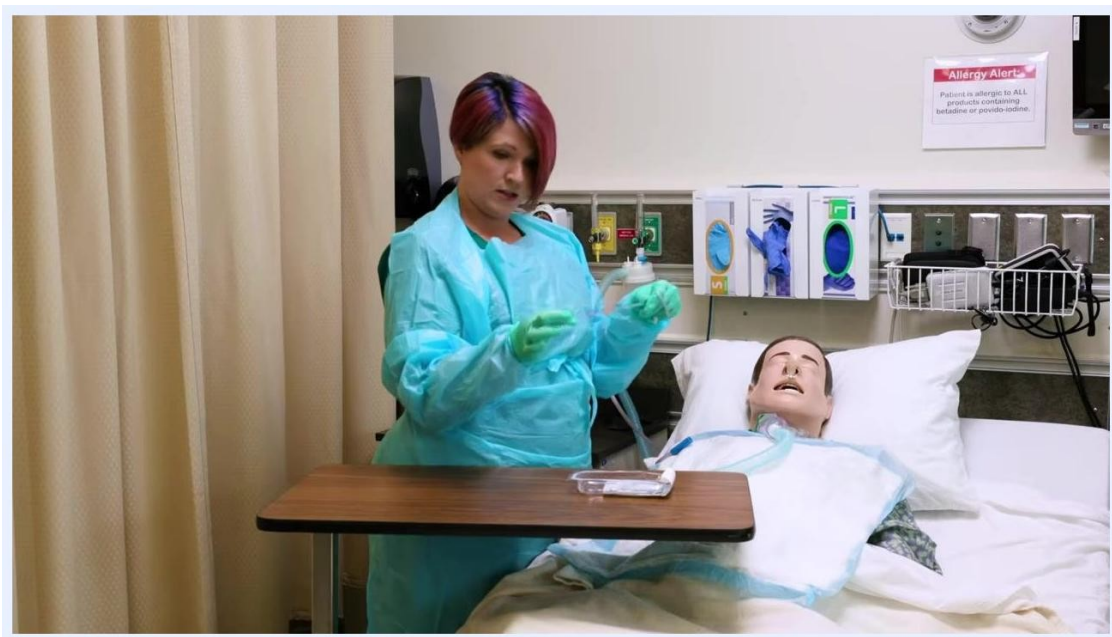


How to Suction a Tracheostomy: Patient Care Procedure

This procedure describes how to suction a tracheostomy safely, using sterile technique from initial patient assessment through post-procedure documentation. It is intended for nursing and allied health staff caring for a patient with a tracheostomy tube who requires airway clearance. Follow each phase in order to protect the sterile field, minimize patient discomfort, and maintain accurate records of the intervention.



Clinician in PPE holding a suction catheter, pointing out measurement markings; patient mannequin in bed, medical supplies and allergy alert sign visible

Purpose & Scope

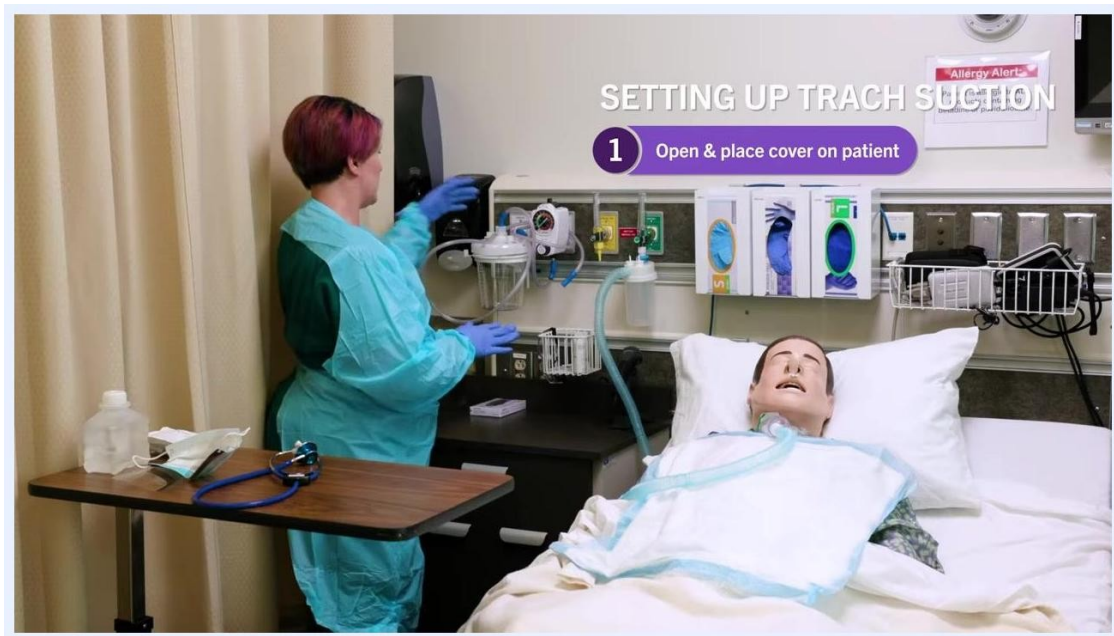
Clinical context: Tracheostomy suctioning removes secretions from the airway of a patient who cannot clear them independently. It is performed at the bedside in an inpatient care setting, using a wall-mounted suction unit, sterile catheter kit, and standard Personal Protective Equipment (PPE).

Patient population: Adult patients with an established tracheostomy who show signs of airway secretions, reduced oxygen saturation, or audible respiratory congestion.

Care setting: Hospital bedside, with the patient positioned in bed and equipment (suction canister, oxygen flow meter, overbed table) mounted or placed within reach.

Required supplies:

- Gown, mask with attached face shield, non-sterile gloves, and sterile gloves
- Sterile suction kit (catheter, container) and sterile water
- Wall-mounted suction canister and tubing
- Chucks pad or towel for moisture protection
- Stethoscope and pulse oximeter
- Oxygen source with flow meter



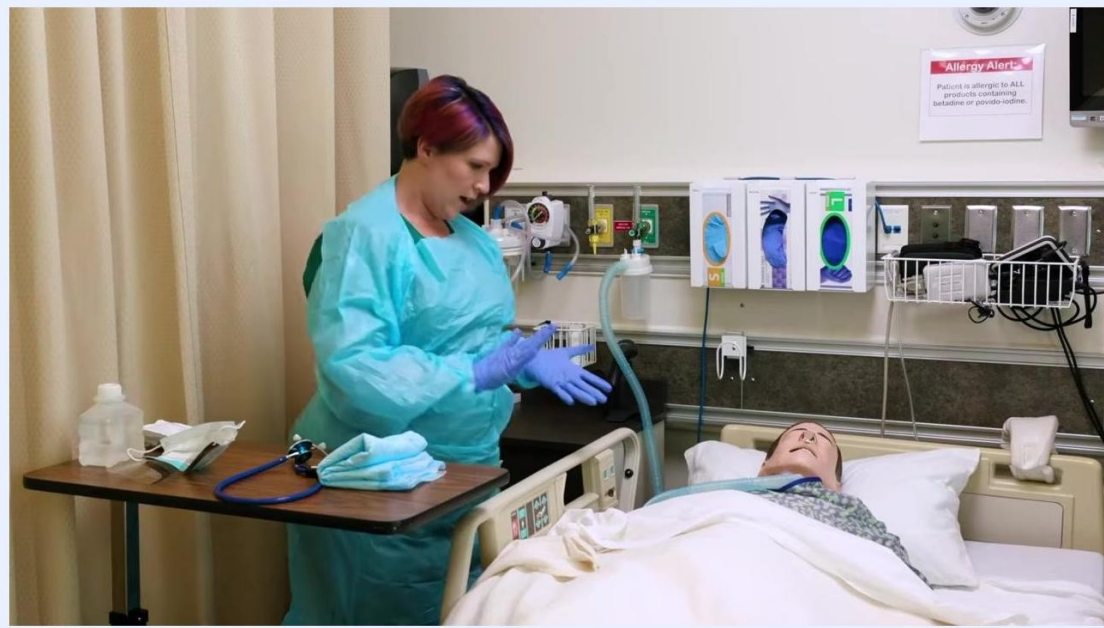
Close-up of nurse in blue gown and gloves holding suction tubing, pointing to the suction regulator gauge, with a label indicating "100-150 mm HG for adults"

Patient Assessment

Complete the following checks before beginning the procedure and again immediately afterward to confirm the intervention was effective.

Assessment step	What to check
Hand hygiene	Wash hands thoroughly at the sink before any patient contact

PPE	Gown, mask with face shield, then non-sterile gloves, donned in that order
Patient position	Bed raised to a 30–45 degree angle; bed height adjusted for the clinician; bed rail lowered on the working side
Lung sounds	Auscultate with a stethoscope before suctioning
Respiration rate	Count and record (example observed: 22 breaths per minute)
Oxygen saturation	Check with a pulse oximeter; low saturation is an indication for suctioning
Patient communication	Inform the patient of the upcoming procedure and its purpose



Nurse in blue gown and gloves adjusting the bed rail of a mannequin patient, with PPE and medical equipment visible on the wall

Inform the patient before you start, for example: "Before I start, I'm going to listen to your lung sounds really quick here." If the patient cannot be repositioned to sitting, complete the assessment as best as possible in the current position.

Care Protocol

The procedure for how to suction a tracheostomy is organized into five phases: preparation, sterile setup, the suctioning itself, post-procedure cleanup, and documentation.

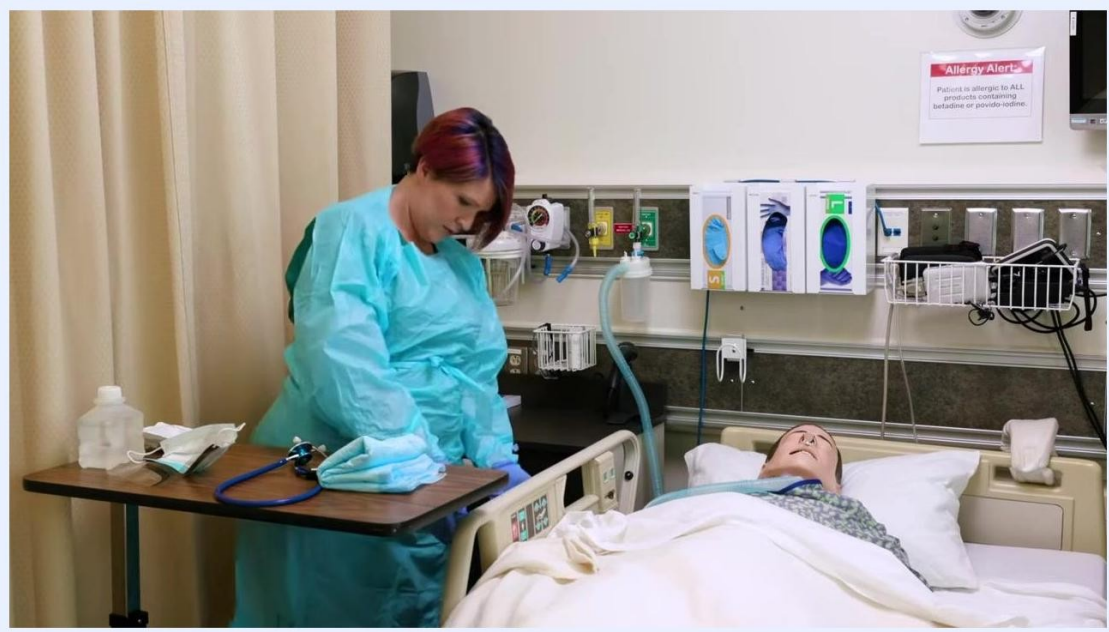
Phase 1: Preparation

1. Wash hands at the sink following standard hand hygiene protocol.
2. Don PPE in order: gown (tied behind or in front, whichever is easier), mask with face shield (positioned so the gap faces away from your face, so mucus does not run onto your skin), then non-sterile gloves.
3. Adjust the bed to a 30–45 degree angle and a comfortable working height, then lower the rail.
4. Assess lung sounds and respiration rate, and inform the patient of your actions.
5. Check oxygen saturation with a pulse oximeter; low saturation supports the need for suctioning.
6. Complete patient education about the procedure before proceeding.
7. Set up all non-sterile items before opening the sterile kit, to avoid breaking the sterile field later.

