

**CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP)**

FOR USE IN PATIENTS &gt;34 KG

**BLS**

Universal Protocol #601

Pulse Oximetry – O<sub>2</sub> administration per Airway Management Protocol #602**BLS Elective Skills****For Moderate to Severe Respiratory Distress****Application**

- Monitor pulse oximetry throughout use
- Place patient in sitting position
- Set up CPAP per manufacturer recommendations
- Confirm air flow prior to applying mask to patient
- Instruct patient to inhale through nose and exhale through mouth
- Adjust settings, beginning low and titrate in 3cm/H<sub>2</sub>O increments – monitoring patient's tolerance and improved VS
- Consider BVM if patient fails to show improvement
- Document patient response before and after application – see notes

**Discontinue** (support respirations with BVM) if:

- Hypotension – SBP < 90 mmHg (remove topical Nitroglycerin products if used)
- Increasing respiratory distress or decrease in respiratory drive
- Decreasing LOC
- Evidence of barotrauma (subcutaneous air or pneumothorax)

Other signs or symptoms of decompensation (ALOC, sustained decrease in O<sub>2</sub> Sat, etc.)**ALS Standing Orders**

- Monitor End-tidal Capnography throughout use
- Medication(s) per appropriate treatment protocol (some patients may not tolerate application until medications take effect)
- Consider BVM or endotracheal intubation (adults only) if patient fails to show improvement

**Base Hospital Orders Only**

As needed

**Notes**

- Notify Base Hospital when used

Clinical Condition	Therapeutic Range	Maximum Settings
Asthma/Anaphylaxis	3.0-5.0 cm H <sub>2</sub> O	15 cm H <sub>2</sub> O
COPD/Pneumonia	5.0-7.5 cm H <sub>2</sub> O	15 cm H <sub>2</sub> O
Pulmonary Edema/Drowning	7.5-10.0 cm H <sub>2</sub> O	15 cm H <sub>2</sub> O

- Indications – Moderate or Severe Respiratory Distress associated with:

- Acute pulmonary edema
- COPD
- Asthma/Anaphylaxis
- Drowning
- Pneumonia

- Contraindications
  - Unconscious or decreased level of consciousness with inability to adequately ventilate
  - Respiratory failure/arrest or cardiac arrest
  - Tracheostomy
  - Signs and symptoms of a pneumothorax
  - Major facial, head or chest trauma
  - Vomiting or upper GI bleed
  - Epistaxis – moderate to severe
  - Unable to control secretions
  - Uncooperative patient after coaching
  - Hypotension (SBP < 90 mmHg)
- Documentation
  - Pressure settings and any adjustments
  - Pulse oximetry readings
  - ETCO<sub>2</sub> and ECG (ALS Providers)
  - Vital Signs
  - Response to treatments