

AIRWAY – PRE-OXYGENATION

1. Levels: EMT, AEMT, Paramedic, RN
2. Purpose: The goal of pre-oxygenation is to address and attempt to correct hypoxia especially in the setting of Ketamine Assisted Ventilation. In some cases, pre-oxygenation will eliminate the need for an invasive airway.
3. Indications:
 - 3.1. Risk for failure of oxygenation or ventilation
 - 3.2. At risk for failure of airway maintenance or protection
 - 3.3. Worsening clinical course expected
4. Procedure:
 - 4.1. Airway Positioning
 - 4.1.1. Position at a minimum of 20° head elevated when possible
 - 4.2. Adequate Ventilatory Effort
 - 4.2.1. Rule of 15s—Minimum of 3 minutes
 - 4.2.1.1. High Flow Nasal Cannula @ 15 lpm and Non-Rebreather Mask @ 15 lpm
 - 4.2.1.2. CPAP @ 10 cmH₂O with high flow nasal cannula @ 15 lpm in cases of suspected alveolar shunting (pulmonary edema, ARDS, pneumonia)
 - 4.3. Inadequate Ventilatory Effort
 - 4.3.1. Positive pressure ventilations via bag valve mask with PEEP of 15 cm/H₂O. See **[AIRWAY - BAG VALVE MASK Procedure.](#)**
 - 4.3.1.1. Place appropriate airway adjunct.
 - 4.3.1.2. Oxygen administration via High Flow Nasal Cannula @ 15 lpm may be helpful while providing ventilations via BVM
 - 4.3.2. See **[ADULT AIRWAY-BREATHING Protocol](#)**, **[KETAMINE ASSISTED VENTILATION Protocol](#)** or **[ADULT AIRWAY-NON BREATHING Protocol](#)**