

# Croup

## EVIDENCE REPOSITORIES

Evidence repositories are collections of best available resources and evidence (clinical guidelines, peer reviewed literature, systematic reviews, etc.), collated by our knowledge synthesis team and content advisors. This evidence repository is not intended to be an exhaustive list of resources for a topic, but rather a curated list of current, evidence-based resources, based on expert consensus of relevance and usability for a general emergency department setting. We search databases (Cochrane Library, PubMed, TRIP Database) and web search engines (Google, Google Scholar) to locate evidence. Additionally, hospital websites are browsed for guidance documents, such as clinical practice guidelines (CPG) for healthcare professionals.

Every effort is made to identify resources that are open access (i.e. publicly available, free of charge, not requiring a subscription).

More information about the creation of our evidence repositories can be found at <https://pubmed.ncbi.nlm.nih.gov/28537762/>

## CONTENT TEAM

Thank you to the following content experts and Knowledge Synthesis team who led the development of this evidence repository.

**David Johnson, MD**

*Professor of Pediatrics and Physiology and Pharmacology  
University of Calgary, Faculty of Medicine  
Senior Medical Director, AHS Maternal Newborn Child and Youth Strategic Clinical Network*

**Jennifer Turnbull, MD FRCPC**

*Assistant Professor, Division of Pediatric Emergency Medicine, McGill University  
Co-Director, McGill Global Child Health Program  
Montreal Children's Hospital*

**Georgina Eagleson, MD**

*McGill Pediatrics  
Montreal Children's Hospital*

**Liza Bialy**

*Knowledge Synthesis Project Coordinator, Alberta Research Centre for Health Evidence,  
Department of Pediatrics,  
University of Alberta,  
Edmonton, AB, Canada*

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TREKK developed resources for healthcare providers and parents & families can be found [here](#).

## Clinical Guidelines

1. Bjornson C JD. [BMJ Best Practice: Croup](#). *BMJ Best Practice*. 2018.
2. Ortiz-Alvarez O. [Acute management of croup in the emergency department](#). *Paediatr Child Health*. 2017;22(3):166-73.
3. Alberta Medical Association. [Diagnosis and Management of Croup, Summary of the Alberta Clinical Practice Guideline](#). 2015.

## Overviews

1. Alberta Research Centre for Health Evidence (ARCHE), TREKK Network. [Cochrane Overview: Evidence Summary: Croup 2014](#). 2014
2. Bjornson CL, Johnson DW. [Croup in children](#). *CMAJ*. 2013;185(15):1317-23.
3. Bjornson C, Russell, K, Vandermeer, B, et al. [Cochrane Summary: Nebulized epinephrine for croup in children](#). *Cochrane Database Syst Rev*. 2013;Art. No.: CD006619(10).
4. Bjornson C, Russell, K, Foisy, M, Johnson, D. [Cochrane Overview: The Cochrane Library and the treatment of croup in children: an overview of reviews](#). *Evid Based Child Health*. 2010(5):1555-65.

## Systematic Reviews

1. Aregbesola A, Tam CM, Kothari A, et al. [Glucocorticoids for croup in children](#). *Cochrane Database Syst Rev*. 2023;1:Cd001955.
2. Moraa I, Sturman N, McGuire TM, et al. [Heliox for croup in children](#). *Cochrane Database Syst Rev*. 2021;10(10):Cd006822.
3. Gates A, Gates M, Vandermeer B, et al. [Glucocorticoids for croup in children](#). *Cochrane Database Syst Rev*. 2018;8(8):Cd001955.
4. Bjornson C, Russell K, Vandermeer B, et al. [Nebulized epinephrine for croup in children](#). *Cochrane Database Syst Rev*. 2013(10):Cd006619.
5. Moore M, Little P. [Humidified air inhalation for treating croup](#). *Cochrane Database Syst Rev*. 2006(3):Cd002870.

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## Key Studies

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- Pierantoni L, Stera G, Andreozzi L, et al. [Multicentre study revealed significant gaps between evidence-based recommendations for using corticosteroids for croup and clinical practice](#). *Acta Paediatr*. 2022;111(10):2010-6.
- Park S, You J, Lee J, et al. [Two Case Reports of Life-Threatening Croup Caused by the SARS-CoV-2 Omicron BA.2 Variant in Pediatric Patients](#). *J Korean Med Sci*. 2022;37(24):e192.
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- Hester G, Nickel AJ, Watson D, et al. [Use of a Clinical Guideline and Order set to Reduce Hospital Admissions for Croup](#). *Pediatrics*. 2022;150(3).
- Brewster RC, Parsons C, Laird-Gion J, et al. [COVID-19-Associated Croup in Children](#). *Pediatrics*. 2022;149(6).
- Pound CM, Knight BD, Webster R, et al. [Predictors of Hospitalization for Children with Croup, a Population-Based Cohort Study](#). *Hosp Pediatr*. 2020;10(12):1068-77.
- Bagwell T, Hollingsworth A, et al. [Management of Croup in the Emergency Department: The Role of Multidose Nebulized Epinephrine](#). *Pediatr Emerg Care*. 2020;36(7):e387-e92.
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- Rosychuk RJ, Klassen TP, Voaklander DC, et al. [Seasonality patterns in croup presentations to emergency departments in Alberta, Canada: a time series analysis](#). *Pediatr Emerg Care*. 2011;27(4):256-60.
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17. Scolnik D, Coates AL, Stephens D, et al. [Controlled delivery of high vs low humidity vs mist therapy for croup in emergency departments: a randomized controlled trial](#). *JAMA*. 2006;295(11):1274-80.
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