8. Open and place a chuck pad or towel across the patient's chest to protect gown and linens.



Nurse in green scrubs preparing PPE at bedside, with a mannequin patient in a hospital bed, PPE supplies and medical equipment visible on the wall, and a sign indicating patient allergies

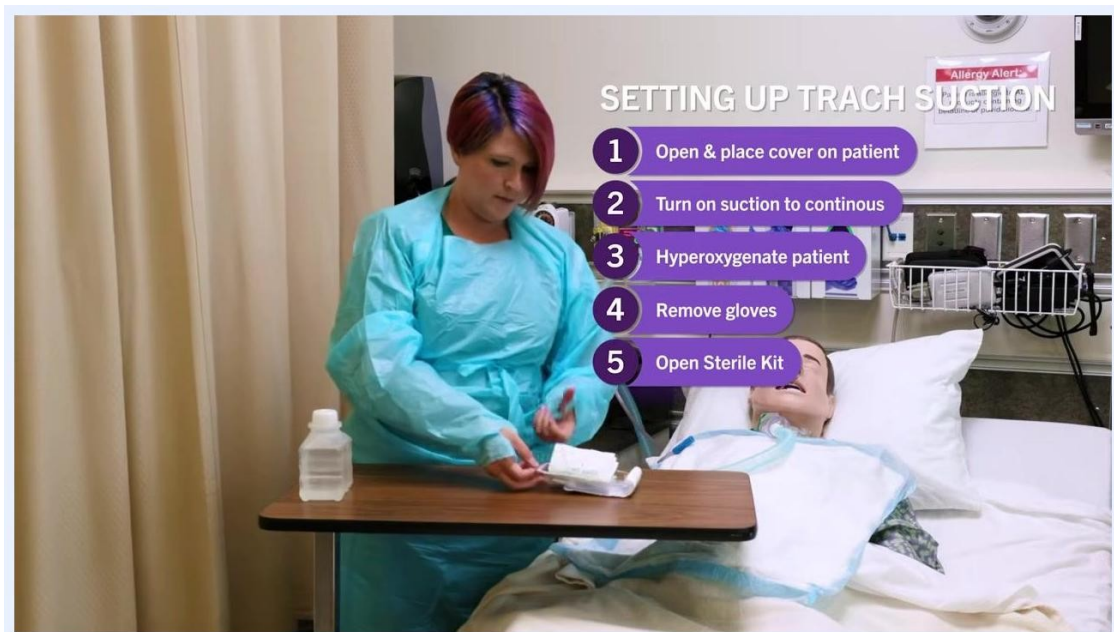


Nurse in blue gown and gloves using a stethoscope to assess the mannequin patient's lung sounds, with PPE and medical equipment visible on the wall

9. Turn the suction regulator to the CONT (continuous) setting.
10. Set suction pressure between 100 and 150 mmHg for adults, confirming the reading on the gauge while occluding the tubing.
11. Position the suction tubing within easy reach, avoiding placement that would require turning your back on the sterile field.
12. Prepare to hyperoxygenate the patient before suctioning begins.

Phase 2: Sterile setup

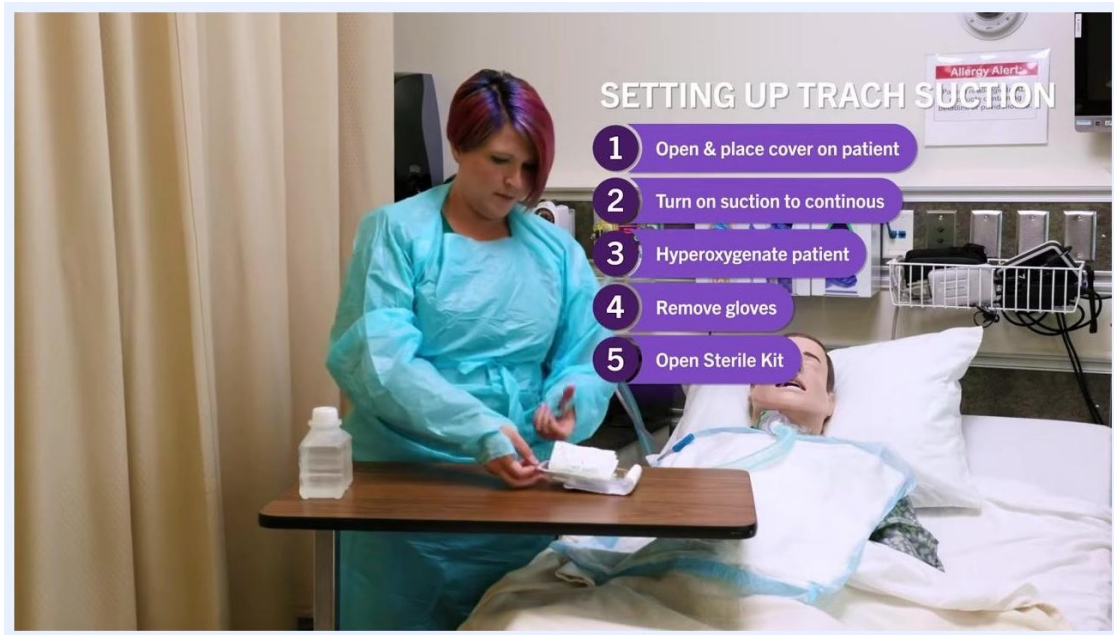
13. Increase the patient's oxygen flow for hyperoxygenation (example: from 2 liters to 4 liters) and confirm the patient is receiving it.
14. Remove non-sterile gloves before opening the sterile kit.
15. Place the sterile kit on a clean, dry surface such as the overbed table, and open the packaging without touching the inside contents.
16. Perform "lipping" of the sterile water bottle by pouring a small amount into a waste container to clear the opening before use.
17. Hold the bottle approximately 6 inches above the sterile field and pour sterile water into the container within the kit. It is acceptable if the catheter becomes wet, as it will be used wet during suctioning.



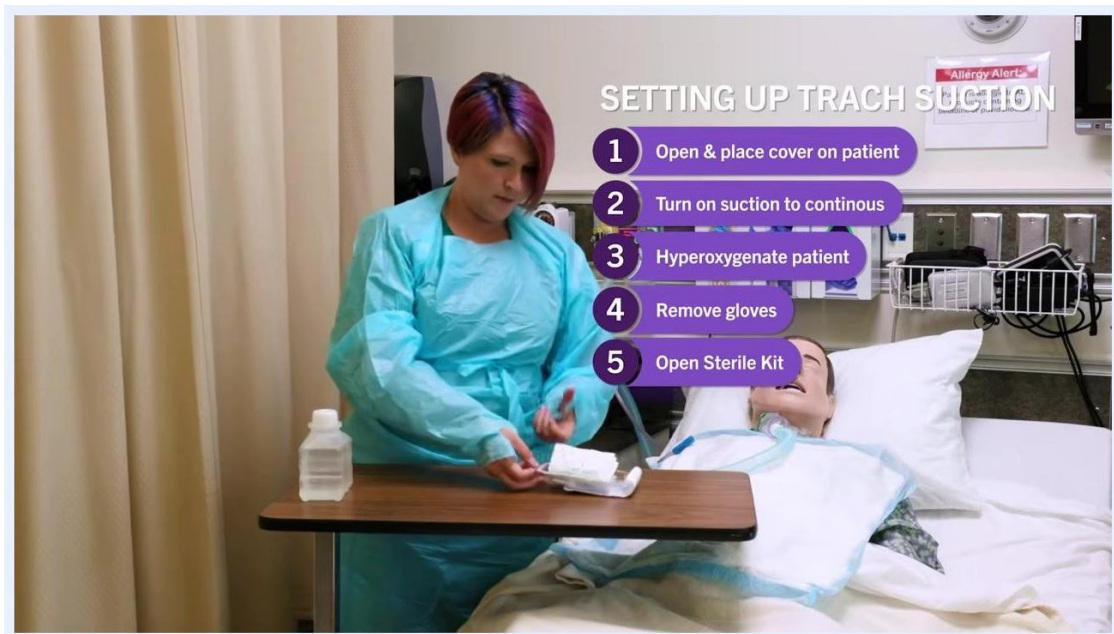
Nurse in blue gown and gloves adjusting the oxygen flow meter on the wall, with suction equipment and oxygen outlets visible. On-screen checklist: "1. Open & place cover on patient, 2. Turn on suction to continuous, 3. Hyperoxygenate patient"

18. Open the sterile glove package and don sterile gloves, keeping gown sleeves clear of contamination.
19. Clear any packaging away from the sterile field to keep the workspace accessible.

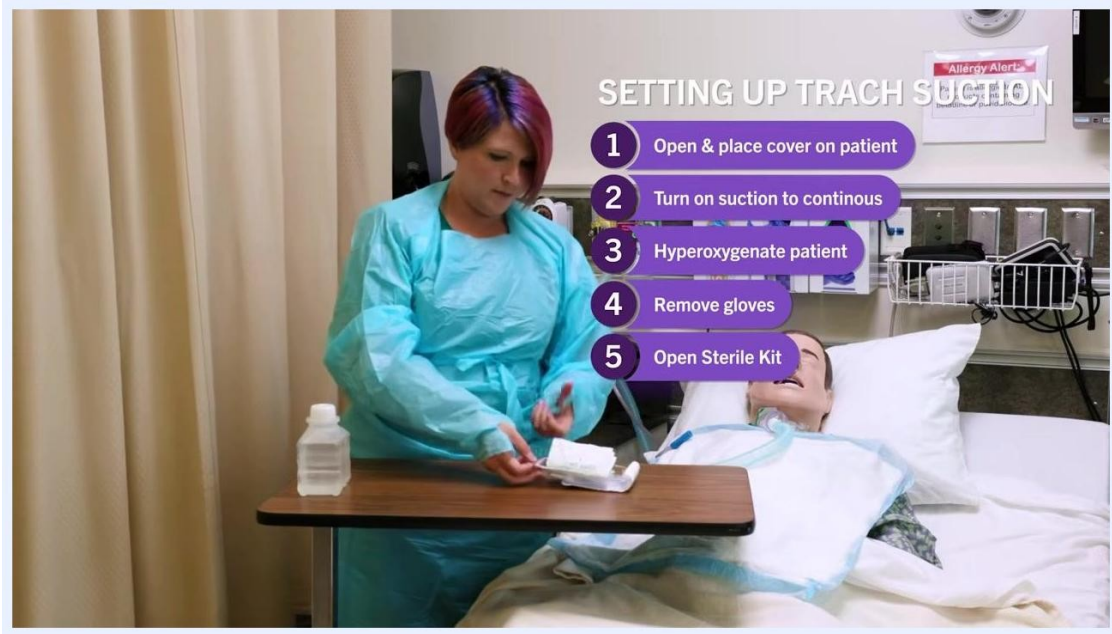
20. Measure the suction catheter from the tip of the patient's nose to the tip of the ear to determine insertion depth, using the centimeter markings on the catheter (markings shown from 4 cm to 40 cm).



