

What is 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, usually parainfluenza virus and sometimes adenovirus or respiratory syncytial virus (RSV). Viral croup is most common and the symptoms are most severe in children 6 months to 3 years old, but can affect older kids too. Some children are more prone to developing croup when they get a viral upper respiratory infection. Most cases of viral croup are mild and can be treated at home. Rarely, croup can be severe and even life threatening.

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 more 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 continues to swell, you may hear a high-pitched or squeaking noise during inhalation (called stridor). A child also might breathe very fast or have retractions (when the skin between the ribs pulls in during breathing).

Symptoms of croup are often worse at night and when children are upset or crying. Besides the effects on the upper airway, the viruses that cause croup can cause inflammation farther down the airway and affect the bronchi (large breathing tubes that connect to the windpipe).

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.

Treatment

Since croup is a viral infection, antibiotics are of no benefit and not prescribed. Most, though not all, cases of viral croup are mild. Breathing in moist air helps most kids feel better, and ibuprofen or acetaminophen (only in children over 6 months old) can make them more comfortable. As with most illnesses, rest and plenty of fluids are recommended. 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, taking your child outside for a few minutes to breath in the cool air can ease symptoms. You also can try taking your child for a drive with the car windows slightly lowered.

Duration

Croup symptoms generally peak 2 to 3 days after the symptoms of the viral infection begin. Viral croup usually lasts 7 to 10 days.

Complications

The vast majority of children recover from croup with no complications. Rarely, a child can develop a bacterial infection of the upper airway, or pneumonia. Dehydration may follow inadequate fluid intake. Children who were born prematurely or who have a history of lung disease (such as asthma) or neuromuscular disease (like cerebral palsy) are more likely to develop severe croup symptoms and often require hospitalization. Still, croup rarely causes any long-term complications.

Prevention

Frequent hand washing and avoiding contact with people who have respiratory infections are the best ways to prevent spreading the viruses that cause croup.

When you call the doctor:

If your child is doing well, no follow up is necessary.

You should follow up immediately if your child develops any of the following:

- Fever above 104 degrees not responding to medication
- No improvement after two days of medication
- Signs of dehydration (dry mouth, lethargy, sunken eyes, and decreased urine)
- Difficulty swallowing, talking or breathing
- Increased drooling
- Rapid, labored, noisy breathing
- Worsening symptoms
- Signs of dehydration (including a dry or sticky mouth, few or no tears, sunken eyes, thirst, no urine or only a little dark yellow urine for 8-12 hours, extreme tiredness)