

# CPAP

Applies to:	
E	EMT*
P	Paramedic

## Clinical Indications:

1. CPAP is indicated in all patients whom inadequate ventilation is suspected and who have adequate mental status and respiratory drive to allow CPAP to function. This could be as a result of pulmonary edema, pneumonia, asthma, COPD, etc.

\* CPAP in patients < 15 years old remains an ALS skill only.

## Clinical Contraindications:

1. Decreased Mental Status.
2. Facial features or deformities that prevent an adequate mask seal.
3. Excessive respiratory secretions.
4. Suspected pneumothorax
5. Thoracic trauma
6. SBP < 90 mmHg
7. < 8 years of age

## Procedure:

1. Ensure adequate oxygen supply to ventilation device.
2. Explain the procedure to the patient.
3. Place the delivery mask over the mouth and nose. Oxygen should be flowing through the device at this point.
4. Secure the mask with provided straps starting with the lower straps until minimal/no air leak occurs.
5. If the Positive End Expiratory Pressure (PEEP) is adjustable on the CPAP device, adjust the PEEP beginning at 0 cmH<sub>2</sub>O of pressure and slowly titrate to achieve a positive pressure as follows:
  - a. 5 – 10 cmH<sub>2</sub>O for pulmonary edema, submersion (near drowning), possible aspiration or pneumonia. A PEEP setting of 7.5 cm H<sub>2</sub>O is suitable for most patients.
6. Evaluate the response of the patient assessing breath sounds, oxygen saturation, and general appearance.
7. Titrate oxygen levels to the patient's response (O<sub>2</sub> sat > 92%).
8. Encourage the patient to allow assisted ventilation to occur.
9. Observe closely for signs of complications and deterioration. Switch to assisted ventilation with BVM if necessary.
10. Document time and response in the EHR.