Nurse in blue gown removing gloves at the bedside table, with a mannequin patient, sterile water bottle, and unopened sterile kit visible. Glove boxes and an allergy alert sign are on the wall



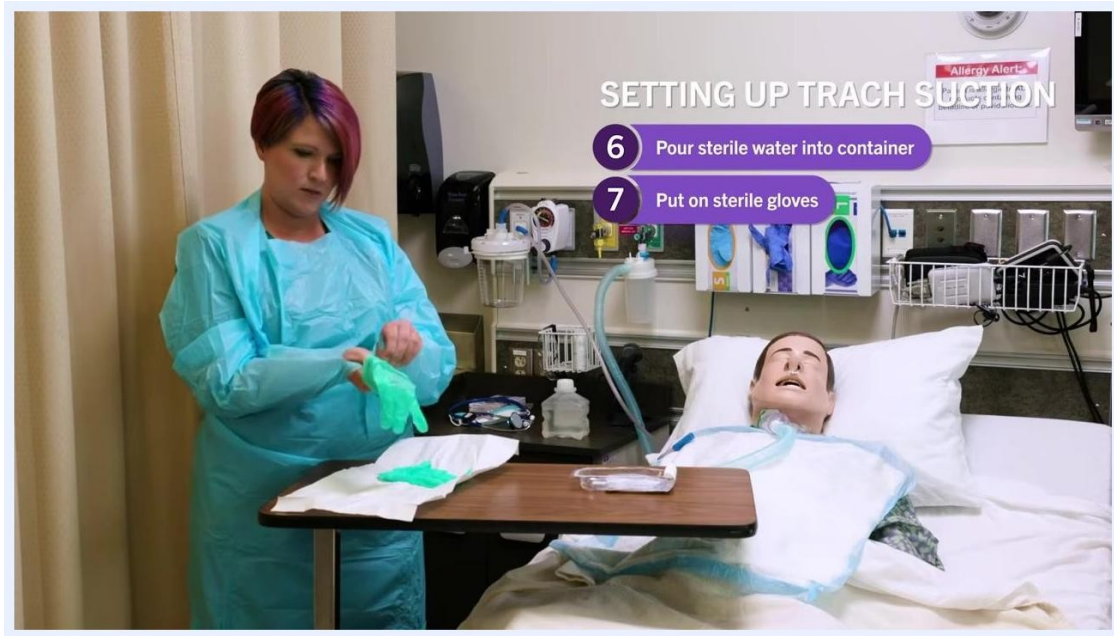
Nurse in blue gown opening the sterile kit on the bedside table, with a bottle of sterile water nearby. On-screen checklist: "4. Remove gloves, 5. Open Sterile Kit"



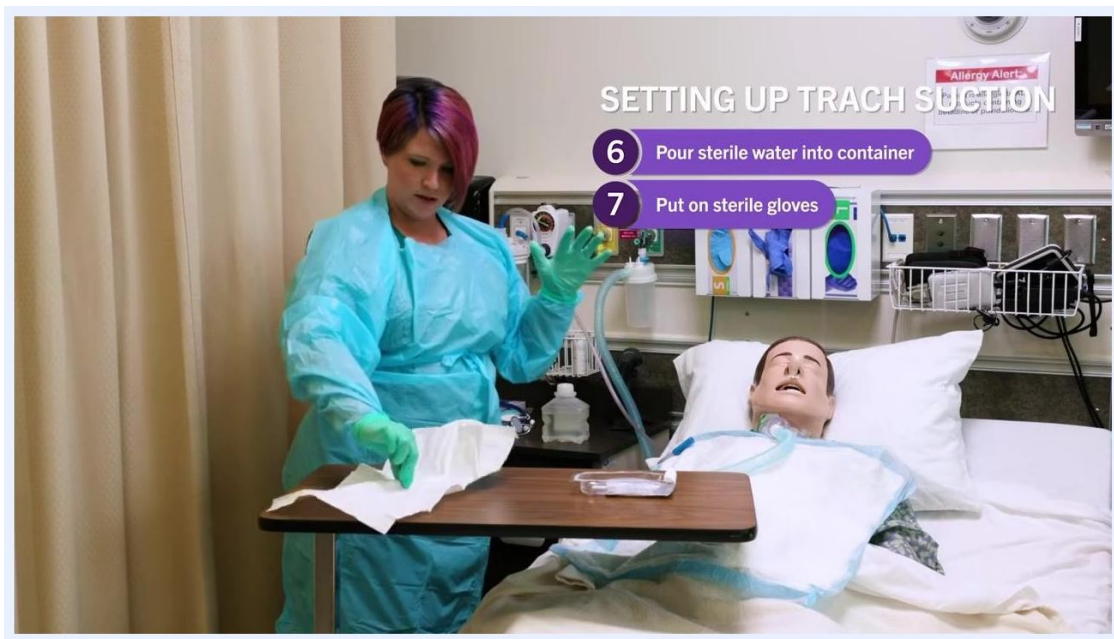
Nurse in blue gown holding a bottle of sterile water, preparing to pour a small amount into a waste container. Sterile kit and supplies are on the table



Nurse in blue gown pouring sterile water from a bottle into a container on the sterile field, with the catheter visible in the tray. On-screen checklist: "6. Pour sterile water into container"



Nurse in blue gown putting on green sterile gloves at the bedside table, with the sterile field and supplies visible. On-screen checklist: "7. Put on sterile gloves"



Nurse in blue gown moving packaging away from the sterile field on the bedside table, maintaining a clear workspace. On-screen checklist: "6. Pour sterile water into container, 7. Put on sterile gloves"

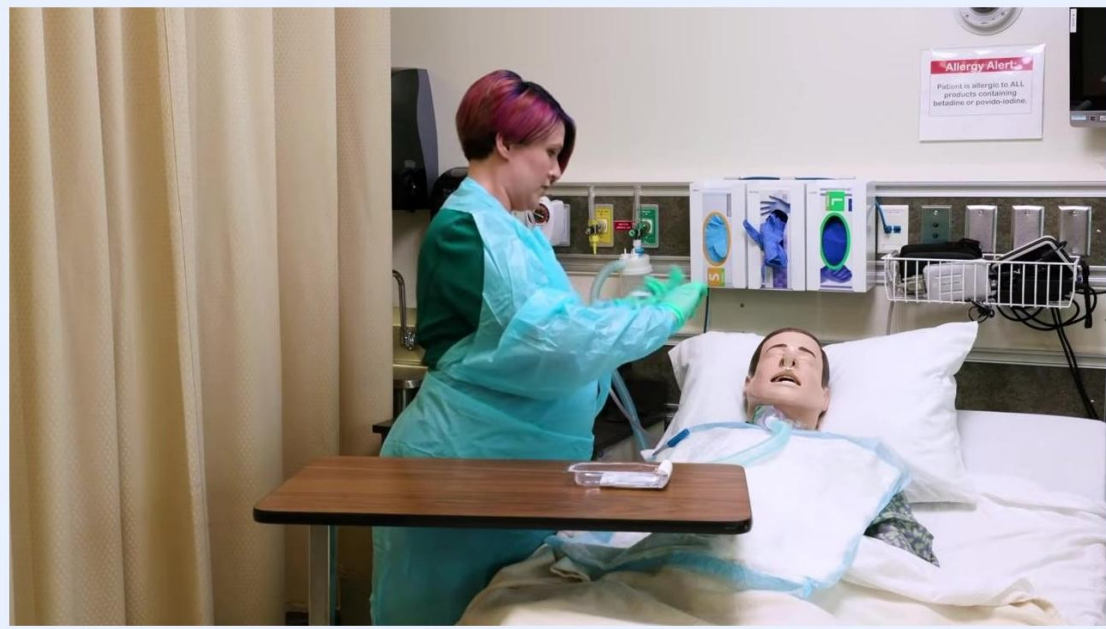


Nurse in blue gown holding suction catheter tubing, measuring from mannequin's nose to ear.
On-screen checklist: "8. Measure tubing from nose to ear"

Phase 3: Suctioning the tracheostomy

21. Identify the measurement markings on the catheter and confirm the insertion depth needed.
22. Maintain a sterile field: do not touch the patient directly with sterile gloves or the catheter except at the intended insertion point.
23. Stand beside the patient with all supplies within reach, and confirm the trach area is accessible.
24. Before connecting to suction, control the catheter tubing by wrapping it around your hand to manage excess length and maintain sterility.
25. Wrap the tubing around your non-dominant hand to keep it organized and prevent contamination.
26. Review the on-screen setup checklist: pour sterile water, put on sterile gloves, measure tubing from nose to ear, connect tubing to suction.
27. Using your non-dominant (non-sterile) hand, test the suction by aspirating a small amount of sterile fluid to confirm it functions before touching the patient.
28. Verify suction functionality by observing fluid move through the tubing before proceeding.
29. Inform the patient that you are about to insert the tubing into the trach, and remind them to communicate any discomfort.

30. Remove the oxygen mask to access the tracheostomy site, holding the catheter in your dominant (sterile) hand, ready for insertion.



