

CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP)

FOR USE IN PATIENTS >34 KG

BLS

Universal Protocol #601

BLS Optional

Pulse Oximetry – O₂ administration per Airway Management Protocol #602

ALS Standing Orders

Application

- Place patient in sitting position
- Set up CPAP per manufacturer recommendations
- Instruct patient to inhale through nose and exhale through mouth
- Adjust settings, beginning low and titrate in 3cm/H₂O increments – monitoring patient’s tolerance and improved VS
- 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
- Document patient response before and after application – see notes

Discontinue (support respirations with BVM/intubation) 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 O₂ Sat, etc.)

Base Hospital Orders Only

As needed

Notes

- Notify Base Hospital when used

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

- Indications
 - Acute pulmonary edema
 - COPD
 - Asthma
 - Drowning
 - Pneumonia
- Contraindications
 - Unconscious or decreased level of consciousness with inability to adequately ventilate
 - Respiratory or cardiac arrest
 - Tracheostomy
 - Sign 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
 - ETCO₂
 - VS and ECG
 - Response to treatments