

EMERGENCY DEPARTMENT Entry Assessment for ASTHMA PATHWAY

If RESPIRATORY ARREST IMMINENT-
Triage and Initiate care in resuscitation room

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

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

5mg neb = 8 puffs
10mg neb = 16 puffs
Q3 hours = 5 puffs Q1 hour x3
Continuous = 5 puffs Q20min. X3
15mg neb = 24 puffs
Q3 hours = 8 puffs Q1 hour x3
Continuous = 8 puffs Q20min. X3

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

- Supplemental Oxygen should be administered to maintain SaO₂ >90%
- Initial PAS score done at triage and on room placement
NOTE: CXR and Blood Gas are not recommended for Routine Asthma Exacerbation

1st HOUR

PAS 1-2

- Albuterol 5 mg Neb
- Repeat per clinician discretion
- Consider Steroids in some cases- consult with physician

PAS 3-5

- Albuterol Neb over 1 hour
<20 kg: Albuterol 10 mg/ ≥20 kg: Albuterol 15 mg
- Ipratropium 1 mg via neb- in conjunction with Albuterol
- Dexamethasone 0.6 mg/kg (max 16 mg) PO/ IM or Methylprednisolone 2mg/kg (max 60mg) IV for PO intolerant

PAS 6-10

- Albuterol Neb over 1 hour
<20 kg: Albuterol 10 mg/ ≥20 kg: Albuterol 15 mg
- Ipratropium 1 mg via neb- in conjunction with Albuterol
- Dexamethasone 0.6 mg/kg (max 16 mg) PO/ IM or Methylprednisolone 2mg/kg (max 60mg) IV for PO intolerant
- **Consider early adjunctive therapy**

2nd HOUR

***Reassess PAS Score**

**PAS 0-2
Discharge to HOME**

- Asthma Action Plan
- Asthma Education to include Smoking Cessation referral if indicated
- Re-label Albuterol
- Script for Controller Meds, if applicable
- Script for Dexamethasone Dose #2- 0.6mg/kg (max 16mg) PO x 1 to be given 24 hours after 1st dose, if applicable

PAS 3-5

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

PAS 6-7

- Albuterol Neb over 1 hour
<20 kg: Albuterol 10 mg
≥20 kg: Albuterol 15 mg
- **Consider adjunctive therapy**

**PAS 8-10
POOR RESPONDER**

- Albuterol Neb over 1 hour (continuous) as necessary
<20 kg: Albuterol 10 mg/ ≥20 kg: Albuterol 15 mg
- **Administer adjunctive therapy if not already done
Contact PICU for Admission if Terbutaline used in 2nd hour**

3rd HOUR

***Reassess PAS Score**

**PAS 0-2
Discharge to HOME**

See above recommendations

**PAS 3-5
Admit to FLOOR**

<20 kg: Albuterol 10 mg Neb Q2h
≥20 kg: Albuterol 15 mg Neb Q2h

**PAS 6-7
Admit to Pulmonary Unit
(see Addendum 5 for Pulmonary Unit exclusion criteria)**

<20 kg: Albuterol 10 mg Neb over 1 hour
≥20 kg: Albuterol 15 mg Neb over 1 hour
****Consider adjunctive therapy**

**PAS 8-10
POOR RESPONDER- Admit to PICU**

<20 kg: Albuterol 15 mg Neb over 1 hour/Continuous
≥20 kg: Albuterol 20 mg Neb over 1 hour/Continuous
****Administer adjunctive therapy if not already given**

***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.**

****ADJUNCTIVE THERAPY OPTIONS****

- **IV NS bolus** (20ml/kg, max 1L)
- **Magnesium Sulfate** 50 mg/kg IV (max 2 g) over 20-30 min. x1
Strongly consider NS bolus if not already given
- **Terbutaline** 10mcg/kg SQ (Max 250mcg=0.25ml) X1 for child in extremis (can be given Q 20minutes x3 doses until IV established)
- **If considering IV Terbutaline**
 - **Must be ordered in concert with STAT PICU consult**
 - Recommended starting dose:
 - 10 mcg/kg (max 250 mcg) IV load over 15 minutes, followed by: Terbutaline continuous IV drip 0.4 mcg/kg/min
 - STAT call to Pharmacy for IV drip Terbutaline

Assessment	0	1	2	
RR	Respiratory Rate (Obtain over 30 seconds and multiply x2)			
	2-3 years old	≤34	35-39	≥40
	4-5 years old	≤30	31-35	≥36
	6-12 years old	≤26	27-30	≥31
>12 years old	≤23	24-27	≥28	
O ₂	Oxygen Requirement (RA for 2min- return O ₂ 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
w o B	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 (Qureshi, et al) Pediatric Asthma Score - modified version for patients >2yrs of age