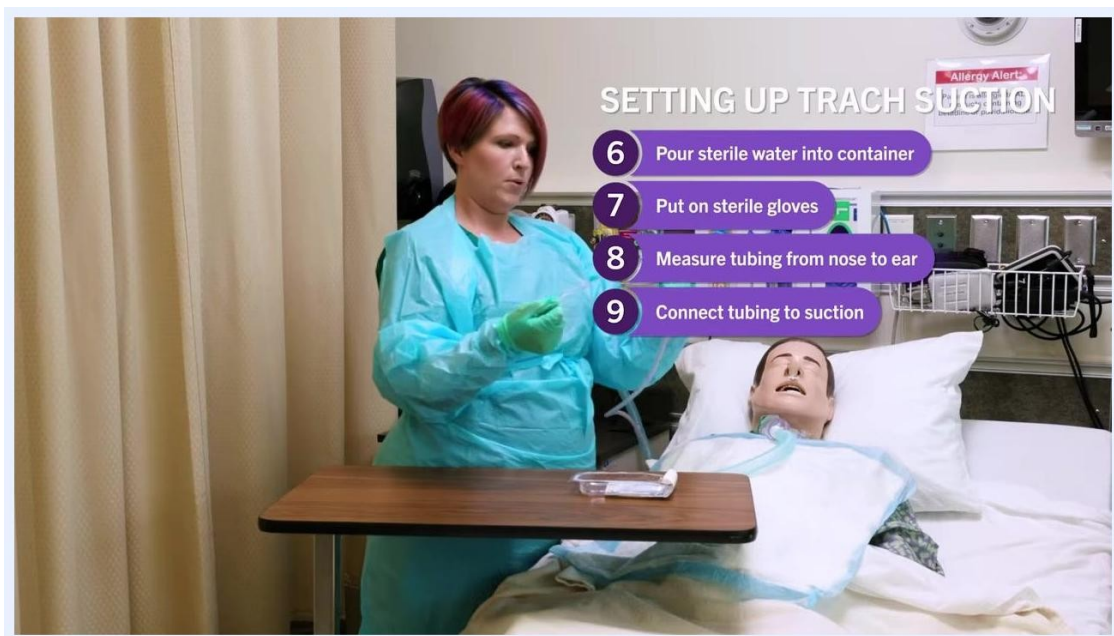
Clinician in PPE approaching mannequin patient, holding suction catheter above patient, maintaining sterile technique

31. Insert the catheter into the tracheostomy tube to the pre-measured depth (example: 15 centimeters) without applying suction during insertion.
32. Once the catheter reaches the correct depth, begin applying suction only as you withdraw it, never during insertion.
33. Withdraw the catheter slowly and steadily while maintaining suction, so secretions are effectively removed from the airway.
34. After removing the catheter, aspirate sterile water or saline through the tubing to clear remaining mucus and maintain equipment hygiene.
35. If additional suctioning is required, remove the oxygen mask and reinsert the catheter as before.
36. Perform a second and third pass if secretions persist, allowing the patient to recover and reapplying the oxygen mask between passes.
37. After suctioning, ensure the patient receives supplemental oxygen and observe for signs of distress or continued need for suctioning.
38. If the patient still shows signs such as audible secretions or respiratory distress, repeat suctioning as necessary while prioritizing comfort and safety.

39. Once the airway is clear, secure the oxygen mask, dispose of used supplies per infection control protocol, remove gloves, and perform hand hygiene.



Clinician in PPE demonstrating wrapping suction catheter tubing around hand, maintaining control and sterility



Close-up of clinician in PPE wrapping suction catheter tubing around hand, focusing on technique



Close-up of gloved hands connecting suction tubing, on-screen checklist: Pour sterile water, Put on sterile gloves, Measure tubing from nose to ear, Connect tubing to suction



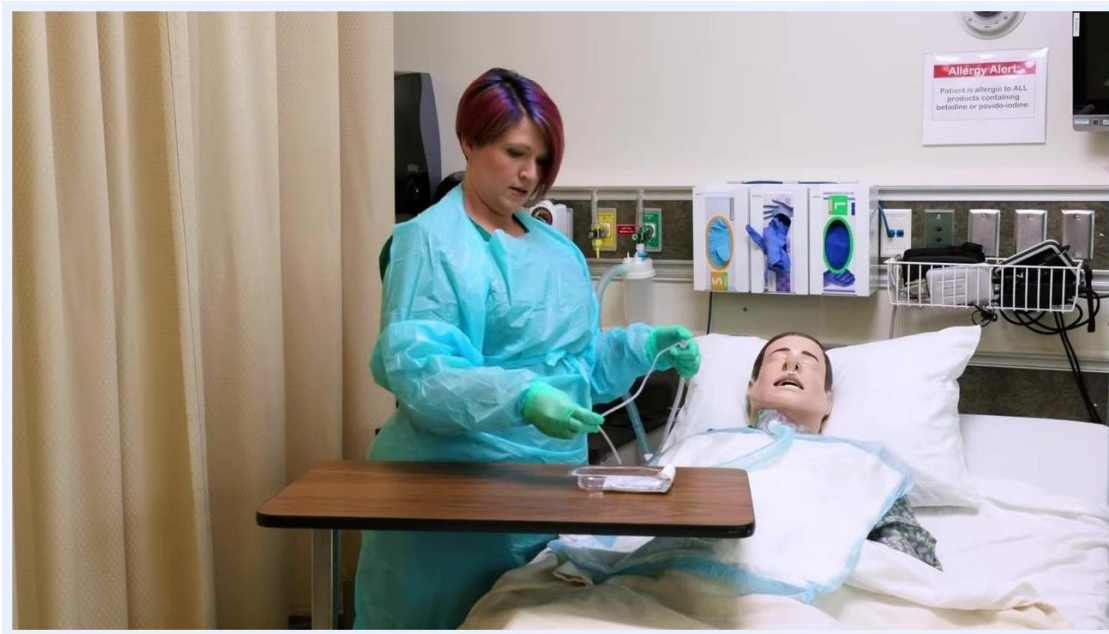
Clinician in PPE holding suction catheter, on-screen checklist visible, mannequin patient in bed



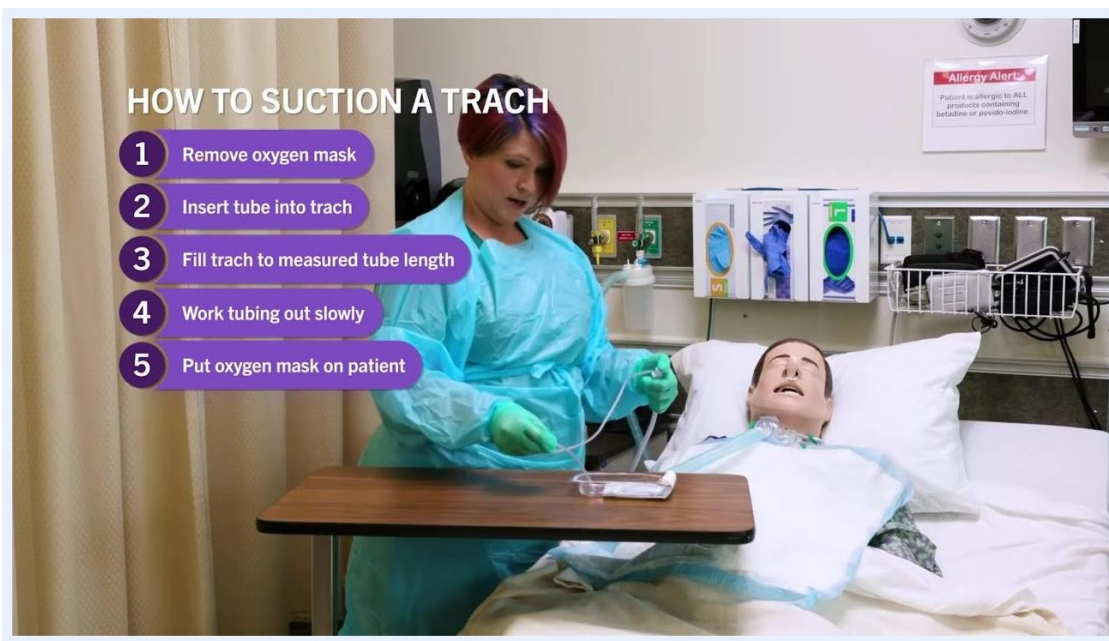
Clinician in PPE testing suction catheter with fluid, overbed table and supplies visible, mannequin patient in bed



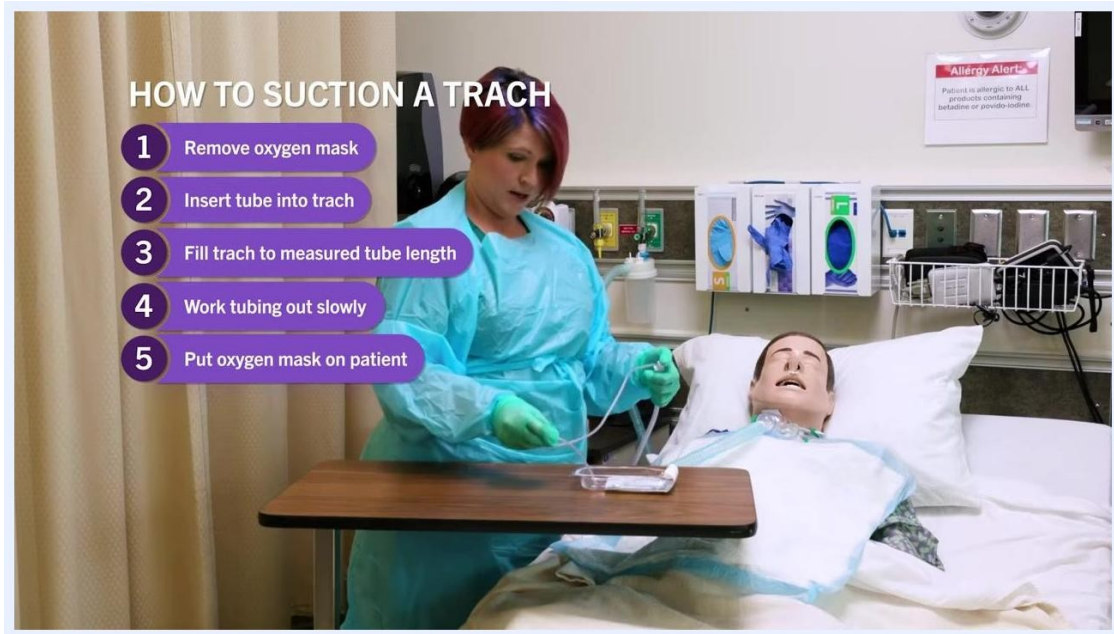
Clinician in PPE explaining procedure to mannequin patient, holding suction catheter above trach area



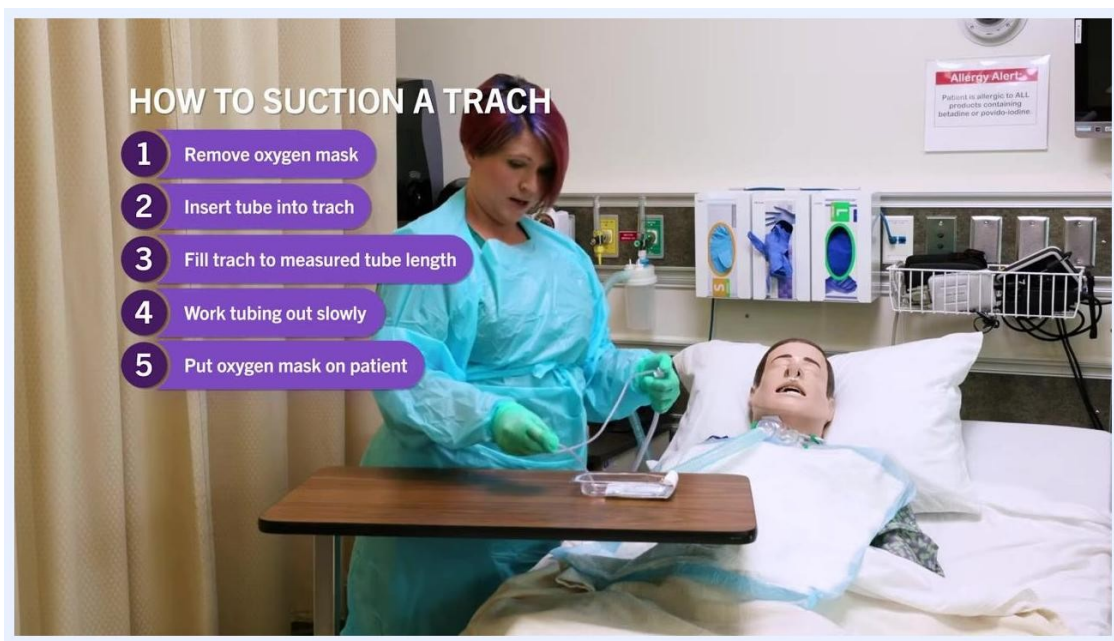
Close-up of clinician in PPE removing oxygen mask from mannequin patient, holding suction catheter near trach, on-screen step: Remove oxygen mask



