

Congestive Heart Failure (CHF)

Protocol

Douglas County KS EMS System

November 2022

Reference Procedures: [12 lead](#), [BVM](#), [CPAP](#), [Pulse Oximetry](#), [Z Vent](#)

Goals for Patient Care:

1. Improved clinical status and hemodynamic stability
2. NIPPV to support respiratory distress

Medications:

ADULT Medications:

- **Nitroglycerin:** 0.4mg SL repeat q 3-5 min
(Systolic BP above 100mm Hg)
(max dose, 3 sprays)
- **Albuterol:** 2.5 mg in 3cc NS repeat PRN
- **Dopamine:** 400 mg / 250 cc NS infused at 5-20 mcg/kg/min (titrated to effect)
IV/IO
(Refer to Dopamine formulary for drip rate)

PEDIATRIC Medications: **Refer to HandTevy**

- ☎ **Contact Medical Control** if you have a pediatric CHF Pt prehospital for guidance
- **Albuterol:** 2.5 mg in 3cc NS repeat PRN
- **Dopamine:** 400 mg / 250 cc NS infused at 5-20 mcg/kg/min (titrated to effect)
IV/IO
(Refer to Dopamine formulary for drip rate)

Background

Congestive Heart Failure (CHF) is a common chronic, often progressive condition that affects the pumping power of heart muscles. While often referred to simply as "heart failure," CHF specifically refers to the stage in which the heart pumps inefficiently leading to clinical manifestations of pulmonary edema, peripheral edema, dyspnea, etc. You may encounter patients with two types of heart failure:

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Procedures/ Interventions

- Administer O2 if SpO2 <92%, assist ventilation as required
- Establish IV/IO access
- Administer nitroglycerin (NTG) if SBP >90mmHG
 - NTG is contraindicated in patients who have taken erectile dysfunction (ED) drugs in last 48 hours
 - Avoid NTG in inferior wall ischemia/infarction
- Nitroglycerin Paste can be used concurrently with spray
- NIPPV
 - CPAP- Initial dose 5cm/H₂O, increase until effective
 - BiPAP – Protocol under development
- Evaluate 12 lead and transmit if needed
- Consider Albuterol Sulfate for wheezing

Cardiogenic Shock: If SBP<90

- Treat underlying dysrhythmia (refer to Dysrhythmia Protocol)
- Consider dopamine for hypotension