# **Croup**

Reviewed by SickKids Hospital Staff

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Croup is a viral infection that causes airway inflammation, making it difficult to breathe. Learn about the symptoms and treatment of croup.

# **Key points**

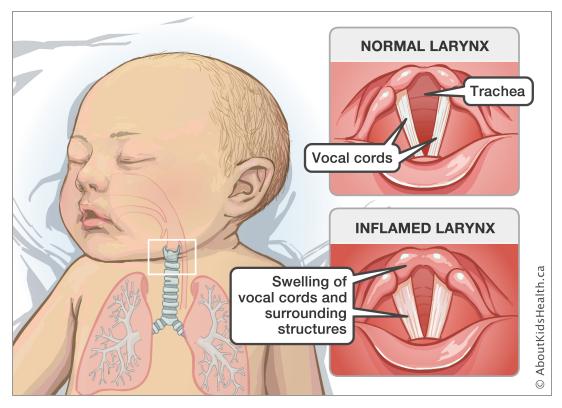
- Croup is a common childhood illness that is caused by a viral infection.
- For most children, croup is a mild illness that can be managed at home. There is no medicine that will make the virus go away faster, but there are ways to make your child more comfortable.
- If croup is more severe, take your child to see a doctor.

# What is croup?

Croup is a common childhood illness that is caused by a viral infection. The virus causes swelling in the upper airways, including the larynx (the upper airway between the throat and the trachea) and the <u>trachea</u> (the windpipe or airway passage from the larynx to the lungs).

The swelling can cause changes in your child's voice and make breathing difficult. Your child may develop a hoarse voice, barking cough or a high pitched wheezing sound when they breathe in (stridor). This is especially likely in younger children, because their airways are smaller.

# Croup



Croup is an infection that affects the upper part of the airway (larynx or voice box, and trachea or windpipe). This leads to swelling and narrowing of the airway.

# Signs and symptoms of croup

Croup usually begins like a regular cold, with nasal congestion and dry cough. Usually by day two or three, the cough becomes barky, the voice becomes hoarse and patients can develop a noisy breathing called stridor. Stridor is a high-pitched noise that occurs when breathing in through narrowed airways. In mild croup, your child may have stridor only when crying or coughing. If croup gets worse, your child may also have stridor when relaxed or sleeping, and may have trouble breathing.

Other symptoms of croup include:

- harsh "barking" cough
- noisy breathing (stridor)
- trouble breathing
- hoarse voice
- mild sore throat
- runny or <u>stuffy nose</u>
- fever

# Croup usually lasts for about one week

The viruses that cause croup usually last about one week. The barking cough and noisy breathing are usually worse during the first two or three days, and often worse at night.

# How did my child get croup?

Croup is caused by viruses that spread easily from person to person. These viruses are spread when a sick person coughs or sneezes.

# What can doctors do for croup?

#### Steroid medicine

Your doctor may prescribe a steroid medicine called <u>dexamethasone</u> to be taken by mouth. This medicine works to reduce the swelling in the airways. It takes a few hours for the steroid medicine to work fully, and the effect lasts for 24 to 36 hours. Usually only one or two doses are needed.

### **Epinephrine**

In the Emergency Department, if your child is having severe problems breathing, your child may be given a medicine called epinephrine. This is given with a mask that sprays epinephrine into your child's airways. This medicine will reduce the swelling in your child's airways very quickly. The effect lasts for about four hours. After four hours, the swelling may come back and your child may have problems breathing again. If epinephrine is needed, the doctor will want your child to stay in the Emergency Department for four to six hours or the doctor may keep your child in the hospital until their symptoms improve.

# Croup can spread easily

The viruses that cause croup are spread easily from one person to another, especially during the first few days. Keep your child home from daycare or school until the fever is gone and the barky cough has gone away. Keep your child away from young babies (under two months old) as much as you can.

Adults can become infected with the same virus that caused their child's croup. However, adults and older children have larger airways, and the illness is usually mild and can seem more like a cold.

# Taking care of your child at home

For most children, croup is a mild illness that can be managed at home. Here are some ways to help your child feel better:

#### **Cool mist**

Cool, humid air may help reduce the swelling in the airways that is causing the noisy or difficult breathing. Placing your child near a cool mist vaporizer is ideal. If you do not have a cool mist vaporizer, even a simple humidifier in your child's bedroom may be helpful. During the winter, you can open your child's bedroom window to let in some cool air, or take your child outside for a short time to breathe in the cool night air.

### Steamy bathroom

You can try running a hot shower with the bathroom door closed, so that the bathroom fills with steam. Sit with your child in the steam-filled bathroom for at least 10 minutes.

### Fever and pain medicines

You can treat fever or sore throat with <u>acetaminophen</u> or <u>ibuprofen</u>. DO NOT give your child <u>acetylsalicylic acid (ASA)</u>.

# Helping your child's cough

Cough is a symptom of croup. Cough medicines should not be given to children less than 6 years old. The cough will get better as the virus runs its course.

However, the viruses that cause croup can also trigger wheezing in children with <u>asthma</u> and can sometimes cause a chest infection. Take your child to the doctor if your child's cough seems severe, or if your child is having difficulty breathing or is working hard to breathe.

Children with croup can suddenly start to have trouble breathing, and this can happen more than once. While your child has croup, you may wish to sleep in the same room. This will let you know about any problems during the night.

# When to see a doctor

### Call your child's doctor if:

- the fever lasts more than three days
- the cough lasts more than one week
- your child is having noisy breathing
- your child complains of an earache
- you have other concerns or questions

www.aboutkidshealth.ca/croup

# Take your child to the nearest Emergency Department or call 911 if:

- the cool mist does not clear up the stridor in 15 minutes
- your child has repeated episodes of stridor or trouble breathing
- your child's chest or stomach is pulling in while breathing
- your child's lips look blue or purple
- your child starts drooling or spitting, has difficulty swallowing or refuses to drink
- your child has neck pain or neck stiffness
- your child seems lethargic (very sleepy) or irritable (very cranky)
- your child stops drinking or urinating

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