

Clinical Indications for Continuous Positive Airway Pressure (CPAP) Use:

CPAP is indicated in all patients whom inadequate ventilation is suspected that is not associated with Asthma. This could be as a result of pulmonary edema, pneumonia, etc. NEVER initiate CPAP on patients who are hypotensive.

Procedure:

1. Ensure adequate oxygen supply to ventilation device.
2. Explain the procedure to the patient.
3. Consider placement of a nasopharyngeal airway.
4. Place ETCO₂ monitoring device on patient.
5. Place the delivery mask over the mouth and nose. Oxygen should be flowing through the device at this point.
6. Secure the mask with provided straps starting with the lower straps until minimal air leak occurs.
7. If the Positive End Expiratory Pressure (PEEP) is adjustable on the CPAP device adjust the PEEP beginning at 0 cmH₂O of pressure and slowly titrate to achieve a positive pressure as follows:
 - 5 – 10 cmH₂O for Pulmonary Edema, Near Drowning, possible aspiration or pneumonia
 - 3 – 5 cm H₂O for COPD
8. Evaluate the response of the patient assessing breath sounds, oxygen saturation, and general appearance.
9. Titrate oxygen levels to the patient's response. Many patients respond to low FIO₂ (30-50%).
10. Encourage the patient to allow forced ventilation to occur. Observe closely for signs of complications. The patient must be breathing for optimal use of the CPAP device.
11. Document time and response on patient care report (PCR).

Certification Requirements:

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Survival Flight Medical Director.