

**PROCEDURE FOR:** Image 3 Full Face Mask Using Non-Invasive Positive Pressure Ventilation (NPPV)

**RATIONALE:** Selecting the appropriate size and type of interface device for a patient is just as important as choosing the method of ventilation. Managing impending respiratory failure in the ICU or ED guidelines should serve as a reference.

**PROCEDURE:** 1. Identify candidate for NPPV:

- Obtain ABG as needed
- Does spontaneously breathing patient demonstrate clinical evidence of acute respiratory distress? More than one:
  - Dyspnea/SOB
  - Accessory Muscle Use
  - SpO<sub>2</sub> < 90%
  - RR > 24 BPM

1) YES: Does the patient exhibit any exclusion criteria for successful NPPV?

- Respiratory arrest
- Uncontrolled arrhythmias
- Airway obstruction
- Unable to clear secretions
- Uncooperative
- Facial trauma
- Systolic BP < 90 mmHg

2) NO: Initiate NPPV with BiPAP Vision Initial Settings:

- Please refer to BiPAP Ventilatory Support System Protocol

2. Full Face mask (Image 3) Indication:

- Inability to breathe through the nose
- Need immediate seal for ventilation
- Claustrophobia
- Anxiety
- Long-term NPPV

3. Adjust settings to patient ventilatory needs

4. Optimize patient ventilator synchrony:

- Optimize Vt and/or PCO<sub>2</sub>
- Minimize accessory muscle use
- Alleviate dyspnea
- Decrease RR

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5. Adjust settings to patient oxygenation needs:
  - Adjust EPAP (and IPAP)
  - Adjust FiO<sub>2</sub>
  - Adjust SpO<sub>2</sub> > 90%
6. Set alarms to appropriate levels
7. Monitor patient/respiratory parameters
  - Does patient demonstrate significant improvement in ABGs and respiratory symptoms?
    - 1) NO: intubate/place on mechanical ventilation
8. **Patient Disposition:**
  - Patients with impending respiratory failure (COPD Exacerbation, CHF Exacerbation, other) will be admitted to the Critical Care Unit.
  - For patients with advance directives and current orders indicating Do Not Resuscitate, Do Not Intubate and impending respiratory failure, NPPV via Full Face Mask can be utilized. These patients will be admitted to the Critical Care Unit or Cardiac Stepdown Unit.
  - Full Face Mask NPPV (CPAP, Bipap) can occur outside a monitored unit for select patients with sleep disordered breathing (sleep apnea) or Chronic Respiratory Failure (COPD, Neuromuscular Disease, other).
  - For specific questions, concerns or variation, please contact the Respiratory Therapy Department Medical Director (or his/her designee).

**APPROVAL:**

**EFFECTIVE DATE:**

**REVISION DATES:** 9/07, 5/08