

## RESPIRATORY DISTRESS / ASTHMA / COPD

Airway / Breathing

Circulation / Shock

Cardiac

Medical

Trauma

## UNIVERSAL PATIENT CARE PROTOCOL

## OXYGEN

## DIAGNOSTIC EKG PROCEDURE

⚠ 1<sup>ST</sup> Contact to EKG and Transmission < 10 Min

## IV / IO PROCEDURE

## Mild – Severe Distress

Treat with aerosol  
ALBUTEROL / IPRATROPIUM  
Oxygen as needed  
EMT may administer only with proper training or ONLINE Medical Control

Oxygen as needed  
Continuous pulse-ox  
Repeat aerosols as needed  
ALBUTEROL / IPRATROPIUM

Unresolved or Worsening Distress – Treat as Moderate / Severe Distress

## Peri-Arrest / Not Moving Air

## AIRWAY PROTOCOL

## CAPNOGRAPHY PROCEDURE

Severe Distress with *STRIDOR*

## CAPNOGRAPHY PROCEDURE

Tachypnea, bradypnea, stridor, accessory muscle use, difficulty speaking, CO<sub>2</sub> narcosis

Treat with aerosol  
RACEMIC EPINEPHRINE  
Unit Dose (2.25% 0.5ml)  
mixed in 3ml of Normal Saline  
Nebulized – No Repeat

STOP NOT for Foreign Body Airway Obstructions  
⚠ If Racemic Epinephrine is unavailable, see medication section for aerosol EPINEPHRINE 1mg / ml

**EPINEPHRINE 1 mg / ml**  
0.3 – 0.5 mg IM – q 5 min prn

## Moderate / Severe Distress

## CAPNOGRAPHY PROCEDURE

Increased Work of Breathing  
Consider CPAP PROCEDURE  
Hypotension  
⚠ Untreated Vomiting

Consider MAGNESIUM SULFATE  
2 Grams IV over 20 minutes

methylPREDNISolone  
125 mg IV / IO / IM / PO  
No Repeat

Treat with CONTINOUS aerosols  
ALBUTEROL / IPRATROPIUM  
Oxygen as needed  
EMT may administer only with proper training or ONLINE Medical Control

MAGNESIUM SULFATE  
2 Grams IV over 20 minutes

methylPREDNISolone  
125 mg IV / IO / IM / PO  
No Repeat

BE PREPARED for Emergency Airway

CRICOHYROTOMY  
NEEDLE, KIT, or SURGICAL  
As provided and trained

*If Patient Occludes Airway*

STOP Must Have Med Command Training / Approval

methylPREDNISolone  
125 mg IV / IO / IM – No Repeat

If ventilation improves with above treatments  
Consider CPAP PROCEDURE  
Hypotension

TRANSPORT to appropriate facility CONTACT receiving facility CONSULT Medical Control where indicated APPROPRIATE transfer of care

EMT Intervention

AEMT Intervention

PARAMEDIC Intervention

Online Medical Control

# RESPIRATORY DISTRESS / ASTHMA / COPD

HISTORY	SIGNS AND SYMPTOMS	DIFFERENTIAL DIAGNOSIS
<ul style="list-style-type: none"> <li>Asthma; COPD -- chronic bronchitis, emphysema, congestive heart failure</li> <li>Home treatment (oxygen, nebulizer)</li> <li>Medications (Theophylline, steroids, inhalers)</li> <li>Toxic exposure, smoke inhalation</li> </ul>	<ul style="list-style-type: none"> <li>Shortness of breath</li> <li>Pursed lip breathing</li> <li>Decreased ability to speak</li> <li>Increased respiratory rate and effort</li> <li>Wheezing, rhonchi</li> <li>Use of accessory muscles</li> <li>Fever, cough</li> <li>Tachycardia</li> <li>Tripod position</li> </ul>	<ul style="list-style-type: none"> <li>Asthma</li> <li>Anaphylaxis</li> <li>Aspiration</li> <li>COPD (emphysema, bronchitis)</li> <li>Pleural effusion</li> <li>Pneumonia</li> <li>Pulmonary embolus</li> <li>Pneumothorax</li> <li>Cardiac (MI or CHF)</li> <li>Pericardial tamponade</li> <li>Hyperventilation</li> <li>Inhaled toxin (Carbon monoxide, etc.)</li> </ul>

**CPAP should be used as a last resort in asthmatic / COPD patients who are HYPOXEMIC. Prepare to intubate and ventilate.**

**SEVERE ASTHMA / STATUS ASTHMATICUS** patients not moving air or is not moving the mist from an aerosol treatment give EPINEPHrine 1 mg / ml 0.3 - 0.5 mg IM.

KEY POINTS
<ul style="list-style-type: none"> <li>Exam: Mental Status, HEENT, Skin, Neck, Heart, Lungs, Abdomen, Extremities, Neuro</li> <li><b>Status asthmaticus</b> - severe prolonged asthma attack unresponsive to therapy - life threatening!</li> <li>If the patient is over 50 years of age, has a history of cardiac disease, or if the patient's heart rate is &gt;120 EPINEPHrine may precipitate cardiac ischemia.</li> <li>Monitor pulse oximetry continuously during treatment and transport.</li> <li>A silent chest in respiratory distress is a pre - respiratory arrest sign.</li> <li>Be alert for respiratory depression in COPD patients on prolonged high flow oxygen administration.</li> <li>DO NOT withhold oxygen from hypoxic patients.</li> <li>If Albuterol and / or Ipratropium is given, monitor the patient's cardiac rhythm and initiate IV.</li> <li>Patient with known COPD, asthma and a history of steroid use should receive IV MethylPREDNISolone (Solu-Medrol). Use with caution in diabetics (hyperglycemia), GI bleeds, and febrile patients (sepsis / infections).</li> <li>Assure enough expiration time when ventilating COPD or asthma patients to prevent breath stacking and allow for CO<sub>2</sub> elimination.</li> <li>Albuterol and Ipratropium can be given down an ETT or tracheostomy during ventilation if there is evidence of bronchoconstriction.</li> <li>IM epinephrine not helpful in COPD or Emphysema. Utilized for severe asthma</li> </ul>