Bronchiolitis is a common lung infection in infants and young children (most common under age 2 years with a peak at 3-6 months). It causes congestion in the small airways of the lung. Bronchiolitis is caused by a virus. Typically, the peak time for bronchiolitis is during the winter months.

Clinical diagnosis of Viral Bronchiolitis
- Checking PCR, CXR or Labs are NOT indicated

If patient with Asthma please refer to Outpatient Asthma pathway

A. Clinical symptoms include, tachypnea, accessory muscle use, retractions, wheezing, decreased air movement
B. Ipatropium Bromide (Atrovent) has not been shown to improve the course of bronchiolitis
C. Pulmicort has not been shown to improve either short term or long term outcomes
D. Rescue bronchodilators or oral steroids have not been shown to improve outcome in bronchiolitis
E. Infants with these risk factors present early in the illness have higher risk of progression:
   - Gestational age < 34 weeks
   - Respiratory rate ≥ 70
   - Age < 3 months

Judicious Suctioning
- Evaluate need prior to feeds
- Avoid "deep" suctioning (beyond nasopharynx)
- Oxygen therapy for Sats ≤ 90%. Continuous pulse ox monitoring while on oxygen therapy.
  - Keep Sats between 90-94%
- Maintain adequate hydration – assess feeding and hydration

No benefit of 3% saline use in ED or urgent care to reduce admission
There is NO benefit of Albuterol, Atrovent, Pulmicort, Steroids, antibiotics

Clearing secretions by bulb suction (send home with home nasal suction)
- Able to take PO without hospital grade suction at least once
- Oxygen saturation on room air >90%
- No evidence of respiratory distress
- F/U with PCP in 2-3 days or sooner

Transfer to ED
- Persistent Hypoxemia
- Severe respiratory distress
- Respiratory failure requiring mechanical ventilation

Home Criteria
- Persistent Hypoxemia
- Severe respiratory distress
- Respiratory failure requiring mechanical ventilation
Bronchiolitis Scoring System – can be helpful when you think there is underlying reactive airway disease based on presentation or family history

<table>
<thead>
<tr>
<th>Clinical Variable</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>I:E Ratio</td>
<td>Less or equal to 1:2</td>
<td>Greater or equal to 1:3</td>
<td></td>
</tr>
<tr>
<td>Respiratory Rate (&lt;2 years)</td>
<td>Less than 49</td>
<td>Greater or equal to 50</td>
<td></td>
</tr>
<tr>
<td>Accessory Muscle Use</td>
<td>None</td>
<td>Retractions (intercostal, substernal, substernal)</td>
<td>Neck or abdominal muscles</td>
</tr>
<tr>
<td>Wheezes</td>
<td>Normal breath sounds or end expiratory</td>
<td>Entire expiratory</td>
<td>Entire expiration and inspiration</td>
</tr>
<tr>
<td>Air Exchange</td>
<td>normal</td>
<td>Localized decreased</td>
<td>Diffuse decreased</td>
</tr>
</tbody>
</table>

Summary of Bronchiolitis Scoring System

1. Scoring should be assessed post-suction
2. Consider a trial of SABA nebs if score is equal or greater than 3 – discontinue SABA if no improvement in the score
3. A decrease in score of greater or equal to 2 is considered significant improvement, suggestive of continued inhaled treatments.
4. If pre-treatment score is less than 3, nebs are not indicated.

References