Clinical Practice Guideline for Bronchiolitis Management: Emergency Department

UPDATED 1.2.20

Infants presenting with signs and symptoms of upper respiratory infection progressing to lower respiratory symptoms[1]

Blue shaded area represents **Caregiver Initiated Protocol for Bronchiolitis 5-25**

Score → Suction → Rescore

Oxygen PRN to maintain sats ≥90% while awake (≥88% while asleep) or if severe respiratory distress

For temperature ≥38 C, also refer to **Fever Guideline** for appropriate age group

Mild CRS 0-2

Moderate CRS 3-6

Severe CRS ≥7 *Notify physician

Continue to evaluate & suction PRN Assess hydration[3]

At risk for Asthma[2]? — YES → Consider One Time Trial Albuterol. *If positive response, then Off Guideline and Consider **Asthma Guideline** for Further Management*

NO

MODERATE

Suction PRN → Reevaluate Assess Hydration[3]

SEVERE

Suction PRN

The following are not routinely indicated. Perform only if results are expected to change management:

- High Flow Nasal Cannula
- Blood gas
- Racemic Epinephrine

→ Reevaluate Assess Hydration[3]

Meets Discharge Criteria[4]

NO → Admit[6]

YES → Patient/Family Education[5] → Discharge

Literature shows the following are not beneficial routinely: CBC, CXR, RSV labs, antibiotics, serial aerosols, steroids and/or chest percussion.

CRS=Clinical Respiratory Score
HFNC= High Flow Nasal Cannula

[1]Inclusion Criteria

- Previously healthy infant
- 1-18 months of age
- Suspicion of diagnosis of bronchiolitis: upper respiratory symptoms such as rhinitis, coughing; lower respiratory signs such as wheezing, crackles, tachypnea, that may result in difficulty breathing and/or difficulty feeding

Exclusion Criteria:

- Toxic Appearance
- CLD (Chronic Lung Disease)
- Cardiac disease requiring baseline medications

Isolation Standard

- Per CDC/HICPAC Guidelines: Contact Droplet Isolation for the duration of the illness

[2]Risk for Asthma

Patient may be at increased risk for asthma if >12mo old:

- with wheeze plus history of atopy OR
- strong family history of atopy or asthma

Respiratory

- Suctioning: Oral, Bulb tip, or NP suctioning as needed; Wean to bulb suctioning

[3]Feeding/Hydration

- PO feeding preferred if respiratory rate <60
- Intake of 75% maintenance fluid needs is adequate unless dehydrated
- NG feedings preferred to IV fluids unless contraindicated or physician order. **Refer to NG policy: PC 19-02, HS-PC 19-02**
- If giving IVF, avoid hypotonic solution (D5¼ and D5½) due to risk of SIADH induced hyponatremia. D5NS or D5LR are preferred maintenance fluids.

[4]Discharge Criteria

Patient must meet all discharge criteria

- Room air sats consistently ≥ 90% while awake or ≥88% while asleep
- Able to handle secretions or bulb suctioning only
- Adequate activity & hydration
- Home care needs arranged
- Parent verbalizes/demonstrates understanding of: Natural history of the disease, bulb suctioning, and medications if indicated
- Parents able to follow-up with PCP within 48 hours or access emergency care if needed
- Administer influenza vaccine, unless contraindicated, refused, or already given.

[5]Patient/Family Education

- Nasal suctioning
- Signs/symptoms of respiratory distress
- Guidelines for feeding
- Review bronchiolitis teaching sheet
- No smoking in home & avoidance of other environmental pollutants

[6]Admission Criteria

- Persistent Significant WOB or required HFNC
- O_2 requirement to keep sats ≥90% while awake consistently
- Unable to handle secretions with bulb suctioning
- Poor Feeding (Consider Nasogastric tube)
- Consider if history of apneic episode

Consider PICU admission if:

- Multiple episodes of apnea (>1) or any episode requiring bagging
- PCO_2 > 55, 30-60 minutes after initiation HFNC
- CRS ≥ 9 despite initiation HFNC
- FiO_2 ≥ 50%
- HFNC Max: Less than 3 kg- PICU
  - **>3 kg, see campus specific HFNC Guidelines**