Croup

Definition

Croup, which is marked by a harsh, repetitive cough similar to the noise of a seal barking, can be scary for children and their parents.

The barking cough of croup is the result of inflammation around the vocal cords (larynx) and windpipe (trachea). When the cough reflex forces air through this narrowed passage, the vocal cords vibrate with a barking noise. Because children have small airways to begin with, those younger than age 5 are most susceptible to having more-marked symptoms with croup.

Croup usually isn’t serious. Most cases of croup can be treated at home. Sometimes, your child will need a prescription medication.

Symptoms

The classic sign of croup is a loud, harsh, barking cough—which often comes in bursts at night. Your child’s breathing may be labored or noisy. Fever and a hoarse voice are common, too.

When to see a doctor

Most cases of croup can be treated at home with a few simple self-care measures. However, you should seek immediate medical attention if your child:

- Makes noisy, high-pitched breathing sounds when inhaling (stridor)
- Begins drooling or has difficulty swallowing
- Seems agitated or extremely irritable
- Struggles to breathe
- Develops blue or grayish skin around nose, mouth or fingernails
- Has a fever of 103.5 F (39.7 C) or higher
**Causes**

Croup is often caused by the parainfluenza virus. Less often, respiratory syncytial virus or various other respiratory viruses cause croup.

Your child may contract a virus by breathing infected respiratory droplets coughed or sneezed into the air. Virus particles in these droplets may also survive on toys and other surfaces. If your child touches a contaminated surface and then touches his or her eyes, nose or mouth, an infection may follow.

Rarely, croup may be caused by bacterial infection.

**Risk Factors**

Croup is most common in children age 5 and younger. Signs and symptoms are typically most severe in children age 3 and younger because of their smaller airways.

**Complications**

Most cases of croup are mild. Rarely, the airway swells enough to interfere with breathing. Pneumonia is a rare but potentially serious complication.

**Treatments and drugs**

In most cases, self-care measures at home—such as breathing moist air and drinking fluids—can speed your child’s recovery. More aggressive treatment is rarely needed.

If your child’s symptoms persist or worsen, his or her doctor may prescribe corticosteroids, epinephrine or another medication to help open the airways. Antibiotics are effective only if your child has a bacterial infection.

For severe croup, your child may need to spend time in a hospital receiving humidified oxygen. Rarely, a temporary breathing tube may need to be placed in a child’s windpipe.

Croup can be scary—especially if it lands your child in the doctor’s office, hospital or emergency room. Hold your child, sing lullabies or read quiet stories. Offer a favorite blanket or toy. Speak in a soothing voice. Your presence can help keep your child calm.

**Lifestyle and home remedies**

Croup often runs its course within three to seven days. In the meantime, keep your child comfortable with a few simple measures.

- Stay calm. Comfort or distract your child—cuddle, read a book or play a quiet game. Crying makes breathing more difficult.
• Moisten the air. Use a cool-air humidifier in your child’s bedroom or have your child breathe the warm, moist air in a steamy bathroom. Although researchers have questioned the benefits of humidity as part of emergency treatment for croup, moist air seems to help children breathe easier—especially when croup is mild.
• Get cool. Sometimes breathing fresh, cool air helps. If it’s cool outdoors, wrap your child in a blanket and walk outside for a few minutes.
• Hold your child in an upright position. Sitting upright can make breathing easier. Hold your child on your lap, or place your child in a favorite chair or infant seat.
• Offer fluids. For babies, water, breast milk or formula is fine. For older children, soup or frozen fruit pops may be soothing.
• Encourage resting. Sleep can help your child fight the infection.
• Try an over-the-counter pain reliever. If your child has a fever, acetaminophen (Tylenol, others) may help. Cough syrup, which doesn’t affect the larynx or trachea, isn’t likely to relieve your child’s cough. Over-the-counter cold preparations are not recommended for children younger than age 5.

Your child’s cough may improve during the day, but don’t be surprised if it returns at night. You may want to sleep near your child or even in the same room so that you can take quick action if your child’s symptoms become severe.

Prevention

To prevent croup, take the same steps you use to prevent colds and flu. Frequent hand washing is most important. Also keep your child away from anyone who’s sick, and encourage your child to cough or sneeze into his or her elbow.

To stave off more-serious infections, keep your child’s immunizations current. The diphtheria, Haemophilus influenza type b (HIB) and measles vaccines offer protection from some of the rarest—but most dangerous—forms of upper airway infection.