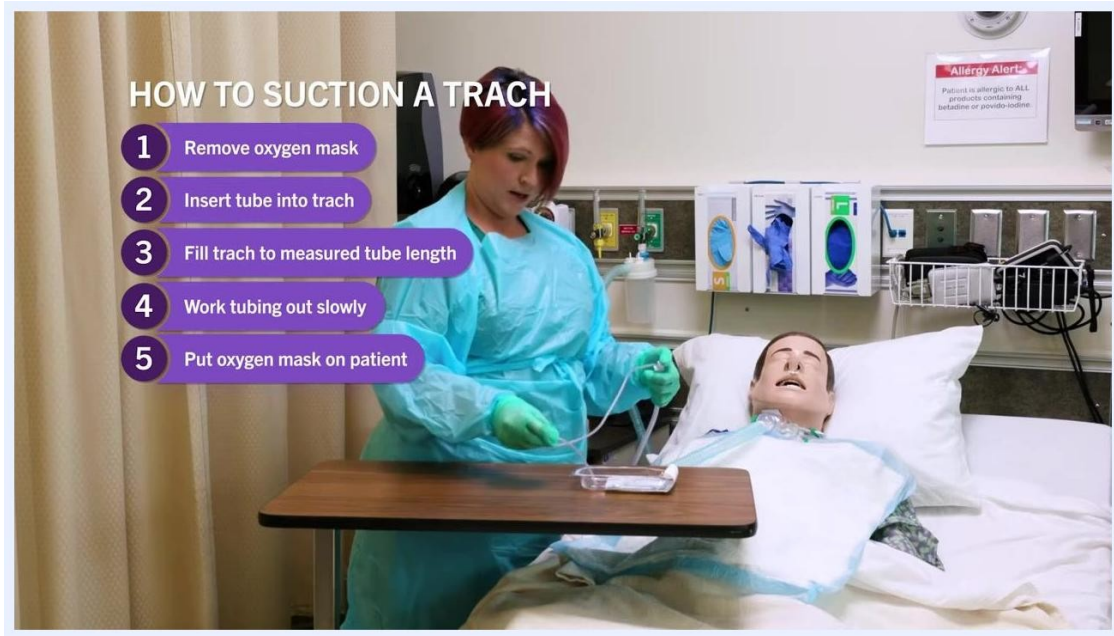
Clinician in PPE holding suction catheter at measured depth, on-screen checklist visible



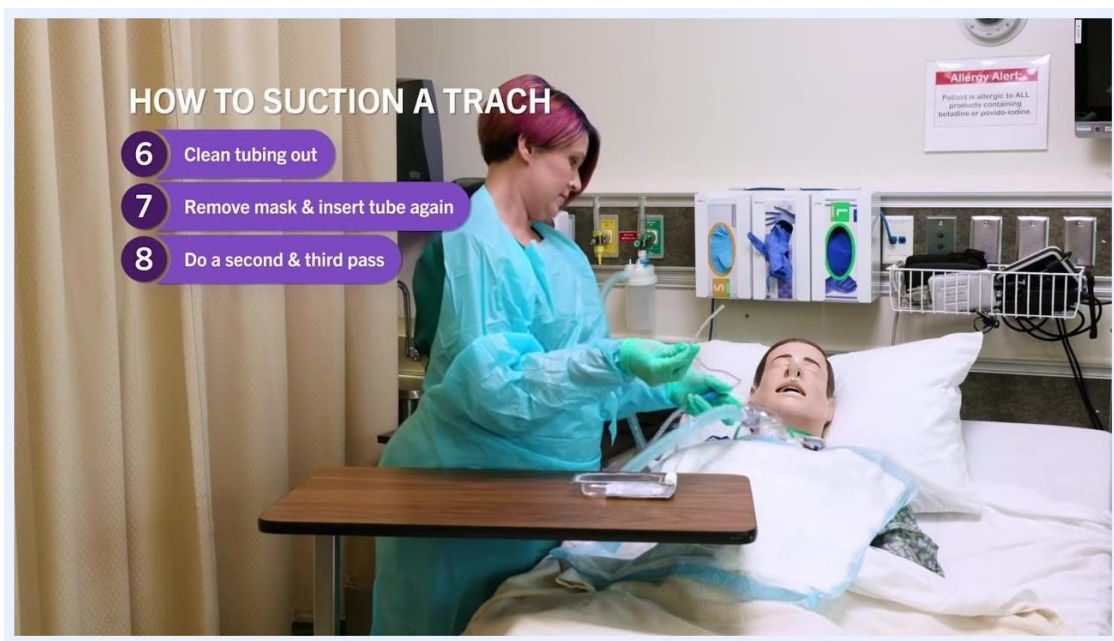
Clinician in PPE withdrawing suction catheter, on-screen checklist: Work tubing out slowly, Put oxygen mask on patient



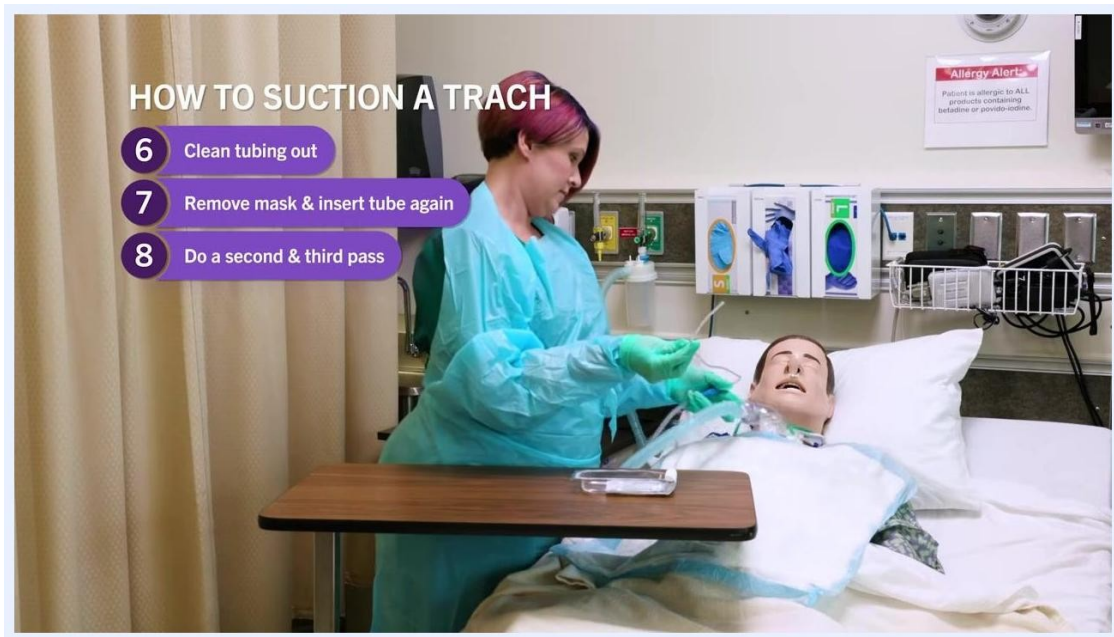
Clinician in PPE cleaning suction tubing, on-screen checklist: Clean tubing out



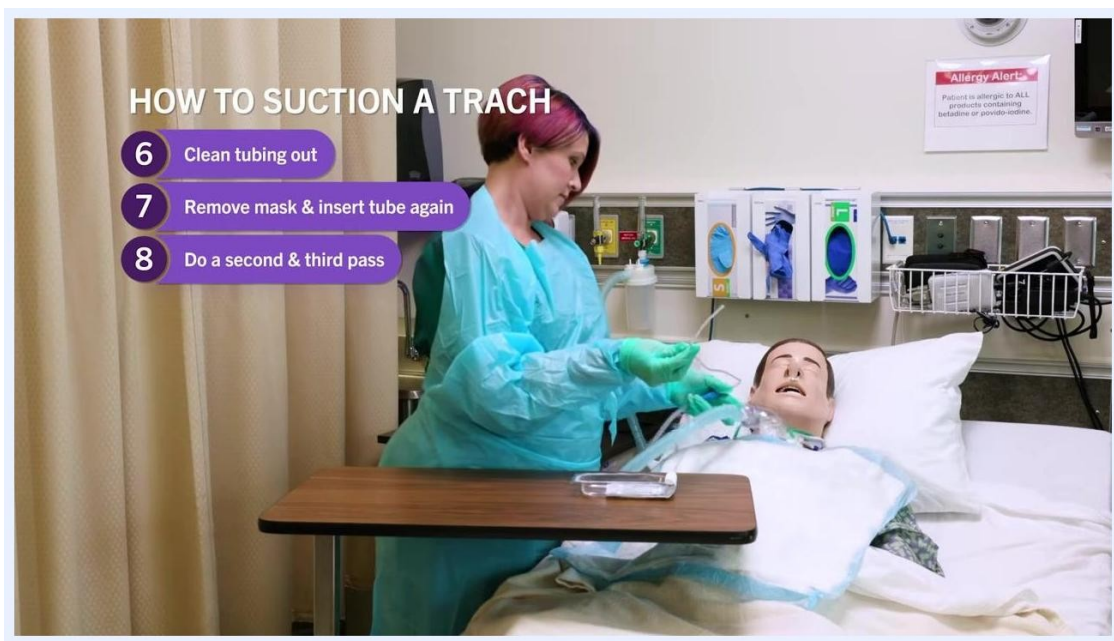
Clinician in PPE preparing to repeat suctioning, on-screen checklist: Remove mask & insert tube again



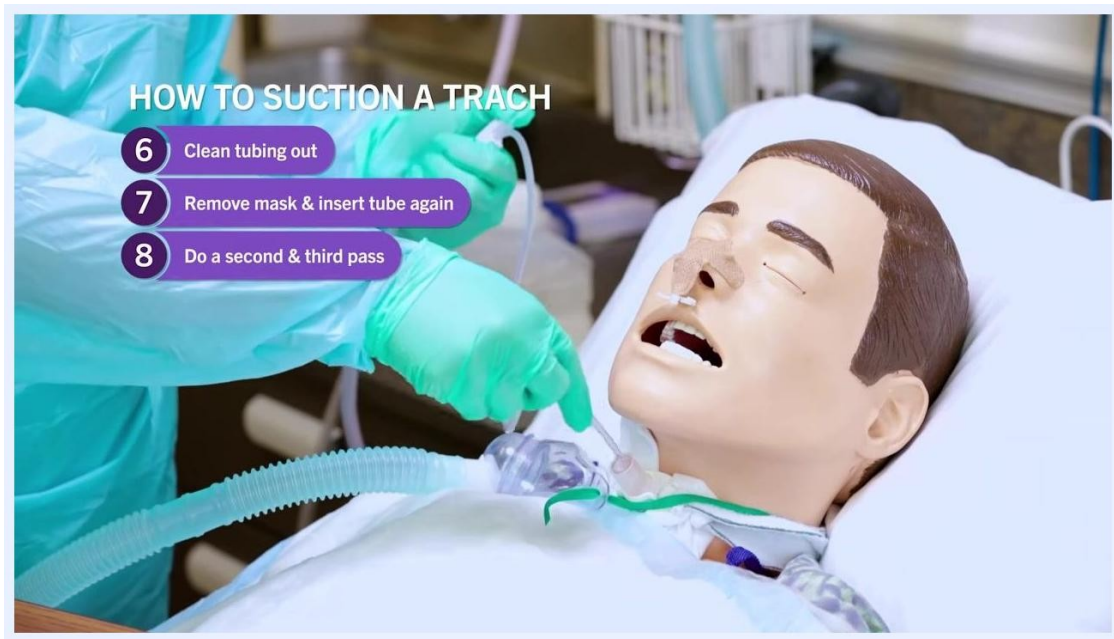
Clinician in PPE performing additional suction passes, on-screen checklist: Do a second & third pass



