PURPOSE: Bronchiolitis is most commonly caused in infants by viral lower respiratory tract infection. Airway edema and mucus plugging are the predominant pathological features. Current evidence suggests nebulized 3% saline may significantly reduce the length of hospital stay and improve the clinical severity score.

PROCEDURE:

I. Physician orders *Initiate Pediatric Bronchiolitis Protocol*.
II. If the physician desires to order a modality outside of the protocol, the physician will not order the protocol.
III. The respiratory therapist assesses the patient utilizing the Bronchiolitis Assessment Score.
IV. The therapist inputs the appropriate medication order(s) based on score, class (attachment 1) and algorithm (attachment 2). The order type is entered as Policy/MEC-approved Protocol.
V. All classes will have appropriate suction PRN.
VI. Classes 1-3 will get sodium chloride 3% inhalation solution (4mL) at the frequency designated in the algorithm. Albuterol MDI (2 puffs) with spacer or 2.5 mg nebulized will precede the sodium chloride only if indicated by patient or family history of asthma.
VII. A minimum of two treatments will be provided in each class prior to advancement.
VIII. Advancement will be based on pre-treatment score only.
IX. If the patient demonstrates an adverse reaction or an acute deterioration in condition, the therapist will abort any further therapy and contact the physician immediately.
### BRONCHIOLITIS ASSESSMENT/SCORING

<table>
<thead>
<tr>
<th>Class 1 Mild</th>
<th>Class 2 Moderate</th>
<th>Class 3 Severe</th>
<th>Class 4 Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>5-7</td>
<td>8-12</td>
<td>&gt;12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Respiratory Care Protocol</strong></th>
<th><strong>Written by: Respiratory Leaders</strong></th>
<th><strong>Policy Page 2 of 3</strong></th>
</tr>
</thead>
</table>

#### Respiratory Rate

<table>
<thead>
<tr>
<th>0 points</th>
<th>1 Point</th>
<th>2 Points</th>
<th>3 Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤40</td>
<td>41-50</td>
<td>51-60</td>
<td>&gt;60</td>
</tr>
</tbody>
</table>

#### Breath Sounds

<table>
<thead>
<tr>
<th>Clear</th>
<th>End Exp. Wheeze Crackles</th>
<th>Insp./Exp Wheeze Crackles</th>
<th>Insp./Exp Wheeze Crackles</th>
</tr>
</thead>
</table>

#### Retractions

<table>
<thead>
<tr>
<th>None to mild</th>
<th>Intercostal/Subcostal</th>
<th>Intercostal Substernal Supraclavicular</th>
<th>Global</th>
</tr>
</thead>
</table>

#### Mental Status

<table>
<thead>
<tr>
<th>Normal Alert</th>
<th>Irritable consolable</th>
<th>Irritable not consolable</th>
<th>Lethargic</th>
</tr>
</thead>
</table>

#### O2 Saturations

<table>
<thead>
<tr>
<th>95% on RA &lt;3 sec</th>
<th>92-94% on RA &lt;3 sec</th>
<th>90-95% on &lt;40% O2 &lt;3 sec</th>
<th>90% or &gt;40% O2 ≥3 sec</th>
</tr>
</thead>
</table>

#### CAP Refill

| 90% or >40% O2 ≥3 sec |
### Bronchiolitis Decision Tree

#### Class 1 – Mild (0-4)
- Suction Bulb/Nasal Aspirator/Deep PRN
- Sodium chloride 3% Q6 till discharge
- Pre-tx. 2.5 mg Albuterol if indicated
- If no improvement following 4 treatments, contact MD for further orders.
- Assure oxygenation and ventilation. Notify MD and RN immediately. Do not leave patient unattended.

#### Class 2 – Moderate (5-7)
- Suction Bulb/Nasal Aspirator/Deep PRN
- Sodium chloride 3% Q4 X 4
- Pre-tx. 2.5 mg Albuterol if indicated
- If no improvement following 3 treatments, contact MD for further orders.

#### Class 3 – Severe (8-12)
- Suction Bulb/Nasal Aspirator/Deep PRN
- Sodium chloride 3% Q2 X 3
- Pre-tx. 2.5 mg Albuterol if indicated
- If no improvement following 3 treatments, contact MD for further orders.

#### Class 4 – Critical (> 12)
- Suction Bulb/Nasal Aspirator/Deep PRN
- Sodium chloride 3% Q4 X 4
- Pre-tx. 2.5 mg Albuterol if indicated
- If no improvement following 3 treatments, contact MD for further orders.

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**Respiratory Care Protocol**

**Written by:** Respiratory Leaders

**Policy Page 3 of 3**

**Approved:** 10/2008

**Revision:** 07/2012

**Origin:** 10/2008

**Revised:** 06/2012

**Title:** Bronchiolitis Protocol
References for Respiratory Bronchiolitis Protocol