

CONGESTIVE HEART FAILURE / PULMONARY EDEMA

UPDATED 1/2024

ALL PROVIDERS

- Focused history and physical exam
 - Determine whether the patient (male or female) has taken erectile dysfunction medications such as Viagra, Levitra or Cialis within the last 24 hours.
 - Assess blood glucose level.
- Continuous cardiac, ETCO₂, 12 lead ECG, and pulse oximetry monitoring.
- Treatment Plan**
 - Maintain airway; assist with breathing as necessary, provide oxygen as needed to target SpO₂ 90-94%.
- Key Considerations**
 - Do not use nitroglycerin if the patient has taken erectile dysfunction medications in the last 24 hours.
 - In pregnant patients of >20 weeks gestation: Place wedge-shaped cushion or multiple pillows under patient's right hip and manually displace the uterus.
 - Pediatric lowest acceptable systolic blood pressures are birth to 1 month = 60mmHg, 1 month to 1 year = 70mmHg, 1 year to 10 years is = 70mmHg + (age x 2) and over 10 years = 90mmHg.

ADULT

PEDIATRIC (<15 years of Age)

NOTE: Pediatric weight based dosing should not exceed Adult dosing.

EMT

EMT

- Assist patient with prescribed nitroglycerin SL every 5 minutes, up to 3 doses, as long as dyspnea or chest pain persist and SBP >90 mmHg
 - Do not administer nitroglycerin if the patient (male or female) has taken erectile dysfunction medications within the last 24 hours

AEMT

AEMT

- Supraglottic device, vascular access and fluid
 - IV access prior to nitrates is preferred if possible
 - Limit fluid bolus to 250–500 mL NS or LR
- **Nitroglycerin 0.4 mg SL** every 5 minutes (max of 3 doses) if dyspnea or chest pain persist and SBP >90 mmHg or MAP of 65.
- **CPAP/BiPAP** – Consider when the patient is awake, cooperative and SBP >90 mmHg
 - Explain the procedure to the patient
 - **CPAP** - Provide 10 L/min oxygen and PAP at 10 cm H₂O
 - **BIPAP** – Provide 10 L/min oxygen and IPAP at 10 cm H₂O with EPAP at 5 cm H₂O

- Supraglottic device, vascular access and fluid
- CPAP/BiPAP** – ONLY use when the patient is on the machine at home. Maintain home settings and bring machine with the patient. If unable to adequately ventilate, return to BVM

📞 Contact OLMC to discuss further settings and treatment above the initial setup.

PARAMEDIC

- ❑ **Push Dose Epinephrine 2-10mcg** as needed to maintain a SBP >100 mmHg or MAP of **65**
- ❑ **Epinephrine 2-10 mcg/min** IV/IO infusion for shock. Titrate up to 10 mcg/min to maintain a SBP >100 mmHg or MAP of **65**
- ❑ **Norepinephrine 1 mcg/min** IV/IO infusion for shock. Titrate up to 30 mcg/min to maintain SBP >100 mmHg or MAP of **65**.

PARAMEDIC

- ❑ **Push Dose Epinephrine 1mcg/kg** as needed to maintain a SBP >70 + (age in years x 2) mmHg
- ❑ **Epinephrine 0.1-1mcg/kg/min** IV/IO infusion for shock. Titrate to maintain a SBP >70 + (age in years x 2) mmHg.