Clinician in PPE holding suction catheter, mannequin patient with oxygen mask, on-screen checklist: Do a second & third pass



Clinician in PPE standing beside mannequin patient, pausing to assess further suctioning needs

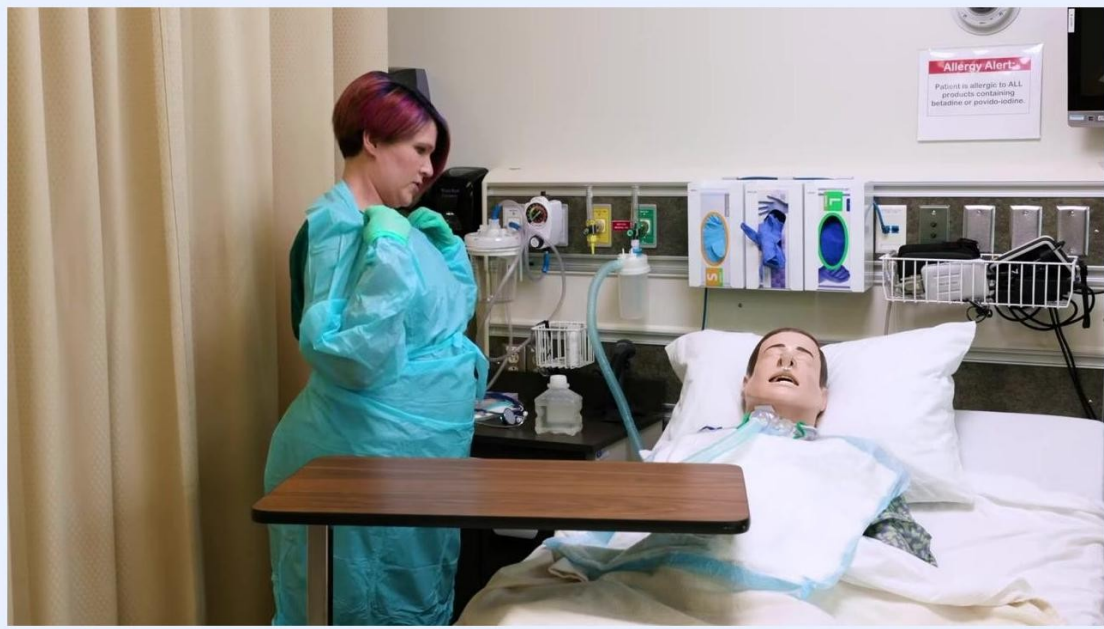


Clinician in PPE concluding suction procedure, standing beside mannequin patient, supplies on overbed table

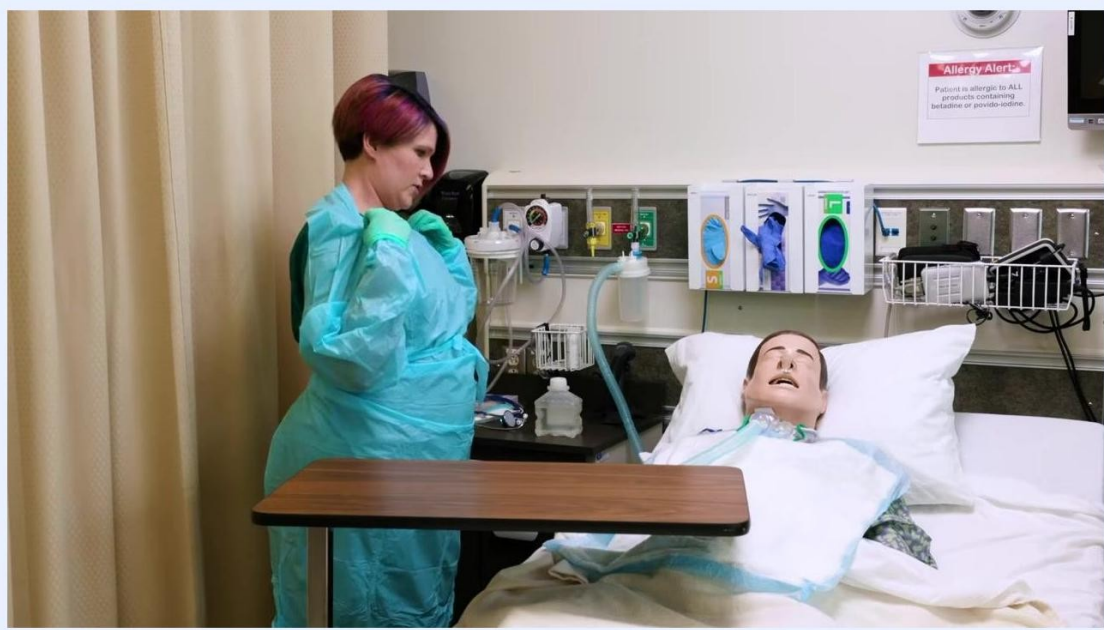
Phase 4: Post-procedure cleanup and reassessment

40. Move to the overbed table to begin disposal of used suctioning materials while remaining in full PPE.
41. Allow the patient to receive oxygen briefly, then begin removing PPE by loosening the gown at the shoulders while still holding the used tubing.
42. Remove gown and gloves together, rolling them inside out, dispose of them appropriately, and perform hand hygiene immediately.
43. Remove any soiled bed pads or protective drapes and dispose of them appropriately to maintain a clean environment.
44. Don a new pair of clean gloves before further patient contact or assessment.
45. Reassess the patient's respiratory status with a stethoscope, confirming breath sounds have improved and the airway is clear.
46. Ask the patient if they are comfortable and need anything, then adjust the gown and bedding, and place the stethoscope on the overbed table.
47. Raise the bed rails and return the bed to a safe, low height.

48. Remove gloves using proper technique, dispose of them appropriately, and perform hand hygiene for the final time before leaving the room.



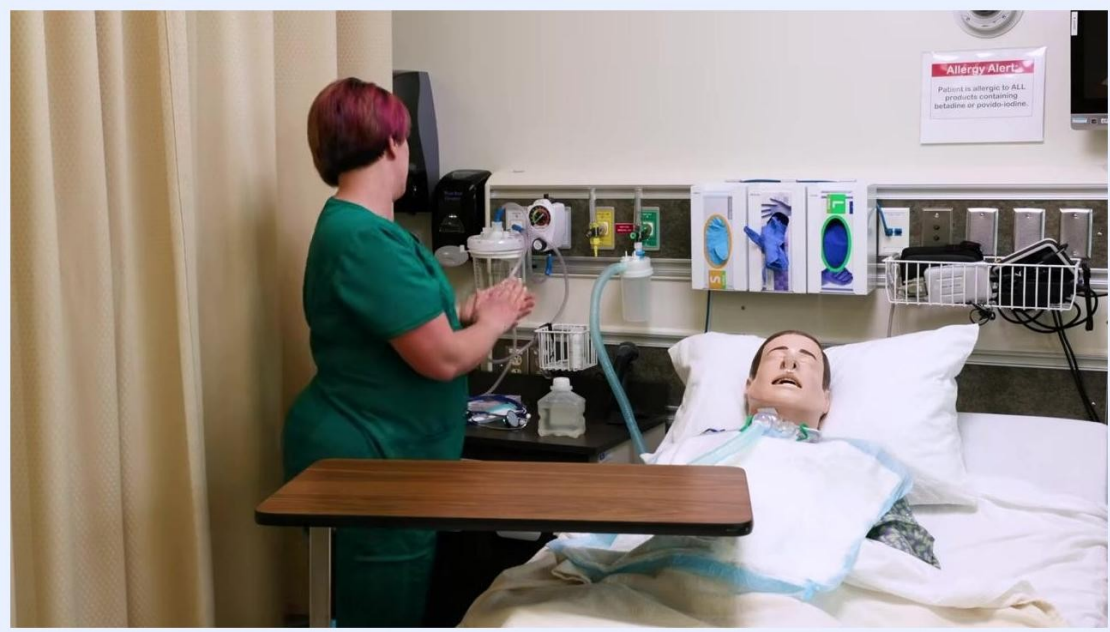
Clinician in PPE holding used suction catheter and tubing, standing by overbed table next to mannequin patient with oxygen mask. Glove dispensers and allergy alert sign visible on wall



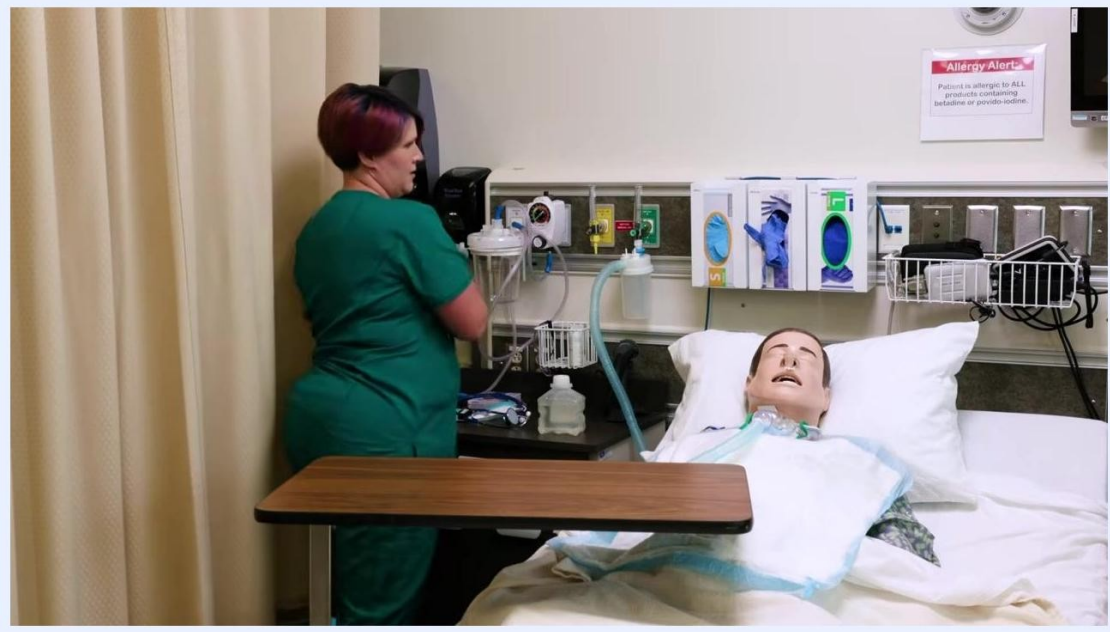
Clinician in PPE loosening gown at shoulders, preparing to remove PPE, holding used catheter tubing



