

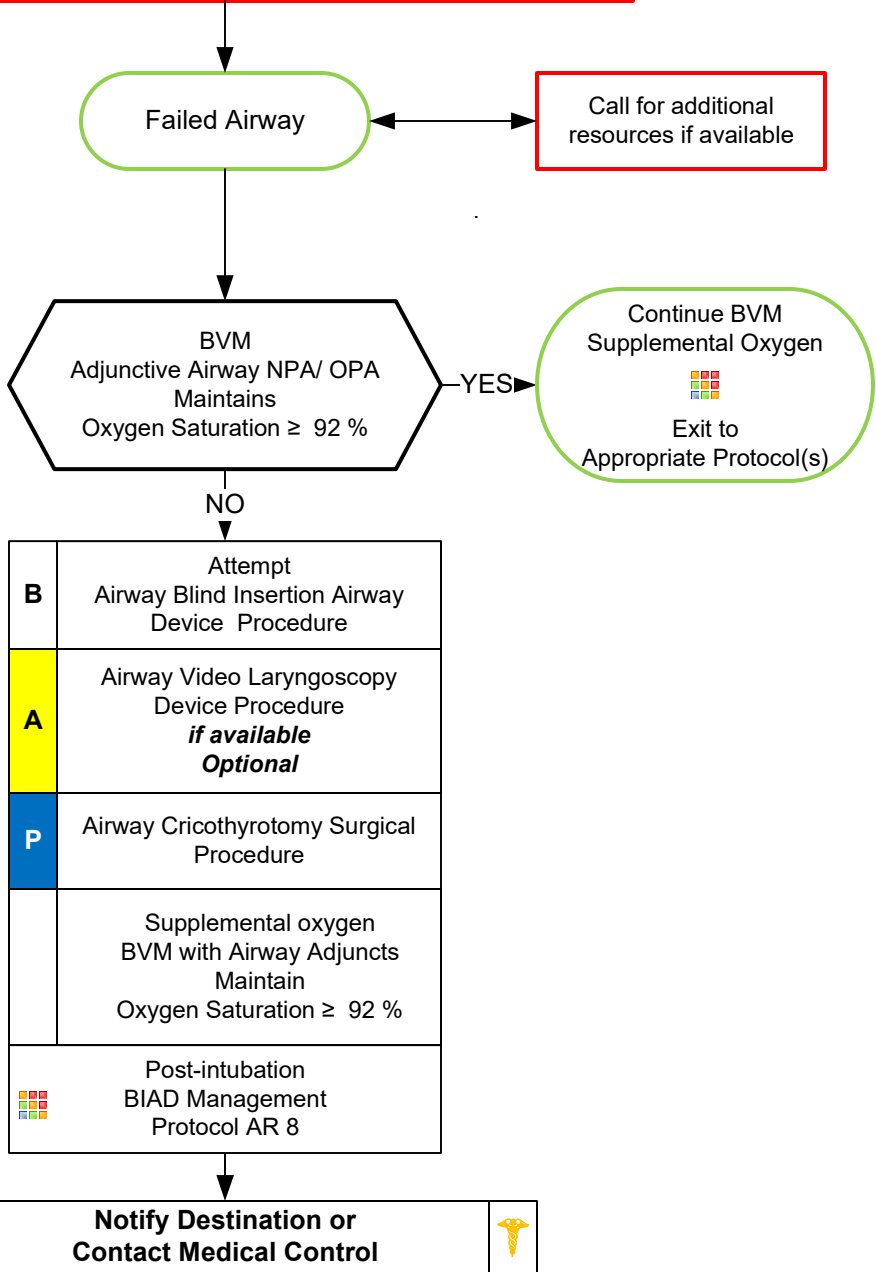


# Adult, Failed Airway

**Definition of Failed Airway:**  
 Unable to Ventilate and Oxygenate  $\geq 90\%$  during  
 or after one (1) or more unsuccessful intubation attempts  
  
 and/ or  
 Anatomy inconsistent with continued attempts  
  
 and/ or  
 Three (3) unsuccessful attempts by most experienced Paramedic/AEMT.  
*Each attempt should include change in approach  
 or equipment*  
  
**NO MORE THAN THREE (3) ATTEMPTS TOTAL**

- Capnography Monitoring**
- End-tidal (EtCO<sub>2</sub>) monitoring is mandatory following placement of an endotracheal tube.
  - EtCO<sub>2</sub> monitoring is mandatory following placement of a BIAD once available on scene.

