

## Speech Development Related to Cleft Palate

It is common for children born with cleft palate or with cleft lip and palate to have speech problems at some time in their lives. Over half of these children will need speech therapy, however, most will develop normal speech by age 5. Typically, children with cleft lip only do not have speech problems related to clefting.

### What speech problems might children with cleft palate have?

A child with cleft palate may have trouble with:

- Speech Sound Development
- Velopharyngeal Incompetence
- Hearing Loss

### Speech Sound Development:

Children born with cleft palate may have a delay in the beginning of speech and development of speech sounds. In addition, children with cleft palate may produce speech errors that are directly related to clefting. These are called compensatory speech errors (please see the Cleft Palate Speech Glossary education sheet).

Generally, it is expected that children will start making sounds between 2 and 3 months of age and babble (such as bababa, dadada) between 6 and 10 months of age. Children typically start using real words (such as mama, dada) between 12 and 14 months of age.

The following is a general guideline for the age at which your child is expected to use sounds in words:

- By age 2: m, n, p, b, h  
3 – 4 years: t, d, k, g, w, y  
4 – 5 years: f  
5 – 7 years: s, z, v, sh, ch, th

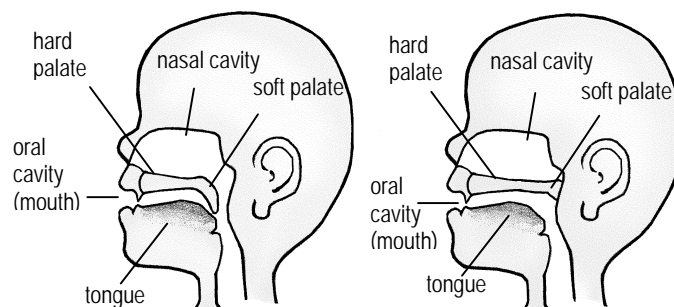
### Velopharyngeal Dysfunction (VPD)

During speech, the goal is to have good airflow through the mouth for all speech sounds except m, n and ng. To direct air through the mouth, the soft palate (back part of the roof of the mouth) lifts and moves towards the back of the throat. This movement closes the opening between the mouth and the nose (see diagram). VPD happens when the opening between the mouth and nose is not closed properly and too much air leaks out of the nose during speech.

All children who are born with cleft palate have velopharyngeal dysfunction resulting in **hyponasality** (too much airflow through the nose) until the cleft is repaired. After repair, some children still have velopharyngeal dysfunction. However, with additional intervention, most will have normal speech by age 5.

### Hearing Loss:

Children with cleft palate are more likely to get fluid in the middle ear and infections. These may cause mild or moderate hearing loss. Because children learn to speak and understand language through hearing, it is very important that hearing concerns and ear health are closely watched.



Soft palate while **breathing**

Soft palate while **speaking**

## What can be done about speech problems related to cleft palate?

- **Speech therapy** is an essential tool for children who have speech errors. The goal of therapy is to help a child learn to use his/her tongue and lips correctly. Therapy may also be an effective treatment option for mild hypernasality but it usually does not correct more serious velopharyngeal dysfunction. If speech therapy is recommended for your child, the Cleft Clinic speech pathologists will help you find speech services close to home.
- **“Speech Surgery”**, such as a pharyngeal flap or sphincter pharyngoplasty, may be recommended to correct moderate to severe velopharyngeal dysfunction. A surgery is a big decision and not a “quick fix”. Your child may need speech therapy before and after the procedure. The Cleft Clinic will work closely with you and your child to decide if surgical intervention may improve velopharyngeal closure for speech.
- **Get regular ear and hearing exams** even if you do not think that your child has a hearing loss. These exams are part of an annual Cleft Clinic visit but your child may require more care such as hearing aids, 6-month re-checks, and/or ear tubes. Good hearing is essential for good speech development.

## How can I help my child develop good speech?

- Talk to your child and provide language-learning opportunities. Suggestions for home activities are given in the Patient/Parent Speech and Language Development handouts.
- Encourage your child to talk to you using his or her best speech.
- Work with your child’s speech therapist to get home activities that are directly related to your child’s therapy plan.
- Remember that to improve speech your child has to work on speech tasks. Blowing whistles or bubbles and sucking through straws will not improve velopharyngeal closure for speech.
- Schedule regular ear and hearing exams. If your child has hearing aids, make sure he or she is wearing them as often as possible.

## Questions?

This sheet is not specific to your child, but provides general information. If you have any questions, please call the Cleft Clinic at (612) 813-6888. Additional resources:

- Cleft Palate Foundation ([www.cleftline.org](http://www.cleftline.org))
- Additional education sheets:
  - Resonance Disorders
  - Cleft Palate Speech Glossary
  - Speech Development

For more reading material about this and other health topics, please call or visit the Family Resource Center library, or visit our Web site: [www.childrensmn.org](http://www.childrensmn.org).

Children’s Hospitals and Clinics of Minnesota  
Patient/Family Education  
2525 Chicago Avenue South  
Minneapolis, MN 55404 08/2010