



Cardiogenic Shock

Adult Medical

Austin County
EMS Protocol & Guideline

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Overview: Cardiogenic shock can result from a multitude of etiologies. These include, but not limited to; Myocardial Infarction, Left Ventricular Hypertrophy, chemical induced dysfunction (medication OD / Adverse reaction, Toxicological exposure, etc) and electrolyte imbalances.

Definition: Any patient that is presenting with the inability to maintain an adequate blood pressure and/or rate, ultimately resulting in inadequate cardiac output. Inadequate output causes inadequate tissue perfusion = Shock.

EMT

- Place patient on the **Cardiac Monitor**
- Obtain **12 Lead EKG** – if applicable
- **Oxygen** administration as appropriate to the patient presentation
- **Airway Adjuncts** (Supraglottic Airway, OPA, NPA) EtCO2 monitoring appropriate to patient presentation
- Obtain **BGL**
- **Identify** Source/Causes

AEMT

- **Normal Saline:** 20 ml/kg fluid challenge
 - May repeat as needed
 - Ongoing assessment for fluid overload/pulmonary edema

Paramedic

- **Epinephrine Infusion** - 1mg of 1:10,000 in a 100 bag to maintain a BP of 90 mmHg or greater
or
- **Dopamine 5 to 20 mcg/kg/min** titrated to maintain a systolic BP of 90 mmHg or greater
- Refer to **RSI** protocol as indicated by patient presentation

PEARLS

In extreme cases, utilization of Normal Saline, Dopamine and Epinephrine infusions may be necessary. If possible ensure at least 2, if not 3 IV sites to independently flow each treatment, however, if necessary to piggyback, attempt to keep the vasopressors separate. All 3 may be given through 1 IV site if absolutely necessary in consideration of risk/benefit to the patient