



# ED Asthma Pathway

Rev 1/2022

2-17yo child with asthma exacerbation

**Exclusions:** Chronic lung disease, cystic fibrosis, heart disease, tracheomalacia, tracheostomy, sickle cell anemia, neuromuscular disease, immune disorders

Supplemental oxygen for SpO2<90%; Obtain respiratory score

	0 POINTS	1 POINT	2 POINTS	3 POINTS
<b>RR</b>				
2-3 yr		≤34	35-39	≥40
4-5 yr		≤30	31-35	≥36
6-12 yr		≤26	27-30	≥31
>12 yr		≤23	24-27	≥28
<b>Retractions</b>	None	Subcostal or intercostal	2 of the following: subcostal, intercostal, substernal	3 of the following: intercostal, substernal, suprasternal, supraclavicular, OR nasal flaring/head bobbing /grunting
<b>Dyspnea: 2-4 yr</b>	Normal feeding, vocalizations, & play	1 of the following: difficulty feeding, decreased vocalization, or agitated	2 of the following: difficulty feeding, decreased vocalization, or agitated	Stops feeding, no vocalization; drowsy/confused
≥ 4 yr	Counts for ≥10 in 1 breath	Counts to 7-8 in one breath	Counts to 4-6 in one breath	Count to ≤3 in one breath
<b>Auscultation</b>	Normal breathing, no wheezing	End-expiratory wheeze	Expiratory wheeze only	Inspiratory or expiratory wheeze OR diminished breath sounds

MILD (1-4)

**Initial:** -Albuterol MDI/spacer 4-8 puffs  
 -Consider dexamethasone 0.6mg/kg (max 16mg) OR prednisone 2mg/kg (max 60mg)

**Assess and score at end of 1st hour:**  
 If score 1-4: **DISCHARGE.**  
 If score worsens and is 5-8: Albuterol MDI/spacer 4-8 puffs, observe an additional 1 hour.

**Assess and score at end of 2nd hour:**  
 If score 1-4: **DISCHARGE.**  
 If score worsens and is 5-8: Albuterol MDI/spacer 4-8 puffs, consider admission

MODERATE (5-8)

**Initial:** -Albuterol MDI/spacer 8 puffs OR Duoneb x3  
 -Dexamethasone 0.6mg/kg (max 16mg) or prednisone 2mg/kg (max 60mg)

**Assess and score at end of 1st hour:**  
 If score 1-4: **DISCHARGE.**  
 If score 5-8: Albuterol MDI/spacer 8 puffs, observe an additional 1 hour.

**Assess and score at end of 2nd hour:**  
 If score 1-4: **DISCHARGE.**  
 If score 5-8: Albuterol MDI/spacer 8 puffs, consider admission.

SEVERE (9-12)

**Initial:** Duonebs x3, IV, Solumedrol 2mg/kg (max 125mg), consider IM Epi (0.01mg/kg of 1:1000), consider magnesium sulfate 50mg/kg (max 2gm)

**Assess and score at end of 1st hour:**  
 If score 1-4: **observe**  
 If score 5-8: **observe**  
 If score 9-12: **Continuous albuterol and PICU admission**

**Assess and score at end of 2nd hour:**  
 If score 1-4: **DISCHARGE**  
 If score 5-8: Albuterol MDI/spacer 8 puffs; Admission to floor

**Continuous dosing:**

- <10kg: 7.5mg/hr
- 10-20kg: 10mg/hr
- >20kg: 15mg/hr
- >40kg: 20mg/hr