Emergency Department Bronchiolitis Care Guideline

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
  - Tachyphnea 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)

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

Moderate Disease
- Mild to moderate tachyphnea
- 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

Severe Disease
- Any of the following:
  - Apnea or history of apnea
  - Marked tachyphnea (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

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

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

At Risk for Severe Disease
- Premature (<32 weeks)
- Age < 12 weeks

NOT Indicated:
- CXR
- RSV/VRP
- Routine Labs (consider only if fever >39C)
- Antibiotics
- Bronchodilators
- Steroids
- Chest Physiotherapy

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 Heath Handout – Parent Version
- Bulb suction

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Reassess the appropriateness of Care Guidelines as condition changes and 24 hrs after admission. This guideline is a tool to aid clinical decision making. It is not a standard of care. The physician should deviate from the guideline when clinical judgment so indicates.

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See page 2 for Admission Criteria
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 pCO2)
    - Hypoxemia (SPO2 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
- FiO2 ≥ 40%
References

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