

# Croup and Your Young Child



Croup is a common illness in young children. It can be scary for parents as well as children. This brochure explains the different types of croup and the causes, symptoms, and treatments.

## What is croup?

Croup is an infection that causes a swelling of the voice box (larynx) and windpipe (trachea), making the airway just below the vocal cords become narrow. This makes breathing noisy and difficult.

Most children get infectious croup once or twice, and some children get croup whenever they have a respiratory illness. Children are most likely to get croup between 6 months and 3 years of age. After age 3, it is not as common because the windpipe is larger and swelling is less likely to get in the way of breathing. Croup can occur at any time of the year, but it is more common in the winter months.

## Different types of croup

- *Viral croup* is the most common and is the result of a viral infection in the voice box and windpipe. This kind of croup often starts with a cold that slowly turns into a barking cough. Your child's voice will become hoarse and her breathing will get noisier. She may make a coarse musical sound each time she breathes in, called *stridor*. Most children with viral croup have a low fever, but some have temperatures up to 104°F.
- *Spasmodic croup* is usually caused by a mild upper respiratory infection or allergy. It can be scary because it comes on suddenly in the middle of the night. Your child may go to bed with a mild cold and wake up in a few hours, gasping for breath. He will be hoarse and have stridor when he breathes in. He also may have a cough that sounds like a seal barking. Most children with spasmodic croup do not have a fever. This type of croup can reoccur. It is probably similar to asthma and often responds to asthma medicines.

As your child's effort to breathe increases, he may stop eating and drinking. He also may become too tired to cough, although you will hear the stridor more with each breath. The danger with croup accompanied by stridor is that the airway will keep swelling. If this happens, it may reach a point where your child cannot breathe at all.

Stridor is common with mild croup, especially when a child is crying or moving actively. But if a child has stridor while resting, it can be a sign of severe croup.

## Treatment

If your child wakes up in the middle of the night with croup, take her into the bathroom. Close the door and turn the shower on the hottest setting to let the bathroom steam up. Sit in the steamy bathroom with your child. Within 15 to 20 minutes, the warm, moist air should help her breathing. (She still will have the barking cough, though.)

For the rest of that night (and 2 to 3 nights after), try to use a cold-water vaporizer or humidifier in your child's room. Sometimes another attack of croup will occur the same night or the next. If it does, repeat the steam treatment in the bathroom. Steam almost always works. If it does not, take your child outdoors for a few minutes. Inhaling moist, cool night air may help open the air passages so that she can breathe more freely. If that does not help, call your pediatrician. If your child's breathing becomes a serious struggle or if your child looks blue, call for emergency medical services. (In most areas, dial 911.)

Never try to open your child's airway with your finger. Breathing is being blocked by swollen tissue out of your reach, so you cannot clear it away. Besides, putting your finger in your child's throat will only upset her. This can make her breathing even more difficult. For the same reasons, do not force your child to throw up. If she does vomit, hold her head down and then quickly sit her back up once she is finished.

## Treating with medication

If your child has viral croup and is not breathing better after the steam treatment, your pediatrician may prescribe a steroid medication to reduce swelling. Steroids can be inhaled, taken by mouth, or given by injection. Treatment with a few doses of steroids should do no harm. For spasmodic croup, your pediatrician may recommend a bronchodilator to help your child's breathing.

Antibiotics, which treat bacteria, are not helpful because croup is almost always caused by a virus or allergy. Cough syrups are of little use too, because they do not affect the larynx or trachea, where the infection is located. These also may get in the way of your child coughing up the mucus from the infection.

If you are concerned that your child has croup, call your pediatrician even if it is the middle of the night. Also, listen closely to your child's breathing. Call for emergency medical services immediately if he

- Makes a whistling sound that gets louder with each breath
- Cannot speak or make verbal sounds for lack of breath
- Seems to be struggling to get a breath
- Has a bluish mouth or fingernails
- Has stridor when resting
- Drools or has extreme difficulty swallowing saliva

In the most serious cases, your child will not be getting enough oxygen into his blood. If this happens, he may need to go into the hospital. Luckily, these severe cases of croup do not occur very often.

## Other infections

Another cause of stridor, barking cough, and serious breathing problems is acute epiglottitis (also known as supraglottitis). This is a dangerous infection with symptoms that can be a lot like those of croup. Luckily, the infection is less common now because there is a vaccine to protect against its cause, a bacterium called *Haemophilus influenzae* type b (Hib).

Acute epiglottitis usually affects children 1 to 5 years old and comes on suddenly with a high fever. Your child may seem very sick. She may have to sit up to be able to breathe. She also may drool because she cannot swallow the saliva in her mouth. If not treated, this disease could lead to complete blockage of your child's airway. If your pediatrician suspects acute epiglottitis, your child will go into the hospital for treatment with antibiotics. She will need a tube in her windpipe to help her breathe. Call your pediatrician immediately if you think your child has epiglottitis.

To protect against acute epiglottitis, your child should get the first dose of the Hib vaccine when she is 2 months old. This vaccine will also protect against meningitis (a swelling in the covering of the brain). Since the Hib vaccine has been available, the number of cases of acute epiglottitis and meningitis has decreased.

When croup persists or recurs frequently, your child may have some narrowing of the airway that is not related to an infection. This may be a problem that was present when your child was born, or one that developed later. If your child has persistent or recurrent croup, your pediatrician may refer you to a specialist for further evaluation.

Croup is a common illness during childhood. Although most cases are mild, croup can become serious and prevent your child from breathing. Contact your pediatrician if you suspect your child has croup. He or she will make sure your child is evaluated and treated properly.

The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.

## From your doctor

