# Pediatric Asthma Respiratory Distress



### **History**

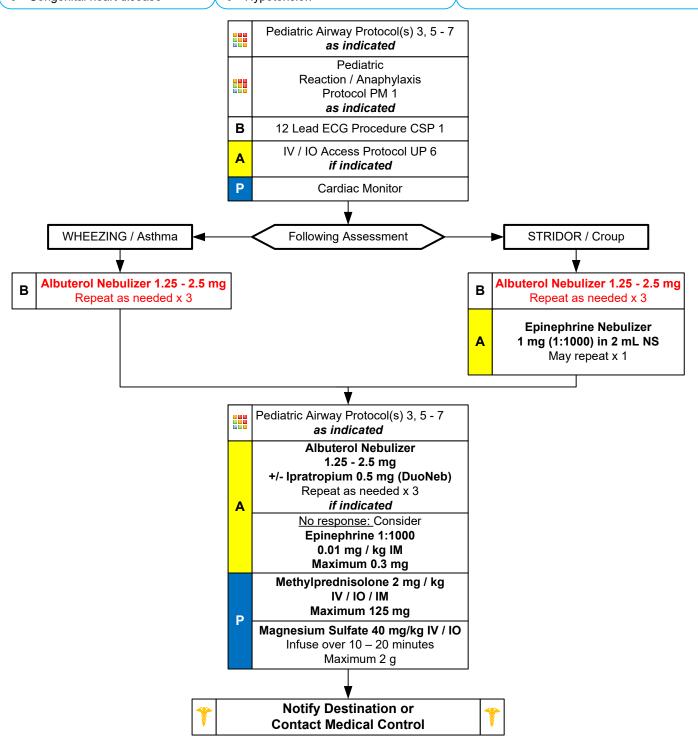
- \* Time of onset
- \* Possibility of foreign body
- ★ Past Medical History
- \* Medications
- ★ Fever / Illness
- Sick Contacts
- \* History of trauma
- History / possibility of choking
- Ingestion / OD
- \* Congenital heart disease

### **Signs and Symptoms**

- Wheezing / Stridor / Crackles / Rales
- ★ Nasal Flaring / Retractions / Grunting
- \* Increased Heart Rate
- \* AMS
- Anxiety
- Attentiveness / Distractibility
- Cyanosis
- \* Poor feeding
- \* JVD / Frothy Sputum
- \* Hypotension

#### **Differential**

- Asthma / Reactive Airway Disease
- Aspiration
- \* Foreign body
- Upper or lower airway infection
- Congenital heart disease
- OD / Toxic ingestion / CHF
- \* Anaphylaxis
- \* Trauma



# **Pediatric Asthma Respiratory Distress**



## **Pearls**

- Albuterol dosing: ≤ 1 year of age 1.25 mg; 1 6 y/o 1.25 2.5 mg; 6 14 y/o 2.5 mg; ≥ 15 years 2.5 5 mg.
- Recommended Exam: Mental Status, HEENT, Skin, Neck, Heart, Lungs, Abdomen, Extremities, Neuro
- Items in Red Text are key performance measures used to evaluate protocol compliance and care.
- This protocol includes all patients with respiratory distress, Asthma, Reactive Airway Disease, croup, or bronchospasm.
- Patients may also have wheezing and respiratory distress with viral upper respiratory tract infections and pneumonia.
- Pulse oximetry AND End-tidal CO2 should be monitored continuously if available.
- Combination nebulizers containing albuterol and ipratropium (DuoNeb):

Patients may require more than 3 nebulizer treatments, treatments should continue until improvement. Following 3 combination nebulizers (DuoNeb), it is preferable to continue albuterol solely with subsequent treatments as there is no proven benefit to continual use of ipratropium.

**Epinephrine:** 

If allergic reaction or anaphylaxis is suspected, give immediately and repeat until improvement. If allergic reaction is not suspected, administer with no improvement and/ or impending respiratory failure.

- Consider Magnesium Sulfate with impending respiratory failure and/ or no improvement.
- Consider IV access when Pulse oximetry remains ≤ 92 % after first beta-agonist nebulizer treatment.
- Do not force a child into a position, allow them to assume position of comfort, typically the tripod position.
- \* Bronchiolitis is a viral infection typically affecting infants which results in wheezing which may not respond to betaagonists. Consider Epinephrine nebulizer if patient < 18 months and not responding to initial beta-agonist treatment.
- Croup typically affects children < 2 years of age. It is viral, possible fever, gradual onset, no drooling is noted.
- Epiglottitis typically affects children > 2 years of age. It is bacterial, with fever, rapid onset, possible stridor, patient wants to sit up to keep airway open, drooling is common. Airway manipulation may worsen the condition.
- In patients using levalbuterol (Xopenex) you may use Albuterol for the first treatment then use the patient's supply for repeat nebulizers or agency's supply.
- A silent chest in respiratory distress is a pre-respiratory arrest sign.
- EMR/ EMT:

The use of Epinephrine IM is limited to the treatment of anaphylaxis. Administration of diphenhydramine is limited to the oral route only.