Inpatient Bronchiolitis Care Guideline

Inclusion Criteria:
- Children who are ≤ 24 months of age,
- Suspected Bronchiolitis with respiratory distress or hypoxemia
- Months of October - March

Exclusion Criteria:
- PICU status,
- Prior wheezing episode, concern for asthma
- Co-morbidity (MRCP, CHD, suspected Sepsis, history < 33 wk prematurity, other significant disease

Assessment
- Respiratory status, O2 saturation w/ vital signs
- Vital signs based on acuity
- Continuous pulse oximetry ONLY if on supplemental oxygen or in distress

Interventions
- Contact isolation
- Oxygen to keep O₂ saturations ≥ 93%
- Assure adequate hydration PO or IV
- Nasal bulb suction PRN
- Begin patient education on admission

Continued Care Considerations
- Advance to diet for age as tolerated
- Wean O₂ to keep saturation > 90% when free of respiratory distress
- When respiratory distress resolved & stable on room air, change from continuous pulse oximetry to pulse oximetry spot checks

Discharge Criteria
- On room air without respiratory distress
- Adequate PO and activity
- Able to handle secretions (bulb suction only)
- Teaching completed; 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

Patient/Family Education
- Bronchiolitis – Kids Health Handout - Parent Version
- Bulb suction

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

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

Recommendations/
Considerations
- The mainstay of Bronchiolitis care is supportive with adequate hydration, oxygenation & maintaining an open airway by nasal bulb suctioning PRN.
- Suctioning should be performed by the least invasive/aggressive but effective means (i.e. bulb suction if possible). The transition from wall suction to bulb suction should be made well prior to discharge.
- Nebulized Hypertonic Saline 3%: Some studies suggest a decrease length of stay for nebulized hypertonic saline, but the quality of evidence is weak.
  - Dose: 4ml NEB 3%
  - Frequency: q6h until discharge
- High Flow Nasal Cannula (HFNC) should be considered for patients presenting with increased respiratory distress. Refer to Protocol for initiation flows and transfer to ICU criteria
- Consider Phenylephrine nose gtt 2-4 days, if nasally obstructed.
- Consider cardiorespiratory monitoring during acute phase for prematurity, chronic underlying conditions & for infants < 3 months of age.

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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References
Bronchiolitis Care Guideline


11/25/14; Reviewed and Revised 11/14/17
1. Score the patient according to vital signs and assessment
2. Insert score in each category and total.
3. If scoring a 3 on Any One of the following: Immediate Assessment by provider is required
4. Patients < 24 months, suction patient, reassess, score, if scoring > 5 place on HFNC according to policy.
5. Patients on bronchiolitis guidelines will be scored upon admission and Q shift if not on scheduled respiratory modalities.
6. Patients > 24 months scoring < 7, do not place on HFNC, utilize low flow oxygen, treatments and suctioning as appropriate.
7. Patients > 24 months scoring ≥8 place on HFNC according to policy

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### HFNC RESPIRATORY ASSESSMENT SCORING GRID

<table>
<thead>
<tr>
<th>SCORING TOOL</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Respiratory Rate</strong></td>
<td>Normal</td>
<td>Mild Tachypnea</td>
<td>Moderate Tachypnea</td>
<td>Severe Tachypnea</td>
<td></td>
</tr>
<tr>
<td>Neonates (0-1 mo) 30-60</td>
<td>Neonates (0-1 mo) 61-69</td>
<td>Neonates (0-1 mo) 70-79</td>
<td>Neonates (0-1 mo) &gt; 80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infants (1mo-1yr) 30-50</td>
<td>Infants (1mo-1yr) 51-60</td>
<td>Infants (1mo-1yr) 61-79</td>
<td>Infants (1mo-1yr) &gt; 80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toddler (1-4yr) 20-30</td>
<td>Toddler (1-4yr) 31-40</td>
<td>Toddler (1-4yr) 41-59</td>
<td>Toddler (1-4yr) &gt; 60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child (5-11yr) 18-25</td>
<td>Child (5-11yr) 25-30</td>
<td>Child (5-11yr) 30-35</td>
<td>Child (5-11yr) &gt; 35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent (12yr) 12-20</td>
<td>Adolescent (12yr) 21-25</td>
<td>Adolescent (12yr) 26-30</td>
<td>Adolescent (12yr) &gt; 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory Pattern</strong></td>
<td>No Distress</td>
<td>Prolonged Exhalation</td>
<td>Forced Exhalation</td>
<td>Prolonged /Forced Exhalation</td>
<td></td>
</tr>
<tr>
<td>or Nasal Flaring</td>
<td>or Moderate Retractions</td>
<td>or With Moderate to Severe Retractions</td>
<td>or with Use of Accessory Muscles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or Mild Retractions</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Breath Sounds</strong></td>
<td>Clear</td>
<td>Mild rales/rhonchi</td>
<td>Moderate rales/rhonchi</td>
<td>Absent BS</td>
<td></td>
</tr>
<tr>
<td>or Expiratory wheeze</td>
<td>or Biphasic wheeze</td>
<td>or Severe Stridor</td>
<td>or Severe Stridor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or Diminished BS</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Oxygen Saturations (on roomair)</strong></td>
<td>Normal range &gt;95%</td>
<td>Mild range 90-95%</td>
<td>Moderate range 85-90%</td>
<td>Severe range &lt;85%</td>
<td></td>
</tr>
</tbody>
</table>

PLEASE TALLY FOR TOTAL SCORE:

Clinical judgement supersedes any score related to this scoring tool.

*N/A if patient is on home oxygen or does not have normal baseline saturation*