

Croup

Croup is a respiratory infection with symptoms of a “barking” cough, hoarseness, and, at times, some difficulty breathing. The child usually improves after a few days of home treatment, but may need to see a doctor if the symptoms are severe enough.

- Children who have had croup before are more likely to have additional attacks.
- Infants or older children with narrowing of their airways (voice box) resulting from other conditions, such as being on a respirator with a breathing tube in place as a premature baby.

What is croup?

Croup is a respiratory infection involving the voice area (larynx) and windpipe (trachea). It is usually caused by a virus, including some of the same viruses that cause a cold. Croup usually occurs in younger children—about age 4 or less. It can be scary because of the sound of the “barking” cough, one of the main symptoms. Although most children recover in a few days, often there is some difficulty breathing. The medical term for croup is *laryngotracheitis*.

What does croup look like?

- Your child may have symptoms of a cold (runny nose, sore throat, or cough) for a few days before the typical symptoms begin.
 - A “barking” cough is the most common symptom.
 - It usually involves hoarseness.
- A harsh sound when breathing in is common. This is called *stridor*. This stridor can be mild or severe and cause difficulty breathing.
- If there is a lot of difficulty breathing, the ribs may stick out and the chest may get sucked in with each breath. This type of breathing is called *retraction*. Retractions can also occur where the neck meets the collar bones.
- Fever may be present.
- Symptoms, especially stridor, are worse when the child is upset or crying.
- Symptoms are usually worse at night and last a few days, but should be gone within a week.

What puts your child at risk of croup?

- Croup most often occurs in younger children, under age 3 to 4. When croup occurs in older children, it is usually less severe.
- Croup is most common in the winter months but can occur year round.

Can croup be prevented?

There is nothing specific you can do to prevent your child from developing croup.

How is croup diagnosed?

- Diagnosis is usually made from symptoms and physical examination.
- Occasionally an x-ray of the neck is needed to be sure the illness is croup.

How is croup treated?

Home treatment. If symptoms are mild, treatment can be done at home without seeing a doctor. The child must *not* have stridor (harsh sound when breathing in), retractions, or difficulty breathing. They also must not appear to be acting very sick and must be taking enough liquids.

- For some children, cool mist with a vaporizer or moist air with a humidifier may help.
- If a vaporizer or humidifier is not available, turning on a hot shower and sitting in the bathroom with your child may help.
- Lots of liquids.
- Acetaminophen (Tylenol) or ibuprofen (Advil) may be needed for fussiness or fever.

Other treatments at the doctor’s office, hospital, or emergency room:

- Steroids have been shown to be helpful and are often given except for very mild cases. Usually just one dose is needed, either orally or as a shot.
- If your child is having a lot of problems breathing, a drug called *epinephrine* may be given as a mist to breathe through a mask.
- Antibiotics are not given unless the doctor think a bacterial infection is now a problem.
- If your child is not taking enough liquids or is dehydrated, fluids may have to be given intravenously (IV).
- Oxygen may be needed if found to be low.

- Your child may have to stay in the hospital if there is still a lot of trouble breathing after the first treatments or if the problem returns.

What are some possible complications of croup?

- Most children recover from croup without problems.
- Although uncommon, breathing problems may become severe enough that a tube will be placed down your child's airway (windpipe) so he or she can breathe more freely. This is called *intubation*.
- Infection can spread to the smaller breathing tubes (bronchioles) or lungs and cause wheezing or pneumonia.



When should I call your office?

You should call our office or seek medical attention if:

- You are concerned that your child is having difficulty breathing.
- Stridor (harsh sounds when breathing in) occurs when your child is resting or calm.
- Your child shows evidence of stridor (chest caving in and ribs sticking out when breathing).
- Your child drools excessively.
- Your child turns blue (cyanosis) at any time. *This is an emergency—call 911.*
- Symptoms do not improve after a few days.

