

Purpose: To clear secretions from tracheostomy tube and maintain patent airway.

Clinical Considerations: Suction catheter size depends on the inner diameter of the tracheostomy tube. The depth of suction depends on the tracheostomy tube length and patient comfort. Both criteria are considered by the ordering physician.

Assemble Supplies:

- Clean gloves unless sterile gloves are required for patient
- Appropriately-sized suction catheter
- Distilled water
- Tap water

Preparation:

1. Read physician's order for detailed instructions specific to the patient.
2. Explain and prepare the patient for the procedure.
3. Prior to performing the procedure, assemble appropriate supplies and plan all actions.
4. Utilize appropriate infection control techniques while preparing, using, and discarding supplies.
5. Check suction machine for appropriate suction level and function by turning machine on and occluding tubing with clean-gloved hand and noting suction pressure.
6. For optimal performance of procedure, position patient using shoulder roll or other positioning device as appropriate.

Procedure:

1. Wash hands or use hand sanitizer as appropriate and apply gloves (to both hands) using sterile or clean technique as appropriate for individual patient.
2. Designate a clean and a dirty hand for the procedure. Clean hand will be used to manipulate suction catheter and dirty hand will be used to manage the suction port hub and other equipment.
3. Coil suction catheter around clean gloved hand leaving several inches of suction catheter length between clean hand and suction port hub.
4. Using dirty hand, attach suction tubing to suction catheter while touching only the suction port hub to secure connection.
5. Remove ventilator, tracheostomy collar, heat moisture exchanger, Passy Muir Valve, or tracheostomy tube cap.
6. Deliver deep resuscitation breaths as appropriate.
7. Advance catheter (with clean hand) into tracheostomy tube to appropriate depth:
 - a. **Adult - until cough is triggered or resistance is met;**
 - b. **Pediatric – to prescribed depth.**

Open Suction Protocol

7. Activate suction by occluding suction port with dirty hand.
8. Withdraw suction catheter over 5-10 seconds while gently rotating suction catheter between fingers and alternating suction activation in on/off pattern as directed.
 - a. For adult patients, use intermittent suction.
 - b. For pediatric patients, use continuous suction.
9. Rinse catheter with distilled water and repeat suction process until secretions have returned to baseline.
10. Deliver breaths with resuscitation bag or place patient on ventilator between suction passes.
11. Discard catheter if appropriate.
12. If catheter is to be re-used, rinse catheter for final time and disconnect from suction tubing.
13. Remove glove over suction catheter to preserve cleanliness and store in clean area.
14. Rinse suction tubing with tap water.
15. Document the procedure, including:
 - a. Tolerance,
 - b. Nature and amount of secretions,
 - c. Oxygen saturation, and
 - d. Vital signs as appropriate.