

Child Voice Difficulties

Like adults, children can also have difficulties or disorders with their voice. Voice problems can occur for a variety of reasons:

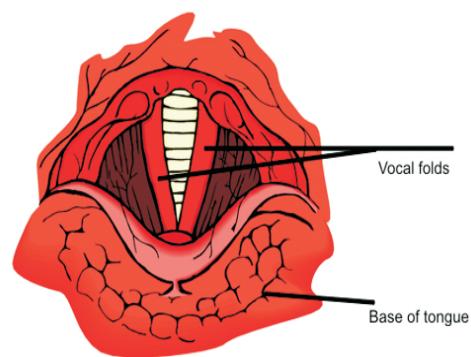
- Misuse of voice
- Stress can lead to voice difficulties
- Injury or illness affecting any part of the vocal apparatus

For many children a croaky voice is not a concern, which sometimes makes treating the problem a little harder. However, it does concern some children. As well as making the child aware of the problem, it is important for the adults around the child support and make sure that certain activities are avoided until the voice problem is

How the voice works

Voice is powered by air from the lungs, the air passes through the larynx which contains the vocal folds (often called the vocal chords). The vocal folds are 2 folds of muscle that meet together many times per second. This creates the voice which resonates in the pharynx, oral and nasal cavities and is then shaped into words by the speech apparatus, the tongue, lips, facial muscles etc. Pitch is changed by altering the length of the vocal folds as they meet. If you simply make an "eeee" sound, this is air passing through your vocal folds, which are at a certain tension. The air passes into the oral cavity and your tongue, cheeks and lips will be placed in a particular position to produce the sound correctly.

If we look down into the larynx we can see the vocal folds . These beat together rapidly to create sound. The vocal folds are 2 folds of muscle that meet together many times per second (approximately 125 per second for men and 210 times for woman) when we want to produce voice.



A superior view, looking down into the larynx

What goes wrong?

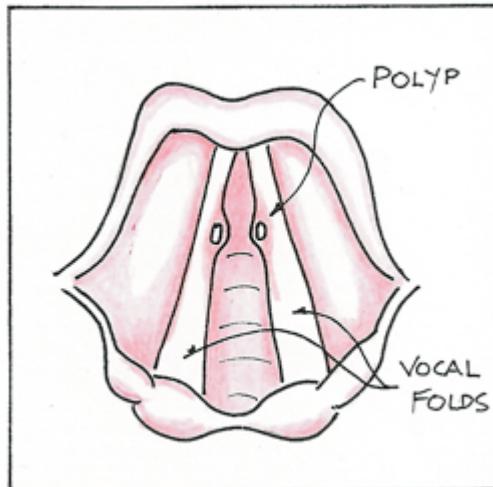
A number of things can cause voice problems and these are usually associated with the larynx. Within the larynx are the vocal folds (often called vocal chords), the two pieces of muscle that come together to make sound, and if these get damaged or a growth (polyp, cyst etc) develops on one or both of them it will affect the voice. If the vocal folds cannot come together properly, then air can escape between them causing croaky or breathy speech. Weak breath control can also cause voice to be weak or at a low volume.

Croaky voice

This is often caused by a growth on the edge of the vocal fold which causes air to escape when the folds are coming together to make sound. There are several different types of growths that cause voice problems and these include nodules, cyst, polyps and tumours. These growths are usually caused by misuse or abuse of voice, lifestyle or stress.

Breathy voice

This can also be caused by a growth on the vocal folds, or because of breathing difficulties. A weak breath may display as speech which is short and low in volume.



What causes voice problems in children

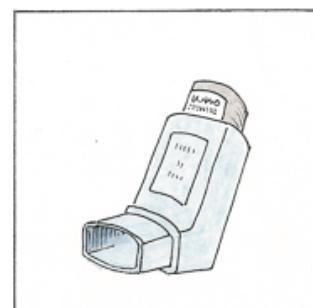
Many things can go wrong with voice, but with children the most likely cause is some form of vocal abuse or misuse. These factors can sometimes cause a small growth to appear on the vocal folds (a nodule, cyst or polyp etc). These are not initially harmful to your health but if you do not address the problems via therapy or surgery they can lead to further deterioration of voice over time and possibly long term damage. Unfortunately, once a nodule has formed the child may work harder to maintain their normal voice and strain their voice further.

