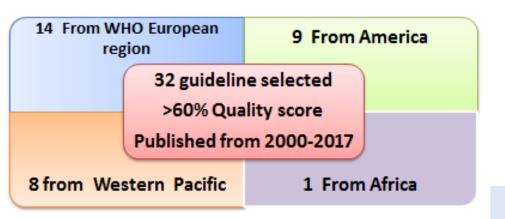
Background: Significant variation exists in the management of bronchiolitis between clinicians and hospitals, with therapeutic interventions poorly supported by evidence often performed.

Objective: Systematically identify current clinical practice guidelines for the diagnosis and management of bronchiolitis in children.





# ACADEMIC P.E.A.R.L.S

Pediatric Evidence And Research Learning Snippet



# What helps & What doesn't in Bronchiolitis A Systematic Review

A Systematic Review of Clinical Practice Guidelines for the Diagnosis and Management of Bronchiolitis. The Journal of Infectious Diseases 2019:222 (Suppl 7)

#### Results:

Diagnostic test - No guidelines recommend any routine diagnostic tests

Hospital Admission Criteria	No of Guidelines recommending
Moderate-to severe respiratory distress	25
Threshold for oxygen saturation ≤ 92%	10
Poor feeding (<50% of usual intake) or dehydration	25
Cyanosis and Apnea	21 and 24
High risk infants	23

General Supportive Management	No of Guidelines recommending
Oxygen (Cutoff SpO2< 92%)	29
CPAP	14
Airway clearance	16
Hydration and Nutrition	25
Nosocomial infection Prevention	17

Pharmacological Therapy	Recommending Routine Use	Recommending Against Routine Use, No.	Equivocal Evidence Or Recommend Considering a Trial of Use, No.
Bronchodilator	3	22	14
Nebulized Epinephrine	3	19	7
Hypertonic saline	8	7	7
Corticosteroid	0	29	5
Antivirals	0	20	4
Montelukast	0	10	0
Antibiotics	0	26	0

Key Message: Management of bronchiolitis is predominantly supportive, with no specific effective therapies available.

## EXPERT COMMENT

Avoid unnecessary diagnostic investigations.



Recommendations are against the routine use of neb adrenaline, corticosteroids, montelukast & antibiotics.

The use of hypertonic saline has been contentious. Most recent evidence is against routine use of bronchodilator & hypertonic saline.

The most commonly specified oxygen saturation threshold ranged from 90% to <92% for guiding hospital admission and for commencing oxygen therapy.

This review doesn't investigate use of HFNC.

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# DR BAKUL JAYANT PAREKH National President 2020

Hon. Secretary Gen. 2020-21

DR G.V. BASAVARAJ

#### <u>Reference</u>

Amir Kirolos, Sara Manti, Rachel Blacow, Gabriel Tse, Thomas Wilson, RESCEU Investigators, A Systematic Review of Clinical Practice Guidelines for the Diagnosis and Management of Bronchiolitis, The Journal of Infectious Diseases, Volume 222, Issue Supplement\_7, 1 November 2020, Pages S672–S679, https://doi.org/10.1093/infdis/jiz240