

# Bronchiolitis

## 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

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

## Clinical Guidelines

1. O'Brien S, Borland ML, Cotterell E, Armstrong D, Babl F, Bauert P, et al. [Australasian bronchiolitis guideline](#). Journal of Paediatrics and Child Health. 2019;55(1):42-53.
2. NICE Guideline (NG9). [Clinical Guideline: Bronchiolitis in children: diagnosis and management](#). 2015.
3. Canadian Paediatric Society. [Bronchiolitis: Recommendations for diagnosis, monitoring and management of children one to 24 months of age](#). 2014.
4. Ralston SL, Lieberthal AS, Meissner HC, Alverson BK, Baley JE, Gadomski AM, et al. [Clinical practice guideline: the diagnosis, management, and prevention of bronchiolitis](#). American Academy of Ped. 2014.

## Summaries of Systematic Reviews

1. Dalziel SR, Haskell L, O'Brien S, Borland ML, Plint AC, Babl FE, et al. [Bronchiolitis](#). Lancet. 2022;400(10349):392-406.
2. Bialy L, Foisly M, Smith M, Fernandes RM. [The Cochrane Library and the treatment of bronchiolitis in children: an overview of reviews](#). Evidence-Based Child Health: A Cochrane Review Journal. 2011;6(1):258-75.

## Systematic Reviews

1. Pereira RA, Oliveira de Almeida V, Zambrano M, Zhang L, Amantéa SL. [Effects of nebulized epinephrine in association with hypertonic saline for infants with acute bronchiolitis: A systematic review and meta-analysis](#). Health Sci Rep. 2022;5(3):e598.
2. Lin J, Zhang Y, Song A, Ying L, Dai J. [Exploring the appropriate dose of nebulized hypertonic saline for bronchiolitis: a dose-response meta-analysis](#). J Investig Med. 2022;70(1):46-54.
3. Kuitunen I, Kiviranta P, Sankilampi U, Salmi H, Renko M. [Helium-oxygen in bronchiolitis-A systematic review and meta-analysis](#). Pediatr Pulmonol. 2022;57(6):1380-91.
4. Jat KR, Dsouza JM, Mathew JL. [Continuous positive airway pressure \(CPAP\) for acute bronchiolitis in children](#). Cochrane Database Syst Rev. 2022;4(4):Cd010473.
5. Elliott SA, Gaudet LA, Fernandes RM, Vandermeer B, Freedman SB, Johnson DW, et al. [Comparative efficacy of bronchiolitis interventions in acute care: a network meta-analysis](#). Pediatrics. 2021;147(5).
6. Cai Z, Lin Y, Liang J. [Efficacy of salbutamol in the treatment of infants with bronchiolitis: A meta-analysis of 13 studies](#). Medicine (Baltimore). 2020;99(4):e18657.
7. O'Brien S, Craig S, Babl FE, Borland ML, Oakley E, Dalziel SR. [Rational use of high-flow therapy in infants with bronchiolitis. What do the latest trials tell us? A Paediatric Research in Emergency Departments International Collaborative perspective](#). J Paediatr Child Health. 2019;55(7):746-52.

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8. McDaniel CE, Ralston S, Lucas B, Schroeder AR. [Association of diagnostic criteria with urinary tract infection prevalence in bronchiolitis: a systematic review and meta-analysis](#). JAMA Pediatr. 2019;173(3):269-77.
9. Lin J, Zhang Y, Xiong L, Liu S, Gong C, Dai J. [High-flow nasal cannula therapy for children with bronchiolitis: a systematic review and meta-analysis](#). Arch Dis Child. 2019;104(6):564-76.
10. Zhang L, Mendoza-Sassi RA, Wainwright C, Klassen TP. [Nebulised hypertonic saline solution for acute bronchiolitis in infants](#). Cochrane Database of Systematic Reviews. 2017.
11. Farley R, Spurling GKP, Eriksson L, Del Mar CB. [Antibiotics for bronchiolitis in children under two years of age](#). Cochrane Database of Systematic Reviews. 2014.
12. Fernandes RM, Bialy LM, Vandermeer B, Tjosvold L, Plint AC, Patel H, et al. [Glucocorticoids for acute viral bronchiolitis in infants and young children](#). Cochrane Database of Systematic Reviews. 2013.

## Key Studies

1. Eşki A, Öztürk GK, Turan C, Özgül S, Gülen F, Demir E. [High-flow nasal cannula oxygen in children with bronchiolitis: A randomized controlled trial](#). Pediatr Pulmonol. 2022;57(6):1527-34.
2. Durand P, Guiddir T, Kyheng C, Blanc F, Vignaud O, Epaud R, et al. [A randomised trial of high-flow nasal cannula in infants with moderate bronchiolitis](#). Eur Respir J. 2020;56(1).
3. Wrotek A, Czajkowska M, Jackowska T. [Chest radiography in children hospitalized with bronchiolitis](#). Adv Exp Med Biol. 2019;1222:55-62.
4. Seliem W, Sultan AM. [Does heliox administered by low-flow nasal cannula improve respiratory distress in infants with respiratory syncytial virus acute bronchiolitis? A randomized controlled trial](#). An Pediatr (Engl Ed). 2019;90(1):3-9.
5. Flores-González JC, Valladares CM, Yun Castilla C, Mayordomo-Colunga J, Quesada SP, Martín Delgado CM, et al. [Association of fluid overload with clinical outcomes in critically ill children with bronchiolitis: bronquiolitis en la unidad de cuidados intensivos pediátricos \(BRUCIP\) study](#). Pediatr Crit Care Med. 2019;20(3):e130-e6.
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