

Pediatric Asthma Exacerbation Protocol in the Emergency Department

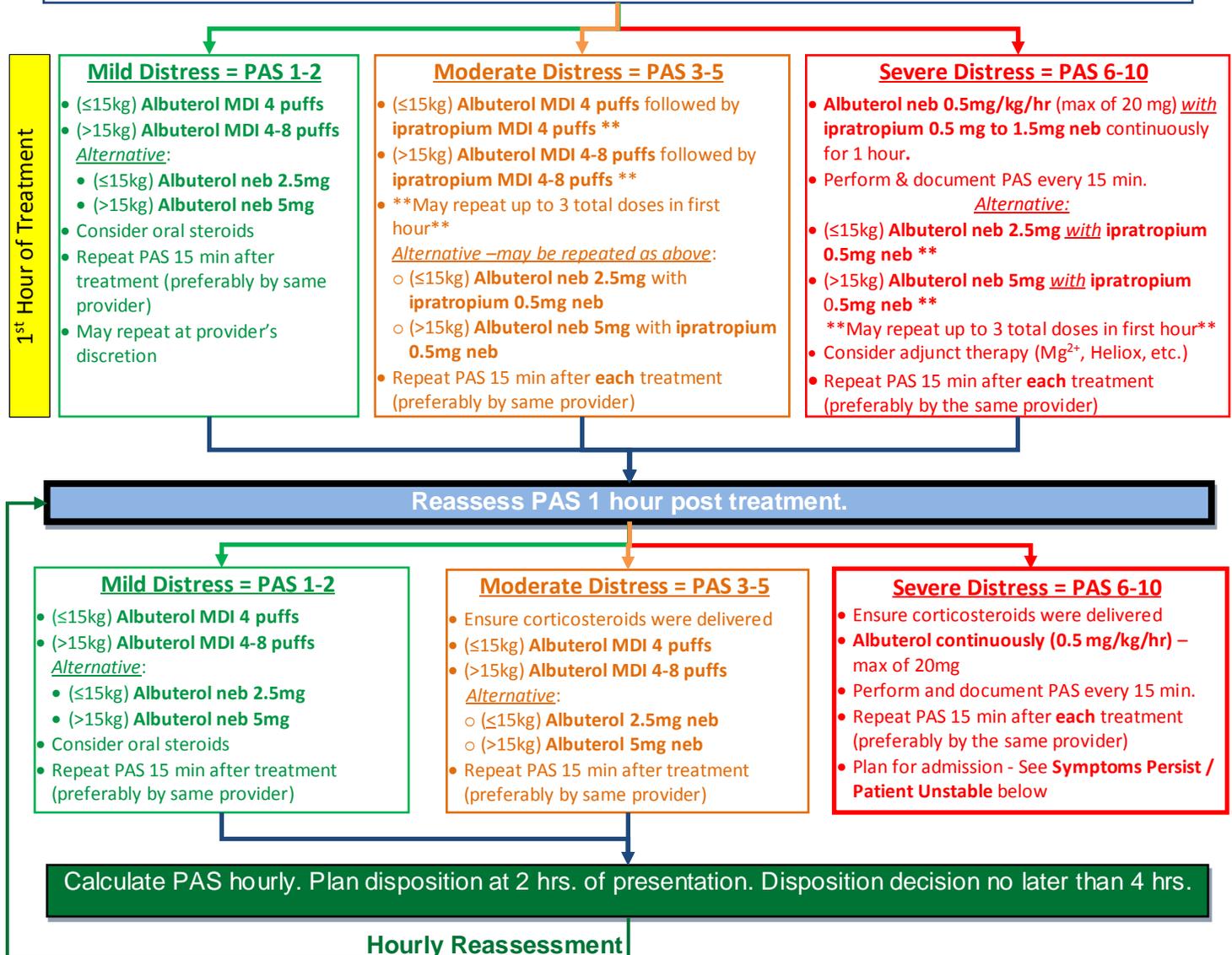
The following information is intended as a guideline for the acute management of children with asthma. Management of your patient may require a more individualized approach.

Inclusion Criteria: 2 y/o or greater with history of asthma or recurrent wheezing presenting with acute onset of wheezing, cough, dyspnea, hypoxia, tachypnea etc.

Exclusion Criteria: < 2 years of age, Diagnosed with viral bronchiolitis or croup, History of Cystic Fibrosis, Chronic Lung Disease, Cardiac Disease, Airway Anomalies

1. **Measure oxygen saturation and vital signs.**
2. **Identify risk factors:** Previous intubation/ ICU admission, 2+ admissions in past year, 3+ ED visits in last year, Prior ED/admission in last month, >2 canisters of SABA per month, poor perception of symptoms

1. Apply Continuous Cardio-Pulmonary Monitors and Pulse Oximetry. Administer O₂ as needed to keep sat goal >92%
2. Nurse to calculate **Pediatric Asthma Score (PAS)**
3. Notify Provider of PAS and begin appropriate order set based on PAS.
4. Administer Corticosteroids* 2mg/kg (PO / IV) PAS of 3 or greater *unless* previously administered in the last 12 hours.
*Seek medical direction for scores 0-2.



Symptoms Resolve / Patient Stable - Discharge

- Contact PCP for follow up
- Education regarding proper medication administration
- Rx for albuterol Q4 hours for cough or worsening symptoms
- Rx for oral corticosteroids for 3-10 days
- Consider maintenance therapy (inhaled corticosteroids)
- **Provide patient with Asthma Action Plan**

Symptoms Persist / Patient Unstable - Admission

- Admit – follow appropriate inpatient order set and flow sheet
- Continue bronchodilators
- Perform PAS prior to transfer to floor
- Consider adjunct therapy (magnesium, Heliox)
- Consider Pulmonary or PICU consult

1. PAS should be done prior to treatment and repeated 15 minutes afterward (preferably by the same provider).
2. Add elements into a single score.
3. Document score in Epic flowsheet

Element		Points		
		0	1	2
1. <u>Respiratory Rate</u> Obtain over 30 sec and multiple by 2.	2-3 yrs	≤34	35-39	≥40
	4-5 yrs	≤30	31-35	≥36
	6-11 yrs	≤26	27-30	≥31
	≥ 12 yrs	≤23	24-27	≥28
2. <u>Auscultation</u> Auscultate anterior and posterior lung fields. Assess air entry and presence of wheezing.		No Wheezes	Expiratory Wheezes	Inspiratory & expiratory wheezes <u>OR</u> diminished breath sounds
3. <u>Work of Breathing</u> Assess for nasal flaring or retractions. (suprasternal, intercostal, subcostal)		≤ 1 sign	2 signs	≥3 signs
4. <u>Dyspnea*</u> As developmentally appropriate. *If sleeping AND not showing physical signs of respiratory distress, score the patient 0 (zero) for this category.		Speaks full sentences, playful, <u>AND</u> takes PO well	Speaks partial sentences, short cry <u>OR</u> poor PO	Speaks short phrases, grunting, <u>OR</u> unable to take PO
5. <u>O₂ Requirement**</u> **Do not take patients off supplemental oxygen to obtain score.		≥ 92% on RA		Supplemental oxygen required to maintain saturations above 92%