*Protocols AR 1, 2, and 3 should be utilized together (even if agency is not using Drug Assisted Airway as they contain useful information for airway management.*





# Adult, Failed Airway

**\*\* FAILED AIRWAY + Unable to Ventilated / Oxygenate = Transport to closest hospital.**  
**On radio/phone report, clearly state, this is a FAILED UNSTABLE AIRWAY – we are unable to ventilate or oxygenate.**

**This supersedes all destination protocols !! – Dr Koontz**

## Pearls

- **For the purposes of this protocol a secure airway is when the patient is receiving appropriate oxygenation and ventilation.**
- **If an effective airway is being maintained by BVM with continuous pulse oximetry values of  $\geq 90\%$ , it is acceptable to continue with basic airway measures.**
- **Ventilation rate should be 10 - 12 per minute to maintain a EtCO<sub>2</sub> of 35-45 and avoid hyperventilation.**
- **Anticipating the Difficult Airway and Airway Assessment**
  - Difficult BVM Ventilation (ROMAN):** Radiation treatment/ Restriction; **Obese/ Obstruction/ OB** – 2d and 3d trimesters/ Obstructive sleep apnea; **Mask seal difficulty** (hair, secretions, trauma); **Age  $\geq 55$ ; No teeth.**
  - Difficult Laryngoscopy (LEON):** Look externally for anatomical problems; Evaluate 3-3-2 (Mouth opening should equal 3 of patients finger's width, mental area to neck should equal 3 of patient's finger's width, base of chin to thyroid prominence should equal 2 of patients finger's width); **Obese, obstruction, OB** – 2d and 3d trimesters; **Neck mobility limited.**
  - Difficulty BIAD (RODS):** Radiation treatment/ Restriction; **Obese/ Obstruction/ OB** – 2d and 3d trimesters/ Obstructive sleep apnea; **Distorted or disrupted airway; Short thyromental distance/ Small mandible.**
  - Difficulty Cricothyrotomy / Surgical Airway (SMART):** Surgery scars; **Mass or hematoma, Access or anatomical problems; Radiation treatment to face, neck, or chest; Tumor**
- **Complete an Airway Evaluation Form with any BIAD or Intubation procedure where medications are used to facilitate.**
- **Nasotracheal intubation:**
  - Procedure requires spontaneous breathing and may require considerable time, exposing patient to critical desaturation.**
  - Contraindicated in combative, anatomically disrupted or distorted airways, increased ICP, severe facial trauma, basal skull fracture, and head injury. Orotracheal route is preferred.**
- **Intubation attempt defined as laryngoscope blade passing the teeth or endotracheal tube passed into the nostril.**
- **If First intubation attempt fails, make an adjustment and try again: (Consider change of provider in addition to equipment)**
- **AEMT and Paramedics should consider using a BIAD if oral-tracheal intubation is unsuccessful.**
- **During intubation attempts use External Laryngeal Manipulation to improve view of glottis.**
- **Gastric tube placement should be considered in all intubated patients if available or time allows.**
- **It is important to secure the endotracheal tube well to better maintain ETT placement. Manual stabilization of endotracheal tube should be used during all patient moves/ transfers.**
- **DOPE: Displaced tracheostomy tube/ ETT, Obstructed tracheostomy tube/ ETT, Pneumothorax and Equipment failure.**