



# Respiratory Distress

## Assessment

### Pediatric Pearls:

- Use pediatric dosing of medications or electrical therapy for a pediatric patient < 37 kg and as defined by the PEDIA Tape.
- Pediatric hypotension is defined as SBP < 70 + (age in years x 2) mmHg

### Signs & Symptoms:

- Shortness of breath
- Pursed lip breathing
- Decreased ability to speak
- Increased respiratory rate and effort
- Wheezing, rhonchi, rales, stridor
- Use of accessory muscles
- Fever, cough
- Tachycardia
- Anxious appearance

### Differential:

- Asthma / COPD (Emphysema, Bronchitis)
- Anaphylaxis
- Aspiration
- Pleural effusion
- Pneumonia
- Pulmonary embolus
- Pneumothorax
- Cardiac (MI or CHF)
- Pericardial tamponade
- Hyperventilation
- Inhaled toxin (CO, etc.)
- Croup / Epiglottitis
- Congenital heart disease
- Trauma
- Hydrocarbon ingestion

## Clinical Management Options

P	P	P	P	P	P	<ul style="list-style-type: none"> <li>• <a href="#">Oxygen</a></li> <li>• Position of comfort</li> <li>• BLS airway management</li> </ul>
L	L	L	L	L	L	<ul style="list-style-type: none"> <li>• If wheezing (non-cardiac), then assist with patient's MDI 2 puffs PRN -or- <a href="#">Albuterol</a> with <a href="#">Ipratropium</a></li> <li>• If wheezing, Consider <a href="#">CPAP</a> with <a href="#">PEEP</a> if refractory to NEB</li> <li>• If stridor, 3 ml nebulized <a href="#">Isotonic Crystalloid</a></li> </ul>
1	2	3	4	5	6	<ul style="list-style-type: none"> <li>• <a href="#">Vascular access</a></li> </ul>
						<ul style="list-style-type: none"> <li>• Monitoring and interpretation of ECG &amp; <a href="#">EtCO<sub>2</sub></a></li> <li>• If Wheezing or Stridor, <a href="#">Epinephrine</a></li> <li>• If wheezing or Stridor, <a href="#">Methylprednisolone</a></li> <li>• If stridor, <a href="#">Epinephrine</a></li> <li>• If wheezing, <a href="#">Magnesium Sulfate</a></li> </ul>
						<ul style="list-style-type: none"> <li>• Advance airway management as needed</li> <li>• If severe bronchospasm refractory to other medications, <a href="#">Ketamine</a></li> <li>• <a href="#">Ultrasound</a> pleural cavity if pneumo/hemothorax is suspected</li> </ul>
						<ul style="list-style-type: none"> <li>• <a href="#">Rapid sequence induction</a> as needed to secure patent airway for oxygenation and ventilation.</li> </ul>

### Consult Online Medical Control As Needed

### Pearls:

- Refer to drug formulary charts for all medication dosing for both adults and pediatric patients.
- EtCO<sub>2</sub> and SpO<sub>2</sub> must be monitored continuously if either are abnormal or decline in patient's mental status/condition.
- A silent chest in respiratory distress is a sign for pre-respiratory arrest.
- Chronic COPD may have elevated CO<sub>2</sub> at baseline. Patient respiratory status must be reassessed after each nebulizer or medication administration to determine need for additional dosing.
- CPAP if continued respiratory distress and if adequate mask seal can be established.