



# Pediatric Asthma Respiratory Distress

## History

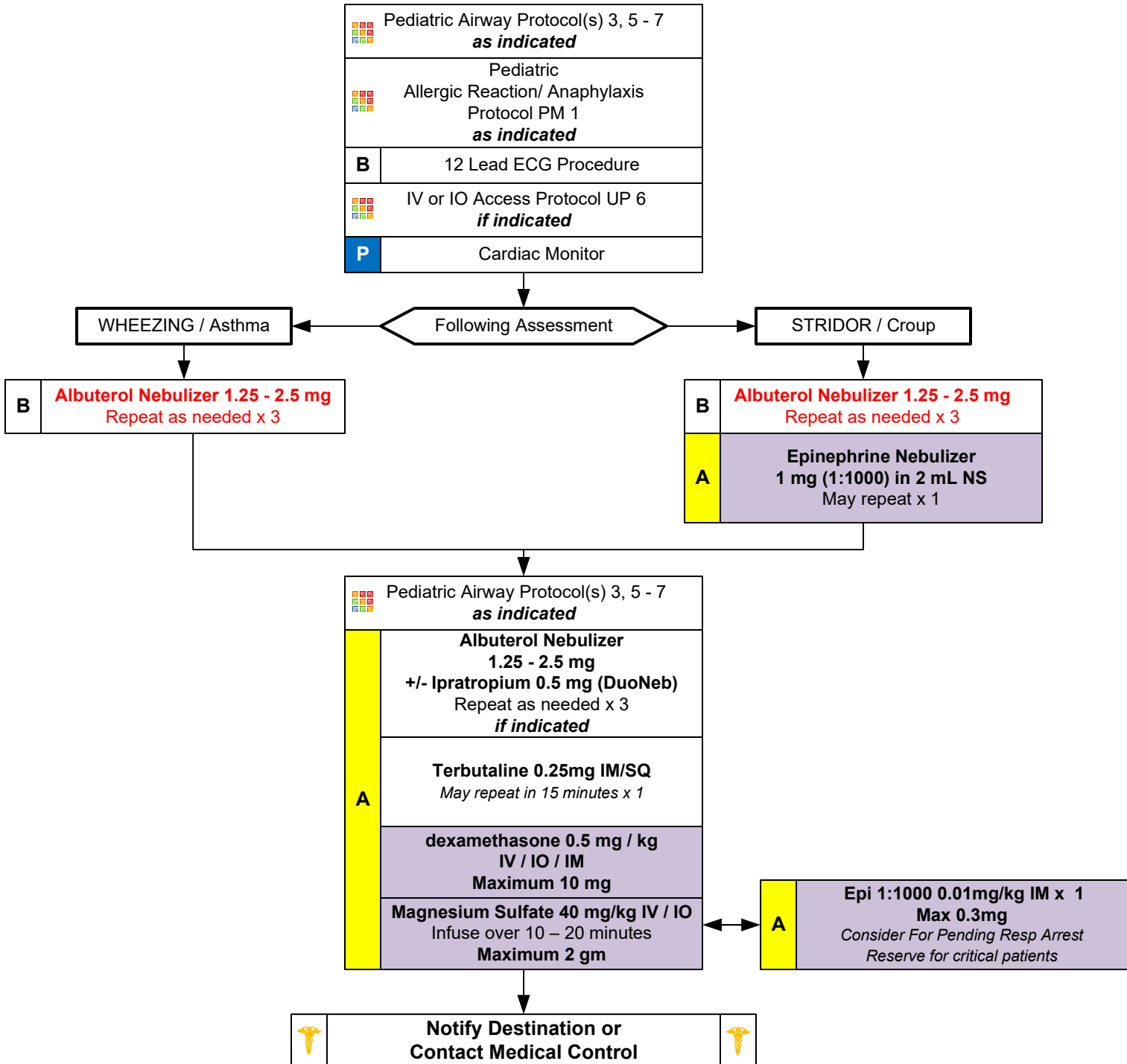
- Time of onset
- Possibility of foreign body
- Past Medical History
- Medications
- Fever / Illness
- Sick Contacts
- History of trauma
- History / possibility of choking
- Ingestion / OD
- Congenital heart disease

## Signs and Symptoms

- Wheezing / Stridor / Crackles / Rales
- Nasal Flaring / Retractions / Grunting
- Increased Heart Rate
- AMS
- Anxiety
- Attentiveness / Distractability
- 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**

- **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 should be monitored continuously and consider End-tidal CO<sub>2</sub> monitoring 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  $\leq 92\%$  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 beta-agonists. 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 & maybe given by autoinjector / Manual draw-up has been approved by the medical director and OEMS**
  - **Administration of diphenhydramine is limited to the oral route only.**
  - **EMT administration of beta-agonist is approved from EMS Supply or Patient's own prescription**
  - **Dr Koontz does not require contact of medical control prior to EMT/ EMR administering any medication(s).**