



# Section 2: Adult Airway/Respiratory Protocols

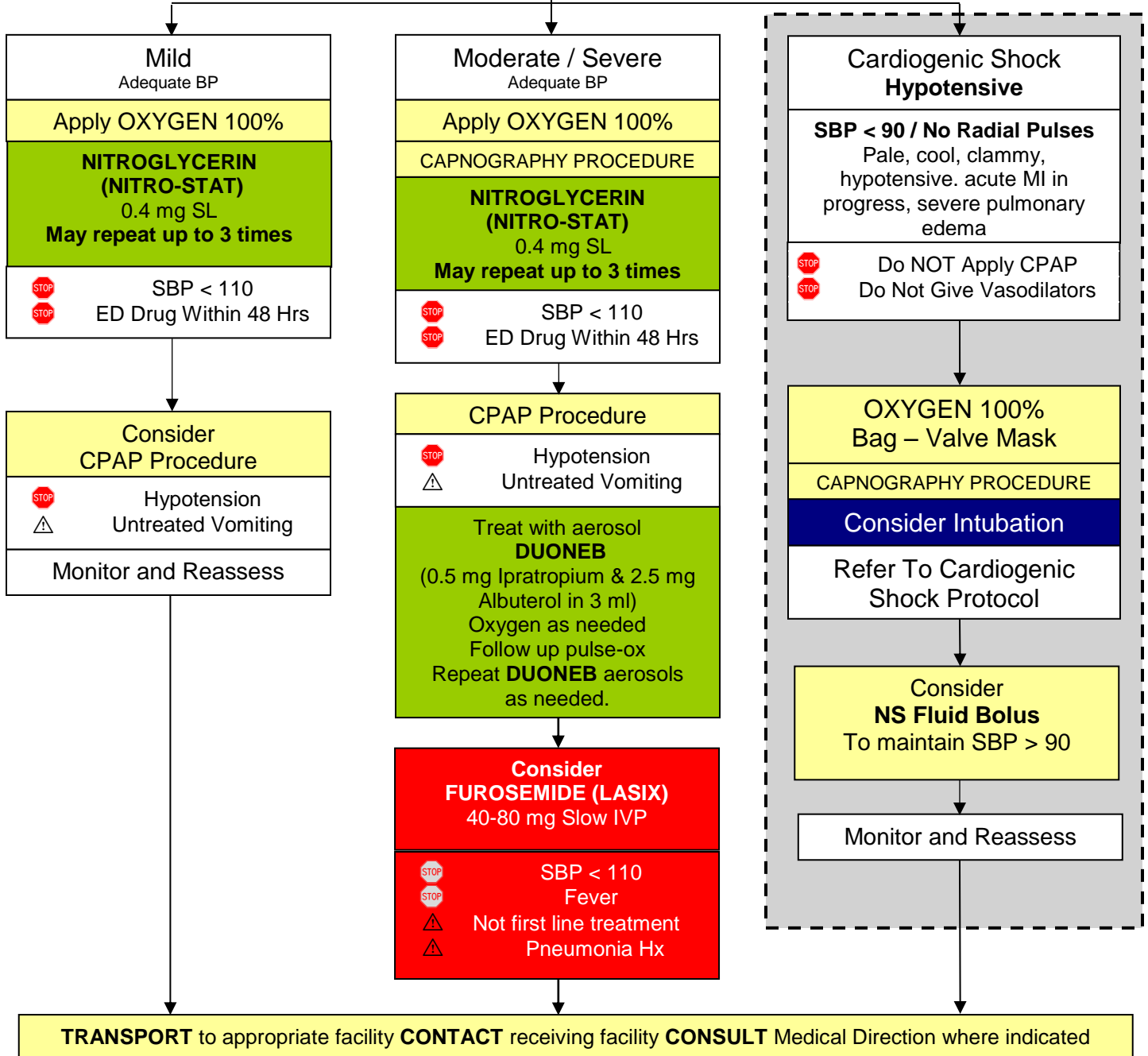
## ADULT AIRWAY/RESPIRATORY: CONGESTIVE HEART FAILURE/PULMONARY EDEMA

**UNIVERSAL PATIENT CARE PROTOCOL**

12 Lead EKG Procedure  
1<sup>ST</sup> Contact to EKG and Transmission < 10 Min

**IV PROCEDURE**

E	EMT	E
A	AEMT	A
P	PARAMEDIC	P
M	MED CONTROL	M





## Section 2: Adult Airway/Respiratory Protocols

### ADULT AIRWAY/RESP: CONGESTIVE HEART FAILURE/PULMONARY EDEMA-cont.

I – MILD	II – MODERATE	III – SEVERE
<p><b>Heart Rate</b> Normal range</p> <p><b>Blood Pressure</b> Normal or slightly elevated</p> <p><b>Breath Sounds</b> Bilateral rales Rhonchi Wheezing possible Some difficulty breathing</p>	<p><b>Heart Rate</b> Tachycardia</p> <p><b>Blood Pressure</b> Elevated</p> <p><b>Breath Sounds</b> Bilateral diffuse rales Wheezing possible Diminished Working hard to breath Frothy sputum may occur</p>	<p><b>Heart Rate</b> Tachycardia then drops to bradycardia</p> <p><b>Blood Pressure</b> Elevated HIGH then drops to Hypotension</p> <p><b>Breath Sounds</b> May be ominously quiet Fatigued from work of breathing</p>

HISTORY	SIGNS AND SYMPTOMS	DIFFERENTIAL DIAGNOSIS
<ul style="list-style-type: none"> <li>Congestive heart failure</li> <li>Past medical history</li> <li>Medications -diuretics</li> <li>Erectile dysfunction medication use</li> <li>Cardiac history - past myocardial infarction</li> <li>&gt;75 years old on diuretic</li> <li>Absence of cough</li> <li>Severe HTN</li> </ul>	<ul style="list-style-type: none"> <li>Respiratory distress, bilateral