

Croup

Croup is an infection of the throat (larynx) and windpipe (trachea) that results in noisy breathing and a harsh, barking cough. Most children who have croup are under five years old. Some older children (aged between three and eight years) may develop occasional croup.

Croup usually starts with a 'cold'

Children with croup usually have an illness like a cold first – a runny nose, cough and slight temperature. Then the child wakes during the night with a barking cough and difficulty breathing. This can last a couple of hours and reappear for the next couple of nights.

Children are small, so their airway is narrow. When infection causes swelling of the lining of the airway, it becomes even narrower making it difficult for the child to breathe. This happens particularly when the air is cold, such as at night-time.

Symptoms of croup

The symptoms include:

- Noisy breathing (inspiratory stridor) – a high-pitched sound
- Harsh, barking cough
- Hoarse voice
- Difficulty breathing – depending on how severe the illness is.

Get help immediately if symptoms become serious

If the child's symptoms don't settle quickly with comforting and once they stop crying, the child needs to be seen by a doctor urgently. In rare cases, a severe croup attack can cause a child to stop breathing. The symptoms of croup are also similar to those caused by other, much more serious conditions. For example, your child could have epiglottitis (inflammation of the epiglottis).

See a doctor immediately if your child:

- Is obviously not well
- Has a high fever
- Is breathing more quickly or has difficulty breathing
- Makes a noise while breathing (particularly a snoring sound on breathing out, even when resting)
- Has difficulty swallowing
- Suddenly starts to cough
- Is restless, anxious or sweating
- Has a bluish tinge to the lips

Experiences 'caving in' of the soft tissues of the neck and between the ribs when trying to breathe in.

In these situations, take your child to the nearest children's hospital or to a hospital where there are doctors with experience in caring for children – **urgently**.

Treatment for croup at home

You can treat mild croup at home if your child has no breathing problems or noisy breathing when they are not crying. Suggestions include:

- **Comfort your child** – having a croupy cough and noisy breathing frightens children and being scared makes the situation worse.
- **Offer frequent drinks** – unless your child is having difficulty swallowing.
- **Give paracetamol according to your child's weight** – only as directed by your doctor, if your child has a high fever or sore throat and if your doctor is sure the problem is not epiglottitis.
- **Moisture in the air** – Some parents like to use vaporisers in their child's room, but doctors do not currently recommend it as there is no evidence that humidified air helps croup and there is a risk of burns from the steam. If vaporisers are used, ensure that instructions for use are followed closely and the room is well ventilated.

Treatment for croup by a doctor

Mild croup generally settles within a couple of hours and the child goes back to sleep. If the croup doesn't settle, or if your child becomes more distressed or unwell, take them to your doctor or children's hospital straight away. Medical treatment for croup may include:

- **Steroids** – oral or inhaled steroids. Steroids decrease the length of the croup episodes. They also reduce the need for admission to hospital.
- **Nebulised adrenalin** – in severe symptoms, adrenalin may be given (in hospital) to relieve the swelling in the windpipe until the steroids work. A device called a nebuliser is used to administer the medication in the form of a mist that is inhaled into the lungs.

Prevention of croup

The viruses that cause croup are very similar to those of the common cold. They start to be infectious with the first signs, such as a runny nose and cough, and remain infectious for up to five days. Only about one in 10 children who get these viruses will develop croup.

It is not usually possible to prevent croup. Many viruses can cause it and there is no immunisation available against most of them. However, immunisation against influenza **is** recommended as this may actually prevent croup caused by the influenza virus (influenza-induced croup).

All children who are aged six months and older can be immunised against influenza. This is especially important for children with an underlying chronic illness such as asthma or cystic fibrosis. Antibiotics will not be of use as the viruses that cause croup will not respond to this treatment.

Where to get help

- In an emergency, call triple zero (000)
- Emergency department of your nearest hospital
- Your doctor
- NURSE-ON-CALL Tel. 1300 606 024 – for expert health information and advice (24 hours, 7 days)
- Maternal and Child Health Line Tel. 13 22 29 (24 hours)
- Parentline (24 hours) Tel. 13 22 89
- The Royal Children's Hospital Tel. (03) 9345 5522

Things to remember

- Croup is a viral infection of the throat and windpipe that causes noisy breathing, a hoarse voice and a harsh, barking cough.
- Croup usually starts as a 'cold' for a few days, then the noisy breathing and cough start (usually at night).
- You can treat mild croup at home if your child has no breathing problems or noisy breathing when they are not crying.
- If there are signs of increasing windpipe obstruction, seek urgent medical help.

This page has been produced in consultation with, and approved by:

The Children's Hospital at Westmead

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