

## Emergency Department Bronchiolitis Surge Guidance

The following guidance pertains to children <2 years of age with the clinical diagnosis of bronchiolitis during the 2022 Fall/Winter Respiratory Viral Pathogen Surge. These are evidence-based, inclusive of 2014 AAP Recommendations (article attached), and are meant to supplement but not replace one's own clinical judgment.

Aim: To improve compliance with AAP published guidelines and minimize potentially unnecessary treatments in bronchiolitis. Treatments not routinely recommended include: viral testing, laboratory testing, albuterol\*, racemic epinephrine\*, 3% saline, corticosteroids, antibiotics\*\*, chest x-ray, chest physiotherapy.

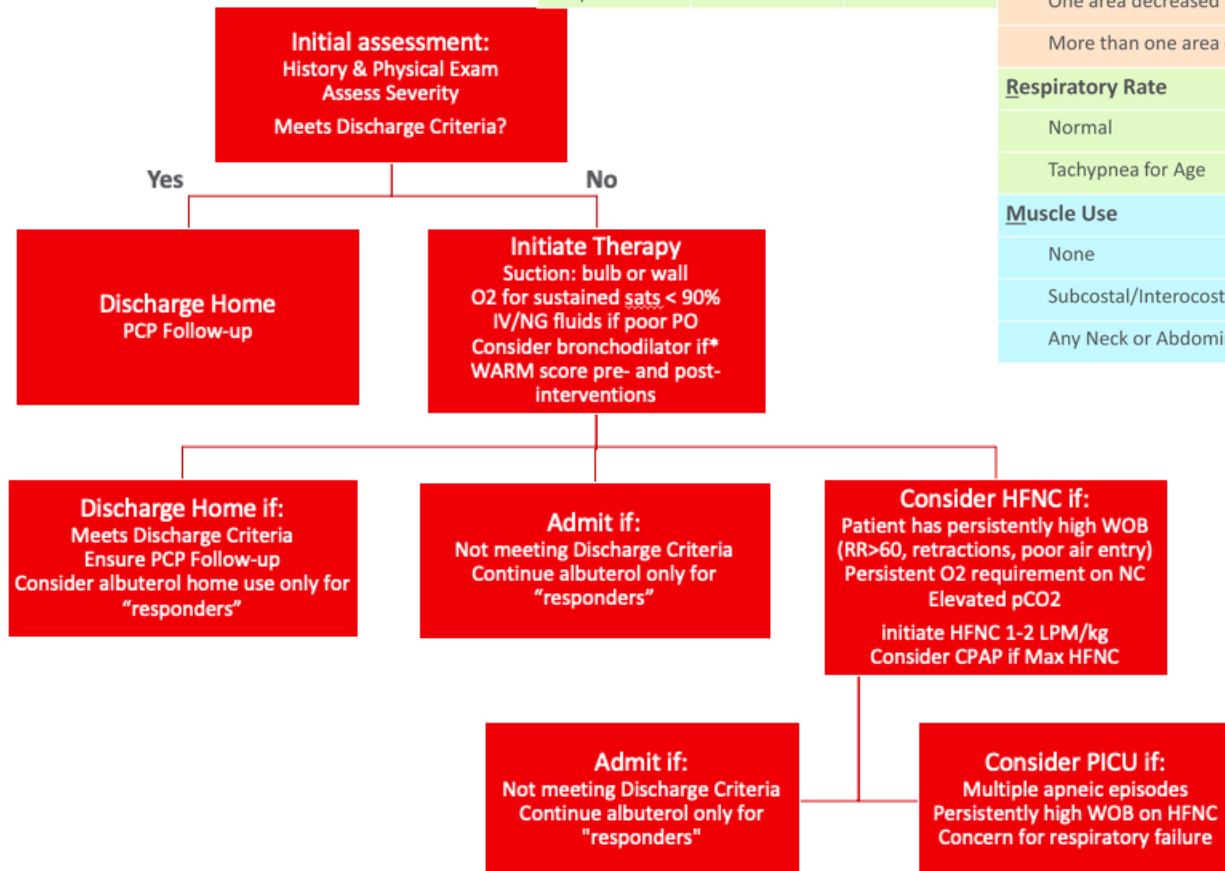
Exclusion criteria: critical bronchiolitis, congenital heart disease, chronic lung disease, neuromuscular disease, immunodeficiency, transplant recipients, genetic abnormalities.

\*Recommendation is for trial of racemic epinephrine.

\*If strong family or personal history of atopy or previous bronchodilator, consider albuterol.

\*\*If strongly suspecting bacterial co-infection, can consider administration of antibiotics.

| Respiratory Diagnosis: HR/RR Parameters |      |     | WARM Score                   |       |
|---|------|-----|------------------------------|-------|
| Age                                     | HR   | RR  | Wheeze                       | Score |
| ≤ 5 mos                                 | <170 | <50 | None                         | 0     |
| 6-11 mos                                | <150 | <40 | Expiratory                   | 1     |
| 1-3 yr                                  | <150 | <30 | Expiratory/any inspiratory   | 2     |
| 4-5 yr                                  | <130 | <25 |                              |       |
| 6-8 yr                                  | <115 | <25 | <b>Air Exchange</b>          |       |
| 9-11 yr                                 | <110 | <25 | Normal                       | 0     |
| 12-15 yr                                | <100 | <25 | One area decreased           | 1     |
| ≥ 16yr                                  | <100 | <20 | More than one area decreased | 2     |
|   |      |     | <b>Respiratory Rate</b>      |       |
|   |      |     | Normal                       | 0     |
|   |      |     | Tachypnea for Age            | 1     |
|   |      |     | <b>Muscle Use</b>            |       |
|   |      |     | None                         | 0     |
|   |      |     | Subcostal/Intercostal        | 1     |
|   |      |     | Any Neck or Abdominal        | 2     |



### Discharge Criteria:

- Mild or no increased WOB
- O2 sat > 90% awake and off supplemental O2 unless going home on O2
- Adequate PO intake
- No apnea for > 24 hours
- Discharge teaching (caretakers comfortable with suctioning)
- Reliable caretaker
- Able to obtain follow-up care

### Admission Criteria:

- Discharge criteria not met
- Acute Care: Requires supplemental O2, high flow nasal cannula (if capable), or clinical progression expected
- PICU: Apnea, severe respiratory distress requiring high flow nasal cannula above maximum floor-capabilities, non-invasive ventilation or mechanical ventilation

### Risk Factors for Severe Disease:

- Age < 12 weeks
- History of prematurity < 34 wks GA
- Underlying cardiopulmonary disease or immunodeficiency

### References

1. Ralston, S. et al. (2014). Clinical Practice Guideline: The Diagnosis, Management, and Prevention of Bronchiolitis. *Pediatrics*;134:e1474–e1502.
2. Abaya, R. et al. (2022). *Emergency Department Clinical Pathway for Evaluation/Treatment of Children with Bronchiolitis*. Chop.edu. <https://www.chop.edu/clinical-pathway/bronchiolitis-emergent-evaluation-clinical-pathway>.
3. Mussman, GM. Et al (2017). Respiratory Scores as a Tool to Reduce Bronchodilator Use in Children Hospitalized With Acute Viral Bronchiolitis. *Hosp Pediatr*;7(5):279-286.

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