



Croup

What is croup?

Croup is a viral infection of the vocal cords, voice box (larynx), and windpipe (trachea). It is caused by Rhinovirus, Adenovirus, Influenza, Parainfluenza or RSV.

Symptoms of a **croup** include:

- a tight, low-pitched "barking" cough
- a hoarse voice
- Plus any other symptom that can come with any cold – sore throat, runny nose, cough, fever, ear infection, etc.

You may hear a harsh, raspy, vibrating sound when your child breathes in. This is called **stridor**. Stridor is usually present only with crying or coughing. As the disease becomes worse, stridor also occurs when your child is sleeping or relaxed. With severe **croup**, breathing may be difficult.

What causes the breathing problems in croup?

The "croupy" or stridorous part of croup is caused by swelling of the vocal cords and the lining of the airway around the vocal cords as part of the viral illness. It causes hoarseness. Stridor is caused by the opening between the vocal cords becoming more narrow due to that swelling.

How long will it last?

Croup usually lasts for 5 to 6 days and generally gets worse at night. During this time, it can change from mild to severe and back many times. The worst symptoms are seen in children under 3 years of age.

How is the stridor treated?

First Aid For Stridor

If your child suddenly develops stridor or tight breathing, do the following:

- **If it is severe or scary call 911 if it is an emergency, or call the doctor on call if less urgent.**
- **Home remedies that can help are:**
 - **Inhalation of cold or warm steam:** Steam from a hot shower or a vaporizer or nebulizer can help difficulty breathing (the stridor).
 - **Breathing ice cold air:** If it is very cold outside you can dress your child warmly and go into the outside air. The cold air will shrink the swelling around the vocal cords and make the breathing easier.
- **Steroids** – Oral steroids can also shrink the swelling in the airway and vocal cords. It won't cure any other symptoms of croup, but it can help breathing. It can take up to 4 hours to take effect so we like to start them early when needed. We generally recommend oral steroids for someone who has stridor during the day time, or had distress the night before. The most common side effect, if any, is irritability in about 10% of patients. The steroids are discontinued after having a night without stridor
- **Emergency Room Treatment:** There are medications that can be administered in aerosol that can help shrink the swelling of the vocal cords. The effect lasts just 4 hours and is used in the most severe cases, and the child may need to be observed until the medication has worn off to make sure that there is not a significant relapse when the medication wears off.
- **Other suggestions:**
 - **Close observation** While your child is **croupy**, sleep in the same room with him. **Croup** can be a dangerous disease.
 - **Smoke exposure** Never let anyone smoke around your child. Smoke can make **croup** worse.