

Continuous Positive Airway Pressure (CPAP) 5.4

EMT/ADVANCED EMT STANDING ORDERS

INDICATIONS

- Spontaneously breathing patient in severe respiratory distress due to Asthma/COPD, Congestive Heart Failure / Pulmonary Edema, Pneumonia or Drowning.

CONTRAINDICATIONS

- Cardiac/Respiratory arrest.
- Unable to follow commands.
- Unable to maintain their own airway.
- Agitated or combative behavior.
- Vomiting and/or active upper GI bleed.
- Respiratory distress secondary to trauma.
- Suspicion of pneumothorax.
- Pediatric patient who is too small for the mask sizes available.

PROCEDURE

A

1. **Ensure adequate oxygen supply for CPAP device.**
2. Managing patient anxiety is extremely important. Reduce patient anxiety by coaching and minimize external stimuli as much as possible.
3. Place patient in upright position. Apply pulse oximetry, capnography nasal capture device and ECG as available and trained.
4. Choose appropriate sized device mask for patient, assemble the CPAP device, attach to oxygen supply and insure oxygen is flowing (follow manufacturer's directions for preparation for your particular device).
5. Place mask over face and secure with straps until minimal air leak.
6. Adjust Positive End Expiratory Pressure (PEEP) to 5 - 15 cmH₂O to effect for patient condition.
7. If device allows, titrate oxygen level to oxygen saturation of 94 – 99%.
8. Recheck mask for leaks and adjust straps as needed to minimize air leaks.
9. Reassure anxious patient.
10. Monitor pulse oximetry, capnography and ECG as available and trained.
11. If patient stabilizes, maintain CPAP for duration of transport and notify receiving hospital to prepare for a CPAP patient.
12. If patient begins to deteriorate, discontinue CPAP and assist respirations by BVM with PEEP valve.
13. Document CPAP procedure, including time and provider. Document serial pulse oximetry and capnography readings to demonstrate effects.

If a commercial device is not available you may consider using a BVM with PEEP valve:

1. Apply nasal cannula at 15 lpm
2. Attach PEEP valve to BVM at desired PEEP level (5 – 15 cmH₂O).
3. Attach oxygen to BVM at least 15 lpm and ensure flow.
4. Maintain continuous mask seal on patient to deliver CPAP.

PARAMEDIC STANDING ORDERS

Keep in mind CPAP uses large volumes of oxygen.

P

- Consider [Supraglottic Airway 5.9](#) or [Intubation 5.6/5.7](#)
- Consider [Rapid Sequence Intubation 7.4](#) (if trained and credentialed)
- Consider administering anxiolytic:
 - *Midazolam 2.5 mg IV/IN may repeat once in 5 minutes or 5 mg IM may repeat once in 10 minutes **OR**
 - Lorazepam 0.5 – 1 mg IV may repeat once in 5 minutes or 1 – 2 mg IM may repeat once in 10 minutes **OR**
 - Diazepam 5 mg IV (then 2.5 mg every 5 minutes to total of 20 mg)



*For IN administration of midazolam use a 5 mg/mL concentration.



Administer benzodiazepines with caution in elderly patients or those with signs of hypercarbia or respiratory fatigue.