

**Exclusion Criteria:**  
 bronchiolitis, cystic fibrosis, tracheostomy patients, neuromuscular diseases, immunodeficiency & cardiac patients (unless ordered), and other chronic lung disease (unless ordered)

**If RESPIRATORY ARREST IMMINENT**  
 Move to Resuscitation Room and Notify ED MD

**EMERGENCY DEPARTMENT  
 Entry Assessment for ASTHMA PATHWAY**

**Goals for Best Practice**

- Steroids within 60 minutes of arrival
- Beta-Agonists within 60 minutes of arrival
- Ipratropium with 1<sup>st</sup> ED Albuterol Neb (PAS ≥3)
- Standardized Asthma Scoring (PAS)

**CXR and Blood Gas are not recommended for Routine Asthma Exacerbation**

**Inclusion Criteria:**  
 Patients 2-18 years of age with acute asthma exacerbation

**1<sup>st</sup> HOUR**

- Supplemental Oxygen should be administered to maintain SaO<sub>2</sub> >90%  
 - Initial PAS score and VS with BP completed with Triage Assessment

**PAS 1-2**

**RT**  
 - Albuterol 5 mg Neb  
 - Repeat per clinician discretion

**RN**  
 - Consider Steroids in some cases- consult with physician

**PAS 3-5**

**RT**  
 - Albuterol Neb over 1 hour  
 <20 kg: Albuterol 10 mg  
 ≥20 kg: Albuterol 15 mg  
 - Ipratropium 1 mg via neb- in conjunction with Albuterol

**RN**  
 - Dexamethasone 0.6 mg/kg (max 16 mg) PO/ IM OR  
 - Methylprednisolone 2mg/kg (max 60mg) IV for PO intolerant

**PAS 6-10**

**STRONG CONSIDERATION FOR EARLY TRANSFER TO DCMC**  
**Contact Seton Transfer Center: 324-3515**  
 Consider Early Adjunctive Therapy\*\*

**RT**  
 - Albuterol Neb over 1 hour  
 <20 kg: Albuterol 10 mg/ ≥20 kg: Albuterol 15 mg  
 - Ipratropium 1 mg via neb- in conjunction with Albuterol

**RN**  
 - Dexamethasone 0.6 mg/kg (max 16 mg) PO/ IM OR  
 - Methylprednisolone 2mg/kg (max 60mg) IV for PO intolerant

**2<sup>nd</sup> HOUR**

**\*Reassess VS (including BP) & PAS Score**

**PAS 0-2**  
**Discharge to HOME**

- Asthma Education
- Smoking Cessation referral if indicated
- \*\*\*Script for Albuterol MDI
- Script for Dexamethasone Dose #2- 0.6mg/kg (max 16mg) PO x 1 to be given 24 hours after 1<sup>st</sup> dose, if applicable

**PAS 3-5**

**RT**  
 - Albuterol Neb over 1 hour  
 <20 kg: Albuterol 10 mg  
 ≥20 kg: Albuterol 15 mg

**PAS 6-10**  
**POOR RESPONDER**  
**Call Seton Transfer Center for Immediate Transfer: 324-3515**  
 Consider Early adjunctive therapy\*\*

**RT**  
 - Albuterol Neb over 1 hour (continuous) as necessary  
 <20 kg: Albuterol 10 mg/ ≥20 kg: Albuterol 15 mg

**3<sup>rd</sup> HOUR**

**\*Reassess VS (including BP) & PAS Score**

**PAS 3-5**  
**Call Seton Transfer Center: 324-3515**  
**RT- Albuterol Neb over 1 hour**  
 (<20 kg: Albuterol 10 mg or ≥20 kg: Albuterol 15 mg)

**\*Reassess PAS Score-** If completing a continuous neb and considering discharge home it is RECOMMENDED that you observe the patient for at least 60 minutes after the completion of the neb, then rescore the patient for discharge readiness.

**\*Pediatric Asthma Score (PAS)**

Assessment	0	1	2	
Respiratory Rate (Obtain over 30 seconds and multiply x2)				
RR	2-3 years old	≤34	35-39	
	4-5 years old	≤30	31-35	
	6-12 years old	≤26	27-30	
	>12 years old	≤23	24-27	
O <sub>2</sub>	Oxygen Requirement (RA for 2min- return O <sub>2</sub> if Sats <90)	>95% RA	90-95% RA	<90% RA
A	Auscultation	BBS clear to End exp. wheeze	Expiratory Wheezes	Insp. & Exp. wheeze or Diminished BS
WOB	Work of Breathing- nasal flaring, suprasternal, intercostal or subcostal muscle use	≤1 accessory muscle	2 accessory muscles	≥3 accessory muscles
D	Dyspnea	speaks full sentences, playful, babbles	Speaks partial sentences, short cry	Speaks short phrases, single words, grunting

PAS (Quereshi, et al) Pediatric Asthma Score- adapted version (for patients >2yrs of age)

**\*\*ADJUNCTIVE THERAPY OPTIONS**

**IV NS bolus**  
 (20ml/kg, max 1L)

**If Giving Therapies Below**  
**Contact Seton Transfer Center for Transfer: 324-3515**

**Magnesium Sulfate**  
 50 mg/kg IV (max 2 g) over 20-30 min. x1  
 (NOTE: Strongly consider NS bolus if not already given)

**Terbutaline**  
 10mcg/kg SQ (Max 50mcg=0.25ml) X1  
**FOR CHILD IN EXTREMIS**  
 (NOTE: can be given Q20min. x3 doses until transfer)

**\*\*\*Albuterol to MDI w/ Spacer Puff Conversions**

**5mg neb = 8 puffs**

**10mg neb= 16 puffs**  
 Continuous= 5 puffs Q20min. x3  
 Q2 hours= 4 puffs Q30 minutes x4  
 Q3 hour= 5 puffs Q1 hour x 3

**15mg neb= 24 puffs**  
 Continuous= 8 puffs Q20min. x3  
 Q2 hours= 6 puffs Q30 minutes x4  
 Q3 hour= 8 puffs Q1 hour x3

**Special Needs or Questions? Call Dell Children's ED Transfer Line: 512-324-3515**

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