

Continuous Positive Airway Pressure (CPAP)

I. Indications

Acute pulmonary edema/CHF patients in moderate to severe respiratory distress.

II. Contraindications

- A. Obtunded patients/unable to maintain their own airway or follow commands.
- B. Recent or spontaneous pneumothorax.
- C. Clinical findings / history suggestive of pulmonary aspiration, pneumonia, or COPD.
- D. Recent gastroesophageal, bronchial, or tracheal surgery.
- E. Facial anatomy that precludes adequate mask seal.

III. Precautions

- A. This procedure can cause a pneumothorax.
- B. Greater risk of aspiration.

IV. Equipment

- A. Oxygen
- B. Cardiac monitor with SPO2 monitor
- C. CPAP generator and pre-packaged respiratory treatment kit

V. Procedure

- A. Administer oxygen.
- B. Assess vital signs.
- C. Routine ALS.
- D. Continually monitor cardiac rhythm and SPO2.
- E. Assemble CPAP unit:
 - 1. Assemble CPAP generator to patient circuit.
Note: disposable filter and PEEP valve must be secure.
 - 2. Connect CPAP to ambulance O2 connector, turn on unit.
 - 3. Briefly explain the application (Verbal sedation) of the CPAP circuit and coach patient to breath through his/her nose.

Continuous Positive Airway Pressure (CPAP)

4. Apply CPAP mask to patient and adjust to ensure good seal and comfort.
- F. Continue to closely monitor patient's GCS, vital signs, lung sounds, cardiac rhythm, and SPO2. If patient decompensates, assist with BVM, followed by intubation as indicated.
- G. Continue pharmacological treatment as indicated.
- H. Notify receiving emergency department that CPAP is in use.
- I. On arrival at ED transfer CPAP oxygen to hospital source.