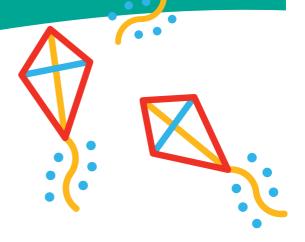


Regional Cleft Lip and Palate Service Specialist Speech and Language Therapy

# How your palate works

Information for parents and carers

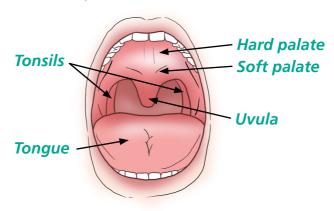




This booklet explains how the palate works, why it is important for speaking, and how it may cause some difficulties with speech.

### What is your palate?

The palate forms the roof of the mouth, and is made up of two parts: the hard palate, which is bony; and the soft palate, towards the back, which is made up of muscles. The uvula dangles below the soft palate.

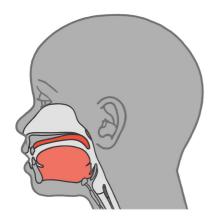


### Why is the palate important for speech?

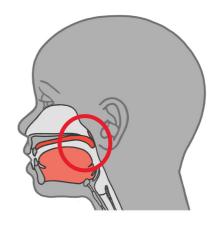
The palate is very important in speech production. When we speak, air comes up from the lungs and into our mouth.

It is necessary for the nose to be closed off from the mouth. To do this, the muscles of the soft palate move upwards and backwards towards the throat. Muscles in the throat also move towards the soft palate to close the nose off.

We use our tongue, palate, teeth and lips to shape the air to make different sounds.



Soft palate at rest for nose sounds, e.g. 'm, n, ng'



Soft palate raised for mouth sounds, e.g. 'b, d, k, s, f.'

Most of the sounds we use in speech, such as p, b, t, d, k, g, s, f, sh, are made with the palate raised up, closing off the nose.

Some sounds, such as m, n, and ng, are made with the palate lowered, letting the air move through the nose.

### Will my child have speech problems?

Many children born with a cleft palate will develop normal speech. However, because the structures used for speech are affected by the cleft, there is a higher risk of developing speech and language difficulties.

If difficulties do occur, the Speech and Language Therapist (SLT) will monitor these carefully and offer therapy and advice as appropriate.

A small number of children may need further surgery to help them with their speech. Some children may have speech and language difficulties that are not related to their cleft palate.

Children with a cleft palate are more likely to have hearing problems caused by a build-up of fluid in the middle ear, called glue ear. This can make it difficult to hear speech sounds clearly and distinguish between them. It can also affect listening skills and the ability to learn new words.

It is recommended that hearing is monitored routinely by local hearing services, but if you have any concerns that your child is not hearing well, seek advice from your health visitor as soon as possible.

### What difficulties can occur with speech?

Some children with a cleft palate may find talking difficult because the palate is unable to work properly. If the palate cannot close off the mouth from the nose properly, air may escape into the nose.

Sometimes after surgery there may be problems with healing, and a small hole, called a 'fistula', can develop at the site of surgery. Speech will be monitored to find out if the fistula is affecting speech development.

### A cleft palate may result in one or more of these effects on speech:

- A nasal quality or tone (we call this 'hypernasality')
- A sound of air escaping though the nose when the child is speaking (we call this 'nasal emission')

- A rustling noise in the nose when the child is speaking (we call this 'nasal turbulence')
- Difficulty making and using certain speech sounds (we call this 'articulation' and 'phonological' difficulties):

Some mouth sounds may be weak, or mouth sounds may be replaced by nose sounds, for example:

- · 'baby' may sound like 'mamy',
- 'daddy' may sound like 'nanny'.

Sometimes children find it easier to make sounds at the back of their mouth or in the throat, such as:

'daddy' may sound like 'gaggy'

## What will happen if my child has difficulties with talking?

- When children have difficulty making certain sounds, speech therapy can help them to use their lips, tongue and teeth to make sounds.
- If we hear hypernasality, nasal emission, nasal turbulence, or nose sounds instead of mouth sounds, we may talk to you about arranging a special type of X-ray. This is so we can look at how your child's palate is working when they talk, and to find out if surgery might help to improve their speech.

You can contact us at any time if you have any questions or concerns about your child's speech or language development:

# Specialist Speech and Language Therapy Service Regional Cleft Lip and Palate Service

Leeds General Infirmary, Leeds, LS1 3EX

Tel: 0113 392 3786

Email: leedsth-tr.cleftslt@nhs.net

Additional information about Cleft Lip and Palate is available from:

### **Cleft Lip and Palate Association (CLAPA)**

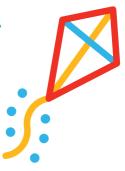
332 Goswell Rd, The Angel, London EC1V 7LQ

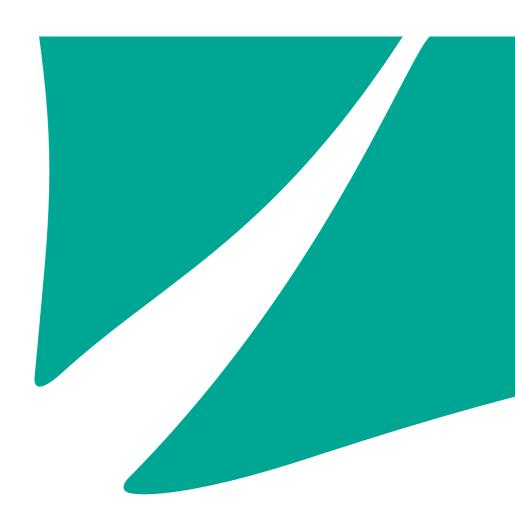
Tel: 020 7833 4883

Email: info@clapa.com

Website: www.clapa.com

A space for your notes and questions...





#### © The Leeds Teaching Hospitals NHS Trust • 1st edition (Ver 1)

Developed by: The Speech and Language Therapists at the Northern and Yorkshire Regional Cleft Lip and Palate Service (Leeds Site), Leeds General Infirmary.

Produced by: Medical Illustration Services • MID code: 20190509\_011/JG

LN004575 Publication date 06/2020 Review date 06/2023