



# Airway: BIAD-Combitube

## Clinical Indications for Blind Insertion Airway Device (BIAD) Use:

- Inability to adequately ventilate a patient with a Bag Valve Mask or longer EMS transport distances require a more advanced airway.
- Appropriate intubation is impossible due to patient access or difficult airway anatomy.
- Inability to secure an endotracheal tube in a patient who does not have a gag reflex where at least one failed intubation attempt has occurred.
- Patient must be  $\geq 5$  feet and  $\geq 16$  years of age and must be unconscious.

## Procedure:

|   |        |   |
|---|--------|---|
| B | EMT    | B |
| I | EMT- I | I |
| P | EMT- P | P |

1. Preoxygenate and hyperventilate the patient.
  2. Lubricate the tube.
  3. Grasp the patient's tongue and jaw with your gloved hand and pull forward.
  4. Gently insert the tube until the teeth are between the printed rings.
  5. Inflate line 1 (blue pilot balloon) leading to the pharyngeal cuff with 100 cc of air.
  6. Inflate line 2 (white pilot balloon) leading to the distal cuff with 15 cc of air.
  7. **Ventilate the patient through the longer blue tube.**
    - Auscultate for breath sounds and sounds over the epigastrium.
    - Look for the chest to rise and fall.
  8. **If breath sounds are positive and epigastric sounds are negative, continue ventilation through the blue tube. The tube is in the esophagus.**
    - In the esophageal mode, stomach contents can be aspirated through the #2, white tube relieving gastric distention.
  9. If breath sounds are negative and epigastric sounds are positive, attempt ventilation through the shorter, #2 white tube and reassess for lung and epigastric sounds. If breath sounds are present and the chest rises, you have intubated the trachea and continue ventilation through the shorter tube.
  10. The device is secured by the large pharyngeal balloon.
  11. **Confirm tube placement using end-tidal CO<sub>2</sub> detector or esophageal bulb device.**
  12. **It is strongly recommended that the airway (if equipment is available) be monitored continuously through Capnography and Pulse Oximetry.**
  13. **It is strongly recommended that an Airway Evaluation Form be completed with any BIAD use.**
- **Endotracheal intubation with a Combitube in Place (Only if ventilation unsuccessful):**
    - A. The tube must be in the esophageal mode.
    - B. Prepare all equipment needed for endotracheal intubation.
    - C. Decompress the stomach by aspirating contents through the shorter, white tube.
    - D. Hyperventilate the patient.
    - E. Deflate the balloons on the Combitube and remove. Suction equipment must be ready.
    - F. Rapidly proceed with endotracheal intubation.

## Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System. Assessment should include direct observation at least once per certification cycle.