CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) PROCEDURE

Indications
- Patients >8 years of age in severe respiratory distress and signs of CHF, COPD, and asthma
- Near drowning

Pre-procedure
- ALS RMC
- Place patient in a seated position with legs dependent
- Follow manufacturer directions for CPAP device set up
- Explain device to patient

Procedure
- Apply device to patient; set flow rate in excess of the patients inspiratory flow rate
- If albuterol and/or ipratropium appropriate, may administer with CPAP in-line nebulizer
- Reassess VS q5 min after CPAP applied, continuous SpO2 monitoring
- Increase oxygen percentage if patient does not demonstrate improvement after 5 minutes of application; repeat PRN to obtain improvement
- Remove the CPAP device and assist ventilations with BVM and/or intubation if patient condition worsens

Equipment
- CPAP equipment
- In-line nebulizer

Critical Information
- Contraindications:
  - Absolute:
    - Age <8 years
    - Respiratory or cardiac arrest
    - Agonal respirations
    - Severely depressed LOC
    - S/Sx of pneumothorax
    - Inability to maintain airway latency
    - Major trauma (especially head trauma with signs of ICP or significant chest trauma)
    - Facial anomalies or trauma
    - Vomiting
  - Relative contraindications
    - Systolic BP <100
    - History of pulmonary fibrosis or history of barotrauma
    - Decreased LOC
    - Claustrophobia or inability to tolerate mask (after 1-2 min trial)

Special Considerations
- Consider using sedation to alleviate possible anxiety associated with the CPAP device