

# Pediatric Severe Asthma

## Assessment: Use PRAM Scoring Tool

SIGNS	0	1	2	3
Suprasternal indrawing	Absent		Present	
Scalene retractions	Absent		Present	
Wheezing	Absent	Expiratory only	Inspiratory +/- expiratory	Audible wheeze/ silent chest/ minimal air entry
Air entry	Normal	Decreased at bases	Widespread decrease	Absent/minimal
O <sub>2</sub> Saturation (Room Air)	>94%	92–94%	<92%	

## Assessment Red Flags:

- Patient may not have previous asthma diagnosis or wheeze; consider asthma in all children over 12 mos of age presenting with wheeze
- Consider anaphylaxis in a patient with wheeze, especially if a known allergy exists
- Consider myocarditis or cardiogenic shock in a patient who deteriorates with fluid boluses

A PedsPac resource from TREKK.  
For more tools in the series,  
call 204-975-7744 or visit [trekk.ca](http://trekk.ca)  
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# Severity-Based Initial Management

## Mild Asthma (PRAM 1-3)

- Salbutamol MDI x 1 treatment, reassess in 60 min

## Moderate Asthma (PRAM 4-7)

- Salbutamol MDI q 20 minutes x 3 treatments
- Dexamethasone **0.6 mg/kg/dose (MAX 12 mg)** within 60 minutes

## Severe Asthma (PRAM 8-12)

- 3 consecutive treatments of:  
Salbutamol (MDI or neb) + Ipratropium (MDI or neb)
- Dexamethasone **0.6 mg/kg/dose (MAX 12 mg)** within 60 minutes

## Impending Respiratory Failure

*(PRAM 12 + lethargy, cyanosis, decreasing respiratory effort, and/or rising pCO<sub>2</sub>)*

- Add Magnesium sulfate 50 mg/kg IV over 20 - 30 min (MAX 2000 mg /dose)
- Hydrocortisone 8 mg/kg IV if po steroid not tolerated (MAX 400 mg/dose)