

TIP SHEET 9



The advice given on this tip sheet is by Lucia Smith, Speech Pathologist.

It is based on experience from her clinical work along with her work consulting with teachers and parents.

All tips are based on research.

It is difficult to address all children's communication styles in a single tip sheet.

If you are concerned about your child's speech or language development, please see a speech pathologist.

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SOUND DEVELOPMENT

This tipsheet is written to help adults understand what is considered normal in the development of sounds in children's speech.

BABIES

Before a child develops speech, they generally go through a period of sound-making that begins with **vocal play (around 20-30 weeks)** and then leads on to **babbling (around 25—50 weeks)**.



VOCAL PLAY is simply that - playing around with sounds. All sorts of sounds may emerge in this period, from raspberries to guttural grunts.

BABBLING is a little more refined. There may, in fact, be less sounds produced than in vocal play but these sounds are repeated in syllable sequences. There is **reduplicated babbling** where the same syllable is repeated (eg. bababa), and then later, **variegated babbling** emerges. This is where syllables containing a whole range of consonant and vowel sounds are joined in a string of babbling (eg. badu e bada).

As the child develops, babbling starts to sound a lot like speech, but at this stage, there is actually no meaning associated with the sound sequences.

Babbling that sounds like speech should emerge between 7—12 months. It is called **CANONICAL BABBLING**.

If a baby is not using this type of babble by their first birthday, or if there is not a wide range of sounds in their babble, the child may be at risk of having speech or language problems later in life.

If this is the case, an assessment by a speech pathologist is recommended. Early intervention can make all the difference!

YOUNG CHILDREN

A child usually starts saying some meaningful “words” around the age of one year. There will still be lots of babbling too, but certain sound combinations now mean specific things. They might say “mama” for “mum” and might even say something like “doda” for “dog”. When a child begins to see the power of words, they will often launch into a new phase where words are popping out all the time! **BUT.... Many words will not be pronounced perfectly. This is fine.**



Some sounds will be too tricky for a young child to make at such an early age. They might say “wabbed” for “rabbit” and “wuv” for “love”. With other words, it may not be the *sound* that is tricky, but the *position in which the sound occurs*. For example, a child may be able to say “sock” but drop the “s” from the word “stop”. This is not a problem in the development of the /s/ sound. Instead, it is a normal developmental pattern where lots of children don’t say the /s/ in words starting with an “s blend”. (Eg. “nake” (snake), “moke” (smoke) and so on).

So when thinking of the development of speech sounds, there are two things to remember:

1. EARLY, MIDDLE AND LATE SOUNDS Some sounds are easier for young children to say. Accurate production of some sounds will occur earlier than others. For example, /th/ is a late-developing sound and it is perfectly normal for a child who is three to be saying: *“I fink (think) it’s in the barff (bath)”*. *A list of early, middle, and late sounds is on Page 3.*

2. NORMAL SOUND ERROR PATTERNS At certain ages, is very normal for a sound to be left out or substituted **in certain positions of words**. These errors occur in patterns that can be seen quite easily (if you know what you are looking for!) These normal errors are to do with a child’s developing sound system and are more associated with perception than the ability to physically produce these sounds. These patterns of errors are called PHONOLOGICAL PROCESSES and they usually resolve naturally. Some children may exhibit just one error pattern, some two or three or even more! Children with several error patterns can be tricky to understand particularly if they are producing long sentences and talking about things that are not in the “here and now”. The ages at which these errors naturally resolve have been set down by many researchers. **When these errors do not “drop away” by the expected age, the child may need to have some intervention.** *Some error patterns are further explained on page 4. An example of a “phonological process” is a child leaving dropping the /s/ sound from the start of /s/ blends. This is seen as a normal until the child is around 4 years of age. (“nake” for “snake”). Another example is a child replacing sounds made in the back of the mouth (/k/ and /g/) with front sounds (/t/ and /d/). A child making this error would say “I dough (go) in the tar (car).” Again, this is normal until the age of about 3.5 years.*

EARLY, MIDDLE AND LATE SOUNDS

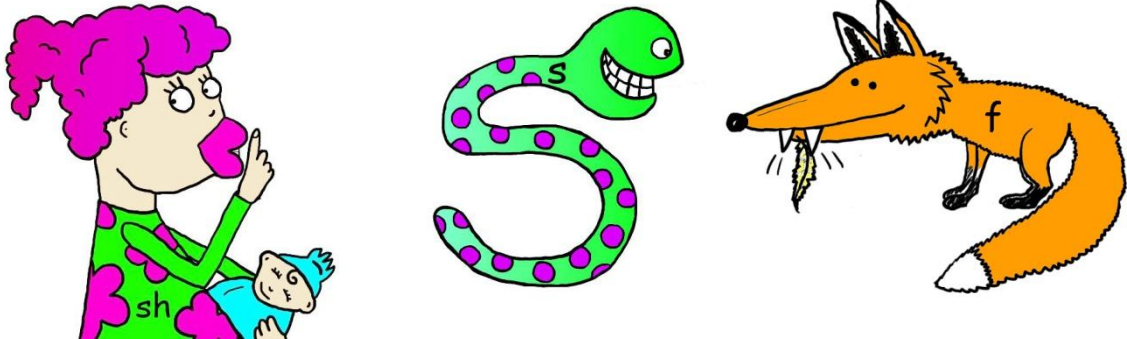
EARLY SOUNDS INCLUDE: /b/ /p/ /m/ /n/ /d/ /w/ /y/ h/
(by around 3 years)

