

TRACHEOSTOMY/STOMA EMERGENCY AIRWAY MANAGEMENT

INTRODUCTION: Patients with a tracheostomy tube in place or open stoma may fall into one of two categories.

1. **Tracheostomy** patients have intact airway anatomy between the tracheostomy and their mouth/nose.
2. Total **laryngectomy** patients rely entirely on their open stoma for their airway. Airway emergencies for both patient types most commonly result from obstruction.

PROCEDURE: Maintain proper PPE/BSI precautions. If patient is in need of ventilator assistance due to respiratory failure/arrest or airway obstruction:

For patients with tracheostomy tube in place:

1. Attempt to ventilate with **bag-valve mask** through tracheostomy tube if bag-valve will connect.
2. If unable to ventilate through tracheostomy tube, attempt to ventilate with bag-valve-mask sealed over mouth and nose while occluding tracheostomy tube.
3. If airway obstruction is encountered, suction down tracheostomy with appropriate size suction catheter:
 - I. Advance catheter gently until resistance is felt.
 - II. Withdraw about 2 cm then apply continuous suction while withdrawing.
 - III. Suction procedure should not exceed 10 seconds.
4. Reattempt ventilation through tracheostomy tube.
5. If obstruction persists, remove tracheostomy tube.
6. **BLS:** Attempt to ventilate through stoma using bag-valve and pediatric mask.
7. **ALS:** Insert appropriate size cuffed endotracheal tube into stoma.
8. Inflate cuff and reattempt ventilation through ET Tube.

9. Confirm proper placement:
 - ✓ Check for chest rise
 - ✓ Auscultate over epigastrium
 - ✓ Auscultate chest for bilateral breath sounds
 - ✓ Observe for fogging/misting in ET Tube
 - ✓ End Tidal CO₂

Laryngectomy/open stoma patients or those with a tube that cannot be connected to bag-valve mask:

1. Remove stoma cover, if present.
2. Remove inner tube, if present.
3. Suction through open stoma with appropriate size catheter, if obstruction suspected.
 - I. Advance catheter gently until resistance is felt.
 - II. Withdraw about 2 cm then apply continuous suction while withdrawing.
 - III. Suction procedure should not exceed 10 seconds.
4. **BLS:** Attempt to ventilate through stoma with bag-valve- and pediatric mask.
5. **ALS:** Insert appropriate size cuffed ET Tube and inflate cuff.
6. Confirm proper placement:
 - ✓ Check for chest rise
 - ✓ Auscultate over epigastrium
 - ✓ Auscultate chest for bilateral breath sounds
 - ✓ Observe for fogging/misting in ET Tube
 - ✓ End Tidal CO₂
7. Suction down ET Tube with appropriate sized catheter, if necessary.
8. Continue ventilations through ET Tube. Monitor capnography and oximetry.