

What is croup? Its symptoms and treatment

October 9 2023, by Kelly Quinn, Boston Children's Hospital



Croup can be a scary thing for new parents to watch their babies struggle with, so here is a primer on what it is and how to best treat it.

Croup is a common respiratory illness, characterized by a narrowing of the main airway (the trachea), just below the vocal cords. It can be caused by many different viruses, including influenza, COVID-19 and RSV. However, the most common virus to cause croup is parainfluenza.

Because it is caused by viruses, croup is usually accompanied by symptoms such as fever, congestion or [runny nose](#). Croup is caused by inflammation and swelling in the [upper airway](#). As a result of this narrowing, patients can have symptoms such as stridor (a high-pitched noise when breathing in), a barking cough or a hoarse voice.

Croup is most common in children aged 6 months to 3 years of age, but it can happen in infants and older children. Younger children are more susceptible to developing croup with viral illnesses because the diameter of their upper airway is smaller than [older children](#) and adults. Children who already have upper airway narrowing, or who are experiencing significant congestion, allergies or reflux, may be predisposed to more severe cases of croup.

Most cases of croup occur in fall or early winter during peak viral seasons; however, it can occur at any time. Symptoms are often worse at nighttime and improve during the day.

Is croup contagious?

The viruses that cause croup are contagious. However, another child who catches the same virus may not develop croup. Patients are usually contagious for a few days, or until fevers have resolved for 24 hours without fever-reducing medications.

Croup symptoms

The symptoms of croup are distinct from other types of respiratory infections. Because of the effects on the upper airway, the cough associated with croup sounds barky, or seal-like. Additionally, the high-pitched noise during breathing in is indicative of upper airway narrowing.

Croup symptoms include:

- Cold symptoms such as runny nose, congestion, fever
- Barky cough
- Hoarse voice or "laryngitis"
- Stridor (high-pitched noise when breathing in), which may be worse with crying, agitation or activity

Severe symptom of croup include:

- Retractions (sucking in the skin around the ribs or neck)
- Nasal flaring
- Belly breathing
- Rapid breathing
- Turning blue
- Not being able to drink enough to stay hydrated

These are reasons to immediately seek care in the nearest emergency room.

Croup vs. RSV: What's the difference?

RSV ([respiratory syncytial virus](#)) is a specific type of virus that can cause different forms of respiratory illness, including croup. RSV may also cause lower respiratory symptoms such as bronchiolitis, wheezing or viral pneumonia.

Can adults get croup?

Adults can get the same viruses that cause croup; however, they rarely develop croup symptoms because the diameter of their upper airway is larger than in children.

Croup treatment

Most cases of croup are mild and can be treated at home. However, in some children it can lead to [respiratory distress](#) if the airway narrowing becomes severe.

Mild croup can be treated at home with:

- Humidified air
- Going out into cold air for short periods, as this may reduce some of the swelling
- Ibuprofen (if older than 6 months) or acetaminophen can help with fevers, or if the cough is irritating
- Staying hydrated and drinking lots of fluids
- Avoiding things that cause agitation or distress

Additionally, your doctor may prescribe an oral steroid called dexamethasone, which can reduce the inflammation in the upper airway. More severe cases of croup may need treatment with an inhaled medication called racemic epinephrine. Rarely, children may require hospitalization and treatment with [supplemental oxygen](#) or more advanced forms of respiratory support at hospitals like [Boston Children's](#). Most patients with croup recover fully without long-term consequences.

Copyright © 2023 [HealthDay](#). All rights reserved.

Citation: What is croup? Its symptoms and treatment (2023, October 9) retrieved 29 April 2024 from <https://medicalxpress.com/news/2023-10-croup-symptoms-treatment.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.