Patient < 18 y/o with SOB and known or suspected Asthma

Cardiac Monitoring & O2 Monitoring & Vitals (Cardiac Monitoring as indicated by severity)

Assess Asthma Severity (PASS Score)

Mild

Albuterol + Atrovent x 1

Consider Steroids

Same/Worse

Improves

Discharge

MDI with Spacer and training

Admit to Peds Inpatient Unit

Peds Consult (no auto-page)

Moderate

Albuterol + Atrovent x 3

Steroids

Reassess

Improves

Tolerates Q 2H Albuterol

Severe

To Resus Bed

Albuterol + Atrovent x 3

Steroids

Vascular access (INT)

Consider IV Magnesium

Reassess

Improves

Condition Persists

Continuous Albuterol

INT & IV Magnesium

Consider IM/IV Epinephrine

Consider High Flow O2

Consider BiPAP/CPAP

PICU Admission

Steroids:
Prednisolone – 2 mg/kg PO (Max dose 60 mg/day)
Prednisone – 2 mg/kg PO (Max dose 60 mg/day)
Methylprednisolone – 2 mg/kg/dose IV
Dexamethasone IV form PO – 0.6 mg/kg (Max dose 16 mg)

Magnesium: 50 mg/kg/dose IV (Max dose 2 grams)

Epinephrine:
IM – 0.01 mg/kg/dose (Max dose 0.3 mg)
Infusion – 0.1-2 mcg/kg/min

Albuterol + Atrovent

Albuterol – if < 10 kg 2.5 mg nebulized; if > 10 kg 5 mg nebulized
Atrovent - if < 10 kg 0.25 mg nebulized; if > 10 kg 0.5 mg nebulized

Note – Albuterol and Atrovent should be provided in combination for up to 3 doses

Asthma Severity: PASS Score (see next page). Mild = 0; Moderate = 1-3; Severe = 4-6.
### Assess Asthma Severity (PASS Score)

<table>
<thead>
<tr>
<th>Respiratory Arrest</th>
<th>Severe (Score = 4-6)</th>
<th>Moderate (Score = 1-3)</th>
<th>Mild (Score = 0)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>KEY EXAM ELEMENTS (PASS)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheezing</td>
<td>None or mild (0)</td>
<td>Moderate (1)</td>
<td>Severe (2)</td>
</tr>
<tr>
<td></td>
<td>None or end of expiration only</td>
<td>Throughout expiration</td>
<td>Inspiratory/expiratory or absent due to poor air exchange</td>
</tr>
<tr>
<td>Work of breathing</td>
<td>None or mild (0)</td>
<td>Moderate (1)</td>
<td>Severe (2)</td>
</tr>
<tr>
<td></td>
<td>Normal or minimal retractions</td>
<td>Intercostal retractions</td>
<td>Suprasternal retractions, abdominal breathing</td>
</tr>
<tr>
<td>Prolonged expiration</td>
<td>None or mild (0)</td>
<td>Moderate (1)</td>
<td>Severe (2)</td>
</tr>
<tr>
<td></td>
<td>Normal or minimally prolonged</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score derived from sum of all 3 components</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Diminished due to poor air exchange
- Tiring, inability to maintain work of breathing
- Severely prolonged


### Terbutaline
- Sub Q – 0.01 mg/kg (Max dose 0.25 mg)
- Bolus IV – 2-10 mcg/kg
- Infusion – 0.1-0.4 mcg/kg/min

### Ketamine
- IV – 0.1-0.3 mg/kg

### Admit to Peds Inpatient Unit
- Albuterol nebulizer treatments must have been spaced to no more frequent than every 2 hours in the PED; patients that required continuous albuterol at any time during management require an attending to attending conversation prior to admission

### Maximum High Flow Nasal Cannula Guidelines for Inpatients

<table>
<thead>
<tr>
<th>Age</th>
<th>Flow (lpm)</th>
<th>% FiO2</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6 mo</td>
<td>3</td>
<td>40%</td>
</tr>
<tr>
<td>6 mo – 3 yrs</td>
<td>4</td>
<td>40%</td>
</tr>
<tr>
<td>3-6 yrs</td>
<td>6</td>
<td>40%</td>
</tr>
</tbody>
</table>

### PICU Admission
- Endotracheal intubation or potential need for emergency endotracheal intubation and mechanical ventilation
- Patients who require continuously nebulized albuterol