

# Emergency Department Bronchiolitis Care Guideline

### At Risk for Severe Disease

- Premature (<32 weeks)
- Age < 12 weeks

### Inclusion Criteria:

- Age less than 2 years
- Mild rhinorrhea or nasal congestion for 1-3 days, followed by:
  - Persistent cough
  - Wheezing with or without rales
  - Tachypnea or retractions
  - Afebrile or T<39C

### Exclusion Criteria:

- Prior wheezing episode, concern for asthma, Asthma, Chronic Lung Disease, Anatomical defects of the airways, Hemodynamically significant congenital heart disease, Immunodeficiency, Neuromuscular disease, Signs of pneumonia (T >39C with focal findings on lung exam)

### NOT Indicated:

- CXR
- RSV/VRP
- Routine Labs (consider only if fever >39C)
- Antibiotics
- Bronchodilators
- Steroids
- Chest Physiotherapy

### Assessment

- Vital Signs with O2 saturation; Respiratory status

### Interventions

- Oxygen to keep O2 saturations >= 92%
- Assure adequate hydration PO or IV
- Frequent Suctioning

### Suction and Score to Determine Clinical Severity

\*Refer to HFNC Respiratory Assessment Scoring Tool

### Mild Disease

- No tachypnea
- No or minimal retractions
- Clear BS or mild end expiratory wheezing
- Looks well
- Feeding well and hydrated

- Continue to evaluate and suction PRN
- Assess hydration

### Moderate Disease

- Mild to moderate tachypnea
- Mild to moderate retractions
- Diffuse expiratory wheezing with or without early inspiratory wheeze
- May be irritable or ill-appearing but not toxic
- *HFNC Respiratory Assessment Score of > 5*

- Nasal Suctioning
- Pulse Ox
- Antipyretic for fever if indicated
- Repeat clinical assessments over next 1-2 hours
- Use High Flow Nasal Cannula

### Severe Disease

Any of the following:

- Apnea or history of apnea
- Marked tachypnea (RR >70)
- Marked retractions, nasal flaring or grunting
- Looks seriously ill or toxic
- Markedly irritable or decreased level of consciousness
- O2 sat persistently <90% or presence of cyanosis
- *HFNC Respiratory Assessment Score of >5*

- Notify physician
- Provide supplemental oxygen if pulse oximetry is <90%
- Use High Flow Nasal Cannula

### Recommendations/Considerations

- The mainstay of Bronchiolitis care is supportive with adequate hydration, oxygenation and maintaining an open airway by nasal bulb suctioning PRN.
- High Flow Nasal Cannula (HFNC) should be considered for patients presenting with increased respiratory distress. Refer to protocol for initiation, titration and transfer to ICU criteria includes starting at 4-8 LPM with Fio2 of 0.4 and titrating accordingly.
- Cardiorespiratory monitoring during acute phase for prematurity, chronic underlying conditions and for infants < 3 months of age.

### Discharge Criteria

- On room air without respiratory distress
- Able to handle secretions (bulb suction only)
- Adequate PO and activity
- Education complete; family able to demonstrate nasal bulb suctioning, verbalize follow up care, and as applicable: understand dosing and purpose of medications, discharge medication/equipment in place
- Parents able to follow-up with PMD within 48 hours or able to return to emergency care if needed

### Patient Education

- Bronchiolitis – Kids Health Handout – Parent Version
- Bulb suction

See page 2 for Admission Criteria

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## Admission Criteria

### • Clinical Indications for Admission to Inpatient Care

- Admission is indicated for **1 or more** of the following:
  - Hypotension (SBP less than 70mmHG)
  - Respiratory fatigue( elevated pCO<sub>2</sub>)
  - Hypoxemia (SPO<sub>2</sub> less than 92% on RA)
  - Central cyanosis
  - Apnea
  - Inpatient admission required because of **1 or more** of the following:
    - Tachypnea, wheeze, or retractions that are severe or persistent *after* observation care treatment
    - Inability to maintain oral hydration
    - Feeding difficulties
    - Lethargy
    - Other condition, treatment , or monitoring requiring inpatient admission per physician discretion

### • Observation is appropriate for patient with **1 or more** of the following:

- Infants with abnormal respiration indicated by **1 or more** of the following:
  - Tachypnea
  - Retractions
  - Wheezing
- Ability to feed or maintain hydration unclear
- Child whose situation includes **1 or more** of the following:
  - Clinical response to outpatient therapy uncertain
  - Outpatient supervision by parents or care givers uncertain
- Other observation care needs per physician discretion

### PICU Admission if:

- Multiple episodes of apnea
- HFNC Max: > 6L
- FiO<sub>2</sub> ≥ 40%

## References

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