Clinician in PPE facing forward, hands at shoulders, preparing to remove gown



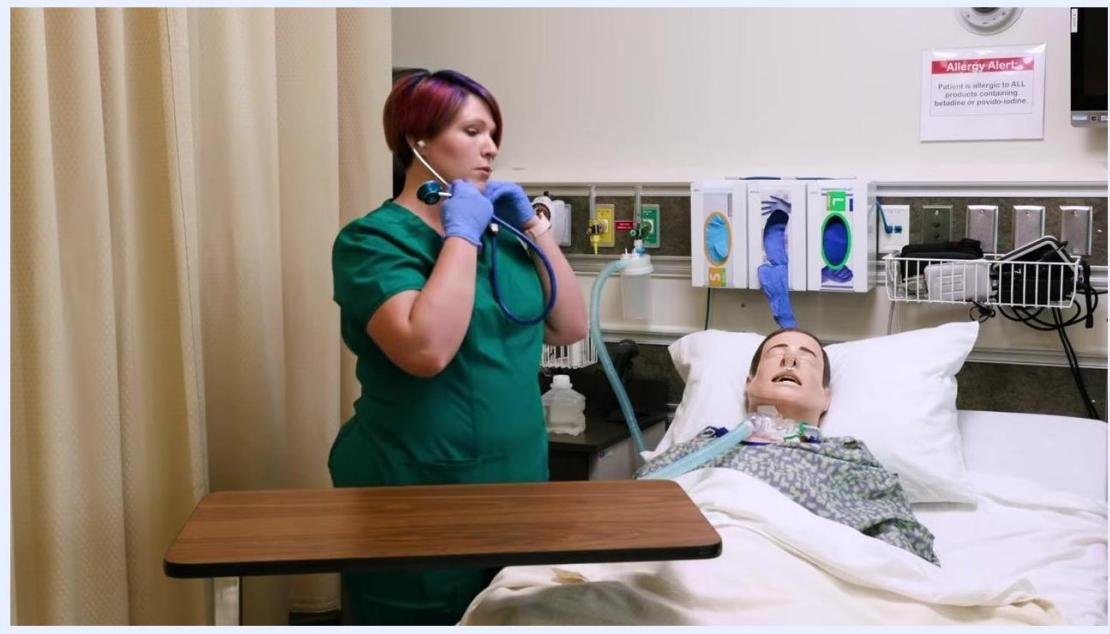
Clinician in scrubs, back to camera, performing hand hygiene at sink after removing PPE.
Mannequin patient remains in bed



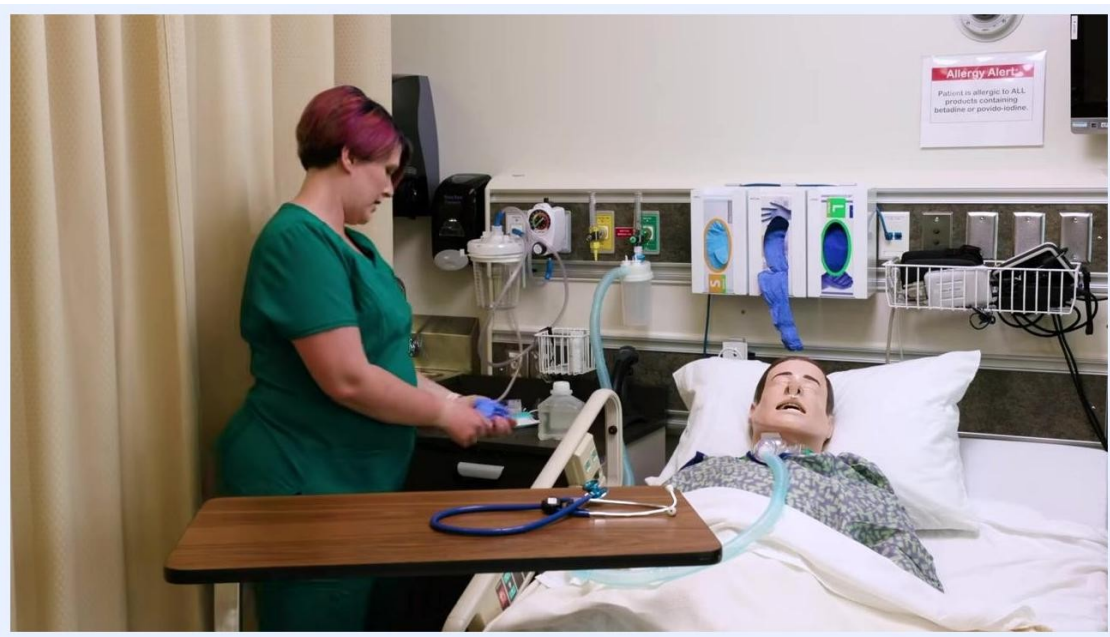
Clinician in scrubs removing soiled bed protection from patient bed, preparing to dispose of it



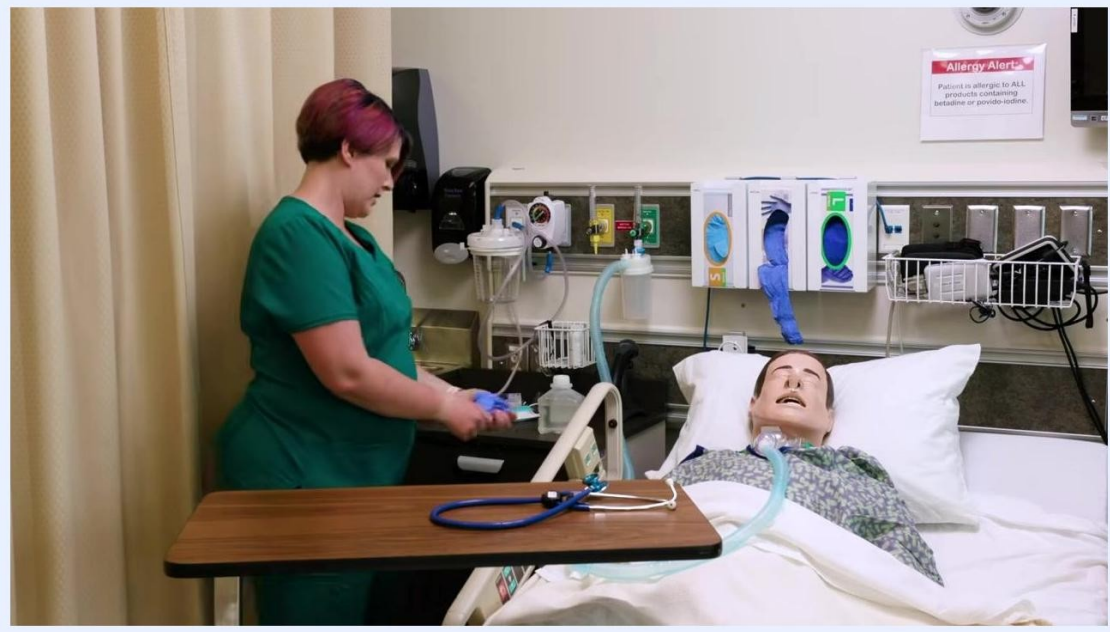
Clinician in scrubs and clean gloves, holding stethoscope, preparing to auscultate mannequin patient's lungs



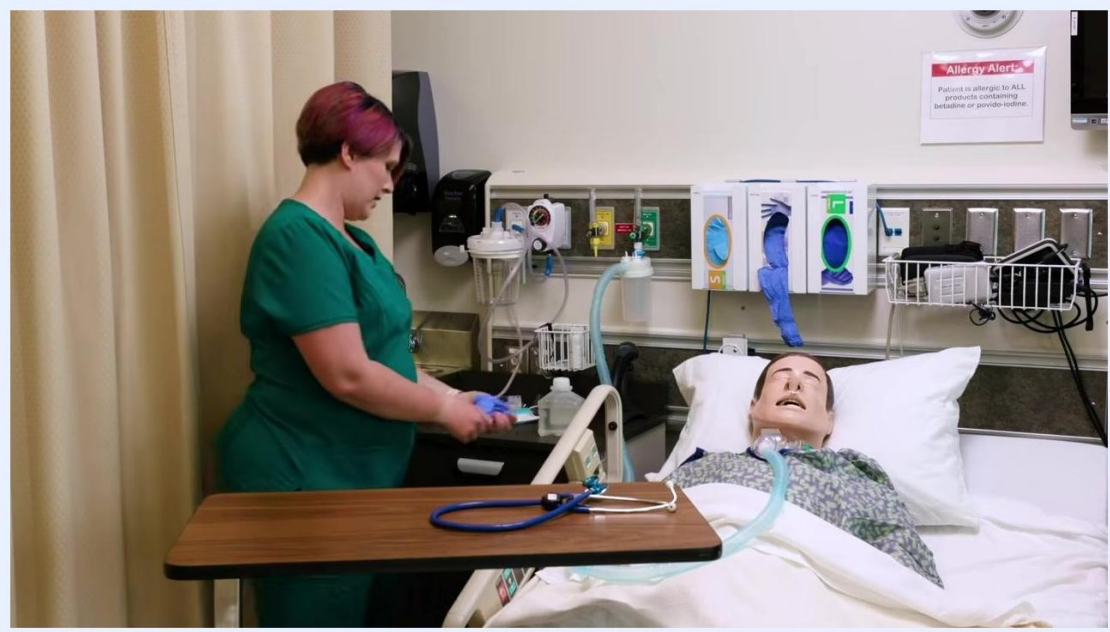
Clinician auscultating mannequin patient's lungs with stethoscope, checking for improved breath sounds



Clinician adjusting patient's gown and bedding, stethoscope on overbed table, ensuring patient comfort



Clinician raising bed rails and adjusting bed height, ensuring patient safety post-procedure

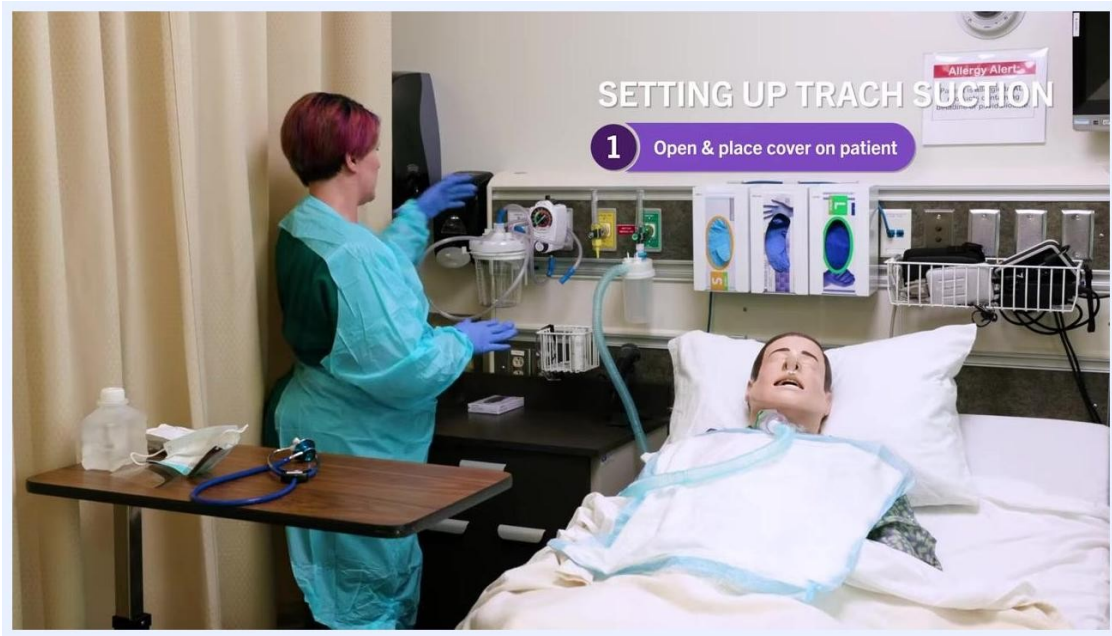


Clinician removing gloves and preparing for final hand hygiene, standing by patient bed