Voice problems through misuse or abuse are probably most common for children and can occur for several reasons:

- The personality of the child can give them a predisposition to voice problems. If your child is outgoing, loud and shows off, they may be more prone to using their voice to bring attention to themselves.
- If the child is behaviourally challenging, gets very angry or upset and shouts, screams, cries and has tantrums, they may be prone to voice difficulties.



- The social activities of the child such as singing or cheering at a sports matches, or any activity that over exerts the voice, may cause voice problems.
- If the child lives in a “loud” household where it is often noisy and the child has to shout to be heard.
- Medical conditions such as frequent throat infections, tonsillitis, coughs and dehydration cause voice problems. Certain medications such as inhalers can also have an effect on the voice.
- If the child is extremely stressed this can lead to voice difficulties.
- Other, rarer reasons for voice difficulties include injury to the larynx, a brain injury or intubation in hospital.



Warning signs that you may have a voice problem

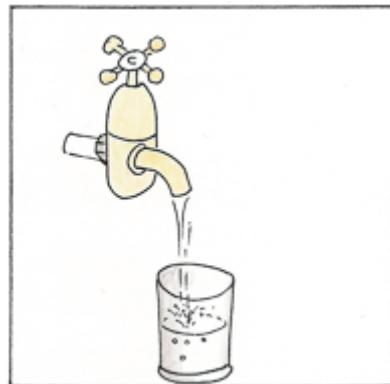
- Constant loss of voice
- Hoarse or croaky voice
- Recurrent sore throat
- Deterioration of voice through the day
- Uncontrolled changes in pitch
- Persistent need to clear throat

Treatment

Treatment can follow several routes. Surgery can remove growths that cause the voice condition. However, if you do not address the underlying cause of the growth (vocal abuse or misuse), there is a good chance the voice problem will re-appear. Speech therapy can be used in conjunction with surgery, or as an alternative. However, for many children, just changing their habits and lifestyle will improve their voices.

Lifestyle changes to improve voice

- Breathing correctly - breath from the diaphragm and take deep breathes before you speak. Do not talk till you run out of air. If you breath shallowly (from your chest, rather than from your stomach), you are not using your breath for speech correctly and not supplying as much power for speech as you could. This means that your vocal folds will be working a little harder than they should and this could lead to a voice problem. To make yourself aware of breathing from the diaphragm, try putting your hands on your stomach with your fingers slightly open. Breath in slowly through your nose and feel and see your fingers move when you inhale. These exercises may be hard to convey to young children and it may be a case of adults reminding them to slow down and say little bits at a time, rather than speaking in long sentences until they run out of air.
- Stay hydrated - drink lots of water continually through the day. Avoid caffeinated drinks such as some soft drinks, tea and coffee. It is important for adults to ensure that the children in their care are always suitably hydrated.





