

# Adult COPD/ Asthma **Respiratory Distress**

### History

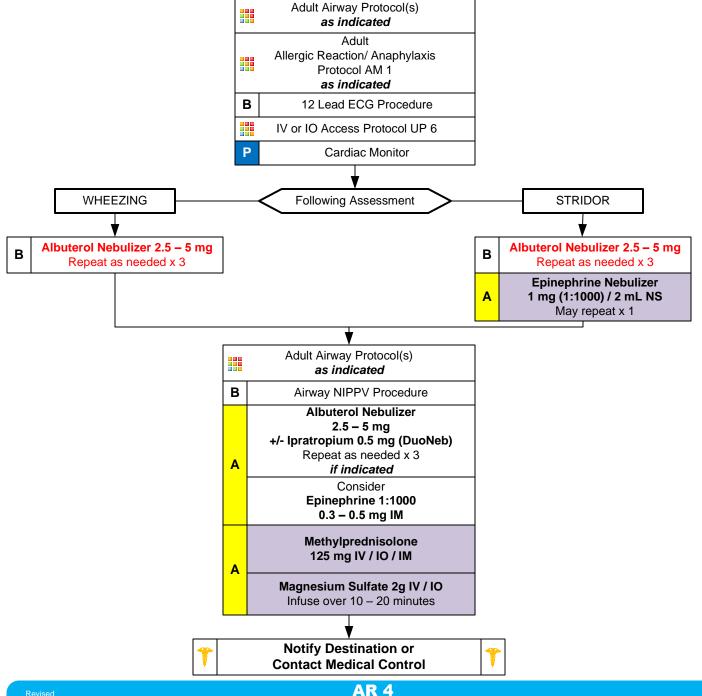
- Asthma; COPD -- chronic bronchitis, ٠ emphysema, congestive heart failure
- Home treatment (oxygen, nebulizer) .
- Medications (theophylline, steroids, . inhalers)
- Toxic exposure, smoke inhalation

## Signs and Symptoms

- Shortness of breath ٠
- Pursed lip breathing
- Decreased ability to speak • Increased respiratory rate and ٠ effort
- Wheezing, rhonchi •
- Use of accessory muscles •
- Fever, cough
- Tachycardia

## Differential

- Asthma
- Anaphylaxis .
  - Aspiration
- COPD (Emphysema, Bronchitis) •
- Pleural effusion •
- Pneumonia •
- Pulmonary embolus •
- Pneumothorax •
- Cardiac (MI or CHF) .
- Pericardial tamponade •
- Hyperventilation .
- . Inhaled toxin (Carbon monoxide, etc.)





## Adult COPD/ 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, COPD, Asthma, Reactive Airway Disease, 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 failure to improve and/ or impending respiratory failure.

- Consider Magnesium Sulfate with no improvement and/ or impending respiratory failure. Likely more effective with asthmatic exacerbation and less so with COPD exacerbation.
- <u>Non-Invasive Positive Pressure Ventilation (NIPPV: CPAP or Bi-Level/ BiPap):</u> May be used with COPD, Asthma, Allergic reactions, and/ or CHF. Consider early in treatment course. Consider removal if SBP remains < 100 mmHg and not responding to other treatments.
  - 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:

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The use of Epinephrine IM is limited to the treatment of anaphylaxis and may be given by autoinjector or manual draw-up, which was by the Agency Medical Director and the NC office of EMS. Administration of diphenhydramine is limited to the oral route only.

- EMT administration of beta-agonist can be given to patients who are currently not prescribed the medication, which has been approved by the Agency Medical Director and the NC office of EMS.
- Agency Medical Director may require contact of medical control prior to EMT/ EMR administering any medication(s).