Pre-k	By the end of 3-year-old preschool, children should be 75% intelligible.
(3-year-old)	Children should be able to say the following speech sounds in words by the end of 3-year-old preschool: P, B, M, N, H, T, D, W
	The following phonological processes should be eliminated: initial consonant deletion*, final consonant deletion, velar assimilation, backing*, weak syllable deletion
Pre-K	By the end of 4-year-old preschool, children should be 90% intelligible.
(4-year-old)	Children should be able to say the following speech sounds in words by the end of 4-year-old preschool: P, B, M, N, H, T, D, W, K, G
	The following phonological processes should be eliminated: Stopping, fronting, deaffrication, cluster reduction, stridency deletion
K	By age 5, children should be 100% intelligible. Children should be able to say the following speech sounds in words by the end of kindergarten: P, B, T, D, M, N, NG, H, W, K, G, F, L
	Continued errors on: R, S, CH, SH, Z, J, V, TH, ZH
	The following phonological processes should be eliminated: gliding
1 st	Children should be able to say the following speech sounds in words by the end of First Grade: P, B, T, D, M, N, NG, H, W, K, G, F, L, CH, SH, J
	Continued errors on: R, S, Z, V, TH, ZH
2 nd	By the end of Second Grade children should be able to say all phonemes.

*Not considered a developmental phonological process

It is important to use these norms as only one piece of the puzzle. The "age of acquisition data are not enough for clinical decision making or to determine eligibility for services...consider children's speech production, perception, comprehensive independent and relational analysis, intelligibility, stimulability, phonological awareness, spelling, reading, academic, and social impact as well as insights from children and significant others in their lives". (Crowe & McLeod, 2020)

Some articulation errors are never developmentally appropriate. These include speech sounds that are produced with air pressed laterally out of the tongue. This is called a lateral lisp and is noted on S, Z, SH, J or CH. Severity of errors can be impacted by other contributing factors including oral motor difficulties (drooling, spilling food), tongue thrust, hearing loss, orthodontic appliances/braces, missing teeth or malocclusion (bite). Consult your SLP if these concerns apply. Dialectal errors are also not a disorder.

Speech sounds are taught in a specific hierarchy based on difficulty. First sounds are taught in isolation, then words, and phrases. The highest level of production is spontaneous conversation. Once a student can do this, we consider their carryover of the sound mastered.

Isolation	
syllable	
words	
phrases	
Sentences	
Reading	
Conversation	