- Posture - good posture will help with your breathing technique. Trying to describe posture to young children may be difficult. However, involving them in some daily stretching exercises may help. If you can turn this into a game it may encourage the child to take part.
- Relaxation - a major cause of voice disorders is stress. If your child is experiencing voice problems, find time each day to relax for them to relax. Everyone has different ways to relax, whether it be listening to music, going for a walk, or just watching TV. The important thing is to make time to unwind. The tension around your shoulders and neck can have an impact on the muscles around your larynx which in turn will have an impact on your voice. If your child is showing signs of stress or anxiety it is important for the adults around that child to find out what is worrying the child and address it.
- Avoid clearing your throat or whispering - many people with voice difficulties feel the need to constantly clear their throat, and are often doing this without thinking about it. Throat clearing can really aggravate voice difficulties. Some suggest either doing a hard swallow or taking a sip of water rather than throat clearing. Contrary to what many people believe, whispering can also affect your voice, because the vocal folds have to work harder during a whisper. This is a difficult concept to teach children as well. Apart from reminding them not to throat clear so much, make sure they always carry a bottle of water which they can use as a replacement for throat clearing.
- Don't smoke around your child - if you smoke, try to stop or reduce smoking around the child as the smoke passes directly over the vocal folds. Smoking can respiratory illness, laryngeal cancer and other health problems which can all impact on voice.
- Avoid activities involving lots of talking or shouting - you may have to get your child to take a break from certain activities that affect their voice such as cheerleading, singing, shouting at concerts or sports matches etc.
- Medications - be aware that certain medications such as inhalers can coat the pharynx and vocal folds, drying them out. One way to help with this is to stay well hydrated and drink lots of water.
- Smoky and dusty environments - Do not let your child spend time in environments that are smoky or dusty if they have a voice problem.



- Reflux - if your child suffers from some form of reflux at night this can also cause voice problems. If you think this might be causing problems, see your doctor for some relevant medication and do not let your child eat late in the evening before they go to bed.
- Give them time to talk - encourage your child not to make themselves heard over lots of noise. In a busy family household, make sure everyone gives the child time to express themselves.
- Check their hearing - it is also important to check your child's hearing as this could inadvertently be causing a voice problem if the child is not getting sufficient feedback from their own speech.

Therapy and treatment for voice problems

Following a growth on the vocal folds (chords) there are generally 2 options, surgery and or therapy. Although surgery can be successful in removing the growth, if the underlying behaviour that caused the growth is not dealt with, the problem is likely to recur. Surgery combined with therapy is often a good option, but therapy alone can also have a positive outcome. However, it is often difficult to provide successful speech therapy to some younger children with voice problems because they do not always see it as a problem and have a lack of awareness. It is also difficult to change the habits of some younger children especially if they have a personality which causes them to talk or shout a lot. For this reason it is important that parents and teachers are aware of the problem, and are there to give subtle reminders to the child.

Creating an environment at home that is more communication friendly is also a good idea, and being aware of simple things such as talking to your child face to face rather than shouting back and forth between rooms. Give your child time to talk, so they don't feel an urgency to communicate, or have to compete with their brothers and sisters.

An unhealthy voice is often a symptom of an unhealthy person, so look after your child's health. While your child's voice is healing, encourage them to avoid activities that may strain their voice. Make sure your child drinks plenty of liquids and stays hydrated (very important), and find time to have one to one time in a quiet environment with your child.



To learn more about voice and voice problems go to our website www.icommunicatetherapy.com, or read about and purchase books from our Online Resource centre by clicking this link:

Suggested Reading

Suggested Reading

Voice and Voice Therapy (with Free DVD), 7th Edition by Daniel R. Boone, Stephen C. McFarlane, and Shelley L. Von Berg

Treatment of Voice Disorders by Robert Thayer Sataloff

Working with Voice Disorders by Stephanie Martin and Myra Lockhart

Working with Children's voice disorders by Jenny Hunt and Alison Slater

Greene and Mathieson's The Voice and its Disorders, 6th Ed. by Lesley Mathieson

The Source for Children's Voice Disorders by Nancy B. Swigert

Pediatric Voice Disorders: Diagnosis and Treatment by Christopher J. Hartnick and Mark Boseley

Voice and Laryngeal Disorders: A Problem-Based Clinical Guide with Voice Samples by Sally K. Gallena

The Voice Clinic Handbook by Harris, Tom Harris, John S. Rubin, and David M. Howard

Management of the Voice and Its Disorders by Linda Rammage, Murray Morrison, and Hamish Nichol

Voice Treatment for Children & Adolescents by Moya L. Andrews

Voice Disorders and Their Management by Margaret Freeman and Margaret Fawcus