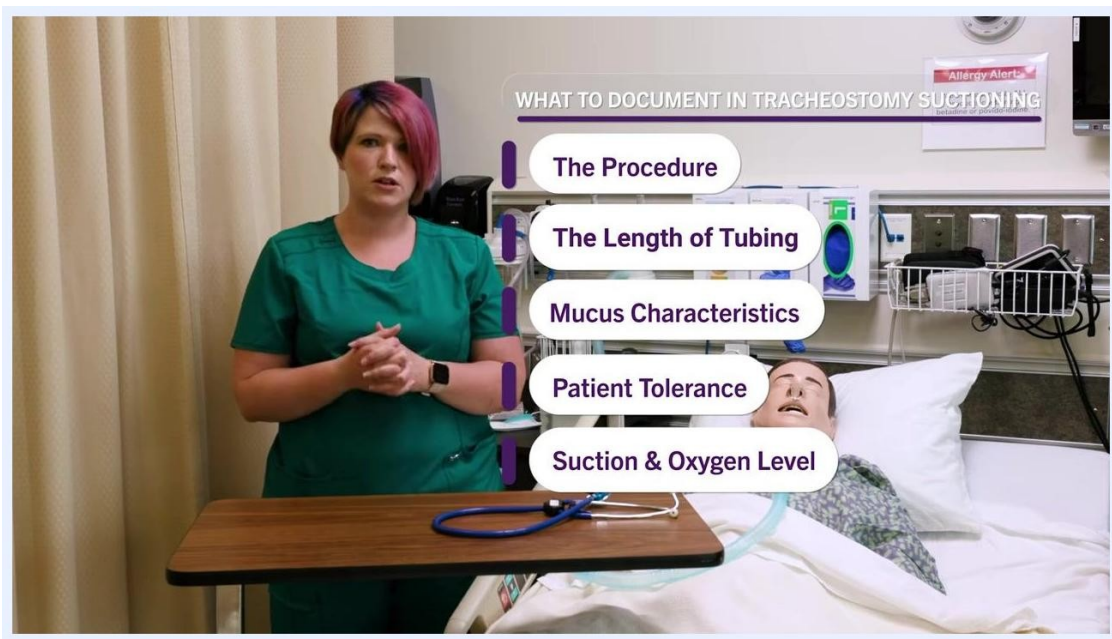
Phase 5: Documentation

Document the following elements immediately after completing the procedure:

Documentation element	What to record
The procedure	That tracheostomy suctioning was performed, including any specific techniques or precautions taken
Length of tubing	The depth to which the catheter was inserted (example: 15 centimeters)
Mucus characteristics	Color (e.g., green, yellow, brown), consistency (e.g., thick, thin), and amount (e.g., copious, scant, moderate)
Patient tolerance	Signs of discomfort, distress, or complications (example: "Patient tolerated suctioning well, no signs of distress")
Suction & oxygen level	Suction pressure used, oxygen level provided before, during, and after suctioning, and confirmation the patient returned to baseline oxygen level (example: "Suction pressure: 100 mmHg. Oxygen increased to 4 L/min during procedure, returned to 2 L/min post-procedure")



Nurse in blue gown and gloves placing a blue chuck's pad across the mannequin patient's chest, with PPE and medical equipment visible on the wall and a bedside table with supplies



Clinician in scrubs standing next to mannequin patient in hospital bed. On-screen text: "WHAT TO DOCUMENT IN TRACHEOSTOMY SUCTIONING: The Procedure, The Length of Tubing, Mucus Characteristics, Patient Tolerance, Suction & Oxygen Level". Overbed table with stethoscope and tubing visible

Review the notes to confirm all required elements are included, then submit or file the documentation according to facility policy.

Pain Management

This procedure does not include a medication or pain-scoring protocol; a full pain management plan for the patient's overall care would document a multimodal medication schedule (drug, dose, route, frequency), a target pain score, and an escalation pathway per facility policy.

Mobility Milestones

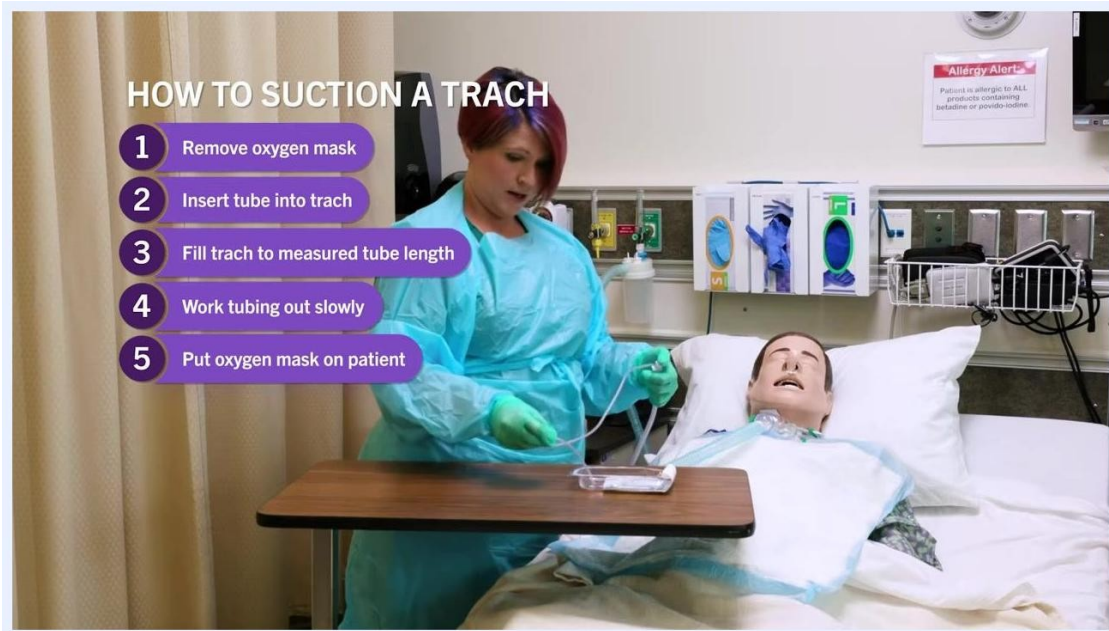
This procedure does not include a mobility progression; a complete mobility plan would document day-by-day goals such as bed exercises, chair transfer, and ambulation with an assistive device as appropriate to the patient's overall condition.

Complication Monitoring

Monitor the patient for the following during and after suctioning:

- Oxygen saturation levels before, during, and after the procedure
- Respiration rate and lung sounds compared to baseline
- Signs of discomfort or distress during catheter insertion or withdrawal
- Audible secretions or continued respiratory distress after suctioning, indicating the need for an additional pass

- Mucus characteristics that may signal infection or other complications (color, consistency, amount)



Clinician in PPE inserting suction catheter into mannequin trach, on-screen checklist: Remove oxygen mask, Insert tube into trach, Fill trach to measured tube length

If the patient continues to show signs of respiratory distress or audible secretions after suctioning, repeat the procedure as necessary, prioritizing patient comfort and safety at each pass. A specific escalation contact and threshold beyond repeating suctioning is not detailed in this procedure and should follow facility protocol.

Discharge Criteria

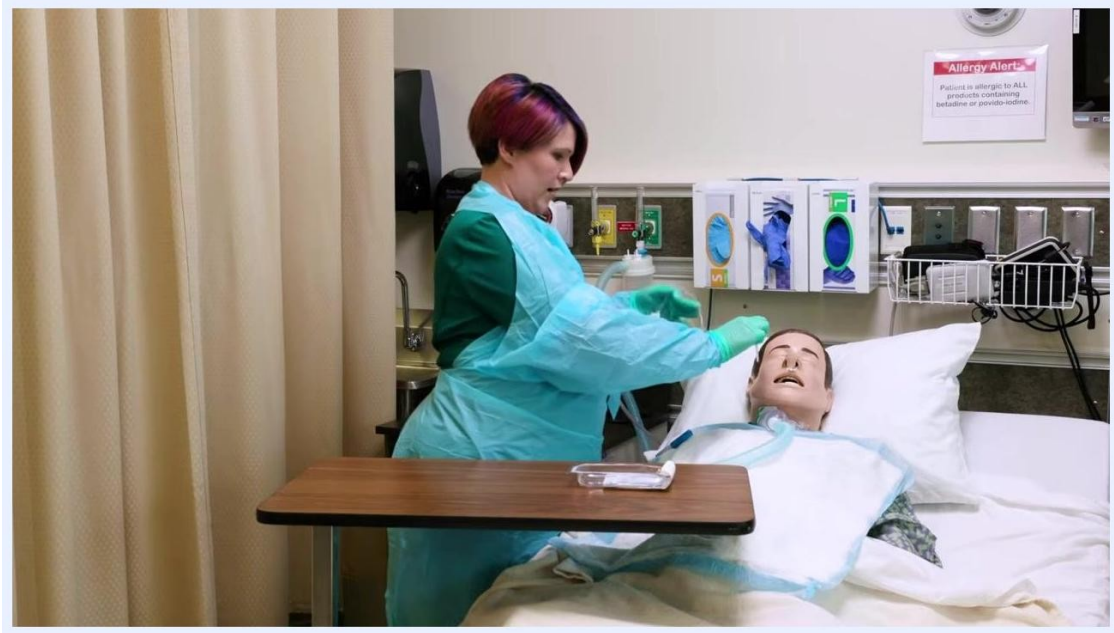
This procedure covers a single suctioning intervention rather than a full inpatient stay, so specific discharge criteria are not part of this content; discharge readiness would instead be determined by the patient's overall respiratory status and care plan per facility policy.

Patient Education

Throughout the procedure, communicate clearly with the patient:

- Explain each step before performing it, for example telling the patient you will listen to their lung sounds or insert the suction tubing.

- Remind the patient to communicate if they feel discomfort during insertion or suctioning.
- After the procedure, ask the patient if they are comfortable and whether they need anything before you leave.
- Confirm the patient's education about the purpose of suctioning was completed as part of the pre-procedure assessment.



Clinician in PPE standing beside mannequin patient, preparing to perform suctioning, supplies on overbed table

What's Next

After completing suctioning and documentation, continue routine respiratory monitoring per facility protocol and repeat the procedure as clinically indicated based on ongoing assessment of secretions and breath sounds.



End screen with "Thanks for watching!", "FOLLOW US @WeberStateU", "CLICK HERE TO SUBSCRIBE", and "NEXT VIDEO" prompts.