficulty with the motor planning and programming of speech which results in difficulty sequencing sounds correctly for words. Young children have a history of little to no babbling as an infant, slow progress in therapy, and they have limited vowels and consonants that they use spontaneously and in imitation. When they try to imitate, they may appear to have difficulty moving their mouth and tongue appropriately to produce the sound or word and they will be inconsistent in how they say words over time. Depending on the severity, they can be minimally verbal or use words and be very difficult to understand. A speech language pathologist knowledgeable about CAS needs to complete a full speech and language evaluation including a motor speech evaluation as early as possible to determine appropriate therapy.

Why is specialized treatment by an SLP important?

A speech language pathologist is the best person to evaluate a child who is having any of the above speech or language difficulties. Children can be referred to Early Childhood Intervention in their area or their local school district depending on their age or to a speech and language clinic in their community. Too many children go unidentified until they get to kindergarten or 1st grade and by then, several years have been lost when the child could have been receiving services. Do not wait and see if they will develop skills on their own. Early intervention for children with a severe speech sound or language disorder can make all the difference in the child becoming a successful verbal communicator and in reducing the disorder's impact on other skills such as literacy and academics.