

# Croup

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## About Croup

*Croup is a condition that causes an inflammation of the upper airways — the voice box (larynx) and windpipe (trachea). It often leads to a barking cough or hoarseness, especially when a child cries.*

*Most cases of croup are caused by viruses. Those involved are usually parainfluenza virus (which accounts for most cases), adenovirus, and respiratory syncytial virus (RSV). Croup is most common — and symptoms are most severe — in children 6 months to 3 years old, but can affect older kids, too.*

*Most cases of viral croup are mild and can be treated at home, though rarely it can be severe and even life-threatening. Some children are more prone to developing croup when they get a viral upper respiratory infection.*

## Signs and Symptoms

At first, a child may have cold symptoms, like a stuffy or runny nose and a fever. As the upper airway (the lining of the windpipe and the voice box) becomes progressively inflamed and swollen, the child may become hoarse, with a harsh, barking cough. This loud cough, which is characteristic of croup, often sounds like the barking of a seal.

If the upper airway becomes increasingly swollen, it becomes even more difficult for a child to breathe, and you may hear a high-pitched or squeaking noise when a child inhales. A child also may tend to breathe very fast and might have retractions (when the skin between the ribs pulls in during breathing). In the most serious cases, a child may appear pale or have a bluish tinge around the mouth due to a lack of oxygen.

Symptoms of croup are often worse at night and when children are upset or crying.

## Contagiousness

Outbreaks of croup tend to occur in **the fall and early winter** when the viruses that cause it peak. Many children who come in contact with the viruses that cause croup will not get croup, but will instead have symptoms of a common cold.

## Diagnosis

Doctors can usually diagnose croup by listening for the telltale barking cough and stridor. They will also ask if your child has had any recent illnesses with a fever, runny nose, and congestion, and if your child has a history of croup or upper airway problems.

If a child's croup is severe and slow to respond to treatment, a neck X-ray may be taken to rule out any other reasons for the breathing difficulty, such as a foreign object lodged in the throat, an abscess behind the throat, or epiglottitis (a inflammation of the epiglottis, the flap of tissue that covers the windpipe). Typical findings on an X-ray if a child has croup includes the top of the airway narrowing to a point, which doctors call a 'steeple sign'

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## Treatment of Croup

*Most, though not all, cases of viral croup are mild.*

Breathing in moist air seems to make kids feel better. The best way to expose your child to moist air is to use a **cool mist humidifier**, or run a **hot shower to create a steam-filled bathroom** where you can sit with your child for 10 minutes. Breathing in the mist will sometimes stop a child from severe coughing. In the cooler months, **try taking your child outside** for a few minutes to breath in the cool air — this may also alleviate symptoms. You can also try driving your child around in the car with the windows down.

Ibuprofen or acetaminophen can make a child feel more comfortable.

When your child is sick, you might also want to consider sleeping overnight in the same room to provide close observation.

If you are not able to break your child's fast breathing and croupy cough, call your child's doctor or seek medical attention as soon as possible.

Medical professionals will need to evaluate your child if the croup appears serious or if there's any suspicion of airway blockage. If the croup becomes severe, doctors will give a breathing treatment that contains epinephrine (adrenalin). This reduces swelling in the airway quickly. Oxygen may also be given, and sometimes a child with croup will remain in the hospital overnight for observation. Doctors will also sometimes treat with steroids, which help with the airway swelling.

## Duration

The symptoms of croup generally peak 2 to 3 days after the symptoms of infection with a virus start. Viral croup usually lasts 3 to 7 days.

## When to Call the Doctor

Immediately call your doctor or seek medical attention if your child has:

- difficulty breathing, including rapid or labored breathing
- retractions: when the skin between the ribs pulls in with each breath
- stridor: high-pitched or squeaking noise when inhaling
- a pale or bluish color around the mouth
- drooling or difficulty swallowing
- a fatigued appearance
- signs of dehydration
- a very sick appearance

*Adapted from [www.kidshealth.org](http://www.kidshealth.org)*