

Acute Asthma Exacerbation Algorithm for Urgent Care

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

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

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

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