Procedure Guidelines

<table>
<thead>
<tr>
<th>Protocol Title:</th>
<th>Continuous Positive Pressure (CPAP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Adoption Date:</td>
<td>08/2000</td>
</tr>
<tr>
<td>Date of Most Recent Update:</td>
<td>05/2016</td>
</tr>
<tr>
<td>Medical Director:</td>
<td>Chad Torstenson M.D.</td>
</tr>
</tbody>
</table>

**Indications:**
1. Hypoxemia secondary to Congestive Heart Failure (CHF) and acute cardiogenic pulmonary edema
2. Hypoxemia secondary to Chronic Obstructive Pulmonary Disease (COPD)
3. Hypoxemia secondary to inadequate ventilation

**Contraindications:**
1. Respiratory Arrest
2. Agonal Respirations
3. Decreased level of consciousness/ inability to follow commands or directions
4. Cardiogenic Shock
5. Pneumothorax
6. Penetrating chest trauma
7. Persistent nausea/vomiting
8. Facial Anomalies / Trauma

**Signs and Symptoms:**
Adults in respiratory distress that have bibasilar rales or wheezes plus one of the following: Increased work of breathing
Initial room air O2 saturation < 90%
Respiratory rate > 28/min

**Procedure:**
1. Assess Vital Signs
2. Attach cardiac monitor, pulse oximeter, and nasal capnography
3. If BP <100 systolic, contact Medical Control prior to beginning CPAP
4. Verbally instruct patient: **Patient may require “verbal sedation to be used effectively.”**
• Example:  Patient - “I can’t get air in! I can’t breathe.”  
  Caregiver- “This will help you get air in,” or “This will help you breathe easier.”

5. Initiate CPAP at 7.50 cm H2O.
6. If no improvement is observed after 5 minutes at 7.5 cm H2O, increase CPAP valve to 10 cm H2O and continue treatment throughout transport to ED ensuring that the patient’s systolic BP does not fall below 100 mmHg.
7. Assess and record pulse, respirations, SpO2, ETCO2 and blood pressure every 5 minutes.
8. If the patient condition deteriorates despite CPAP, terminate CPAP and manage airway as needed.
*Consider the use of the Medicated Assisted Airway Protocol
9. Notify the emergency department regarding CPAP early during transport.