rales</li> <li>Apprehension, orthopnea</li> <li>Jugular vein distention</li> <li>Pink, frothy sputum</li> <li>Peripheral edema, diaphoresis</li> <li>Hypotension, shock</li> <li>Chest pain</li> <li>Positive hepato-jugular reflux (HJR)</li> <li>Orthopnea</li> </ul>	<ul style="list-style-type: none"> <li>Myocardial infarction</li> <li>Congestive heart failure</li> <li>Asthma</li> <li>Anaphylaxis</li> <li>Aspiration</li> <li>COPD</li> <li>Pleural effusion</li> <li>Pneumonia</li> <li>Pulmonary embolus</li> <li>Pericardial tamponade</li> </ul>

Congestive Heart Failure Signs and Symptoms	Pneumonia Signs and Symptoms
<ul style="list-style-type: none"> <li>Afebrile</li> <li>Jugular venous distension (JVD)</li> <li>Positive hepato-jugular reflux (HJR)</li> <li>Bilateral rales</li> <li>Distal edema</li> <li>Orthopnea</li> <li>History of CHF</li> </ul>	<ul style="list-style-type: none"> <li>Febrile</li> <li>Cough</li> <li>History of infectious illness</li> <li>Unilateral rales</li> <li>No distal edema</li> <li>No jugular venous distension (JVD)</li> <li>No hepato-jugular reflux (HJR)</li> </ul>

- Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro
- Obtain 12-lead EKG to evaluate for M.I.
- Differentiate and document CHF vs pneumonia.
- Monitor for hypotension after administration of Nitroglycerin (Nitro-Stat).
- Monitor for hypotension while using CPAP, specifically with Nitroglycerine (Nitro-Stat)
- DO NOT administer Nitroglycerin (Nitro-Stat) to a patient who took an erectile dysfunction medication (Viagra, Cialas, Levitra, etc.) within the last 48 hours.