MIDDLE SOUNDS INCLUDE: /g/ /k/ /v/ /f/ /ch/ /j/ /ng/ /t/
(by around 3 to 4 years)

LATE SOUNDS INCLUDE: /r/ /th/ /sh/ /l/ /r/ /s/ /z/
(by around 5.5 to 8 years)

Note: *The latest developing sound is /th/ and this isn't mastered until the second or third year of school for some children.*

Reference: Shriberg, L. (1993). Four new speech and prosody-voice measures for genetics research and other studies in developmental phonological disorders. *Journal of Speech and Hearing Research*, 36, 105-140.



These pictures above are known as "sound pictures" and are part of The Speech Sound Set program from Pelican Talk . They are great for increasing a child's awareness of sounds and the position of the mouth required to make each sound.

When sounds are too tricky, they are usually replaced by another sound, not simply left off. These sound substitutions are usually quite consistent, and for this reason, we can usually understand a 3 year old's speech, even though they may still be unable to say many of the late sounds accurately.

If an unfamiliar listener finds a three year old very difficult to understand in conversation, a referral to a speech pathologist is recommended.

SOME COMMON ERROR PATTERNS (PHONOLOGICAL PROCESSES)

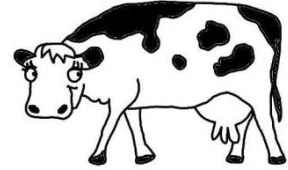
Final Consonant Deletion: Drops end sounds (*fish* → *fi*, *couch* → *cow*)

USUALLY GONE BY - 3 yrs 3 mths

Fronting: Back sounds are made at the front

(*go* → *dough*, *key* → *tea*)

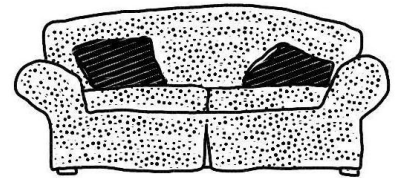
USUALLY GONE BY - 3 yrs 6 mths



Stopping of /f/: The long sound /f/ is made as a short sound

(*four* → *bore* or *fan* → *tan*)

USUALLY GONE BY - 3 yrs



S Cluster Reduction: /s/ is dropped from the front of s blend words (*snake* → *nake*)

USUALLY GONE BY - 3 yrs 4 yrs

Stopping of /s/: The long sound /s/ is made as a short sound (*sun* → *dun* or *tun*)

USUALLY GONE BY - 3 yrs

*Reference : Bowen,C (1998). *Developmental phonological disorders. A practical guide for families and teachers.* Melbourne: ACER Press

Note: Some patterns of errors are not considered normal at any age. For example, leaving the first consonant sound off words is not a developmentally normal pattern and a referral to a speech pathologist should be sought.

When children have several of the above errors in their speech, they can be quite difficult to understand. If this is still the case at the time of starting school, they may be at risk of having difficulties with learning literacy. Consult a speech pathologist if the above errors have not disappeared from the child's speech at the expected ages.



PROMOTING ACCURATE SOUND PRODUCTION



1. Have hearing checked. This needs to be done by a professional who will assess not only your child's hearing, but also how the middle ear is functioning. Middle ear infections can often occur repeatedly without many symptoms and can really affect the development of a child's sound awareness and sound production.

2. Be wary of background noise. Young children are not great at filtering out background noise and will find it hard to focus on speech with competing noise. If we expect children to learn to say sounds clearly, particularly the soft high frequency sounds (such as /f/, /s/ and /sh/), it is important that a good environment for listening to speech is provided. So turn off that TV or radio if it's just on in the background and read books to your child in a quiet place!

3. It is important also to speak slowly and clearly when we are speaking to children so they can attend to all the wonderful sounds that they need to learn. Don't use really long sentences. If you need to, "chunk" long sentences into phrases. Facing a child when you are speaking will also help them.

4. If your child makes sound errors, don't force them to correct themselves, simply repeat back what they have said in the correct way. *Eg. Child: "I taw a tar". You: "You saw a car, did you? A car? What colour car was it?"*

5. Good sound production often develops when children develop in their "sound awareness". This is also called "phonemic awareness". There are lots of sound awareness games and activities you can play. *The Speech Sound Set* (from Pelican Talk) specifically targets sound awareness. There are also lots of activity ideas on the Pelican Talk tipsheet *10 Tips for Increasing Phonemic Awareness* (see the FREE STUFF at www.pelicantalk.com).

6. Finally, it is important to refer to a speech pathologist if a baby does not babble, does not use canonical babbling by one year, is not largely intelligible by three years, or if they have phonological processes at ages when they should have resolved. Other indicators for a referral include if your child is having trouble making some sounds at ages when they should be able to, and/or if they are also having difficulties with their eating (chewing, drinking). There are sometimes structural abnormalities that will affect how a child can develop speech sounds so a speech pathologist would check for these too. These include cleft palate and tongue tie. **Remember speech pathologists also assess and help children with language difficulties – however this tipsheet is only addressing the issue of speech sounds.**

Please email lucia@pelicantalk.com with any questions about speech sound development.