



# Amherst Fire District Procedure

## CPAP

### Clinical Indications:

- Any patient who is in respiratory distress with signs and symptoms consistent with, asthma, COPD, pulmonary edema, CHF, or pneumonia AND who is:
  - Awake and able to follow commands
  - Is over 12 years old and is able to fit the CPAP mask
  - Has the ability to maintain an open airway
  - Exhibits two or more of the following:
    - a respiratory rate greater than 25 breaths per minute
    - SPO<sub>2</sub> of less than 94% at any time
    - use of accessory muscles during respirations

### Clinical Contra-Indications:

- Patient is in respiratory arrest/apneic
- Patient's systolic blood pressure less than 100 mmHg
- Patient is suspected of having a pneumothorax or has suffered trauma to the chest
- Patient has a tracheostomy
- Patient is actively vomiting or has upper GI bleeding
- Patient is unable to maintain an airway

### Procedure:

1. EXPLAIN THE PROCEDURE TO THE PATIENT!
2. Ensure adequate oxygen supply to ventilation device
3. Place the patient on continuous pulse oximetry
4. Place the patient on cardiac monitor.
5. Place the delivery device over the mouth and nose
6. Secure the mask with provided straps or other provided devices
7. Use 7.5 cm H<sub>2</sub>O of PEEP valve (Medic can choose to decrease PEEP to 5.0 or increase PEEP to 10.0 depending on status of patient).
8. Check for air leaks
9. If respiratory status deteriorates, remove device.
10. Consider sedation for patients experiencing anxiety.
11. Due to changes in preload and afterload of the heart during CPAP therapy, a complete set of vital signs must be obtained every 5 minutes.

### Removal Procedure:

1. CPAP therapy needs to be continuous and should not be removed unless the patient can not tolerate the mask or experiences respiratory arrest or begins to vomit.
2. Intermittent positive pressure ventilation with a Bag-Valve-Mask, placement of a Non-visualized airway and/or endotracheal intubation should be considered if the patient is removed from CPAP therapy.

## **Special Notes:**

- Do not remove CPAP until hospital therapy is ready to be placed on patient.
- Watch patient for gastric distention, which can result in vomiting.
- Procedure may be performed on patient with Do Not Resuscitate Order.

## **Certification Requirements:**

- Successfully complete an annual skill evaluation inclusive of the indications, contraindications, technique, and possible complications of the procedure.