

<b>Providence Health Care</b>	Department:  <b>Respiratory Services</b>	Date Originated: <b>September 1986</b>  Date Revised: <b>January 2013</b>
<b>POLICY &amp; PROCEDURE</b>	Topic: <u>Critical Care</u> – Tracheostomy Tube Management - Decannulation/Elective Removal of a Tracheostomy Tube (Respiratory Therapy)  Number: B-00-12-12042	Related Links:

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#### **APPLICABLE SITES:**

St. Paul's Hospital  
 Mount Saint Joseph Hospital

#### **GENERAL INFORMATION:**

##### **Assessment of Readiness for Decannulation:**

Although there are no specific guidelines around when to consider elective removal of the tracheostomy tube, in general it should be considered when:

- Reason(s) for placement of the tracheostomy tube have been resolved
- Able to manage secretions – effective cough
- Adequate level of consciousness
- Able to tolerate trial of tracheostomy tube occlusion (corking/plugging) – in some cases, an assessment of tolerance to trach tube corking/plugging for at least 24h may be beneficial

A Physician's order is required for elective tracheostomy tube decannulation.

**Note:** If the patient has not had the tracheostomy in situ for at least 7 days, the tracheal-cutaneous tract may not be fully formed, in which case reinsertion of the trach tube in the event of decannulation failure may be difficult and could lead to incorrect placement into the anterior cutaneous tissues.

#### **Post-Decannulation Monitoring:**

After removal of the tracheostomy tube, the patient needs to be monitored for:

- Airway/ventilation status - breath sounds, work of breathing, airway patency (presence/absence of stridor), oxygenation/SpO<sub>2</sub>
- Cough/secretion management
- Stoma site – signs of infection (early/late), healing (late)
- Swallowing ability – consult OT or SLP as necessary

## **PROCEDURE FOR DECANNULATION:**

### **Equipment:**

- Personal protective equipment as appropriate
- Dressing tray
- Sterile normal saline
- Oral/tracheal suction supplies (regulator, canister, tubing)
- Tonsil tip/Yankeur suction
- Disposable suction catheter kit (unless patient already has inline suction catheter in situ)
- Scissors
- 20 mL syringe
- 2x2 gauze
- Allevyn Gentle Border adhesive (or suitable alternative)
- Oxygen therapy equipment for use post decannulation (as required)

### **Procedure:**

1. Obtain physician order for decannulation.
2. Wash hands; don personal protective equipment as appropriate.
3. Explain the procedure to the patient.
4. Position the patient in semi-fowlers as tolerated.
5. Prepare equipment. Place drape from dressing tray on the patient's chest.
6. Pre-oxygenate the patient. Suction via both the tracheostomy and oropharynx to prevent aspiration of secretions.
7. Remove the stoma dressing and cut the ties securing the tracheostomy tube.
8. Fully deflate the cuff of the tracheostomy tube in situ if applicable.
9. Remove the tracheostomy tube smoothly while the patient is performing the deep breath and hold. The patient will most likely start to cough as the trach tube is removed. Discard the tube after removal.
10. Apply oxygen therapy as required via the upper airway.
11. Cleanse the skin and stoma site with gauze soaked in normal saline. Completely dry the

area. Any stray hairs should be clipped to ensure close approximation of the dressing to the site.

12. Place a 2x2 gauze dressing over the stoma and secure with the Allevyn dressing.

**NOTE:** The dressing should be changed daily and PRN. This is a shared responsibility between Respiratory Therapy and Nursing.

**NOTE:** As stoma begins to close/heal, gauze may no longer be necessary.

13. Instruct the patient to apply firm pressure over the tracheostomy site when coughing until the stoma has closed and is healed. The tracheostomy stoma will generally heal within 5-7 days following decannulation, although rates are highly variable.

**NOTE:** The physician should be informed if the stoma fails to heal within 14 days of decannulation or if the stoma site appears reddened, inflamed, or infected. Treatment for infection and/or surgical closure may be required.

14. The patient may have reduced vocal quality resulting from air flow diversion through the stoma on exhalation. Vocalization can be enhanced by having the patient gently place 2 fingers over stoma dressing to maximize airflow through the vocal cords. Vocal quality should return to normal once the stoma has healed.
15. Assess the patient and document procedure on the Respiratory Flowsheet or in Progress Notes of the patient record.
16. Remove Trach Emergency Equipment bag and supplies 2-3 days post decannulation (once internal closure of the stoma has begun).

## REFERENCES:

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4. O'Connor H, White AC. *Tracheostomy decannulation*. Respir Care 2010; 55(8): 1076-1081.
5. Smith & Nephew Allevyn Adhesive product insert.
6. Stelfox HT, Hess DR, Schmidt UH. *A North American survey of respiratory therapist and physician tracheostomy decannulation practices*. Respir Care 2009; 54(12): 1658-1664.