Adult COPD/ Asthma Respiratory Distress

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

Signs and Symptoms
- Shortness of breath
- Pursed lip breathing
- Decreased ability to speak
- Increased respiratory rate and 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 Airway Protocol(s) ***as indicated***

Adult Allergic Reaction/ Anaphylaxis Protocol AM 1 ***as indicated***

B — 12 Lead ECG Procedure

IV or IO Access Protocol UP 6

P — Cardiac Monitor

Following Assessment

WHEEZING

B — **Albuterol Nebulizer 2.5 – 5 mg** Repeat as needed x 3

STRIDOR

B — **Albuterol Nebulizer 2.5 – 5 mg** Repeat as needed x 3

A — **Epinephrine Nebulizer 1 mg (1:1000) / 2 mL NS** May repeat x 1

Adult Airway Protocol(s) ***as indicated***

B — Airway NIPPV Procedure

A — **Albuterol Nebulizer 2.5 – 5 mg +/- Ipratropium 0.5 mg (DuoNeb)** Repeat as needed x 3 ***if indicated***

Consider **Epinephrine 1:1000 0.3 – 0.5 mg IM**

A — **Methylprednisolone 125 mg IV / IO / IM**

Magnesium Sulfate 2g IV / IO Infuse over 10 – 20 minutes

Notify Destination or Contact Medical Control

Airway Respiratory Protocol Section

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_2 monitoring if available.**
- **<u>Combination nebulizers containing albuterol and ipratropium (DuoNeb):</u>**
  - **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.**
- **<u>Epinephrine:</u>**
  - **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.
- **<u>EMR/ EMT:</u>**
  - **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).