Acute Asthma Exacerbation Algorithm for Urgent Care

**Initial Assessment:**
History and PE with oxygen saturations and PEF if available

**Mild-Moderate**
(Mild to moderate wheezing with tachypnea; PEF 40-69%)

- Oxygen to keep sats > 90%
- Administer 1 dose of albuterol and reassess (May give up to 3 treatments every 20min within the first hour as needed)
- Consider systemic steroids

- Reassess for admission criteria
- Discharge to home if stable
- Parent Education

**Moderate-Severe**
(Diffuse wheezing, tachypnea, accessory muscle use; PEF 25-40%)

- Oxygen to keep sats > 90%
- Administer albuterol every 20min up to 3 doses with 1-3 doses of Atrovent based on acuity and response to treatment
- Load with systemic steroids

- Reassess after 3 treatments
- Reassess for admission criteria; Direct admission to Peds Hospitalist Recommended
- Follow inpatient algorithm if admitted
  - If not meeting admission criteria, discharge to home if stable with follow-up in 24hrs with PCP and Parent Education.
  - Recommend albuterol q4hrs for 24hrs and systemic steroids for 3-5 days

**Severe-Life Threatening**
(Poor air expansion, increased WOB with retractions and accessory muscle use; too dyspneic to speak; PEF <25%)

- Oxygen to keep sats > 90%
- Initiate Continuous Albuterol at 0.5mg/kg/hr with Atrovent
- Load with systemic steroids; consider IV methylprednisolone or IM dexamethasone
- Consider adjunct medications

- Call 911
- Consider direct admission to Peds or PICU if stable after initiation of albuterol/atrovent

**Albuterol Dosing:**
- ≤ 20kg: 2.5mg neb or 4 puffs MDI
- > 20kg: 5mg neb or 8 puffs MDI

**Atrovent Dosing:**
- ≤ 20kg: 250mcg
- > 20kg: 500mcg