Procedure Guidelines

<table>
<thead>
<tr>
<th>Protocol Title:</th>
<th>Biphasic Positive Pressure (BiPAP)</th>
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<tr>
<td>Original Adoption Date:</td>
<td>04/2011</td>
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<tr>
<td>Past Protocol Updates:</td>
<td>NOT APPLICABLE PROTOCOL NEW IN 2011</td>
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<tr>
<td>Date of Most Recent Update:</td>
<td>December 26, 2013</td>
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<td>Medical Director:</td>
<td>Chad Torstenson M.D.</td>
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**Indications:**
For use with patients already on BiPAP either in-hospital or at home.
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 BiPAP
4. Verbally instruct patient: 

   Patient requires verbal sedation to be used effectively. 
   • Example: Patient - “I can’t get air in!” 
   Caregiver- “This will help you get air in,” or “This will help you breathe easier.” 

5. Initiate BiPAP at the patient’s previously outlined settings and continue treatment throughout transport to ED.

6. Assess and record pulse, respirations, SpO2, ETCO2 and blood pressure every 5 minutes.

7. If the patient condition deteriorates, despite BiPAP, terminate BiPAP and manage airway as needed.

*Consider the use of the Continuous Positive Airway Pressure (CPAP) protocol
*Consider the use of the Medicated Assisted Airway protocol